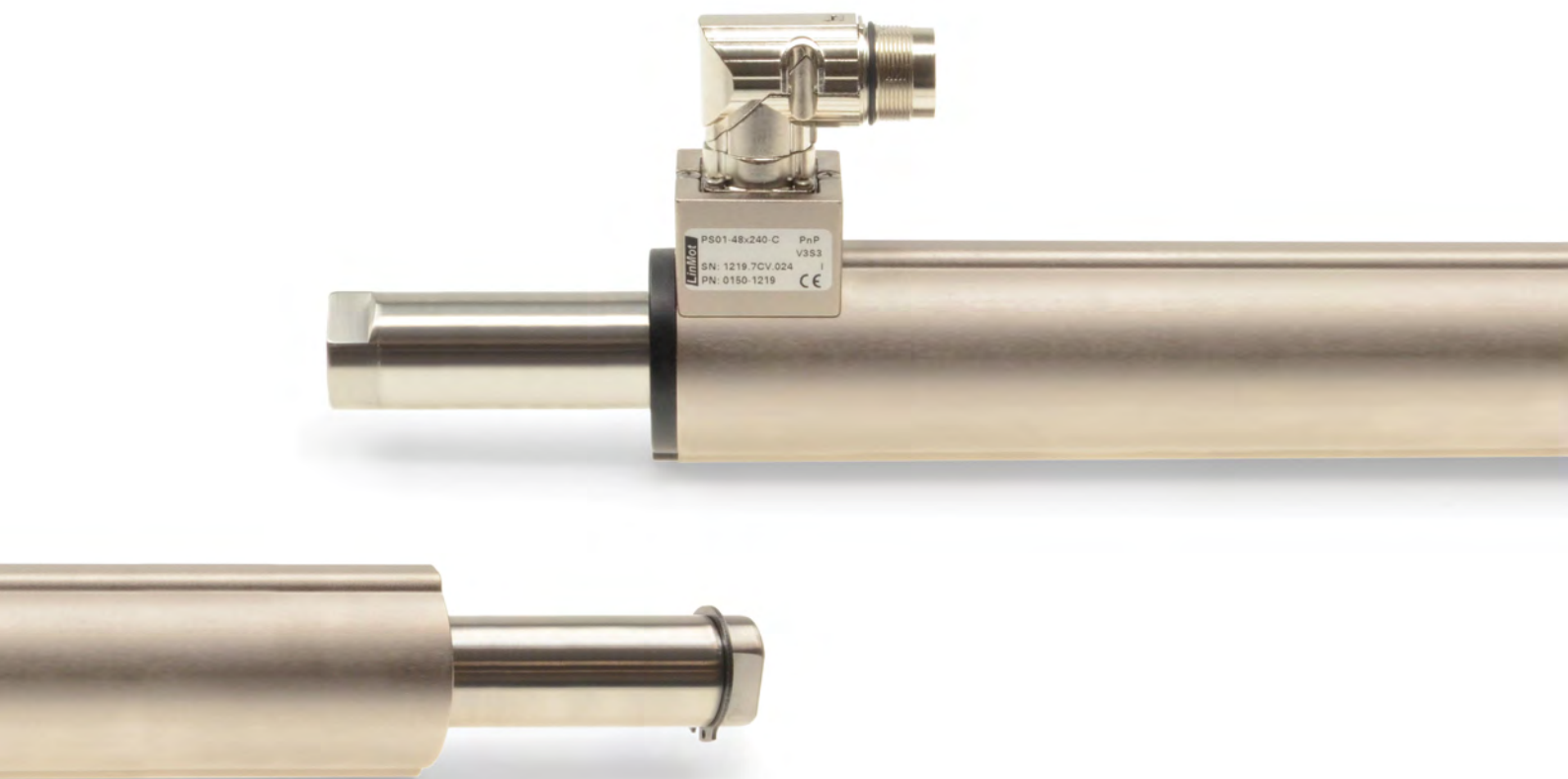


Industrial Linear Motors

Smart solutions are driven by

LinMot[®]



PRODUCT CATALOGUE
Edition 24

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NTI AG

NTI AG is a global manufacturer of high quality tubular style linear motors and linear motor systems and thus focuses on the development, production and distribution of linear direct drives for use in industrial environments.

Founded in 1993 as an independent business unit of the Sulzer Group, NTI AG has been in operation since 2000 as an independent company.

NTI AG headquarters are located in Spreitenbach, near Zurich in Switzerland. In addition to three production sites in Switzerland and Slovakia, NTI AG maintains a sales and support office LinMot® USA Inc. to cover the Americas.

The brands LinMot® for industrial linear motors and Mag-Spring(R) for magnetic springs are offered to customers worldwide. NTI AG maintains an experienced customer consultant sales and support network of over 120 locations worldwide.

For the realization of linear motion NTI AG is always a competent and reliable partner.



Mission

LinMot offers its customers a sophisticated and dedicated linear drive system that can be easily integrated into all leading control systems. A high degree of standardization, delivery from stock and a worldwide distribution network insure the immediate availability and excellent customer support.

Our aim is to push linear direct drive technology and make it a standard machine design element. We offer highly efficient drive solutions that make a major contribution to the overall resource conservation effort.



PRODUCTS

Standard Motors *Universal*



CHAPTER 2

HP Motors *High Performance*



CHAPTER 2

Short Type Motors *Compact*



CHAPTER 2

P10-54 Motors *Power packages*



CHAPTER 4

P10-70 Motors *High Power*



CHAPTER 4

Stainless Steel Motors *Hygienic*



CHAPTER 5

ATEX Motors *Encapsulated*



CHAPTER 6

Linear Rotary Motors *Synchronous lifting and rotating*



CHAPTER 10

P04 Motors *Pneumatic replacement*



CHAPTER 8

PD03 Motors *Integrated Drive*



CHAPTER 7

Special Motor *Integrated Drive IP69k*



PD04 Motors *Easy pneumatic replacement*



CHAPTER 9

LinMot develops and produces a wide variety of electromagnetic direct drives for a nearly unlimited range of applications. The linear motors are provided together with appropriate control electronics and diverse accessories. The product range is coordinated to provide the customer with all of the

components needed for linear drive systems from a single source. Currently over 2000 different drive and motor combinations are normally available from stock within a short period of time.

A 1100
Space-saving

CHAPTER 11
C 1100
Compact-Drive / Point to Point

CHAPTER 11
C 1200
Compact Drive / NC Motion

CHAPTER 11
E 1200
High End

CHAPTER 11
C1400
Universal

CHAPTER 11
E 1400
High feature drive

CHAPTER 11
Linear Guides
Safe motion

CHAPTER 13
MagSpring
Weightless

CHAPTER 12
LinMot Accessories
Everything from a single source

CHAPTER 14

FIELDS OF APPLICATION

FOOD PRODUCTS



LinMot drives provide machine builders with optimal components for setting manufacturing and packaging processes in motion in the food products field. They fulfill the high requirements of the IP69k protection class and are made entirely of stainless steel. The freely programmable motion parameters of the drive give the motors a great degree of flexibility for various applications.

- » Beverage filling
- » Single and multiple closures
- » Weight products
- » Metering products
- » Sorting using pushers or pull noses
- » Reject products
- » Cutting food products
- » Packaging
- » Placing products in packages
- » Sealing
- » Compressing
- » etc.

TEXTILE MACHINES



The benefits of LinMot technology have been used for years in the latest textile machines. The motors are used for placing and positioning additional threads, for example. Linear motors are also preferred for precise winding of textile yarns.

LinMot has programmed a complete functional building block that controls the entire winding process and can simply be invoked by the upper-level controller.

- » Driving stitching axes
- » Winding up textile yarns
- » Placing and positioning threads
- » Raising and lowering a cloth roller
- » Precise positioning of a cloth roller
- » etc.

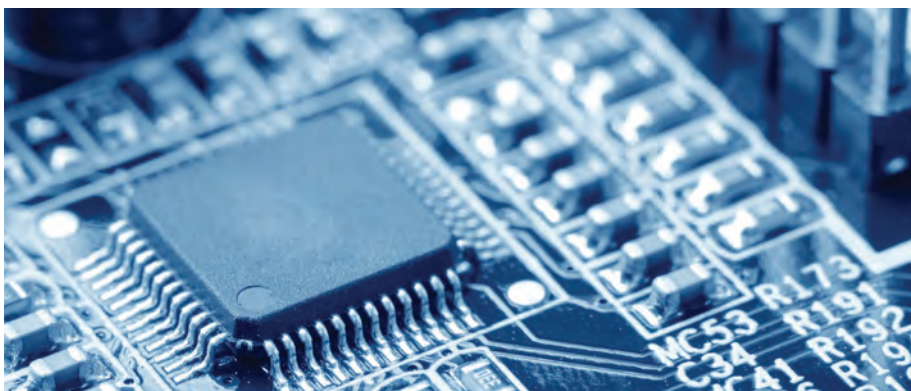
WOOD PROCESSING



The linear technology provides automated step width adjustment in order to guarantee optimal material cuts.

- » Automated step width adjustment
- » Rapid drill head transport
- » Cutting endless material to length
- » Material handling
- » etc.

SEMICONDUCTORS & ELECTRONICS



In the semiconductor industry, availability of systems and machine are an absolute requirement. Modern electronics manufacturing must deal with frequent product changes. With innovative drive solutions from LinMot and intelligent drive and controls components, manufacturing, setup, and conveyor applications can be implemented effectively.

- » Front-end machines
- » Back-end machines
- » Wafer handling
- » Semiconductor handling
- » Automated semiconductor testing
- » Automated semiconductor packaging
- » Automated population equipment
- » Flying probe testers
- » Depaneling machines
- » CD / DVD Production lines & packaging machines
- » etc.

AUTOMOTIVE



Linear drive components from LinMot provide greater flexibility and productivity for the automotive industry. They can be used not only for reliably implementing functional and durability tests, but also for applications along the production process. This includes primarily applications in the field of assembly, material management, and fault checking.

- » Functional and durability tests
- » Assembly
- » Material management
- » Fault checking
- » etc.

LABORATORY AUTOMATION



Automated workstations and lab automation require a high degree of flexibility and reproducibility when selecting the type of drives. LinMot components meet these requirements and are also low-noise, low-maintenance, clean-room capable, and provide smooth, gentle motions. The unusually compact linear motors are ideal for automation, because they can be installed even in very small spaces.

- » Handling
- » Loading and unloading
- » Pick & Place
- » Insertion
- » Closure
- » etc.

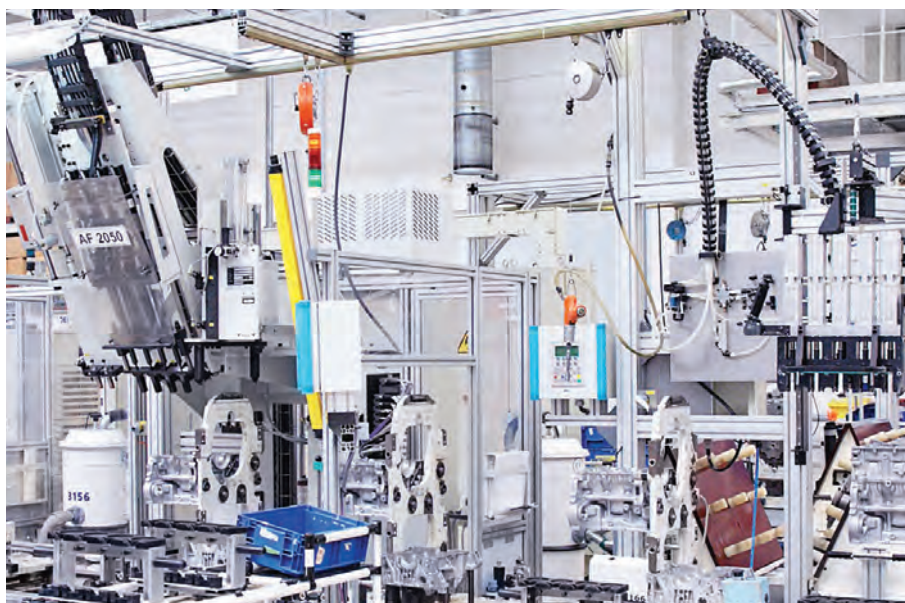
MEDICAL & PHARMACEUTICAL



When blood samples need gentle handling, pills need to be counted or filled, or for the challenging packaging of pharmaceuticals, LinMot drive components provide highly dynamic and precise solutions for these tasks. The hygienic design of the linear motors means that highly sensitive products can be processed cleanly in accordance with clean room requirements.

- » Flexible filling stations
- » Metering and counting
- » Insertion
- » Placement
- » Closure
- » Pressing closures
- » Carton packing
- » Labeling
- » Pick und place systems
- » Product handling and palletizing
- » Blister & tray and shell handling
- » Packaging systems in blisters & trays
- » etc.

HANDLING & ASSEMBLY

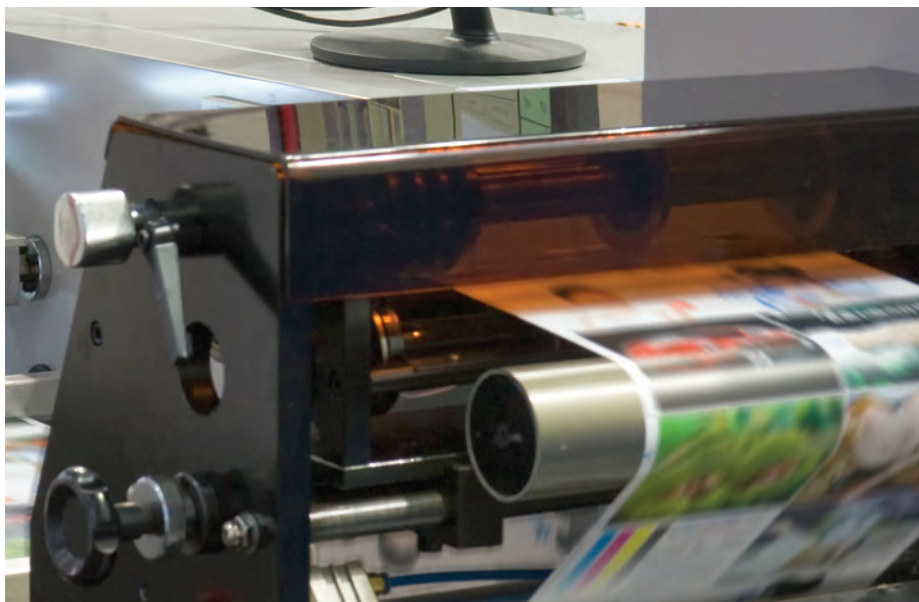


In addition to increased flexibility, a modern system needs the highest possible production speed and reliable traceability in the form of continuous electronic process documentation. The freely programmable and highly dynamic linear motors provide the systems engineer with the optimal components for a modern production machine that can meet the applicable requirements with no trouble.

- » Feed systems
- » Transfer systems
- » Pick & place modules
- » Palletizing units
- » Stacking units
- » XY-tables
- » Joining modules
- » Precision pressing
- » Sorting systems
- » Automated screwdriving systems
- » Metering units
- » Gluing stations
- » Quality assurance
- » Testing modules
- » Camera positioning
- » etc.



PRINTING & LABELING



Sensitive products can be printed more quickly using linear motor technology, because the position, speed, and force of the printing process can be controlled. There are no force impulses, as is the case with pneumatic solutions.

In general, the freely programmable force and motion profiles lead to decisive process improvements relative to other types of drives and open up many new fields of application.

- » Inspection systems
- » Paper feeding
- » Decoration
- » Ink mixing systems
- » Pad printing
- » Screen printing
- » Doctor blade controls
- » Labeling
- » etc.



PACKAGING



Highly dynamic, durable LinMot drives ensure high productivity and availability. The programmable controller adapts quickly to new products and types packaging and provides continuous control of motion parameters.

In many applications, the linear motor is used as a replacement for pneumatic cylinders in order to make the machines and systems more flexible, productive, and reliable, while simultaneously reducing the cost of energy per package.

- » Insertion
- » Feeding
- » Deflection
- » Carton packing
- » Sealing
- » Labeling
- » Discharge
- » Rejection
- » etc.

eCATALOGUE

LinMot e-Catalogue

shop.linmot.com/index.php?page=start

Suchen

LinMot®

Home Firma Solutions Produkte Download Support Kontakt DE EN

Herzlich Willkommen im LinMot Katalog

Linarmotoren P01-23
Linarmotoren P01-37
Linarmotoren P01-48
Linarmotoren P10-54
Linarmotoren P10-70
Linarmotoren INOX
Linarmotoren ATEX
Linarmotoren Zubehör
Hubdrehmotoren PR01-52
Hubdrehmotoren PR01-84
Hubdrehmotoren PR01-52 Getriebe
Hubdrehmotoren PR01-84 Getriebe
Hubdrehmotoren Zubehör
Drives für Motoren P01 & PR01
Drives für Motoren P10
Drives Zubehör
Motor Kabel für P01 & PR01
Motor Kabel für P10
Linearführungen H
Linearführungen B
Linearführungen INOX
Magnetische Federn
Produkt Dokumentation
Datenbücher / Brochüren
Marketing

Suche

Erweiterte Suche

Neuheiten

C1450-PLV5-151000

alle Neuheiten

Warenkorb

Ihr Warenkorb ist leer.

zur Preisabfrage

Linarmotoren P01-23

Linarmotoren P01-37

Linarmotoren P01-48

Linarmotoren P10-54

Linarmotoren P10-70

Linarmotoren INOX

Linarmotoren ATEX

Linarmotoren Zubehör

Hubdrehmotoren PR01-52

Hubdrehmotoren PR01-84

Hubdrehmotoren PR01-52 Getriebe

Hubdrehmotoren PR01-84 Getriebe

Hubdrehmotoren Zubehör

Drives für Motoren P01 & PR01

Drives für Motoren P10

Drives Zubehör

Motor Kabel für P01 & PR01

Motor Kabel für P10

Linearführungen H

Linearführungen B

Linearführungen INOX

Magnetische Federn

Produkt Dokumentation

Datenbücher / Brochüren

Zuletzt angesehen

AT100-GP-LC-05-000

Marketing

The LinMot eCatalogue contains all product information, technical data, information on accessories, CAD data and software for the offered products. The integrated search function makes it very easy to locate the information by article number or description. Each product is presented with several photos that provide a first optical impression to interested parties. All desired system components can be collected in the shopping cart and then a price request can be initiated. Our sales and support team provides personal consultation for customers on request and ensures smooth integration of the selected products in the planned system. The eCatalog also suggests appropriate accessories automatically, thus avoiding time-consuming searches.

The bottom part of the eCatalog contains more interesting auxiliary functions.

Customers can use the convenient “Contact & feedback” form to make contact or ask specific questions, for example. There is also an option to generate a cleanly formatted PDF from an article list in the eCatalog. With just a few clicks, the customer can subscribe to the newsletter to get information about new products.

HIGHLIGHTS FROM THE ECATALOGUE

- » New products from our development department can be seen at a glance.
- » Comprehensive information is available for every product:
 - Data sheets
 - Assembly instructions
 - 3D CAD files
 - EPLAN macros
 - Functional PLC building blocks
- » Corresponding software can be downloaded for every product.
- » Matching accessories are proposed for every part so that nothing will prevent your system from being built correctly.
- » Simply collect the desired products in your shopping cart and send them to us for a price inquiry.



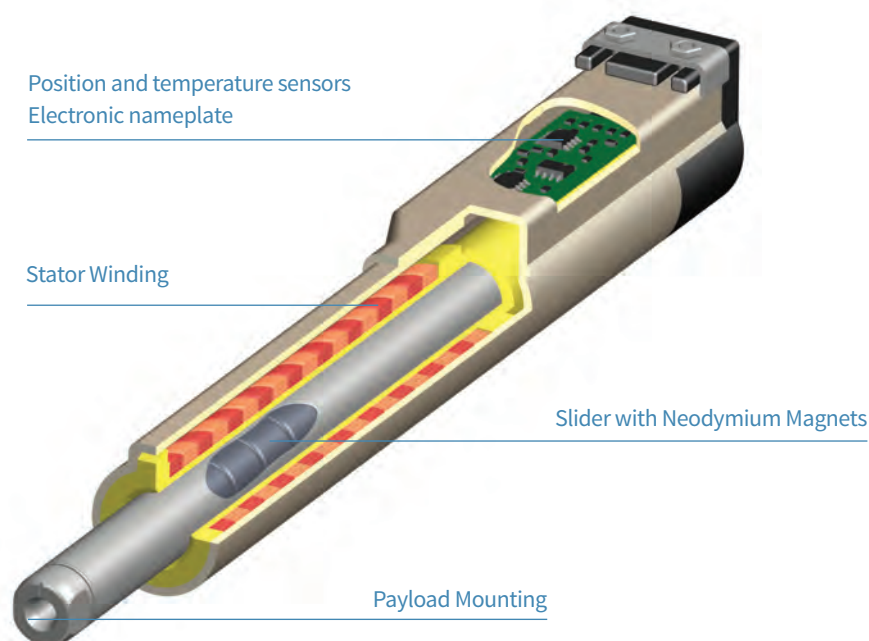
LINEAR MOTORS



Mode of Operation

LinMot linear motors are permanently actuated synchronous servo motors, with integrated position measurement and overload protection. Permanent magnets in the slider (like a rotor) and windings in the stator are used to generate forces, like in a brushless rotary motor. The configuration and different arrangement of the magnets generate the linear motion directly, using electromagnetic force, without mechanical elements that are subject to wear.

The design of the linear motors makes them standard elements in the field of machine design, where they are commonly used to replace pneumatic drives and mechanical cam discs. The applications range from rapid positioning, lifting, and pushing motions, to synchronous pick and place applications, to complex palletizing gantry robots.



Design

The windings, position sensors, temperature monitoring, and bearings are all located in the stator. It consists of a solid metal cylinder in which the motor components are cast, so that they are optimally protected from damage and contamination (IP67). The stators are available in two versions, with direct cable exit or a rotating angle connector. The slider consists of a stainless steel tube in which the drive magnets are mounted. During operation, the slider is guided by the plain bearing integrated in the stator. There is no electrical or mechanical connection between the slider and the stator.



Product Overview

LinMot offers a wide range of linear motor products. They can be used to implement nearly any application. It makes no difference what voltage range the motors are used in. Motors are available in 72 V, 230 VAC, or 3x400VAC technology. For greater dynamics, the customer can make use of high-performance motors that have different speeds than the standard motors. If

the engineer needs a very compact drive or if difficult conditions apply, LinMot offers short motors and INOX and ATEX versions. The LinMot product range also includes the right components for replacing pneumatic systems. The P04 and PD04 drives are strong players here and provide a true alternative to pneumatic cylinders.



Standard Motors P01 / P02

The standard variant of the linear motors covers a wide range of applications. The compact motors are used to carry out a wide range of positioning tasks in the low voltage range. This motor family includes 7 sizes with a maximum stroke length of 1830 mm and a maximum force of 1024 N.



HP Motors P01

The High Performance linear motors have significantly more power than standard motors of the same size and dimensions. This is due to the further development of the motor winding, the magnetic circuit and the use of high-performance materials. With High Performance motors, the user has nearly double the available power.



Short Type Motors P01 / P02

This motor type is the shortest design of the LinMot linear motors. They were developed especially for applications with limited space conditions. In order to provide designers with the maximum of space for cabling, the motors are supplied with three covers (cable outlet left, right or front).



P10 Motors

The P10 series motors are LinMot's most powerful drives. This motor type contains 2 motor families, which are characterized by a 3-phase technology. They are controlled by Servo Drives with direct power supply. Compared to the P01 series, the motors offer more than the 3 times peak power. By providing encoders which supply the usual signals, they can also be controlled by drives from third-party manufacturers.



Stainless Steel Motors

Developed for a challenging environment, these compact linear motors are designed entirely of EN 1.4404/AISI 316L stainless steel. Thanks to this complete encapsulation, they are also protected against penetration by dust and water (allowing high-pressure and steam-jet cleaning). This leak tightness means that they meet protection class IP69K according to DIN EN 60529. This means that the motors are optimally designed for use in the pharmaceutical and food products industries.



ATEX Motors

Wherever explosive gases or vapors are mixed with air, or flammable dust can occur, special electrical drives are required. The LinMot ATEX variant of the linear motor was developed for these special conditions. The motors are completely encapsulated in stainless steel and do not require seals. All joint connections are welded. This guarantees optimal protection of the motor and eliminates the risk of electrical arcing.



PD03 Motors

The PD03 motor is a compact linear motor with integrated drive. This concept thus allows the controller to be eliminated from the electrical enclosure, thus greatly reducing installation time and effort. The design of this motor is based on the 37Sx120 short version of the standard HP motor and produces a peak force of 255 N. The drive supplies the motor with a peak phase current of up to 25 A and has an industrial Ethernet interface.



P04 Motors

This drive has all of the features of the familiar tubular linear motor from LinMot and the additional advantage of an integrated guide. The PD04 actuator can be equipped with familiar mechanical accessories for pneumatic systems. This makes it even easier to replace pneumatics, as all possible mounting variants can be implemented.



PD04 Motors

PD04 actuators from LinMot are the motors that replace pneumatics. Designed for a force range of up to 550 N and acceleration of up to 50 m/s², the PD04 can be used more precisely than pneumatic cylinders. The drive can be used to replace pneumatic cylinders and configured with no software or PC required. Motion data and force data can be set from a display directly on the drive in real time. The user can set up four positions easily.

Sliders

LinMot sliders consist of a stainless steel tube in which the drive magnets are mounted. The slider is guided in the slide bearing of the stator, and can be the moving or the fixed part of the drive, depending on the application. The round design causes the attractive magnetic forces between the slider and the stator

to be balanced, so that the motor can be installed by hand without a problem. This is a great advantage over flat linear motors, in which large attractive forces are generated between the windings and the magnetic part. In addition to standard sliders, LinMot has various special versions available.

HOLLOW SLIDERS

Hollow sliders have a central hole through their length. This can be used to run compressed air, vacuum, or other media, or to run wires. Hollow sliders have the same mechanical dimensions as standard sliders. Hollow sliders have a lower mass (-12%) compared to standard sliders and have a slightly reduced continuous and maximum force (-10%).

HIGH-CLEARANCE SLIDERS

High-clearance sliders have an outer diameter that is 1mm less than that of a standard slider. This means there is an air gap of 0.5 mm between the slider and the stator.

The air gap simplifies installation and alignment of the motor, and allows maintenance-free operation of the motor. Sliders with reduced diameter must be mounted at both ends, or have external bearings.

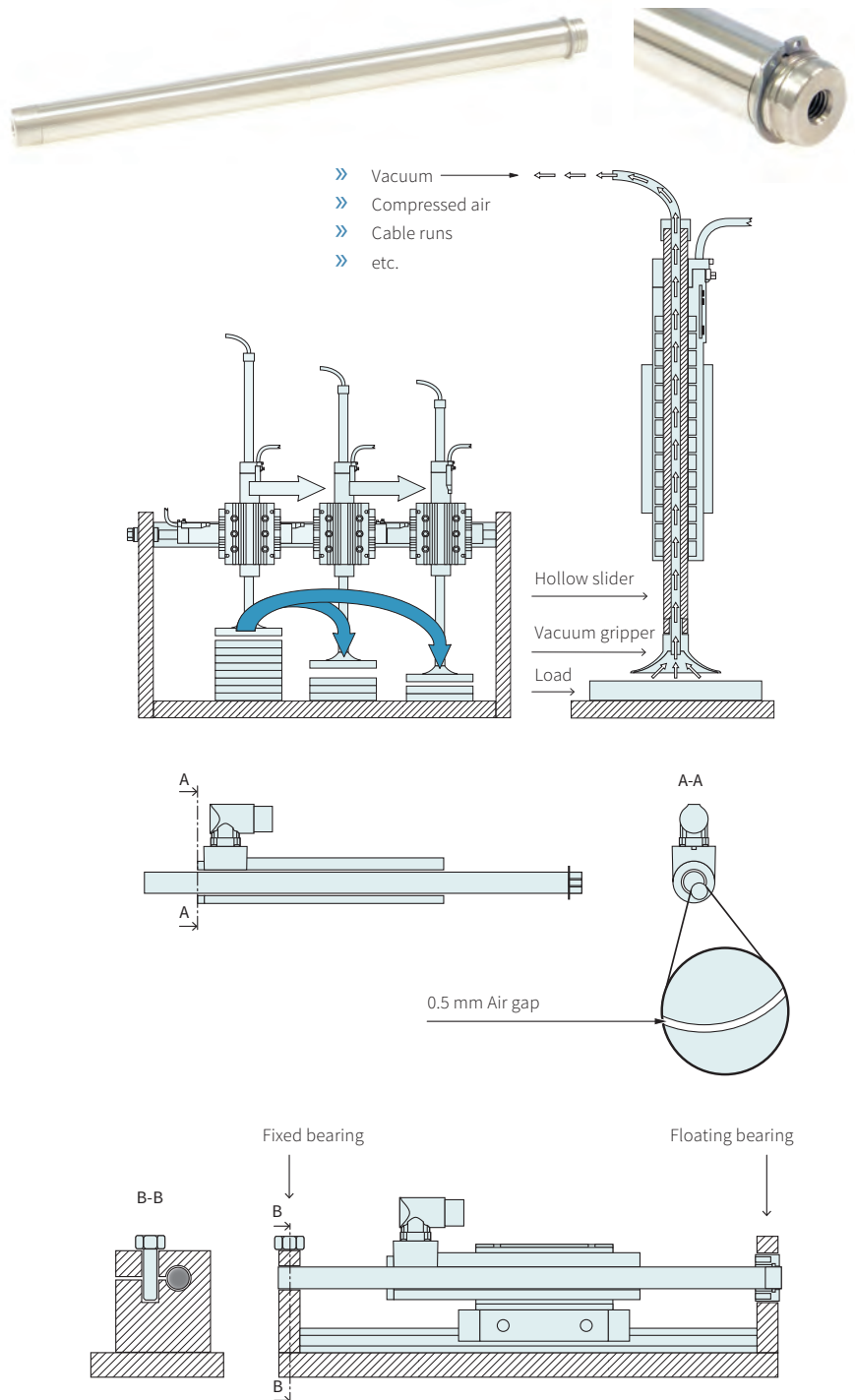
High-clearance sliders can be used with all stator types, just like standard sliders. Mechanically, they are different from the standard slider only in their diameter. Due to the smaller diameter, the values of mass and force differ.

Mass:

- » -10 % for motor series P01-37
- » -7 % for motor series P01-48

Continuous and max. force:

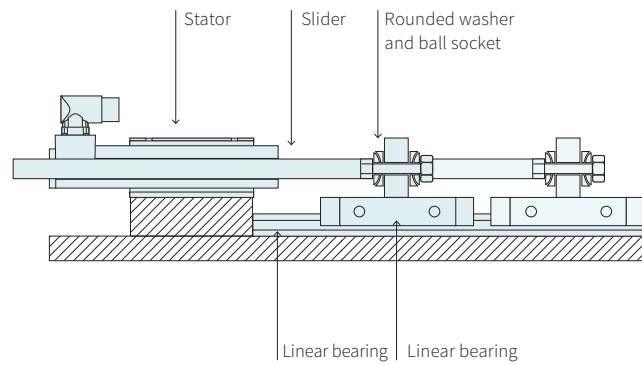
- » +8 % for motor series P01-37
- » -20 % for motor series P01-37-HP
- » -13 % for motor series P01-48



"Moving Slider" Applications

In a "moving slider" installation, the stator is fixed and the slider is the moving part. The load, borne by a linear guide, is attached directly to the end of the slider. In order to compensate for misalignment, spherical axial bearings consisting of rounded washers and ball sockets may be used to connect to the load.

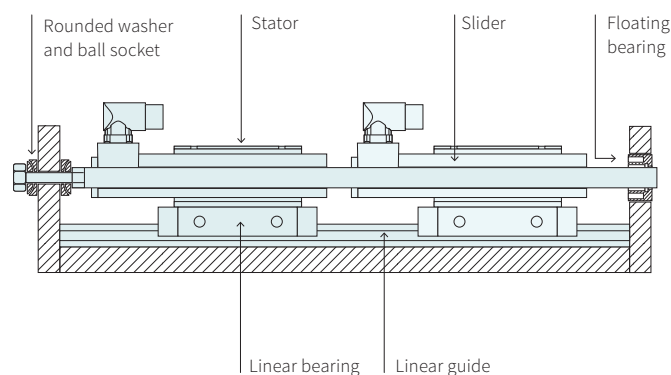
The "moving slider" installation has advantages of short-stroke and very dynamic motions, since the moving mass is small and the motor cable does not move.



"Moving Stator" Applications

In "moving stator" applications, the slider is fixed, and the stator is the moving part. The load is attached to the stator, which is mounted on a linear guide. In order to avoid an overdetermined bearing mount, and compensate for alignment errors, the slider may be mounted on one end in a fixed bearing with a spherical axial bearing. On the opposite end, the slider is mounted in a floating bearing.

The "moving stator" installation has advantages for long-stroke motions, in terms of installation length. Since the motor cable is always under motion in this installation type, only stators with plug connectors should be used, along with cable-chain compatible motor cables of type KS. In some applications, multiple stators may be used on a single (long) slider.

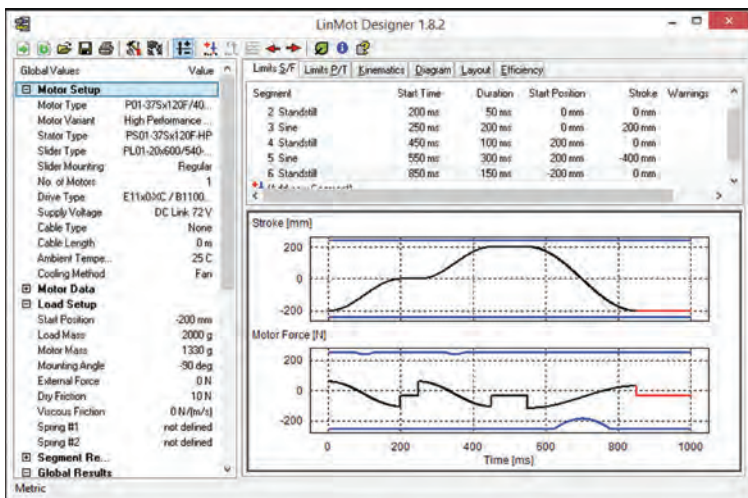


Dimensioning of linear motors

The LinMot Designer program calculates the appropriate benchmark data, such as peak force, rated force, and maximum speed, for the appropriate linear motor.

In a first step, the global data such as the installation orientation, loads, friction, etc. are specified for the drive design. The entire motion cycle is then divided into individual motion segments: forward motion, dwell time, reverse motion, dwell time, etc. To define the motions in the individual segments, various motion profiles are available, such as sinusoidal motions, motion profiles optimized for jerk or for time, etc. Additional, segment-specific data can be defined in every segment, such as higher friction or greater load mass during the reverse motion.

After the entire motion sequence has been entered, the desired motion sequence is simulated. On the basis of the data entered, the kinematic benchmark data and the relevant parameters for the motor are calculated. The peak values that occur briefly and the numbers relevant to continuous operation are compared with those of the selected motor. If the required motion profile exceeds the motor performance data, then a warning is automatically output, on the basis of which the motor selection or the motion sequence must be adjusted.



Simulation of the motion

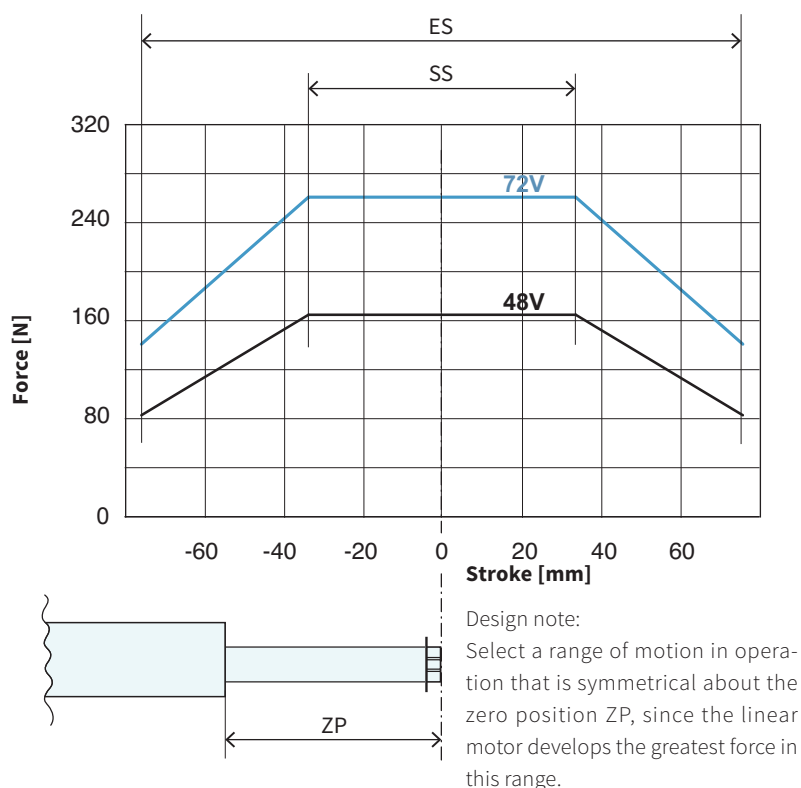
Input of global motor data

Important terms

Stroke-Force Diagram

Due to its design, the maximum force of a LinMot linear motor is dependent on the position of the slider in the stator. The maximum force curve is symmetrical about the center of the stroke range, which is known as the zero position (ZP). If the front slider end is moved out of the stator by the distance ZP, the slider is in the center of the stroke range. The zero position ZP is found in the data sheet for each linear motor, and is different for each motor.

In the Standard Stroke (SS) range, the motor has a constant maximum force, since the drive magnets of the slider are in the active range of the stator. This results in optimal force generation over the entire SS stroke range. The further the slide moves out of the SS stroke range, the fewer magnets are within the active part of the stator. This causes the maximum and effective force to drop off linearly at the edges of the Extended Stroke (ES). The maximum force is also dependent on the power supply voltage, and the maximum current from the Servo Drive. The maximum force, depending on the slider position, is shown for various Servo Drives in the stroke-force diagram.



Homing

After powering up the Servo Drive, a position initialization must be carried out, in the form of a homing, to determine the zero position. The initialization can be configured by the user. It can be made either to a mechanical stop, or to a reference sensor. In case of an emergency stop, the linear motor does not need to be referenced again, since only the power supply is interrupted, while the separate logic supply remains up.

If a linear absolute encoder is used, then no homing is required.

Performance limits and thermal behavior

The performance limit of a linear motor with lower duty cycles is limited to the peak force and the maximum speed of the slider. In longer duty cycles, the continuous force of the linear motor is limited by the maximum permissible power dissipation. This, in turn, is largely determined by the ambient temperature, cooling, and mounting of the motor. With forced cooling of the linear motor using a fan, the continuous force can be nearly doubled.

Forced Cooling

The continuous force of the linear motor depends mainly on cooling. The values given in the data sheets for continuous force can be significantly increased with the use of forced cooling, using a fan. If a linear motor mounted using standard flanges is additionally cooled by a fan, it can be operated with nearly double the continuous force. The same cooling effect as a fan can be obtained by feeding air between the slider and the stator via a special hole in the stator.

Option MagSpring / Weight Balancer

In vertical installation applications, a weight balancer can be implemented with a MagSpring to assist the linear motor. MagSpring is a purely passive design element that generates a constant force over a defined stroke.

Weight balancing can also be done with a mechanical spring or a pneumatic cylinder under constant pressure, mounted in parallel with the linear motor.

In the ideal case, the force of the weight balancer is selected to be the same as or slightly greater than the gravitational force. This causes the vertical axis to remain motionless at its current position when the motor is turned off, and may allow the use of a smaller linear motor.

Option Mechanical Brake

A brake prevents the motor from falling to the lower end stop when the motor is turned off in vertical installations.

LinMot linear guide models H01-37 and H01-48 have an option for installing a brake. These are controlled by the Servo Drive, and are automatically released when the motor is turned on. When the motor is turned off, or in case of a fault, the brake is automatically activated, so that the motor stays in its current position. For horizontal installations, brakes are needed only in rare cases.

Option: External Position Sensors

For high-precision applications, an optional external position measurement system can be used to increase the resolution and position accuracy beyond that of the internal measurement system.

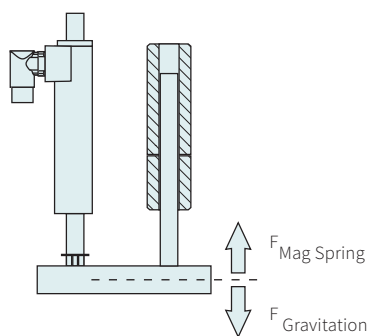
Since the principle of linear direct drives eliminates mechanical play and the external position sensors can be placed precisely where the precision is effective, positioning accuracy in the micrometer and sub-micrometer range can be obtained.

LinMot Servo Drives can operate the linear motors with an external measurement system. Both optical and magnetic systems are suitable for this, with incremental (RS422) or sin/cos interfaces, from any manufacturer.

Motor Temperature

Several absolute temperature sensors are located in the windings of LinMot stators. The absolute motor temperature in test operations can be read, and the instantaneous load on the motor can be determined.

In addition, the motor temperature can also be read during operation by the overall controller. This allows use of a diagnostic function that recognizes an increase in motor temperature during machine operation (such as in case of increasing friction), and can issue an appropriate warning.



Option: End- and Reference-Switches

Since the LinMot ServoDrive detects the current position and it is controlled, end position switches are not needed to protect gearboxes, spindles, etc. If end position switches are nevertheless needed for a special application, they can be connected to the LinMot drive.

As a rule, LinMot linear motors are referenced to a mechanical end stop at powerup. In applications where this is not possible or desirable, initialization can be done with a reference switch, a reference mark, or an end position switch.

LINEAR MOTORS P01 / P02



LinMot P01 and P02 linear motors are linear direct drives for highly dynamic motions and a wide range of applications.

Product Description

3

The P01 and P02 linear motors are linear direct drives with standard, short, and high-performance versions. Users can choose from a total of 7 sizes with a closely spaced range of sliders. This results in a large number of stroke and force ranges for any positioning task.

Typical applications include rapid positioning, lifting, and sliding motions, synchronous pick-and-place applications, and complete gantry-style palletizing robots.



Standard Motors P01 / P02

The standard variant of the linear motor covers a wide range of applications. The compact drives are used to perform a many different positioning tasks in the low-voltage range. The stators are available with a rotating IP67 angle plug or a cable outlet. This makes them easy to install, even under difficult space constraints.



HP Motors P01

In comparison with standard motors, high-performance linear motors have substantially higher power output for the same form factor and identical dimensions. This is produced by advancements in the motor windings and in the magnetic circuit, and by the use of high-performance materials. The user can access nearly double the rated power.



Short Type Motors P01 / P02

This type of motor is the shortest form factor among LinMot linear motors. Short motors were developed specially for applications with limited available space. In order to provide designers with as much flexibility as possible for cable routing, these motors are shipped with three covers (cable output on the left, right, or front).

Characteristics

FREELY POSITIONABLE

LinMot linear motors can be freely positioned. With absolute or relative movement commands, they can move to any desired position in the stroke range. Since the LinMot linear drive is a closed-loop system, not only the end positions are monitored, but also deviations in position during travel. This allows, among other things, precise specification of travel speeds, acceleration and braking ramps, and travel through curved paths.

HIGH AND CONTROLLED DYNAMICS

Max. acceleration values over 500 m/s² and travel speeds over 5 m/s allow cyclical motion sequences of several Hertz

For handling applications with sensitive products, such as transporting wafers in semiconductor production, very gentle, smooth motions with suitable accelerations can be obtained.

PROCESS STABILITY

Since not only the end positions, but also speed and acceleration are controlled and monitored, motions that are programmed once are carried out the same way over the entire life of the machine.

SYNCHRONIZATION

For synchronous machines, the linear motor can be synchronized to the main shaft. By replacing mechanical cam discs with LinMot linear motors, for example, great variations can be achieved, with format changeovers at the push of a button.

OVERLOAD PROTECTION

There are no mechanical components for force transfer that could be damaged in a crash or stall condition in a linear motor. Complex, expensive designs to protect gearboxes, gears, and shafts are thus eliminated. If the linear motor stalls, it acts like a pneumatic cylinder and tries to reach the target position with maximum force. The following error monitor in the drive can, however, immediately recognize a stall condition. Temperature sensors integrated in the stator prevent the drive from overloading in any case.

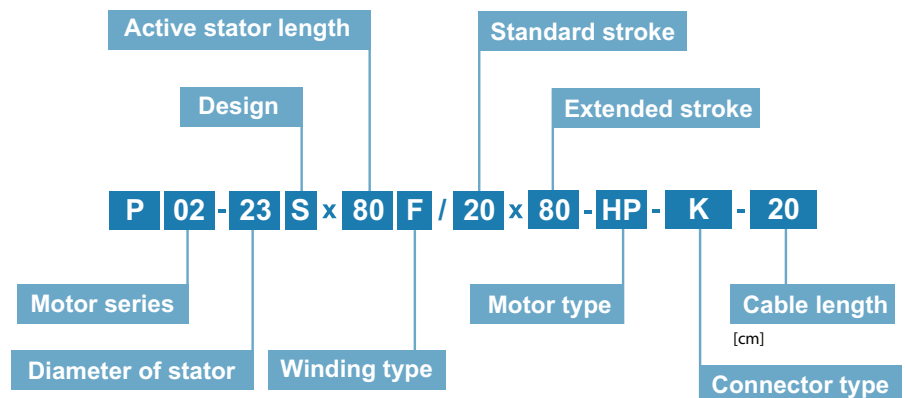
LONG LIFESPAN

Since the linear motion is generated purely magnetically, and no mechanical force transmission takes place, even extremely dynamic applications can be implemented with a long lifespan.

SIMPLE INSTALLATION

The connection between the motor and the Servo Drive requires only a single cable. Since all motors have a Connector either directly on the motor or at the end of the motor cable, installation is as simple as you might think. Motor cables are available from stock in various lengths, in different versions. The standard cable is suitable for stationary applications. For applications with moving stators, high-flex motor cables are available for use with cable tracks, and robotic cables are available for applications with cable torsion.

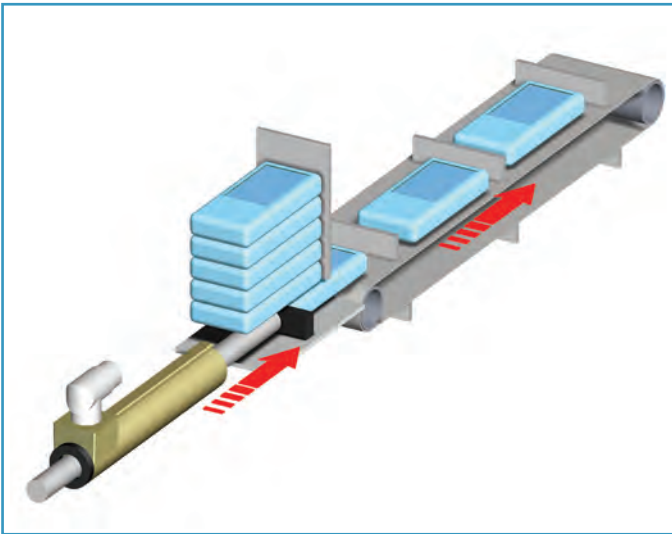
Type Code Linear Motors



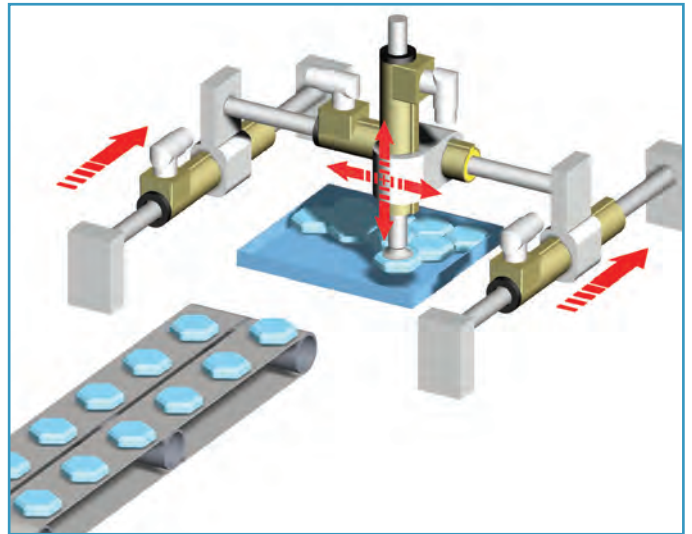
For explanations of the terms, please refer to the section "Glossary"

Sample applications

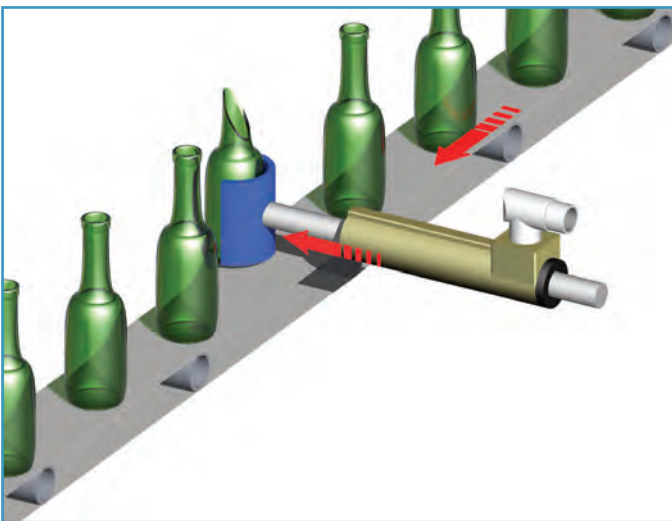
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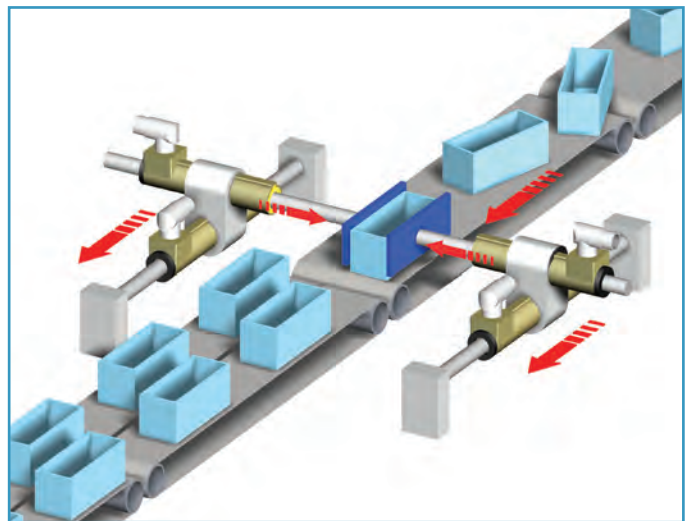
Feeding



Pick and Place



Sorting



Alignment

LINEAR MOTORS P01-23x80



- ✓ Highly dynamic drives
- ✓ Wide stroke range
- ✓ Available with cable outlet or with rotatable connector
- ✓ Optional with air cooling
- ✓ Wide range of applications in handling modules as well as in plant and machine construction

LINEAR MOTORS P01-23x80

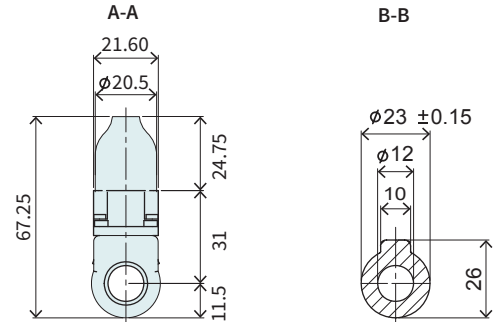
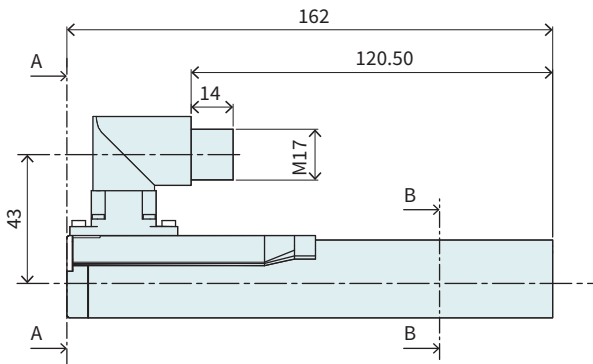
Technical Data	29
Motor Specifications	
P01-23x80/0x60-LC	32
P01-23x80/40x100-LC	33
P01-23x80/60x120-LC	34
P01-23x80/100x160-LC	35
P01-23x80/160x220-LC	36
P01-23x80/220x280-LC	37
P01-23x80/290x350-LC	38
P01-23x80/350x410-LC	39
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MOTOR FAMILY P01-23x80

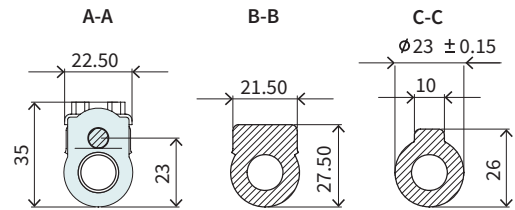
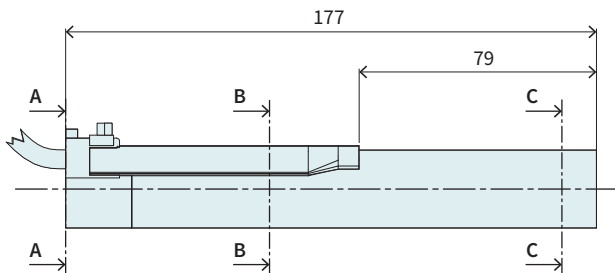
Technical Data				
Stroke				
Standard Stroke (SS)	mm (in)		≤ 720 (≤ 28.3)	
Extended Stroke (ES)	mm (in)		≤ 780 (≤ 30.69)	
Force				
Max. Force @ 48VDC	N (lbf)		41.6 (9.35)	
Max. Force @ 72VDC	N (lbf)		44 (9.89)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		8.6 / 16 / - (1.9 / 3.5 / -)	
Max. Border Force relative	%		≤ 63	
Force Constant	N/A _{pk} (lbf/A _{pk})		11 (2.47)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.9 (159.9)	
Max. Velocity @ 72VDC	m/s (in/s)		5.9 (239.9)	
Position Detection				
Position Resolution	mm (in)		0.002 (0.0001)	
Repeatability	mm (in)		±0.05 (±0.002)	
Position Resolution with ES	mm (in)		0.001 (0.00004)	
Repeatability with ES	mm (in)		±0.01 (±0.0004)	
Linearity with ES	mm (in)		±0.01 (±0.0004)	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Terminal Resistance 25 °C / 120 °C	Ohm		10 / 14	
Terminal Inductivity	mH		1.4	
Magnetic Period	mm (in)		20 (0.78)	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		770 / 230 / -	
Mechanical Data				
Stator Diameter	mm (in)		23 (0.91)	
Stator Length [Connector type / Cable type]	mm (in)		162 / 177 (6.4 / 7)	
Stator Mass	g (lb)		265 (0.58)	
Slider Diameter	mm (in)		12 (0.47)	
Slider Length	mm (in)		130 - 850 (5.1 - 33)	
Slider Mass	g (lb)		90 - 700 (0.20 - 1.5)	
IP Code			IP 65	

STATOR CONNECTOR TYPE



Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233

STATOR CABLE TYPE

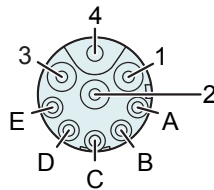


Item	Description	Item-No.
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1 m, Connector D-Sub-9(m)	0150-1201

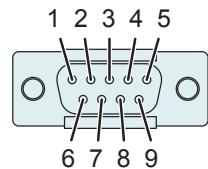
CONNECTOR

Motor Connector Wiring	PS01-23x80-R PS01-23x80-R20	PS01-23x80	Wire color motor cable
	R-Connector	D-Connector	
Ph 1+	1	1	red
Ph 1-	2	6	pink
Ph 2+	3	2	blue
Ph 2-	4	7	grey
+5VDC	A	3	white
GND	B	8	inner shield
Sin	C	4	yellow
Cos	D	9	green
Temp.	E	5	black
Shield	Housing	Housing	outer Shield

R-Connector



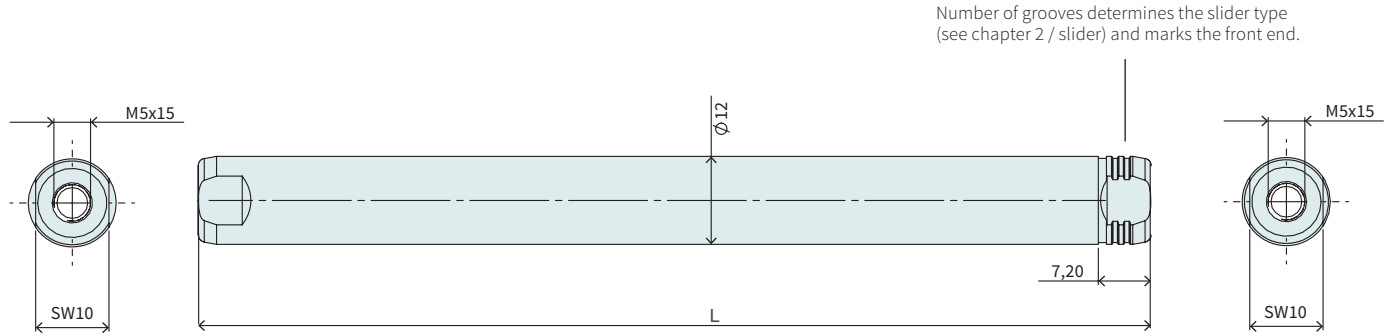
D-Connector



View: Motor Connector, plug side

SLIDER

3

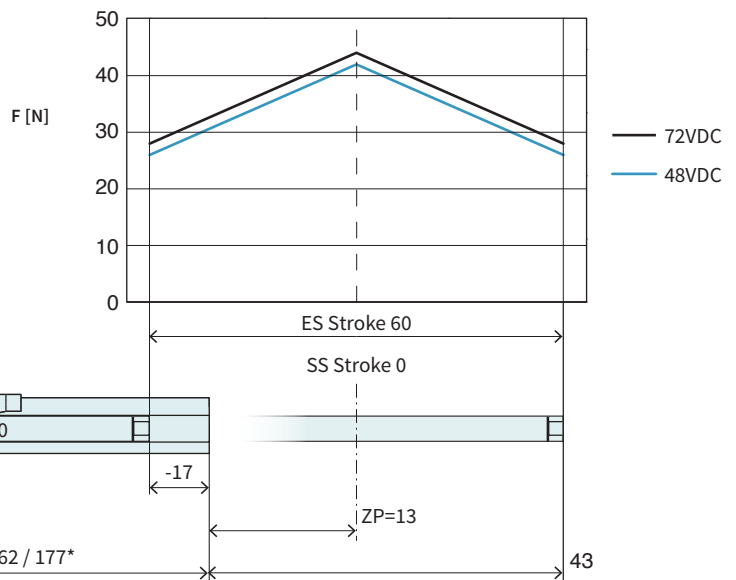


Slider Standard				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-12x130/90-LC	Slider 'standard LC'	60	0	0150-2580
PL01-12x170/130-LC	Slider 'standard LC'	100	40	0150-2581
PL01-12x190/150-LC	Slider 'standard LC'	120	60	0150-2582
PL01-12x230/190-LC	Slider 'standard LC'	160	100	0150-2598
PL01-12x290/250-LC	Slider 'standard LC'	220	160	0150-2583
PL01-12x350/310-LC	Slider 'standard LC'	280	220	0150-2584
PL01-12x420/380-LC	Slider 'standard LC'	350	290	0150-2585
PL01-12x480/440-LC	Slider 'standard LC'	410	350	0150-2586
PL01-12x580/540-LC	Slider 'standard LC'	510	450	0150-2587
PL01-12x760/720-LC	Slider 'standard LC'	690	630	0150-2589
PL01-12x850/810-LC	Slider 'standard LC'	780	720	0150-2588

Slider Heavy Duty				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL02-12x130/90-LC	Slider 'heavy duty LC'	60	0	0150-2590
PL02-12x170/130-LC	Slider 'heavy duty LC'	100	40	0150-2591
PL02-12x190/150-LC	Slider 'heavy duty LC'	120	60	0150-2592
PL02-12x230/190-LC	Slider 'heavy duty LC'	160	100	0150-2599
PL02-12x290/250-LC	Slider 'heavy duty LC'	220	160	0150-2593
PL02-12x350/310-LC	Slider 'heavy duty LC'	280	220	0150-2594
PL02-12x420/380-LC	Slider 'heavy duty LC'	350	290	0150-2595
PL02-12x480/440-LC	Slider 'heavy duty LC'	410	350	0150-2597
PL02-12x580/540-LC	Slider 'heavy duty LC'	510	450	0150-2596
PL02-12x760/720-LC	Slider 'heavy duty LC'	690	630	on request
PL02-12x850/810-LC	Slider 'heavy duty LC'	780	720	on request

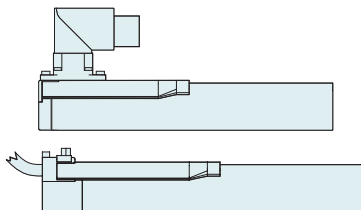
P01-23x80/0x60-LC

Max. Stroke: 60 mm
Peak Force: 44 N



Technical Data P01-23x80/0x60-LC

Stroke			
Standard Stroke (SS)	mm (in)	0	(0)
Extended Stroke (ES)	mm (in)	60	(2.35)
Force			
Max. Force @ 48VDC	N (lbf)	41.6	(9.35)
Max. Force @ 72VDC	N (lbf)	44	(9.89)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	8.6 / 16 / -	(1.9 / 3.5 / -)
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	11	(2.47)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3.9	(159.9)
Max. Velocity @ 72VDC	m/s (in/s)	5.9	(239.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.5	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	3.7	
Max. Current @ 72VDC	A _{pk}	3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	0.78 / 1.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	770 / 230 / -	
Mechanical Data			
Slider Length	mm (in)	130	(5.1)
Slider Mass	g (lb)	90	(0.16)



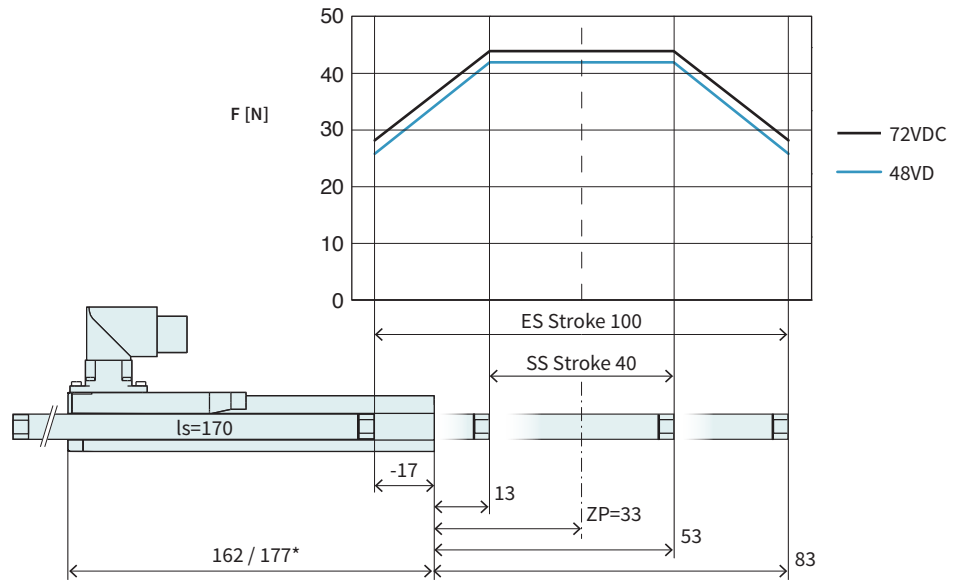
Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201
PL01-12x130/90-LC	Slider 'standard LC'	0150-2580
PL02-12x130/90-LC	Slider 'heavy duty LC'	0150-2590

P01-23x80/40x100-LC

3

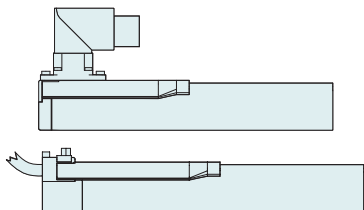
Max. Stroke: 100 mm
Peak Force: 44 N

Dimensions in mm
 *Cable Type

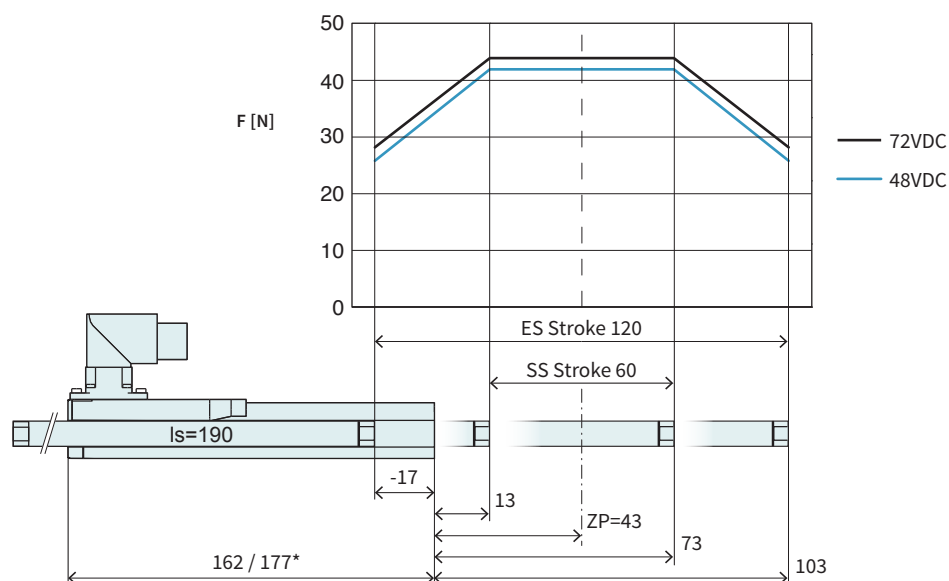


Technical Data P01-23x80/40x100-LC

Stroke				
Standard Stroke (SS)	mm (in)		40 (1.57)	
Extended Stroke (ES)	mm (in)		100 (3.93)	
Force				
Max. Force @ 48VDC	N (lbf)		41.6 (9.35)	
Max. Force @ 72VDC	N (lbf)		44 (9.89)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		8.6 / 16 / - (1.9 / 3.5 / -)	
Max. Border Force relative	%		63	
Force Constant	N/A _{pk} (lbf/A _{pk})		11 (2.47)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.9 (159.9)	
Max. Velocity @ 72VDC	m/s (in/s)		5.9 (239.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.35	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		770 / 230 / -	
Mechanical Data				
Slider Length	mm (in)		170 (6.7)	
Slider Mass	g (lb)		130 (0.23)	

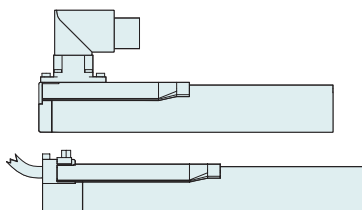


Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201
PL01-12x170/130-LC	Slider 'standard LC'	0150-2581
PL02-12x170/130-LC	Slider 'heavy duty LC'	0150-2591



Technical Data P01-23x80/60x120-LC

Stroke				
Standard Stroke (SS)	mm	(in)	60	(2.35)
Extended Stroke (ES)	mm	(in)	120	(4.71)
Force				
Max. Force @ 48VDC	N	(lbf)	41.6	(9.35)
Max. Force @ 72VDC	N	(lbf)	44	(9.89)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	8.6 / 16 / -	(1.9 / 3.5 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	11	(2.47)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	3.9	(159.9)
Max. Velocity @ 72VDC	m/s	(in/s)	5.9	(239.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		770 / 230 / -	
Mechanical Data				
Slider Length	mm	(in)	190	(7.5)
Slider Mass	g	(lb)	145	(0.26)



Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0,2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201



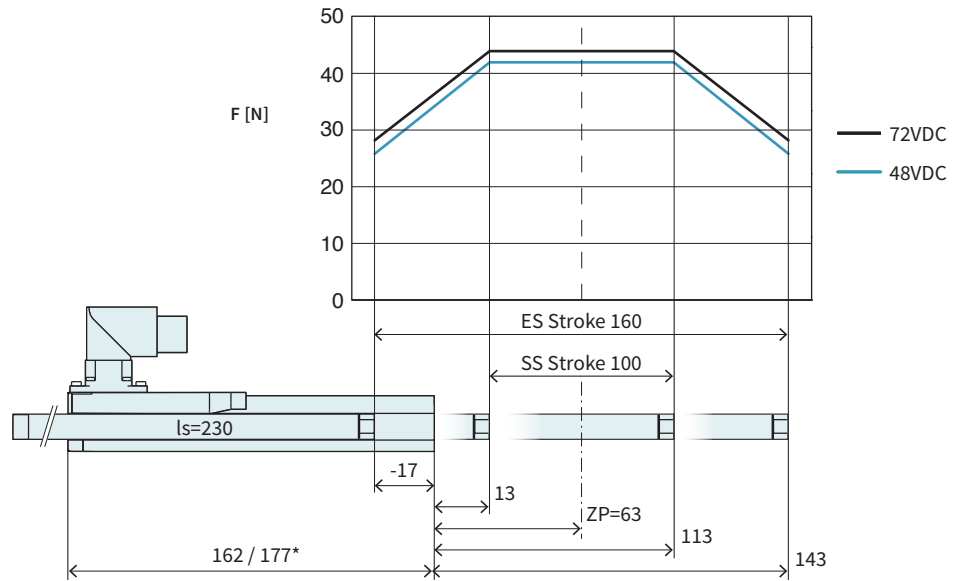
PL01-12x190/150-LC	Slider 'standard LC'	0150-2582
PL02-12x190/150-LC	Slider 'heavy duty LC'	0150-2592

P01-23x80/100x160-LC

3

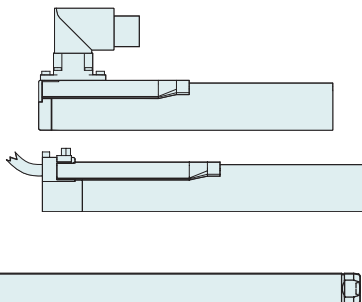
Max. Stroke: 160 mm
Peak Force: 44 N

Dimensions in mm
 *Cable Type



Technical Data P01-23x80/100x160-LC

Stroke				
Standard Stroke (SS)	mm (in)		100 (3.93)	
Extended Stroke (ES)	mm (in)		160 (6.29)	
Force				
Max. Force @ 48VDC	N (lbf)		41.6 (9.35)	
Max. Force @ 72VDC	N (lbf)		44 (9.89)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		8.6 / 16 / - (1.9 / 3.5 / -)	
Max. Border Force relative	%		63	
Force Constant	N/A _{pk} (lbf/A _{pk})		11 (2.47)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.9 (159.9)	
Max. Velocity @ 72VDC	m/s (in/s)		5.9 (239.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		770 / 230 / -	
Mechanical Data				
Slider Length	mm (in)		230 (9.1)	
Slider Mass	g (lb)		180 (0.32)	

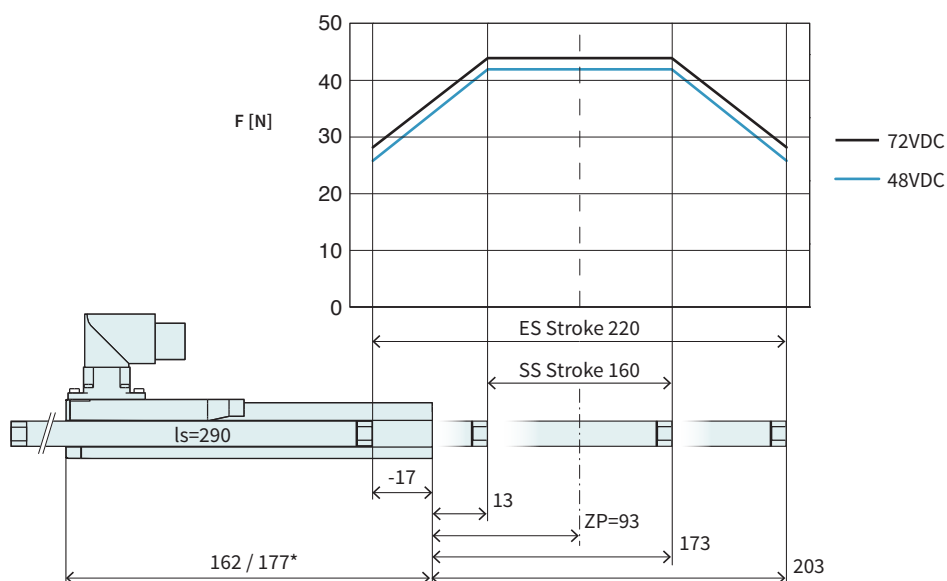


Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201
PL01-12x230/190-LC	Slider 'standard LC'	0150-2598
PL02-12x230/190-LC	Slider 'heavy duty LC'	0150-2599

P01-23x80/160x220-LC

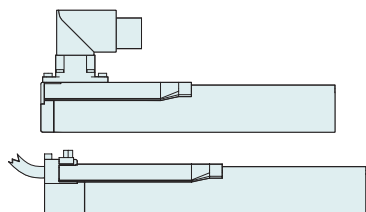
Max. Stroke: 220 mm
Peak Force: 44 N

Dimensions in mm
 *Cable Type



Technical Data P01-23x80/160x220-LC

Stroke				
Standard Stroke (SS)	mm	(in)	160	(6.29)
Extended Stroke (ES)	mm	(in)	220	(8.65)
Force				
Max. Force @ 48VDC	N	(lbf)	41.6	(9.35)
Max. Force @ 72VDC	N	(lbf)	44	(9.89)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	8.6 / 16 / -	(1.9 / 3.5 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	11	(2.47)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	3.9	(159.9)
Max. Velocity @ 72VDC	m/s	(in/s)	5.9	(239.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		770 / 230 / -	
Mechanical Data				
Slider Length	mm	(in)	290	(11)
Slider Mass	g	(lb)	230	(0.41)



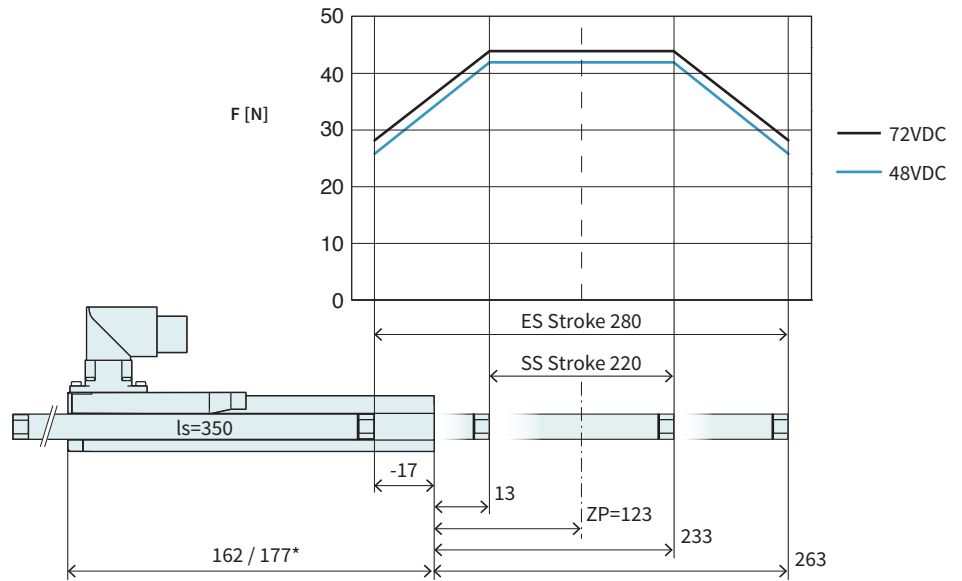
Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201
PL01-12x290/250-LC	Slider 'standard LC'	0150-2583
PL02-12x290/250-LC	Slider 'heavy duty LC'	0150-2593

P01-23x80/220x280-LC

3

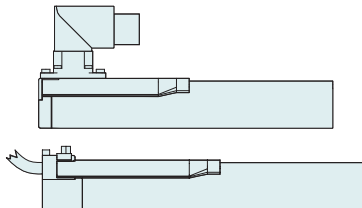
Max. Stroke: 280 mm
Peak Force: 44 N

Dimensions in mm
 *Cable Type



Technical Data P01-23x80/220x280-LC

Stroke				
Standard Stroke (SS)	mm (in)		220 (8.65)	
Extended Stroke (ES)	mm (in)		280 (10.99)	
Force				
Max. Force @ 48VDC	N (lbf)		41.6 (9.35)	
Max. Force @ 72VDC	N (lbf)		44 (9.89)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		8.6 / 16 / - (1.9 / 3.5 / -)	
Max. Border Force relative	%		63	
Force Constant	N/A _{pk} (lbf/A _{pk})		11 (2.47)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.9 (159.9)	
Max. Velocity @ 72VDC	m/s (in/s)		5.9 (239.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		770 / 230 / -	
Mechanical Data				
Slider Length	mm (in)		350 (14)	
Slider Mass	g (lb)		280 (0.5)	

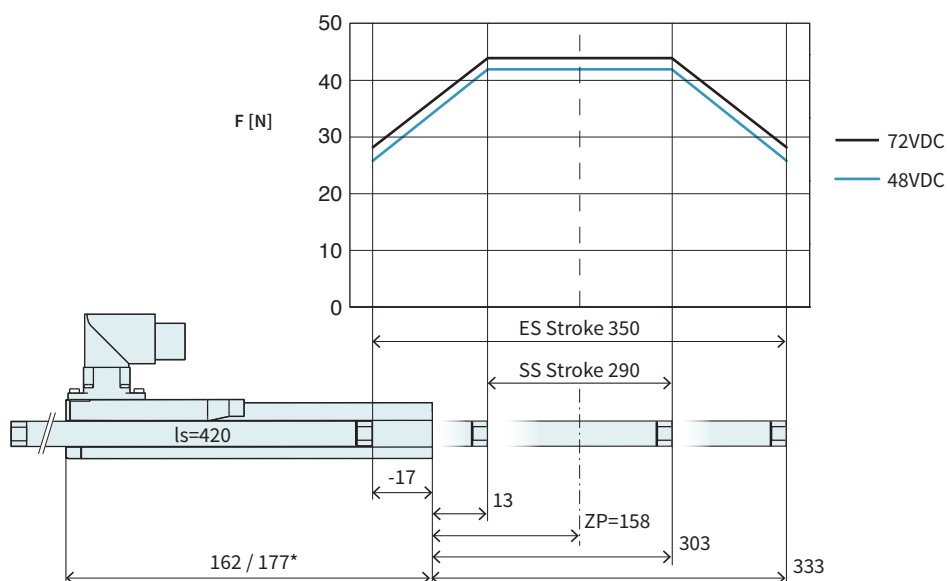


Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201
PL01-12x350/310-LC	Slider 'standard LC'	0150-2584
PL02-12x350/310-LC	Slider 'heavy duty LC'	0150-2594

P01-23x80/290x350-LC

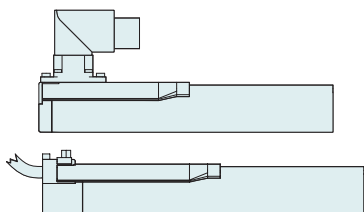
Max. Stroke: 350 mm
Peak Force: 44 N

Dimensions in mm
 *Cable Type



Technical Data P01-23x80/290x350-LC

Stroke			
Standard Stroke (SS)	mm (in)	290 (11.4)	
Extended Stroke (ES)	mm (in)	350 (13.8)	
Force			
Max. Force @ 48VDC	N (lbf)	41.6 (9.35)	
Max. Force @ 72VDC	N (lbf)	44 (9.89)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	8.6 / 16 / - (1.9 / 3.5 / -)	
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	11 (2.47)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3.9 (159.9)	
Max. Velocity @ 72VDC	m/s (in/s)	5.9 (239.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	3.7	
Max. Current @ 72VDC	A _{pk}	3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	0.78 / 1.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	770 / 230 / -	
Mechanical Data			
Slider Length	mm (in)	420 (17)	
Slider Mass	g (lb)	340 (0.61)	



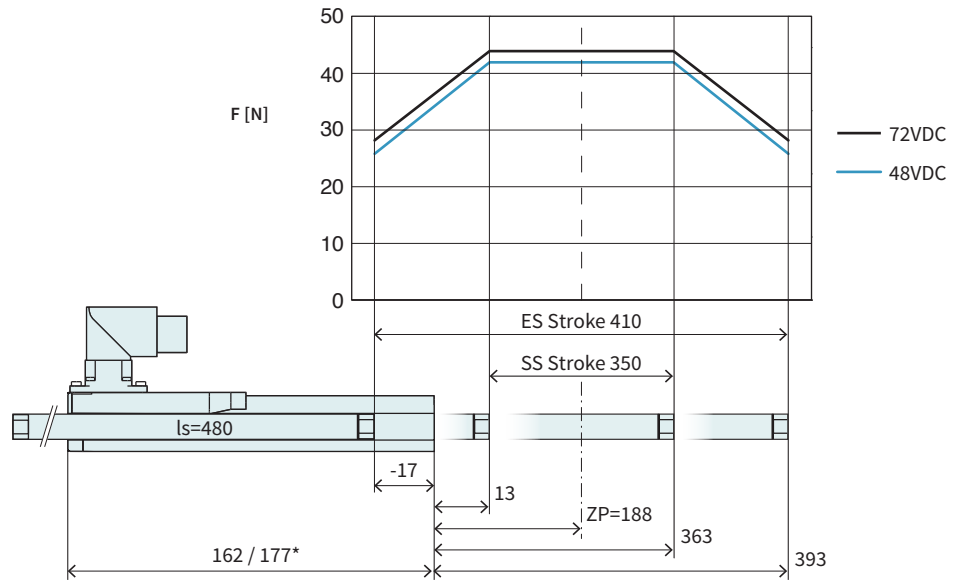
Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201

PL01-12x420/380-LC	Slider 'standard LC'	0150-2585
PL02-12x420/380-LC	Slider 'heavy duty LC'	0150-2595

P01-23x80/350x410-LC

3

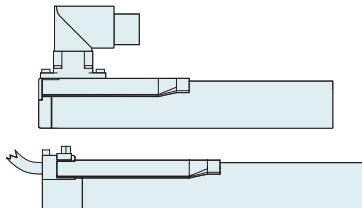
Max. Stroke: 410 mm
Peak Force: 44 N



Dimensions in mm
 *Cable Type

Technical Data P01-23x80/350x410-LC

Stroke				
Standard Stroke (SS)	mm	(in)	350	(13.8)
Extended Stroke (ES)	mm	(in)	410	(16.1)
Force				
Max. Force @ 48VDC	N	(lbf)	41.6	(9.35)
Max. Force @ 72VDC	N	(lbf)	44	(9.89)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	8.6 / 16 / -	(1.9 / 3.5 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	11	(2.47)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	3.9	(159.9)
Max. Velocity @ 72VDC	m/s	(in/s)	5.9	(239.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		770 / 230 / -	
Mechanical Data				
Slider Length	mm	(in)	480	(19)
Slider Mass	g	(lb)	390	(0.7)

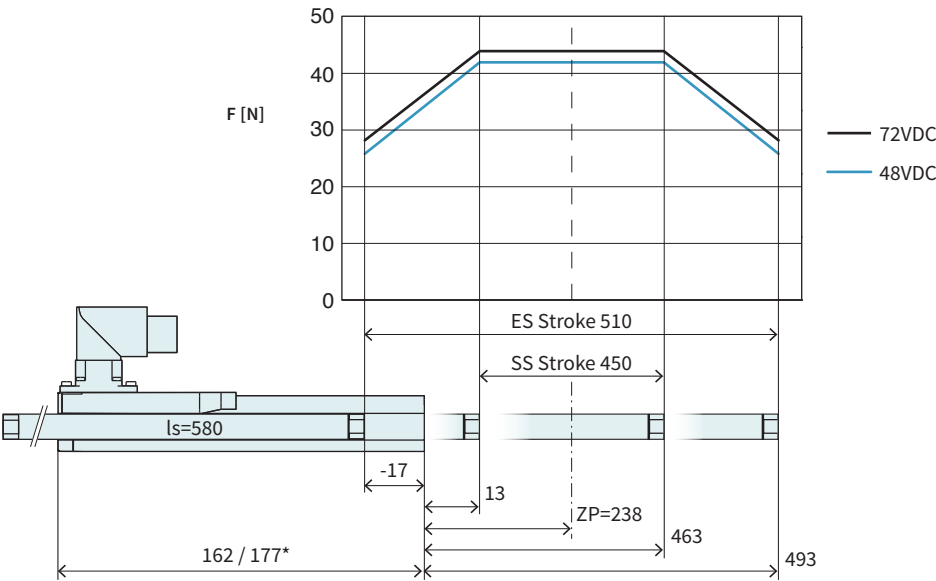


Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201

PL01-12x480/440-LC	Slider 'standard LC'	0150-2586
PL02-12x480/440-LC	Slider 'heavy duty LC'	0150-2597

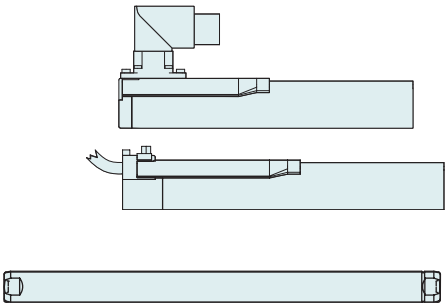
P01-23x80/450x510-LC

Max. Stroke: 510 mm
Peak Force: 44 N



Dimensions in mm
*Cable Type

Technical Data P01-23x80/450x510-LC				
Stroke				
Standard Stroke (SS)	mm	(in)	450	(17.69)
Extended Stroke (ES)	mm	(in)	510	(20.1)
Force				
Max. Force @ 48VDC	N	(lbf)	41.6	(9.35)
Max. Force @ 72VDC	N	(lbf)	44	(9.89)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	8.6 / 16 / -	(1.9 / 3.5 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	11	(2.47)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	3.9	(159.9)
Max. Velocity @ 72VDC	m/s	(in/s)	5.9	(239.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling/ Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		770 / 230 / -	
Mechanical Data				
Slider Length	mm	(in)	580	(23)
Slider Mass	g	(lb)	480	(0.86)

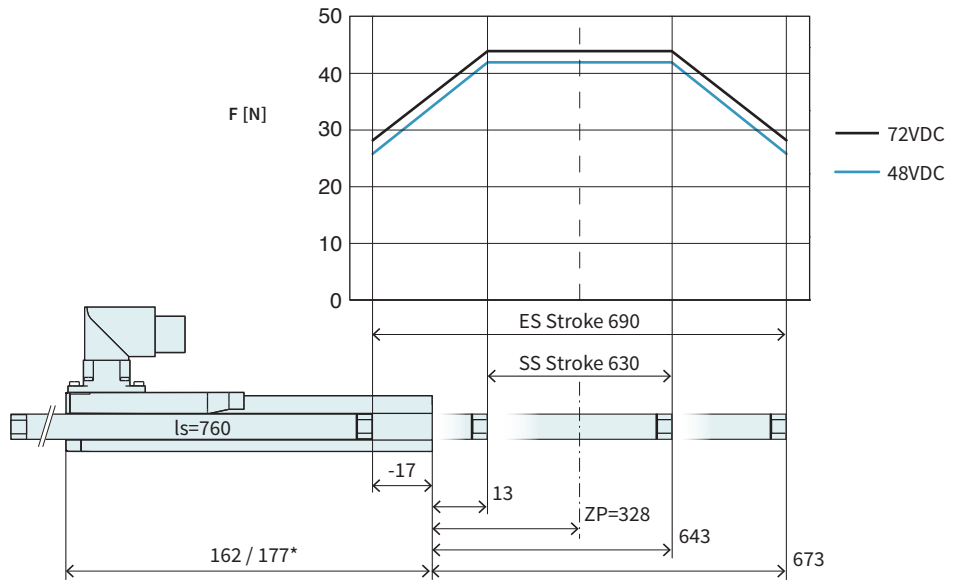


Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201
PL01-12x580/540-LC	Slider 'standard LC'	0150-2587
PL02-12x580/540-LC	Slider 'heavy duty LC'	0150-2596

P01-23x80/630x690-LC

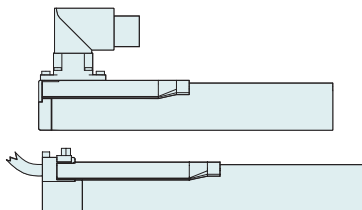
Max. Stroke: 690 mm
Peak Force: 44 N

Dimensions in mm
 *Cable Type



Technical Data P01-23x80/630x690-LC

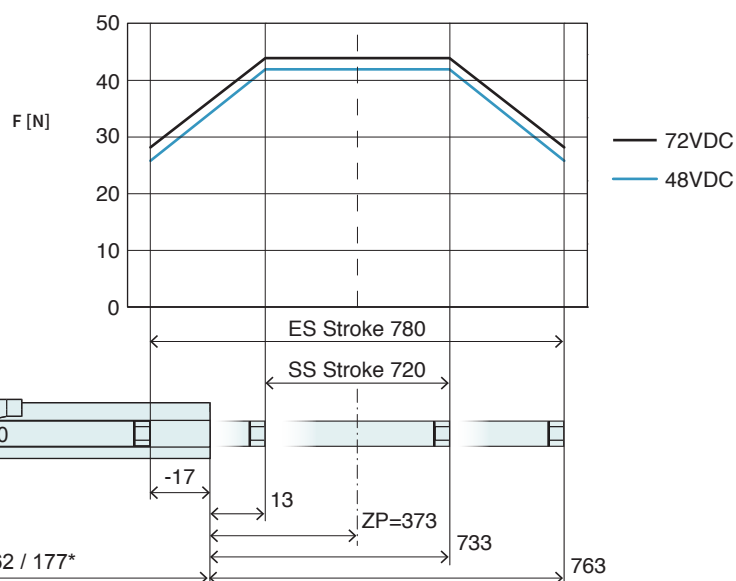
Stroke				
Standard Stroke (SS)	mm (in)	630	(24.8)	
Extended Stroke (ES)	mm (in)	690	(27.19)	
Force				
Max. Force @ 48VDC	N (lbf)	41.6	(9.35)	
Max. Force @ 72VDC	N (lbf)	44	(9.89)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	8.6 / 16 / -	(1.9 / 3.5 / -)	
Max. Border Force relative	%	63		
Force Constant	N/A _{pk} (lbf/A _{pk})	11	(2.47)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)	3.9	(159.9)	
Max. Velocity @ 72VDC	m/s (in/s)	5.9	(239.9)	
Position Detection				
Repeatability	mm (in)	±0.05	(±0.002)	
Linearity	%	± 0.15		
Electrical Data				
Max. Current @ 48VDC	A _{pk}	3.7		
Max. Current @ 72VDC	A _{pk}	3.9		
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	0.78 / 1.4 / -		
Thermal Data				
Max. Winding Temperature (Sensor)	°C	90		
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	6.4 / 1.9 / -		
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	770 / 230 / -		
Mechanical Data				
Slider Length	mm (in)	760	(30)	
Slider Mass	g (lb)	630	(1.1)	



Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201
PL01-12x760/720-LC	Slider 'standard LC'	0150-2589
PL01-12x760/720-LC	Slider 'heavy duty LC'	on request

P01-23x80/720x780-LC

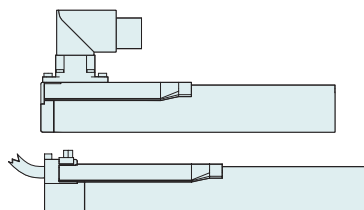
Max. Stroke: 780 mm
Peak Force: 44 N



Dimensions in mm
 *Cable Type

Technical Data P01-23x80/720x780-LC

Stroke			
Standard Stroke (SS)	mm (in)	720	(28.3)
Extended Stroke (ES)	mm (in)	780	(30.69)
Force			
Max. Force @ 48VDC	N (lbf)	41.6	(9.35)
Max. Force @ 72VDC	N (lbf)	44	(9.89)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	8.6 / 16 / -	(1.9 / 3.5 / -)
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	11	(2.47)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3.9	(159.9)
Max. Velocity @ 72VDC	m/s (in/s)	5.9	(239.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	3.7	
Max. Current @ 72VDC	A _{pk}	3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	0.78 / 1.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	770 / 230 / -	
Mechanical Data			
Slider Length	mm (in)	850	(33)
Slider Mass	g (lb)	700	(1.3)



Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201



PL01-12x850/810-LC	Slider 'standard LC'	0150-2588
PL02-12x850/810-LC	Slider 'heavy duty LC'	on request

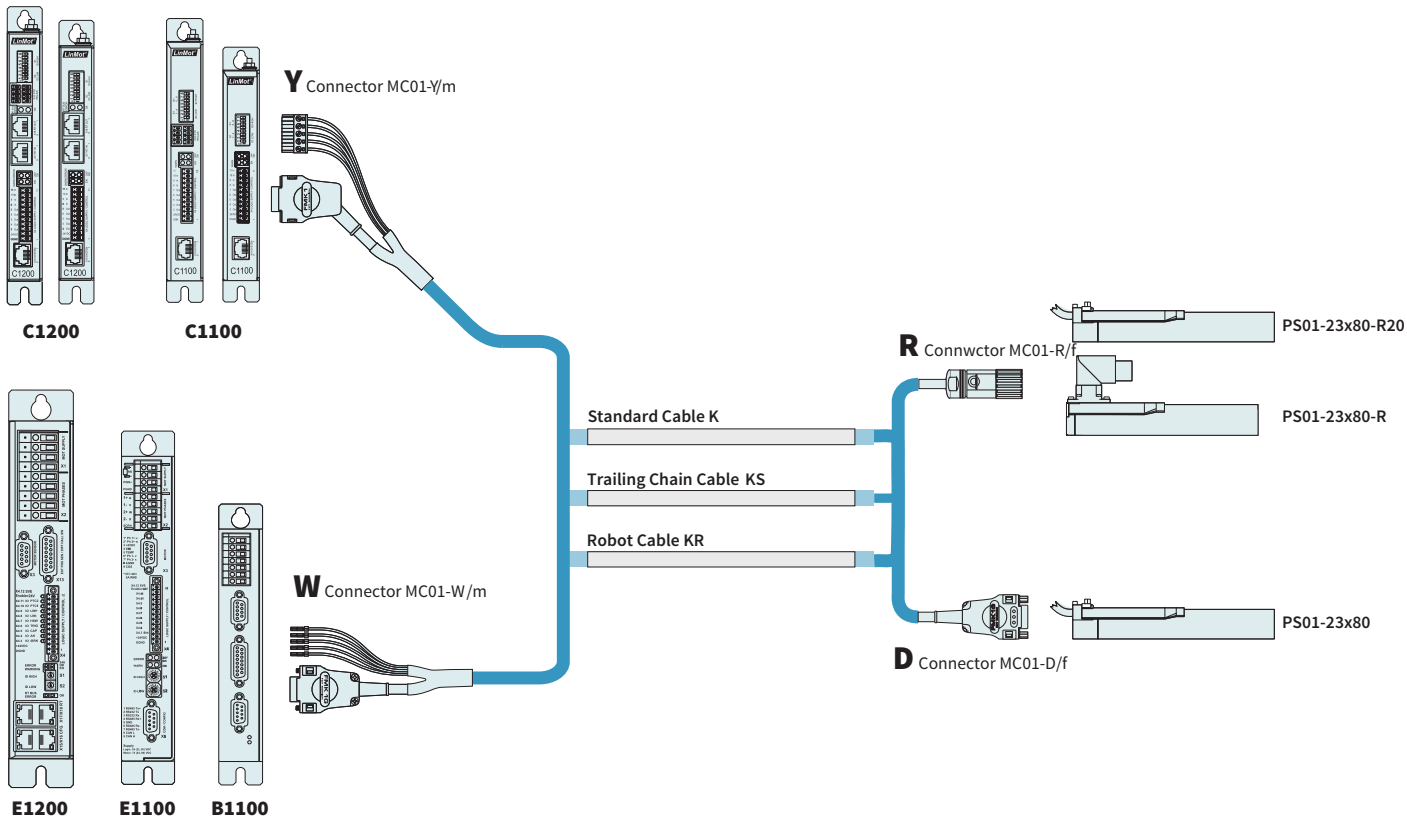
Linear Guides H01



HM01-23x80/60 Linear Module 23x80 with 60 mm Stroke				
→	H-Guide	H01-23x86/60	H-Guide for P01-23x80, Stroke max 60 mm	0150-5014
		H01-23x86/60-GF	H-Guide for P01-23x80, Stroke max 60 mm	0150-5074
	Stator	PS01-23x80-R	Stator with IP67 connector M17/9(m)	0150-1233
		PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
		PS01-23x80	Stator, cable 1 m, connector D-Sub-9(m)	0150-1201
→	Slider	PL01-12x190/150-LC	Slider 'standard LC'	0150-2582
HM01-23x80/160 Linear Module 23x80 with 160mm Stroke				
→	H-Guide	H01-23x86/160	H-Guide for P01-23x80, Stroke max 160 mm	0150-5015
		H01-23x86/160-GF	H-Guide for P01-23x80, Stroke max 160 mm	0150-5075
→	Stator	PS01-23x80-R	Stator with IP67 connector M17/9(m)	0150-1233
		PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
		PS01-23x80	Stator, cable 1 m, connector D-Sub-9(m)	0150-1201
→	Slider	PL01-12x290/250-LC	Slider 'standard LC'	0150-2583
HM01-23x80/260 Linear Module 23x80 with 260mm Stroke				
→	H-Guide	H01-23x86/260	H-Guide for P01-23x80, Stroke max 260 mm	0150-5016
		H01-23x86/260-GF	H-Guide for P01-23x80, Stroke max 260 mm	0150-5076
→	Stator	PS01-23x80-R	Stator with IP67 connector M17/9(m)	0150-1233
		PS01-23x80-R20	Stator, 0.2m cable, IP67 con. M17/9(m)	0150-1241
		PS01-23x80	Stator, cable 1m, connector D-Sub-9(m)	0150-1201
→	Slider	PL01-12x420/380-LC	Slider 'standard LC'	0150-2585
Accessories				
→	Fan	HV01-23	Fan cooling for H01-23	0150-5050
	MagSpring	MF01-20/H23	Flange MagSpring 20 / H-Guide 23	0250-2306
		MA01-20/H23	Adapter MagSpring 20 / H-Guide 23	0250-0116
→	Centering sleeve	HC01-09/04	Centering sleeve D9x4 mm	0150-3251

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

MOTOR CABLE



ORDERING INFORMATION

STANDARD CABLE		
Item	Description	Item-No.
K05-W/R-2	Motor Cable W/R, 2 m	0150-2119
K05-W/R-4	Motor Cable W/R, 4 m	0150-2120
K05-W/R-6	Motor Cable W/R, 6 m	0150-2121
K05-W/R-8	Motor Cable W/R, 8 m	0150-2122
K05-W/R-	Motor Cable W/R, Custom length	0150-3262
K05-W/D-0.4	Motor Cable W/D, 0.4 m	0150-1947
K05-Y/R-2	Motor Cable Y/R, 2 m	0150-2421
K05-Y/R-4	Motor Cable Y/R, 4 m	0150-2422
K05-Y/R-6	Motor Cable Y/R, 6 m	0150-2423
K05-Y/R-8	Motor Cable Y/R, 8 m	0150-2424
K05-Y-Fe/R-	Motor Cable Y/R, Custom length	0150-3501
K05-Y-Fe/D-	Motor Cable Y-Fe/D, Custom length	0150-1947

TRAILING CHAIN CABLE

Item	Description	Item-No.
KS05-W/R-4	Trailing Chain Cable W/R, 4 m	0150-2106
KS05-W/R-6	Trailing Chain Cable W/R, 6 m	0150-2131
KS05-W/R-8	Trailing Chain Cable W/R, 8 m	0150-2107
KS05-W/R-	Trailing Chain Cable W/R, Custom length	0150-3256
KS05-Y/R-4	Trailing Chain Cable Y/R, 4 m	0150-2433
KS05-Y/R-6	Trailing Chain Cable Y/R, 6 m	0150-2434
KS05-Y/R-8	Trailing Chain Cable Y/R, 8 m	0150-2435
KS05-Y-Fe/R-	Trailing Chain Cable Y-Fe/R, Custom length	0150-3507
KS05-Y-Fe/D-	Trailing Chain Cable Y-Fe/D, Custom length	0150-3556

ROBOT CABLE

Item	Description	Item-No.
KR05-W/R-	Robot Cable KR05-W/R, Custom length	0150-3336
KR05-Y-Fe/R-	Robot Cable KR05-Y-Fe/R, Custom length	0150-3512

CONNECTOR & CABLE (INDIVIDUAL)

Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-R/f	Motor Connector R/f	0150-3129
MC01-D/f	Motor Connector D/f	0150-3025
K05-04/05	Motor Cable per m	0150-1920
KS05-04/05	Trailing Chain Cable per m	0150-1938
KR05-04/05	Robot Cable per m	0150-1846

MOTOR FLANGES



Item	Description	Item-No.
PF02-23x50	Flange 23x50 mm	0150-2102
PF02-23x90	Flange 23x90 mm	0150-2146

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-23	Fan cooling for H01-23 and PF02-23	0150-5050

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-12	Fixed End Washer Set for 12 mm sliders	0150-3085
PLF01-12-Ni	Fixed End Washer Set for 12 mm sliders nickel-plated	0150-3573
PLL02-12	Floating support for PL01-12 Sliders	0150-3111

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

WIPERS



Item	Description	Item-No.
PA01-23/12-F	Seal front side for PS01-23x...	0150-3125

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1 μ m, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D-Encoder	Encoder Cable (Length in m)	0150-3166
KS025-D/D15-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1 μ m, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

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LINEAR MOTORS P01-23x80F-HP



- ✓ Higher maximum peak force and acceleration
- ✓ Increased duration of force and acceleration
- ✓ Higher permissible operating temperatures with less self-heating
- ✓ In comparison with the standard motors , a smaller HP motor can be used with the same load.

LINEAR MOTORS P01-23x80F-HP

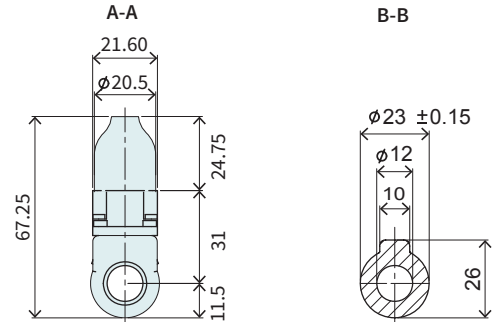
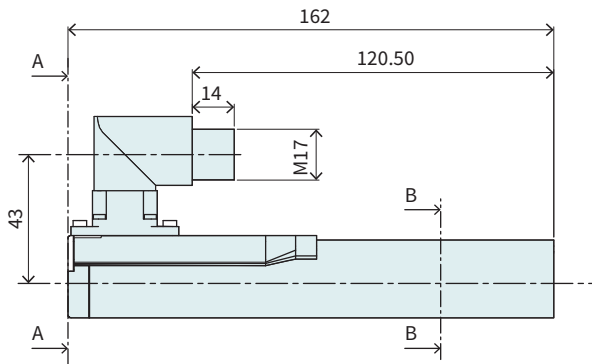
Technical Data	51
Motor Specifications	
P01-23x80F/0x60-HP	55
P01-23x80F/20x80-HP	56
P01-23x80F/40x100-HP	57
P01-23x80F/70x130-HP	58
P01-23x80F/100x160-HP	59
P01-23x80F/140x200-HP	60
P01-23x80F/160x220-HP	61
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MOTOR FAMILY P01-23x80F-HP

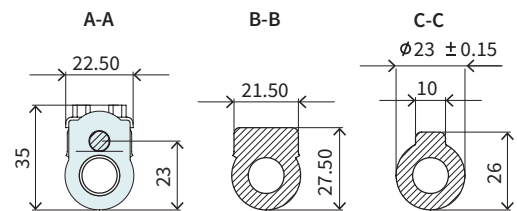
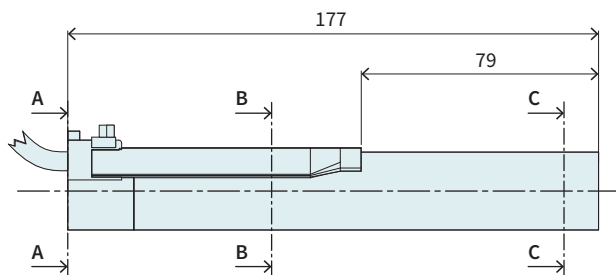
Technical Data				
Stroke				
Standard Stroke (SS)	mm	(in)	≤ 720	(≤ 28.3)
Extended Stroke (ES)	mm	(in)	≤ 780	(≤ 30.69)
Force				
Max. Force @ 48VDC	N	(lbf)	67.1	(15.1)
Max. Force @ 72VDC	N	(lbf)	67.1	(15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	14 / 23 / -	(3.2 / 5.3 / -)
Max. Border Force relative	%		≤ 63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	8.95	(2.01)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	4.9	(189.9)
Max. Velocity @ 72VDC	m/s	(in/s)	7.3	(289.9)
Position Detection				
Position Resolution	mm	(in)	0.002	(0.0001)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.6 / 2.6 / -	
Terminal Resistance 25 °C / 150 °C	Ohm		4.2 / 6.2	
Terminal Inductivity	mH		0.6	
Magnetic Period	mm	(in)	20	(0.78)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		5.4 / 2 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		650 / 240 / -	
Mechanical Data				
Stator Diameter	mm	(in)	23	(0.91)
Stator Length [Connector type / Cable type]	mm	(in)	162 / 177	(6.4 / 7)
Stator Mass	g	(lb)	265	(0.58)
Slider Diameter	mm	(in)	12	(0.47)
Slider Length	mm	(in)	130 - 850	(5.1 - 33)
Slider Mass	g	(lb)	90 - 700	(0.19 - 1.5)
IP Code			IP 65	

STATOR CONNECTOR TYPE



Item	Description	Item-No.
PS01-23x80F-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1259

STATOR CABLE TYPE

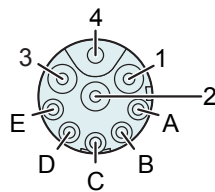


Item	Description	Item-No.
PS01-23x80F-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1260

CONNECTOR

Motor Connector Wiring	PS01-23x80F-HP-R PS01-23x80F-HP-R20	Wire color motor cable
	R-Connector	
Ph 1+	1	red
Ph 1-	2	pink
Ph 2+	3	blue
Ph 2-	4	grey
+5VDC	A	white
GND	B	inner shield
Sin	C	yellow
Cos	D	green
Temp.	E	black
Shield	Housing	outer Shield

R-Connector



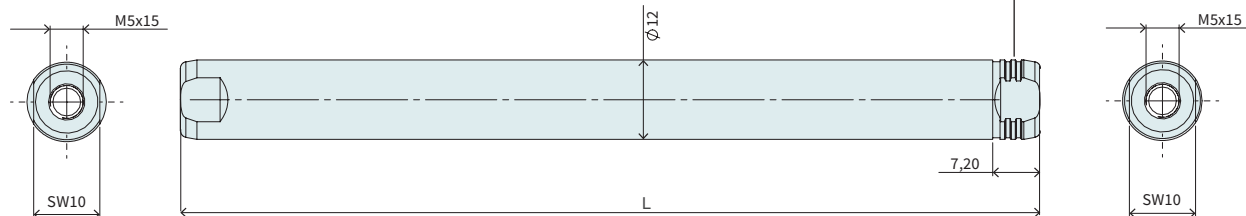
View: Motor Connector, plug side

SLIDER

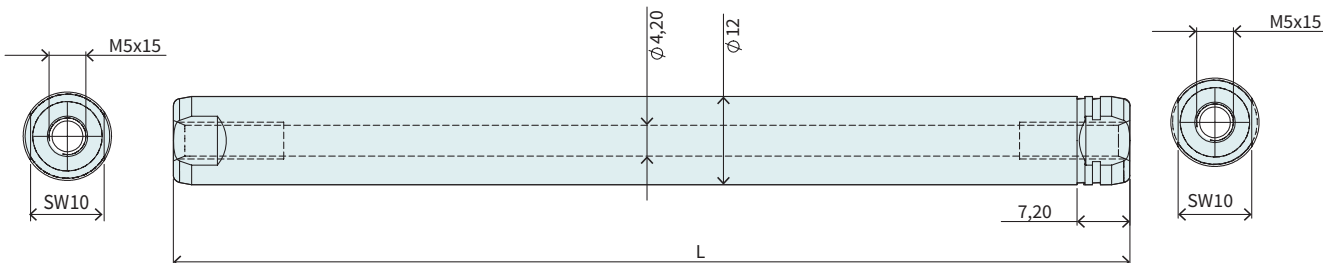
3

Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.

Slider HP / Heavy Duty HP



Hollow slider HP



Slider High Performance

Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-12x130/90-HP	Slider 'High Performance'	60	0	0150-2209
PL01-12x150/110-HP	Slider 'High Performance'	80	20	0150-2281
PL01-12x170/130-HP	Slider 'High Performance'	100	40	0150-1529
PL01-12x200/160-HP	Slider 'High Performance'	130	70	0150-1518
PL01-12x230/190-HP	Slider 'High Performance'	160	100	0150-1519
PL01-12x270/230-HP	Slider 'High Performance'	200	140	0150-1520
PL01-12x290/250-HP	Slider 'High Performance'	220	160	0150-1521
PL01-12x350/310-HP	Slider 'High Performance'	280	220	0150-1522
PL01-12x420/380-HP	Slider 'High Performance'	350	290	0150-1523
PL01-12x480/440-HP	Slider 'High Performance'	410	350	0150-1524
PL01-12x580/540-HP	Slider 'High Performance'	510	450	0150-1525
PL01-12x760/720-HP	Slider 'High Performance'	690	630	0150-1526
PL01-12x850/810-HP	Slider 'High Performance'	780	720	0150-1527

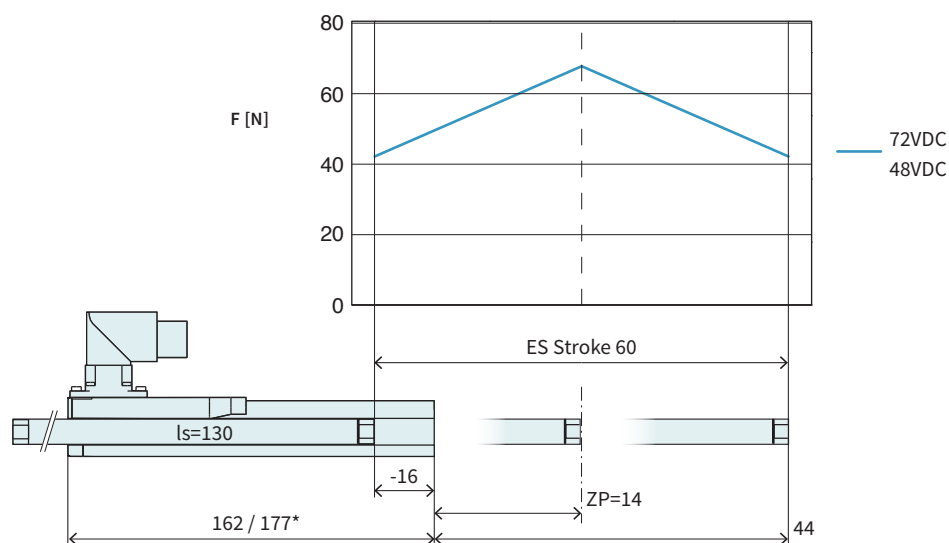
Slider Heavy Duty High Performance

Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL02-12x130/90-HP	Slider 'heavy duty' 'High Performance'	60	0	on request
PL02-12x150/110-HP	Slider 'heavy duty' 'High Performance'	80	20	on request
PL02-12x170/130-HP	Slider 'heavy duty' 'High Performance'	100	40	0150-1559
PL02-12x200/160-HP	Slider 'heavy duty' 'High Performance'	130	70	0150-1532
PL02-12x230/190-HP	Slider 'heavy duty' 'High Performance'	160	100	0150-1552
PL02-12x270/230-HP	Slider 'heavy duty' 'High Performance'	200	140	0150-1533
PL02-12x290/250-HP	Slider 'heavy duty' 'High Performance'	220	160	0150-1495
PL02-12x350/310-HP	Slider 'heavy duty' 'High Performance'	280	220	0150-1555
PL02-12x420/380-HP	Slider 'heavy duty' 'High Performance'	350	290	0150-1554
PL02-12x480/440-HP	Slider 'heavy duty' 'High Performance'	410	350	0150-2519
PL02-12x580/540-HP	Slider 'heavy duty' 'High Performance'	510	450	0150-2520
PL02-12x760/720-HP	Slider 'heavy duty' 'High Performance'	690	630	0150-2521
PL02-12x850/810-HP	Slider 'heavy duty' 'High Performance'	780	720	0150-2516

Slider 'High Performance L'				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-12x130/90-HP-L	Slider 'High Performance L'	60	0	0150-3687
PL01-12x150/110-HP-L	Slider 'High Performance L'	80	20	on request
PL02-12x170/130-HP-L	Slider 'High Performance L'	100	40	0150-3688
PL02-12x200/160-HP-L	Slider 'High Performance L'	130	70	0150-3689
PL02-12x230/190-HP-L	Slider 'High Performance L'	160	100	0150-2546
PL02-12x270/230-HP-L	Slider 'High Performance L'	200	140	0150-2557
PL02-12x290/250-HP-L	Slider 'High Performance L'	220	160	0150-3690
PL02-12x350/310-HP-L	Slider 'High Performance L'	280	220	0150-3691
PL02-12x420/380-HP-L	Slider 'High Performance L'	350	290	0150-3692
PL02-12x480/440-HP-L	Slider 'High Performance L'	410	350	0150-3693
PL02-12x580/540-HP-L	Slider 'High Performance L'	510	450	0150-3694
PL02-12x760/720-HP-L	Slider 'High Performance L'	690	630	0150-3695
PL02-12x850/810-HP-L	Slider 'High Performance L'	780	720	on request

P01-23x80F/0x60-HP

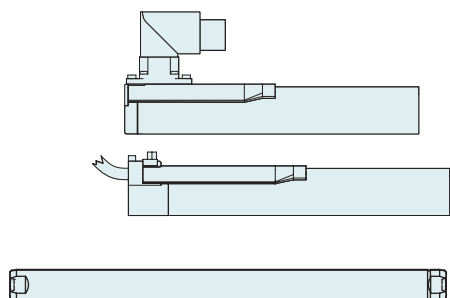
Max. Stroke: 60 mm
Peak Force: 67 N



Dimensions in mm
 *Cable Type

Technical Data P01-23x80F/0x60-HP

Stroke			
Standard Stroke (SS)	mm (in)	0	(0)
Extended Stroke (ES)	mm (in)	60	(2.35)
Force			
Max. Force @ 48VDC	N (lbf)	67.1	(15.1)
Max. Force @ 72VDC	N (lbf)	67.1	(15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	14 / 23 / -	(3.2 / 5.3 / -)
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	8.95	(2.01)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	4.9	(189.9)
Max. Velocity @ 72VDC	m/s (in/s)	7.3	(289.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.5	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.4	
Max. Current @ 72VDC	A _{pk}	7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.6 / 2.6 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	5.4 / 2 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	650 / 240 / -	
Mechanical Data			
Slider Length	mm (in)	130	(5.1)
Slider Mass	g (lb)	90	(0.2)



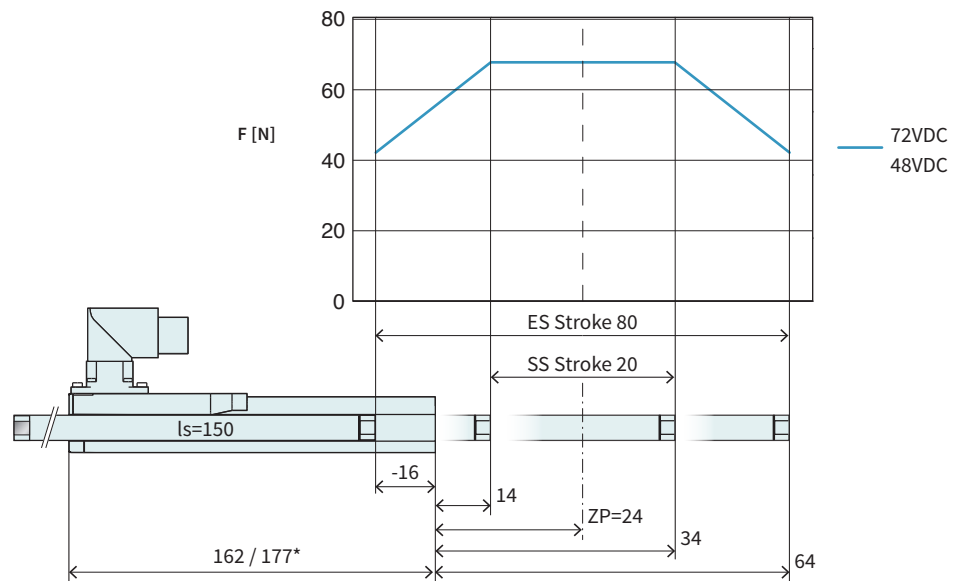
Item	Description	Item-No.
PS01-23x80F-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1259
PS01-23x80F-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1260
PL01-12x130/90-HP	Slider 'High Performance'	0150-2209
PL02-12x130/90-HP	Slider 'heavy duty' 'High Performance'	on request
PL01-12x130/90-HP-L*	Slider 'High Performance L'	0150-3687

* With this slider, the motor specifications above change.

P01-23x80F/20x80-HP

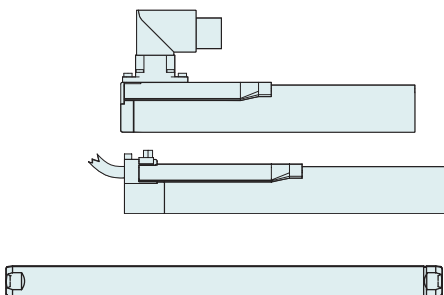
Max. Stroke: 80 mm
Peak Force: 67 N

Dimensions in mm
 *Cable Type



Technical Data P01-23x80F/20x80-HP

Stroke			
Standard Stroke (SS)	mm (in)	20 (0.78)	
Extended Stroke (ES)	mm (in)	80 (3.14)	
Force			
Max. Force @ 48VDC	N (lbf)	67.1 (15.1)	
Max. Force @ 72VDC	N (lbf)	67.1 (15.1)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	14 / 23 / - (3.2 / 5.3 / -)	
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	8.95 (2.01)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	4.9 (189.9)	
Max. Velocity @ 72VDC	m/s (in/s)	7.3 (289.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.4	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.4	
Max. Current @ 72VDC	A _{pk}	7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.6 / 2.6 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	5.4 / 2 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	650 / 240 / -	
Mechanical Data			
Slider Length	mm (in)	150 (5.9)	
Slider Mass	g (lb)	110 (0.24)	



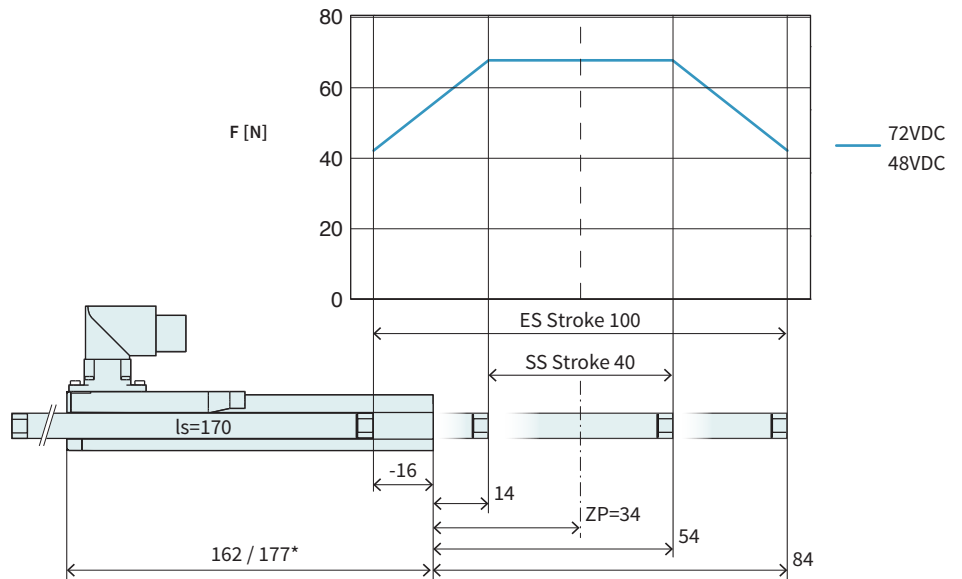
Item	Description	Item-No.
PS01-23x80F-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1259
PS01-23x80F-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1260
PL01-12x150/110-HP	Slider 'High Performance'	0150-2281
PL02-12x150/110-HP	Slider 'heavy duty' 'High Performance'	on request
PL01-12x150/110-HP-L*	Slider 'High Performance L'	on request

* With this slider, the motor specifications above change.

P01-23x80F/40x100-HP

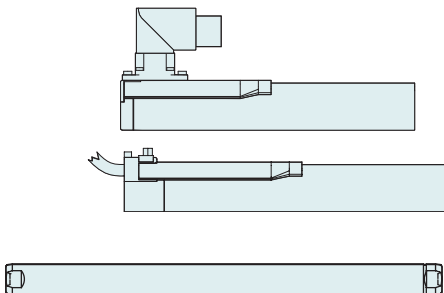
Max. Stroke: 100 mm
Peak Force: 67 N

Dimensions in mm
 *Cable Type



Technical Data P01-23x80F/40x100-HP

Stroke				
Standard Stroke (SS)	mm (in)		40 (1.57)	
Extended Stroke (ES)	mm (in)		100 (3.93)	
Force				
Max. Force @ 48VDC	N (lbf)		67.1 (15.1)	
Max. Force @ 72VDC	N (lbf)		67.1 (15.1)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		14 / 23 / - (3.2 / 5.3 / -)	
Max. Border Force relative	%		63	
Force Constant	N/A _{pk} (lbf/A _{pk})		8.95 (2.01)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		4.9 (189.9)	
Max. Velocity @ 72VDC	m/s (in/s)		7.3 (289.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.35	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.6 / 2.6 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		5.4 / 2 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		650 / 240 / -	
Mechanical Data				
Slider Length	mm (in)		170 (6.7)	
Slider Mass	g (lb)		130 (0.29)	

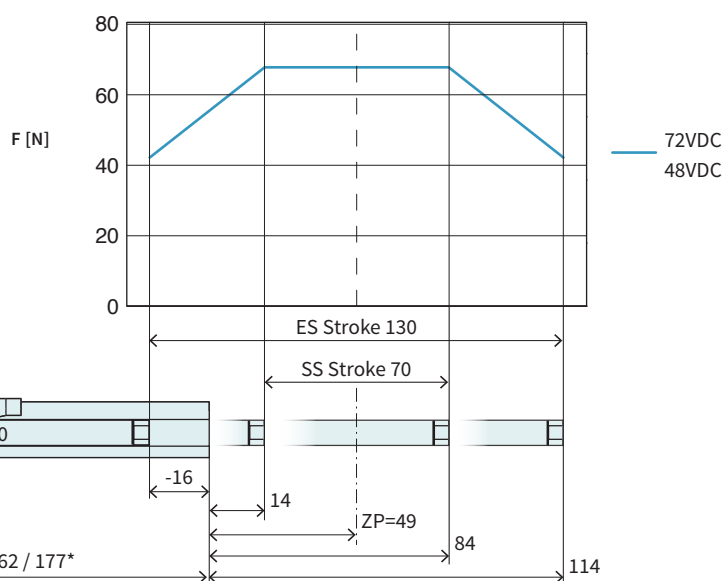


Item	Description	Item-No.
PS01-23x80F-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1259
PS01-23x80F-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1260
PL01-12x170/130-HP	Slider 'High Performance'	0150-1529
PL02-12x170/130-HP	Slider 'heavy duty' 'High Performance'	0150-1559
PL01-12x170/130-HP-L*	Slider 'High Performance L'	0150-3688

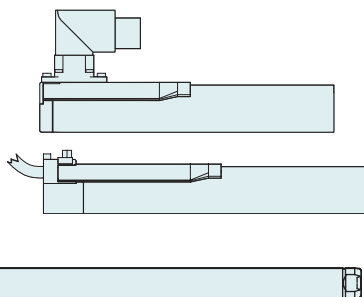
* With this slider, the motor specifications above change.

P01-23x80F/70x130-HP

Max. Stroke: 130 mm
Peak Force: 67 N



Technical Data P01-23x80F/70x130-HP			
Stroke			
Standard Stroke (SS)	mm (in)	70 (2.75)	
Extended Stroke (ES)	mm (in)	130 (5.12)	
Force			
Max. Force @ 48VDC	N (lbf)	67.1 (15.1)	
Max. Force @ 72VDC	N (lbf)	67.1 (15.1)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	14 / 23 / - (3.2 / 5.3 / -)	
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	8.95 (2.01)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	4.9 (189.9)	
Max. Velocity @ 72VDC	m/s (in/s)	7.3 (289.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.3	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.4	
Max. Current @ 72VDC	A _{pk}	7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.6 / 2.6 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	5.4 / 2 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	650 / 240 / -	
Mechanical Data			
Slider Length	mm (in)	200 (7.9)	
Slider Mass	g (lb)	155 (0.34)	



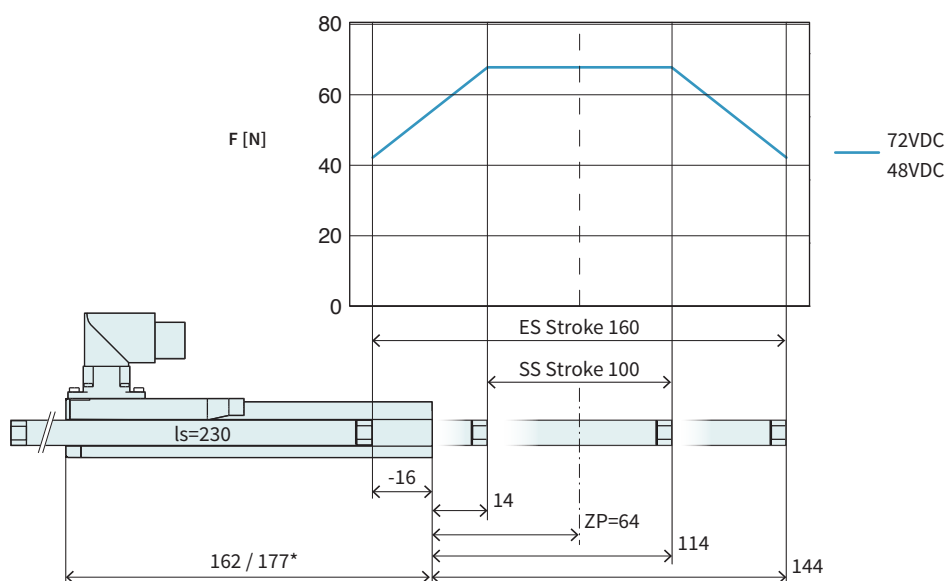
Item	Description	Item-No.
PS01-23x80F-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1259
PS01-23x80F-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1260
PL01-12x200/160-HP	Slider 'standard LC'	0150-1518
PL02-12x200/160-HP	Slider 'heavy duty LC'	0150-1532
PL01-12x200/160-HP-L*	Slider 'High Performance L'	0150-3689

* With this slider, the motor specifications above change.

P01-23x80F/100x160-HP

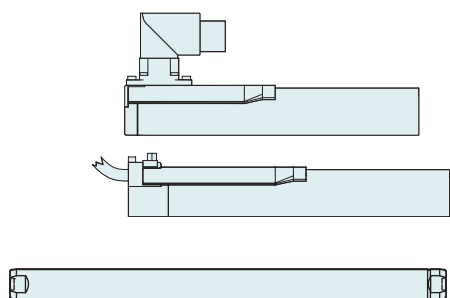
Max. Stroke: 160 mm
Peak Force: 67 N

Dimensions in mm
 *Cable Type



Technical Data P01-23x80F/100x160-HP

Stroke			
Standard Stroke (SS)	mm (in)	100 (3.93)	
Extended Stroke (ES)	mm (in)	160 (6.29)	
Force			
Max. Force @ 48VDC	N (lbf)	67.1 (15.1)	
Max. Force @ 72VDC	N (lbf)	67.1 (15.1)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	14 / 23 / - (3.2 / 5.3 / -)	
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	8.95 (2.01)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	4.9 (189.9)	
Max. Velocity @ 72VDC	m/s (in/s)	7.3 (289.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.25	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.4	
Max. Current @ 72VDC	A _{pk}	7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.6 / 2.6 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	5.4 / 2 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	650 / 240 / -	
Mechanical Data			
Slider Length	mm (in)	230 (9.1)	
Slider Mass	g (lb)	180 (0.4)	

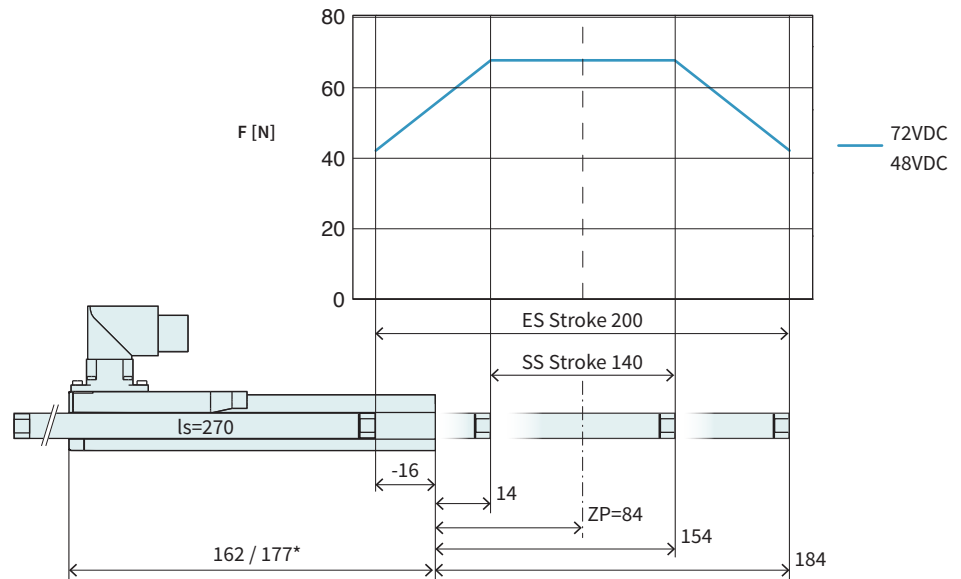


Item	Description	Item-No.
PS01-23x80F-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1259
PS01-23x80F-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1260
PL01-12x230/190-HP	Slider 'High Performance'	0150-1519
PL02-12x230/190-HP	Slider 'heavy duty' 'High Performance'	0150-1552
PL01-12x230/190-HP-L*	Slider 'High Performance L'	0150-2546

* With this slider, the motor specifications above change.

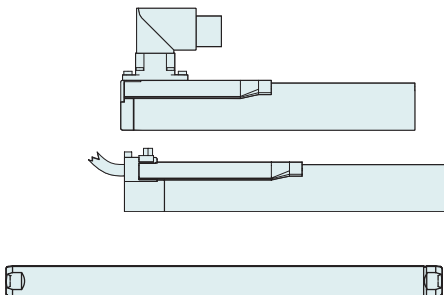
P01-23x80F/140x200-HP

Max. Stroke: 200 mm
Peak Force: 67 N



Dimensions in mm
*Cable Type

Technical Data P01-23x80F/140x200-HP				
Stroke				
Standard Stroke (SS)	mm	(in)	140	(5.5)
Extended Stroke (ES)	mm	(in)	200	(7.86)
Force				
Max. Force @ 48VDC	N	(lbf)	67.1	(15.1)
Max. Force @ 72VDC	N	(lbf)	67.1	(15.1)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	14 / 23 / -	(3.2 / 5.3 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	8.95	(2.01)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	4.9	(189.9)
Max. Velocity @ 72VDC	m/s	(in/s)	7.3	(289.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling /Fan / Fluid]	A _{pk}		1.6 / 2.6 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		5.4 / 2 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		650 / 240 / -	
Mechanical Data				
Slider Length	mm	(in)	270	(11)
Slider Mass	g	(lb)	215	(0.47)



Item	Description	Item-No.
PS01-23x80F-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1259
PS01-23x80F-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1260
PL01-12x270/230-HP	Slider 'standard LC'	0150-1520
PL02-12x270/230-HP	Slider 'heavy duty LC'	0150-1533
PL01-12x270/230-HP-L*	Slider 'High Performance L'	0150-2557

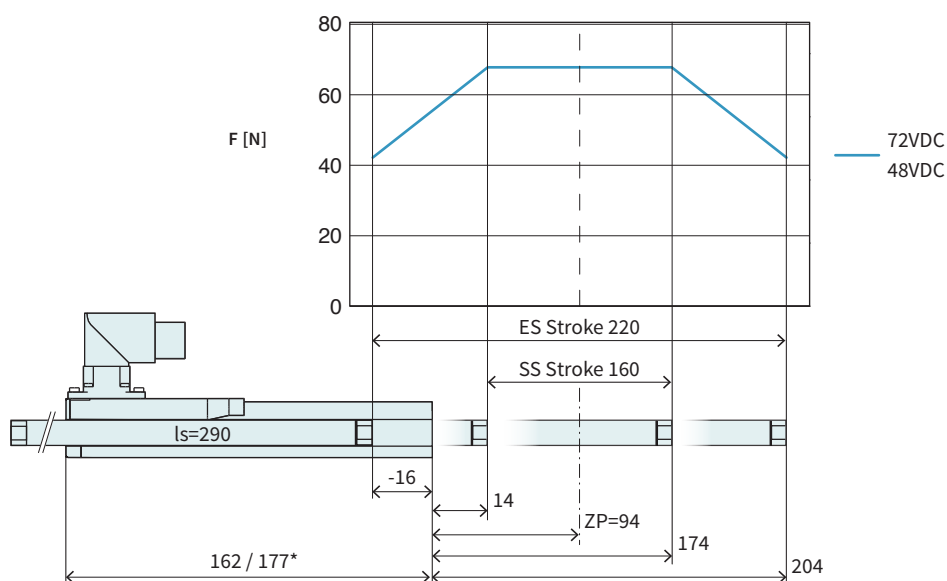
* With this slider, the motor specifications above change.

P01-23x80F/160x220-HP

3

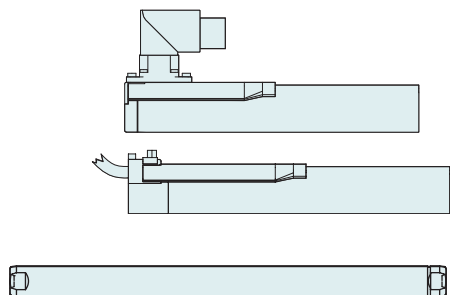
Max. Stroke: 220 mm
Peak Force: 67 N

Dimensions in mm
 *Cable Type



Technical Data P01-23x80F/160x220-HP

Stroke			
Standard Stroke (SS)	mm (in)	160 (6.29)	
Extended Stroke (ES)	mm (in)	220 (8.65)	
Force			
Max. Force @ 48VDC	N (lbf)	67.1 (15.1)	
Max. Force @ 72VDC	N (lbf)	67.1 (15.1)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	14 / 23 / - (3.2 / 5.3 / -)	
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	8.95 (2.01)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	4.9 (189.9)	
Max. Velocity @ 72VDC	m/s (in/s)	7.3 (289.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.4	
Max. Current @ 72VDC	A _{pk}	7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.6 / 2.6 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	5.4 / 2 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	650 / 240 / -	
Mechanical Data			
Slider Length	mm (in)	290 (11)	
Slider Mass	g (lb)	230 (0.51)	



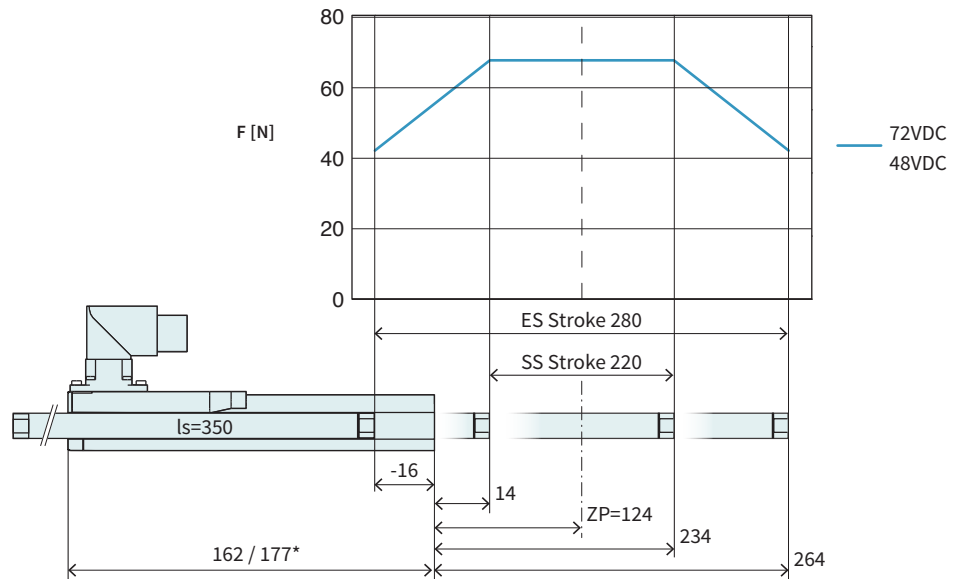
Item	Description	Item-No.
PS01-23x80F-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1259
PS01-23x80F-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1260
PL01-12x290/250-HP	Slider 'High Performance'	0150-1521
PL02-12x290/250-HP	Slider 'heavy duty' 'High Performance'	0150-1495
PL01-12x290/250-HP-L*	Slider 'High Performance L'	0150-3690

* With this slider, the motor specifications above change.

P01-23x80F/220x280-HP

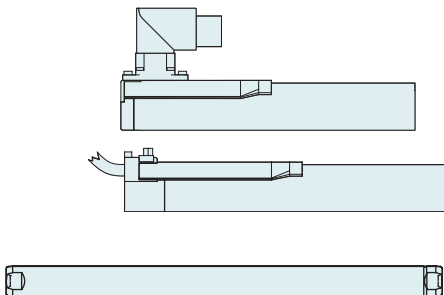
Max. Stroke: 280 mm
Peak Force: 67 N

Dimensions in mm
 *Cable Type



Technical Data P01-23x80F/220x280-HP

Stroke			
Standard Stroke (SS)	mm (in)	220 (8.65)	
Extended Stroke (ES)	mm (in)	280 (10.99)	
Force			
Max. Force @ 48VDC	N (lbf)	67.1 (15.1)	
Max. Force @ 72VDC	N (lbf)	67.1 (15.1)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	14 / 23 / - (3.2 / 5.3 / -)	
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	8.95 (2.01)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	4.9 (189.9)	
Max. Velocity @ 72VDC	m/s (in/s)	7.3 (289.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.4	
Max. Current @ 72VDC	A _{pk}	7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.6 / 2.6 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	5.4 / 2 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	650 / 240 / -	
Mechanical Data			
Slider Length	mm (in)	350 (14)	
Slider Mass	g (lb)	280 (0.62)	



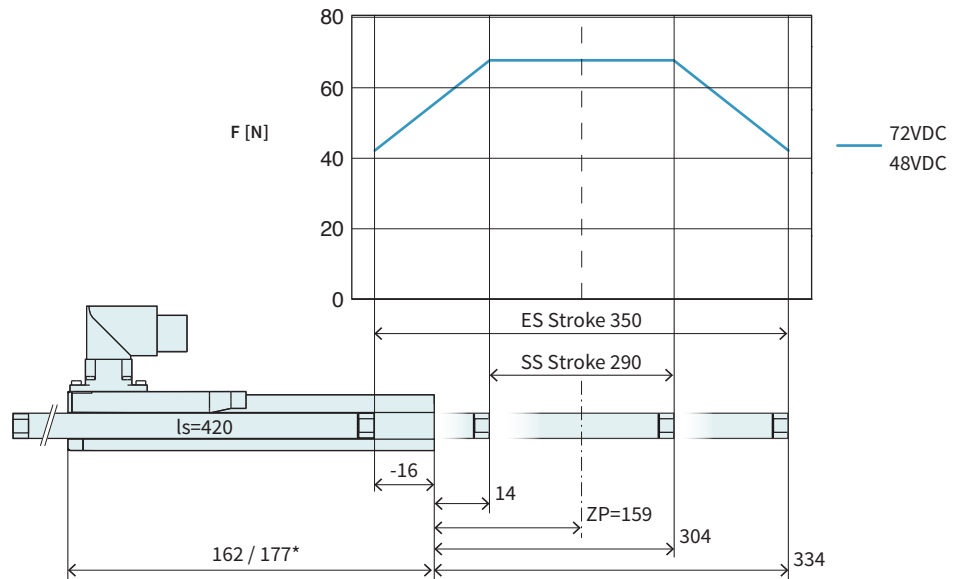
Item	Description	Item-No.
PS01-23x80F-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1259
PS01-23x80F-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1260
PL01-12x350/310-HP	Slider 'standard LC'	0150-1522
PL02-12x350/310-HP	Slider 'heavy duty LC'	0150-1555
PL01-12x350/310-HP-L*	Slider 'High Performance L'	0150-3691

* With this slider, the motor specifications above change.

P01-23x80F/290x350-HP

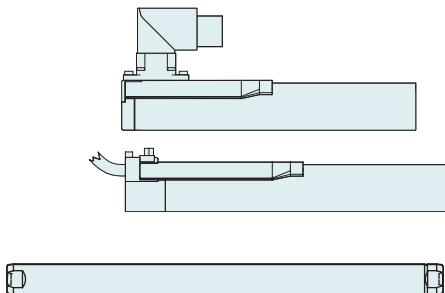
Max. Stroke: 350 mm
Peak Force: 67 N

Dimensions in mm
 *Cable Type



Technical Data P01-23x80F/290x350-HP

Stroke			
Standard Stroke (SS)	mm (in)	290 (11.4)	
Extended Stroke (ES)	mm (in)	350 (13.8)	
Force			
Max. Force @ 48VDC	N (lbf)	67.1 (15.1)	
Max. Force @ 72VDC	N (lbf)	67.1 (15.1)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	14 / 23 / - (3.2 / 5.3 / -)	
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	8.95 (2.01)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	4.9 (189.9)	
Max. Velocity @ 72VDC	m/s (in/s)	7.3 (289.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.4	
Max. Current @ 72VDC	A _{pk}	7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.6 / 2.6 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	5.4 / 2 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	650 / 240 / -	
Mechanical Data			
Slider Length	mm (in)	420 (17)	
Slider Mass	g (lb)	340 (0.75)	



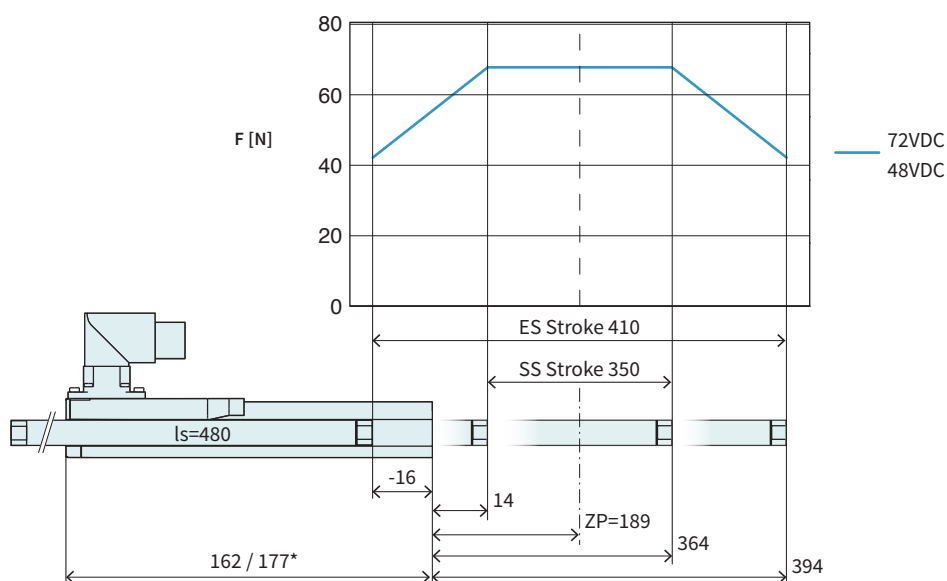
Item	Description	Item-No.
PS01-23x80F-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1259
PS01-23x80F-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1260
PL01-12x420/380-HP	Slider 'High Performance'	0150-1523
PL02-12x420/380-HP	Slider 'heavy duty' 'High Performance'	0150-1554
PL01-12x420/380-HP-L*	Slider 'High Performance L'	0150-3692

* With this slider, the motor specifications above change.

P01-23x80F/350x410-HP

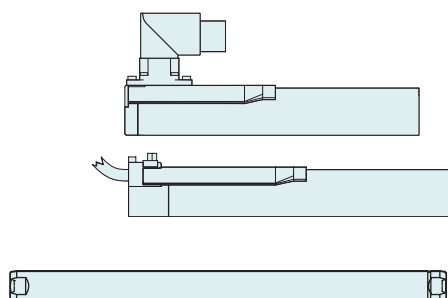
Max. Stroke: 410 mm
Peak Force: 67 N

Dimensions in mm
 *Cable Type



Technical Data P01-23x80F/350x410-HP

Stroke			
Standard Stroke (SS)	mm (in)	350 (13.8)	
Extended Stroke (ES)	mm (in)	410 (16.1)	
Force			
Max. Force @ 48VDC	N (lbf)	67.1 (15.1)	
Max. Force @ 72VDC	N (lbf)	67.1 (15.1)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	14 / 23 / - (3.2 / 5.3 / -)	
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	8.95 (2.01)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	4.9 (189.9)	
Max. Velocity @ 72VDC	m/s (in/s)	7.3 (289.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.4	
Max. Current @ 72VDC	A _{pk}	7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.6 / 2.6 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	5.4 / 2 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	650 / 240 / -	
Mechanical Data			
Slider Length	mm (in)	480 (19)	
Slider Mass	g (lb)	390 (0.86)	



Item	Description	Item-No.
PS01-23x80F-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1259
PS01-23x80F-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1260
PL01-12x480/440-HP	Slider 'standard LC'	0150-1524
PL02-12x480/440-HP	Slider 'heavy duty LC'	0150-2519
PL01-12x480/440-HP-L*	Slider 'High Performance L'	0150-3693

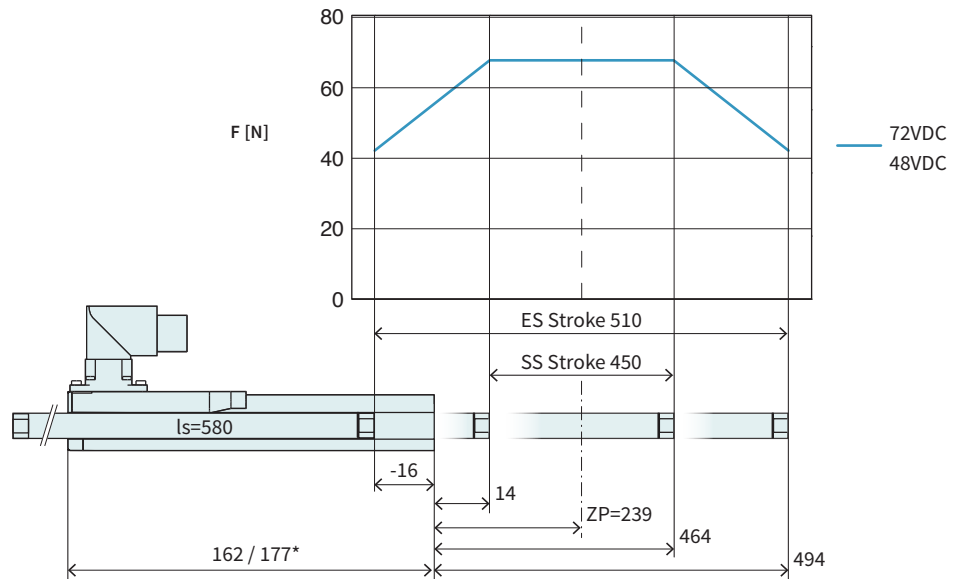
* With this slider, the motor specifications above change.

P01-23x80F/450x510-HP

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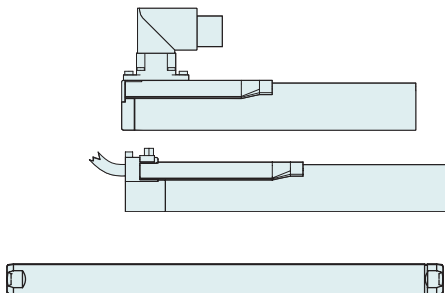
Max. Stroke: 510 mm
Peak Force: 67 N

Dimensions in mm
 *Cable Type



Technical Data P01-23x80F/450x510-HP

Stroke			
Standard Stroke (SS)	mm (in)	450	(17.69)
Extended Stroke (ES)	mm (in)	510	(20.1)
Force			
Max. Force @ 48VDC	N (lbf)	67.1	(15.1)
Max. Force @ 72VDC	N (lbf)	67.1	(15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	14 / 23 / -	(3.2 / 5.3 / -)
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	8.95	(2.01)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	4.9	(189.9)
Max. Velocity @ 72VDC	m/s (in/s)	7.3	(289.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.4	
Max. Current @ 72VDC	A _{pk}	7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.6 / 2.6 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	5.4 / 2 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	650 / 240 / -	
Mechanical Data			
Slider Length	mm (in)	580	(23)
Slider Mass	g (lb)	480	(1.06)



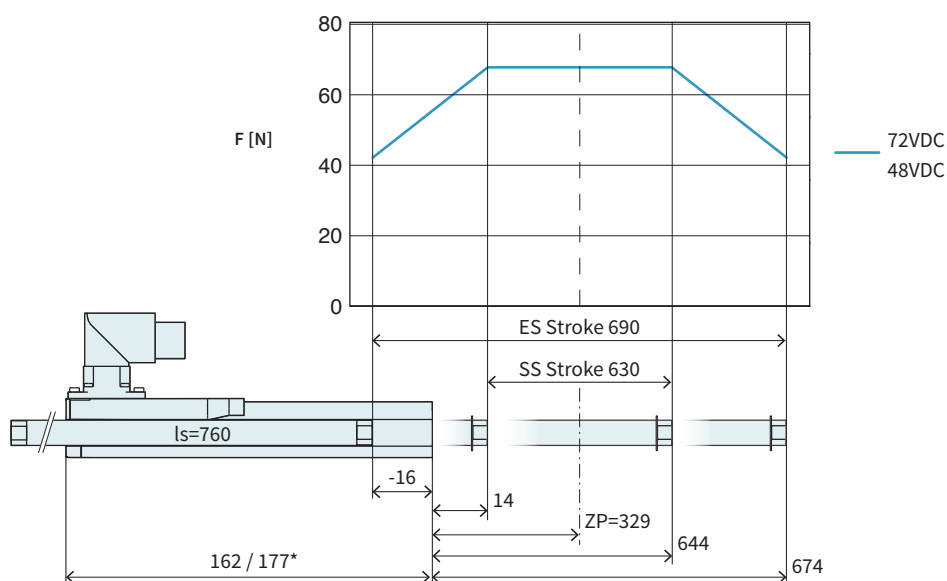
Item	Description	Item-No.
PS01-23x80F-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1259
PS01-23x80F-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1260
PL01-12x580/540-HP	Slider 'High Performance'	0150-1525
PL02-12x580/540-HP	Slider 'heavy duty' 'High Performance'	0150-2520
PL01-12x580/540-HP-L*	Slider 'High Performance L'	0150-3694

* With this slider, the motor specifications above change.

P01-23x80F/630x690-HP

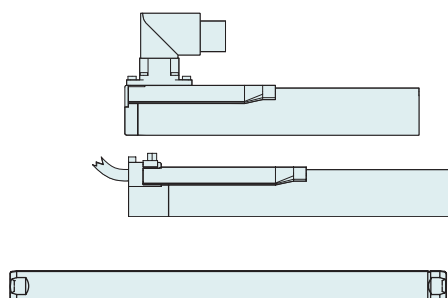
Max. Stroke: 690 mm
Peak Force: 67 N

Dimensions in mm
 *Cable Type



Technical Data P01-23x80F/630x690-HP

Stroke			
Standard Stroke (SS)	mm (in)	630 (24.8)	
Extended Stroke (ES)	mm (in)	690 (27.19)	
Force			
Max. Force @ 48VDC	N (lbf)	67.1 (15.1)	
Max. Force @ 72VDC	N (lbf)	67.1 (15.1)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	14 / 23 / - (3.2 / 5.3 / -)	
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	8.95 (2.01)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	4.9 (189.9)	
Max. Velocity @ 72VDC	m/s (in/s)	7.3 (289.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.4	
Max. Current @ 72VDC	A _{pk}	7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.6 / 2.6 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	5.4 / 2 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	650 / 240 / -	
Mechanical Data			
Slider Length	mm (in)	760 (30)	
Slider Mass	g (lb)	630 (1.4)	



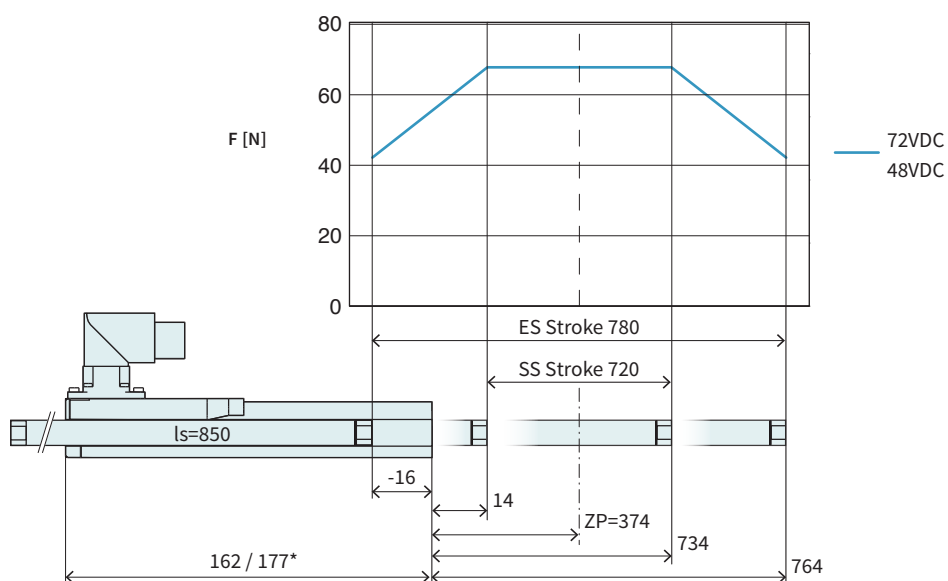
Item	Description	Item-No.
PS01-23x80F-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1259
PS01-23x80F-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1260
PL01-12x760/720-HP	Slider 'standard LC'	0150-1526
PL02-12x760/720-HP	Slider 'heavy duty LC'	0150-2521
PL01-12x760/720-HP-L*	Slider 'High Performance L'	0150-3695

* With this slider, the motor specifications above change.

P01-23x80F/720x780-HP

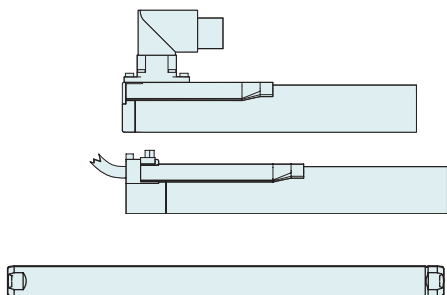
Max. Stroke: 780 mm
Peak Force: 67 N

Dimensions in mm
 *Cable Type



Technical Data P01-23x80F/720x780-HP

Stroke				
Standard Stroke (SS)	mm (in)		720 (28.3)	
Extended Stroke (ES)	mm (in)		780 (30.69)	
Force				
Max. Force @ 48VDC	N (lbf)		67.1 (15.1)	
Max. Force @ 72VDC	N (lbf)		67.1 (15.1)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		14 / 23 / - (3.2 / 5.3 / -)	
Max. Border Force relative	%		63	
Force Constant	N/A _{pk} (lbf/A _{pk})		8.95 (2.01)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		4.9 (189.9)	
Max. Velocity @ 72VDC	m/s (in/s)		7.3 (289.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.6 / 2.6 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		5.4 / 2 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		650 / 240 / -	
Mechanical Data				
Slider Length	mm (in)		850 (33)	
Slider Mass	g (lb)		700 (1.5)	

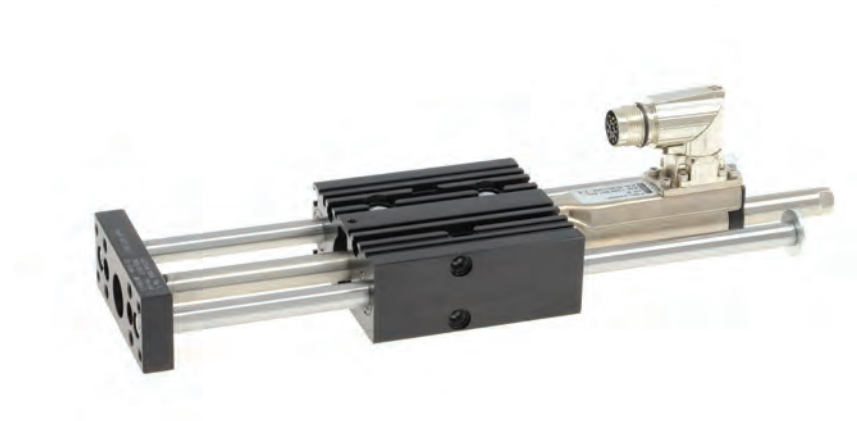


Item	Description	Item-No.
PS01-23x80F-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1259
PS01-23x80F-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1260
PL01-12x850/810-HP	Slider 'High Performance'	0150-1527
PL02-12x850/810-HP	Slider 'heavy duty' 'High Performance'	0150-2516
PL01-12x850/810-HP-L*	Slider 'High Performance L'	on request

* With this slider, the motor specifications above change.

Linear Guides H01

3



HM01-23x80/60	Linear Module 23x80 with 60 mm Stroke			
→	H-Guide	H01-23x86/60	H-Guide for P01-23x80, Stroke max 60mm	0150-5014
		H01-23x86/60-GF	H-Guide for P01-23x80, Stroke max 60mm	0150-5074
	Stator	PS01-23x80F-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1259
		PS01-23x80F-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1260
→	Slider	PL01-12x200/160-HP	Slider 'High Performance'	0150-1518

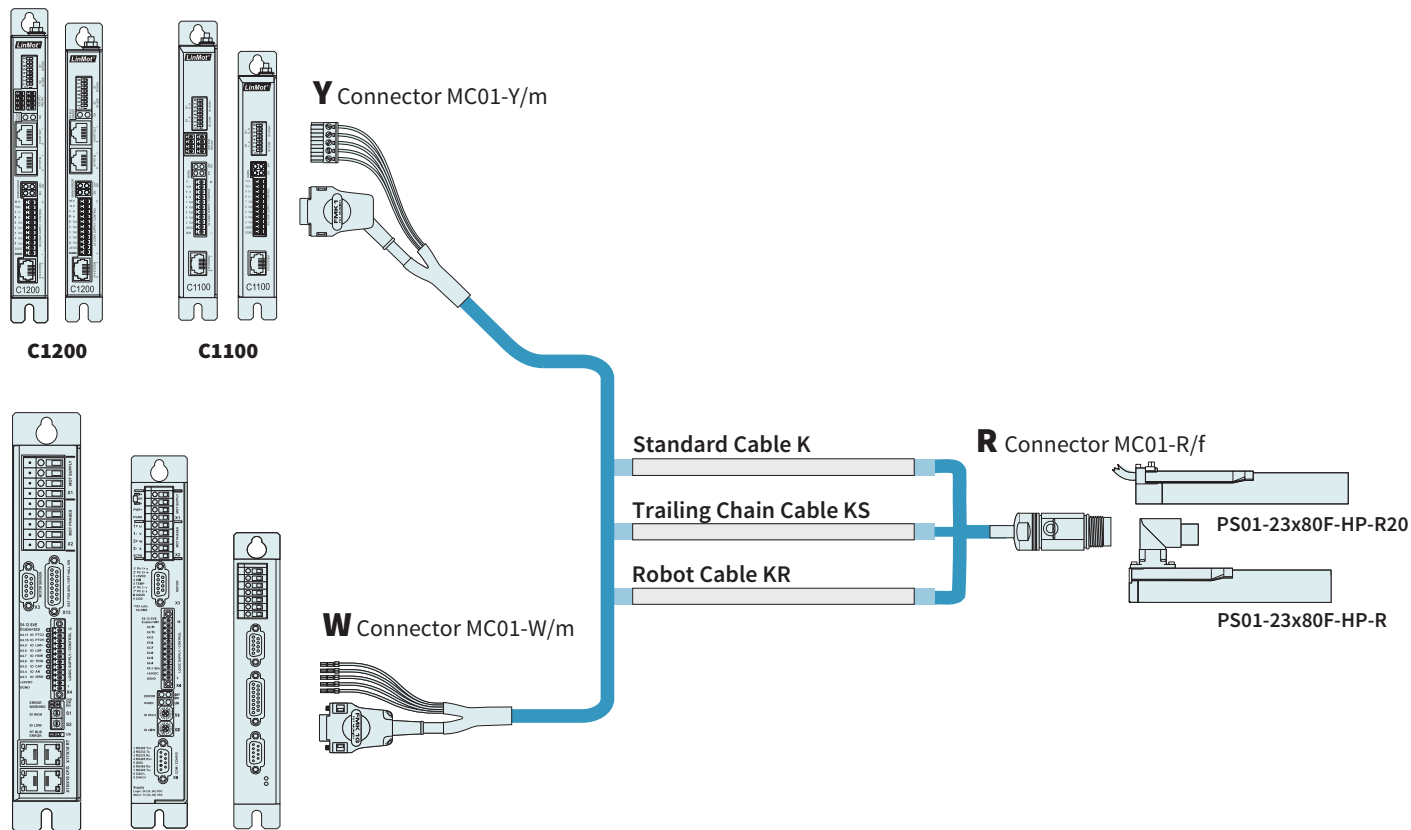
HM01-23x80/160	Linear Module 23x80 with 160 mm Stroke			
→	H-Guide	H01-23x86/160	H-Guide for P01-23x80, Stroke max 160mm	0150-5015
		H01-23x86/160-GF	H-Guide for P01-23x80, Stroke max 160mm	0150-5075
→	Stator	PS01-23x80F-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1259
		PS01-23x80F-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1260
→	Slider	PL01-12x290/250-HP	Slider 'standard LC'	0150-1521

HM01-23x80/260	Linear Module 23x80 with 260 mm Stroke			
→	H-Guide	H01-23x86/260	H-Guide for P01-23x80, Stroke max 260mm	0150-5016
		H01-23x86/260-GF	H-Guide for P01-23x80, Stroke max 260mm	0150-5076
→	Stator	PS01-23x80F-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1259
		PS01-23x80F-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1260
→	Slider	PL01-12x420/380-HP	Slider 'High Performance'	0150-1523

Accessories				
→	Fan	HV01-23	Fan cooling for H01-23	0150-5050
→	MagSpring	MF01-20/H23	Flange MagSpring 20 / H-Guide 23	0250-2306
		MA01-20/H23	Flange MagSpring 20 / H-Guide 23	0250-0116
→	Centering sleeve	HC01-09/04	Centering sleeve D9x4 mm	0150-3251

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

Motor Cable



ORDERING INFORMATION

STANDARD CABLE		
Item	Description	Item-No.
K05-W/R-2	Motor Cable W/R, 2 m	0150-2119
K05-W/R-4	Motor Cable W/R, 4 m	0150-2120
K05-W/R-6	Motor Cable W/R, 6 m	0150-2121
K05-W/R-8	Motor Cable W/R, 8 m	0150-2122
K05-W/R-	Motor Cable W/R, Custom length	0150-3262
K05-Y/R-2	Motor Cable Y/R, 2 m	0150-2421
K05-Y/R-4	Motor Cable Y/R, 4 m	0150-2422
K05-Y/R-6	Motor Cable Y/R, 6 m	0150-2423
K05-Y/R-8	Motor Cable Y/R, 8 m	0150-2424
K05-Y-Fe/R-	Motor Cable Y/R, Custom length	0150-3501

TRAILING CHAIN CABLE

Item	Description	Item-No.
KS05-W/R-4	Trailing Chain Cable W/R, 4 m	0150-2106
KS05-W/R-6	Trailing Chain Cable W/R, 6 m	0150-2131
KS05-W/R-8	Trailing Chain Cable W/R, 8 m	0150-2107
KS05-W/R-	Trailing Chain Cable W/R, Custom length	0150-3256
KS05-Y/R-4	Trailing Chain Cable Y/R, 4 m	0150-2433
KS05-Y/R-6	Trailing Chain Cable Y/R, 6 m	0150-2434
KS05-Y/R-8	Trailing Chain Cable Y/R, 8 m	0150-2435
KS05-Y/R-	Trailing Chain Cable Y/R, Custom length	0150-3507

ROBOT CABLE

Item	Description	Item-No.
KR05-W/R-	Robot Cable KR05-W/R, Custom length	0150-3336
KR05-Y-Fe/R-	Robot Cable KR05-Y-Fe/R, Custom length	0150-3512

CONNECTOR & CABLE (INDIVIDUAL)

Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-R/f	Motor Connector R/f	0150-3129
K05-04/05	Motor Cable per m	0150-1920
KS05-04/05	Trailing Chain Cable per m	0150-1938
KR05-04/05	Robot Cable per m	0150-1846

MOTOR FLANGES



Item	Description	Item-No.
PF02-23x50	Flange 23x50 mm	0150-2102
PF02-23x90	Flange 23x90 mm	0150-2146

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-23	Fan cooling for H01-23 and PF02-23	0150-5050

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-12	Fixed End Washer Set for 12 mm sliders	0150-3085
PLF01-12-Ni	Fixed End Washer Set for 12 mm sliders nickel-plated	0150-3573
PLL02-12	Floating support for PL01-12 Sliders	0150-3111

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

WIPERS



Item	Description	Item-No.
PA01-23/12-F	Seal front side for PS01-23x...	0150-3125

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1 µm, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D-Encoder	Encoder Cable (Length in m)	0150-3166
KS025-D/D15-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1 µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P02-23Sx80



- ✓ Short design
- ✓ Integrated mounting flange
- ✓ Pluggable motor cable with cover
- ✓ For use where space is limited and in multi-axis applications

LINEAR MOTORS P02-23Sx80

Technical Data **75**

Motor Specifications

P02-23Sx80/0x60-LC **78**

P02-23Sx80/40x100-LC **79**

P02-23Sx80/60x120-LC **80**

P02-23Sx80/100x160-LC **81**

P02-23Sx80/160x220-LC **82**

P02-23Sx80/220x280-LC **83**

P02-23Sx80/290x350-LC **84**

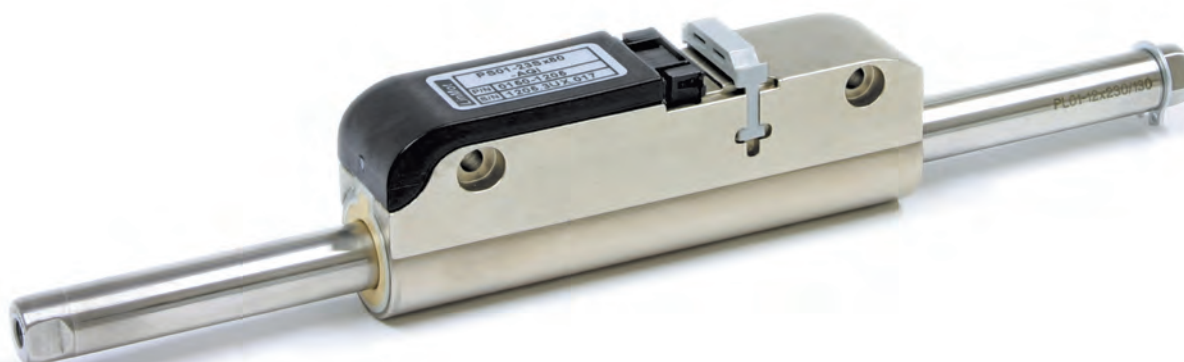
P02-23Sx80/350x410-LC **85**

P02-23Sx80/450x510-LC **86**

P02-23Sx80/630x690-LC **87**

P02-23Sx80/720x780-LC **88**

Accessories **89**



MOTOR FAMILY P02-23Sx80


Technical Data				
Stroke				
Standard Stroke (SS)	mm	(in)	≤ 720	(≤ 28.3)
Extended Stroke (ES)	mm	(in)	≤ 780	(≤ 30.69)
Force				
Max. Force @ 48VDC	N	(lbf)	41.6	(9.35)
Max. Force @ 72VDC	N	(lbf)	44	(9.89)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	8.6 / 16 / -	(1.9 / 3.5 / -)
Max. Border Force relative	%		≤ 63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	11	(2.47)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	3.9	(159.9)
Max. Velocity @ 72VDC	m/s	(in/s)	5.9	(239.9)
Position Detection				
Position Resolution	mm	(in)	0.002	(0.0001)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Terminal Resistance 25 °C / 120 °C	Ohm		10 / 14	
Terminal Inductivity	mH		1.4	
Magnetic Period	mm	(in)	20	(0.78)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Stator Diameter	mm	(in)	23	(0.91)
Stator Length [Connector type / Cable type]	mm	(in)	105	(4.1)
Stator Mass	g	(lb)	245	(0.54)
Slider Diameter	mm	(in)	12	(0.47)
Slider Length	mm	(in)	130 - 850	(5.1 - 33)
Slider Mass	g	(lb)	90 - 700	(0.2 - 1.54)
IP Code			IP 50	

3



B- B

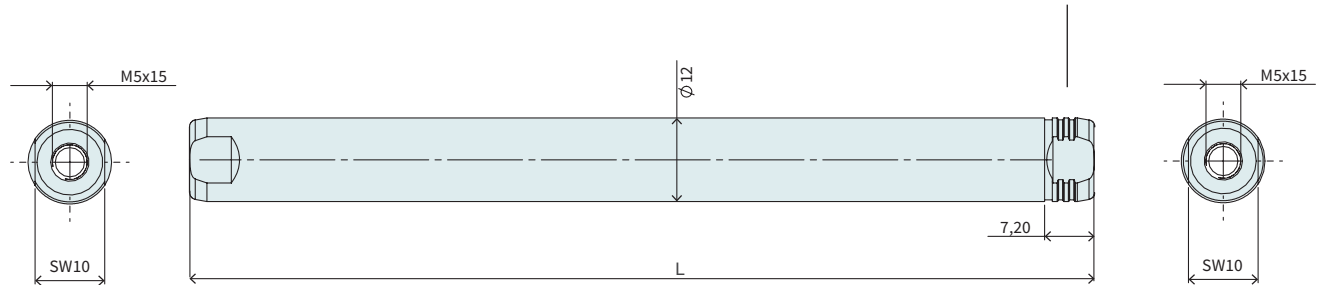
Motor Connector Wiring

1  13

View: Motor Connector, plug side

SLIDER

Number of grooves determines the slider type (see chapter 2 / slider) and marks the front end.

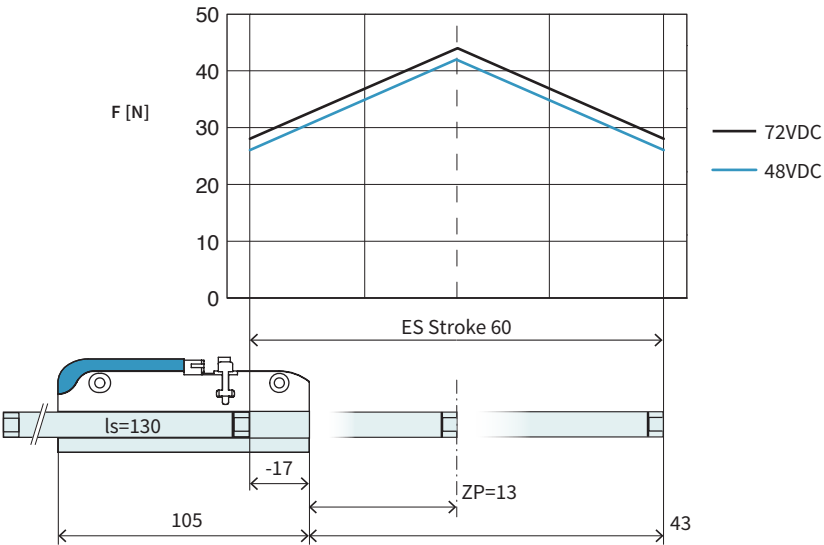


Slider Standard				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-12x130/90-LC	Slider 'standard LC'	60	0	0150-2580
PL01-12x170/130-LC	Slider 'standard LC'	100	40	0150-2581
PL01-12x190/150-LC	Slider 'standard LC'	120	60	0150-2582
PL01-12x230/190-LC	Slider 'standard LC'	160	100	0150-2598
PL01-12x290/250-LC	Slider 'standard LC'	220	160	0150-2583
PL01-12x350/310-LC	Slider 'standard LC'	280	220	0150-2584
PL01-12x420/380-LC	Slider 'standard LC'	350	290	0150-2585
PL01-12x480/440-LC	Slider 'standard LC'	410	350	0150-2586
PL01-12x580/540-LC	Slider 'standard LC'	510	450	0150-2587
PL01-12x760/720-LC	Slider 'standard LC'	690	630	0150-2589
PL01-12x850/810-LC	Slider 'standard LC'	780	720	0150-2588

Slider Heavy Duty				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL02-12x130/90-LC	Slider 'heavy duty LC'	60	0	0150-2590
PL02-12x170/130-LC	Slider 'heavy duty LC'	100	40	0150-2591
PL02-12x190/150-LC	Slider 'heavy duty LC'	120	60	0150-2592
PL02-12x230/190-LC	Slider 'heavy duty LC'	160	100	0150-2599
PL02-12x290/250-LC	Slider 'heavy duty LC'	220	160	0150-2593
PL02-12x350/310-LC	Slider 'heavy duty LC'	280	220	0150-2594
PL02-12x420/380-LC	Slider 'heavy duty LC'	350	290	0150-2595
PL02-12x480/440-LC	Slider 'heavy duty LC'	410	350	0150-2597
PL02-12x580/540-LC	Slider 'heavy duty LC'	510	450	0150-2596
PL02-12x760/720-LC	Slider 'heavy duty LC'	690	630	on request
PL02-12x850/810-LC	Slider 'heavy duty LC'	780	720	on request

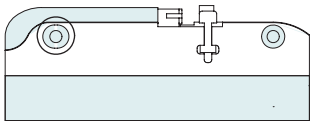
P02-23Sx80/0x60-LC

Max. Stroke: 60 mm
Peak Force: 44 N



Dimensions in mm

Technical Data P02-23Sx80/0x60-LC				
Stroke				
Standard Stroke (SS)	mm	(in)	0	(0)
Extended Stroke (ES)	mm	(in)	60	(2.35)
Force				
Max. Force @ 48VDC	N	(lbf)	41.6	(9.35)
Max. Force @ 72VDC	N	(lbf)	44	(9.89)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	8.6 / 16 / -	(1.9 / 3.5 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	11	(2.47)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	3.9	(159.9)
Max. Velocity @ 72VDC	m/s	(in/s)	5.9	(239.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.5	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm	(in)	130	(5.1)
Slider Mass	g	(lb)	90	(0.2)

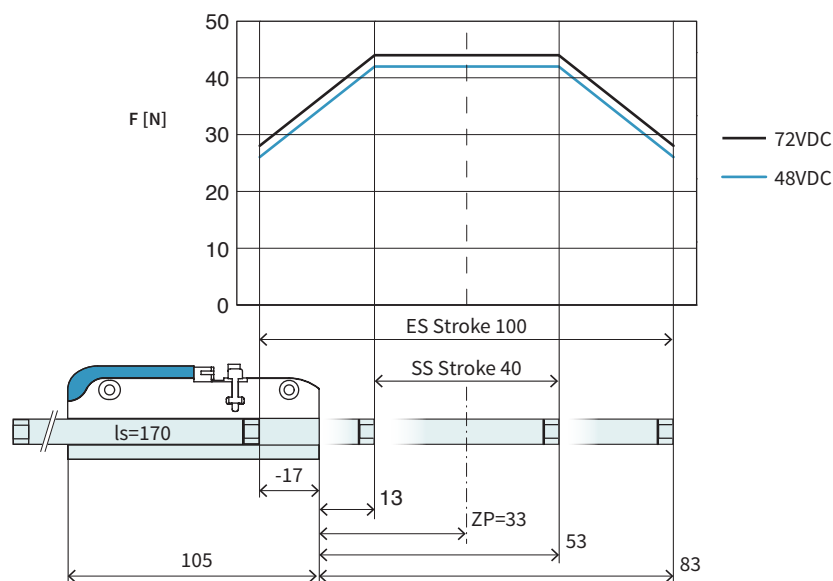


Item	Description	Item-No.
PS02-23Sx80-F	Stator with Flat cable connector 13 Pin	0150-1272
PL01-12x130/90-LC	Slider 'standard LC'	0150-2580
PL02-12x130/90-LC	Slider 'heavy duty LC'	0150-2590

P02-23Sx80/40x100-LC

3

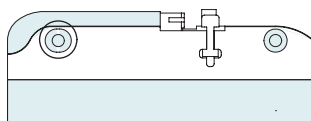
Max. Stroke: 100 mm
Peak Force: 44 N



Dimensions in mm

Technical Data P02-23Sx80/40x100-LC

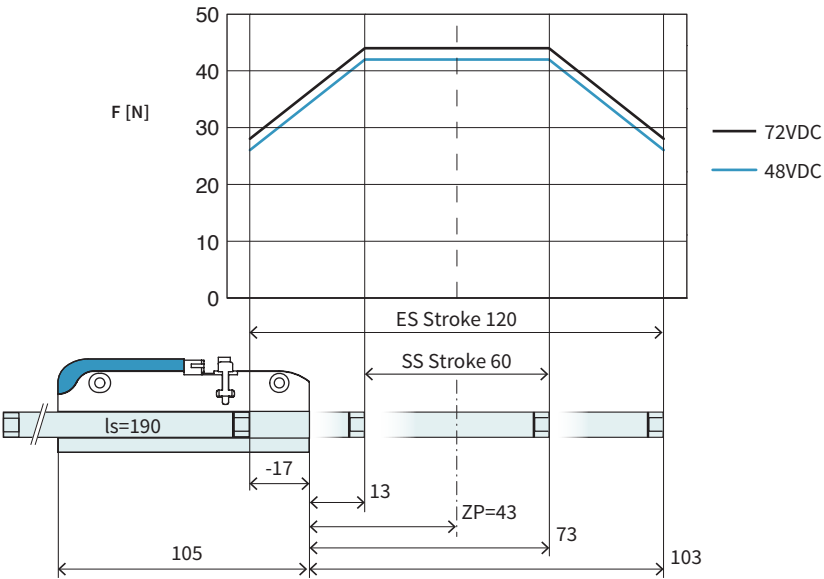
Stroke				
Standard Stroke (SS)	mm (in)		40 (1.57)	
Extended Stroke (ES)	mm (in)		100 (3.93)	
Force				
Max. Force @ 48VDC	N (lbf)		41.6 (9.35)	
Max. Force @ 72VDC	N (lbf)		44 (9.89)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		8.6 / 16 / - (1.9 / 3.5 / -)	
Max. Border Force relative	%		63	
Force Constant	N/A _{pk} (lbf/A _{pk})		11 (2.47)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.9 (159.9)	
Max. Velocity @ 72VDC	m/s (in/s)		5.9 (239.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.35	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm (in)		170 (6.7)	
Slider Mass	g (lb)		130 (0.29)	



Item	Description	Item-No.
PS02-23Sx80-F	Stator with Flat cable connector 13 Pin	0150-1272
PL01-12x170/130-LC	Slider 'standard LC'	0150-2581
PL02-12x170/130-LC	Slider 'heavy duty LC'	0150-2591

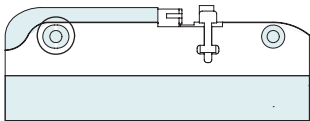
P02-23Sx80/60x120-LC

Max. Stroke: 120 mm
Peak Force: 44 N



Dimensions in mm

Technical Data P02-23Sx80/60x120-LC				
Stroke				
Standard Stroke (SS)	mm	(in)	60	(2.35)
Extended Stroke (ES)	mm	(in)	120	(4.71)
Force				
Max. Force @ 48VDC	N	(lbf)	41.6	(9.35)
Max. Force @ 72VDC	N	(lbf)	44	(9.89)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	8.6 / 16 / -	(1.9 / 3.5 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	11	(2.47)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	3.9	(159.9)
Max. Velocity @ 72VDC	m/s	(in/s)	5.9	(239.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm	(in)	190	(7.5)
Slider Mass	g	(lb)	145	(0.32)



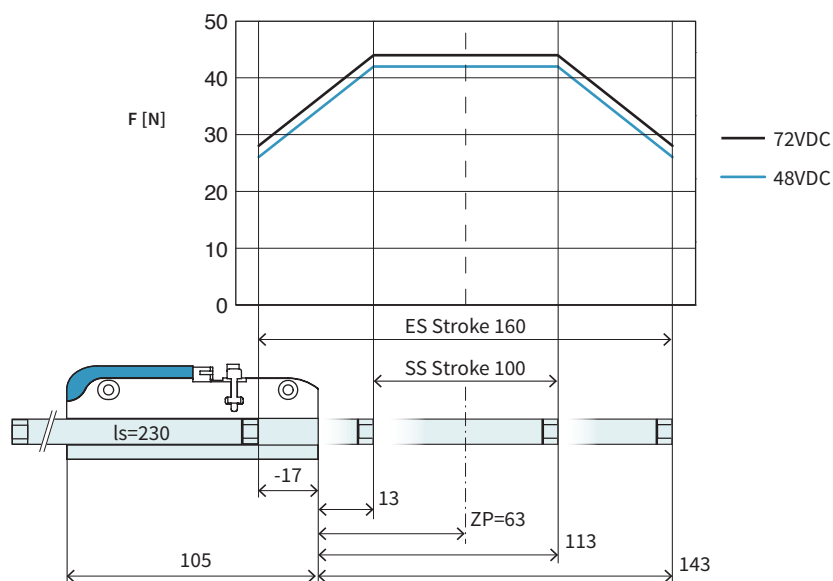
Item	Description	Item-No.
PS02-23Sx80-F	Stator with Flat cable connector 13 Pin	0150-1272
PL01-12x190/150-LC	Slider 'standard LC'	0150-2582
PL02-12x190/150-LC	Slider 'heavy duty LC'	0150-2592

P02-23Sx80/100x160-LC

3

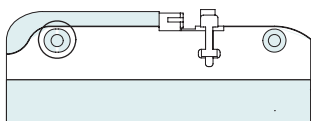
Max. Stroke: 160 mm
Peak Force: 44 N

Dimensions in mm



Technical Data P02-23Sx80/100x160-LC

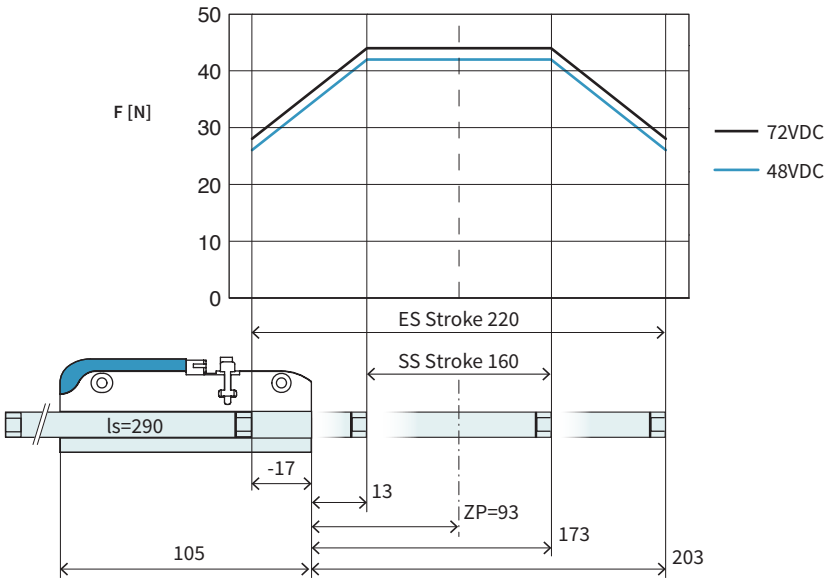
Stroke				
Standard Stroke (SS)	mm (in)	100	(3.93)	
Extended Stroke (ES)	mm (in)	160	(6.29)	
Force				
Max. Force @ 48VDC	N (lbf)	41.6	(9.35)	
Max. Force @ 72VDC	N (lbf)	44	(9.89)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	8.6 / 16 / -	(1.9 / 3.5 / -)	
Max. Border Force relative	%	63		
Force Constant	N/A _{pk} (lbf/A _{pk})	11	(2.47)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)	3.9	(159.9)	
Max. Velocity @ 72VDC	m/s (in/s)	5.9	(239.9)	
Position Detection				
Repeatability	mm (in)	±0.05	(±0.002)	
Linearity	%	± 0.25		
Electrical Data				
Max. Current @ 48VDC	A _{pk}	3.7		
Max. Current @ 72VDC	A _{pk}	3.9		
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	0.78 / 1.4 / -		
Thermal Data				
Max. Winding Temperature (Sensor)	°C	90		
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	6.4 / 1.9 / -		
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	830 / 250 / -		
Mechanical Data				
Slider Length	mm (in)	230	(9.1)	
Slider Mass	g (lb)	180	(0.4)	



Item	Description	Item-No.
PS02-23Sx80-F	Stator with Flat cable connector 13 Pin	0150-1272
PL01-12x230/190-LC	Slider 'standard LC'	0150-2598
PL02-12x230/190-LC	Slider 'heavy duty LC'	0150-2599

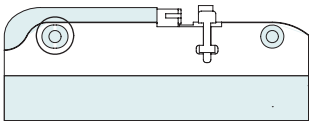
P0S-23Sx80/160x220-LC

Max. Stroke: 220 mm
Peak Force: 44 N



Dimensions in mm

Technical Data P02-23Sx80/160x220-LC				
Stroke				
Standard Stroke (SS)	mm	(in)	160	(6.29)
Extended Stroke (ES)	mm	(in)	220	(8.65)
Force				
Max. Force @ 48VDC	N	(lbf)	41.6	(9.35)
Max. Force @ 72VDC	N	(lbf)	44	(9.89)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	8.6 / 16 / -	(1.9 / 3.5 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	11	(2.47)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	3.9	(159.9)
Max. Velocity @ 72VDC	m/s	(in/s)	5.9	(239.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm	(in)	290	(11)
Slider Mass	g	(lb)	230	(0.51)

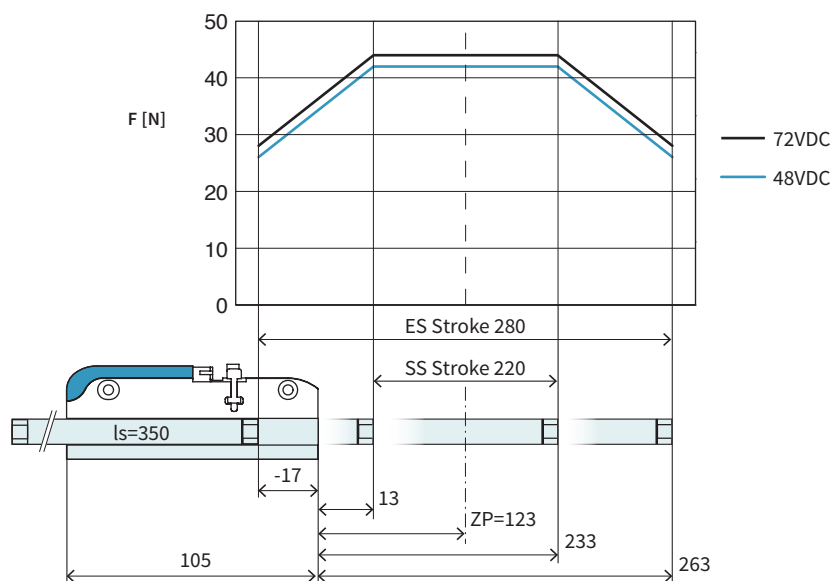


Item	Description	Item-No.
PS02-23Sx80-F	Stator with Flat cable connector 13 Pin	0150-1272
PL01-12x290/250-LC	Slider 'standard LC'	0150-2583
PL02-12x290/250-LC	Slider 'heavy duty LC'	0150-2593

P02-23Sx80/220x280-LC

3

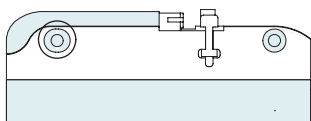
Max. Stroke: 280 mm
Peak Force: 44 N



Dimensions in mm

Technical Data P02-23Sx80/220x280-LC

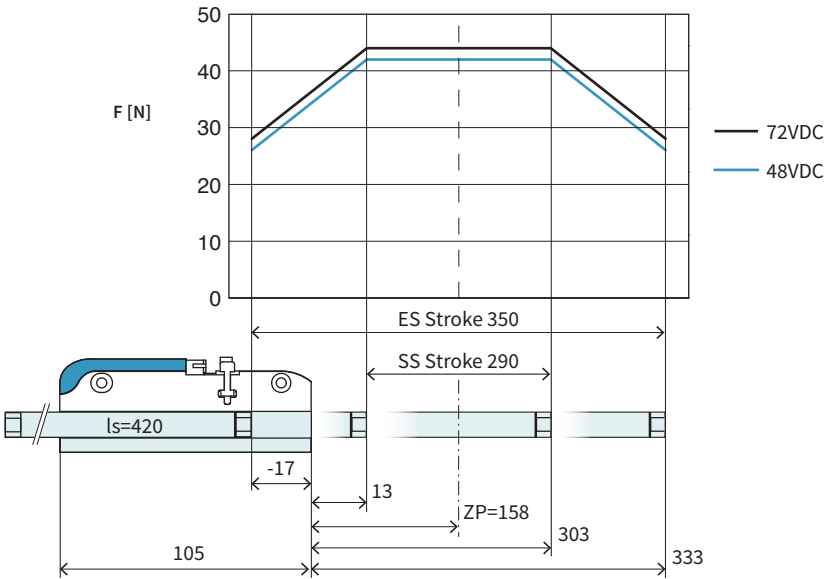
Stroke				
Standard Stroke (SS)	mm (in)	220	(8.65)	
Extended Stroke (ES)	mm (in)	280	(10.99)	
Force				
Max. Force @ 48VDC	N (lbf)	41.6	(9.35)	
Max. Force @ 72VDC	N (lbf)	44	(9.89)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	8.6 / 16 / -	(1.9 / 3.5 / -)	
Max. Border Force relative	%	63		
Force Constant	N/A _{pk} (lbf/A _{pk})	11	(2.47)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)	3.9	(159.9)	
Max. Velocity @ 72VDC	m/s (in/s)	5.9	(239.9)	
Position Detection				
Repeatability	mm (in)	±0.05	(±0.002)	
Linearity	%	± 0.2		
Electrical Data				
Max. Current @ 48VDC	A _{pk}	3.7		
Max. Current @ 72VDC	A _{pk}	3.9		
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	0.78 / 1.4 / -		
Thermal Data				
Max. Winding Temperature (Sensor)	°C	90		
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	6.4 / 1.9 / -		
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	830 / 250 / -		
Mechanical Data				
Slider Length	mm (in)	350	(14)	
Slider Mass	g (lb)	280	(0.62)	



Item	Description	Item-No.
PS02-23Sx80-F	Stator with Flat cable connector 13 Pin	0150-1272
PL01-12x350/310-LC	Slider 'standard LC'	0150-2584
PL02-12x350/310-LC	Slider 'heavy duty LC'	0150-2594

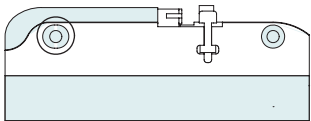
P02-23Sx80/290x350-LC

Max. Stroke: 350 mm
Peak Force: 44 N



Dimensions in mm

Technical Data P02-23Sx80/290x350-LC				
Stroke				
Standard Stroke (SS)	mm (in)		290	(11.4)
Extended Stroke (ES)	mm (in)		350	(13.8)
Force				
Max. Force @ 48VDC	N (lbf)		41.6	(9.35)
Max. Force @ 72VDC	N (lbf)		44	(9.89)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		8.6 / 16 / -	(1.9 / 3.5 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk} (lbf/A _{pk})		11	(2.47)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.9	(159.9)
Max. Velocity @ 72VDC	m/s (in/s)		5.9	(239.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm (in)		420	(17)
Slider Mass	g (lb)		340	(0.75)

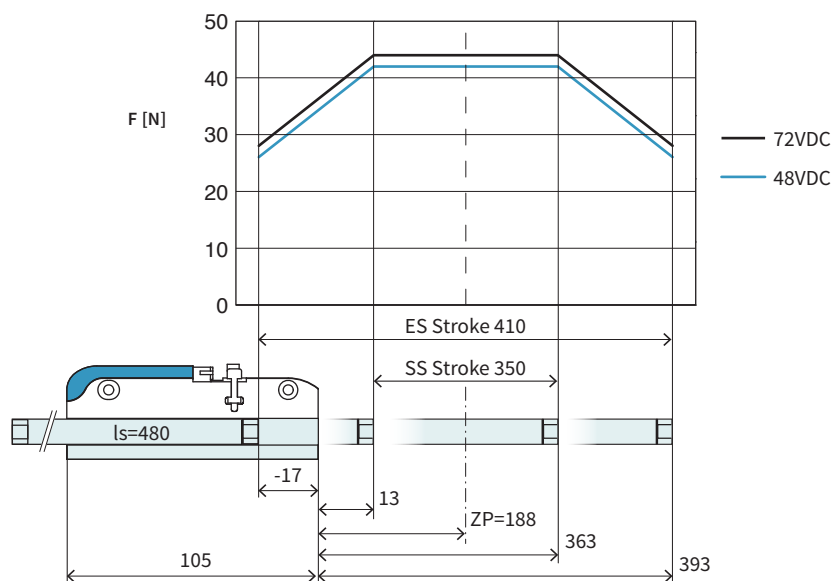


Item	Description	Item-No.
PS02-23Sx80-F	Stator with Flat cable connector 13 Pin	0150-1272
PL01-12x420/380-LC	Slider 'standard LC'	0150-2585
PL02-12x420/380-LC	Slider 'heavy duty LC'	0150-2595

P02-23Sx80/350x410-LC

3

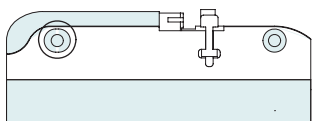
Max. Stroke: 410 mm
Peak Force: 44 N



Dimensions in mm

Technical Data P02-23Sx80/350x410-LC

Stroke				
Standard Stroke (SS)	mm (in)		350 (13.8)	
Extended Stroke (ES)	mm (in)		410 (16.1)	
Force				
Max. Force @ 48VDC	N (lbf)		41.6 (9.35)	
Max. Force @ 72VDC	N (lbf)		44 (9.89)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		8.6 / 16 / - (1.9 / 3.5 / -)	
Max. Border Force relative	%		63	
Force Constant	N/A _{pk} (lbf/A _{pk})		11 (2.47)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.9 (159.9)	
Max. Velocity @ 72VDC	m/s (in/s)		5.9 (239.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm (in)		480 (19)	
Slider Mass	g (lb)		390 (0.86)	

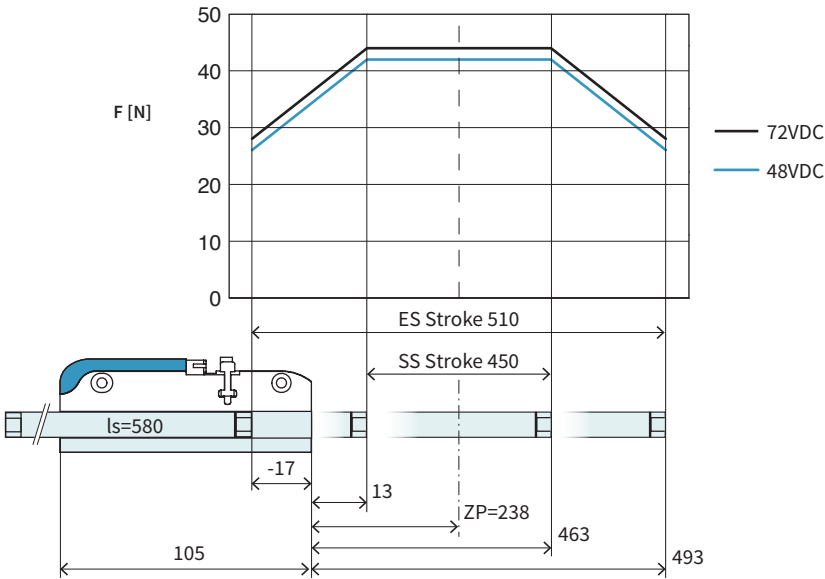


Item	Description	Item-No.
PS02-23Sx80-F	Stator with Flat cable connector 13 Pin	0150-1272
PL01-12x480/440-LC	Slider 'standard LC'	0150-2586
PL02-12x480/440-LC	Slider 'heavy duty LC'	0150-2597

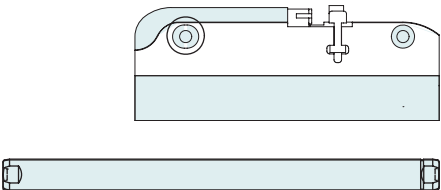
P02-23Sx80/450x510-LC

Max. Stroke: 510 mm
Peak Force: 44 N

Dimensions in mm



Technical Data P02-23Sx80/450x510-LC				
Stroke				
Standard Stroke (SS)	mm (in)		450	(17.69)
Extended Stroke (ES)	mm (in)		510	(20.1)
Force				
Max. Force @ 48VDC	N (lbf)		41.6	(9.35)
Max. Force @ 72VDC	N (lbf)		44	(9.89)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		8.6 / 16 / -	(1.9 / 3.5 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk} (lbf/A _{pk})		11	(2.47)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.9	(159.9)
Max. Velocity @ 72VDC	m/s (in/s)		5.9	(239.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm (in)		580	(23)
Slider Mass	g (lb)		480	(1.06)

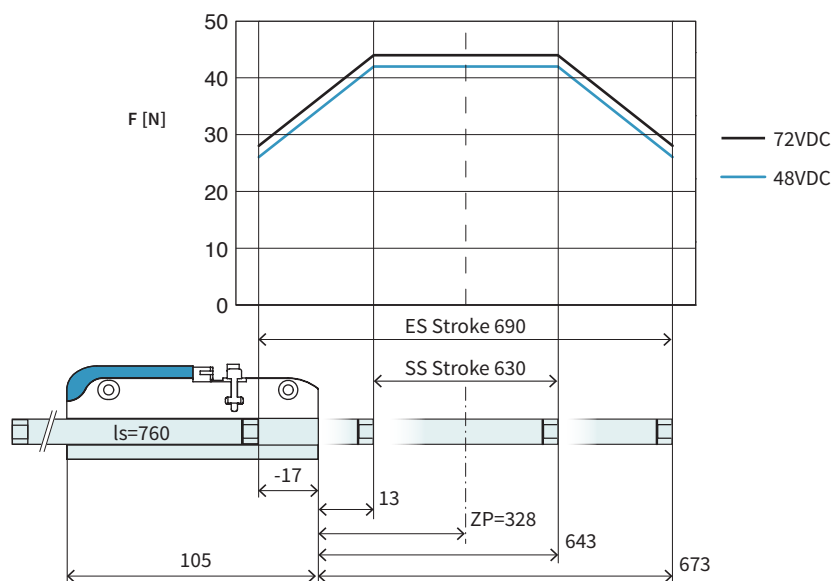


Item	Description	Item-No.
PS02-23Sx80-F	Stator with Flat cable connector 13 Pin	0150-1272
PL01-12x580/540-LC	Slider 'standard LC'	0150-2587
PL02-12x580/540-LC	Slider 'heavy duty LC'	0150-2596

P02-23Sx80/630x690-LC

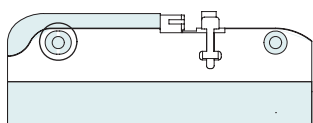
Max. Stroke: 690 mm
Peak Force: 44 N

Dimensions in mm



Technical Data P02-23Sx80/630x690-LC

Stroke			
Standard Stroke (SS)	mm (in)	630 (24.8)	
Extended Stroke (ES)	mm (in)	690 (27.19)	
Force			
Max. Force @ 48VDC	N (lbf)	41.6 (9.35)	
Max. Force @ 72VDC	N (lbf)	44 (9.89)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	8.6 / 16 / -	(1.9 / 3.5 / -)
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	11	(2.47)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3.9 (159.9)	
Max. Velocity @ 72VDC	m/s (in/s)	5.9 (239.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	3.7	
Max. Current @ 72VDC	A _{pk}	3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	0.78 / 1.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	830 / 250 / -	
Mechanical Data			
Slider Length	mm (in)	760 (30)	
Slider Mass	g (lb)	630 (1.4)	



Item	Description	Item-No.
PS02-23Sx80-F	Stator with Flat cable connector 13 Pin	0150-1272
PL01-12x760/720-LC	Slider 'standard LC'	0150-2589
PL02-12x760/720-LC	Slider 'heavy duty LC'	on request

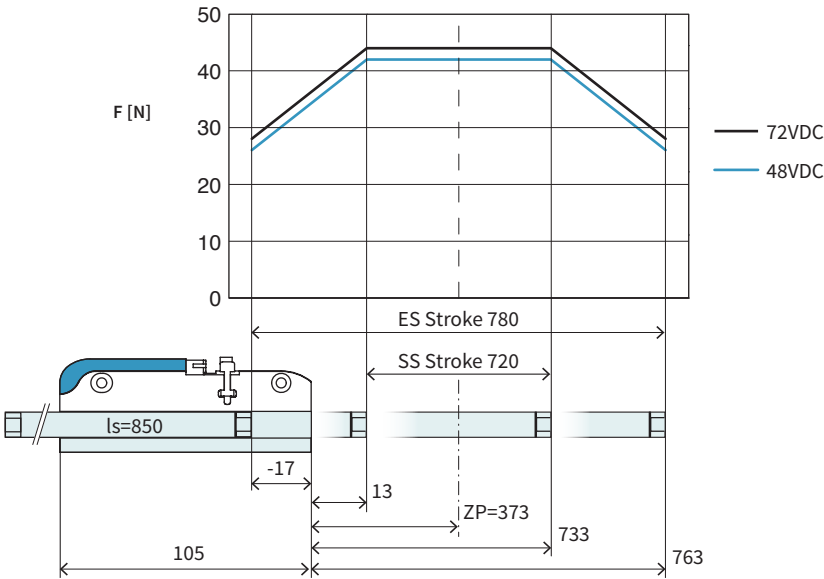
P02-23Sx80/720x780-LC

Max. Stroke:

780 mm

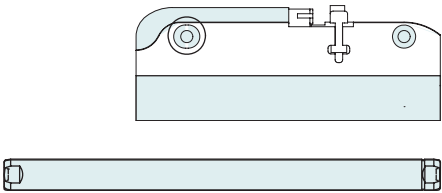
Peak Force:

44 N



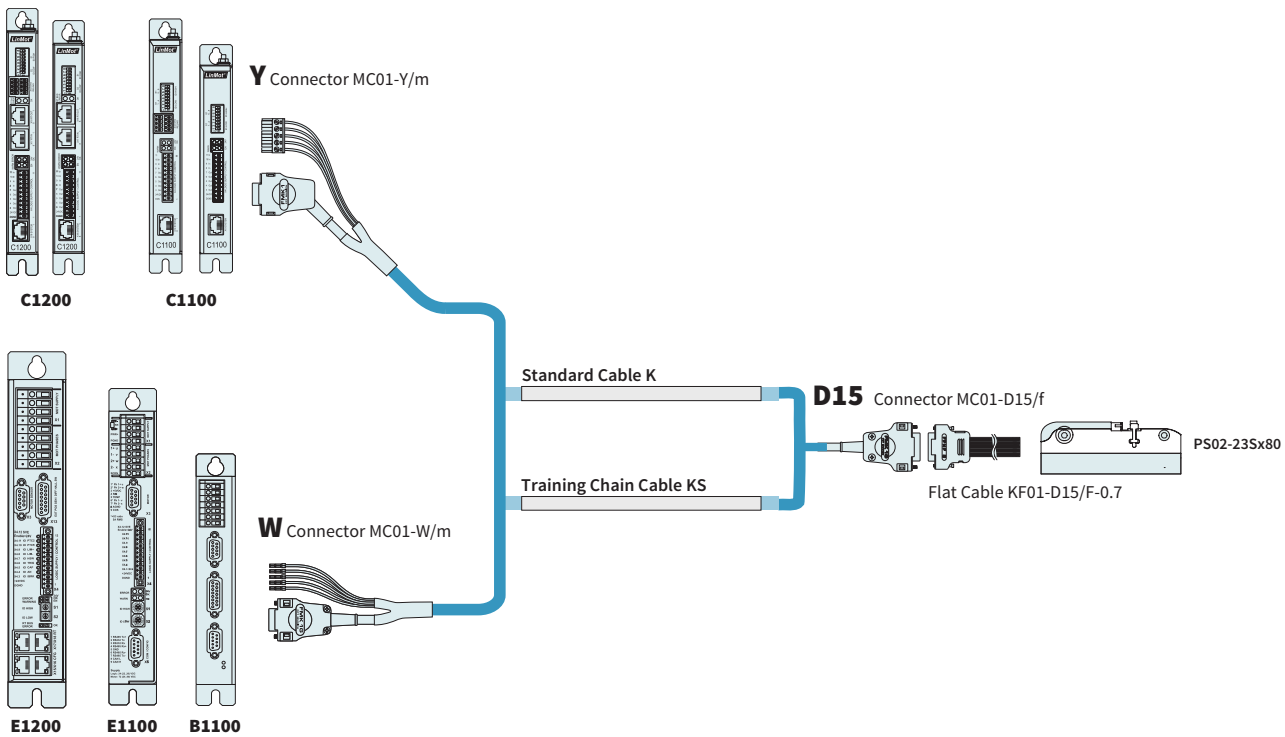
Dimensions in mm

Technical Data P02-23Sx80/720x780-LC				
Stroke				
Standard Stroke (SS)	mm	(in)	720	(28.3)
Extended Stroke (ES)	mm	(in)	780	(30.69)
Force				
Max. Force @ 48VDC	N	(lbf)	41.6	(9.35)
Max. Force @ 72VDC	N	(lbf)	44	(9.89)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	8.6 / 16 / -	(1.9 / 3.5 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	11	(2.47)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	3.9	(159.9)
Max. Velocity @ 72VDC	m/s	(in/s)	5.9	(239.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm	(in)	850	(33)
Slider Mass	g	(lb)	700	(1.3)



Item	Description	Item-No.
PS02-23Sx80-F	Stator with Flat cable connector 13 Pin	0150-1272
PL01-12x850/810-LC	Slider 'standard LC'	0150-2588
PL01-12x850/810-LC	Slider 'heavy duty LC'	on request

Motor Cable



ORDERING INFORMATION

STANDARD CABLE		
Item	Description	Item-No.
K05-W/D15-	Motor Cable W/D15, Custom length	0150-3333
K05-Y-Fe/D15-	Motor Cable Y-Fe/D15, Custom length	0150-3504

TRAILING CHAIN CABLE		
Item	Description	Item-No.
KS05-W/D15-	Trailing Chain Cable KS05-W/D15-, Custom length	on request
KS05-Y-Fe/D15-	Trailing Chain Cable KS05-Y-Fe/D15-, Custom length	0150-3683

FLAT CABLE		
Item	Description	Item-No.
KF02-D15/F-0.08	Flat Cable 0.08 m, for PS02-23Sx80-F	0150-2150
KF02-D15/F-0.16	Flat Cable 0.16 m, for PS02-23Sx80-F	0150-2156
KF02-D15/F-0.32	Flat Cable 0.32 m, for PS02-23Sx80-F	0150-2152
KF02-D15/F-0.48	Flat Cable 0.48 m, for PS02-23Sx80-F	0150-2154
KF02-D15/F-0.70	Flat Cable 0.70 m, for PS02-23Sx80-F	0150-2158

CONNECTOR & CABLE (INDIVIDUAL)		
Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-D15/f	Motor Connector D15 (f)	0150-3136
K05-04/05	Motor Cable per m	0150-1920
KS05-04/05	Trailing Chain Cable per m	0150-1938

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-12	Fixed End Washer Set for 12 mm sliders	0150-3085
PLF01-12-Ni	Fixed End Washer Set for 12 mm sliders nickel-plated	0150-3573
PLL02-12	Floating support for PL01-12 Sliders	0150-3111

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D-Encoder	Encoder Cable (Length in m)	0150-3166
KS025-D/D15-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P02-23Sx80F-HP



- ✓ Short design
- ✓ Integrated mounting flange
- ✓ Pluggable motor cable with cover
- ✓ Free positionable cable outlet
- ✓ For use where space is limited and in multi-axis applications

LINEAR MOTORS P02-23Sx80F-HP

Technical Data	93
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Motor Specifications

P02-23Sx80F/0x60-HP	97
P02-23Sx80F/20x80-HP	98
P02-23Sx80F/40x100-HP	99
P02-23Sx80F/70x130-HP	100
P02-23Sx80F/100x160-HP	101
P02-23Sx80F/140x200-HP	102
P02-23Sx80F/160x220-HP	103
P02-23Sx80F/220x280-HP	104
P02-23Sx80F/290x350-HP	105
P02-23Sx80F/350x410-HP	106
P02-23Sx80F/450x510-HP	107
P02-23Sx80F/630x690-HP	108
P02-23Sx80F/720x780-HP	109

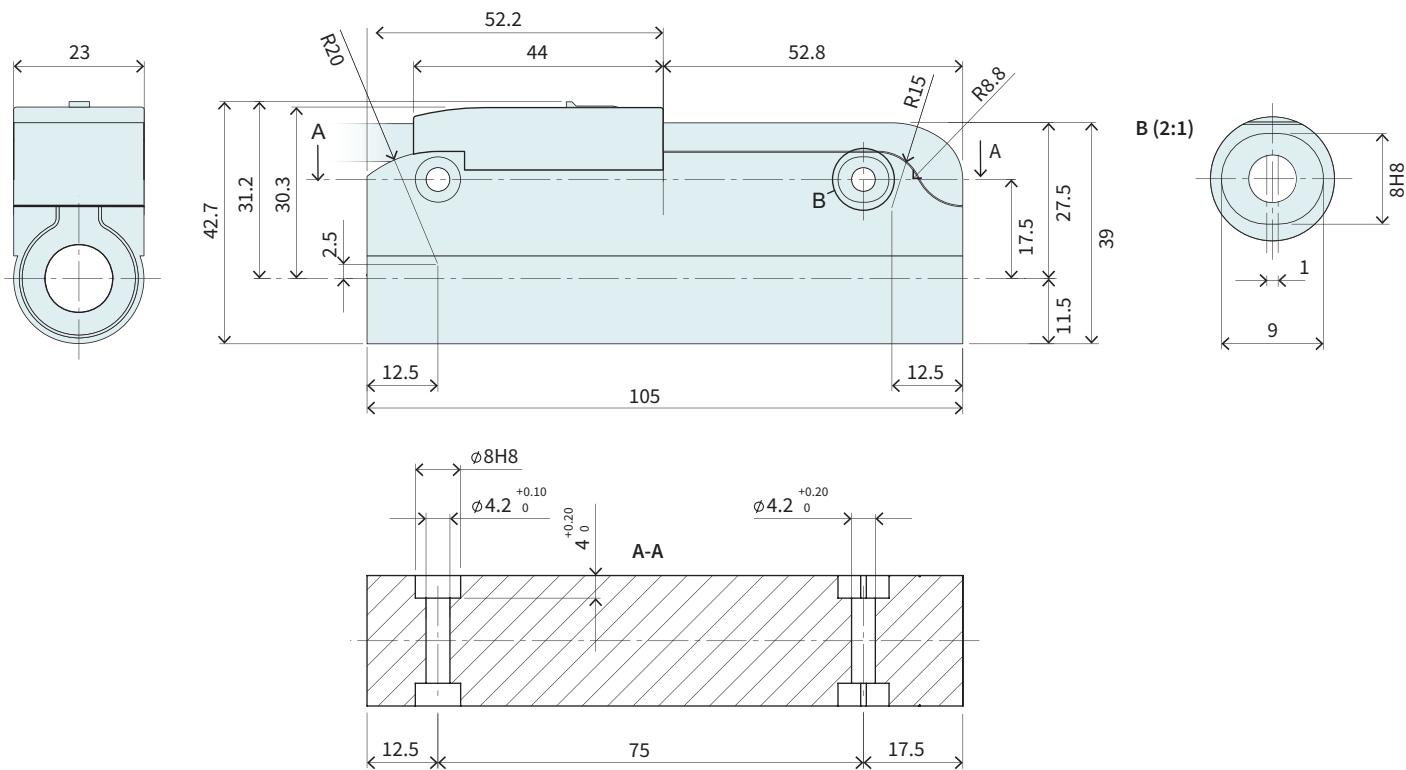
Accessories	110
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MOTOR FAMILY P02-23Sx80F-HP

Technical Data				
Stroke				
Standard Stroke (SS)	mm	(in)	≤ 720	(≤ 28.3)
Extended Stroke (ES)	mm	(in)	≤ 780	(≤ 30.69)
Force				
Max. Force @ 48VDC	N	(lbf)	67.1	(15.1)
Max. Force @ 72VDC	N	(lbf)	67.1	(15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	13 / 24 / -	(2.9 / 5.3 / -)
Max. Border Force relative	%		≤ 63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	8.95	(2.01)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	4.9	(189.9)
Max. Velocity @ 72VDC	m/s	(in/s)	7.3	(289.9)
Position Detection				
Position Resolution	mm	(in)	0.002	(0.0001)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -	
Terminal Resistance 25 °C / 150 °C	Ohm		4.2 / 6.2	
Terminal Inductivity	mH		0.6	
Magnetic Period	mm	(in)	20	(0.78)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Stator Diameter	mm	(in)	23	(0.91)
Stator Length [Connector type / Cable type]	mm	(in)	105	(4.1)
Stator Mass	g	(lb)	245	(0.54)
Slider Diameter	mm	(in)	12	(0.47)
Slider Length	mm	(in)	130 - 850	(5.1 - 33)
Slider Mass	g	(lb)	90 - 700	(0.2 - 1.54)
IP Code			IP 50	

STATOR

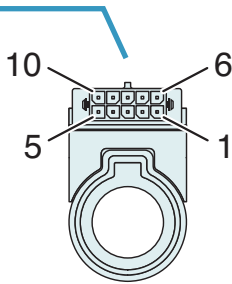


Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285

CONNECTOR

Motor Connector Wiring		Wire color motor cable
Pin 1	Phase 1+	red
Pin 2	Phase 2+	blue
Pin 3	n.c.	n.c.
Pin 4	Phase 1-	pink
Pin 5	Phase 2-	grey
Pin 6	Sensor Sin	yellow
Pin 7	Sensor Cos	green
Pin 8	GND	brown
Pin 9	+5V	white
Pin 10	Temp sensor	black
	Housing	Shield

K-Connector

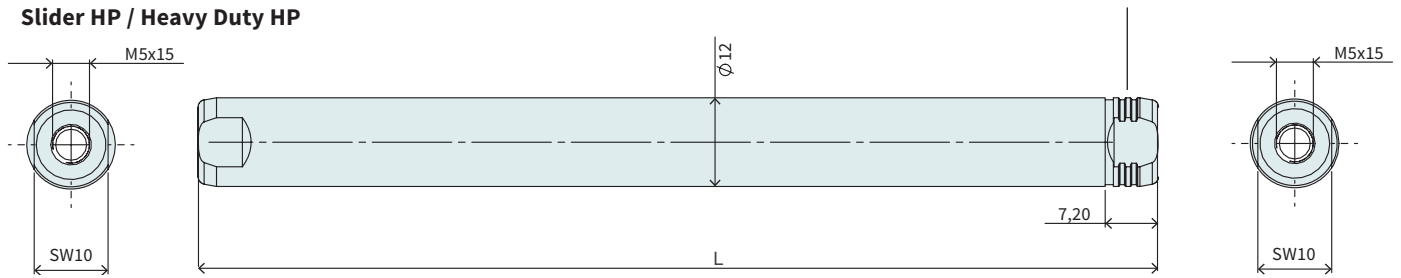


View: Motor Connector, plug side

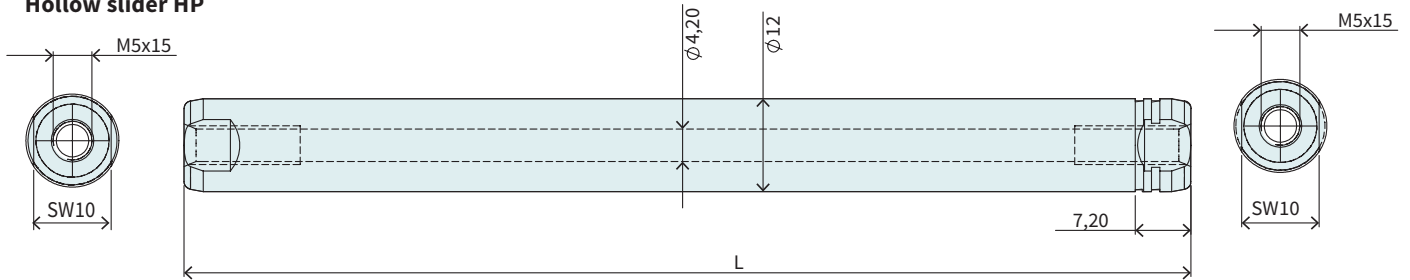
SLIDER

Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.

Slider HP / Heavy Duty HP



Hollow slider HP



Slider High Performance

Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-12x130/90-HP	Slider 'High Performance'	60	-	0150-2209
PL01-12x150/110-HP	Slider 'High Performance'	80	20	0150-2281
PL01-12x170/130-HP	Slider 'High Performance'	100	40	0150-1529
PL01-12x200/160-HP	Slider 'High Performance'	130	70	0150-1518
PL01-12x230/190-HP	Slider 'High Performance'	160	100	0150-1519
PL01-12x270/230-HP	Slider 'High Performance'	200	140	0150-1520
PL01-12x290/250-HP	Slider 'High Performance'	220	160	0150-1521
PL01-12x350/310-HP	Slider 'High Performance'	280	220	0150-1522
PL01-12x420/380-HP	Slider 'High Performance'	350	290	0150-1523
PL01-12x480/440-HP	Slider 'High Performance'	410	350	0150-1524
PL01-12x580/540-HP	Slider 'High Performance'	510	450	0150-1525
PL01-12x760/720-HP	Slider 'High Performance'	690	630	0150-1526
PL01-12x850/810-HP	Slider 'High Performance'	780	720	0150-1527

Slider Heavy Duty High Performance

Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL02-12x130/90-HP	Slider 'heavy duty' 'High Performance'	60	-	on request
PL02-12x150/110-HP	Slider 'heavy duty' 'High Performance'	80	20	on request
PL02-12x170/130-HP	Slider 'heavy duty' 'High Performance'	100	40	0150-1559
PL02-12x200/160-HP	Slider 'heavy duty' 'High Performance'	130	70	0150-1532
PL02-12x230/190-HP	Slider 'heavy duty' 'High Performance'	160	100	0150-1552
PL02-12x270/230-HP	Slider 'heavy duty' 'High Performance'	200	140	0150-1533
PL02-12x290/250-HP	Slider 'heavy duty' 'High Performance'	220	160	0150-1495
PL02-12x350/310-HP	Slider 'heavy duty' 'High Performance'	280	220	0150-1555
PL02-12x420/380-HP	Slider 'heavy duty' 'High Performance'	350	290	0150-1554
PL02-12x480/440-HP	Slider 'heavy duty' 'High Performance'	410	350	0150-2519
PL02-12x580/540-HP	Slider 'heavy duty' 'High Performance'	510	450	0150-2520
PL02-12x760/720-HP	Slider 'heavy duty' 'High Performance'	690	630	0150-2521
PL02-12x850/810-HP	Slider 'heavy duty' 'High Performance'	780	720	0150-2516

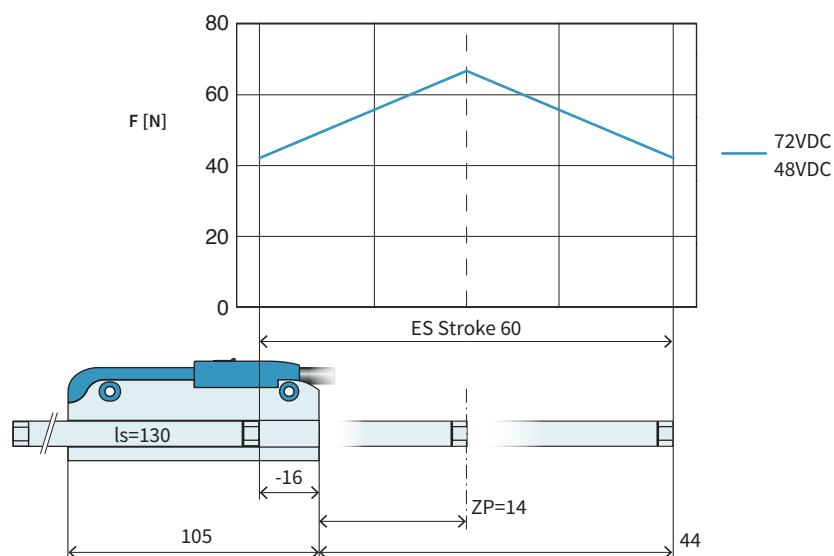
Hollow slider High Performance				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-12x130/90-HP-L	Slider 'High Performance L'	60	–	0150-3687
PL01-12x150/110-HP-L	Slider 'High Performance L'	80	20	on request
PL01-12x170/130-HP-L	Slider 'High Performance L'	100	40	0150-3688
PL01-12x200/160-HP-L	Slider 'High Performance L'	130	70	0150-3689
PL01-12x230/190-HP-L	Slider 'High Performance L'	160	100	0150-2546
PL01-12x270/230-HP-L	Slider 'High Performance L'	200	140	0150-2557
PL01-12x290/250-HP-L	Slider 'High Performance L'	220	160	0150-3690
PL01-12x350/310-HP-L	Slider 'High Performance L'	280	220	0150-3691
PL01-12x420/380-HP-L	Slider 'High Performance L'	350	290	0150-3692
PL01-12x480/440-HP-L	Slider 'High Performance L'	410	350	0150-3693
PL01-12x580/540-HP-L	Slider 'High Performance L'	510	450	0150-3694
PL01-12x760/720-HP-L	Slider 'High Performance L'	690	630	0150-3695
PL01-12x850/810-HP-L	Slider 'High Performance L'	780	720	on request

P02-23Sx80F/0x60-HP

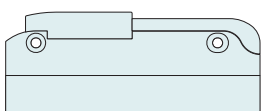
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Max. Stroke: 60 mm
Peak Force: 67 N

Dimensions in mm



Technical Data P02-23Sx80F/0x60-HP				
Stroke				
Standard Stroke (SS)	mm (in)		0 (0)	
Extended Stroke (ES)	mm (in)		60 (2.35)	
Force				
Max. Force @ 48VDC	N (lbf)		67.1 (15.1)	
Max. Force @ 72VDC	N (lbf)		67.1 (15.1)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		13 / 24 / - (2.9 / 5.3 / -)	
Max. Border Force relative	%		63	
Force Constant	N/A _{pk} (lbf/A _{pk})		8.95 (2.01)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		4.9 (189.9)	
Max. Velocity @ 72VDC	m/s (in/s)		7.3 (289.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.5	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm (in)		130 (5.1)	
Slider Mass	g (lb)		90 (0.2)	



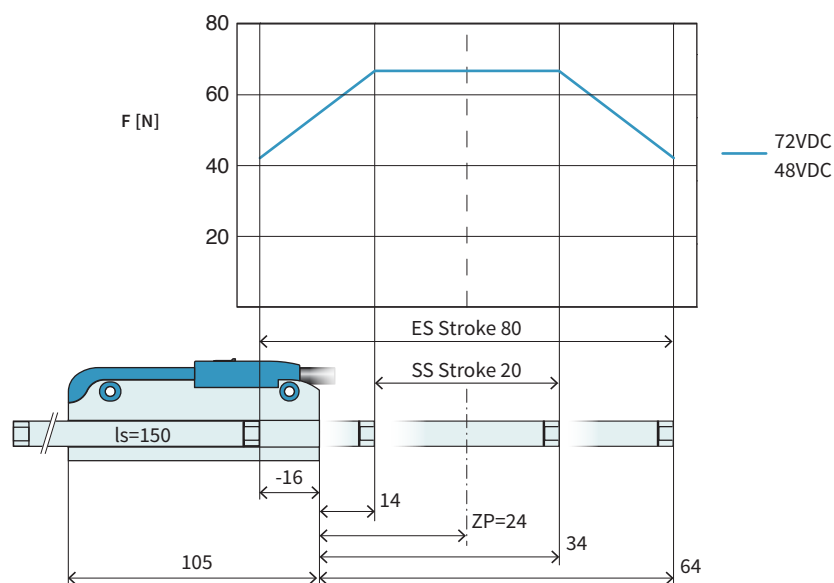
Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x130/90-HP	Slider 'High Performance'	0150-2209
PL02-12x130/90-HP	Slider 'heavy duty' 'High Performance'	on request
PL01-12x130/90-HP-L*	Slider 'High Performance L'	0150-3687

* With this slider, the motor specifications above change.

P02-23Sx80F/20x80-HP

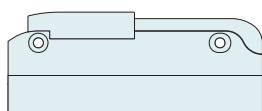
Max. Stroke: 80 mm
Peak Force: 67 N

Dimensions in mm



Technical Data P02-23Sx80F/20x80-HP

Stroke				
Standard Stroke (SS)	mm (in)		20 (0.78)	
Extended Stroke (ES)	mm (in)		80 (3.14)	
Force				
Max. Force @ 48VDC	N (lbf)		67.1 (15.1)	
Max. Force @ 72VDC	N (lbf)		67.1 (15.1)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		13 / 24 / - (2.9 / 5.3 / -)	
Max. Border Force relative	%		63	
Force Constant	N/A _{pk} (lbf/A _{pk})		8.95 (2.01)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		4.9 (189.9)	
Max. Velocity @ 72VDC	m/s (in/s)		7.3 (289.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.4	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm (in)		150 (5.9)	
Slider Mass	g (lb)		110 (0.24)	



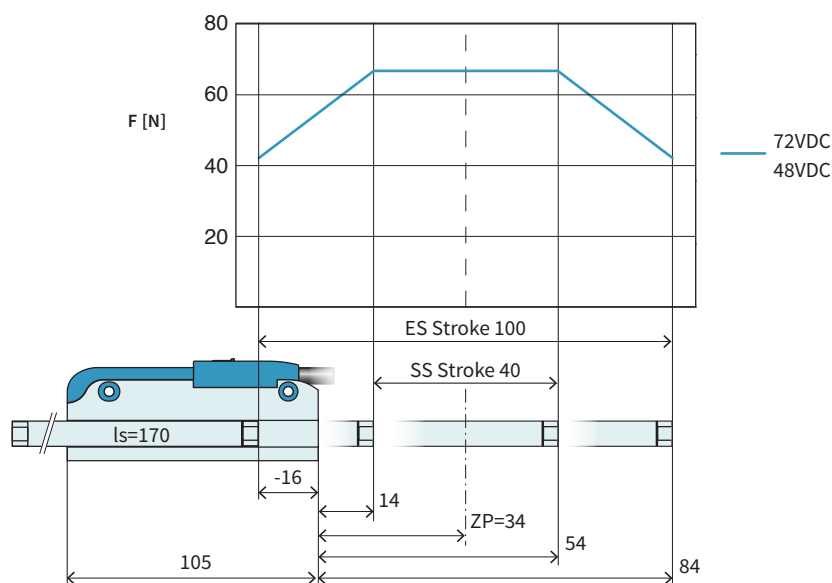
Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x150/110-HP	Slider 'High Performance'	0150-2281
PL02-12x150/110-HP	Slider 'heavy duty' 'High Performance'	on request
PL01-12x150/110-HP-L*	Slider 'High Performance L'	on request

* With this slider, the motor specifications above change.

P02-23Sx80F/40x100-HP

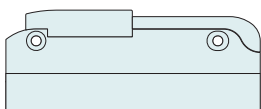
Max. Stroke: 100 mm
Peak Force: 67 N

Dimensions in mm



Technical Data P02-23Sx80F/40x100-HP

Stroke				
Standard Stroke (SS)	mm (in)		40 (1.57)	
Extended Stroke (ES)	mm (in)		100 (3.93)	
Force				
Max. Force @ 48VDC	N (lbf)		67.1 (15.1)	
Max. Force @ 72VDC	N (lbf)		67.1 (15.1)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		13 / 24 / -	(2.9 / 5.3 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk} (lbf/A _{pk})		8.95	(2.01)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		4.9 (189.9)	
Max. Velocity @ 72VDC	m/s (in/s)		7.3 (289.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.35	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm (in)		170 (6.7)	
Slider Mass	g (lb)		130 (0.28)	



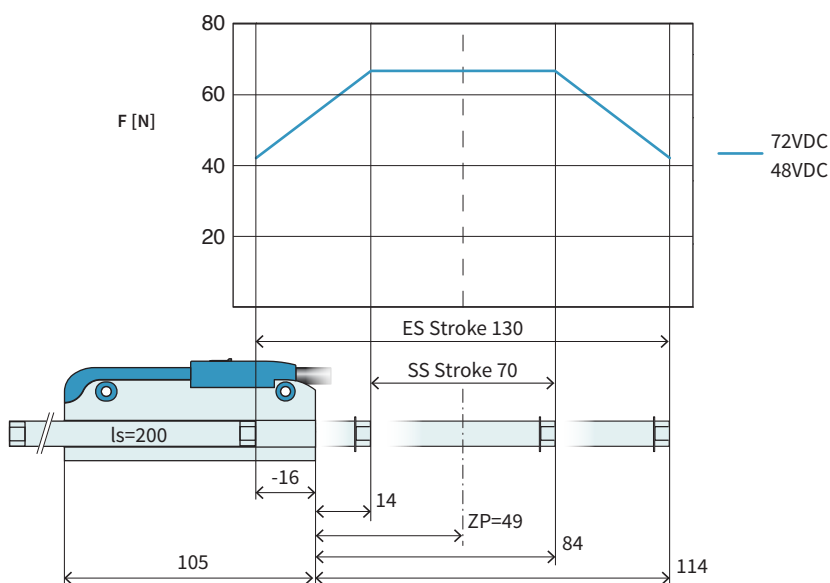
Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x170/130-HP	Slider 'High Performance'	0150-1529
PL02-12x170/130-HP	Slider 'heavy duty' 'High Performance'	0150-1559
PL01-12x170/130-HP-L*	Slider 'High Performance L'	0150-3688

* With this slider, the motor specifications above change.

P02-23Sx80F/70x130-HP

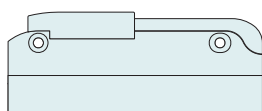
Max. Stroke: 130 mm
Peak Force: 67 N

Dimensions in mm



Technical Data P02-23Sx80F/70x130-HP

Stroke				
Standard Stroke (SS)	mm	(in)	70	(2.75)
Extended Stroke (ES)	mm	(in)	130	(5.12)
Force				
Max. Force @ 48VDC	N	(lbf)	67.1	(15.1)
Max. Force @ 72VDC	N	(lbf)	67.1	(15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	13 / 24 / -	(2.9 / 5.3 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	8.95	(2.01)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	4.9	(189.9)
Max. Velocity @ 72VDC	m/s	(in/s)	7.3	(289.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm	(in)	200	(7.9)
Slider Mass	g	(lb)	155	(0.34)



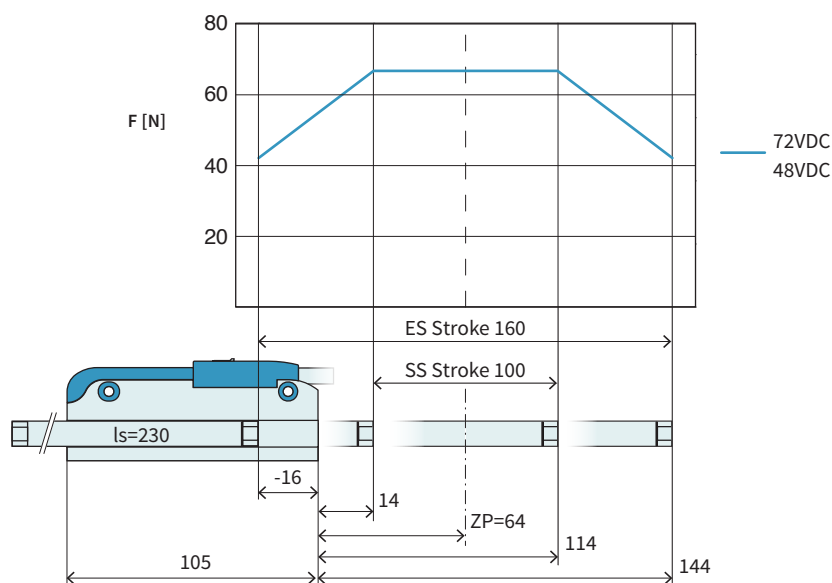
Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x200/160-HP	Slider 'High Performance'	0150-1518
PL02-12x200/160-HP	Slider 'heavy duty' 'High Performance'	0150-1532
PL01-12x200/160-HP-L*	Slider 'High Performance L'	0150-3689

* With this slider, the motor specifications above change.

P02-23Sx80F/100x160-HP

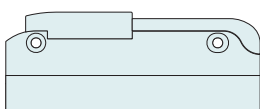
3

Max. Stroke: 160 mm
Peak Force: 67 N



Dimensions in mm

Technical Data P02-23Sx80F/100x160-HP				
Stroke				
Standard Stroke (SS)	mm (in)	100	(3.93)	
Extended Stroke (ES)	mm (in)	160	(6.29)	
Force				
Max. Force @ 48VDC	N (lbf)	67.1	(15.1)	
Max. Force @ 72VDC	N (lbf)	67.1	(15.1)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	13 / 24 / -	(2.9 / 5.3 / -)	
Max. Border Force relative	%	63		
Force Constant	N/A _{pk} (lbf/A _{pk})	8.95	(2.01)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)	4.9	(189.9)	
Max. Velocity @ 72VDC	m/s (in/s)	7.3	(289.9)	
Position Detection				
Repeatability	mm (in)	±0.05	(±0.002)	
Linearity	%	± 0.25		
Electrical Data				
Max. Current @ 48VDC	A _{pk}	7.4		
Max. Current @ 72VDC	A _{pk}	7.4		
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.5 / 2.7 / -		
Thermal Data				
Max. Winding Temperature (Sensor)	°C	120		
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	6.4 / 1.9 / -		
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	830 / 250 / -		
Mechanical Data				
Slider Length	mm (in)	230	(9.1)	
Slider Mass	g (lb)	180	(0.4)	

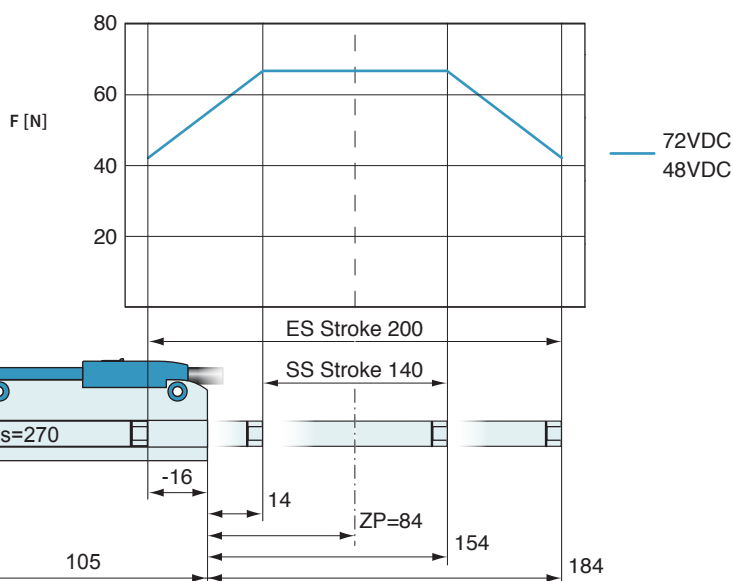


Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x230/190-HP	Slider 'High Performance'	0150-1519
PL02-12x230/190-HP	Slider 'heavy duty' 'High Performance'	0150-1552
PL01-12x230/190-HP-L*	Slider 'High Performance L'	0150-2546

* With this slider, the motor specifications above change.

P0S-23Sx80F/140x200-HP

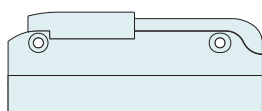
Max. Stroke: 200 mm
Peak Force: 67 N



Dimensions in mm

Technical Data P02-23Sx80F/140x200-HP

Stroke			
Standard Stroke (SS)	mm (in)	140	(5.5)
Extended Stroke (ES)	mm (in)	200	(7.86)
Force			
Max. Force @ 48VDC	N (lbf)	67.1	(15.1)
Max. Force @ 72VDC	N (lbf)	67.1	(15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	13 / 24 / -	(2.9 / 5.3 / -)
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	8.95	(2.01)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	4.9	(189.9)
Max. Velocity @ 72VDC	m/s (in/s)	7.3	(289.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.4	
Max. Current @ 72VDC	A _{pk}	7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.5 / 2.7 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	830 / 250 / -	
Mechanical Data			
Slider Length	mm (in)	270	(11)
Slider Mass	g (lb)	215	(0.47)



Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x270/230-HP	Slider 'High Performance'	0150-1520
PL02-12x270/230-HP	Slider 'heavy duty' 'High Performance'	0150-1533
PL01-12x270/230-HP-L*	Slider 'High Performance L'	0150-2557

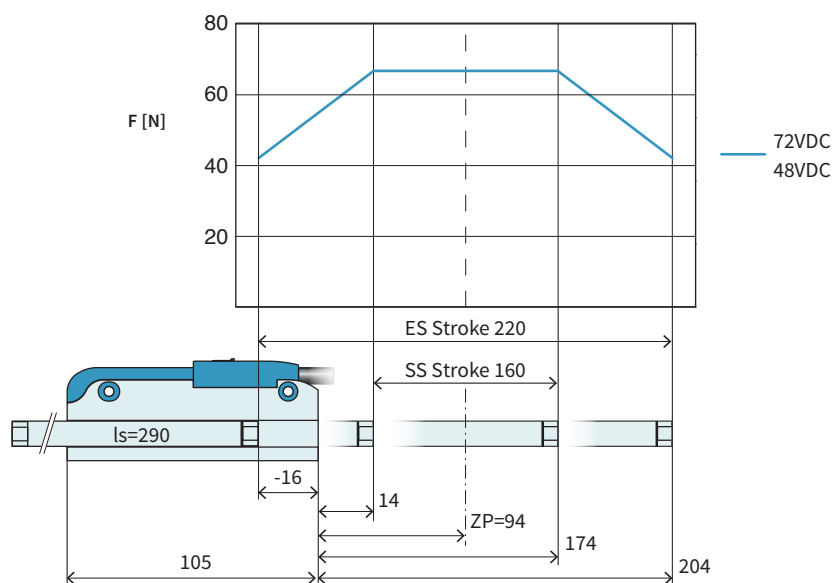
* With this slider, the motor specifications above change.

P02-23Sx80F/160x220-HP

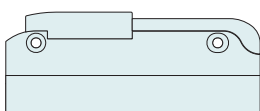
3

Max. Stroke: 220 mm
Peak Force: 67 N

Dimensions in mm



Technical Data P02-23Sx80F/160x220-HP				
Stroke				
Standard Stroke (SS)	mm (in)		160	(6.29)
Extended Stroke (ES)	mm (in)		220	(8.65)
Force				
Max. Force @ 48VDC	N (lbf)		67.1	(15.1)
Max. Force @ 72VDC	N (lbf)		67.1	(15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		13 / 24 / -	(2.9 / 5.3 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk} (lbf/A _{pk})		8.95	(2.01)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		4.9	(189.9)
Max. Velocity @ 72VDC	m/s (in/s)		7.3	(289.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm (in)		290	(11)
Slider Mass	g (lb)		230	(0.51)

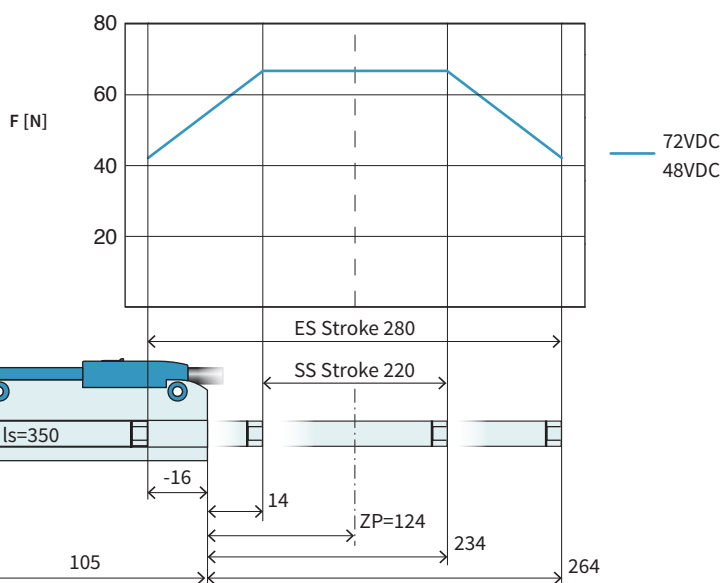


Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x290/250-HP	Slider 'High Performance'	0150-1521
PL02-12x290/250-HP	Slider 'heavy duty' 'High Performance'	0150-1495
PL01-12x290/250-HP-L*	Slider 'High Performance L'	0150-3690

* With this slider, the motor specifications above change.

P02-23Sx80F/220x280-HP

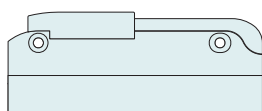
Max. Stroke: 280 mm
Peak Force: 67 N



Dimensions in mm

Technical Data P02-23Sx80F/220x280-HP

Stroke			
Standard Stroke (SS)	mm (in)	220	(8.65)
Extended Stroke (ES)	mm (in)	280	(10.99)
Force			
Max. Force @ 48VDC	N (lbf)	67.1	(15.1)
Max. Force @ 72VDC	N (lbf)	67.1	(15.1)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N (lbf)	13 / 24 / -	(2.9 / 5.3 / -)
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	8.95	(2.01)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	4.9	(189.9)
Max. Velocity @ 72VDC	m/s (in/s)	7.3	(289.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.4	
Max. Current @ 72VDC	A _{pk}	7.4	
Max. Cont. Current [Passive cooling/ Fan / Fluid]	A _{pk}	1.5 / 2.7 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling/ Fan / Fluid]	°K/W	6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling/ Fan / Fluid]	s	830 / 250 / -	
Mechanical Data			
Slider Length	mm (in)	350	(14)
Slider Mass	g (lb)	280	(0.62)



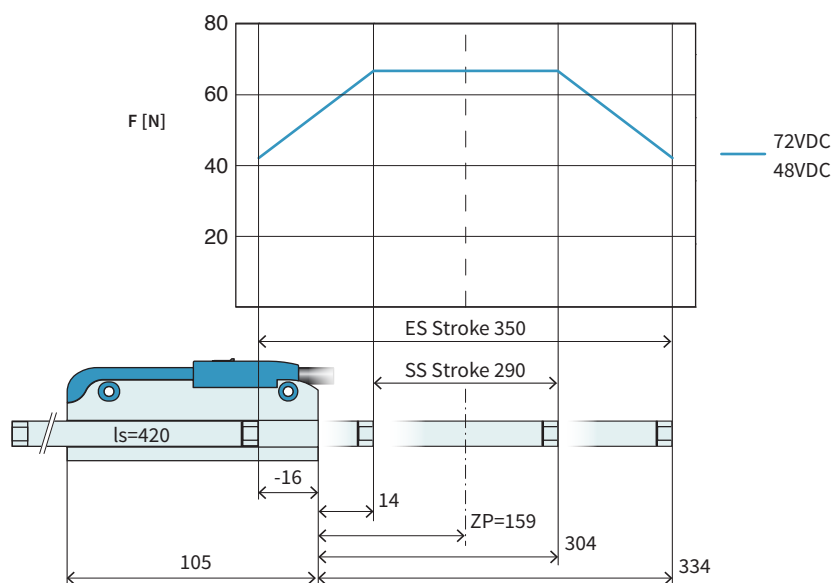
Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x350/310-HP	Slider 'High Performance'	0150-1522
PL02-12x350/310-HP	Slider 'heavy duty' 'High Performance'	0150-1555
PL01-12x350/310-HP-L*	Slider 'High Performance L'	0150-3691

* With this slider, the motor specifications above change.

P02-23Sx80F/290x350-HP

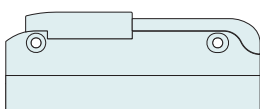
3

Max. Stroke: 350 mm
Peak Force: 67 N



Dimensions in mm

Technical Data P02-23Sx80F/290x350-HP				
Stroke				
Standard Stroke (SS)	mm (in)		290 (11.4)	
Extended Stroke (ES)	mm (in)		350 (13.8)	
Force				
Max. Force @ 48VDC	N (lbf)		67.1 (15.1)	
Max. Force @ 72VDC	N (lbf)		67.1 (15.1)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		13 / 24 / -	(2.9 / 5.3 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk} (lbf/A _{pk})		8.95	(2.01)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		4.9 (189.9)	
Max. Velocity @ 72VDC	m/s (in/s)		7.3 (289.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm (in)		420 (17)	
Slider Mass	g (lb)		340 (0.75)	

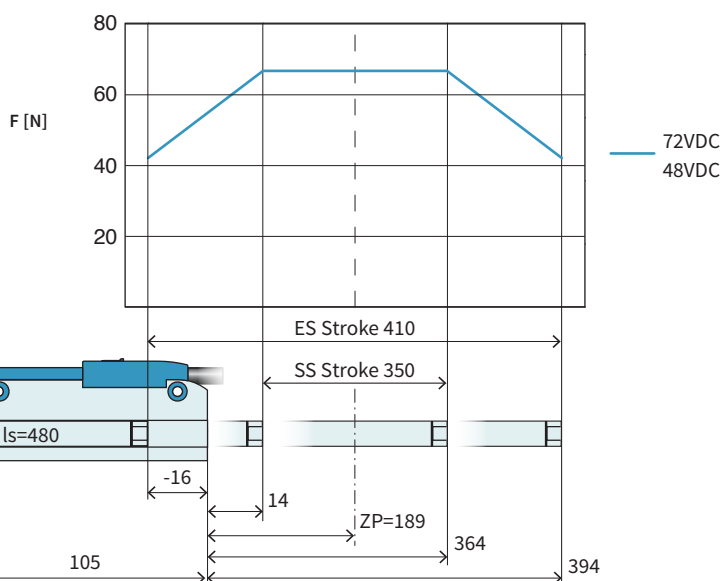


Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x420/380-HP	Slider 'High Performance'	0150-1523
PL02-12x420/380-HP	Slider 'heavy duty' 'High Performance'	0150-1554
PL01-12x420/380-HP-L*	Slider 'High Performance L'	0150-3692

* With this slider, the motor specifications above change.

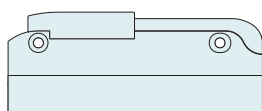
P02-23Sx80F/350x410-HP

Max. Stroke: 410 mm
Peak Force: 67 N



Technical Data P02-23Sx80F/350x410-HP

Stroke				
Standard Stroke (SS)	mm	(in)	350	(13.8)
Extended Stroke (ES)	mm	(in)	410	(16.1)
Force				
Max. Force @ 48VDC	N	(lbf)	67.1	(15.1)
Max. Force @ 72VDC	N	(lbf)	67.1	(15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	13 / 24 / -	(2.9 / 5.3 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	8.95	(2.01)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	4.9	(189.9)
Max. Velocity @ 72VDC	m/s	(in/s)	7.3	(289.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm	(in)	480	(19)
Slider Mass	g	(lb)	390	(0.78)



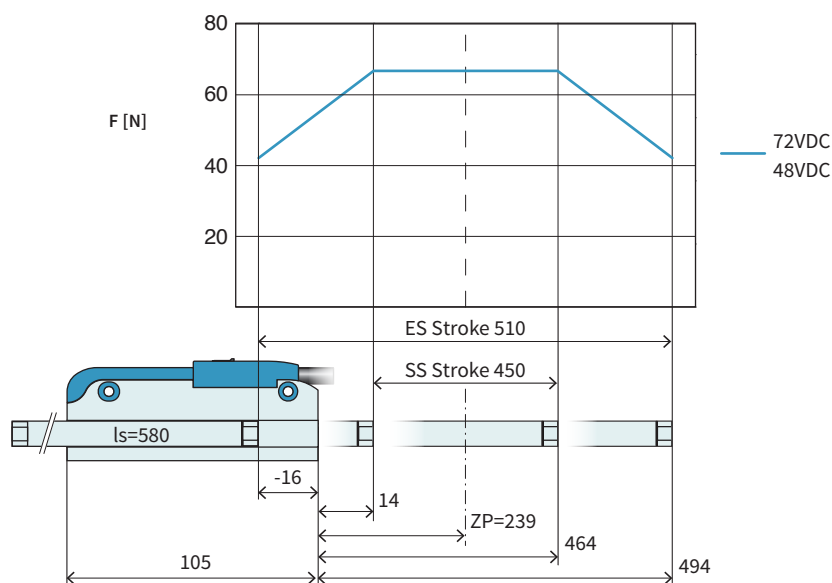
Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x480/440-HP	Slider 'High Performance'	0150-1524
PL02-12x480/440-HP	Slider 'heavy duty' 'High Performance'	0150-2519
PL01-12x480/440-HP-L*	Slider 'High Performance L'	0150-3693

* With this slider, the motor specifications above change.

P02-23Sx80F/450x510-HP

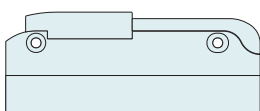
Max. Stroke: 510 mm
Peak Force: 67 N

Dimensions in mm



Technical Data P02-23Sx80F/450x510-HP

Stroke			
Standard Stroke (SS)	mm (in)	450	(17.69)
Extended Stroke (ES)	mm (in)	510	(20.1)
Force			
Max. Force @ 48VDC	N (lbf)	67.1	(15.1)
Max. Force @ 72VDC	N (lbf)	67.1	(15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	13 / 24 / -	(2.9 / 5.3 / -)
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	8.95	(2.01)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	4.9	(189.9)
Max. Velocity @ 72VDC	m/s (in/s)	7.3	(289.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.4	
Max. Current @ 72VDC	A _{pk}	7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.5 / 2.7 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	830 / 250 / -	
Mechanical Data			
Slider Length	mm (in)	580	(23)
Slider Mass	g (lb)	480	(1.06)



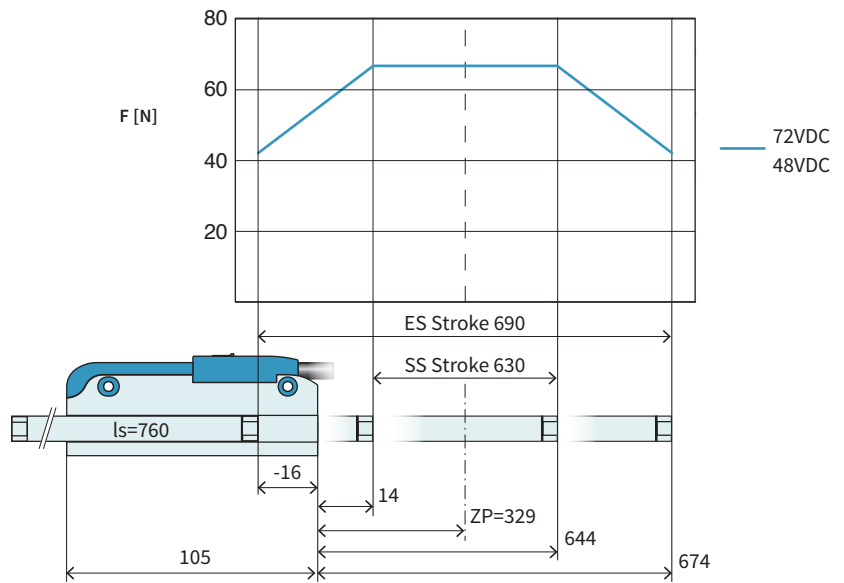
Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x580/540-HP	Slider 'High Performance'	0150-1525
PL02-12x580/540-HP	Slider 'heavy duty' 'High Performance'	0150-2520
PL01-12x580/540-HP-L*	Slider 'High Performance L'	0150-3694

* With this slider, the motor specifications above change.

P02-23Sx80F/630x690-HP

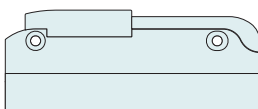
Max. Stroke: 690 mm
Peak Force: 67 N

Dimensions in mm



Technical Data P02-23Sx80F/630x690-HP

Stroke			
Standard Stroke (SS)	mm (in)	630 (24.8)	
Extended Stroke (ES)	mm (in)	690 (27.19)	
Force			
Max. Force @ 48VDC	N (lbf)	67.1 (15.1)	
Max. Force @ 72VDC	N (lbf)	67.1 (15.1)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	13 / 24 / - (2.9 / 5.3 / -)	
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	8.95 (2.01)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	4.9 (189.9)	
Max. Velocity @ 72VDC	m/s (in/s)	7.3 (289.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.4	
Max. Current @ 72VDC	A _{pk}	7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.5 / 2.7 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	830 / 250 / -	
Mechanical Data			
Slider Length	mm (in)	760 (30)	
Slider Mass	g (lb)	630 (1.39)	



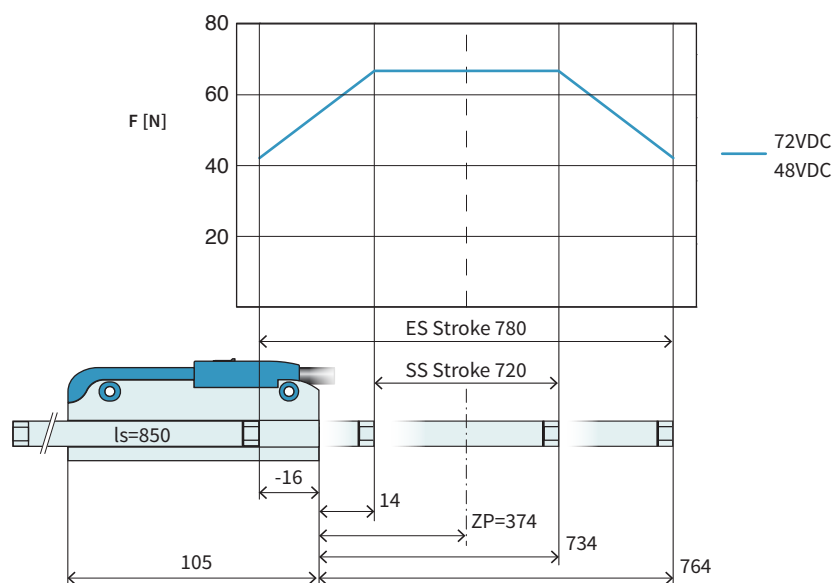
Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x760/720-HP	Slider 'High Performance'	0150-1526
PL02-12x760/720-HP	Slider 'heavy duty' 'High Performance'	0150-2521
PL01-12x760/720-HP-L*	Slider 'High Performance L'	0150-3695

* With this slider, the motor specifications above change.

P02-23Sx80F/720x780-HP

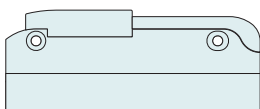
3

Max. Stroke: 780 mm
Peak Force: 67 N



Dimensions in mm

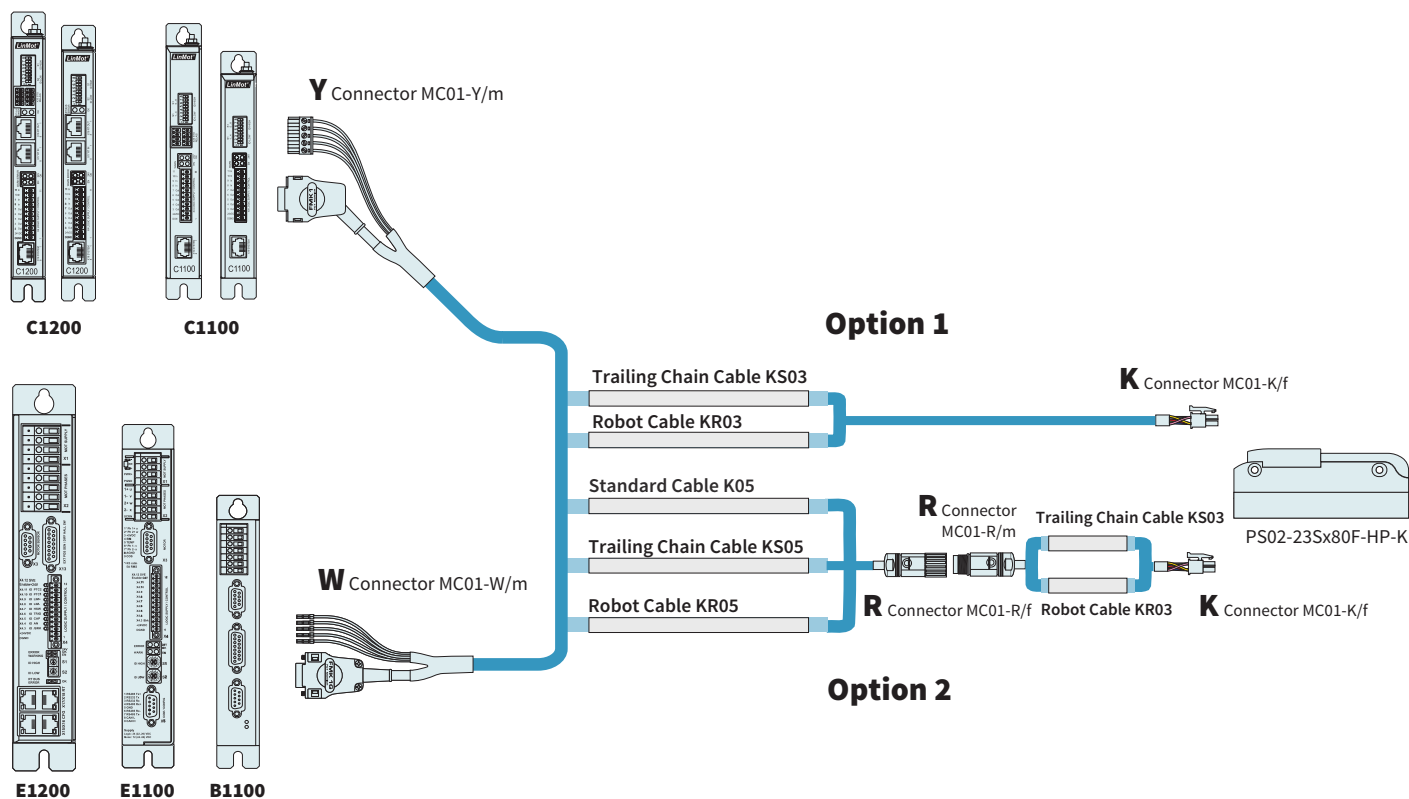
Technical Data P02-23Sx80F/720x780-HP				
Stroke				
Standard Stroke (SS)	mm (in)		720 (28.3)	
Extended Stroke (ES)	mm (in)		780 (30.69)	
Force				
Max. Force @ 48VDC	N (lbf)		67.1 (15.1)	
Max. Force @ 72VDC	N (lbf)		67.1 (15.1)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		13 / 24 / -	(2.9 / 5.3 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk} (lbf/A _{pk})		8.95	(2.01)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		4.9 (189.9)	
Max. Velocity @ 72VDC	m/s (in/s)		7.3 (289.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm (in)		850 (33)	
Slider Mass	g (lb)		700 (1.54)	



Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x850/810-HP	Slider 'High Performance'	0150-1527
PL02-12x850/810-HP	Slider 'heavy duty' 'High Performance'	0150-2516
PL01-12x850/810-HP-L*	Slider 'High Performance L'	on request

* With this slider, the motor specifications above change.

Motor Cable



ORDERING INFORMATION

OPTION 1 – TRAILING CHAIN CABLE / ROBOT CABLE

Item	Description	Item-No.
KS03-W-Fe/K-2	Trailing Chain Cable W-Fe/K 2 m	0150-2187
KS03-W-Fe/K-4	Trailing Chain Cable W-Fe/K 4 m	0150-2369
KS03-W-Fe/K-6	Trailing Chain Cable W-Fe/K 6 m	0150-2370
KS03-W-Fe/K-	Trailing Chain Cable W-Fe/K, Custom Length (max. 6m)	0150-3357
KS03-Y-Fe/K-2	Trailing Chain Cable Y-Fe/K, 2 m	0150-2446
KS03-Y-Fe/K-4	Trailing Chain Cable Y-Fe/K, 4 m	0150-2447
KS03-Y-Fe/K-6	Trailing Chain Cable Y-Fe/K, 6 m	0150-2448
KS03-Y-Fe/K-	Trailing Chain Cable Y-Fe/K, Custom Length (max. 6m)	0150-3516
KR03-Y-Fe/K-	Robot Cable KR03-Y-Fe/K, Custom Length (max. 6m)	0150-3718
KR03-W-Fe/K-	Robot Cable KR03-W-Fe/K, Custom Length (max. 6m)	0150-3755

OPTION 2 – STANDARD CABLE

Item	Description	Item-No.
K05-W/R-2	Motor Cable W/R, 2 m	0150-2119
K05-W/R-4	Motor Cable W/R, 4 m	0150-2120
K05-W/R-6	Motor Cable W/R, 6 m	0150-2121
K05-W/R-8	Motor Cable W/R, 8 m	0150-2122
K05-W/R-	Motor Cable W/R, Custom length	0150-3262
K05-Y/R-2	Motor Cable Y/R, 2 m	0150-2421
K05-Y/R-4	Motor Cable Y/R, 4 m	0150-2422
K05-Y/R-6	Motor Cable Y/R, 6 m	0150-2423
K05-Y/R-8	Motor Cable Y/R, 8 m	0150-2424
K05-Y-Fe/R-	Motor Cable Y/R, Custom length	0150-3501

OPTION 2 – TRAILING CHAIN CABLE

Item	Description	Item-No.
KS05-W/R-4	Trailing Chain Cable W/R, 4 m	0150-2106
KS05-W/R-6	Trailing Chain Cable W/R, 6 m	0150-2131
KS05-W/R-8	Trailing Chain Cable W/R, 8 m	0150-2107
KS05-W/R-	Trailing Chain Cable W/R, Custom length	0150-3256
KS05-Y/R-4	Trailing Chain Cable Y/R, 4 m	0150-2433
KS05-Y/R-6	Trailing Chain Cable Y/R, 6 m	0150-2434
KS05-Y/R-8	Trailing Chain Cable Y/R, 8 m	0150-2435
KS05-Y/R-	Trailing Chain Cable Y/R, Custom length	0150-3507

OPTION 2 – ROBOT CABLE

Item	Description	Item-No.
KR05-W/R-	Robot Cable KR05-W/R, Custom length	0150-3336
KR05-Y-Fe/R-	Robot Cable KR05-Y-Fe/R, Custom length	0150-3512

OPTION 2 – TRAILING CHAIN CABLE / ROBOT CABLE

Item	Description	Item-No.
KS03-R/K-1	Trailing Chain Cable R/K 1 m	0150-2185
KS03-R/K-2	Trailing Chain Cable R/K 2 m	0150-2186
KS03-R/K-	Trailing Chain Cable R/K, Custom length (max. 6m)	0150-3530
KR03-R/K-	Robot Cable R/K, Custom length (max. 6m)	0150-3754

CONNECTOR & CABLE (INDIVIDUAL)

Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-R/f	Motor Connector R/f	0150-3129
MC01-K/f	Motor Connector K (f)	0150-3345
K05-04/05	Motor Cable per m	0150-1920
KS05-04/05	Trailing Chain Cable per m	0150-1938
KR05-04/05	Robot Cable per m	0150-1846
KS03-09	Trailing Chain Cable per m (max. 6m connection length)	0150-2182
KR03-09	Robot Cable per m	0150-2801

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-12	Fixed End Washer Set for 12 mm sliders	0150-3085
PLF01-12-Ni	Fixed Bearing Set for 12 mm sliders, nickel-plated	0150-3573
PLL02-12	Floating Bearing Set for PL01-12 sliders	0150-3111

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for 1mm incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D-Encoder	Encoder Cable (Length in m)	0150-3166
KSS01-12-D15-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for 1 mm absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P01-23x160



- ✓ Highly dynamic drives
- ✓ Wide stroke range
- ✓ Available with cable outlet or with rotatable connector
- ✓ Optional with air cooling
- ✓ Wide range of applications in handling modules as well as in plant and machine construction

LINEAR MOTORS P01-23x160

Technical Data 115

Motor Specifications

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P01-23x160/20x120-LC 119

P01-23x160/20x160-LC 120

P01-23x160/80x220-LC 121

P01-23x160/140x280-LC 122

P01-23x160/210x350-LC 123

P01-23x160/270x410-LC 124

P01-23x160/370x510-LC 125

P01-23x160/550x690-LC 126

P01-23x160/640x780-LC 127

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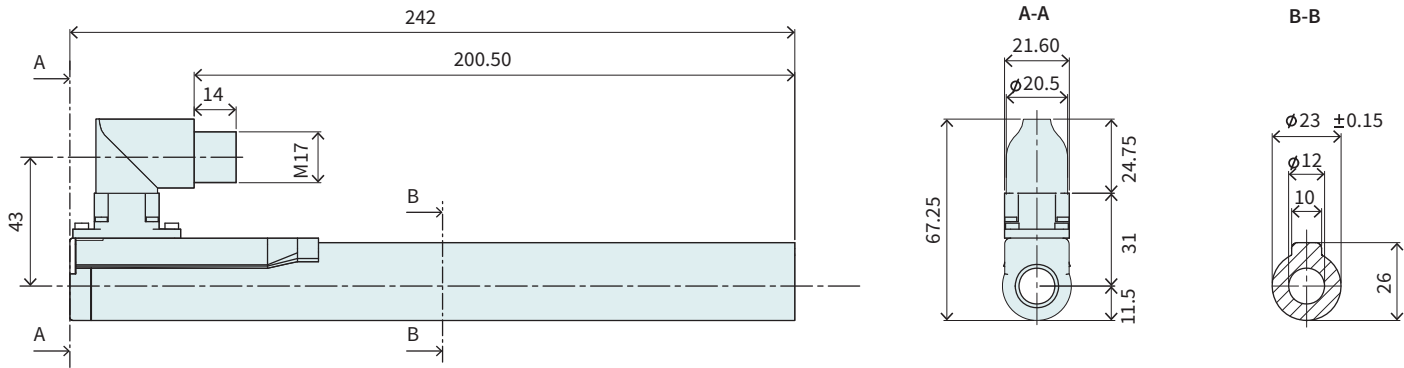
Accessories 129



MOTOR FAMILY P01-23x160

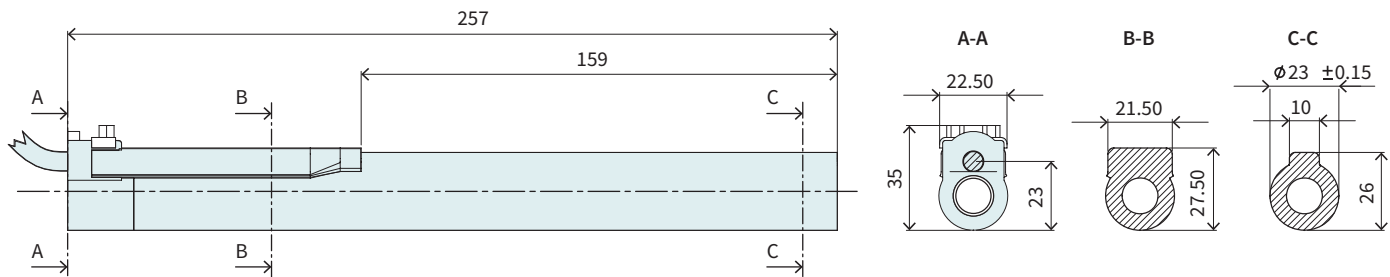
Technical Data				
Stroke				
Standard Stroke (SS)	mm (in)		≤ 640	(≤ 25.19)
Extended Stroke (ES)	mm (in)		≤ 780	(≤ 30.69)
Force				
Max. Force @ 48VDC	N (lbf)		41.6	(9.35)
Max. Force @ 72VDC	N (lbf)		62.4	(14)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		16 / 30 / -	(3.6 / 6.8 / -)
Max. Border Force relative	%		≤ 75	
Force Constant	N/A _{pk} (lbf/A _{pk})		22	(4.95)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.7	(109.9)
Max. Velocity @ 72VDC	m/s (in/s)		3.9	(159.9)
Position Detection				
Position Resolution	mm (in)		0.002	(0.0001)
Repeatability	mm (in)		±0.05	(±0.002)
Position Resolution with ES	mm (in)		0.001	(0.00004)
Repeatability with ES	mm (in)		±0.01	(±0.0004)
Linearity with ES	mm (in)		±0.01	(±0.0004)
Electrical Data				
Max. Current @ 48VDC	A _{pk}		1.8	
Max. Current @ 72VDC	A _{pk}		2.8	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.73 / 1.4 / -	
Terminal Resistance 25 °C / 120 °C	Ohm		21 / 28	
Terminal Inductivity	mH		2.7	
Magnetic Period	mm (in)		20	(0.78)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.6 / 1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		720 / 200 / -	
Mechanical Data				
Stator Diameter	mm (in)		23	(0.91)
Stator Length [Connector type / Cable type]	mm (in)		242 / 257	(9.5 / 10)
Stator Mass	g (lb)		450	(0.99)
Slider Diameter	mm (in)		12	(0.47)
Slider Length	mm (in)		170 - 850	(6.7 - 33)
Slider Mass	g (lb)		130 - 700	(0.28 - 1.5)
IP Code			IP 65	

STATOR CONNECTOR TYPE



Item	Description	Item-No.
PS01-23x160-R	Stator with IP67 Connector M17/9(m)	0150-1234

STATOR CABLE TYPE

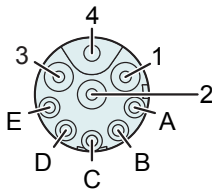


Item	Description	Item-No.
PS01-23x160-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1242
PS01-23x160	Stator, cable 1m, Connector D-Sub-9(m)	0150-1202

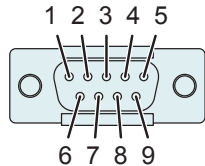
CONNECTOR

Motor Connector Wiring	PS01-23x160-R PS01-23x160-R20	PS01-23x160	Wire color motor cable
	R-Connector	D-Connector	
Ph 1+	1	1	red
Ph 1-	2	6	pink
Ph 2+	3	2	blue
Ph 2-	4	7	grey
+5VDC	A	3	white
GND	B	8	inner shield
Sin	C	4	yellow
Cos	D	9	green
Temp.	E	5	black
Shield	Housing	Housing	outer Shield

R-Connector



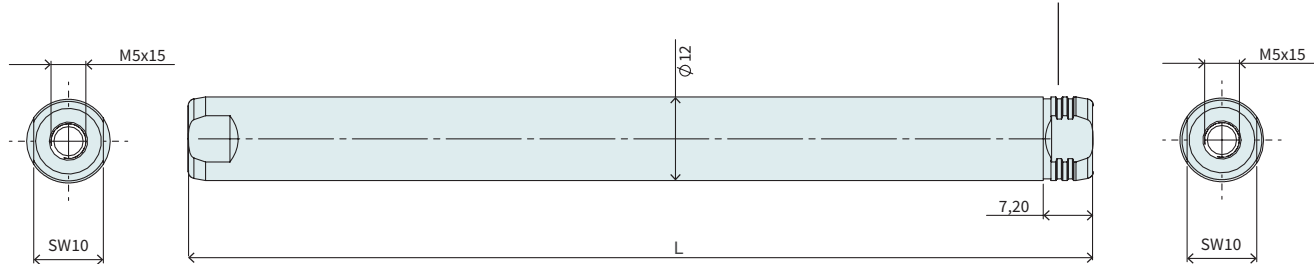
D-Connector



View: Motor Connector, plug side

SLIDER

Number of grooves determines the slider type (see chapter 2 / slider) and marks the front end.

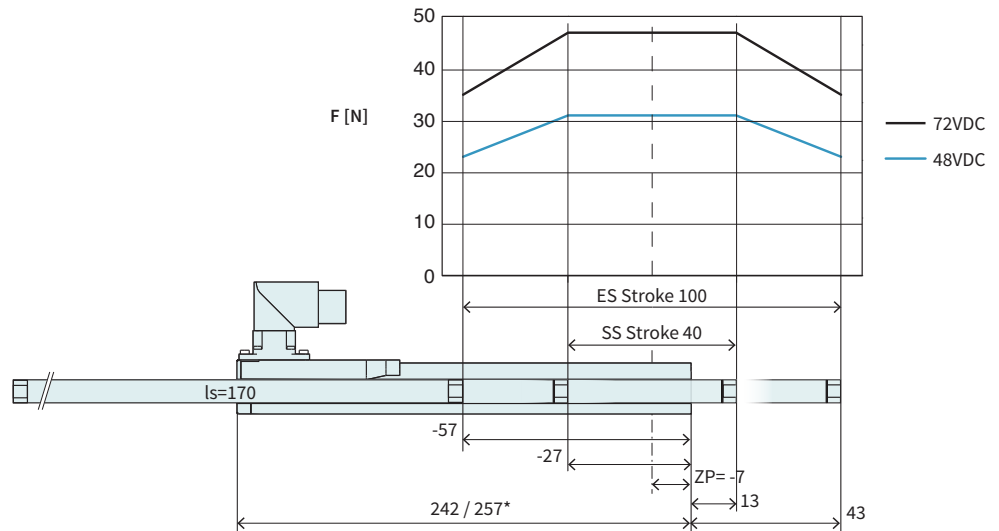


Slider Standard				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-12x170/130-LC	Slider 'standard LC'	100	40	0150-2581
PL01-12x190/150-LC	Slider 'standard LC'	120	60	0150-2582
PL01-12x230/190-LC	Slider 'standard LC'	160	100	0150-2598
PL01-12x290/250-LC	Slider 'standard LC'	220	160	0150-2583
PL01-12x350/310-LC	Slider 'standard LC'	280	220	0150-2584
PL01-12x420/380-LC	Slider 'standard LC'	350	290	0150-2585
PL01-12x480/440-LC	Slider 'standard LC'	410	350	0150-2586
PL01-12x580/540-LC	Slider 'standard LC'	510	450	0150-2587
PL01-12x760/720-LC	Slider 'standard LC'	690	630	0150-2589
PL01-12x850/810-LC	Slider 'standard LC'	780	720	0150-2588

Slider Heavy Duty				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL02-12x170/130-LC	Slider 'heavy duty LC'	100	40	0150-2591
PL02-12x190/150-LC	Slider 'heavy duty LC'	120	60	0150-2592
PL02-12x230/190-LC	Slider 'heavy duty LC'	160	100	0150-2599
PL02-12x290/250-LC	Slider 'heavy duty LC'	220	160	0150-2593
PL02-12x350/310-LC	Slider 'heavy duty LC'	280	220	0150-2594
PL02-12x420/380-LC	Slider 'heavy duty LC'	350	290	0150-2595
PL02-12x480/440-LC	Slider 'heavy duty LC'	410	350	0150-2597
PL02-12x580/540-LC	Slider 'heavy duty LC'	510	450	0150-2596
PL02-12x760/720-LC	Slider 'heavy duty LC'	690	630	on request
PL02-12x850/810-LC	Slider 'heavy duty LC'	780	720	on request

P01-23x160/40x100-LC

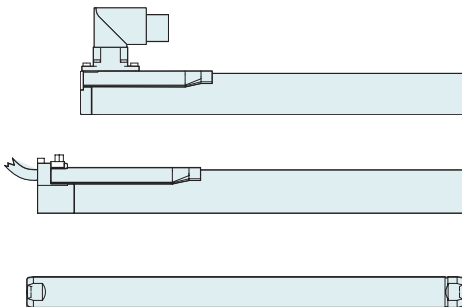
Max. Stroke: 100 mm
Peak Force: 47 N



Dimensions in mm
 *Cable Type

Technical Data P01-23x160/40x100-LC

Stroke			
Standard Stroke (SS)	mm (in)	40 (1.57)	
Extended Stroke (ES)	mm (in)	100 (3.93)	
Force			
Max. Force @ 48VDC	N (lbf)	31.2 (7.01)	
Max. Force @ 72VDC	N (lbf)	46.8 (10.5)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	12 / 23 / - (2.7 / 5.1 / -)	
Max. Border Force relative	%	75	
Force Constant	N/A _{pk} (lbf/A _{pk})	16.5 (3.71)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.7 (109.9)	
Max. Velocity @ 72VDC	m/s (in/s)	3.9 (159.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.35	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	1.8	
Max. Current @ 72VDC	A _{pk}	2.8	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	0.73 / 1.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	3.6 / 1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	720 / 200 / -	
Mechanical Data			
Slider Length	mm (in)	170 (6.7)	
Slider Mass	g (lb)	130 (0.29)	

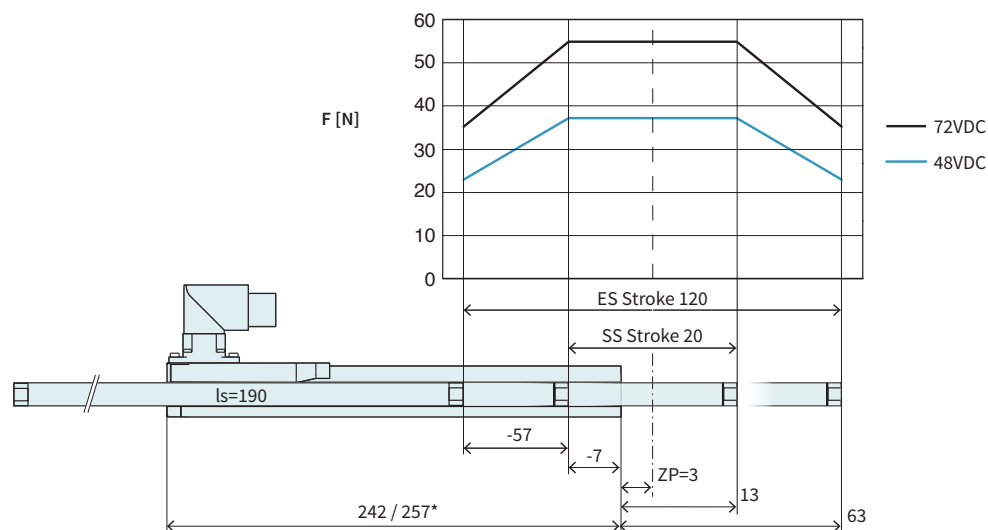


Item	Description	Item-No.
PS01-23x160-R	Stator with IP67 Connector M17/9(m)	0150-1234
PS01-23x160-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1242
PS01-23x160	Stator, cable 1m, Connector D-Sub-9(m)	0150-1202
PL01-12x170/130-LC	Slider 'standard LC'	0150-2581
PL02-12x170/130-LC	Slider 'heavy duty LC'	0150-2591

P01-23x160/20x120-LC

3

Max. Stroke: 120 mm
Peak Force: 55 N



Dimensions in mm
 *Cable Type

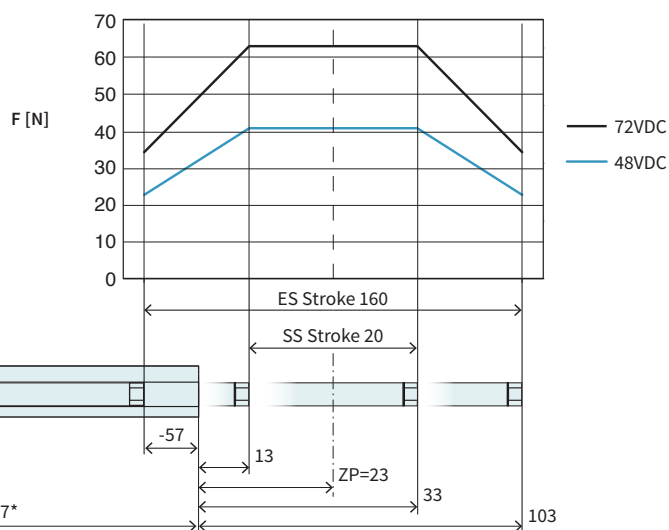
Technical Data P01-23x160/20x120-LC				
Stroke				
Standard Stroke (SS)	mm (in)		20 (0.78)	
Extended Stroke (ES)	mm (in)		120 (4.71)	
Force				
Max. Force @ 48VDC	N (lbf)		36.4 (8.18)	
Max. Force @ 72VDC	N (lbf)		54.6 (12.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		14 / 27 / - (3.2 / 6 / -)	
Max. Border Force relative	%		64	
Force Constant	N/A _{pk} (lbf/A _{pk})		19.3 (4.33)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.2 (89.9)	
Max. Velocity @ 72VDC	m/s (in/s)		3.3 (139.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		1.8	
Max. Current @ 72VDC	A _{pk}		2.8	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.73 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.6 / 1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		720 / 200 / -	
Mechanical Data				
Slider Length	mm (in)		190 (7.5)	
Slider Mass	g (lb)		145 (0.32)	



Item	Description	Item-No.
PS01-23x160-R	Stator with IP67 Connector M17/9(m)	0150-1234
PS01-23x160-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1242
PS01-23x160	Stator, cable 1m, Connector D-Sub-9(m)	0150-1202
PL01-12x190/150-LC	Slider 'standard LC'	0150-2582
PL02-12x190/150-LC	Slider 'heavy duty LC'	0150-2592

P01-23x160/20x160-LC

Max. Stroke: 160 mm
Peak Force: 62 N



Dimensions in mm
 *Cable Type

Technical Data P01-23x160/20x160-LC

Stroke			
Standard Stroke (SS)	mm (in)	20 (0.78)	
Extended Stroke (ES)	mm (in)	160 (6.29)	
Force			
Max. Force @ 48VDC	N (lbf)	41.6 (9.35)	
Max. Force @ 72VDC	N (lbf)	62.4 (14)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	16 / 30 / - (3.6 / 6.8 / -)	
Max. Border Force relative	%	56	
Force Constant	N/A _{pk} (lbf/A _{pk})	22 (4.95)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.9 (78.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2.9 (119.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.25	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	1.8	
Max. Current @ 72VDC	A _{pk}	2.8	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	0.73 / 1.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	3.6 / 1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	720 / 200 / -	
Mechanical Data			
Slider Length	mm (in)	230 (9.1)	
Slider Mass	g (lb)	180 (0.4)	

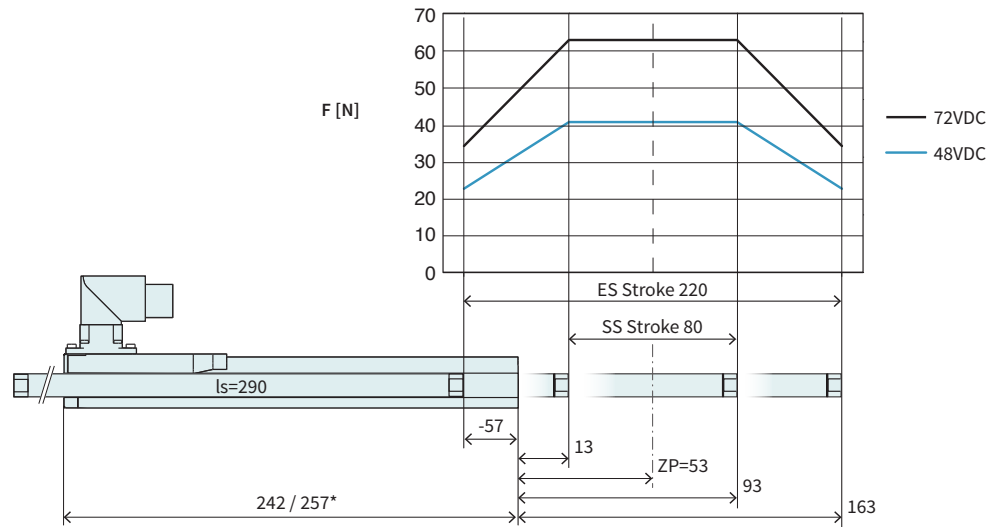


Item	Description	Item-No.
PS01-23x160-R	Stator with IP67 Connector M17/9(m)	0150-1234
PS01-23x160-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1242
PS01-23x160	Stator, cable 1m, Connector D-Sub-9(m)	0150-1202
PL01-12x230/190-LC	Slider 'standard LC'	0150-2598
PL02-12x230/190-LC	Slider 'heavy duty LC'	0150-2599

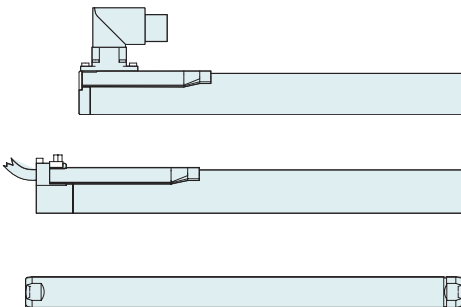
P01-23x160/80x220-LC

3

Max. Stroke: 220 mm
Peak Force: 62 N



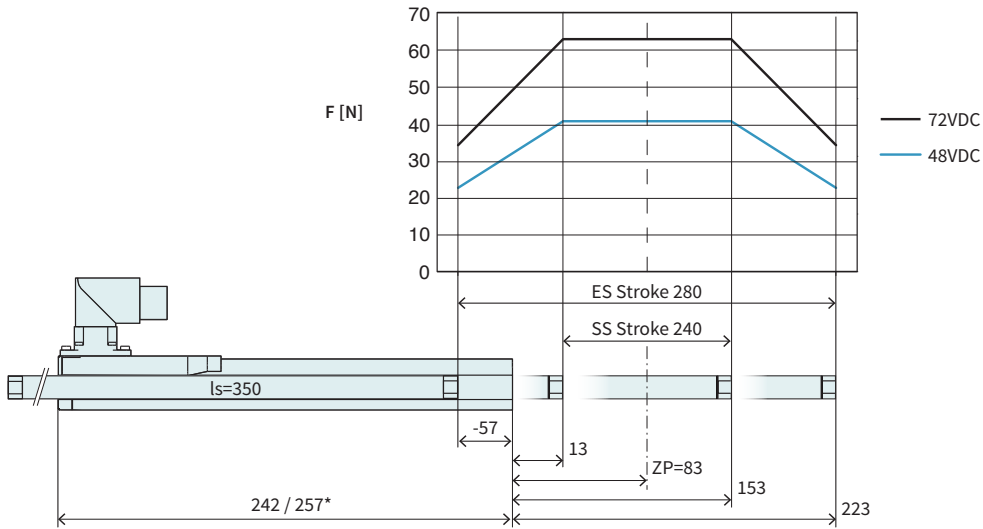
Technical Data P01-23x160/80x220-LC				
Stroke				
Standard Stroke (SS)	mm (in)	80	(3.14)	
Extended Stroke (ES)	mm (in)	220	(8.65)	
Force				
Max. Force @ 48VDC	N (lbf)	41.6	(9.35)	
Max. Force @ 72VDC	N (lbf)	62.4	(14)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	16 / 30 / -	(3.6 / 6.8 / -)	
Max. Border Force relative	%	56		
Force Constant	N/A _{pk} (lbf/A _{pk})	22	(4.95)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)	1.9	(78.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2.9	(119.9)	
Position Detection				
Repeatability	mm (in)	±0.05	(±0.002)	
Linearity	%	± 0.2		
Electrical Data				
Max. Current @ 48VDC	A _{pk}	1.8		
Max. Current @ 72VDC	A _{pk}	2.8		
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	0.73 / 1.4 / -		
Thermal Data				
Max. Winding Temperature (Sensor)	°C	90		
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	3.6 / 1 / -		
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	720 / 200 / -		
Mechanical Data				
Slider Length	mm (in)	290	(11)	
Slider Mass	g (lb)	230	(0.51)	



Item	Description	Item-No.
PS01-23x160-R	Stator with IP67 Connector M17/9(m)	0150-1234
PS01-23x160-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1242
PS01-23x160	Stator, cable 1m, Connector D-Sub-9(m)	0150-1202
PL01-12x290/250-LC	Slider 'standard LC'	0150-2583
PL02-12x290/250-LC	Slider 'heavy duty LC'	0150-2593

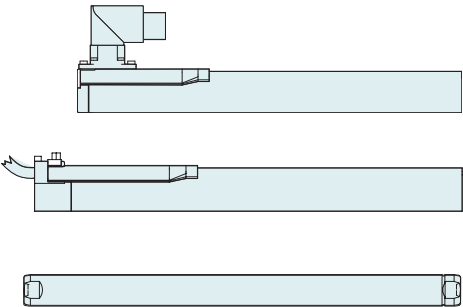
P01-23x160/140x280-LC

Max. Stroke: 280 mm
Peak Force: 62 N



Dimensions in mm
*Cable Type

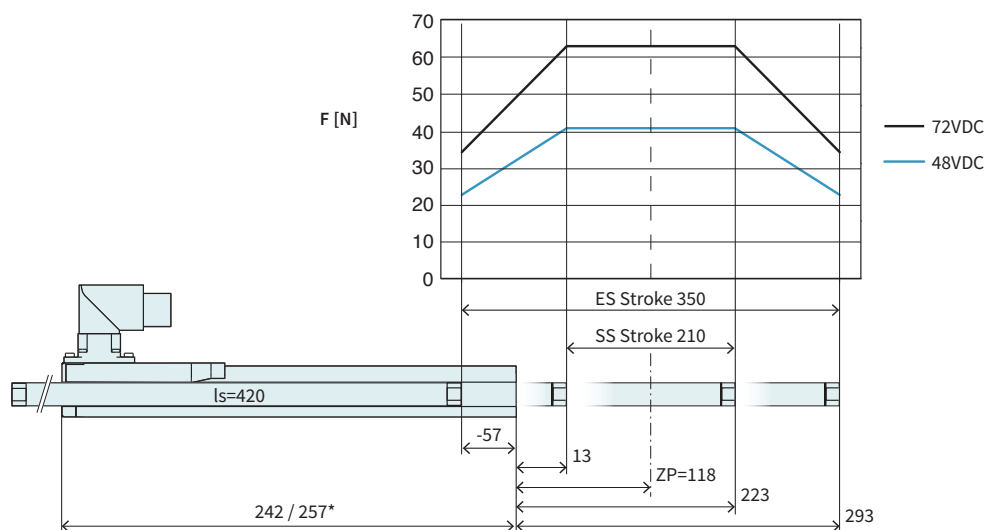
Technical Data P01-23x160/140x280-LC				
Stroke				
Standard Stroke (SS)	mm	(in)	140	(5.5)
Extended Stroke (ES)	mm	(in)	280	(10.99)
Force				
Max. Force @ 48VDC	N	(lbf)	41.6	(9.35)
Max. Force @ 72VDC	N	(lbf)	62.4	(14)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	16 / 30 / -	(3.6 / 6.8 / -)
Max. Border Force relative	%		56	
Force Constant	N/A _{pk}	(lbf/A _{pk})	22	(4.95)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.9	(78.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.9	(119.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		1.8	
Max. Current @ 72VDC	A _{pk}		2.8	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.73 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.6 / 1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		720 / 200 / -	
Mechanical Data				
Slider Length	mm	(in)	350	(14)
Slider Mass	g	(lb)	280	(0.62)



Item	Description	Item-No.
PS01-23x160-R	Stator with IP67 Connector M17/9(m)	0150-1234
PS01-23x160-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1242
PS01-23x160	Stator, cable 1m, Connector D-Sub-9(m)	0150-1202
PL01-12x350/310-LC	Slider 'standard LC'	0150-2584
PL02-12x350/310-LC	Slider 'heavy duty LC'	0150-2594

P01-23x160/210x350-LC

Max. Stroke: 350 mm
Peak Force: 62 N



Technical Data P01-23x160/210x350-LC

Stroke				
Standard Stroke (SS)	mm (in)	210	(8.26)	
Extended Stroke (ES)	mm (in)	350	(13.8)	
Force				
Max. Force @ 48VDC	N (lbf)	41.6	(9.35)	
Max. Force @ 72VDC	N (lbf)	62.4	(14)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	16 / 30 / -	(3.6 / 6.8 / -)	
Max. Border Force relative	%	56		
Force Constant	N/A _{pk} (lbf/A _{pk})	22	(4.95)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)	1.9	(78.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2.9	(119.9)	
Position Detection				
Repeatability	mm (in)	±0.05	(±0.002)	
Linearity	%	± 0.15		
Electrical Data				
Max. Current @ 48VDC	A _{pk}	1.8		
Max. Current @ 72VDC	A _{pk}	2.8		
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	0.73 / 1.4 / -		
Thermal Data				
Max. Winding Temperature (Sensor)	°C	90		
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	3.6 / 1 / -		
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	720 / 200 / -		
Mechanical Data				
Slider Length	mm (in)	420	(17)	
Slider Mass	g (lb)	340	(0.75)	



Item	Description	Item-No.
PS01-23x160-R	Stator with IP67 Connector M17/9(m)	0150-1234



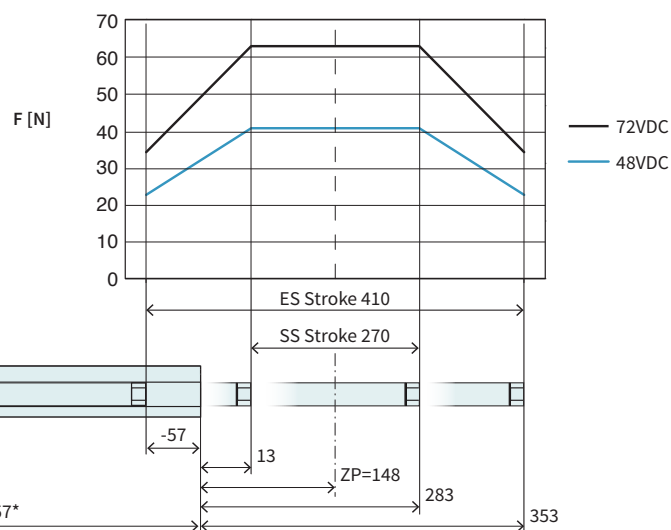
PS01-23x160-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1242
PS01-23x160	Stator, cable 1m, Connector D-Sub-9(m)	0150-1202



PL01-12x420/380-LC	Slider 'standard LC'	0150-2585
PL02-12x420/380-LC	Slider 'heavy duty LC'	0150-2595

P01-23x160/270x410-LC

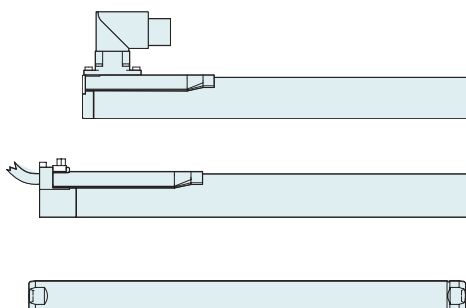
Max. Stroke: 410 mm
Peak Force: 62 N



Dimensions in mm
*Cable Type

Technical Data P01-23x160/270x410-LC

Stroke			
Standard Stroke (SS)	mm (in)	270	(10.59)
Extended Stroke (ES)	mm (in)	410	(16.1)
Force			
Max. Force @ 48VDC	N (lbf)	41.6	(9.35)
Max. Force @ 72VDC	N (lbf)	62.4	(14)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	16 / 30 / -	(3.6 / 6.8 / -)
Max. Border Force relative	%	56	
Force Constant	N/A _{pk} (lbf/A _{pk})	22	(4.95)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.9	(78.9)
Max. Velocity @ 72VDC	m/s (in/s)	2.9	(119.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	1.8	
Max. Current @ 72VDC	A _{pk}	2.8	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	0.73 / 1.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	3.6 / 1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	720 / 200 / -	
Mechanical Data			
Slider Length	mm (in)	480	(19)
Slider Mass	g (lb)	390	(0.86)

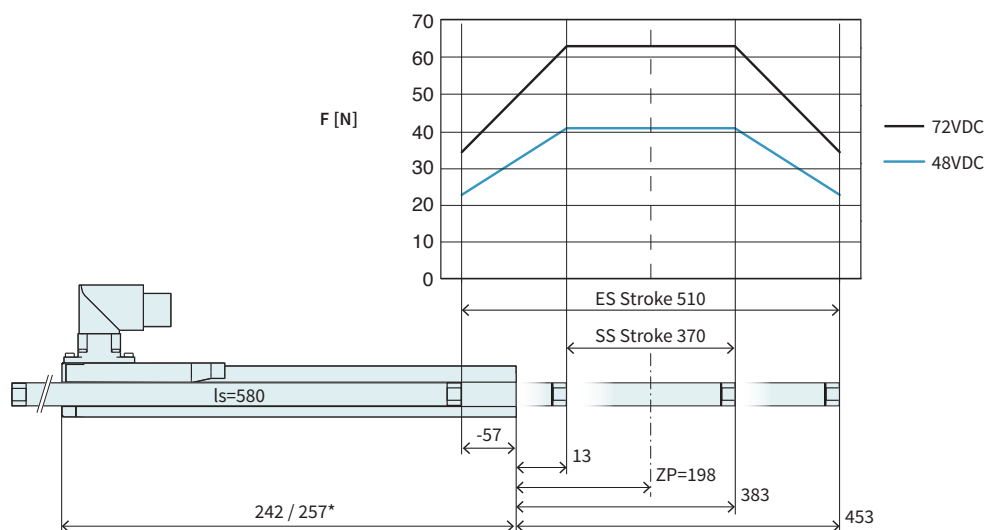


Item	Description	Item-No.
PS01-23x160-R	Stator with IP67 Connector M17/9(m)	0150-1234
PS01-23x160-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1242
PS01-23x160	Stator, cable 1m, Connector D-Sub-9(m)	0150-1202
PL01-12x480/440-LC	Slider 'standard LC'	0150-2586
PL02-12x480/440-LC	Slider 'heavy duty LC'	0150-2597

P01-23x160/370x510-LC

3

Max. Stroke: 510 mm
Peak Force: 62 N



Technical Data P01-23x160/370x510-LC

Stroke				
Standard Stroke (SS)	mm (in)		370 (14.59)	
Extended Stroke (ES)	mm (in)		510 (20.1)	
Force				
Max. Force @ 48VDC	N (lbf)		41.6 (9.35)	
Max. Force @ 72VDC	N (lbf)		62.4 (14)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		16 / 30 / - (3.6 / 6.8 / -)	
Max. Border Force relative	%		56	
Force Constant	N/A _{pk} (lbf/A _{pk})		22 (4.95)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		1.9 (78.9)	
Max. Velocity @ 72VDC	m/s (in/s)		2.9 (119.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		1.8	
Max. Current @ 72VDC	A _{pk}		2.8	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.73 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.6 / 1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		720 / 200 / -	
Mechanical Data				
Slider Length	mm (in)		580 (23)	
Slider Mass	g (lb)		480 (1.06)	



Item	Description	Item-No.
PS01-23x160-R	Stator with IP67 Connector M17/9(m)	0150-1234



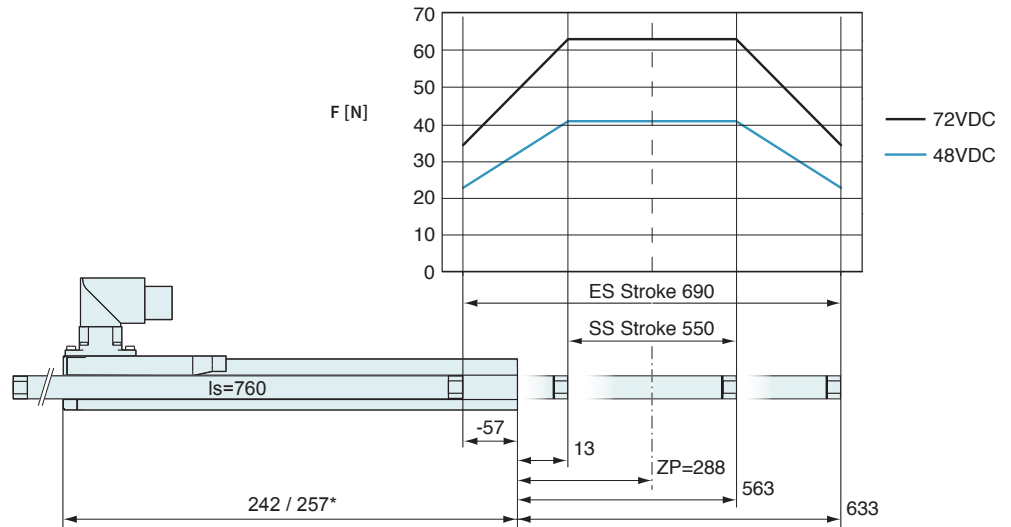
PS01-23x160-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1242
PS01-23x160	Stator, cable 1m, Connector D-Sub-9(m)	0150-1202



PL01-12x580/540-LC	Slider 'standard LC'	0150-2587
PL02-12x580/540-LC	Slider 'heavy duty LC'	0150-2596

P01-23x160/550x690-LC

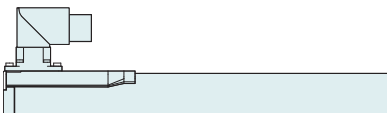
Max. Stroke: 690 mm
Peak Force: 62 N



Dimensions in mm
 *Cable Type

Technical Data P01-23x160/550x690-LC

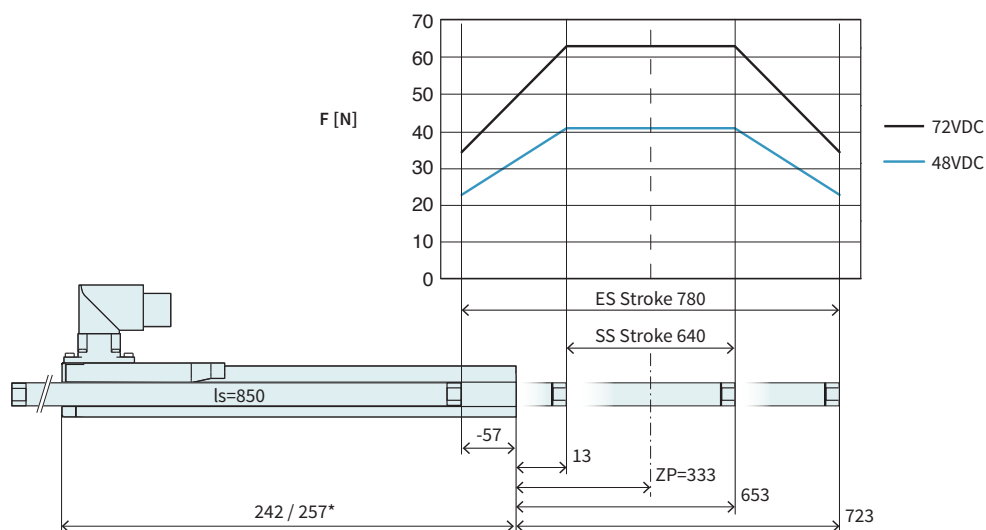
Stroke			
Standard Stroke (SS)	mm (in)	550 (21.69)	
Extended Stroke (ES)	mm (in)	690 (27.19)	
Force			
Max. Force @ 48VDC	N (lbf)	41.6 (9.35)	
Max. Force @ 72VDC	N (lbf)	62.4 (14)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	16 / 30 / - (3.6 / 6.8 / -)	
Max. Border Force relative	%	56	
Force Constant	N/A _{pk} (lbf/A _{pk})	22 (4.95)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.9 (78.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2.9 (119.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	1.8	
Max. Current @ 72VDC	A _{pk}	2.8	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	0.73 / 1.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	3.6 / 1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	720 / 200 / -	
Mechanical Data			
Slider Length	mm (in)	760 (30)	
Slider Mass	g (lb)	630 (1.39)	



Item	Description	Item-No.
PS01-23x160-R	Stator with IP67 Connector M17/9(m)	0150-1234
PS01-23x160-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1242
PS01-23x160	Stator, cable 1m, Connector D-Sub-9(m)	0150-1202
PL01-12x760/720-LC	Slider 'standard LC'	0150-2589
PL01-12x760/720-LC	Slider 'heavy duty LC'	on request

P01-23x160/640x780-LC

Max. Stroke: 780 mm
Peak Force: 62 N



Technical Data P01-23x160/640x780-LC

Stroke				
Standard Stroke (SS)	mm (in)		640	(25.19)
Extended Stroke (ES)	mm (in)		780	(30.69)
Force				
Max. Force @ 48VDC	N (lbf)		41.6	(9.35)
Max. Force @ 72VDC	N (lbf)		62.4	(14)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		16 / 30 / -	(3.6 / 6.8 / -)
Max. Border Force relative	%		56	
Force Constant	N/A _{pk} (lbf/A _{pk})		22	(4.95)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		1.9	(78.9)
Max. Velocity @ 72VDC	m/s (in/s)		2.9	(119.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		1.8	
Max. Current @ 72VDC	A _{pk}		2.8	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.73 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.6 / 1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		720 / 200 / -	
Mechanical Data				
Slider Length	mm (in)		850	(33)
Slider Mass	g (lb)		700	(1.54)



Item	Description	Item-No.
PS01-23x160-R	Stator with IP67 Connector M17/9(m)	0150-1234
PS01-23x160-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1242
PS01-23x160	Stator, cable 1m, Connector D-Sub-9(m)	0150-1202
PL01-12x850/810-LC	Slider 'standard LC'	0150-2588
PL02-12x850/810-LC	Slider 'heavy duty LC'	on request

Linear Guides H01

3



HM01-23x160/80	Linear Module 23x160 with 80 mm Stroke			
→	H-Guide	H01-23x166/80	H-Guide for P01-23x160, Stroke max 80mm	0150-5017
		H01-23x166/80-GF	H-Guide for P01-23x160, Stroke max 80mm	0150-5077
	Stator	PS01-23x160-R	Stator with IP67 connector M17/9(m)	0150-1234
		PS01-23x160-R20	Stator, 0.2m cable, IP67 con. M17/9(m)	0150-1242
		PS01-23x160	Stator, cable 1m, connector D-Sub-9(m)	0150-1202
→	Slider	PL01-12x290/250-LC	Slider 'standard LC'	0150-2583

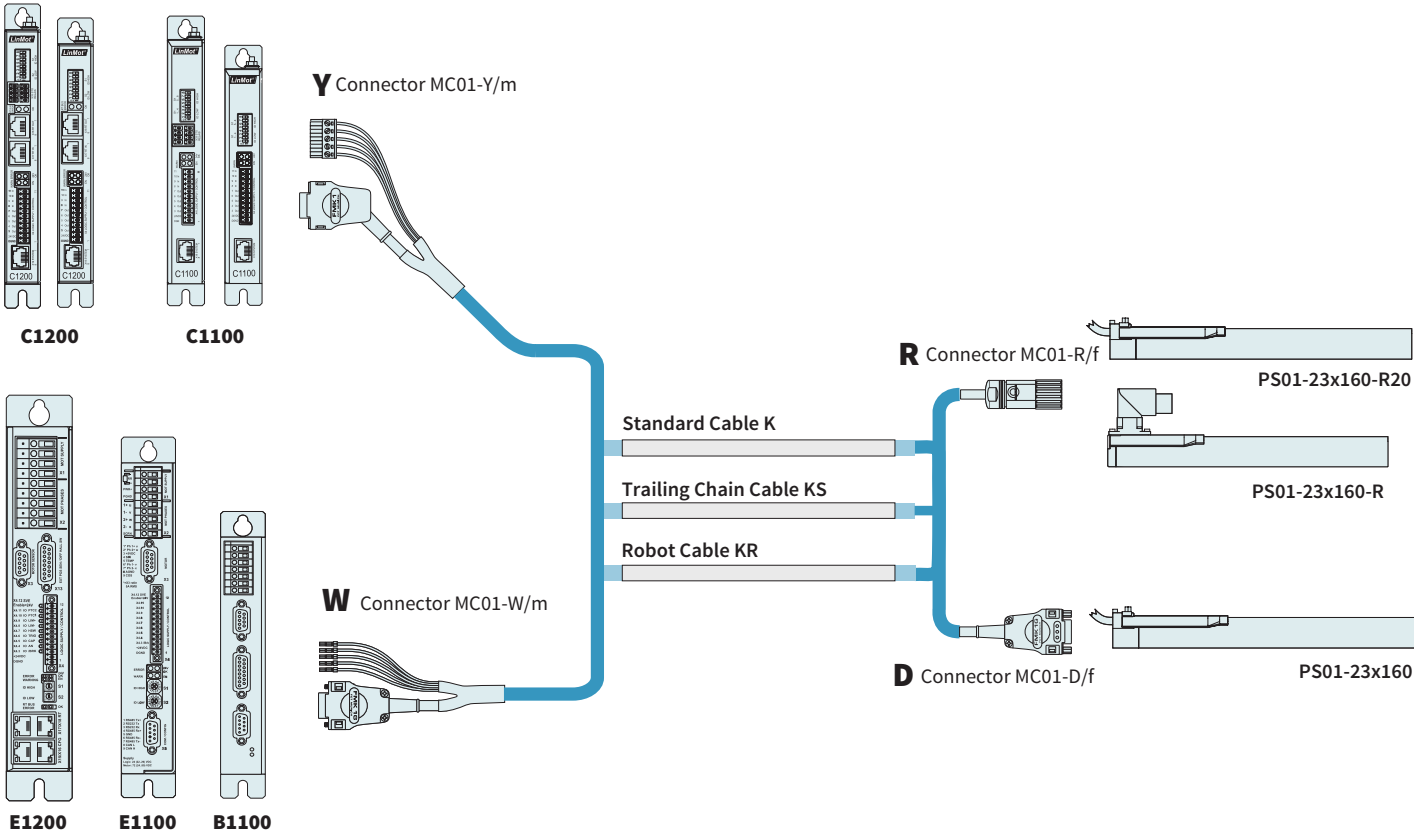
HM01-23x160/180	Linear Module 23x160 with 180 mm Stroke			
→	H-Guide	H01-23x166/180	H-Guide for P01-23x160, Stroke max 180mm	0150-5018
		H01-23x166/180-GF	H-Guide for P01-23x160, Stroke max 180mm	0150-5078
→	Stator	PS01-23x160-R	Linearmotor Stator, Connector R - IP67	0150-1234
		PS01-23x160-R20	Linearmotor Stator, 0.2m Cable, Connector R - IP67	0150-1242
		PS01-23x160	Linearmotor Stator, 1.0m Cable, Connector D	0150-1202
→	Slider	PL01-12x420/380-LC	Slider 'standard LC'	0150-2585

HM01-23x160/280	Linear Module 23x160 with 280 mm Stroke			
→	H-Guide	H01-23x166/280	H-Guide for P01-23x160, Stroke max 280 mm	0150-5019
		H01-23x166/280-GF	H-Guide for P01-23x160, Stroke max 280 mm	0150-5079
→	Stator	PS01-23x160-R	Linearmotor Stator, Connector R - IP67	0150-1234
		PS01-23x160-R20	Linearmotor Stator, 0.2m Cable, Connector R - IP67	0150-1242
		PS01-23x160	Linearmotor Stator, 1.0m Cable, Connector D	0150-1202
→	Slider	PL01-12x480/440-LC	Slider 'standard LC'	0150-2586

Accessories				
→	Fan	HV01-23	Fan cooling for H01-23	0150-5050
	MagSpring	MF01-20/H23	Flange MagSpring 20 / H-Guide 23	0250-2306
		MA01-20/H23	Flange MagSpring 20 / H-Guide 23	0250-0116
	Centering sleeve	HC01-09/04	Centering sleeve D9x4mm	0150-3251

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

Motor Cable



ORDERING INFORMATION

STANDARD CABLE		
Item	Description	Item-No.
K05-W/R-2	Motor Cable W/R, 2 m	0150-2119
K05-W/R-4	Motor Cable W/R, 4 m	0150-2120
K05-W/R-6	Motor Cable W/R, 6 m	0150-2121
K05-W/R-8	Motor Cable W/R, 8 m	0150-2122
K05-W/R-	Motor Cable W/R, Custom length	0150-3262
K05-W/D-0.4	Motor Cable W/D, 0.4 m	0150-1947
K05-Y/R-2	Motor Cable Y/R, 2 m	0150-2421
K05-Y/R-4	Motor Cable Y/R, 4 m	0150-2422
K05-Y/R-6	Motor Cable Y/R, 6 m	0150-2423
K05-Y/R-8	Motor Cable Y/R, 8 m	0150-2424
K05-Y-Fe/R-	Motor Cable Y/R, Custom length	0150-3501
K05-Y-Fe/D-	Motor Cable Y-Fe/D, Custom length	0150-1947

TRAILING CHAIN CABLE

Item	Description	Item-No.
KS05-W/R-4	Trailing Chain Cable W/R, 4 m	0150-2106
KS05-W/R-6	Trailing Chain Cable W/R, 6 m	0150-2131
KS05-W/R-8	Trailing Chain Cable W/R, 8 m	0150-2107
KS05-W/R-	Trailing Chain Cable W/R, Custom length	0150-3256
KS05-Y/R-4	Trailing Chain Cable Y/R, 4 m	0150-2433
KS05-Y/R-6	Trailing Chain Cable Y/R, 6 m	0150-2434
KS05-Y/R-8	Trailing Chain Cable Y/R, 8 m	0150-2435
KS05-Y/R-	Trailing Chain Cable Y/R, Custom length	0150-3507
KS05-Y-Fe/D-	Trailing Chain Cable Y-Fe/D, Custom length	0150-3556

ROBOT CABLE

Item	Description	Item-No.
KR05-W/R-	Robot Cable KR05-W/R, Custom length	0150-3336
KR05-Y-Fe/R-	Robot Cable KR05-Y-Fe/R, Custom length	0150-3512

CONNECTOR & CABLE (INDIVIDUAL)

Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-R/f	Motor Connector R/f	0150-3129
MC01-D/f	Motor Connector D/f	0150-3025
K05-04/05	Motor Cable per m	0150-1920
KS05-04/05	Trailing Chain Cable per m	0150-1938
KR05-04/05	Robot Cable per m	0150-1846

MOTOR FLANGES



Item	Description	Item-No.
PF02-23x120	Flange 23x120 mm	0150-2103
PF02-23x170	Flange 23x170 mm	0150-2117

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-23	Fan cooling for H01-23 and PF02-23	0150-5050

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-12	Fixed Bearing Set for 12 mm sliders	0150-3085
PLF01-12-Ni	Fixed Bearing Set for 12 mm sliders nickel-plated	0150-3573
PLL02-12	Floating Bearing for PL01-12 Sliders	0150-3111

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

WIPERS



Item	Description	Item-No.
PA01-23/12-F	Wiper front side for PS01-23x...	0150-3125

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D-Encoder	Encoder Cable (Length in m)	0150-3166
KS025-D/D15-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P01-23x160F



- ✓ Highly dynamic drives
- ✓ With a special F-winding for a higher maximum speed
- ✓ Wide stroke range
- ✓ Available with cable outlet or with rotatable connector
- ✓ Optional with air cooling
- ✓ Wide range of applications in handling modules as well as in plant and machine construction

LINEAR MOTORS P01-23x160F

Technical Data **135**

Motor Specifications

 P01-23x160F/40x100-LC **138**

 P01-23x160F/20x120-LC **139**

 P01-23x160F/20x160-LC **140**

 P01-23x160F/80x220-LC **141**

 P01-23x160F/140x280-LC **142**

 P01-23x160F/210x350-LC **143**

 P01-23x160F/270x410-LC **144**

 P01-23x160F/370x510-LC **145**

 P01-23x160F/550x690-LC **146**

 P01-23x160F/640x780-LC **147**

Linear Guides **148**

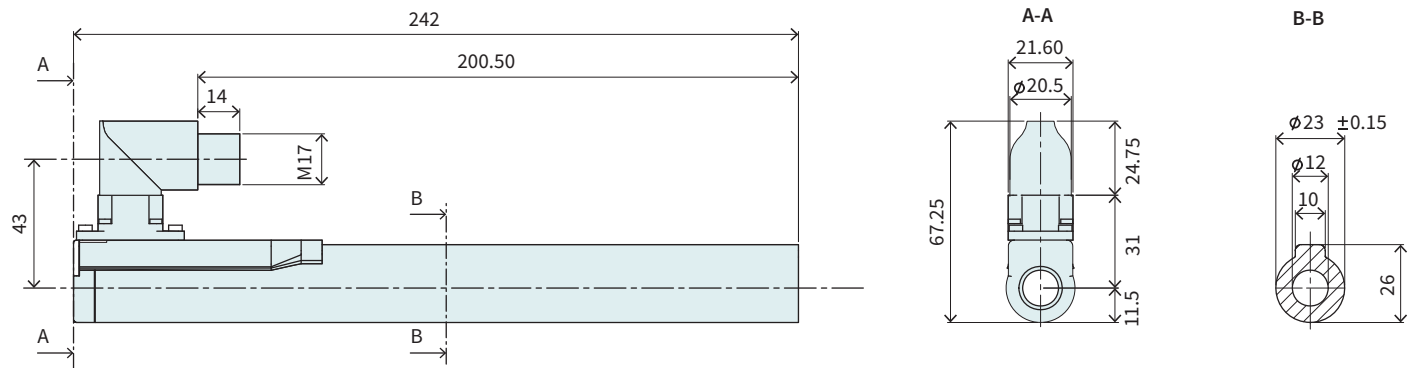
Accessories **149**



MOTOR FAMILY P01-23x160F

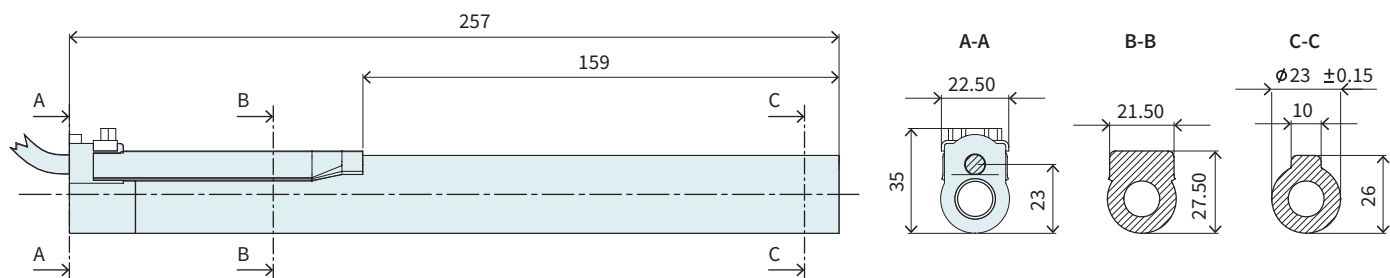
Technical Data				
Stroke				
Standard Stroke (SS)	mm (in)		≤ 640	(≤ 25.19)
Extended Stroke (ES)	mm (in)		≤ 780	(≤ 30.69)
Force				
Max. Force @ 48VDC	N (lbf)		62.5	(14.1)
Max. Force @ 72VDC	N (lbf)		86.4	(19.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		16 / 30 / -	(3.6 / 6.9 / -)
Max. Border Force relative	%		≤ 75	
Force Constant	N/A _{pk} (lbf/A _{pk})		14.4	(3.24)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		4	(159.9)
Max. Velocity @ 72VDC	m/s (in/s)		6	(239.9)
Position Detection				
Position Resolution	mm (in)		0.002	(0.0001)
Repeatability	mm (in)		±0.05	(±0.002)
Position Resolution with ES	mm (in)		0.001	(0.00004)
Repeatability with ES	mm (in)		±0.01	(±0.0004)
Linearity with ES	mm (in)		±0.01	(±0.0004)
Electrical Data				
Max. Current @ 48VDC	A _{pk}		4.3	
Max. Current @ 72VDC	A _{pk}		5.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.1 / 2.1 / -	
Terminal Resistance 25 °C / 120 °C	Ohm		9 / 12	
Terminal Inductivity	mH		1.2	
Magnetic Period	mm (in)		20	(0.78)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.5 / 1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		700 / 200 / -	
Mechanical Data				
Stator Diameter	mm (in)		23	(0.91)
Stator Length [Connector type / Cable type]	mm (in)		242 / 257	(9.5 / 10)
Stator Mass	g (lb)		450	(1.0)
Slider Diameter	mm (in)		12	(0.47)
Slider Length	mm (in)		170 - 850	(6.7 - 33)
Slider Mass	g (lb)		130 - 700	(0.29 - 1.54)
IP Code			IP 65	

STATOR CONNECTOR TYPE



Item	Description	Item-No.
PS01-23x160F-R	Stator with IP67 Connector M17/9(m)	0150-1235

STATOR CABLE TYPE

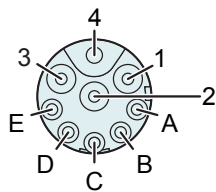


Item	Description	Item-No.
PS01-23x160F-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1243

CONNECTOR

Motor Connector Wiring	PS01-23x160F-R PS01-23x160F-R20	Wire color motor cable
	R-Connector	
Ph 1+	1	red
Ph 1-	2	pink
Ph 2+	3	blue
Ph 2-	4	grey
+5VDC	A	white
GND	B	inner shield
Sin	C	yellow
Cos	D	green
Temp.	E	black
Shield	Housing	outer Shield

R-Connector

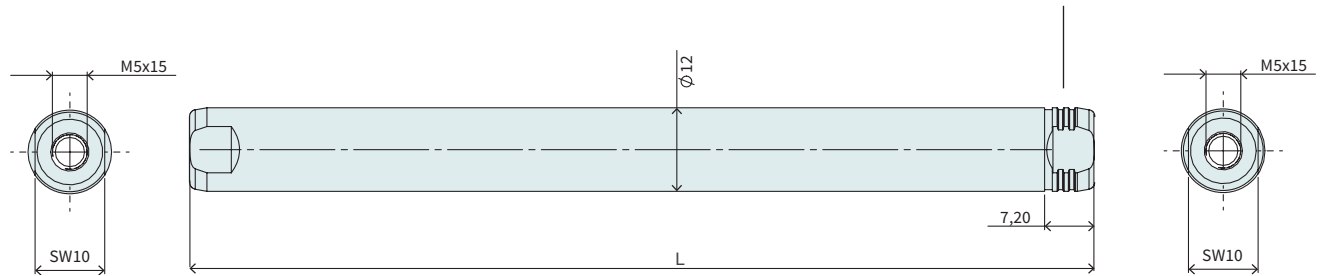


View: Motor Connector, plug side

SLIDER

3

Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.

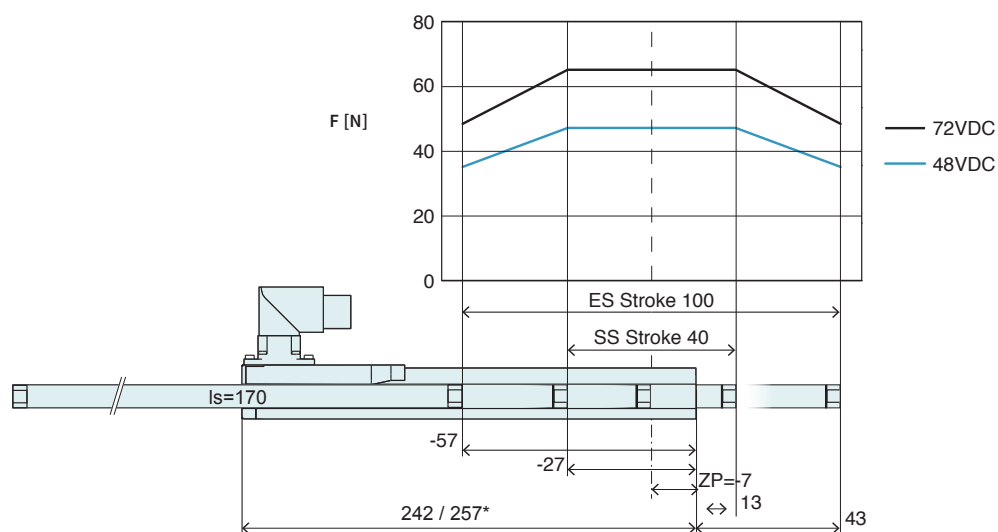


Slider Standard				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-12x170/130-LC	Slider 'standard LC'	100	40	0150-2581
PL01-12x190/150-LC	Slider 'standard LC'	120	20	0150-2582
PL01-12x230/190-LC	Slider 'standard LC'	160	20	0150-2598
PL01-12x290/250-LC	Slider 'standard LC'	220	80	0150-2583
PL01-12x350/310-LC	Slider 'standard LC'	280	140	0150-2584
PL01-12x420/380-LC	Slider 'standard LC'	350	210	0150-2585
PL01-12x480/440-LC	Slider 'standard LC'	410	270	0150-2586
PL01-12x580/540-LC	Slider 'standard LC'	510	370	0150-2587
PL01-12x760/720-LC	Slider 'standard LC'	690	550	0150-2589
PL01-12x850/810-LC	Slider 'standard LC'	780	640	0150-2588

Slider Heavy Duty				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL02-12x170/130-LC	Slider 'heavy duty LC'	100	40	0150-2591
PL02-12x190/150-LC	Slider 'heavy duty LC'	120	20	0150-2592
PL02-12x230/190-LC	Slider 'heavy duty LC'	160	20	0150-2599
PL02-12x290/250-LC	Slider 'heavy duty LC'	220	80	0150-2593
PL02-12x350/310-LC	Slider 'heavy duty LC'	280	140	0150-2594
PL02-12x420/380-LC	Slider 'heavy duty LC'	350	210	0150-2595
PL02-12x480/440-LC	Slider 'heavy duty LC'	410	270	0150-2597
PL02-12x580/540-LC	Slider 'heavy duty LC'	510	370	0150-2596
PL02-12x760/720-LC	Slider 'heavy duty LC'	690	550	on request
PL02-12x850/810-LC	Slider 'heavy duty LC'	780	640	on request

P01-23x160F/40x100-LC

Max. Stroke: 100 mm
Peak Force: 65 N

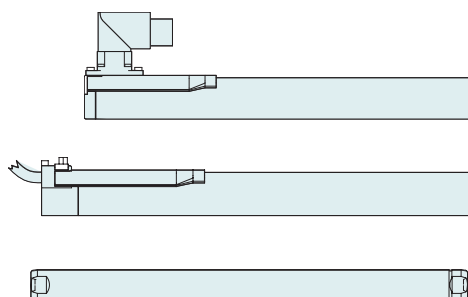


Dimensions in mm

*Cable Type

Technical Data P01-23x160F/40x100-LC

Stroke				
Standard Stroke (SS)	mm	(in)	40	(1.57)
Extended Stroke (ES)	mm	(in)	100	(3.93)
Force				
Max. Force @ 48VDC	N	(lbf)	46.9	(10.5)
Max. Force @ 72VDC	N	(lbf)	64.8	(14.6)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	12 / 23 / -	(2.7 / 5.1 / -)
Max. Border Force relative	%		75	
Force Constant	N/A _{pk}	(lbf/A _{pk})	10.8	(2.43)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	4	(159.9)
Max. Velocity @ 72VDC	m/s	(in/s)	6	(239.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.35	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		4.3	
Max. Current @ 72VDC	A _{pk}		5.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.1 / 2.1 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.5 / 1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		700 / 200 / -	
Mechanical Data				
Slider Length	mm	(in)	170	(6.7)
Slider Mass	g	(lb)	130	(0.29)

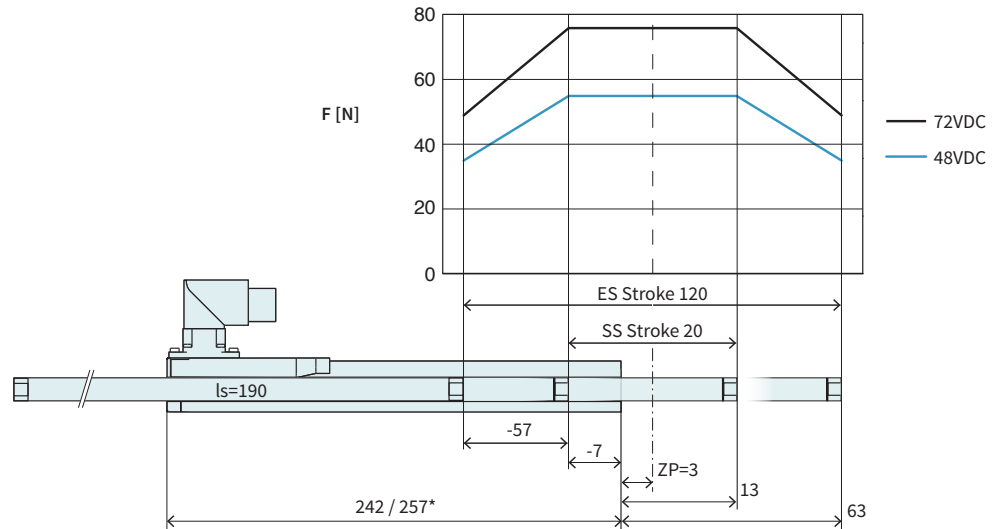


Item	Description	Item-No.
PS01-23x160F-R	Stator with IP67 Connector M17/9(m)	0150-1235
PS01-23x160F-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1243
PL01-12x170/130-LC	Slider 'standard LC'	0150-2581
PL02-12x170/130-LC	Slider 'heavy duty LC'	0150-2591

P01-23x160F/20x120-LC

3

Max. Stroke: 120 mm
Peak Force: 76 N



Technical Data P01-23x160F/20x120-LC

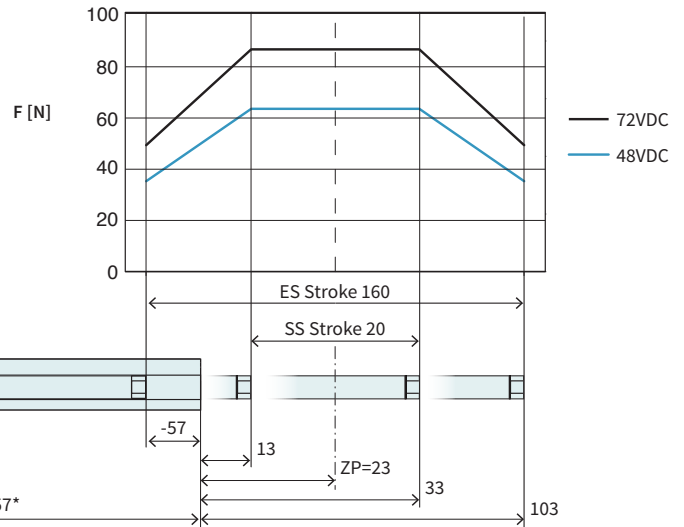
Stroke				
Standard Stroke (SS)	mm (in)		20 (0.78)	
Extended Stroke (ES)	mm (in)		120 (4.71)	
Force				
Max. Force @ 48VDC	N (lbf)		54.7 (12.3)	
Max. Force @ 72VDC	N (lbf)		75.6 (17)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		14 / 27 / - (3.2 / 6 / -)	
Max. Border Force relative	%		64	
Force Constant	N/A _{pk} (lbf/A _{pk})		12.6 (2.83)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.4 (139.9)	
Max. Velocity @ 72VDC	m/s (in/s)		5.2 (209.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		4.3	
Max. Current @ 72VDC	A _{pk}		5.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.1 / 2.1 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.5 / 1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		700 / 200 / -	
Mechanical Data				
Slider Length	mm (in)		190 (7.5)	
Slider Mass	g (lb)		145 (0.32)	



Item	Description	Item-No.
PS01-23x160F-R	Stator with IP67 Connector M17/9(m)	0150-1235
PS01-23x160F-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1243
PL01-12x190/150-LC	Slider 'standard LC'	0150-2582
PL02-12x190/150-LC	Slider 'heavy duty LC'	0150-2592

P01-23x160F/20x160-LC

Max. Stroke: 160 mm
Peak Force: 86 N



Dimensions in mm
*Cable Type

Technical Data P01-23x160F/20x160-LC

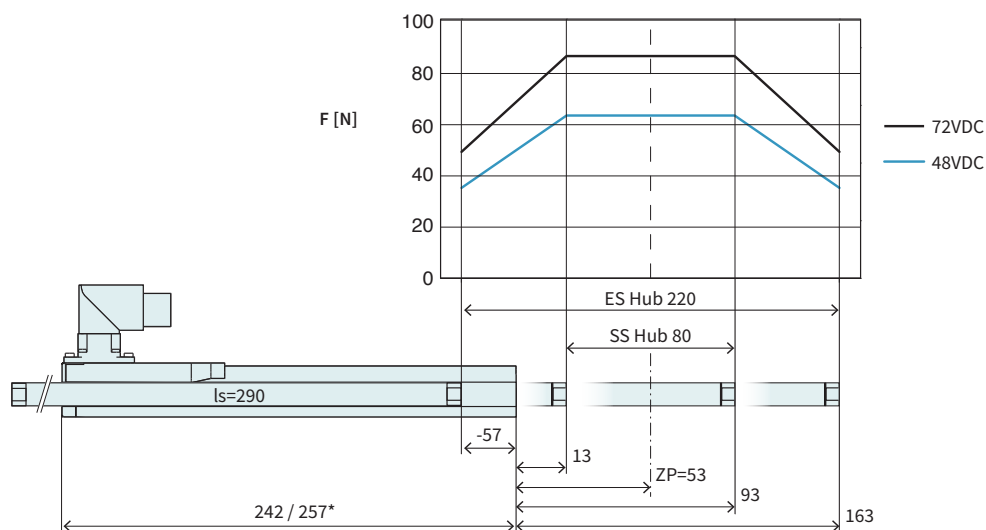
Stroke				
Standard Stroke (SS)	mm (in)		20 (0.78)	
Extended Stroke (ES)	mm (in)		160 (6.29)	
Force				
Max. Force @ 48VDC	N (lbf)		62.5 (14.1)	
Max. Force @ 72VDC	N (lbf)		86.4 (19.4)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		16 / 30 / - (3.6 / 6.9 / -)	
Max. Border Force relative	%		56	
Force Constant	N/A _{pk} (lbf/A _{pk})		14.4 (3.24)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3 (119.9)	
Max. Velocity @ 72VDC	m/s (in/s)		4.5 (179.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		4.3	
Max. Current @ 72VDC	A _{pk}		5.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.1 / 2.1 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.5 / 1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		700 / 200 / -	
Mechanical Data				
Slider Length	mm (in)		230 (9.1)	
Slider Mass	g (lb)		180 (0.4)	



Item	Description	Item-No.
PS01-23x160F-R	Stator with IP67 Connector M17/9(m)	0150-1235
PS01-23x160F-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1243
PL01-12x230/190-LC	Slider 'standard LC'	0150-2598
PL02-12x230/190-LC	Slider 'heavy duty LC'	0150-2599

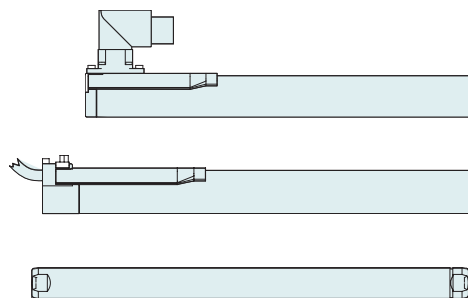
P01-23x160F/80x220-LC

Max. Stroke: 220 mm
Peak Force: 86 N



Technical Data P01-23x160F/80x220-LC

Stroke				
Standard Stroke (SS)	mm (in)		80 (3.14)	
Extended Stroke (ES)	mm (in)		220 (8.65)	
Force				
Max. Force @ 48VDC	N (lbf)		62.5 (14.1)	
Max. Force @ 72VDC	N (lbf)		86.4 (19.4)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		16 / 30 / - (3.6 / 6.9 / -)	
Max. Border Force relative	%		56	
Force Constant	N/A _{pk} (lbf/A _{pk})		14.4 (3.24)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3 (119.9)	
Max. Velocity @ 72VDC	m/s (in/s)		4.5 (179.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		4.3	
Max. Current @ 72VDC	A _{pk}		5.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.1 / 2.1 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.5 / 1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		700 / 200 / -	
Mechanical Data				
Slider Length	mm (in)		290 (11)	
Slider Mass	g (lb)		230 (0.51)	

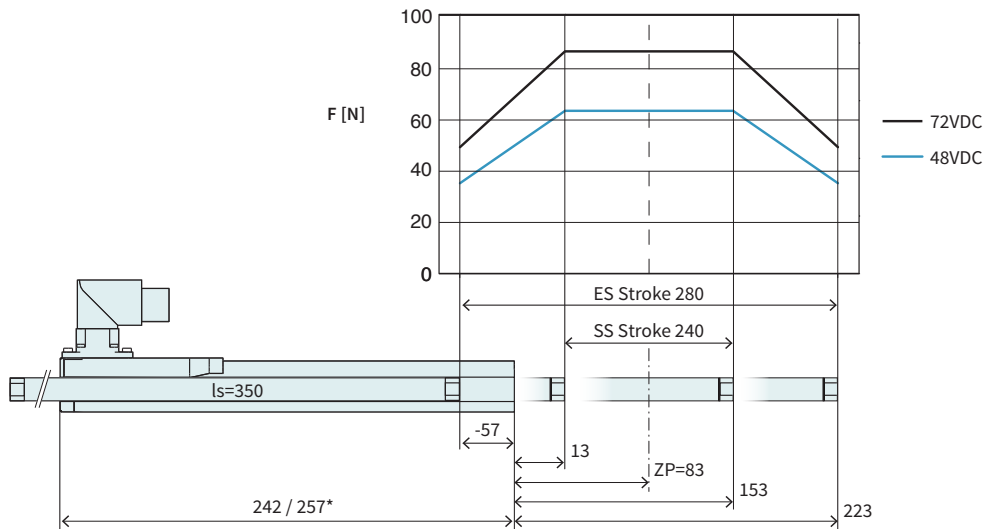


Item	Description	Item-No.
PS01-23x160F-R	Stator with IP67 Connector M17/9(m)	0150-1235
PS01-23x160F-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1243
PL01-12x290/250-LC	Slider 'standard LC'	0150-2583
PL02-12x290/250-LC	Slider 'heavy duty LC'	0150-2593

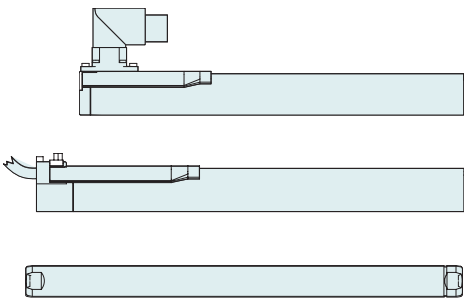
P01-23x160F/140x280-LC

Max. Stroke: 280 mm
Peak Force: 86 N

Dimensions in mm
*Cable Type



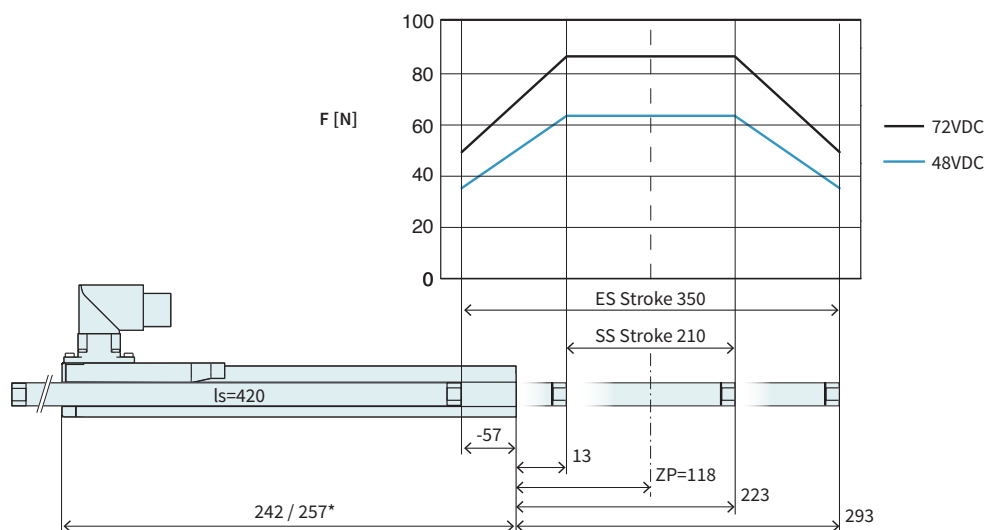
Technical Data P01-23x160F/140x280-LC				
Stroke				
Standard Stroke (SS)	mm (in)		140 (5.5)	
Extended Stroke (ES)	mm (in)		280 (10.99)	
Force				
Max. Force @ 48VDC	N (lbf)		62.5 (14.1)	
Max. Force @ 72VDC	N (lbf)		86.4 (19.4)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		16 / 30 / - (3.6 / 6.9 / -)	
Max. Border Force relative	%		56	
Force Constant	N/A _{pk} (lbf/A _{pk})		14.4 (3.24)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3 (119.9)	
Max. Velocity @ 72VDC	m/s (in/s)		4.5 (179.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		4.3	
Max. Current @ 72VDC	A _{pk}		5.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.1 / 2.1 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.5 / 1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		700 / 200 / -	
Mechanical Data				
Slider Length	mm (in)		350 (14)	
Slider Mass	g (lb)		280 (0.62)	



Item	Description	Item-No.
PS01-23x160F-R	Stator with IP67 Connector M17/9(m)	0150-1235
PS01-23x160F-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1243
PL01-12x350/310-LC	Slider 'standard LC'	0150-2584
PL02-12x350/310-LC	Slider 'heavy duty LC'	0150-2594

P01-23x160F/210x350-LC

Max. Stroke: 350 mm
Peak Force: 86 N



Dimensions in mm
 *Cable Type

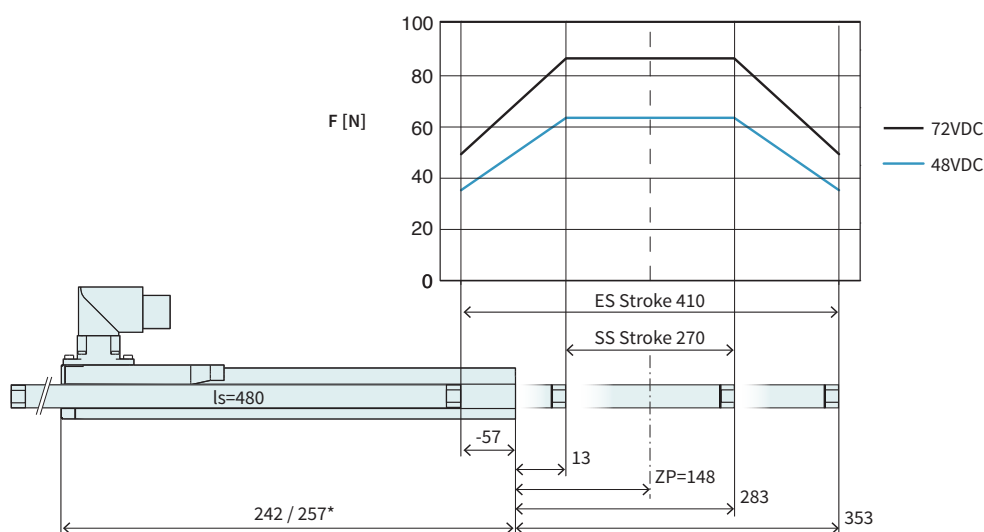
Technical Data P01-23x160F/210x350-LC				
Stroke				
Standard Stroke (SS)	mm (in)		210	(8.26)
Extended Stroke (ES)	mm (in)		350	(13.8)
Force				
Max. Force @ 48VDC	N (lbf)		62.5	(14.1)
Max. Force @ 72VDC	N (lbf)		86.4	(19.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		16 / 30 / -	(3.6 / 6.9 / -)
Max. Border Force relative	%		56	
Force Constant	N/A _{pk} (lbf/A _{pk})		14.4	(3.24)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3	(119.9)
Max. Velocity @ 72VDC	m/s (in/s)		4.5	(179.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		4.3	
Max. Current @ 72VDC	A _{pk}		5.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.1 / 2.1 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.5 / 1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		700 / 200 / -	
Mechanical Data				
Slider Length	mm (in)		420	(17)
Slider Mass	g (lb)		340	(0.75)



Item	Description	Item-No.
PS01-23x160F-R	Stator with IP67 Connector M17/9(m)	0150-1235
PS01-23x160F-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1243
PL01-12x420/380-LC	Slider 'standard LC'	0150-2585
PL02-12x420/380-LC	Slider 'heavy duty LC'	0150-2595

P01-23x160F/270x410-LC

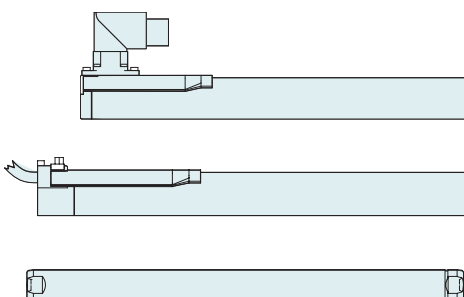
Max. Stroke: 410 mm
Peak Force: 86 N



Dimensions in mm
*Cable Type

Technical Data P01-23x160F/270x410-LC

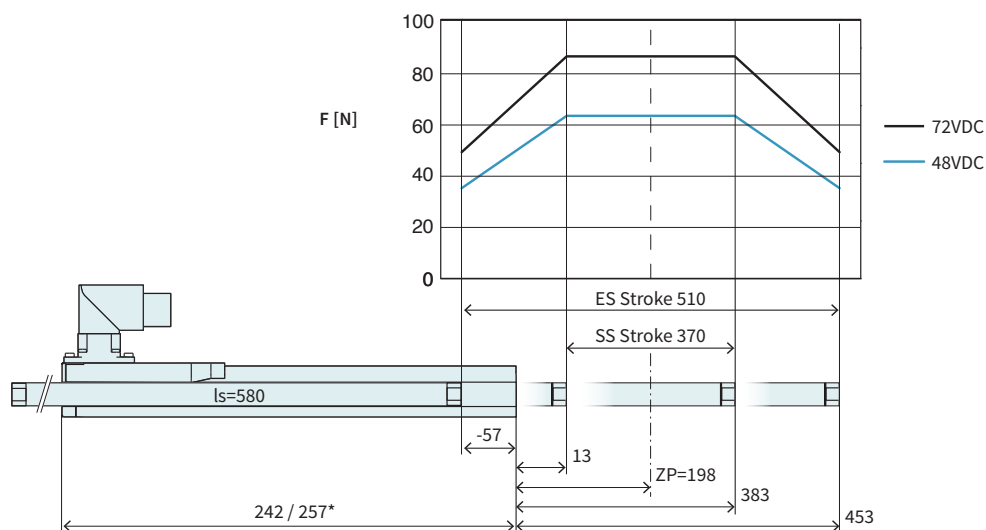
Stroke			
Standard Stroke (SS)	mm (in)	270	(10.59)
Extended Stroke (ES)	mm (in)	410	(16.1)
Force			
Max. Force @ 48VDC	N (lbf)	62.5	(14.1)
Max. Force @ 72VDC	N (lbf)	86.4	(19.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	16 / 30 / -	(3.6 / 6.9 / -)
Max. Border Force relative	%	56	
Force Constant	N/A _{pk} (lbf/A _{pk})	14.4	(3.24)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3	(119.9)
Max. Velocity @ 72VDC	m/s (in/s)	4.5	(179.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	4.3	
Max. Current @ 72VDC	A _{pk}	5.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.1 / 2.1 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	3.5 / 1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	700 / 200 / -	
Mechanical Data			
Slider Length	mm (in)	480	(19)
Slider Mass	g (lb)	390	(0.78)



Item	Description	Item-No.
PS01-23x160F-R	Stator with IP67 Connector M17/9(m)	0150-1235
PS01-23x160F-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1243
PL01-12x480/440-LC	Slider 'standard LC'	0150-2586
PL02-12x480/440-LC	Slider 'heavy duty LC'	0150-2597

P01-23x160F/370x510-LC

Max. Stroke: 510 mm
Peak Force: 86 N



Dimensions in mm
 *Cable Type

Technical Data P01-23x160F/370x510-LC

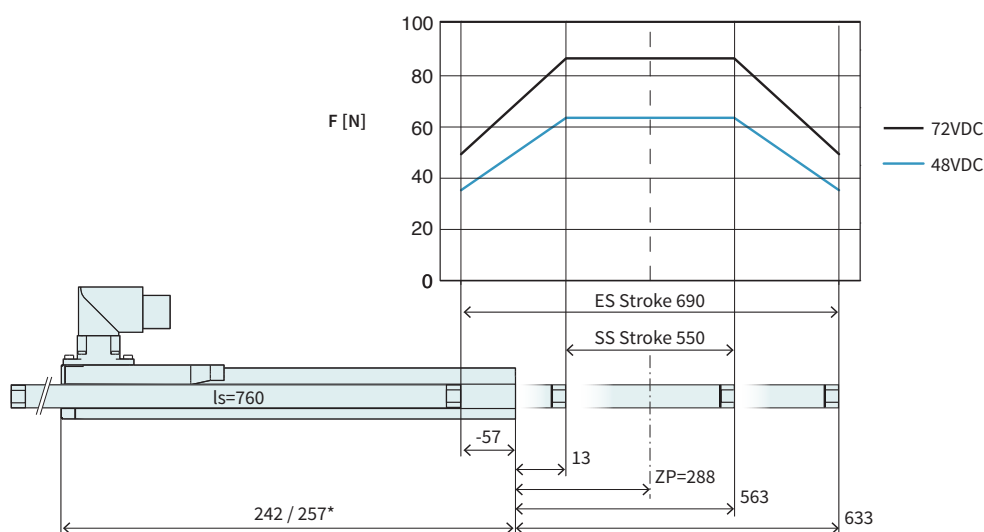
Stroke			
Standard Stroke (SS)	mm (in)	370 (14.59)	
Extended Stroke (ES)	mm (in)	510 (20.1)	
Force			
Max. Force @ 48VDC	N (lbf)	62.5 (14.1)	
Max. Force @ 72VDC	N (lbf)	86.4 (19.4)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	16 / 30 / -	(3.6 / 6.9 / -)
Max. Border Force relative	%	56	
Force Constant	N/A _{pk} (lbf/A _{pk})	14.4 (3.24)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3 (119.9)	
Max. Velocity @ 72VDC	m/s (in/s)	4.5 (179.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	4.3	
Max. Current @ 72VDC	A _{pk}	5.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.1 / 2.1 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	3.5 / 1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	700 / 200 / -	
Mechanical Data			
Slider Length	mm (in)	580 (23)	
Slider Mass	g (lb)	480 (1.06)	



Item	Description	Item-No.
PS01-23x160F-R	Stator with IP67 Connector M17/9(m)	0150-1235
PS01-23x160F-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1243
PL01-12x580/540-LC	Slider 'standard LC'	0150-2587
PL02-12x580/540-LC	Slider 'heavy duty LC'	0150-2596

P01-23x160F/550x690-LC

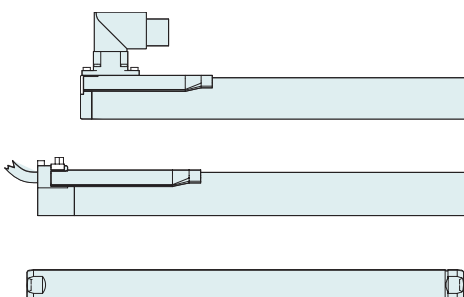
Max. Stroke: 690 mm
Peak Force: 86 N



Dimensions in mm
*Cable Type

Technical Data P01-23x160F/550x690-LC

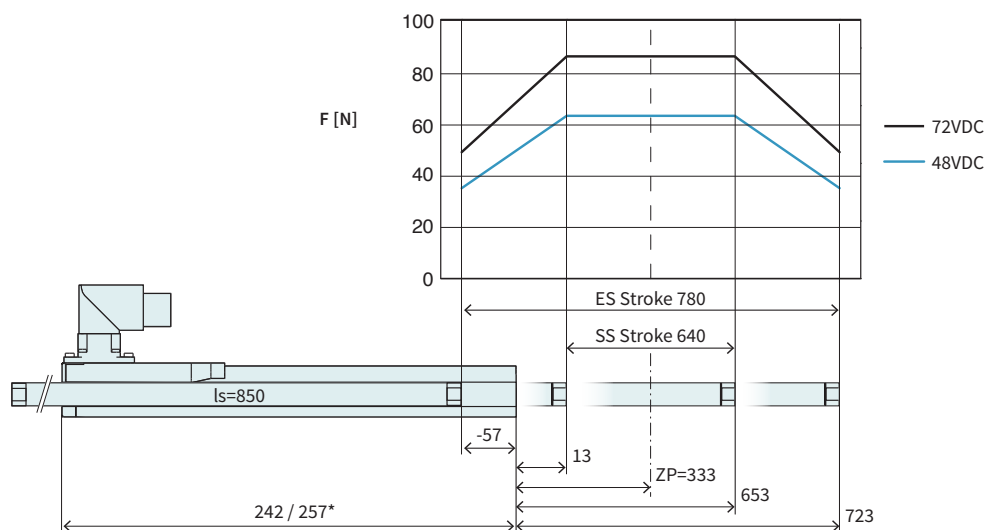
Stroke			
Standard Stroke (SS)	mm (in)	550 (21.69)	
Extended Stroke (ES)	mm (in)	690 (27.19)	
Force			
Max. Force @ 48VDC	N (lbf)	62.5 (14.1)	
Max. Force @ 72VDC	N (lbf)	86.4 (19.4)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	16 / 30 / - (3.6 / 6.9 / -)	
Max. Border Force relative	%	56	
Force Constant	N/A _{pk} (lbf/A _{pk})	14.4 (3.24)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3 (119.9)	
Max. Velocity @ 72VDC	m/s (in/s)	4.5 (179.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	4.3	
Max. Current @ 72VDC	A _{pk}	5.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.1 / 2.1 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	3.5 / 1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	700 / 200 / -	
Mechanical Data			
Slider Length	mm (in)	760 (30)	
Slider Mass	g (lb)	630 (1.39)	



Item	Description	Item-No.
PS01-23x160F-R	Stator with IP67 Connector M17/9(m)	0150-1235
PS01-23x160F-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1243
PL01-12x760/720-LC	Slider 'standard LC'	0150-2589
PL01-12x760/720-LC	Slider 'heavy duty LC'	on request

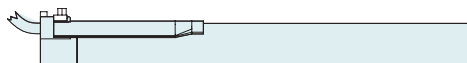
P01-23x160F/640x780-LC

Max. Stroke: 780 mm
Peak Force: 86 N



Technical Data P01-23x160F/640x780-LC

Stroke				
Standard Stroke (SS)	mm (in)		640	(25.19)
Extended Stroke (ES)	mm (in)		780	(30.69)
Force				
Max. Force @ 48VDC	N (lbf)		62.5	(14.1)
Max. Force @ 72VDC	N (lbf)		86.4	(19.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		16 / 30 / -	(3.6 / 6.9 / -)
Max. Border Force relative	%		56	
Force Constant	N/A _{pk} (lbf/A _{pk})		14.4	(3.24)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3	(119.9)
Max. Velocity @ 72VDC	m/s (in/s)		4.5	(179.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		4.3	
Max. Current @ 72VDC	A _{pk}		5.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.1 / 2.1 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.5 / 1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		700 / 200 / -	
Mechanical Data				
Slider Length	mm (in)		850	(33)
Slider Mass	g (lb)		700	(1.54)



Item	Description	Item-No.
PS01-23x160F-R	Stator with IP67 Connector M17/9(m)	0150-1235
PS01-23x160F-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1243
PL01-12x850/810-LC	Slider 'standard LC'	0150-2588
PL02-12x850/810-LC	Slider 'heavy duty LC'	on request

Linear Guides H01

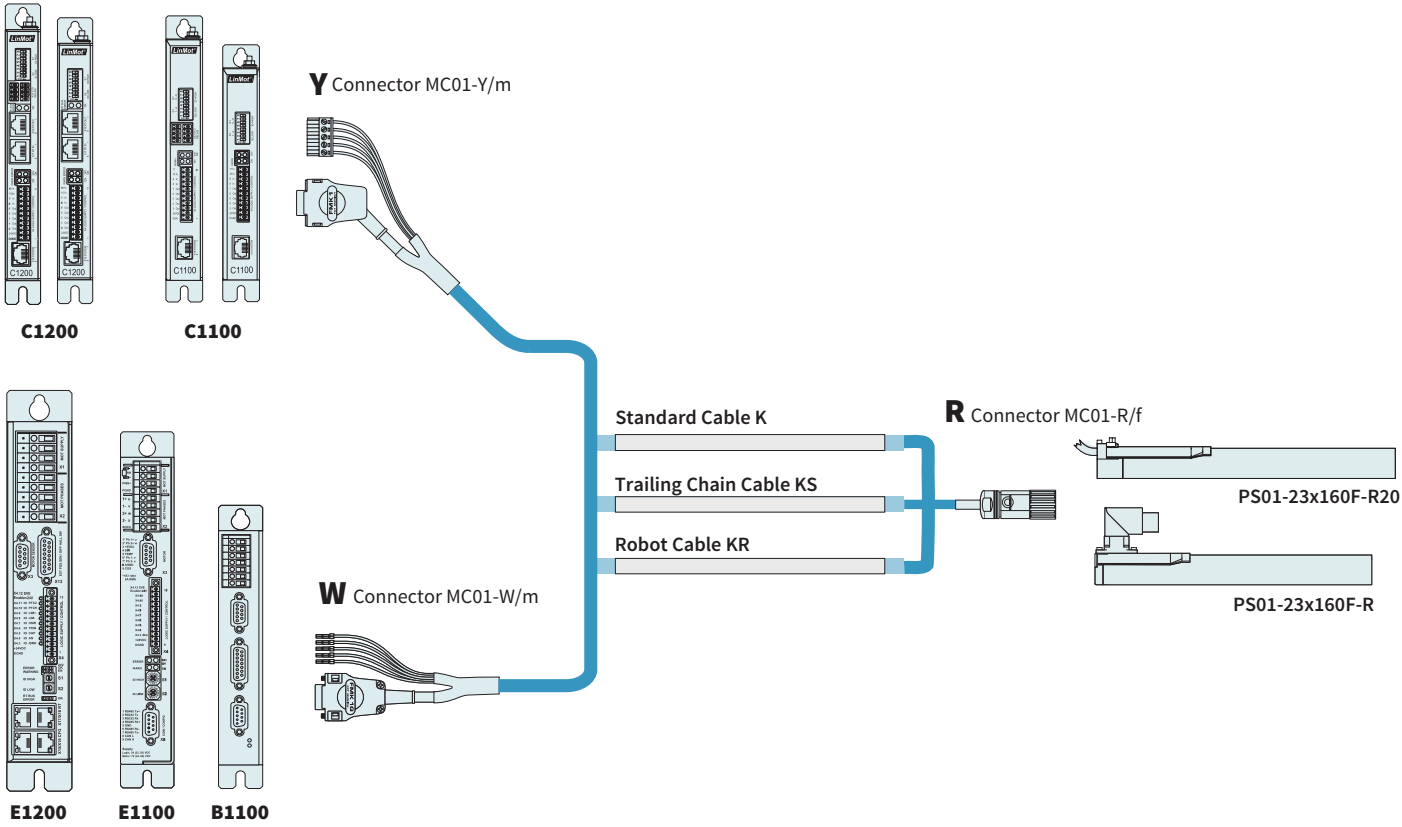
3



HM01-23x160/80		Linear Module 23x160 with 80 mm Stroke			
	→	H-Guide	H01-23x166/80	H-Guide for P01-23x160, Stroke max 80mm	0150-5017
			H01-23x166/80-GF	H-Guide for P01-23x160, Stroke max 80mm	0150-5077
	→	Stator	PS01-23x160F-R	Linearmotor Stator, Connector R - IP67	0150-1235
			PS01-23x160F-R20	Linearmotor Stator, 0.2m Cable, Connector R - IP67	0150-1243
	→	Slider	PL01-12x290/250-LC	Slider 'standard LC'	0150-2583
HM01-23x160/180		Linear Module 23x160 with 180 mm Stroke			
	→	H-Guide	H01-23x166/180	H-Guide for P01-23x160, Stroke max 180mm	0150-5018
			H01-23x166/180-GF	H-Guide for P01-23x160, Stroke max 180mm	0150-5078
	→	Stator	PS01-23x160F-R	Linearmotor Stator, Connector R - IP67	0150-1235
			PS01-23x160F-R20	Linearmotor Stator, 0.2m Cable, Connector R - IP67	0150-1243
	→	Slider	PL01-12x420/380-LC	Slider 'standard LC'	0150-2585
HM01-23x160/280		Linear Module 23x160 with 280 mm Stroke			
	→	H-Guide	H01-23x166/280	H-Guide for P01-23x160, Stroke max 280mm	0150-5019
			H01-23x166/280-GF	H-Guide for P01-23x160, Stroke max 280mm	0150-5079
	→	Stator	PS01-23x160F-R	Linearmotor Stator, Connector R - IP67	0150-1235
			PS01-23x160F-R20	Linearmotor Stator, 0.2m Cable, Connector R - IP67	0150-1243
	→	Slider	PL01-12x480/440-LC	Slider 'standard LC'	0150-2586
Accessories					
	→	Fan	HV01-23	Fan cooling for H01-23	0150-5050
	→	MagSpring	MF01-20/H23	Flange MagSpring 20 / H-Guide 23	0250-2306
			MA01-20/H23	Flange MagSpring 20 / H-Guide 23	0250-0116
	→	Centering sleeve	HC01-09/04	Centering sleeve D9x4mm	0150-3251

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

Motor Cable



ORDERING INFORMATION

STANDARD CABLE		
Item	Description	Item-No.
K05-W/R-2	Motor Cable W/R, 2 m	0150-2119
K05-W/R-4	Motor Cable W/R, 4 m	0150-2120
K05-W/R-6	Motor Cable W/R, 6 m	0150-2121
K05-W/R-8	Motor Cable W/R, 8 m	0150-2122
K05-W/R-	Motor Cable W/R, Custom length	0150-3262
K05-W/D-0.4	Motor Cable W/D, 0.4 m	0150-1947
K05-Y/R-2	Motor Cable Y/R, 2 m	0150-2421
K05-Y/R-4	Motor Cable Y/R, 4 m	0150-2422
K05-Y/R-6	Motor Cable Y/R, 6 m	0150-2423
K05-Y/R-8	Motor Cable Y/R, 8 m	0150-2424
K05-Y-Fe/R-	Motor Cable Y/R, Custom length	0150-3501
K05-Y-Fe/D-	Motor Cable Y-Fe/D, Custom length	0150-1947

TRAILING CHAIN CABLE

Item	Description	Item-No.
KS05-W/R-4	Trailing Chain Cable W/R, 4 m	0150-2106
KS05-W/R-6	Trailing Chain Cable W/R, 6 m	0150-2131
KS05-W/R-8	Trailing Chain Cable W/R, 8 m	0150-2107
KS05-W/R-	Trailing Chain Cable W/R, Custom length	0150-3256
KS05-Y/R-4	Trailing Chain Cable Y/R, 4 m	0150-2433
KS05-Y/R-6	Trailing Chain Cable Y/R, 6 m	0150-2434
KS05-Y/R-8	Trailing Chain Cable Y/R, 8 m	0150-2435
KS05-Y/R-	Trailing Chain Cable Y/R, Custom length	0150-3507
KS05-Y-Fe/D-	Trailing Chain Cable Y-Fe/D, Custom length	0150-3556

ROBOT CABLE

Item	Description	Item-No.
KR05-W/R-	Robot Cable KR05-W/R, Custom length	0150-3336
KR05-Y-Fe/R-	Robot Cable KR05-Y-Fe/R, Custom length	0150-3512

CONNECTOR & CABLE (INDIVIDUAL)

Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-R/f	Motor Connector R/f	0150-3129
MC01-D/f	Motor Connector D/f	0150-3025
K05-04/05	Motor Cable per m	0150-1920
KS05-04/05	Trailing Chain Cable per m	0150-1938
KR05-04/05	Robot Cable per m	0150-1846

MOTOR FLANGES



Item	Description	Item-No.
PF02-23x120	Flange 23x120 mm	0150-2103
PF02-23x170	Flange 23x170 mm	0150-2117

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-23	Fan cooling for H01-23 and PF02-23	0150-5050

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-12	Fixed Bearing Set for 12 mm sliders	0150-3085
PLF01-12-Ni	Fixed Bearing Set for 12 mm sliders nickel-plated	0150-3573
PLL02-12	Floating Bearing for PL01-12 Sliders	0150-3111

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

WIPERS



Item	Description	Item-No.
PA01-23/12-F	Wiper front side for PS01-23x...	0150-3125

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D-Encoder	Encoder Cable (Length in m)	0150-3166
KS025-D/D15-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P01-23x160H-HP



- ✓ Higher maximum peak force and acceleration
- ✓ Increased continuous force and acceleration
- ✓ Higher permissible operating temperatures with less self-heating
- ✓ Wide range of applications in handling modules as well as in plant and machine construction

LINEAR MOTORS P01-23x160H-HP

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Motor Specifications

P01-23x160H/20x160-HP	158
P01-23x160H/60x200-HP	159
P01-23x160H/80x220-HP	160
P01-23x160H/140x280-HP	161
P01-23x160H/210x350-HP	162
P01-23x160H/270x410-HP	163
P01-23x160H/370x510-HP	164
P01-23x160H/550x690-HP	165
P01-23x160H/640x780-HP	166

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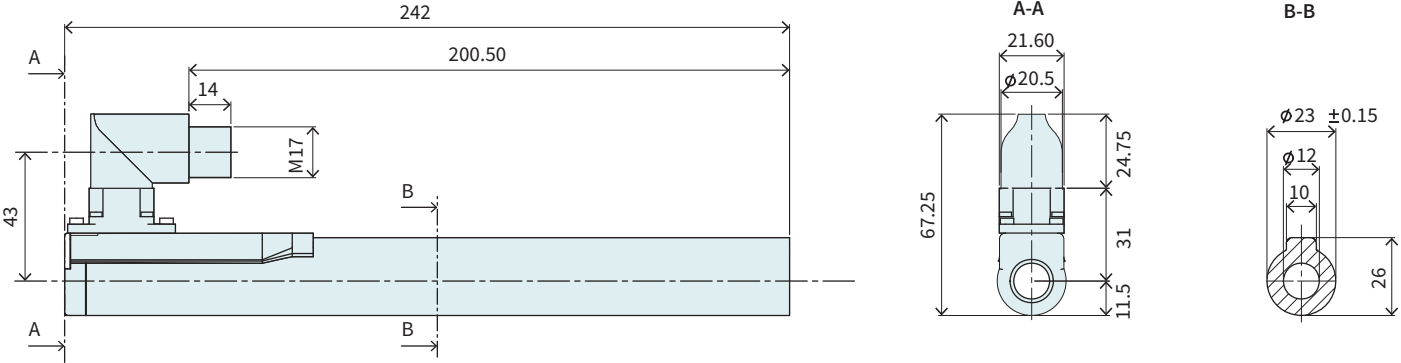
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MOTOR FAMILY P01-23x160H-HP

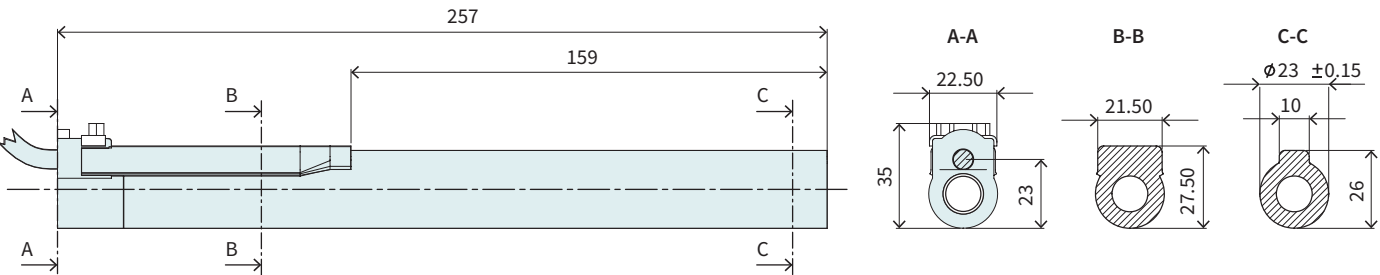
Technical Data				
Stroke				
Standard Stroke (SS)	mm	(in)	≤ 640	(≤ 25.19)
Extended Stroke (ES)	mm	(in)	≤ 780	(≤ 30.69)
Force				
Max. Force @ 48VDC	N	(lbf)	126	(28.3)
Max. Force @ 72VDC	N	(lbf)	138	(31)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	30 / 46 / -	(6.7 / 10 / -)
Max. Border Force relative	%		≤ 56	
Force Constant	N/A _{pk}	(lbf/A _{pk})	12.5	(2.82)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	3.4	(139.9)
Max. Velocity @ 72VDC	m/s	(in/s)	5.2	(209.9)
Position Detection				
Position Resolution	mm	(in)	0.002	(0.0001)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 48VDC	A _{pk}		10	
Max. Current @ 72VDC	A _{pk}		10.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.4 / 3.6 / -	
Terminal Resistance 25 °C / 150 °C	Ohm		3.9 / 5.7	
Terminal Inductivity	mH		0.54	
Magnetic Period	mm	(in)	20	(0.78)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		510 / 220 / -	
Mechanical Data				
Stator Diameter	mm	(in)	23	(0.91)
Stator Length [Connector type / Cable type]	mm	(in)	242 / 257	(9.5 / 10)
Stator Mass	g	(lb)	450	(1.0)
Slider Diameter	mm	(in)	12	(0.47)
Slider Length	mm	(in)	230 - 850	(9.1 - 33)
Slider Mass	g	(lb)	180 - 700	(0.4 - 1.54)
IP Code			IP 65	

STATOR CONNECTOR TYPE



Item	Description	Item-No.
PS01-23x160H-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1254

STATOR CABLE TYPE

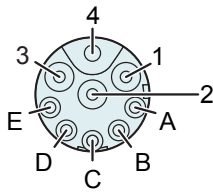


Item	Description	Item-No.
PS01-23x160H-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1255

CONNECTOR

Motor Connector Wiring	PS01-23x160H-HP-R PS01-23x160H-HP-R20	Wire color motor cable
	R-Connector	
Ph 1+	1	red
Ph 1-	2	pink
Ph 2+	3	blue
Ph 2-	4	grey
+5VDC	A	white
GND	B	inner shield
Sin	C	yellow
Cos	D	green
Temp.	E	black
Shield	Housing	outer Shield

R-Connector

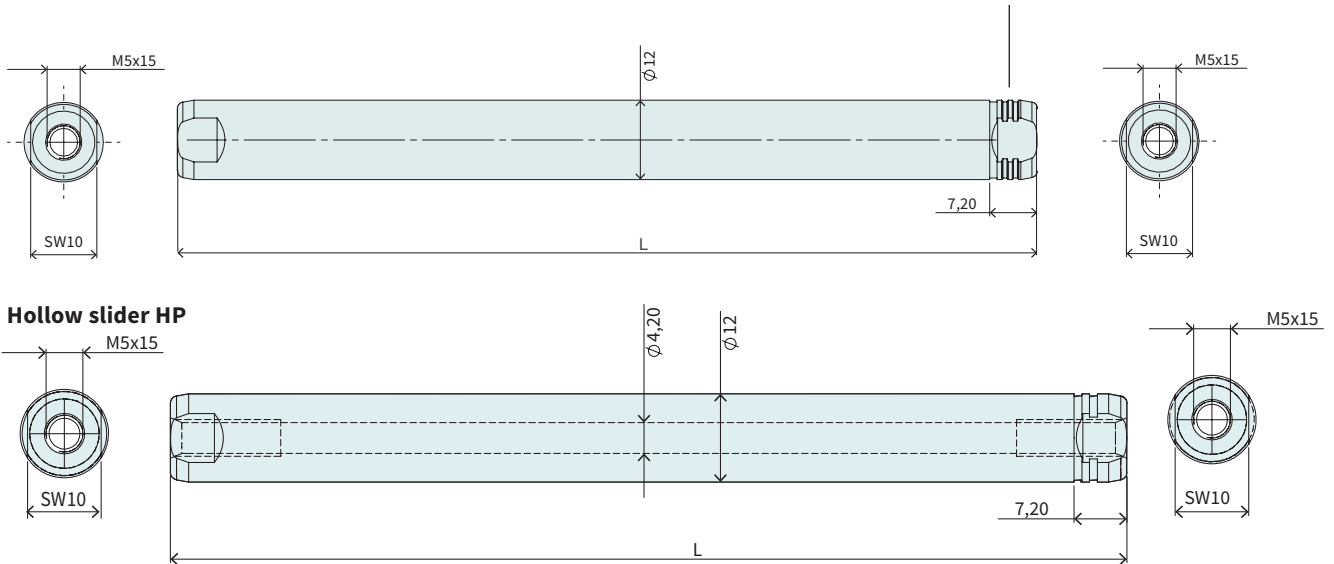


View: Motor Connector, plug side

SLIDER

Slider HP / Heavy Duty HP

Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.



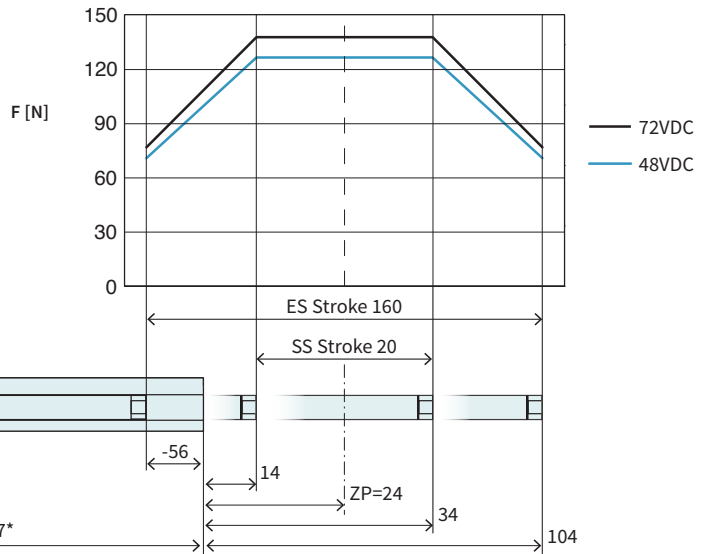
Slider High Performance				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-12x230/190-HP	Slider 'High Performance'	160	20	0150-1519
PL01-12x270/230-HP	Slider 'High Performance'	200	60	0150-1520
PL01-12x290/250-HP	Slider 'High Performance'	220	80	0150-1521
PL01-12x350/310-HP	Slider 'High Performance'	280	140	0150-1522
PL01-12x420/380-HP	Slider 'High Performance'	350	210	0150-1523
PL01-12x480/440-HP	Slider 'High Performance'	410	270	0150-1524
PL01-12x580/540-HP	Slider 'High Performance'	510	370	0150-1525
PL01-12x760/720-HP	Slider 'High Performance'	690	550	0150-1526
PL01-12x850/810-HP	Slider 'High Performance'	780	640	0150-1527

Slider Heavy Duty High Performance				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL02-12x230/190-HP	Slider 'heavy duty' 'High Performance'	160	20	0150-1552
PL02-12x270/230-HP	Slider 'heavy duty' 'High Performance'	200	60	0150-1533
PL02-12x290/250-HP	Slider 'heavy duty' 'High Performance'	220	80	0150-1495
PL02-12x350/310-HP	Slider 'heavy duty' 'High Performance'	280	140	0150-1555
PL02-12x420/380-HP	Slider 'heavy duty' 'High Performance'	350	210	0150-1554
PL02-12x480/440-HP	Slider 'heavy duty' 'High Performance'	410	270	0150-2519
PL02-12x580/540-HP	Slider 'heavy duty' 'High Performance'	510	370	0150-2520
PL02-12x760/720-HP	Slider 'heavy duty' 'High Performance'	690	550	0150-2521
PL02-12x850/810-HP	Slider 'heavy duty' 'High Performance'	780	640	0150-2516

Hollow slider High Performance				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-12x230/190-HP-L	Slider 'High Performance L'	160	20	0150-2546
PL01-12x270/230-HP-L	Slider 'High Performance L'	200	60	0150-2557
PL01-12x290/250-HP-L	Slider 'High Performance L'	220	80	0150-3690
PL01-12x350/310-HP-L	Slider 'High Performance L'	280	140	0150-3691
PL01-12x420/380-HP-L	Slider 'High Performance L'	350	210	0150-3692
PL01-12x480/440-HP-L	Slider 'High Performance L'	410	270	0150-3693
PL01-12x580/540-HP-L	Slider 'High Performance L'	510	370	0150-3694
PL01-12x760/720-HP-L	Slider 'High Performance L'	690	550	0150-3695
PL01-12x850/810-HP-L	Slider 'High Performance L'	780	640	on request

P01-23x160H/20x160-HP

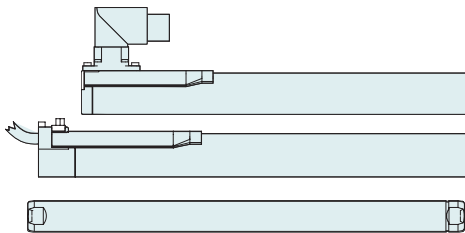
Max. Stroke: 160 mm
Peak Force: 138 N



Dimensions in mm
 *Cable Type

Technical Data P01-23x160H/20x160-HP

Stroke				
Standard Stroke (SS)	mm (in)		20 (0.78)	
Extended Stroke (ES)	mm (in)		160 (6.29)	
Force				
Max. Force @ 48VDC	N (lbf)		126 (28.3)	
Max. Force @ 72VDC	N (lbf)		138 (31)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		30 / 46 / - (6.7 / 10 / -)	
Max. Border Force relative	%		56	
Force Constant	N/A _{pk} (lbf/A _{pk})		12.5 (2.82)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.4 (139.9)	
Max. Velocity @ 72VDC	m/s (in/s)		5.2 (209.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		10	
Max. Current @ 72VDC	A _{pk}		10.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.4 / 3.6 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		510 / 220 / -	
Mechanical Data				
Slider Length	mm (in)		230 (9.1)	
Slider Mass	g (lb)		180 (0.4)	



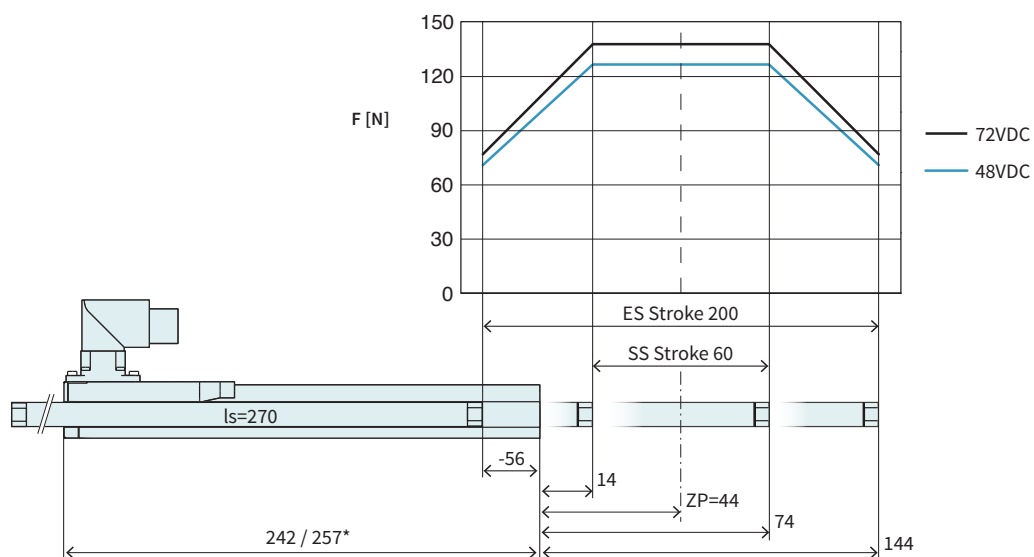
Item	Description	Item-No.
PS01-23x160H-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1254
PS01-23x160H-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1255
PL01-12x230/190-HP	Slider 'High Performance'	0150-1519
PL02-12x230/190-HP	Slider 'heavy duty' 'High Performance'	0150-1552
PL01-12x230/190-HP-L*	Slider 'High Performance L'	0150-2546

* With this slider, the motor specifications above change.

P01-23x160H/60x200-HP

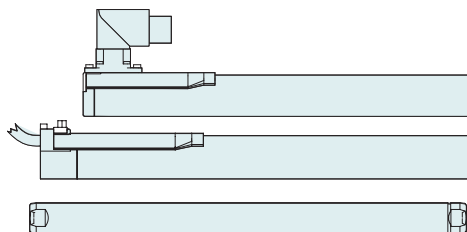
Max. Stroke: 200 mm
Peak Force: 138 N

Dimensions in mm
 *Cable Type



Technical Data P01-23x160H/60x200-HP

Stroke				
Standard Stroke (SS)	mm (in)	60 (2.35)		
Extended Stroke (ES)	mm (in)	200 (7.86)		
Force				
Max. Force @ 48VDC	N (lbf)	126 (28.3)		
Max. Force @ 72VDC	N (lbf)	138 (31)		
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	30 / 46 / - (6.7 / 10 / -)		
Max. Border Force relative	%	56		
Force Constant	N/A _{pk} (lbf/A _{pk})	12.5 (2.82)		
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)	3.4 (139.9)		
Max. Velocity @ 72VDC	m/s (in/s)	5.2 (209.9)		
Position Detection				
Repeatability	mm (in)	±0.05 (±0.002)		
Linearity	%	± 0.2		
Electrical Data				
Max. Current @ 48VDC	A _{pk}	10		
Max. Current @ 72VDC	A _{pk}	10.9		
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2.4 / 3.6 / -		
Thermal Data				
Max. Winding Temperature (Sensor)	°C	120		
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.6 / 1.1 / -		
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	510 / 220 / -		
Mechanical Data				
Slider Length	mm (in)	270 (11)		
Slider Mass	g (lb)	215 (0.47)		

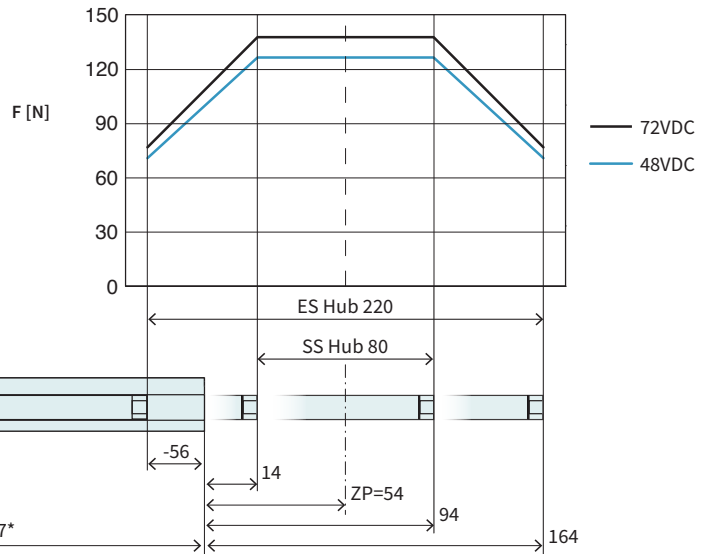


Item	Description	Item-No.
PS01-23x160H-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1254
PS01-23x160H-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1255
PL01-12x270/230-HP	Slider 'High Performance'	0150-1520
PL02-12x270/230-HP	Slider 'heavy duty' 'High Performance'	0150-1533
PL01-12x270/230-HP-L*	Slider 'High Performance L'	0150-2557

* With this slider, the motor specifications above change.

P01-23x160H/80x220-HP

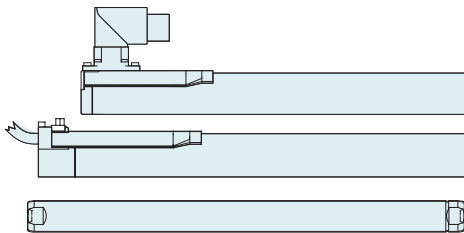
Max. Stroke: 220 mm
Peak Force: 138 N



Dimensions in mm
 *Cable Type

Technical Data P01-23x160H/80x220-HP

Stroke			
Standard Stroke (SS)	mm (in)	80 (3.14)	
Extended Stroke (ES)	mm (in)	220 (8.65)	
Force			
Max. Force @ 48VDC	N (lbf)	126 (28.3)	
Max. Force @ 72VDC	N (lbf)	138 (31)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	30 / 46 / - (6.7 / 10 / -)	
Max. Border Force relative	%	56	
Force Constant	N/A _{pk} (lbf/A _{pk})	12.5 (2.82)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3.4 (139.9)	
Max. Velocity @ 72VDC	m/s (in/s)	5.2 (209.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	10	
Max. Current @ 72VDC	A _{pk}	10.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2.4 / 3.6 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.6 / 1.1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	510 / 220 / -	
Mechanical Data			
Slider Length	mm (in)	290 (11)	
Slider Mass	g (lb)	230 (0.51)	



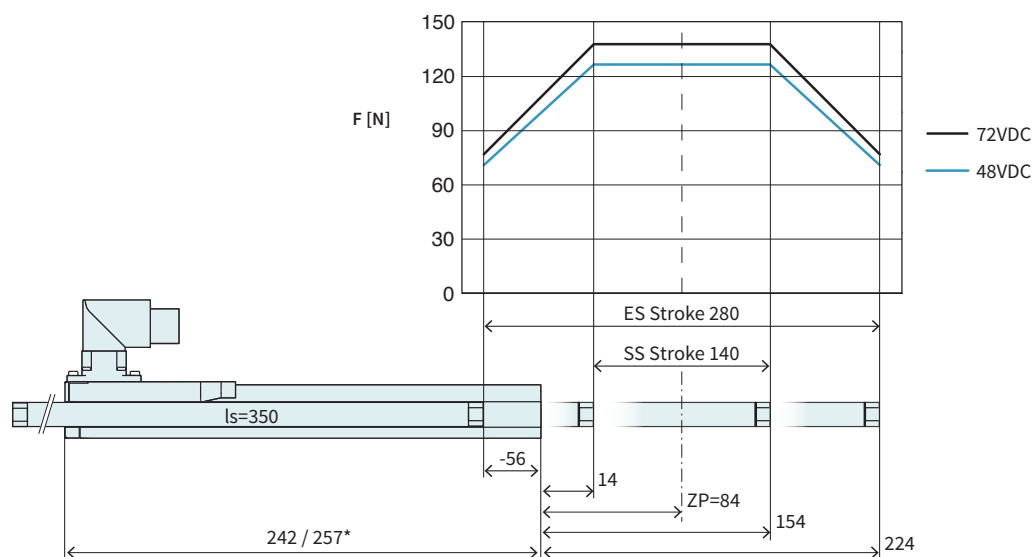
Item	Description	Item-No.
PS01-23x160H-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1254
PS01-23x160H-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1255
PL01-12x290/250-HP	Slider 'High Performance'	0150-1521
PL02-12x290/250-HP	Slider 'heavy duty' 'High Performance'	0150-1495
PL01-12x290/250-HP-L*	Slider 'High Performance L'	0150-3690

* With this slider, the motor specifications above change.

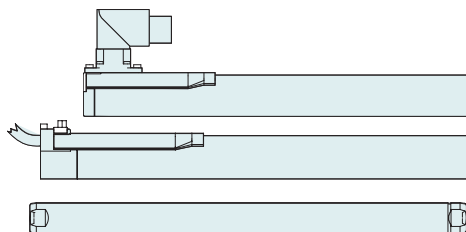
P01-23x160H/140x280-HP

Max. Stroke: 280 mm
Peak Force: 138 N

Dimensions in mm
 *Cable Type



Technical Data P01-23x160H/140x280-HP				
Stroke				
Standard Stroke (SS)	mm (in)		140 (5.5)	
Extended Stroke (ES)	mm (in)		280 (10.99)	
Force				
Max. Force @ 48VDC	N (lbf)		126 (28.3)	
Max. Force @ 72VDC	N (lbf)		138 (31)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		30 / 46 / -	(6.7 / 10 / -)
Max. Border Force relative	%		56	
Force Constant	N/A _{pk} (lbf/A _{pk})		12.5	(2.82)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.4	(139.9)
Max. Velocity @ 72VDC	m/s (in/s)		5.2	(209.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		10	
Max. Current @ 72VDC	A _{pk}		10.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.4 / 3.6 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		510 / 220 / -	
Mechanical Data				
Slider Length	mm (in)		350	(14)
Slider Mass	g (lb)		280	(0.62)

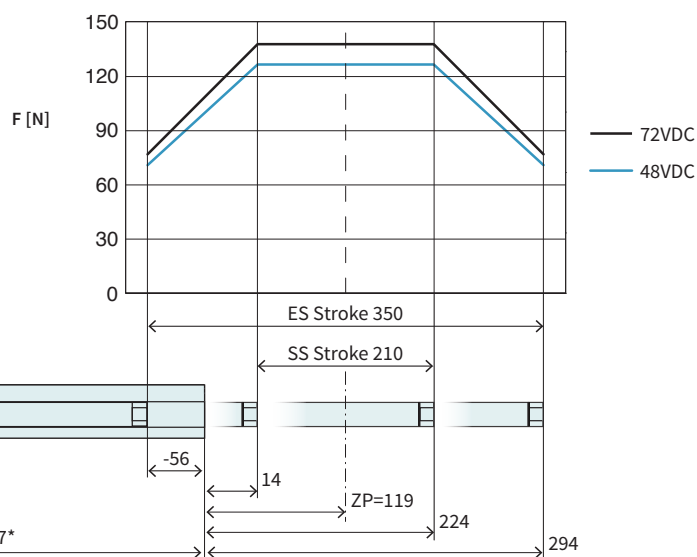


Item	Description	Item-No.
PS01-23x160H-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1254
PS01-23x160H-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1255
PL01-12x350/310-HP	Slider 'High Performance'	0150-1522
PL02-12x350/310-HP	Slider 'heavy duty' 'High Performance'	0150-1555
PL01-12x350/310-HP-L*	Slider 'High Performance L'	0150-3691

* With this slider, the motor specifications above change.

P01-23x160H/210x350-HP

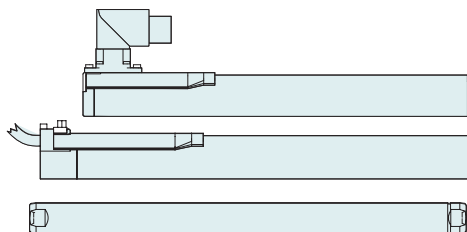
Max. Stroke: 350 mm
Peak Force: 138 N



Dimensions in mm
 *Cable Type

Technical Data P01-23x160H/210x350-HP

Stroke			
Standard Stroke (SS)	mm (in)	210	(8.26)
Extended Stroke (ES)	mm (in)	350	(13.8)
Force			
Max. Force @ 48VDC	N (lbf)	126	(28.3)
Max. Force @ 72VDC	N (lbf)	138	(31)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	30 / 46 / -	(6.7 / 10 / -)
Max. Border Force relative	%	56	
Force Constant	N/A _{pk} (lbf/A _{pk})	12.5	(2.82)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3.4	(139.9)
Max. Velocity @ 72VDC	m/s (in/s)	5.2	(209.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	10	
Max. Current @ 72VDC	A _{pk}	10.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2.4 / 3.6 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.6 / 1.1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	510 / 220 / -	
Mechanical Data			
Slider Length	mm (in)	420	(17)
Slider Mass	g (lb)	340	(0.75)



Item	Description	Item-No.
PS01-23x160H-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1254
PS01-23x160H-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1255
PL01-12x420/380-HP	Slider 'High Performance'	0150-1523
PL02-12x420/380-HP	Slider 'heavy duty' 'High Performance'	0150-1554
PL01-12x420/380-HP-L*	Slider 'High Performance L'	0150-3692

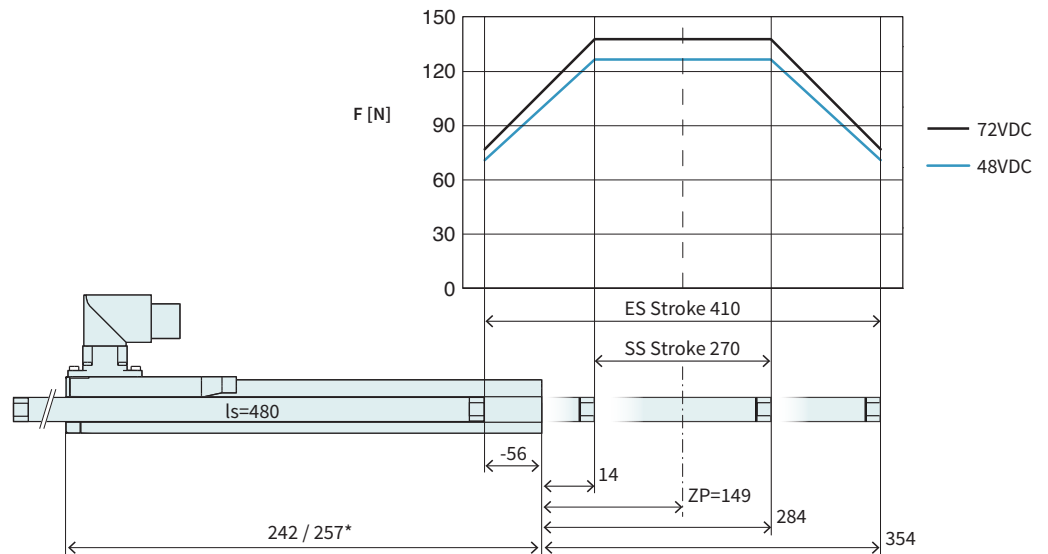
* With this slider, the motor specifications above change.

P01-23x160H/270x410-HP

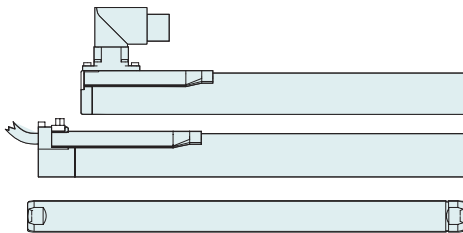
3

Max. Stroke: 410 mm
Peak Force: 138 N

Dimensions in mm
 *Cable Type



Technical Data P01-23x160H/270x410-HP				
Stroke				
Standard Stroke (SS)	mm (in)		270	(10.59)
Extended Stroke (ES)	mm (in)		410	(16.1)
Force				
Max. Force @ 48VDC	N (lbf)		126	(28.3)
Max. Force @ 72VDC	N (lbf)		138	(31)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		30 / 46 / -	(6.7 / 10 / -)
Max. Border Force relative	%		56	
Force Constant	N/A _{pk} (lbf/A _{pk})		12.5	(2.82)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.4	(139.9)
Max. Velocity @ 72VDC	m/s (in/s)		5.2	(209.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		10	
Max. Current @ 72VDC	A _{pk}		10.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.4 / 3.6 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		510 / 220 / -	
Mechanical Data				
Slider Length	mm (in)		480	(19)
Slider Mass	g (lb)		390	(0.86)

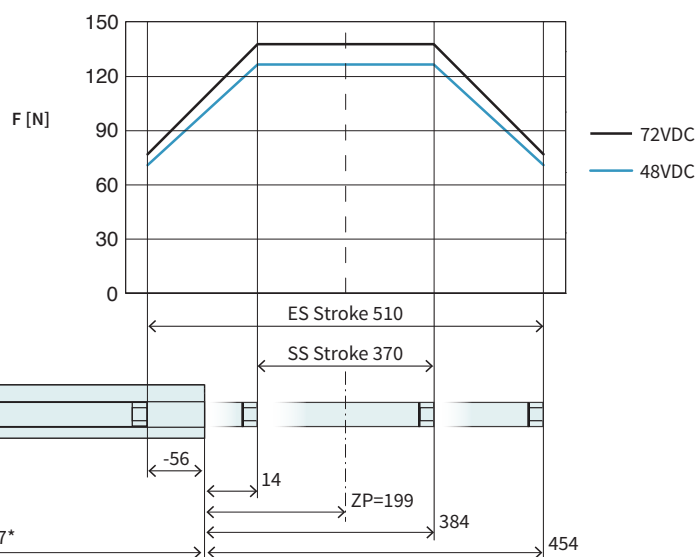


Item	Description	Item-No.
PS01-23x160H-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1254
PS01-23x160H-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1255
PL01-12x480/440-HP	Slider 'High Performance'	0150-1524
PL02-12x480/440-HP	Slider 'heavy duty' 'High Performance'	0150-2519
PL01-12x480/440-HP-L*	Slider 'High Performance L'	0150-3693

* With this slider, the motor specifications above change.

P01-23x160H/370x510-HP

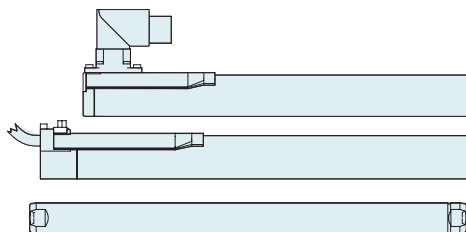
Max. Stroke: 510 mm
Peak Force: 138 N



Dimensions in mm
 *Cable Type

Technical Data P01-23x160H/370x510-HP

Stroke			
Standard Stroke (SS)	mm (in)	370 (14.59)	
Extended Stroke (ES)	mm (in)	510 (20.1)	
Force			
Max. Force @ 48VDC	N (lbf)	126 (28.3)	
Max. Force @ 72VDC	N (lbf)	138 (31)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	30 / 46 / - (6.7 / 10 / -)	
Max. Border Force relative	%	56	
Force Constant	N/A _{pk} (lbf/A _{pk})	12.5 (2.82)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3.4 (139.9)	
Max. Velocity @ 72VDC	m/s (in/s)	5.2 (209.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	10	
Max. Current @ 72VDC	A _{pk}	10.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2.4 / 3.6 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.6 / 1.1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	510 / 220 / -	
Mechanical Data			
Slider Length	mm (in)	580 (23)	
Slider Mass	g (lb)	480 (1.06)	



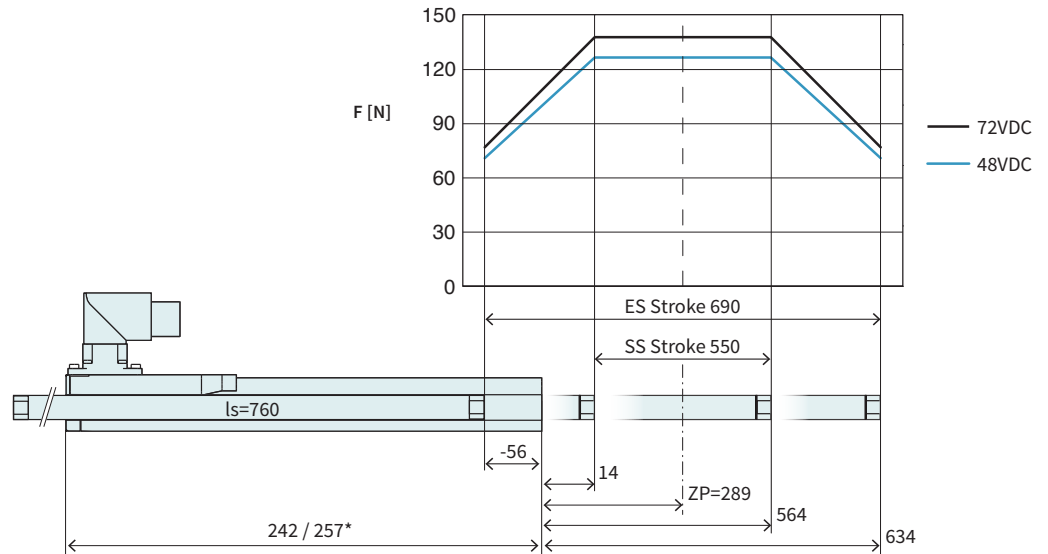
Item	Description	Item-No.
PS01-23x160H-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1254
PS01-23x160H-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1255
PL01-12x580/540-HP	Slider 'High Performance'	0150-1525
PL02-12x580/540-HP	Slider 'heavy duty' 'High Performance'	0150-2520
PL01-12x580/540-HP-L*	Slider 'High Performance L'	0150-3694

* With this slider, the motor specifications above change.

P01-23x160H/550x690-HP

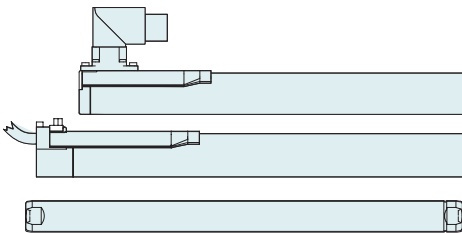
3

Max. Stroke: 690 mm
Peak Force: 138 N



Dimensions in mm
 *Cable Type

Technical Data P01-23x160H/550x690-HP				
Stroke				
Standard Stroke (SS)	mm (in)		550 (21.69)	
Extended Stroke (ES)	mm (in)		690 (27.19)	
Force				
Max. Force @ 48VDC	N (lbf)		126 (28.3)	
Max. Force @ 72VDC	N (lbf)		138 (31)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		30 / 46 / -	(6.7 / 10 / -)
Max. Border Force relative	%		56	
Force Constant	N/A _{pk} (lbf/A _{pk})		12.5	(2.82)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.4 (139.9)	
Max. Velocity @ 72VDC	m/s (in/s)		5.2 (209.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		10	
Max. Current @ 72VDC	A _{pk}		10.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.4 / 3.6 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		510 / 220 / -	
Mechanical Data				
Slider Length	mm (in)		760 (30)	
Slider Mass	g (lb)		630 (1.39)	

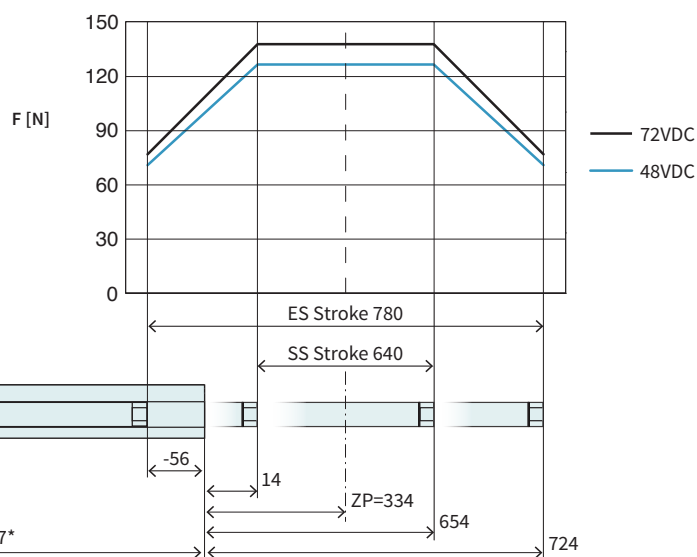


Item	Description	Item-No.
PS01-23x160H-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1254
PS01-23x160H-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1255
PL01-12x760/720-HP	Slider 'High Performance'	0150-1526
PL02-12x760/720-HP	Slider 'heavy duty' 'High Performance'	0150-2521
PL01-12x760/720-HP-L*	Slider 'High Performance L'	0150-3695

* With this slider, the motor specifications above change.

P01-23x160H/640x780-HP

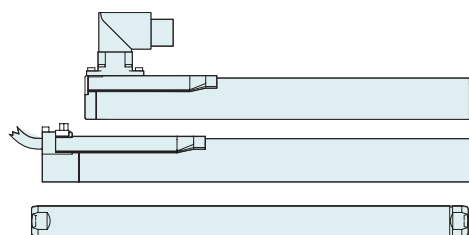
Max. Stroke: 780 mm
Peak Force: 138 N



Dimensions in mm
 *Cable Type

Technical Data P01-23x160H/640x780-HP

Stroke			
Standard Stroke (SS)	mm (in)	640 (25.19)	
Extended Stroke (ES)	mm (in)	780 (30.69)	
Force			
Max. Force @ 48VDC	N (lbf)	126 (28.3)	
Max. Force @ 72VDC	N (lbf)	138 (31)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	30 / 46 / - (6.7 / 10 / -)	
Max. Border Force relative	%	56	
Force Constant	N/A _{pk} (lbf/A _{pk})	12.5 (2.82)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3.4 (139.9)	
Max. Velocity @ 72VDC	m/s (in/s)	5.2 (209.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	10	
Max. Current @ 72VDC	A _{pk}	10.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2.4 / 3.6 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.6 / 1.1 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	510 / 220 / -	
Mechanical Data			
Slider Length	mm (in)	850 (33)	
Slider Mass	g (lb)	700 (1.54)	



Item	Description	Item-No.
PS01-23x160H-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1254
PS01-23x160H-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1255
PL01-12x850/810-HP	Slider 'High Performance'	0150-1527
PL02-12x850/810-HP	Slider 'heavy duty' 'High Performance'	0150-2516
PL01-12x850/810-HP-L*	Slider 'High Performance L'	on request

* With this slider, the motor specifications above change.

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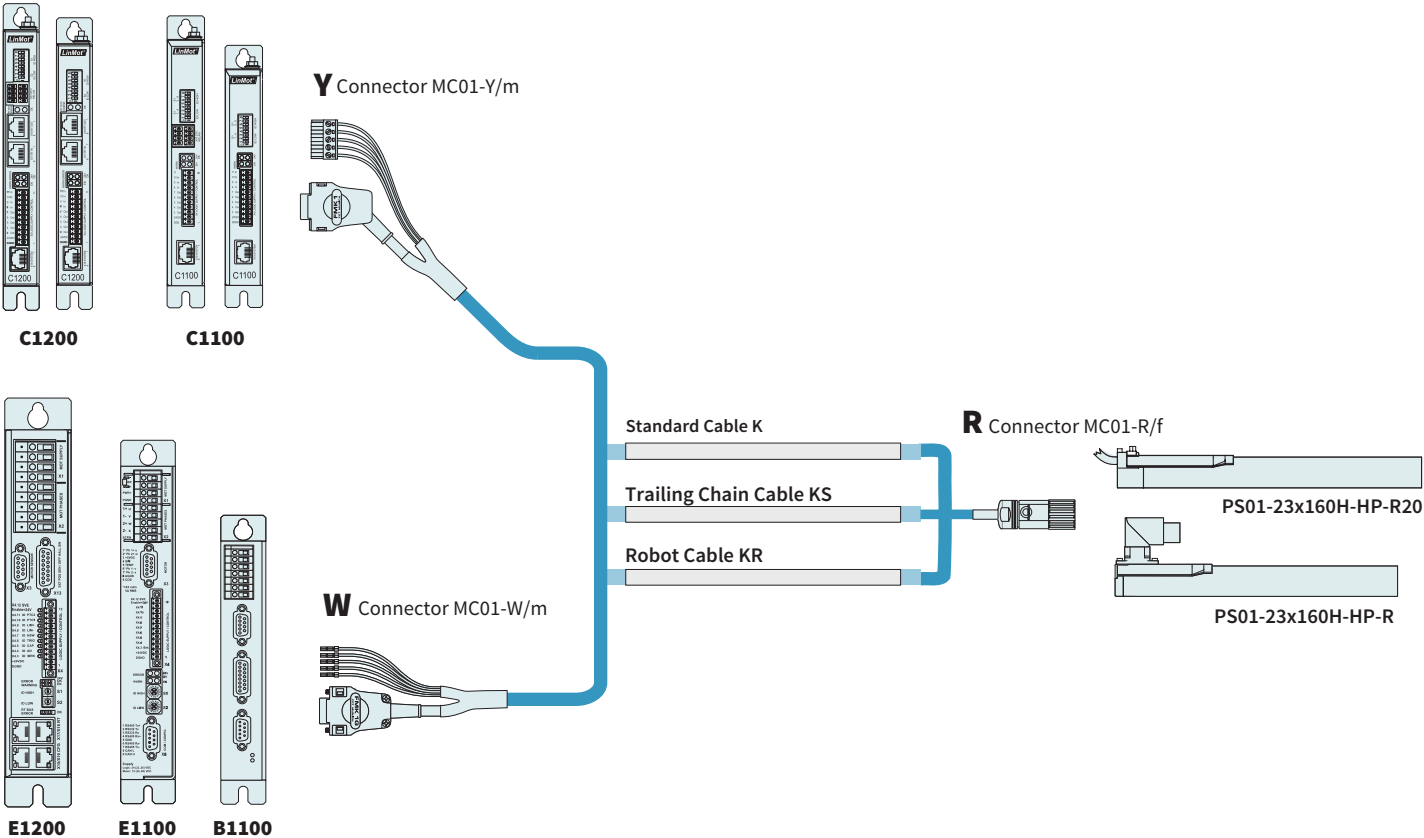


HM01-23x160/80		Linear Module 23x160 with 80 mm Stroke		
→	H-Guide	H01-23x166/80	H-Guide for P01-23x160, Stroke max 80mm	0150-5017
		H01-23x166/80-GF	H-Guide for P01-23x160, Stroke max 80mm	0150-5077
	Stator	PS01-23x160H-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1254
		PS01-23x160H-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1255
→	Slider	PL01-12x290/250-HP	Slider 'High Performance'	0150-1521
HM01-23x160/180		Linear Module 23x160 with 180 mm Stroke		
→	H-Guide	H01-23x166/180	H-Guide for P01-23x160, Stroke max 180mm	0150-5018
		H01-23x166/180-GF	H-Guide for P01-23x160, Stroke max 180mm	0150-5078
→	Stator	PS01-23x160H-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1254
		PS01-23x160H-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1255
→	Slider	PL01-12x420/380-HP	Slider 'High Performance'	0150-1523
HM01-23x160/280		Linear Module 23x160 with 280 mm Stroke		
→	H-Guide	H01-23x166/280	H-Guide for P01-23x160, Stroke max 280mm	0150-5019
		H01-23x166/280-GF	H-Guide for P01-23x160, Stroke max 280mm	0150-5079
→	Stator	PS01-23x160H-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1254
		PS01-23x160H-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1255
→	Slider	PL01-12x480/440-HP	Slider 'High Performance'	0150-1524
Accessories				
→	Fan	HV01-23	Fan cooling for H01-23	0150-5050
→	MagSpring	MF01-20/H23	Flange MagSpring 20 / H-Guide 23	0250-2306
→		MA01-20/H23	Adapter MagSpring 20 / H-Guide 23	0250-0116
→	Centering sleeve	HC01-09/04	Centering sleeve D9x4mm	0150-3251

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

Motor Cable

3



ORDERING INFORMATION

STANDARD CABLE		
Item	Description	Item-No.
K05-W/R-2	Motor Cable W/R, 2 m	0150-2119
K05-W/R-4	Motor Cable W/R, 4 m	0150-2120
K05-W/R-6	Motor Cable W/R, 6 m	0150-2121
K05-W/R-8	Motor Cable W/R, 8 m	0150-2122
K05-W/R-	Motor Cable W/R, Custom length	0150-3262
K05-Y/R-2	Motor Cable Y/R, 2 m	0150-2421
K05-Y/R-4	Motor Cable Y/R, 4 m	0150-2422
K05-Y/R-6	Motor Cable Y/R, 6 m	0150-2423
K05-Y/R-8	Motor Cable Y/R, 8 m	0150-2424
K05-Y-Fe/R-	Motor Cable Y/R, Custom length	0150-3501

TRAILING CHAIN CABLE

Item	Description	Item-No.
KS05-W/R-4	Trailing Chain Cable W/R, 4 m	0150-2106
KS05-W/R-6	Trailing Chain Cable W/R, 6 m	0150-2131
KS05-W/R-8	Trailing Chain Cable W/R, 8 m	0150-2107
KS05-W/R-	Trailing Chain Cable W/R, Custom length	0150-3256
KS05-Y/R-4	Trailing Chain Cable Y/R, 4 m	0150-2433
KS05-Y/R-6	Trailing Chain Cable Y/R, 6 m	0150-2434
KS05-Y/R-8	Trailing Chain Cable Y/R, 8 m	0150-2435
KS05-Y/R-	Trailing Chain Cable Y/R, Custom length	0150-3507

ROBOT CABLE

Item	Description	Item-No.
KR05-W/R-	Robot Cable KR05-W/R, Custom length	0150-3336
KR05-Y-Fe/R-	Robot Cable KR05-Y-Fe/R, Custom length	0150-3512

CONNECTOR & CABLE (INDIVIDUAL)

Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-R/f	Motor Connector R/f	0150-3129
MC01-D/f	Motor Connector D/f	0150-3025
K05-04/05	Motor Cable per m	0150-1920
KS05-04/05	Trailing Chain Cable per m	0150-1938
KR05-04/05	Robot Cable per m	0150-1846

MOTOR FLANGES



Item	Description	Item-No.
PF02-23x120	Flange 23x120 mm	0150-2103
PF02-23x170	Flange 23x170 mm	0150-2117

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-23	Fan cooling for H01-23 and PF02-23	0150-5050

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-12	Fixed End Washer Set for 12 mm sliders	0150-3085
PLF01-12-Ni	Fixed End Washer Set for 12 mm sliders nickel-plated	0150-3573
PLL02-12	Floating support for PL01-12 Sliders	0150-3111

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

WIPERS



Item	Description	Item-No.
PA01-23/12-F	Wiper front side for PS01-23x...	0150-3125

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D-Encoder	Encoder Cable (Length in m)	0150-3166
KS025-D/D15-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

Handwriting practice area with 20 horizontal dotted lines.

LINEAR MOTORS P01-37Sx60-HP



- ✓ Short design
- ✓ Integrated mounting flange
- ✓ Integrated mounting flange
- ✓ Free positionable cable outlet
- ✓ For use where space is limited and in multi-axis applications

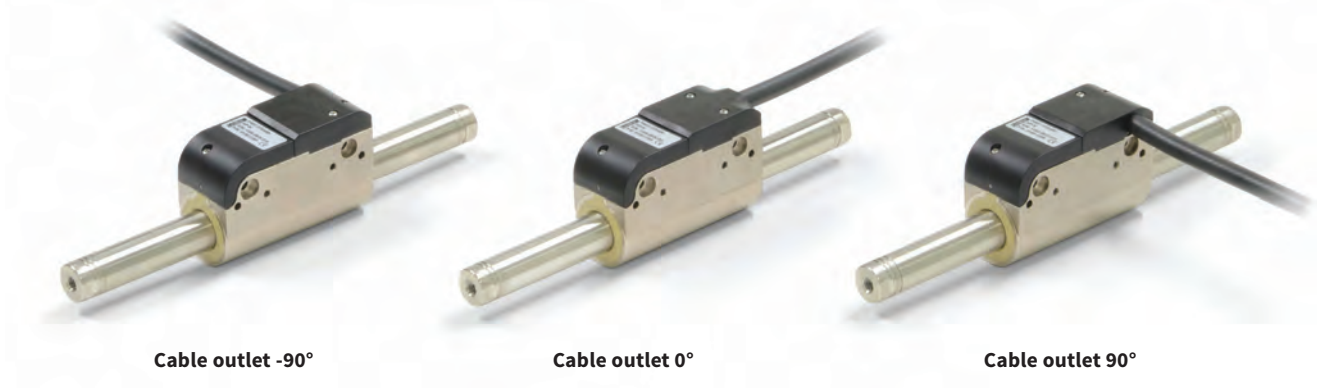
LINEAR MOTORS P01-37Sx60-HP

Technical Data 175

Motor Specifications

P01-37Sx60/20x40-HP	179
P01-37Sx60/60x80-HP	180
P01-37Sx60/100x120-HP	181
P01-37Sx60/160x180-HP	182
P01-37Sx60/220x240-HP	183
P01-37Sx60/260x280-HP	184
P01-37Sx60/360x380-HP	185
P01-37Sx60/460x480-HP	186
P01-37Sx60/560x580-HP	187
P01-37Sx60/660x680-HP	188
P01-37Sx60/760x780-HP	189
P01-37Sx60/860x880-HP	190
P01-37Sx60/1060x1080-HP	191
P01-37Sx60/1260x1280-HP	192
P01-37Sx60/1460x1480-HP	193

Accessories 194



MOTOR FAMILY P01-37Sx60-HP

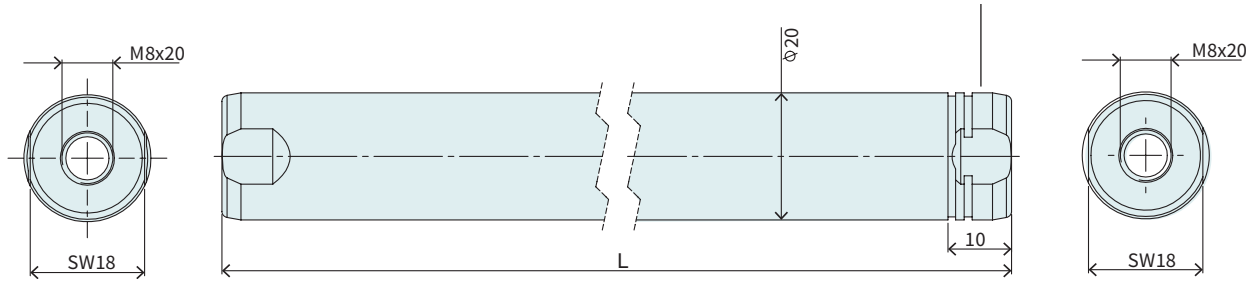
Technical Data				
Stroke				
Standard Stroke (SS)	mm (in)		≤ 1460	(≤ 57.5)
Extended Stroke (ES)	mm (in)		≤ 1480	(≤ 58.3)
Force				
Max. Force @ 48VDC	N (lbf)		128	(28.7)
Max. Force @ 72VDC	N (lbf)		128	(28.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		16 / 33 / -	(3.7 / 7.3 / -)
Max. Border Force relative	%		≤ 83	
Force Constant	N/A _{pk} (lbf/A _{pk})		13.4	(3.02)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.2	(129.9)
Max. Velocity @ 72VDC	m/s (in/s)		4.9	(189.9)
Position Detection				
Position Resolution	mm (in)		0.005	(0.0002)
Repeatability	mm (in)		±0.05	(±0.002)
Position Resolution with ES	mm (in)		0.001	(0.00004)
Repeatability with ES	mm (in)		±0.01	(±0.0004)
Linearity with ES	mm (in)		±0.01	(±0.0004)
Electrical Data				
Max. Current @ 48VDC	A _{pk}		9.4	
Max. Current @ 72VDC	A _{pk}		9.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.2 / 2.4 / -	
Terminal Resistance 25 °C / 120 °C	Ohm		3.2 / 4.7	
Terminal Inductivity	mH		1.6	
Magnetic Period	mm (in)		40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		12 / 3 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2400 / 600 / -	
Mechanical Data				
Stator Diameter	mm (in)		37	(1.5)
Stator Length [Connector type / Cable type]	mm (in)		90	(3.5)
Stator Mass	g (lb)		520	(1.14)
Slider Diameter	mm (in)		20	(0.79)
Slider Length	mm (in)		160 - 1600	(6.3 - 63)
Slider Mass	g (lb)		310 - 3620	(0.68 - 7.96)
IP Code			IP 50	

SLIDER

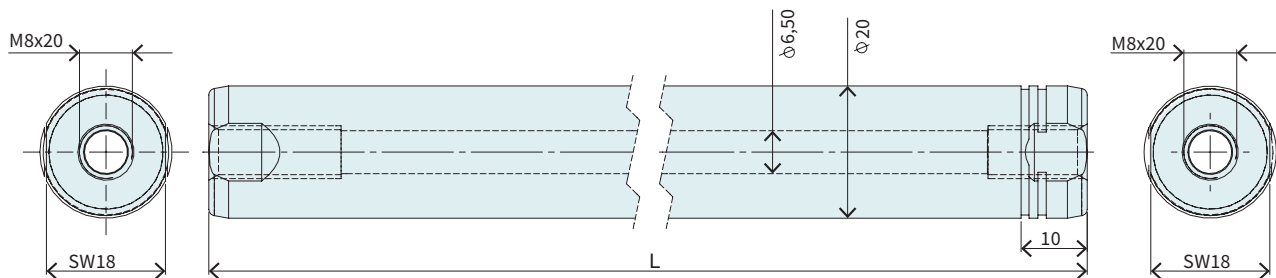
3

Slider HP / Heavy Duty HP

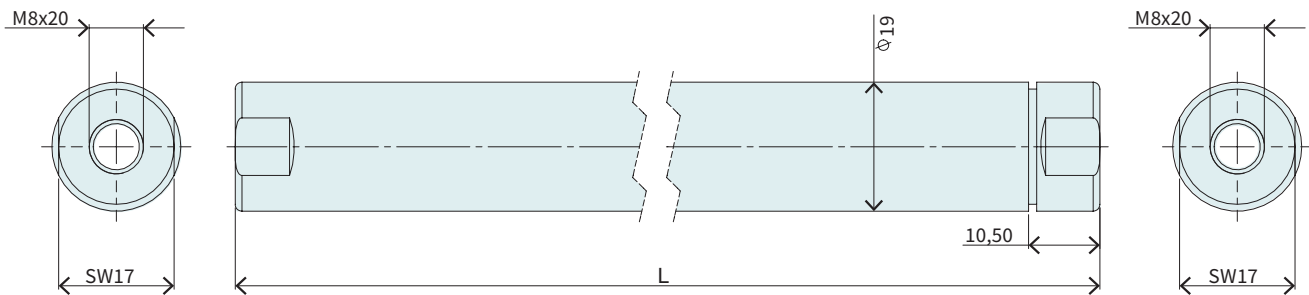
Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.



Hollow slider HP



High-Clearance Slider



Slider High Performance				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-20x160/100-HP	Slider 'High Performance'	40	20	0150-2513
PL01-20x200/140-HP	Slider 'High Performance'	80	60	0150-2512
PL01-20x240/180-HP	Slider 'High Performance'	120	100	0150-1505
PL01-20x300/240-HP	Slider 'High Performance'	180	160	0150-1506
PL01-20x360/300-HP	Slider 'High Performance'	240	220	0150-1507
PL01-20x400/340-HP	Slider 'High Performance'	280	260	0150-1508
PL01-20x500/440-HP	Slider 'High Performance'	380	360	0150-1509
PL01-20x600/540-HP	Slider 'High Performance'	480	460	0150-1510
PL01-20x700/640-HP	Slider 'High Performance'	580	560	0150-1511
PL01-20x800/740-HP	Slider 'High Performance'	680	660	0150-1512
PL01-20x900/840-HP	Slider 'High Performance'	780	760	0150-1513
PL01-20x1000/940-HP	Slider 'High Performance'	880	860	0150-1514
PL01-20x1200/1140-HP	Slider 'High Performance'	1080	1060	0150-1515
PL01-20x1400/1340-HP	Slider 'High Performance'	1280	1260	0150-1516
PL01-20x1600/1540-HP	Slider 'High Performance'	1480	1460	0150-1517

Slider Heavy Duty High Performance				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL02-20x160/100-HP	Slider 'heavy duty' 'High Performance	40	20	on request
PL02-20x200/140-HP	Slider 'heavy duty' 'High Performance	80	60	on request
PL02-20x240/180-HP	Slider 'heavy duty' 'High Performance	120	100	0150-2162
PL02-20x300/240-HP	Slider 'heavy duty' 'High Performance	180	160	0150-2163
PL02-20x360/300-HP	Slider 'heavy duty' 'High Performance	240	220	0150-2164
PL02-20x400/340-HP	Slider 'heavy duty' 'High Performance	280	260	0150-2165
PL02-20x500/440-HP	Slider 'heavy duty' 'High Performance	380	360	0150-2166
PL02-20x600/540-HP	Slider 'heavy duty' 'High Performance	480	460	0150-2167
PL02-20x700/640-HP	Slider 'heavy duty' 'High Performance	580	560	0150-2168
PL02-20x800/740-HP	Slider 'heavy duty' 'High Performance	680	660	0150-2169
PL02-20x900/840-HP	Slider 'heavy duty' 'High Performance	780	760	0150-2170

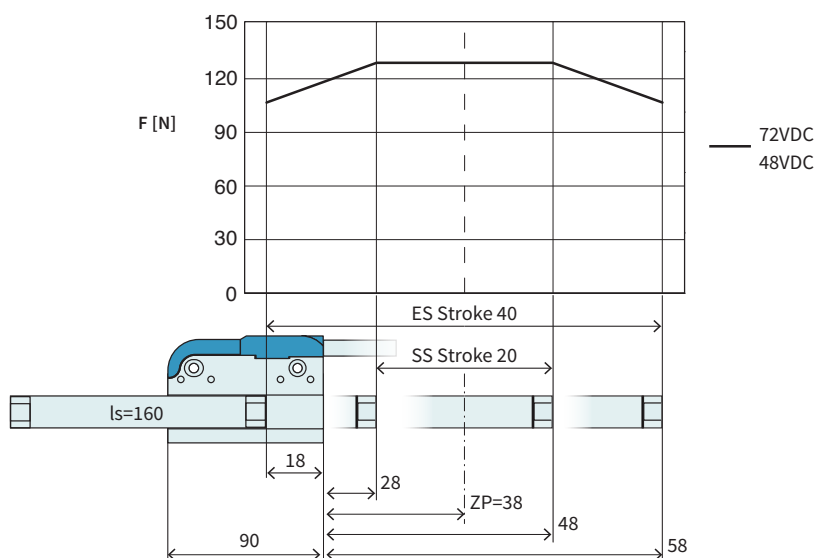
Hollow slider High Performance				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-20x160/100-HP-L	Slider 'High Performance L'	40	20	on request
PL01-20x200/140-HP-L	Slider 'High Performance L'	80	60	on request
PL01-20x240/180-HP-L	Slider 'High Performance L'	120	100	0150-2540
PL01-20x300/240-HP-L	Slider 'High Performance L'	180	160	0150-3696
PL01-20x360/300-HP-L	Slider 'High Performance L'	240	220	0150-1537
PL01-20x400/340-HP-L	Slider 'High Performance L'	280	260	0150-3697
PL01-20x500/440-HP-L	Slider 'High Performance L'	380	360	0150-3698
PL01-20x600/540-HP-L	Slider 'High Performance L'	480	460	0150-3699
PL01-20x700/640-HP-L	Slider 'High Performance L'	580	560	0150-3700
PL01-20x800/740-HP-L	Slider 'High Performance L'	680	660	0150-3701
PL01-20x900/840-HP-L	Slider 'High Performance L'	780	760	0150-3702
PL01-20x1000/940-HP-L	Slider 'High Performance L'	880	860	0150-3703
PL01-20x1200/1140-HP-L	Slider 'High Performance L'	1080	1060	0150-2510
PL01-20x1400/1340-HP-L	Slider 'High Performance L'	1280	1260	on request
PL01-20x1600/1540-HP-L	Slider 'High Performance L'	1480	1460	on request

High-Clearance Slider				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-19x160/100	Slider 'high clearance'	40	20	on request
PL01-19x200/140	Slider 'high clearance'	80	60	on request
PL01-19x240/160	Slider 'high clearance'	100	80	0150-1448
PL01-19x300/220	Slider 'high clearance'	160	140	0150-1449
PL01-19x395/320	Slider 'high clearance'	360	340	0150-1452
PL01-19x500/420	Slider 'high clearance'	460	440	0150-1455
PL01-19x600/520	Slider 'high clearance'	560	540	0150-1456

P01-37Sx60/20x40-HP

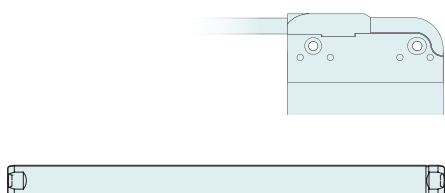
Max. Stroke: 40 mm
Peak Force: 128 N

Dimensions in mm



Technical Data P01-37Sx60/20x40-HP

Stroke				
Standard Stroke (SS)	mm (in)		20 (0.78)	
Extended Stroke (ES)	mm (in)		40 (1.57)	
Force				
Max. Force @ 48VDC	N (lbf)		128 (28.7)	
Max. Force @ 72VDC	N (lbf)		128 (28.7)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		16 / 33 / - (3.7 / 7.3 / -)	
Max. Border Force relative	%		83	
Force Constant	N/A _{pk} (lbf/A _{pk})		13.4 (3.02)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.2 (129.9)	
Max. Velocity @ 72VDC	m/s (in/s)		4.9 (189.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 1.35	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		9.4	
Max. Current @ 72VDC	A _{pk}		9.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.2 / 2.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		12 / 3 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2400 / 600 / -	
Mechanical Data				
Slider Length	mm (in)		160 (6.3)	
Slider Mass	g (lb)		310 (0.68)	



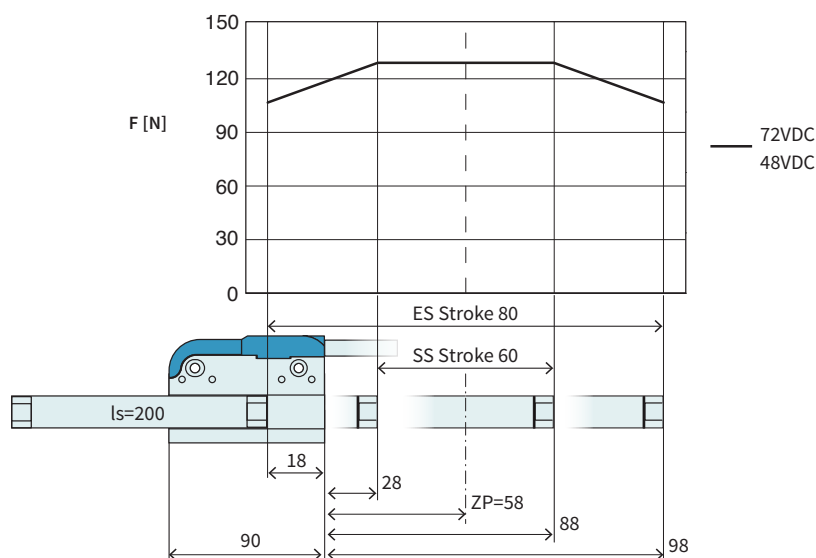
Item	Description	Item-No.
PS01-37Sx60-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1295
PL01-20x160/100-HP	Slider 'High Performance'	0150-2513
PL02-20x160/100-HP	Slider 'heavy duty' 'High Performance'	on request
PL01-20x160/100-HP-L*	Slider 'High Performance L'	on request
PL01-19x160/100*	Slider 'high clearance'	on request

* With this slider, the motor specifications above change.

P01-37Sx60/60x80-HP

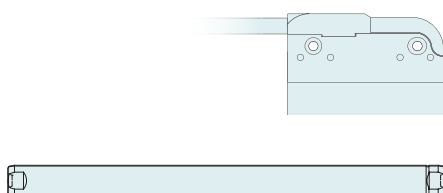
Max. Stroke: 80 mm
Peak Force: 128 N

Dimensions in mm



Technical Data P01-37Sx60/60x80-HP

Stroke				
Standard Stroke (SS)	mm	(in)	60	(2.35)
Extended Stroke (ES)	mm	(in)	80	(3.14)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	128	(28.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	16 / 33 / -	(3.7 / 7.3 / -)
Max. Border Force relative	%		83	
Force Constant	N/A _{pk}	(lbf/A _{pk})	13.4	(3.02)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	3.2	(129.9)
Max. Velocity @ 72VDC	m/s	(in/s)	4.9	(189.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.7	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		9.4	
Max. Current @ 72VDC	A _{pk}		9.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.2 / 2.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		12 / 3 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2400 / 600 / -	
Mechanical Data				
Slider Length	mm	(in)	200	(7.9)
Slider Mass	g	(lb)	400	(0.88)



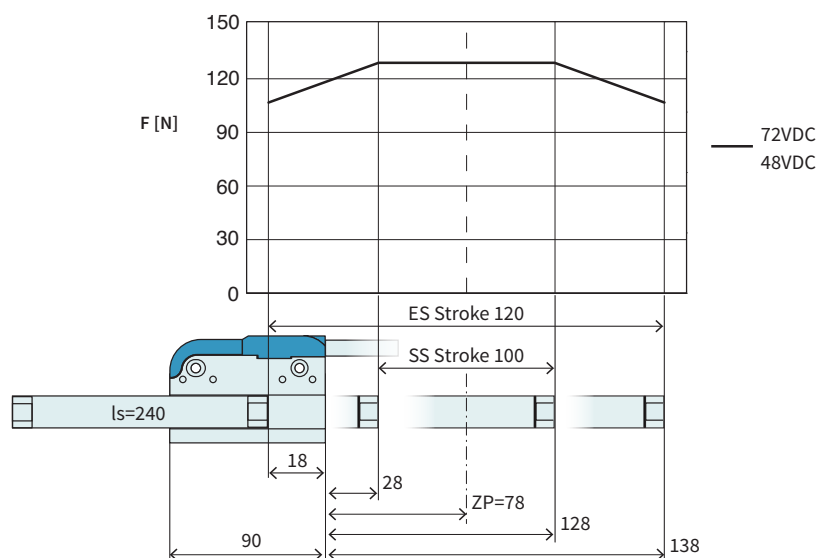
Item	Description	Item-No.
PS01-37Sx60-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1295
PL01-20x200/140-HP	Slider 'High Performance'	0150-2512
PL02-20x200/140-HP	Slider 'heavy duty' 'High Performance'	on request
PL01-20x200/140-HP-L*	Slider 'High Performance L'	on request
PL01-19x200/140*	Slider 'high clearance'	on request

* With this slider, the motor specifications above change.

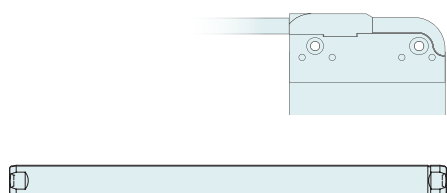
P01-37Sx60/100x120-HP

Max. Stroke: 120 mm
Peak Force: 128 N

Dimensions in mm



Technical Data P01-37Sx60/100x120-HP				
Stroke				
Standard Stroke (SS)	mm (in)		100 (3.93)	
Extended Stroke (ES)	mm (in)		120 (4.71)	
Force				
Max. Force @ 48VDC	N (lbf)		128 (28.7)	
Max. Force @ 72VDC	N (lbf)		128 (28.7)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		16 / 33 / -	(3.7 / 7.3 / -)
Max. Border Force relative	%		83	
Force Constant	N/A _{pk} (lbf/A _{pk})		13.4	(3.02)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.2 (129.9)	
Max. Velocity @ 72VDC	m/s (in/s)		4.9 (189.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.5	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		9.4	
Max. Current @ 72VDC	A _{pk}		9.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.2 / 2.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		12 / 3 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2400 / 600 / -	
Mechanical Data				
Slider Length	mm (in)		240 (9.4)	
Slider Mass	g (lb)		490 (1.08)	

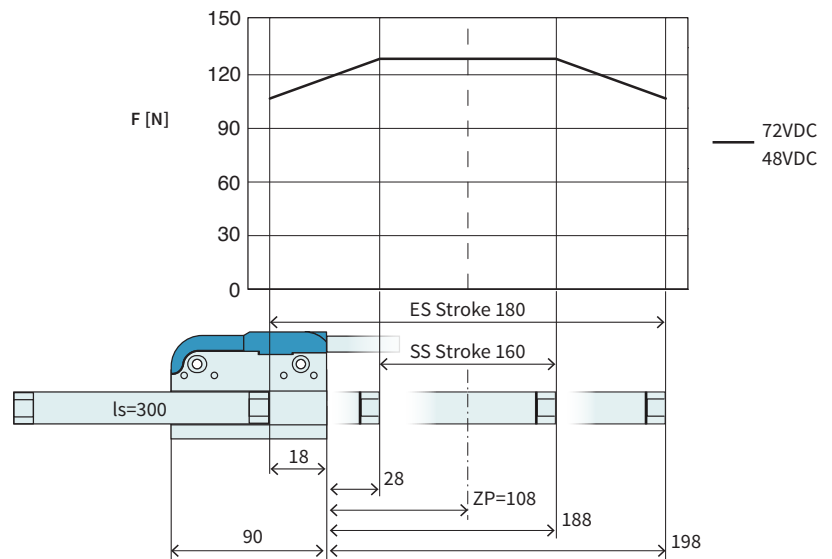


Item	Description	Item-No.
PS01-37Sx60-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1295
PL01-20x240/180-HP	Slider 'High Performance'	0150-1505
PL02-20x240/180-HP	Slider 'heavy duty' 'High Performance'	0150-2162
PL01-20x240/180-HP-L*	Slider 'High Performance L'	0150-2540
PL01-19x240/160*	Slider 'high clearance'	0150-1448

* With this slider, the motor specifications above change.

P01-37Sx60/160x180-HP

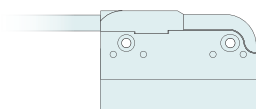
Max. Stroke: 180 mm
Peak Force: 128 N



Dimensions in mm

Technical Data P01-37Sx60/160x180-HP

Stroke			
Standard Stroke (SS)	mm (in)	160	(6.29)
Extended Stroke (ES)	mm (in)	180	(7.08)
Force			
Max. Force @ 48VDC	N (lbf)	128	(28.7)
Max. Force @ 72VDC	N (lbf)	128	(28.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	16 / 33 / -	(3.7 / 7.3 / -)
Max. Border Force relative	%	83	
Force Constant	N/A _{pk} (lbf/A _{pk})	13.4	(3.02)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3.2	(129.9)
Max. Velocity @ 72VDC	m/s (in/s)	4.9	(189.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.4	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	9.4	
Max. Current @ 72VDC	A _{pk}	9.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.2 / 2.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	12 / 3 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2400 / 600 / -	
Mechanical Data			
Slider Length	mm (in)	300	(12)
Slider Mass	g (lb)	630	(1.1)



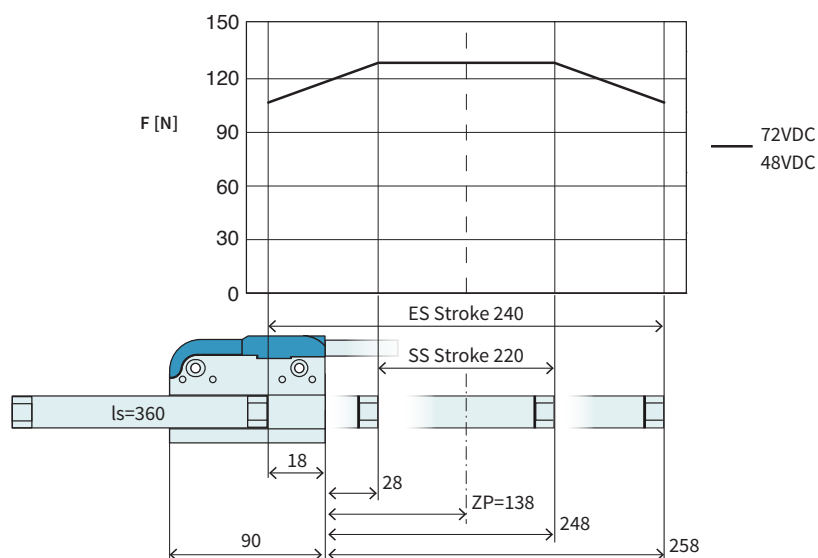
Item	Description	Item-No.
PS01-37Sx60-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1295
PL01-20x300/240-HP	Slider 'High Performance'	0150-1506
PL02-20x300/240-HP	Slider 'heavy duty' 'High Performance'	0150-2163
PL01-20x300/240-HP-L	Slider 'High Performance L'	0150-3696
PL01-19x300/220*	Slider 'high clearance'	0150-1449

* With this slider, the motor specifications above change.

P01-37Sx60/220x240-HP

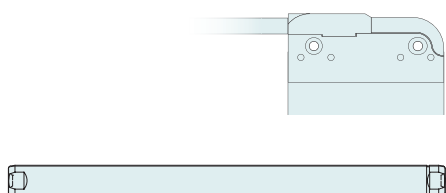
Max. Stroke: 240 mm
Peak Force: 128 N

Dimensions in mm



Technical Data P01-37Sx60/220x240-HP

Stroke				
Standard Stroke (SS)	mm	(in)	220	(8.65)
Extended Stroke (ES)	mm	(in)	240	(9.44)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	128	(28.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	16 / 33 / -	(3.7 / 7.3 / -)
Max. Border Force relative	%		83	
Force Constant	N/A _{pk}	(lbf/A _{pk})	13.4	(3.02)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	3.2	(129.9)
Max. Velocity @ 72VDC	m/s	(in/s)	4.9	(189.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		9.4	
Max. Current @ 72VDC	A _{pk}		9.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.2 / 2.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		12 / 3 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2400 / 600 / -	
Mechanical Data				
Slider Length	mm	(in)	360	(14)
Slider Mass	g	(lb)	760	(1.67)

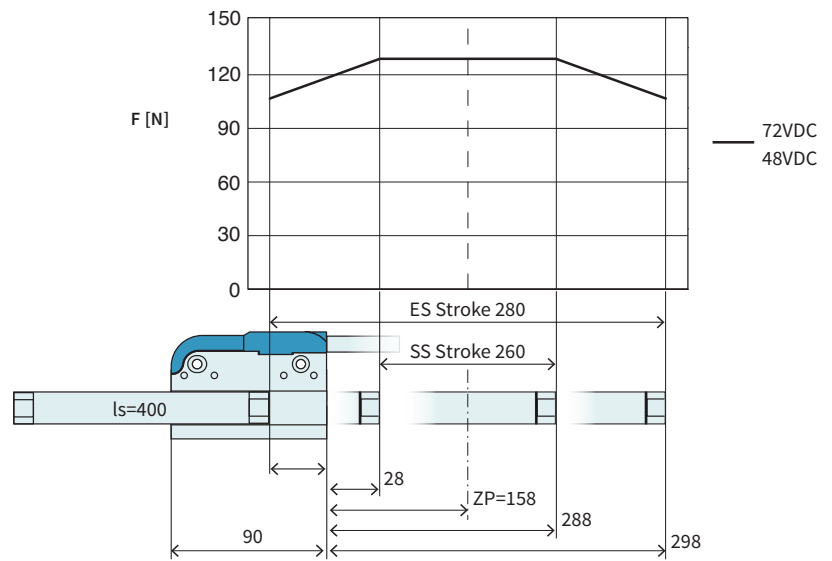


Item	Description	Item-No.
PS01-37Sx60-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1295
PL01-20x360/300-HP	Slider 'High Performance'	0150-1507
PL02-20x360/300-HP	Slider 'heavy duty' 'High Performance'	0150-2164
PL01-20x360/300-HP-L*	Slider 'High Performance L'	0150-1537

* With this slider, the motor specifications above change.

P01-37Sx60/260x280-HP

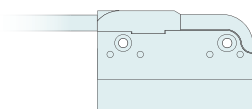
Max. Stroke: 280 mm
Peak Force: 128 N



Dimensions in mm

Technical Data P01-37Sx60/260x280-HP

Stroke			
Standard Stroke (SS)	mm (in)	260	(10.19)
Extended Stroke (ES)	mm (in)	280	(10.99)
Force			
Max. Force @ 48VDC	N (lbf)	128	(28.7)
Max. Force @ 72VDC	N (lbf)	128	(28.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	16 / 33 / -	(3.7 / 7.3 / -)
Max. Border Force relative	%	83	
Force Constant	N/A _{pk} (lbf/A _{pk})	13.4	(3.02)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3.2	(129.9)
Max. Velocity @ 72VDC	m/s (in/s)	4.9	(189.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.3	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	9.4	
Max. Current @ 72VDC	A _{pk}	9.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.2 / 2.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	12 / 3 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2400 / 600 / -	
Mechanical Data			
Slider Length	mm (in)	400	(16)
Slider Mass	g (lb)	860	(1.89)



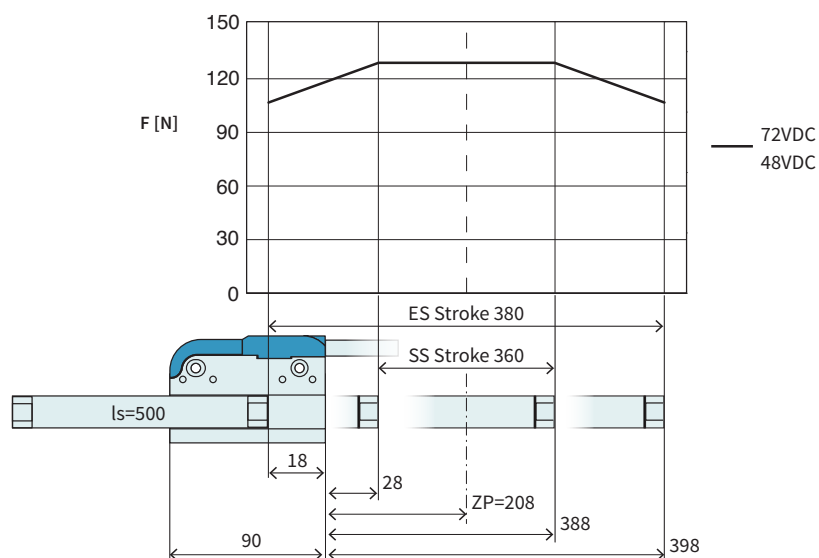
Item	Description	Item-No.
PS01-37Sx60-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1295
PL01-20x400/340-HP	Slider 'High Performance'	0150-1508
PL02-20x400/340-HP	Slider 'heavy duty' 'High Performance'	0150-2165
PL01-20x400/340-HP-L*	Slider 'High Performance L'	0150-3697
PL01-19x395/320*	Slider 'high clearance'	0150-1452

* With this slider, the motor specifications above change.

P01-37Sx60/360x380-HP

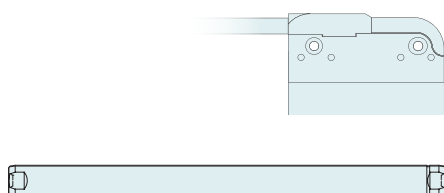
Max. Stroke: 380 mm
Peak Force: 128 N

Dimensions in mm



Technical Data P01-37Sx60/360x380-HP

Stroke				
Standard Stroke (SS)	mm (in)		360 (14.19)	
Extended Stroke (ES)	mm (in)		380 (14.99)	
Force				
Max. Force @ 48VDC	N (lbf)		128 (28.7)	
Max. Force @ 72VDC	N (lbf)		128 (28.7)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		16 / 33 / -	(3.7 / 7.3 / -)
Max. Border Force relative	%		83	
Force Constant	N/A _{pk} (lbf/A _{pk})		13.4	(3.02)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.2 (129.9)	
Max. Velocity @ 72VDC	m/s (in/s)		4.9 (189.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		9.4	
Max. Current @ 72VDC	A _{pk}		9.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.2 / 2.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		12 / 3 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2400 / 600 / -	
Mechanical Data				
Slider Length	mm (in)		500 (20)	
Slider Mass	g (lb)		1090 (2.4)	

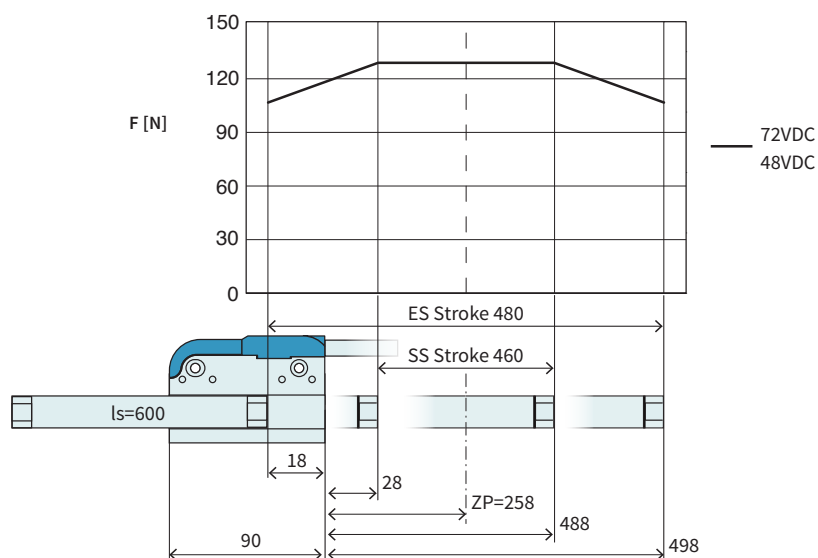


Item	Description	Item-No.
PS01-37Sx60-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1295
PL01-20x500/440-HP	Slider 'High Performance'	0150-1509
PL02-20x500/440-HP	Slider 'heavy duty' 'High Performance'	0150-2166
PL01-20x500/440-HP-L*	Slider 'High Performance L'	0150-3698
PL01-19x500/420*	Slider 'high clearance'	0150-1455

* With this slider, the motor specifications above change.

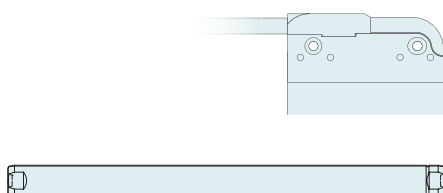
P01-37Sx60/460x480-HP

Max. Stroke: 480 mm
Peak Force: 128 N



Technical Data P01-37Sx60/460x480-HP

Stroke			
Standard Stroke (SS)	mm (in)	460 (18.1)	
Extended Stroke (ES)	mm (in)	480 (18.89)	
Force			
Max. Force @ 48VDC	N (lbf)	128 (28.7)	
Max. Force @ 72VDC	N (lbf)	128 (28.7)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	16 / 33 / - (3.7 / 7.3 / -)	
Max. Border Force relative	%	83	
Force Constant	N/A _{pk} (lbf/A _{pk})	13.4 (3.02)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3.2 (129.9)	
Max. Velocity @ 72VDC	m/s (in/s)	4.9 (189.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	9.4	
Max. Current @ 72VDC	A _{pk}	9.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.2 / 2.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	12 / 3 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2400 / 600 / -	
Mechanical Data			
Slider Length	mm (in)	600 (24)	
Slider Mass	g (lb)	1330 (2.93)	



Item	Description	Item-No.
PS01-37Sx60-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1295
PL01-20x600/540-HP	Slider 'High Performance'	0150-1510
PL02-20x600/540-HP	Slider 'heavy duty' 'High Performance'	0150-2167
PL01-20x600/540-HP-L*	Slider 'High Performance L'	0150-3699
PL01-19x600/520*	Slider 'high clearance'	0150-1456

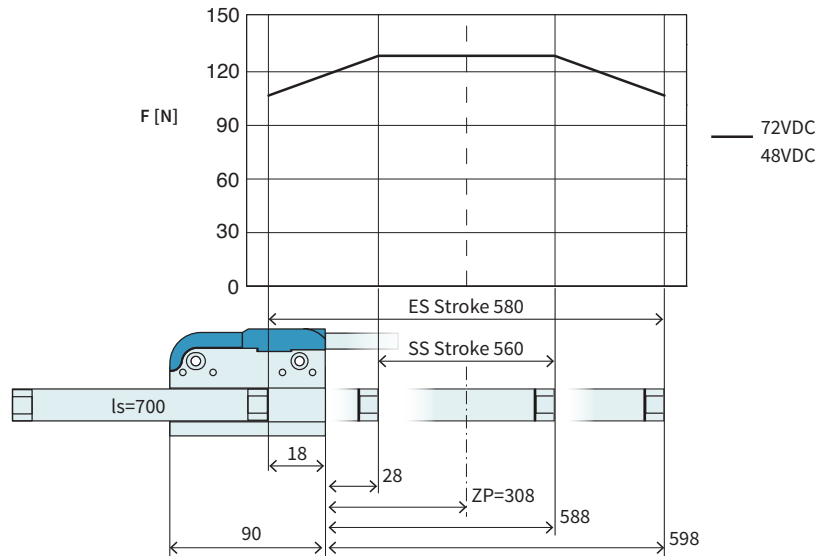
* With this slider, the motor specifications above change.

P01-37Sx60/560x580-HP

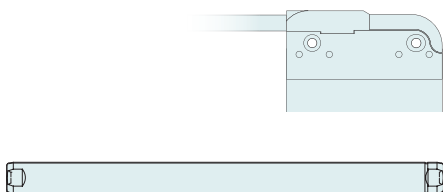
3

Max. Stroke: 580 mm
Peak Force: 128 N

Dimensions in mm



Technical Data P01-37Sx60/560x580-HP				
Stroke				
Standard Stroke (SS)	mm (in)		560	(21.99)
Extended Stroke (ES)	mm (in)		580	(22.8)
Force				
Max. Force @ 48VDC	N (lbf)		128	(28.7)
Max. Force @ 72VDC	N (lbf)		128	(28.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		16 / 33 / -	(3.7 / 7.3 / -)
Max. Border Force relative	%		83	
Force Constant	N/A _{pk} (lbf/A _{pk})		13.4	(3.02)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.2	(129.9)
Max. Velocity @ 72VDC	m/s (in/s)		4.9	(189.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		9.4	
Max. Current @ 72VDC	A _{pk}		9.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.2 / 2.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		12 / 3 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2400 / 600 / -	
Mechanical Data				
Slider Length	mm (in)		700	(28)
Slider Mass	g (lb)		1560	(3.43)

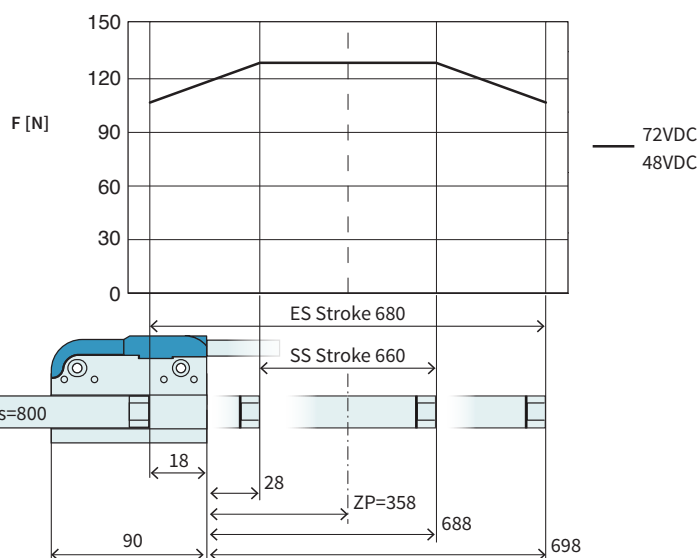


Item	Description	Item-No.
PS01-37Sx60-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1295
PL01-20x700/640-HP	Slider 'High Performance'	0150-1511
PL02-20x700/640-HP	Slider 'heavy duty' 'High Performance'	0150-2168
PL01-20x700/640-HP-L*	Slider 'High Performance L'	0150-3700
PL01-19x700/620*	Slider 'high clearance'	0150-1457

* With this slider, the motor specifications above change.

P01-37Sx60/660x680-HP

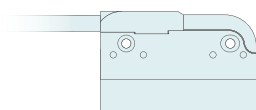
Max. Stroke: 680 mm
Peak Force: 128 N



Dimensions in mm

Technical Data P01-37Sx60/660x680-HP

Stroke			
Standard Stroke (SS)	mm (in)	660	(25.99)
Extended Stroke (ES)	mm (in)	680	(26.8)
Force			
Max. Force @ 48VDC	N (lbf)	128	(28.7)
Max. Force @ 72VDC	N (lbf)	128	(28.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	16 / 33 / -	(3.7 / 7.3 / -)
Max. Border Force relative	%	83	
Force Constant	N/A _{pk} (lbf/A _{pk})	13.4	(3.02)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3.2	(129.9)
Max. Velocity @ 72VDC	m/s (in/s)	4.9	(189.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	9.4	
Max. Current @ 72VDC	A _{pk}	9.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.2 / 2.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	12 / 3 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2400 / 600 / -	
Mechanical Data			
Slider Length	mm (in)	800	(31)
Slider Mass	g (lb)	1790	(3.94)



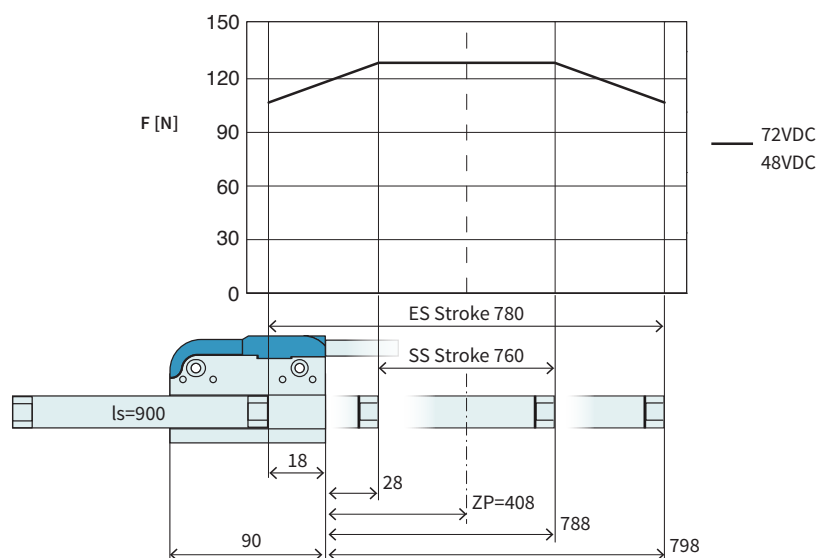
Item	Description	Item-No.
PS01-37Sx60-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1295
PL01-20x800/740-HP	Slider 'High Performance'	0150-1512
PL02-20x800/740-HP	Slider 'heavy duty' 'High Performance'	0150-2169
PL01-20x800/740-HP-L*	Slider 'High Performance L'	0150-3701

* With this slider, the motor specifications above change.

P01-37Sx60/760x780-HP

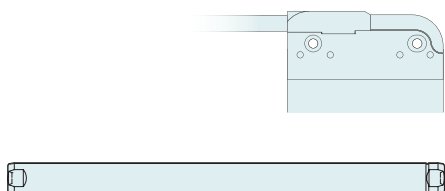
Max. Stroke: 780 mm
Peak Force: 128 N

Dimensions in mm



Technical Data P01-37Sx60/760x780-HP

Stroke				
Standard Stroke (SS)	mm (in)		760	(29.89)
Extended Stroke (ES)	mm (in)		780	(30.69)
Force				
Max. Force @ 48VDC	N (lbf)		128	(28.7)
Max. Force @ 72VDC	N (lbf)		128	(28.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		16 / 33 / -	(3.7 / 7.3 / -)
Max. Border Force relative	%		83	
Force Constant	N/A _{pk} (lbf/A _{pk})		13.4	(3.02)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.2	(129.9)
Max. Velocity @ 72VDC	m/s (in/s)		4.9	(189.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		9.4	
Max. Current @ 72VDC	A _{pk}		9.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.2 / 2.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		12 / 3 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2400 / 600 / -	
Mechanical Data				
Slider Length	mm (in)		900	(35)
Slider Mass	g (lb)		2020	(4.44)

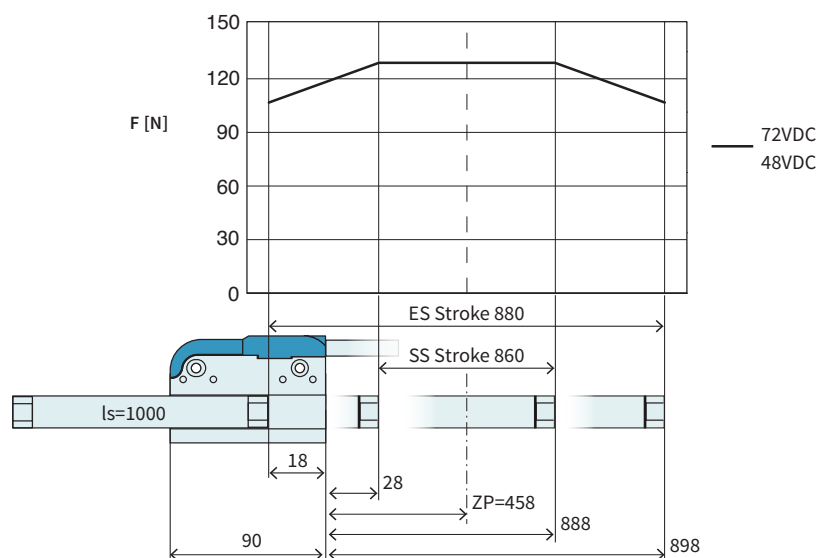


Item	Description	Item-No.
PS01-37Sx60-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1295
PL01-20x900/840-HP	Slider 'High Performance'	0150-1513
PL02-20x900/840-HP	Slider 'heavy duty' 'High Performance'	0150-2170
PL01-20x900/840-HP-L*	Slider 'High Performance L'	0150-3702

* With this slider, the motor specifications above change.

P01-37Sx60/860x880-HP

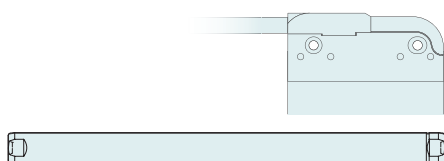
Max. Stroke: 880 mm
Peak Force: 128 N



Dimensions in mm

Technical Data P01-37Sx60/860x880-HP

Stroke				
Standard Stroke (SS)	mm	(in)	860	(33.89)
Extended Stroke (ES)	mm	(in)	880	(34.6)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	128	(28.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	16 / 33 / -	(3.7 / 7.3 / -)
Max. Border Force relative	%		83	
Force Constant	N/A _{pk}	(lbf/A _{pk})	13.4	(3.02)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	3.2	(129.9)
Max. Velocity @ 72VDC	m/s	(in/s)	4.9	(189.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		9.4	
Max. Current @ 72VDC	A _{pk}		9.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.2 / 2.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		12 / 3 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2400 / 600 / -	
Mechanical Data				
Slider Length	mm	(in)	1000	(39)
Slider Mass	g	(lb)	2230	(4.91)



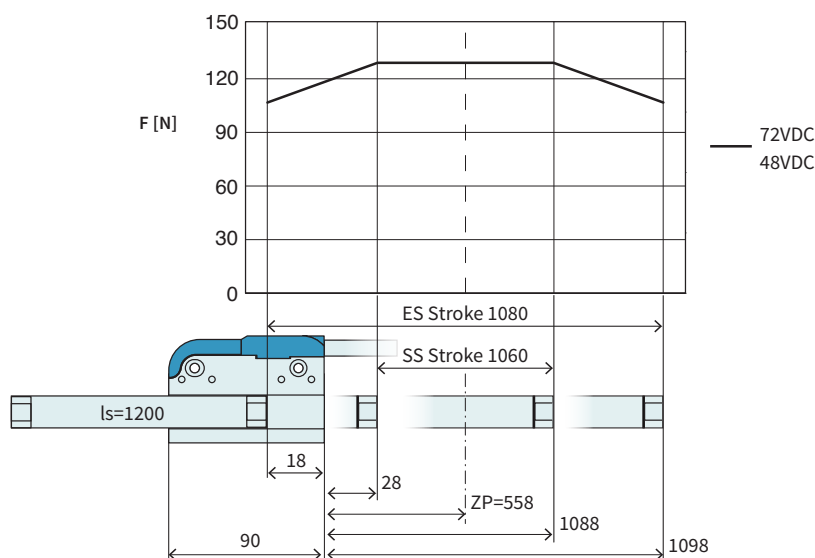
Item	Description	Item-No.
PS01-37Sx60-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1295
PL01-20x1000/940-HP	Slider 'High Performance'	0150-1514
PL01-20x1000/940-HP-L*	Slider 'High Performance L'	0150-3703

* With this slider, the motor specifications above change.

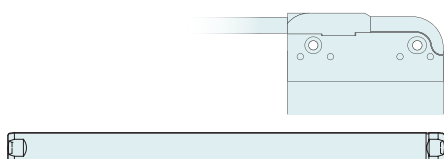
P01-37Sx60/1060x1080-HP

Max. Stroke: 1080 mm
Peak Force: 128 N

Dimensions in mm



Technical Data P01-37Sx60/1060x1080-HP				
Stroke				
Standard Stroke (SS)	mm (in)		1060 (41.7)	
Extended Stroke (ES)	mm (in)		1080 (42.49)	
Force				
Max. Force @ 48VDC	N (lbf)		128 (28.7)	
Max. Force @ 72VDC	N (lbf)		128 (28.7)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		16 / 33 / -	(3.7 / 7.3 / -)
Max. Border Force relative	%		83	
Force Constant	N/A _{pk} (lbf/A _{pk})		13.4	(3.02)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.2 (129.9)	
Max. Velocity @ 72VDC	m/s (in/s)		4.9 (189.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		9.4	
Max. Current @ 72VDC	A _{pk}		9.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.2 / 2.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		12 / 3 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2400 / 600 / -	
Mechanical Data				
Slider Length	mm (in)		1200 (47)	
Slider Mass	g (lb)		2690 (5.92)	

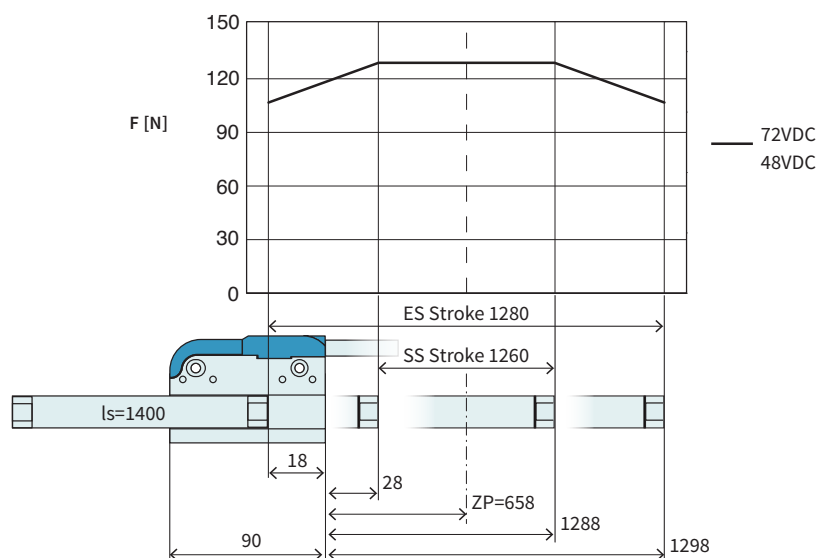


Item	Description	Item-No.
PS01-37Sx60-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1295
PL01-20x1200/1140-HP	Slider 'High Performance'	0150-1515
PL01-20x1200/1140-HP-L*	Slider 'High Performance L'	0150-2510

* With this slider, the motor specifications above change.

P01-37Sx60/1260x1280-HP

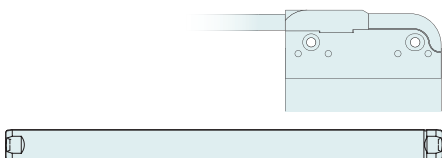
Max. Stroke: 1280 mm
Peak Force: 128 N



Dimensions in mm

Technical Data P01-37Sx60/1260x1280-HP

Stroke			
Standard Stroke (SS)	mm (in)	1260	(49.6)
Extended Stroke (ES)	mm (in)	1280	(50.39)
Force			
Max. Force @ 48VDC	N (lbf)	128	(28.7)
Max. Force @ 72VDC	N (lbf)	128	(28.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	16 / 33 / -	(3.7 / 7.3 / -)
Max. Border Force relative	%	83	
Force Constant	N/A _{pk} (lbf/A _{pk})	13.4	(3.02)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3.2	(129.9)
Max. Velocity @ 72VDC	m/s (in/s)	4.9	(189.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	9.4	
Max. Current @ 72VDC	A _{pk}	9.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.2 / 2.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	12 / 3 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2400 / 600 / -	
Mechanical Data			
Slider Length	mm (in)	1400	(55)
Slider Mass	g (lb)	3160	(6.95)



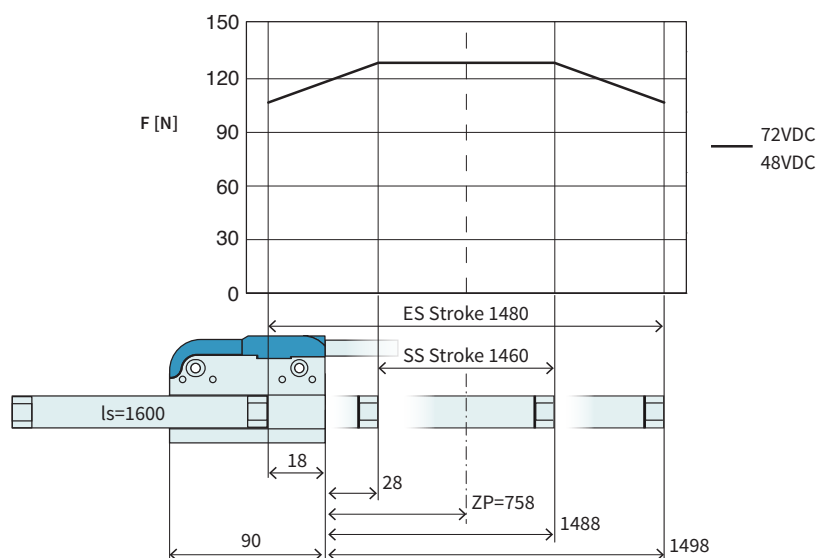
Item	Description	Item-No.
PS01-37Sx60-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1295
PL01-20x1400/1340-HP	Slider 'High Performance'	0150-1516
PL01-20x1400/1340-HP-L*	Slider 'High Performance L'	on request

* With this slider, the motor specifications above change.

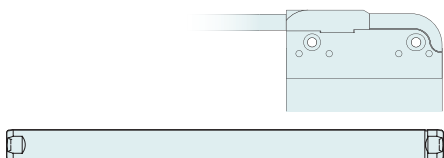
P01-37Sx60/1460x1480-HP

Max. Stroke: 1480 mm
Peak Force: 128 N

Dimensions in mm



Technical Data P01-37Sx60/1460x1480-HP				
Stroke				
Standard Stroke (SS)	mm (in)		1460	(57.49)
Extended Stroke (ES)	mm (in)		1480	(58.29)
Force				
Max. Force @ 48VDC	N (lbf)		128	(28.7)
Max. Force @ 72VDC	N (lbf)		128	(28.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		16 / 33 / -	(3.7 / 7.3 / -)
Max. Border Force relative	%		83	
Force Constant	N/A _{pk} (lbf/A _{pk})		13.4	(3.02)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.2	(129.9)
Max. Velocity @ 72VDC	m/s (in/s)		4.9	(189.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		9.4	
Max. Current @ 72VDC	A _{pk}		9.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.2 / 2.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		12 / 3 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2400 / 600 / -	
Mechanical Data				
Slider Length	mm (in)		1600	(63)
Slider Mass	g (lb)		3620	(7.96)

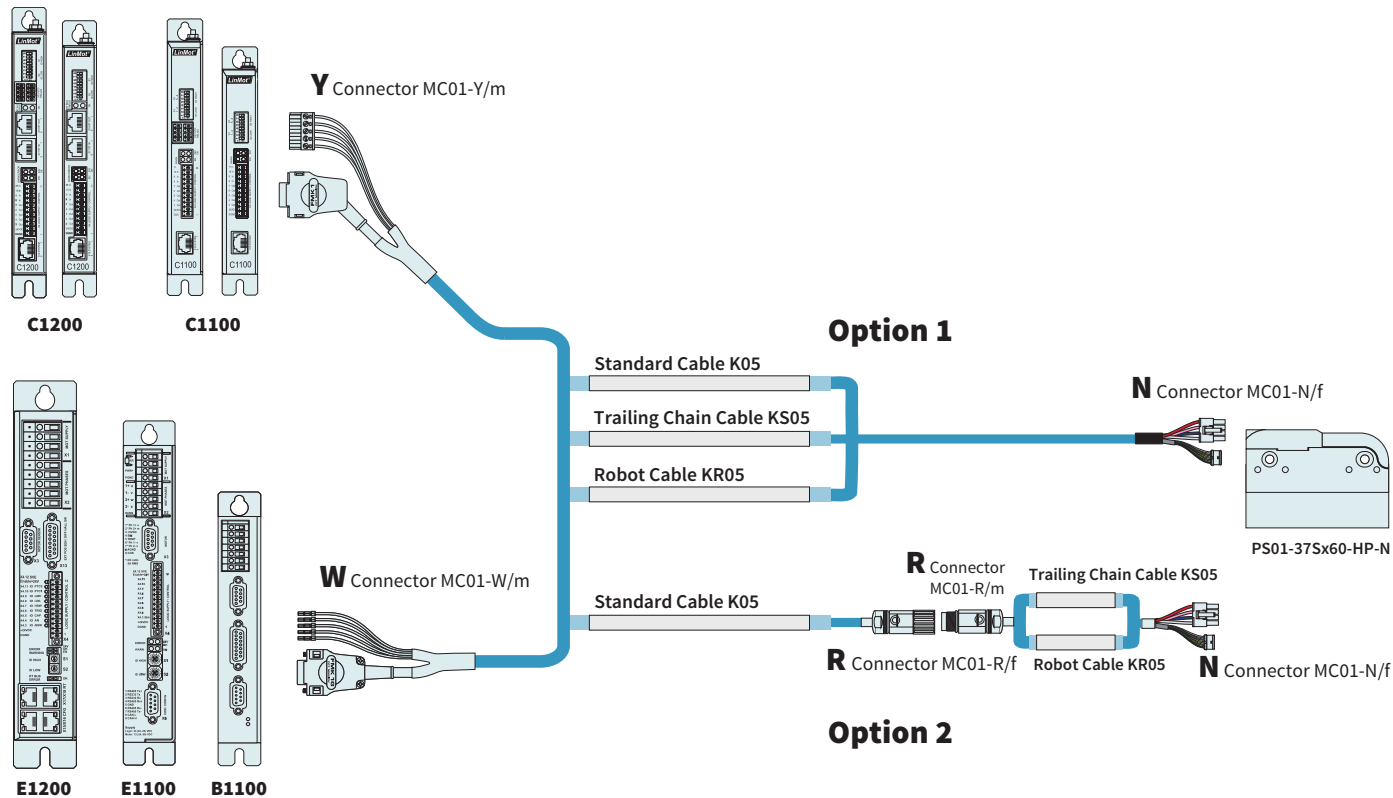


Item	Description	Item-No.
PS01-37Sx60-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1295
PL01-20x1600/1540-HP	Slider 'High Performance'	0150-1517
PL01-20x1600/1540-HP-L*	Slider 'High Performance L'	on request

* With this slider, the motor specifications above change.

Motor Cable

3



ORDERING INFORMATION

OPTION 1		
Item	Description	Item-No.
K05-W/N-	Motor Cable W/N, Custom length	0150-3756
K05-Y-Fe/N-	Motor Cable Y/N, Custom length	0150-3503
KS05-W/N-2	Trailing Chain Cable W/N, 2 m	0150-2296
KS05-W/N-4	Trailing Chain Cable W/N, 4 m	0150-2297
KS05-W/N-6	Trailing Chain Cable W/N, 6 m	0150-2298
KS05-W/N-8	Trailing Chain Cable W/N, 8 m	0150-2299
KS05-W/N-	Trailing Chain Cable W/N, Custom length	0150-3412
KS05-Y/N-2	Trailing Chain Cable Y/N, 2 m	0150-2442
KS05-Y/N-4	Trailing Chain Cable Y/N, 4 m	0150-2443
KS05-Y/N-6	Trailing Chain Cable Y/N, 6 m	0150-2444
KS05-Y/N-8	Trailing Chain Cable Y/N, 8 m	0150-2445
KS05-Y-Fe/N-	Trailing Chain Cable Y/N, Custom length	0150-3509
KR05-W/N-	Robot Cable W/N, Custom length	0150-3406
KR05-Y-Fe/N-	Robot Cable Y/N, Custom length	0150-3514

OPTION 2		
Item	Description	Item-No.
K05-W/R-2	Motor Cable W/R, 2 m	0150-2119
K05-W/R-4	Motor Cable W/R, 4 m	0150-2120
K05-W/R-6	Motor Cable W/R, 6 m	0150-2121
K05-W/R-8	Motor Cable W/R, 8 m	0150-2122
K05-W/R-	Motor Cable W/R, Custom length	0150-3262
K05-Y/R-2	Motor Cable Y/R, 2 m	0150-2421
K05-Y/R-4	Motor Cable Y/R, 4 m	0150-2422
K05-Y/R-6	Motor Cable Y/R, 6 m	0150-2423
K05-Y/R-8	Motor Cable Y/R, 8 m	0150-2424
K05-Y-Fe/R-	Motor Cable Y/R, Custom length	0150-3501
KS05-R/N-	Trailing Chain Cable R/N, Custom length	0150-3486
KR05-R/N-	Robot Cable R/N, Custom length	0150-3757

CONNECTOR & CABLE (INDIVIDUAL)		
Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-R/f	Motor Connector R/f	0150-3129
MC01-N/f	Motor Connector N/f	0150-3407
K05-04/05	Motor Cable per m	0150-1920
KS05-04/05	Trailing Chain Cable per m	0150-1938
KR05-04/05	Robot Cable per m	0150-1846

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-20	Fixed Bearing Set for 19/20 mm sliders	0150-3083
PLF01-20-SS	Fixed Bearing Set for 19/20 mm sliders, stainless steel	0150-3296
PLL01-19	Floating Bearing for 19 mm sliders	0150-3335
PLL01-20	Floating Bearing for 20 mm sliders	0150-3084
PLM01-20-MK	Mounting Kit for 20 mm sliders	0150-3079

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D-Encoder	Encoder Cable (Length in m)	0150-3166
KS025-D/D15-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P01-37x120



- ✓ Highly dynamic drives
- ✓ Wide stroke range
- ✓ Available with cable outlet or with rotatable connector
- ✓ Optional with air cooling
- ✓ Wide range of applications in handling modules as well as in plant and machine construction

LINEAR MOTORS P01-37x120

Technical Data	199
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Motor Specifications

P01-37x120/40x120-LC	202
P01-37x120/100x180-LC	203
P01-37x120/200x280-LC	204
P01-37x120/300x380-LC	205
P01-37x120/400x480-LC	206
P01-37x120/500x580-LC	207
P01-37x120/600x680-LC	208
P01-37x120/700x780-LC	209
P01-37x120/800x880-LC	210
P01-37x120/1000x1080-LC	211
P01-37x120/1200x1280-LC	212
P01-37x120/1400x1480-LC	213

Linear Guides	214
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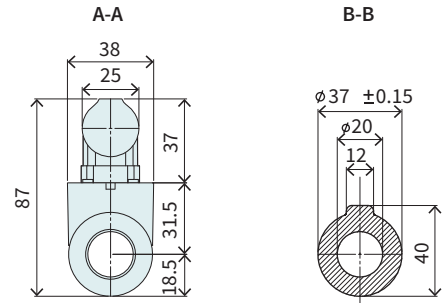
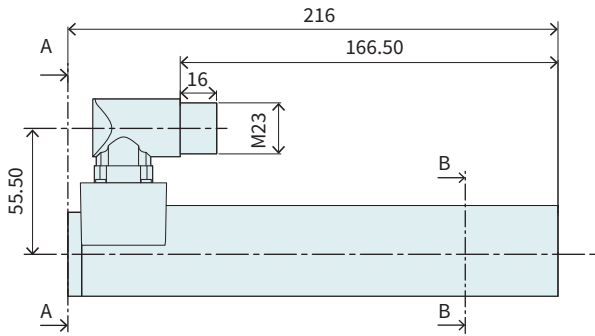
Accessories	216
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MOTOR FAMILY P01-37x120

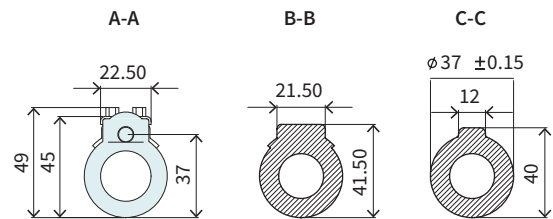
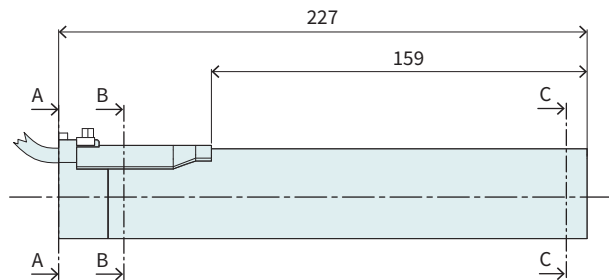
Technical Data				
Stroke				
Standard Stroke (SS)	mm	(in)	≤ 1400	(≤ 55.1)
Extended Stroke (ES)	mm	(in)	≤ 1480	(≤ 58.3)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	163	(36.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		≤ 67	
Force Constant	N/A _{pk}	(lbf/A _{pk})	20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.2	(129.9)
Position Detection				
Position Resolution	mm	(in)	0.005	(0.0002)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 48VDC	A _{pk}		6.2	
Max. Current @ 72VDC	A _{pk}		7.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 2.5 / -	
Terminal Resistance 25 °C / 120 °C	Ohm		6.2 / 8.5	
Terminal Inductivity	mH		3.1	
Magnetic Period	mm	(in)	40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Stator Diameter	mm	(in)	37	(1.5)
Stator Length [Connector type / Cable type]	mm	(in)	216 / 227	(8.5 / 8.9)
Stator Mass	g	(lb)	740	(1.6)
Slider Diameter	mm	(in)	20	(0.79)
Slider Length	mm	(in)	240 - 1600	(9.4 - 63)
Slider Mass	g	(lb)	490 - 3620	(1.1 - 7.96)
IP Code			IP 65	

STATOR CONNECTOR TYPE



Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223

STATOR CABLE TYPE

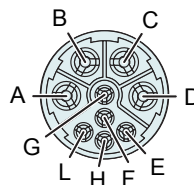


Item	Description	Item-No.
PS01-37x120	Stator, 1.5 m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2 m Cable, IP67 St. M23/9(m)	0150-1237

CONNECTOR

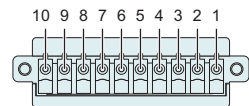
Motor Connector Wiring	PS01-37x120-C PS01-37x120-C20	PS01-37x120	Wire color motor cable
	C-Connector	P-Connector	
Ph 1+	A	1	red
Ph 1-	B	2	pink
Ph 2+	C	3	blue
Ph 2-	D	4	grey
+5VDC	E	5	white
GND	F	6	inner shield
Sin	G	7	yellow
Cos	H	8	green
Temp.	L	9	black
Shield	Housing	10	outer Shield

C-Connector



View: Motor Connector, plug side

P-Connector

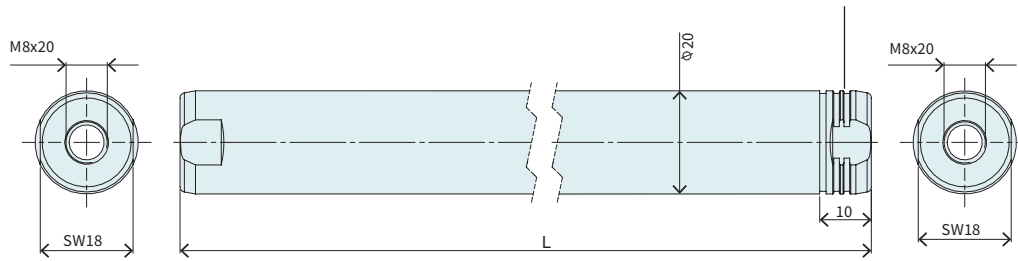


SLIDER

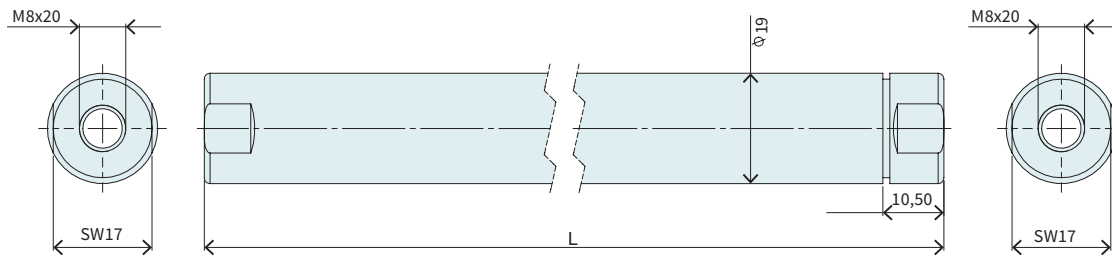
3

Slider Standard / Heavy Duty

Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.



High-Clearance Slider



Slider Standard				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-20x240/180-LC	Slider 'standard LC'	120	40	0150-2560
PL01-20x300/240-LC	Slider 'standard LC'	180	100	0150-2561
PL01-20x400/340-LC	Slider 'standard LC'	280	200	0150-2562
PL01-20x500/440-LC	Slider 'standard LC'	380	300	0150-2563
PL01-20x600/540-LC	Slider 'standard LC'	480	400	0150-2564
PL01-20x700/640-LC	Slider 'standard LC'	580	500	0150-2565
PL01-20x800/740-LC	Slider 'standard LC'	680	600	0150-2566
PL01-20x900/840-LC	Slider 'standard LC'	780	700	0150-2567
PL01-20x1000/940-LC	Slider 'standard LC'	880	800	0150-2568
PL01-20x1200/1140-LC	Slider 'standard LC'	1080	1000	0150-2569
PL01-20x1400/1340-LC	Slider 'standard LC'	1280	1200	0150-2570
PL01-20x1600/1540-LC	Slider 'standard LC'	1480	1400	0150-2571

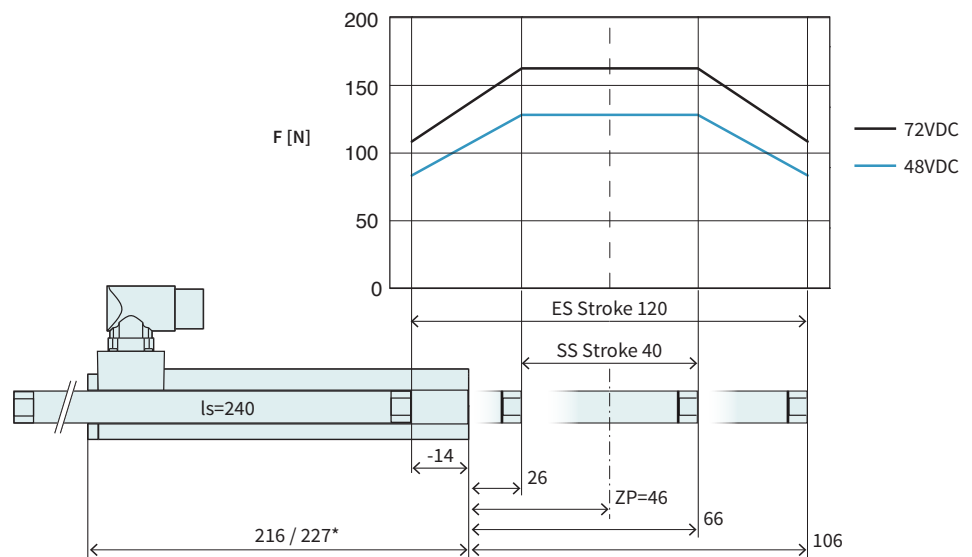
Slider Heavy Duty				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL02-20x240/180-LC	Slider 'heavy duty LC'	120	40	0150-2572
PL02-20x300/240-LC	Slider 'heavy duty LC'	180	100	0150-2573
PL02-20x400/340-LC	Slider 'heavy duty LC'	280	200	0150-2574
PL02-20x500/440-LC	Slider 'heavy duty LC'	380	300	0150-2575
PL02-20x600/540-LC	Slider 'heavy duty LC'	480	400	0150-2576
PL02-20x700/640-LC	Slider 'heavy duty LC'	580	500	0150-2577
PL02-20x800/740-LC	Slider 'heavy duty LC'	680	600	0150-2578
PL02-20x900/840-LC	Slider 'heavy duty LC'	780	700	0150-2579

High-Clearance Slider				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-19x240/160	Slider 'high clearance'	100	80	0150-1488
PL01-19x300/220	Slider 'high clearance'	160	140	0150-1489
PL01-19x395/320	Slider 'high clearance'	260	240	0150-1452
PL01-19x500/420	Slider 'high clearance'	360	340	0150-1455
PL01-19x600/520	Slider 'high clearance'	460	440	0150-1456
PL01-19x700/620	Slider 'high clearance'	560	540	0150-1457

P01-37x120/40x120-LC

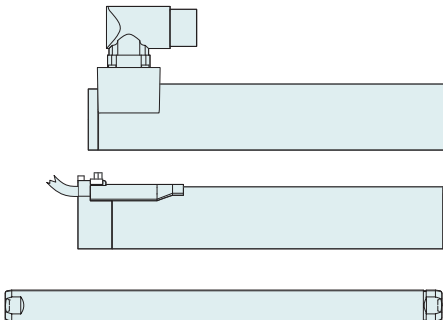
Max. Stroke: 120 mm
Peak Force: 163 N

Dimensions in mm
 * Cable Type



Technical Data P01-37x120/40x120-LC

Stroke				
Standard Stroke (SS)	mm	(in)	40	(1.57)
Extended Stroke (ES)	mm	(in)	120	(4.71)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	163	(36.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk}	(lbf/A _{pk})	20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.2	(129.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.5	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		6.2	
Max. Current @ 72VDC	A _{pk}		7.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm	(in)	240	(9.4)
Slider Mass	g	(lb)	490	(1.08)

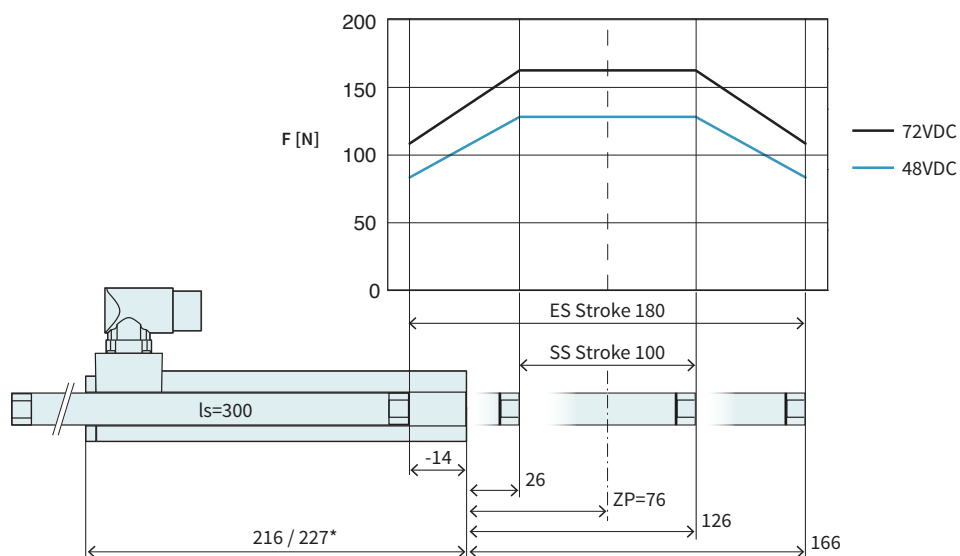


Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x240/180-LC	Slider 'standard LC'	0150-2560
PL02-20x240/180-LC	Slider 'heavy duty LC'	0150-2572
PL01-19x240/160*	Slider 'high clearance'	0150-1448

* With this slider, the motor specifications above change.

P01-37x120/100x180-LC

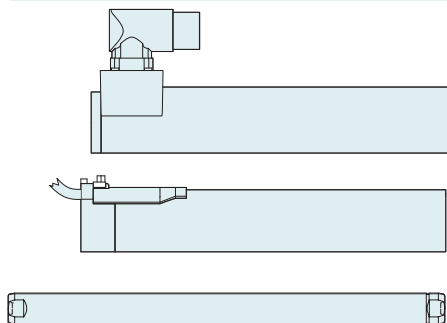
Max. Stroke: 180 mm
Peak Force: 163 N



Dimensions in mm
 * Cable Type

Technical Data P01-37x120/100x180-LC

Stroke				
Standard Stroke (SS)	mm (in)		100 (3.93)	
Extended Stroke (ES)	mm (in)		180 (7.08)	
Force				
Max. Force @ 48VDC	N (lbf)		128 (28.7)	
Max. Force @ 72VDC	N (lbf)		163 (36.7)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		28 / 52 / - (6.4 / 12 / -)	
Max. Border Force relative	%		67	
Force Constant	N/A _{pk} (lbf/A _{pk})		20.4 (4.59)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.2 (84.9)	
Max. Velocity @ 72VDC	m/s (in/s)		3.2 (129.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.4	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		6.2	
Max. Current @ 72VDC	A _{pk}		7.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm (in)		300 (12)	
Slider Mass	g (lb)		630 (1.39)	

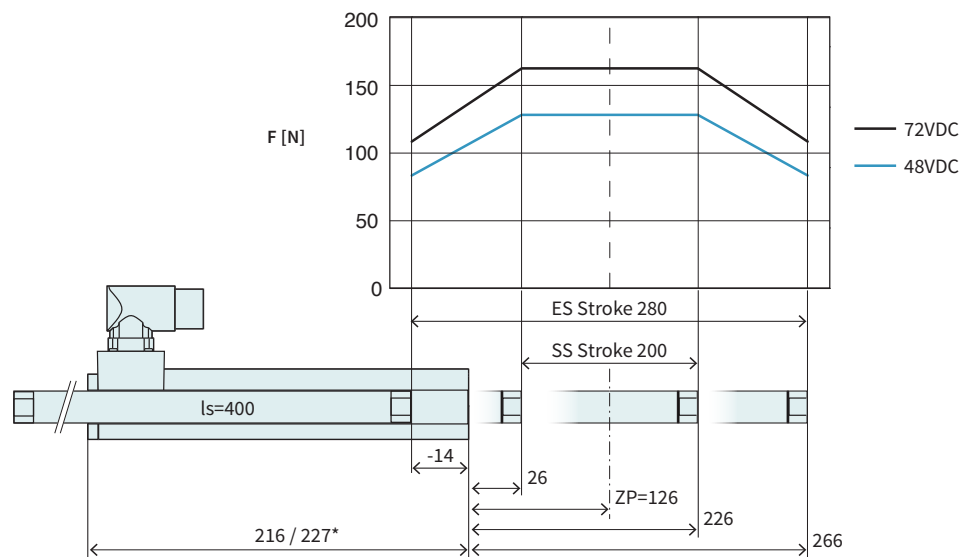


Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x300/240-LC	Slider 'standard LC'	0150-2561
PL02-20x300/240-LC	Slider 'heavy duty LC'	0150-2573
PL01-19x300/220*	Slider 'high clearance'	0150-1449

* With this slider, the motor specifications above change.

P01-37x120/200x280-LC

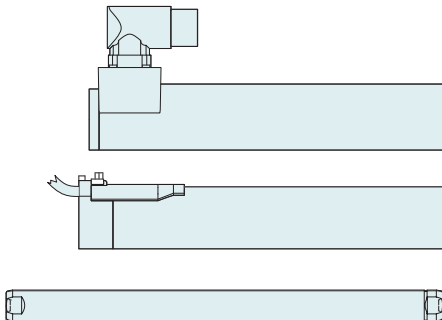
Max. Stroke: 280 mm
Peak Force: 163 N



Dimensions in mm
 * Cable Type

Technical Data P01-37x120/200x280-LC

Stroke				
Standard Stroke (SS)	mm	(in)	200	(7.86)
Extended Stroke (ES)	mm	(in)	280	(10.99)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	163	(36.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk}	(lbf/A _{pk})	20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.2	(129.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		6.2	
Max. Current @ 72VDC	A _{pk}		7.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm	(in)	400	(16)
Slider Mass	g	(lb)	860	(1.89)



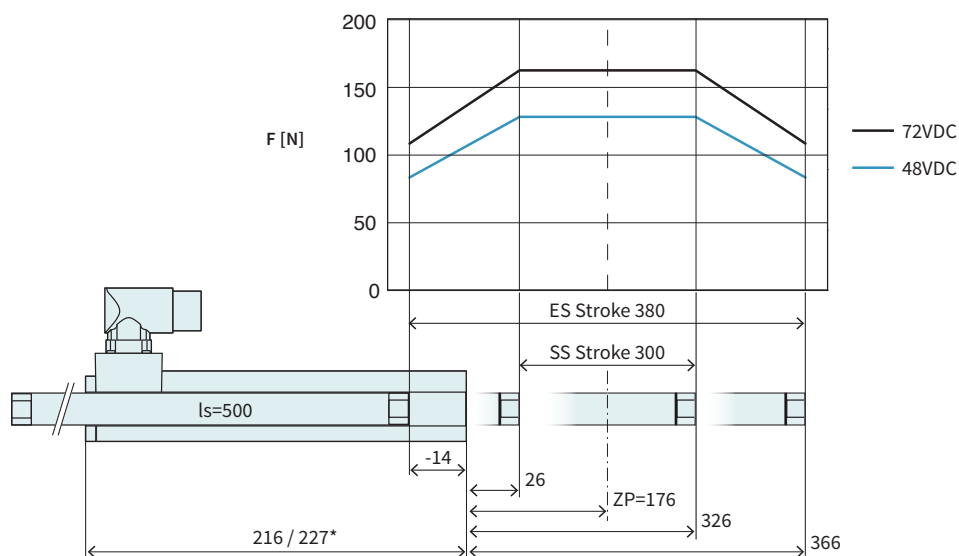
Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x400/340-LC	Slider 'standard LC'	0150-2562
PL02-20x400/340-LC	Slider 'heavy duty LC'	0150-2574
PL01-19x395/320*	Slider 'high clearance'	0150-1452

* With this slider, the motor specifications above change.

P01-37x120/300x380-LC

3

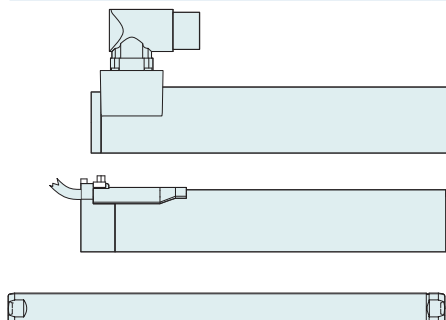
Max. Stroke: 380 mm
Peak Force: 163 N



Dimensions in mm
 * Cable Type

Technical Data P01-37x120/300x380-LC

Stroke			
Standard Stroke (SS)	mm (in)	300 (11.8)	
Extended Stroke (ES)	mm (in)	380 (14.99)	
Force			
Max. Force @ 48VDC	N (lbf)	128 (28.7)	
Max. Force @ 72VDC	N (lbf)	163 (36.7)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	28 / 52 / - (6.4 / 12 / -)	
Max. Border Force relative	%	67	
Force Constant	N/A _{pk} (lbf/A _{pk})	20.4 (4.59)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.2 (84.9)	
Max. Velocity @ 72VDC	m/s (in/s)	3.2 (129.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.25	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	6.2	
Max. Current @ 72VDC	A _{pk}	7.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.4 / 2.5 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1300 / 390 / -	
Mechanical Data			
Slider Length	mm (in)	500 (20)	
Slider Mass	g (lb)	1090 (2.4)	

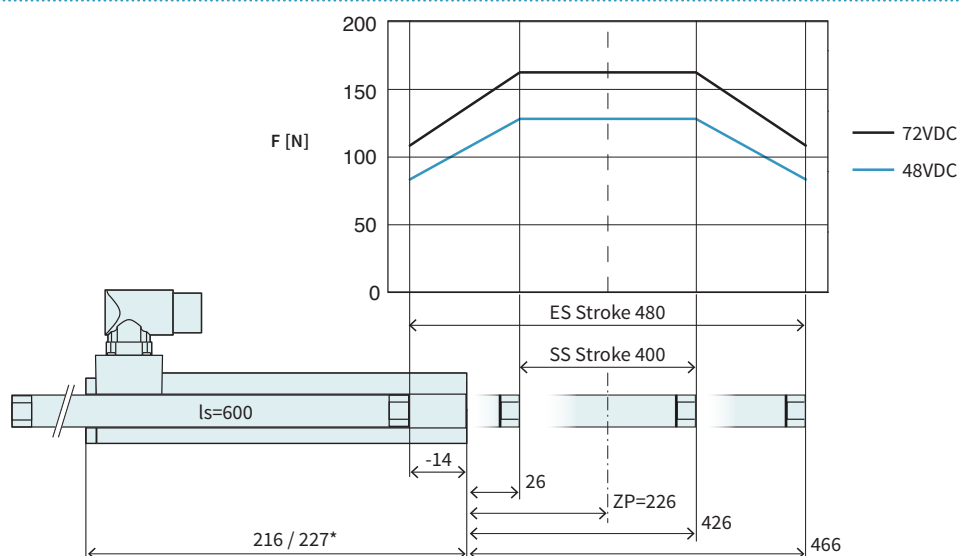


Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x500/440-LC	Slider 'standard LC'	0150-2563
PL02-20x500/440-LC	Slider 'heavy duty LC'	0150-2575
PL01-19x500/420*	Slider 'high clearance'	0150-1455

* With this slider, the motor specifications above change.

P01-37x120/400x480-LC

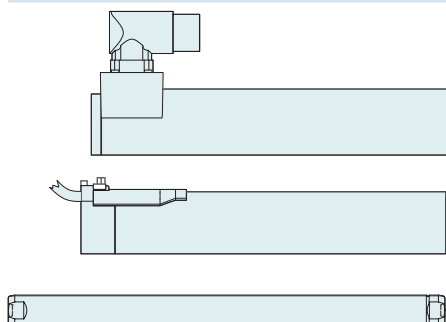
Max. Stroke: 480 mm
Peak Force: 163 N



Dimensions in mm
 * Cable Type

Technical Data P01-37x120/400x480-LC

Stroke				
Standard Stroke (SS)	mm	(in)	400	(15.69)
Extended Stroke (ES)	mm	(in)	480	(18.89)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	163	(36.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk}	(lbf/A _{pk})	20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.2	(129.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		6.2	
Max. Current @ 72VDC	A _{pk}		7.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm	(in)	600	(24)
Slider Mass	g	(lb)	1330	(2.93)



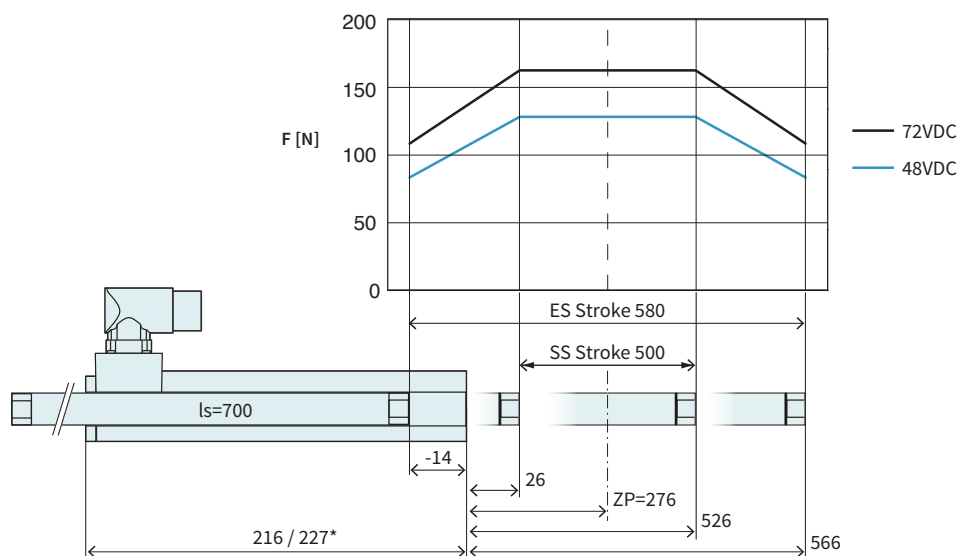
Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x600/540-LC	Slider 'standard LC'	0150-2564
PL02-20x600/540-LC	Slider 'heavy duty LC'	0150-2576
PL01-19x600/520*	Slider 'high clearance'	0150-1456

* With this slider, the motor specifications above change.

P01-37x120/500x580-LC

3

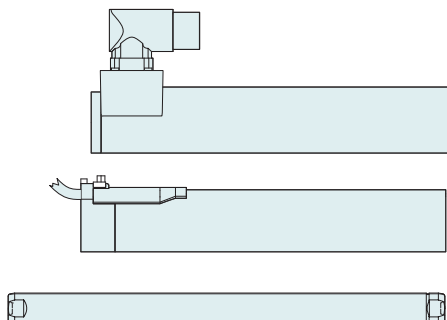
Max. Stroke: 580 mm
Peak Force: 163 N



Dimensions in mm
 * Cable Type

Technical Data P01-37x120/500x580-LC

Stroke			
Standard Stroke (SS)	mm (in)	500	(19.69)
Extended Stroke (ES)	mm (in)	580	(22.8)
Force			
Max. Force @ 48VDC	N (lbf)	128	(28.7)
Max. Force @ 72VDC	N (lbf)	163	(36.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%	67	
Force Constant	N/A _{pk} (lbf/A _{pk})	20.4	(4.59)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s (in/s)	3.2	(129.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	6.2	
Max. Current @ 72VDC	A _{pk}	7.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.4 / 2.5 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1300 / 390 / -	
Mechanical Data			
Slider Length	mm (in)	700	(28)
Slider Mass	g (lb)	1560	(3.43)



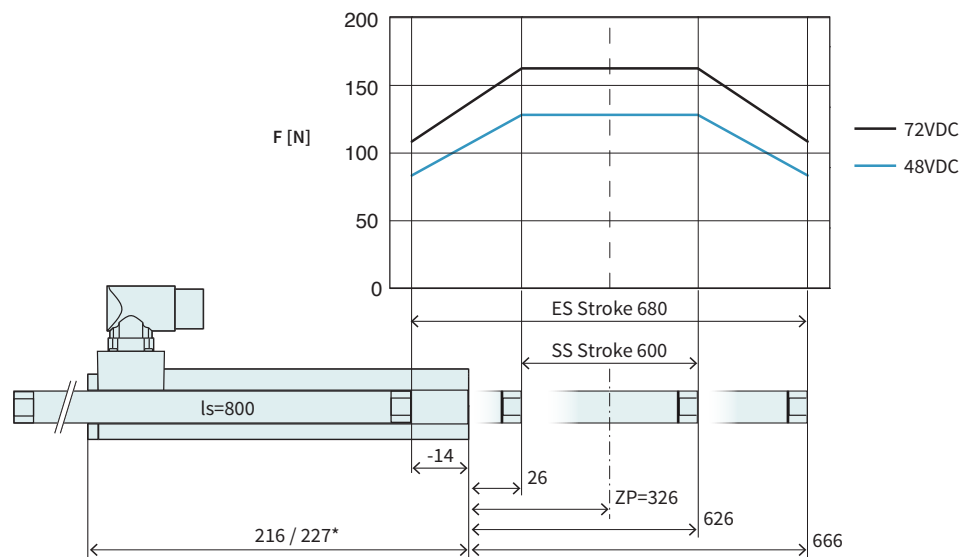
Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x700/640-LC	Slider 'standard LC'	0150-2565
PL02-20x700/640-LC	Slider 'heavy duty LC'	0150-2577
PL01-19x700/620*	Slider 'high clearance'	0150-1457

* With this slider, the motor specifications above change.

P01-37x120/600x680-LC

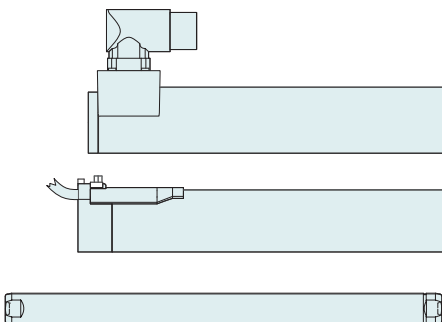
Max. Stroke: 680 mm
Peak Force: 163 N

Dimensions in mm
 * Cable Type



Technical Data P01-37x120/600x680-LC

Stroke				
Standard Stroke (SS)	mm	(in)	600	(23.6)
Extended Stroke (ES)	mm	(in)	680	(26.8)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	163	(36.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk}	(lbf/A _{pk})	20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.2	(129.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		6.2	
Max. Current @ 72VDC	A _{pk}		7.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm	(in)	800	(31)
Slider Mass	g	(lb)	1790	(3.94)

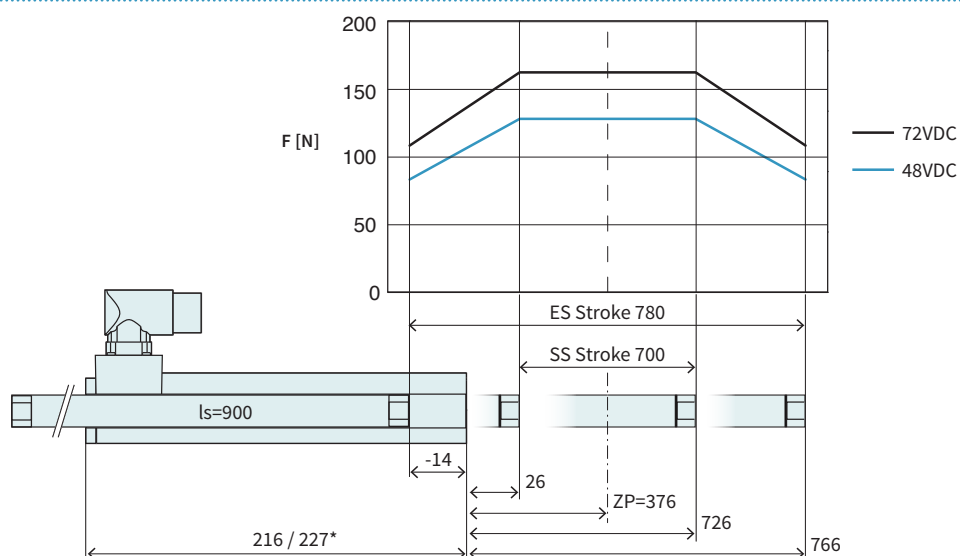


Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x800/740-LC	Slider 'standard LC'	0150-2566
PL02-20x800/740-LC	Slider 'heavy duty LC'	0150-2578

P01-37x120/700x780-LC

3

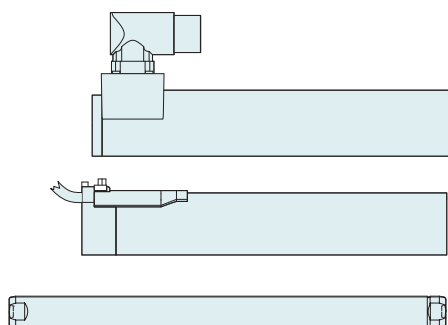
Max. Stroke: 780 mm
Peak Force: 163 N



Dimensions in mm
 * Cable Type

Technical Data P01-37x120/700x780-LC

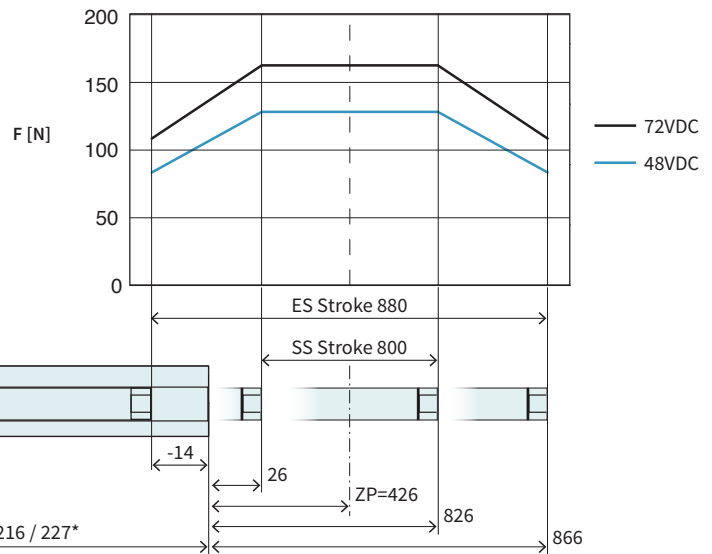
Stroke			
Standard Stroke (SS)	mm (in)	700	(27.6)
Extended Stroke (ES)	mm (in)	780	(30.69)
Force			
Max. Force @ 48VDC	N (lbf)	128	(28.7)
Max. Force @ 72VDC	N (lbf)	163	(36.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%	67	
Force Constant	N/A _{pk} (lbf/A _{pk})	20.4	(4.59)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s (in/s)	3.2	(129.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	6.2	
Max. Current @ 72VDC	A _{pk}	7.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.4 / 2.5 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1300 / 390 / -	
Mechanical Data			
Slider Length	mm (in)	900	(35)
Slider Mass	g (lb)	2020	(4.44)



Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x900/840-LC	Slider 'standard LC'	0150-2567
PL02-20x900/840-LC	Slider 'heavy duty LC'	0150-2579

P01-37x120/800x880-LC

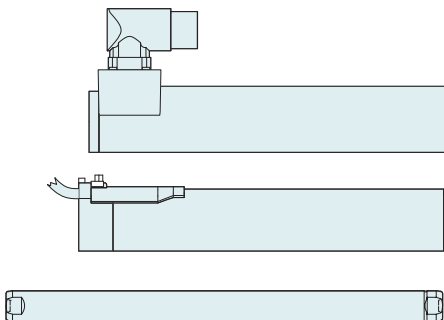
Max. Stroke: 880 mm
Peak Force: 163 N



Dimensions in mm
 * Cable Type

Technical Data P01-37x120/800x880-LC

Stroke				
Standard Stroke (SS)	mm	(in)	800	(31.49)
Extended Stroke (ES)	mm	(in)	880	(34.6)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	163	(36.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk}	(lbf/A _{pk})	20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.2	(129.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		6.2	
Max. Current @ 72VDC	A _{pk}		7.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm	(in)	1000	(39)
Slider Mass	g	(lb)	2230	(4.91)

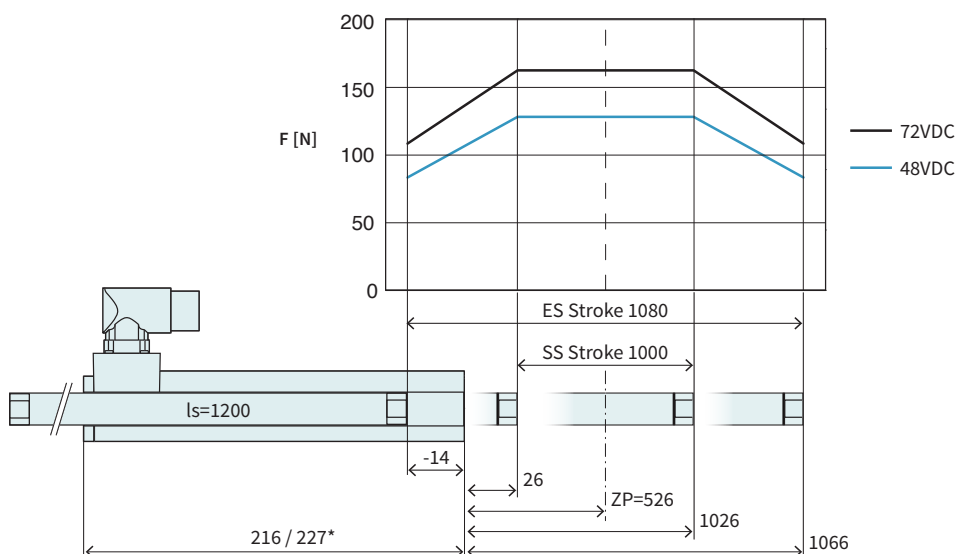


Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x1000/940-LC	Slider 'standard LC'	0150-2568

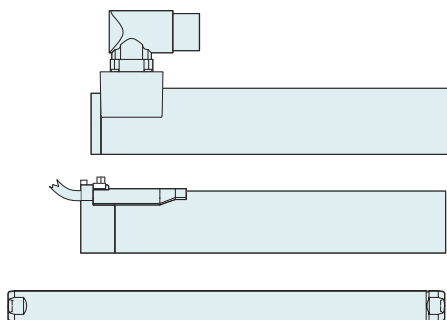
P01-37x120/1000x1080-LC

3

Max. Stroke: 1080 mm
Peak Force: 163 N



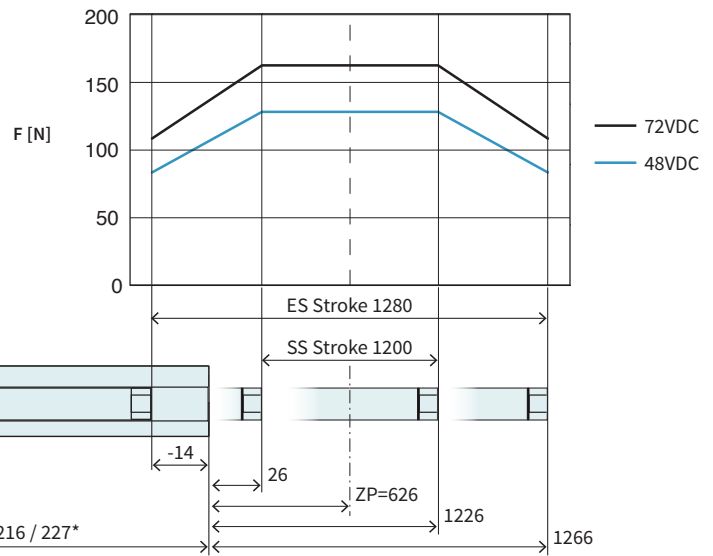
Technical Data P01-37x120/1000x1080-LC				
Stroke				
Standard Stroke (SS)	mm (in)		1000	(39.39)
Extended Stroke (ES)	mm (in)		1080	(42.49)
Force				
Max. Force @ 48VDC	N (lbf)		128	(28.7)
Max. Force @ 72VDC	N (lbf)		163	(36.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk} (lbf/A _{pk})		20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.2	(84.9)
Max. Velocity @ 72VDC	m/s (in/s)		3.2	(129.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		6.2	
Max. Current @ 72VDC	A _{pk}		7.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm (in)		1200	(47)
Slider Mass	g (lb)		2690	(5.92)



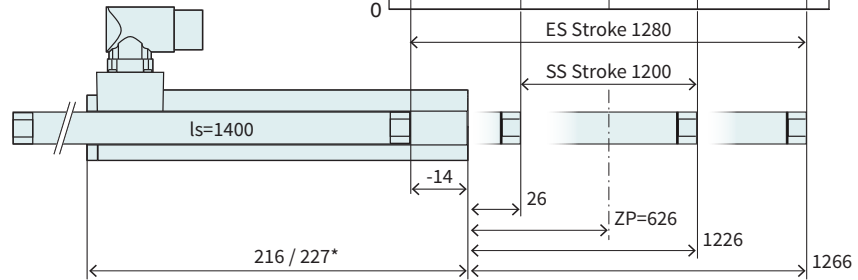
Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x1200/1140-LC	Slider 'standard LC'	0150-2569

P01-37x120/1200x1280-LC

Max. Stroke: 1280 mm
Peak Force: 163 N

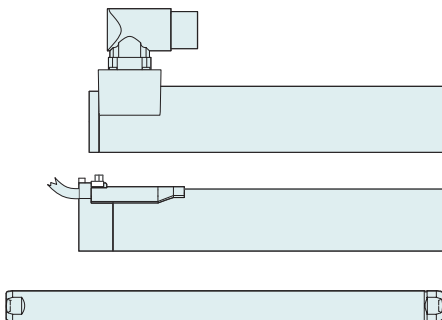


Dimensions in mm
 * Cable Type



Technical Data P01-37x120/1200x1280-LC

Stroke				
Standard Stroke (SS)	mm	(in)	1200	(47.2)
Extended Stroke (ES)	mm	(in)	1280	(50.39)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	163	(36.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk}	(lbf/A _{pk})	20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.2	(129.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		6.2	
Max. Current @ 72VDC	A _{pk}		7.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm	(in)	1400	(55)
Slider Mass	g	(lb)	3160	(6.95)

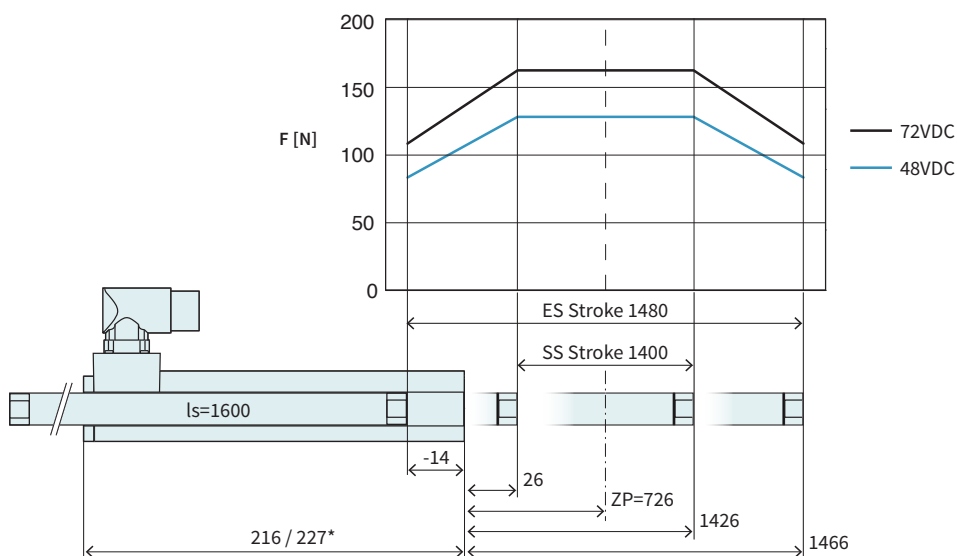


Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x1400/1340-LC	Slider 'standard LC'	0150-2570

P01-37x120/1400x1480-LC

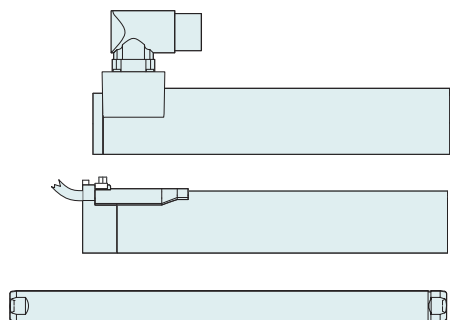
3

Max. Stroke: 1480 mm
Peak Force: 163 N



Dimensions in mm
 * Cable Type

Technical Data P01-37x120/1400x1480-LC				
Stroke				
Standard Stroke (SS)	mm (in)		1400 (55.1)	
Extended Stroke (ES)	mm (in)		1480 (58.29)	
Force				
Max. Force @ 48VDC	N (lbf)		128 (28.7)	
Max. Force @ 72VDC	N (lbf)		163 (36.7)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk} (lbf/A _{pk})		20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.2	(84.9)
Max. Velocity @ 72VDC	m/s (in/s)		3.2	(129.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		6.2	
Max. Current @ 72VDC	A _{pk}		7.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm (in)		1600	(63)
Slider Mass	g (lb)		3620	(8.0)



Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x1600/1540-LC	Slider 'standard LC'	0150-2571

Linear Guides H01

3



HM01-37x120/80		Linear Module 37x120 with 80 mm Stroke			
<div><div></div><div></div><div></div><div></div></div>	→	H-Guide	H01-37x166/80	H-Guide for P01-37x120, Stroke max 80mm	0150-5020
			H01-37x166/80-GF	H-Guide for P01-37x120, Stroke max 80mm	0150-5080
	→	Stator	PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
			PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
			PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
	→	Slider	PL01-20x300/240-LC	Slider 'standard LC'	0150-2561

HM01-37x120/180		Linear Module 37x120 with 180 mm Stroke			
<div><div></div><div></div><div></div><div></div></div>	→	H-Guide	H01-37x166/180	H-Guide for P01-37x120, Stroke max. 180 mm	0150-5021
			H01-37x166/180-GF	H=Guide for P01-37x120, Stroke max. 180 mm	0150-5081
	→	Stator	PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
			PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
			PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
	→	Slider	PL01-20x400/340-LC	Slider 'standard LC'	0150-2562

HM01-37x120/280		Linear Module 37x120 with 280 mm Stroke			
<div><div></div><div></div><div></div><div></div></div>	→	H-Guide	H01-37x166/280	H-Guide for P01-37x120, Stroke max. 280 mm	0150-5022
			H01-37x166/280-GF	H-Guide for P01-37x120, Stroke max. 280 mm	0150-5082
	→	Stator	PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
			PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
			PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
	→	Slider	PL01-20x500/440-LC	Slider 'standard LC'	0150-2563

Accessories					
<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	→	Brake	HB01-37	Pneumatic brake for H01-37 guides	0150-5052
	→	Fan	HV01-37/48	Fan cooling for H01-37/48 &PF02-37/48	0150-5051
	→	MagSpring	MF01-37/H37	Flange MagSpring 37 / H-Guide 23/37/48	0250-2307
			MA01-37/H37	Adapter MagSpring 37&20 / H-Guide 37	0250-0117
	→	Centering sleeve	HC01-09/04	Centering sleeve D9x4 mm	0150-3251
	→	Wipers	HA01-27/20-F	Wiper for H01-37 guides, front side	0150-5108

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

Bridge Guide B01



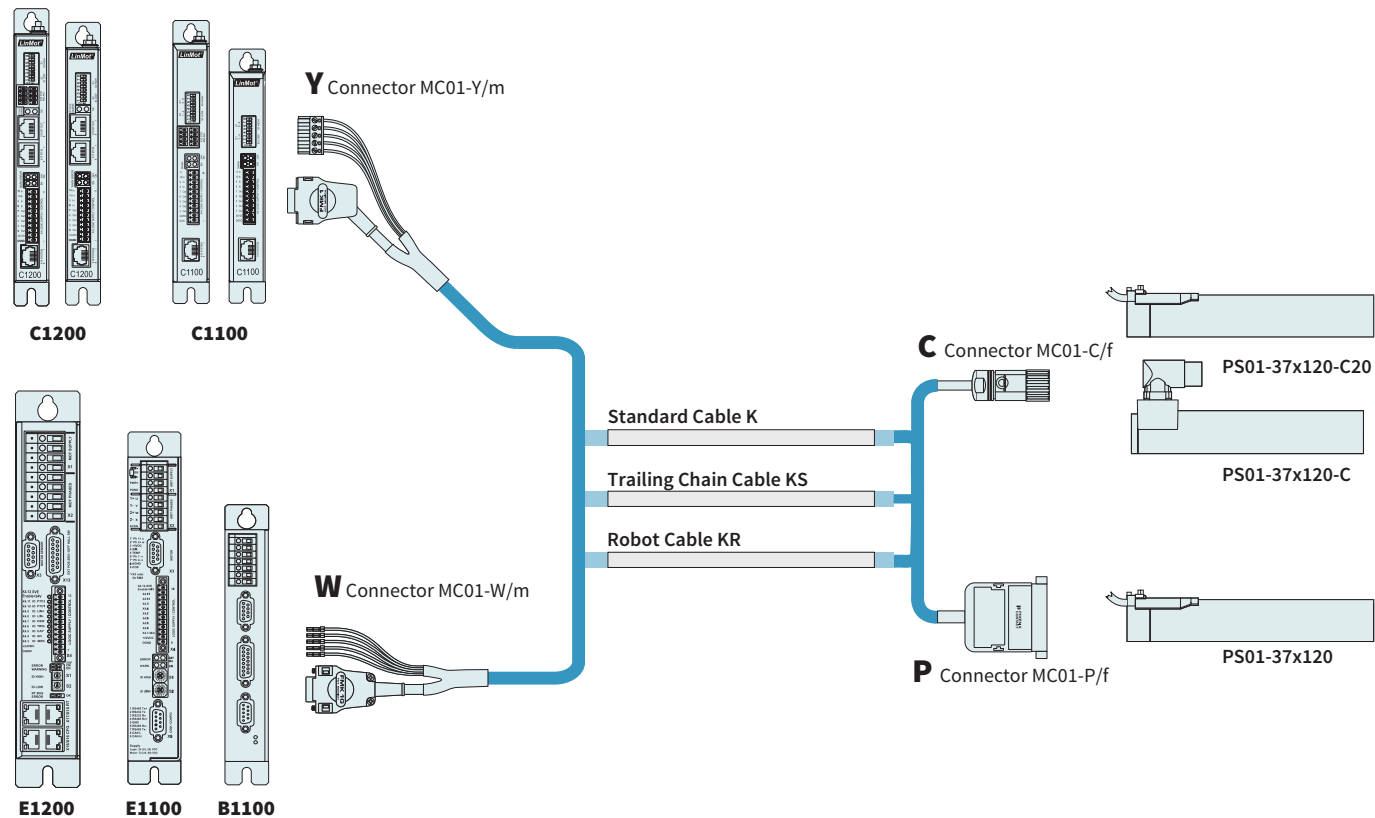
BM01-37x120/160 Bridge Module 37x120 with 160 mm Stroke ¹⁾				
→	B-Guide	B01-37x166/160	B-Guide for P01-37x120, Stroke max 160 mm	0150-5138
		B01-37x166/160-GF	B-Guide for P01-37x120, Stroke max 160 mm	0150-5141
→	Stator	PS01-37x120-C	Stator with IP67 connector M23/9(m)	0150-1223
		PS01-37x120-C20	Linearmotor Stator, 0.2m Cable, Connector C - IP67	0150-1237
		PS01-37x120	Linearmotor Stator, 1.5m Cable, Connector P	0150-1204
→	Slider	PL01-19x395/320	High Clearance Slider for B01-37x166/160	0150-1452
BM01-37x120/260 Bridge Module 37x120 with 260 mm Stroke ¹⁾				
→	B-Guide	B01-37x166/260	B-Guide for P01-37x120, Stroke max 260 mm	0150-5139
		B01-37x166/260-GF	B-Guide for P01-37x120, Stroke max 260 mm	0150-5142
→	Stator	PS01-37x120-C	Stator with IP67 connector M23/9(m)	0150-1223
		PS01-37x120-C20	Linearmotor Stator, 0.2m Cable, Connector C - IP67	0150-1237
		PS01-37x120	Linearmotor Stator, 1.5m Cable, Connector P	0150-1204
→	Slider	PL01-19x500/420	High Clearance Slider for B01-37x166/260	0150-1455
BM01-37x120/360 Bridge Module 37x120 with 360 mm Stroke ¹⁾				
→	B-Guide	B01-37x166/360	B-Guide for P01-37x120, Stroke max 360 mm	0150-5140
		B01-37x166/360-GF	B-Guide for P01-37x120, Stroke max 360 mm	0150-5143
→	Stator	PS01-37x120-C	Stator with IP67 connector M23/9(m)	0150-1223
		PS01-37x120-C20	Linearmotor Stator, 0.2m Cable, Connector C - IP67	0150-1237
		PS01-37x120	Linearmotor Stator, 1.5m Cable, Connector P	0150-1204
→	Slider	PL01-19x600/520	High Clearance Slider for B01-37x166/260	0150-1456
Accessories				
→	Brake	HB01-37	Pneumatic Brake for H01-37/600N (4-6Bar)	0150-5052
→	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051
→	MagSpring	MF01-37/H37	Flange MagSpring 37 / H-Guide 23/37/48	0250-2307
		MA01-37/H37	Adapter MagSpring 37&20 / H-Guide 37	0250-0117
→	Centering sleeve	HC01-09/04	Centering sleeve D9x4 mm	0150-3251
→	Wipers	HA01-37/19-F	Wiper for H01-37 guides, front side	0150-5177

¹⁾ The stroke is reduced by 18 mm when using cable models.

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

Motor Cable

3



ORDERING INFORMATION

STANDARD CABLE		
Item	Description	Item-No.
K05-W/C-2	Motor Cable W/C, 2 m	0150-2123
K05-W/C-4	Motor Cable W/C, 4 m	0150-2124
K05-W/C-6	Motor Cable W/C, 6 m	0150-2125
K05-W/C-8	Motor Cable W/C, 8 m	0150-2126
K05-W/C-	Motor Cable W/C, Custom length	0150-3263
K05-W/P	Motor Cable W/P, Custom length	0150-3113
K05-Y/C-2	Motor Cable Y/R, 2 m	0150-2425
K05-Y/C-4	Motor Cable Y/R, 4 m	0150-2426
K05-Y/C-6	Motor Cable Y/R, 6 m	0150-2427
K05-Y/C-8	Motor Cable Y/R, 8 m	0150-2428
K05-Y-Fe/C-	Motor Cable Y-Fe/R, Custom length	0150-3502

TRAILING CHAIN CABLE

Item	Description	Item-No.
KS05-W/C-4	Trailing Chain Cable W/C, 4 m	0150-2127
KS05-W/C-6	Trailing Chain Cable W/C, 6 m	0150-2128
KS05-W/C-8	Trailing Chain Cable W/C, 8 m	0150-2129
KS05-W/C-	Trailing Chain Cable W/C, Custom length	0150-3204
KS05-W/P-	Trailing Chain Cable W/P, Custom length	0150-3114
KS05-Y/C-4	Trailing Chain Cable Y/C, 4 m	0150-2436
KS05-Y/C-6	Trailing Chain Cable Y/C, 6 m	0150-2437
KS05-Y/C-8	Trailing Chain Cable Y/C, 8 m	0150-2438
KS05-Y-Fe/C-	Trailing Chain Cable Y-Fe/C, Custom length	0150-3508

ROBOT CABLE

Item	Description	Item-No.
KR05-W/C-	Robot Cable KR05-W/C, Custom length	0150-3644
KR05-Y-Fe/C-	Robot Cable KR05-Y-Fe/C, Custom length	0150-3513

CONNECTOR & CABLE (INDIVIDUAL)

Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-C/f	Motor Connector C/f	0150-3080
MC01-P/f	Motor Connector P/f	0150-3021
K05-04/05	Motor Cable per m	0150-1920
KS05-04/05	Trailing Chain Cable per m	0150-1938
KR05-04/05	Robot Cable per m	0150-1846

MOTOR FLANGES



Item	Description	Item-No.
PF02-37x100	Flange 37x100 mm	0150-1998
PF02-37x140	Flange 37x140 mm	0150-2105

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-20	Fixed Bearing Set for 19mm and 20mm Slider	0150-3083
PLF01-20-SS	Fixed Bearing Set for 19mm and 20mm Slider, Stainless steel	0150-3296
PLL01-19	Floating Bearing for PL01-19 Slider	0150-3335
PLL01-20	Floating Bearing for PL01-20 Slider	0150-3084
PLM01-20-MK	Mounting Kit for PL01-20 Slider	0150-3079

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

WIPERS



Item	Description	Item-No.
PA01-37/19-F	Wiper front side for PS01-37x...	0150-3225
PA01-37/19-R	Wiper back side for PS01-37x...-C	0150-3226
PA01-37/19-R cable	Wiper back side for PS01-37-Cable Type	0150-3227
PA01-37/20-F	Wiper front side for PS01-37x...	0150-3126
PA01-37/20-R	Wiper front side for PS01-37x...	0150-3201
PA01-37/20-R cable	Wiper back side for PS01-37-Cable Type	0150-3221

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D-Encoder	Encoder Cable (Length in m)	0150-3166
KS025-D/D15-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

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LINEAR MOTORS P01-37x120F-HP



- ✓ Higher maximum peak force and acceleration
- ✓ Increased continuous force and acceleration
- ✓ Higher permissible operating temperatures with less self-heating
- ✓ Wide range of applications in handling modules as well as in plant and machine construction

LINEAR MOTORS P01-37x120F-HP

Technical Data 223

Motor Specifications

P01-37x120F/40x120-HP 227

P01-37x120F/100x180-HP 228

P01-37x120F/160x240-HP 229

P01-37x120F/200x280-HP 230

P01-37x120F/300x380-HP 231

P01-37x120F/400x480-HP 232

P01-37x120F/500x580-HP 233

P01-37x120F/600x680-HP 234

P01-37x120F/700x780-HP 235

P01-37x120F/800x880-HP 236

P01-37x120F/1000x1080-HP 237

P01-37x120F/1200x1280-HP 238

P01-37x120F/1400x1480-HP 239

Linear Guides 240

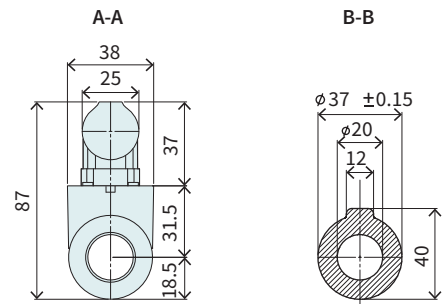
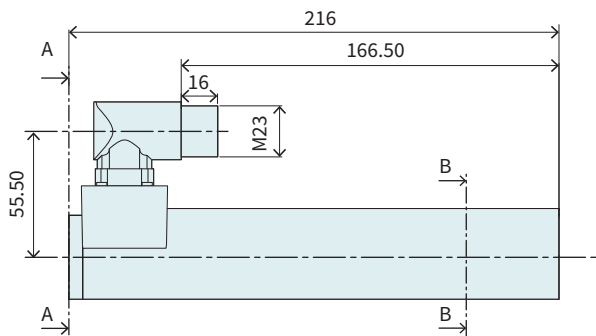
Accessories 242



MOTOR FAMILY P01-37x120F-HP

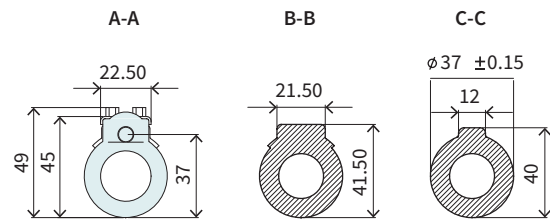
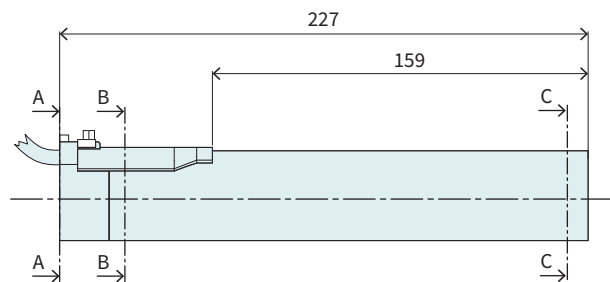
Technical Data				
Stroke				
Standard Stroke (SS)	mm	(in)	≤ 1400	(≤ 55.1)
Extended Stroke (ES)	mm	(in)	≤ 1480	(≤ 58.3)
Force				
Max. Force @ 48VDC	N	(lbf)	255	(57.3)
Max. Force @ 72VDC	N	(lbf)	255	(57.3)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	48 / 87 / -	(11 / 20 / -)
Max. Border Force relative	%		≤ 67	
Force Constant	N/A _{pk} (lbf/A _{pk})		17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.5	(99.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.8	(149.9)
Position Detection				
Position Resolution	mm	(in)	0.005	(0.0002)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling /Fan / Fluid]	A _{pk}		2.8 / 5.1 / -	
Terminal Resistance 25 °C / 120 °C	Ohm		2.4 / 3.5	
Terminal Inductivity	mH		1.6	
Magnetic Period	mm	(in)	40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.9 / 0.88 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 350 / -	
Mechanical Data				
Stator Diameter	mm	(in)	37	(1.5)
Stator Length [Connector type / Cable type]	mm	(in)	216 / 227	(8.5 / 8.9)
Stator Mass	g	(lb)	740	(1.63)
Slider Diameter	mm	(in)	20	(0.79)
Slider Length	mm	(in)	240 - 1600	(9.4 - 63)
Slider Mass	g	(lb)	490 - 3620	(1.08 - 7.96)
IP Code			IP 65	

STATOR CONNECTOR TYPE



Item	Description	Item-No.
PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251

STATOR CABLE TYPE

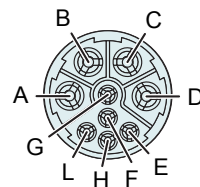


Item	Description	Item-No.
PS01-37x120F-HP-C20	Stator HP, 0.2 m Cable, IP67 St. M23/9(m)	0150-1252

CONNECTOR

Motor Connector Wiring	PS01-37x120F-HP-C PS01-37x120F-HP-C20	Wire color motor cable
	C-Connector	
Ph 1+	A	red
Ph 1-	B	pink
Ph 2+	C	blue
Ph 2-	D	grey
+5VDC	E	white
GND	F	inner shield
Sin	G	yellow
Cos	H	green
Temp.	L	black
Shield	Housing	outer Shield

C-Connector

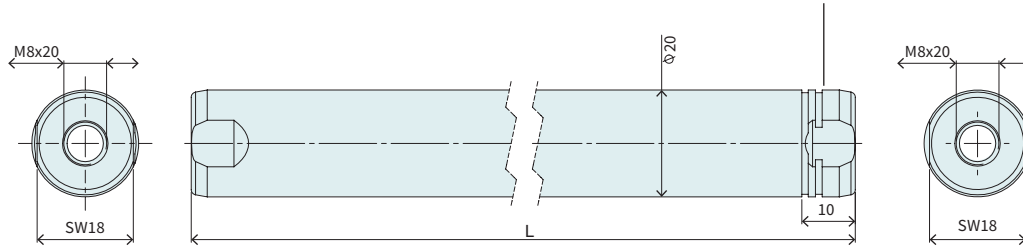


View: Motor Connector, plug side

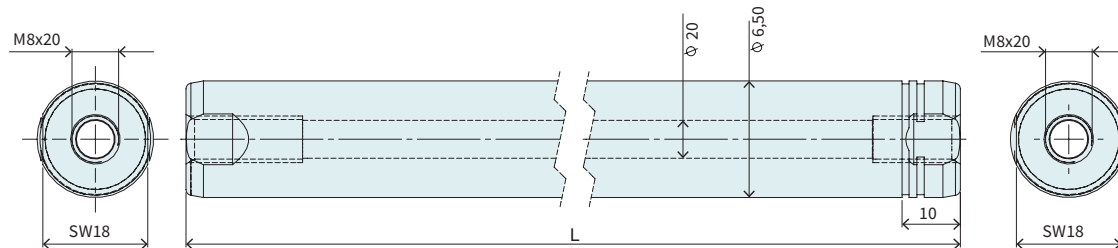
SLIDER

Slider HP/ Heavy Duty HP

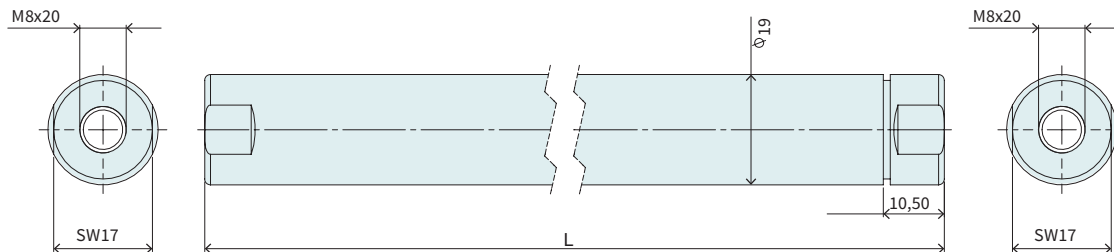
Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.



Hollow slider



High-Clearance Slider



Slider HP				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-20x240/180-HP	Slider 'High Performance'	120	40	0150-1505
PL01-20x300/240-HP	Slider 'High Performance'	180	100	0150-1506
PL01-20x360/300-HP	Slider 'High Performance'	240	160	0150-1507
PL01-20x400/340-HP	Slider 'High Performance'	280	200	0150-1508
PL01-20x500/440-HP	Slider 'High Performance'	380	300	0150-1509
PL01-20x600/540-HP	Slider 'High Performance'	480	400	0150-1510
PL01-20x700/640-HP	Slider 'High Performance'	580	500	0150-1511
PL01-20x800/740-HP	Slider 'High Performance'	680	600	0150-1512
PL01-20x900/840-HP	Slider 'High Performance'	780	700	0150-1513
PL01-20x1000/940-HP	Slider 'High Performance'	880	800	0150-1514
PL01-20x1200/1140-HP	Slider 'High Performance'	1080	1000	0150-1515
PL01-20x1400/1340-HP	Slider 'High Performance'	1280	1200	0150-1516
PL01-20x1600/1540-HP	Slider 'High Performance'	1480	1400	0150-1517

Slider Heavy Duty HP				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL02-20x240/180-HP	Slider 'heavy duty' 'High Performance'	120	40	0150-2162
PL02-20x300/240-HP	Slider 'heavy duty' 'High Performance'	180	100	0150-2163
PL02-20x360/300-HP	Slider 'heavy duty' 'High Performance'	240	160	0150-2164
PL02-20x400/340-HP	Slider 'heavy duty' 'High Performance'	280	200	0150-2165
PL02-20x500/440-HP	Slider 'heavy duty' 'High Performance'	380	300	0150-2166
PL02-20x600/540-HP	Slider 'heavy duty' 'High Performance'	480	400	0150-2167
PL02-20x700/640-HP	Slider 'heavy duty' 'High Performance'	580	500	0150-2168
PL02-20x800/740-HP	Slider 'heavy duty' 'High Performance'	680	600	0150-2169
PL02-20x900/840-HP	Slider 'heavy duty' 'High Performance'	780	700	0150-2170

Hollow slider

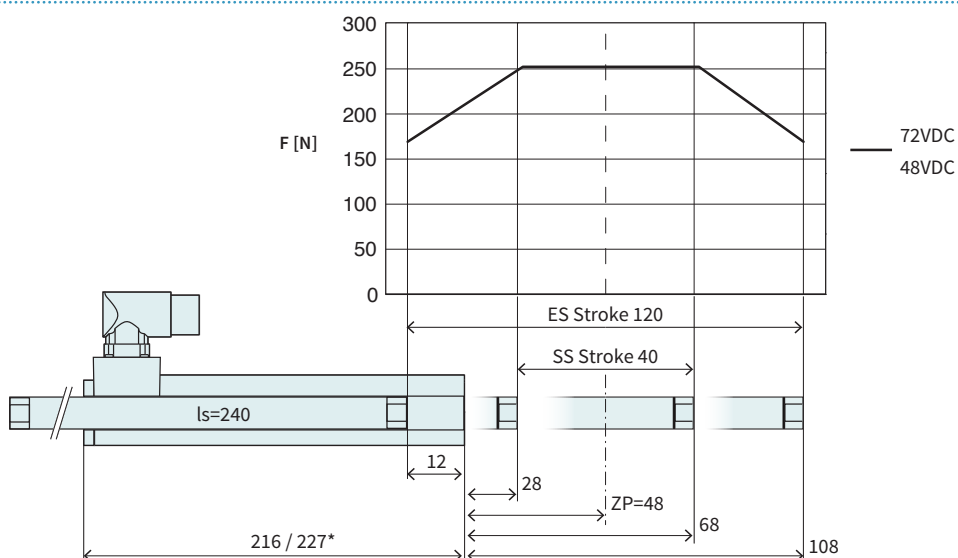
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-20x240/180-HP-L	Slider 'High Performance L'	120	100	0150-2540
PL01-20x300/240-HP-L	Slider 'High Performance L'	180	160	0150-3696
PL01-20x360/300-HP-L	Slider 'High Performance L'	240	220	0150-1537
PL01-20x400/340-HP-L	Slider 'High Performance L'	280	260	0150-3697
PL01-20x500/440-HP-L	Slider 'High Performance L'	380	360	0150-3698
PL01-20x600/540-HP-L	Slider 'High Performance L'	480	460	0150-3699
PL01-20x700/640-HP-L	Slider 'High Performance L'	580	560	0150-3700
PL01-20x800/740-HP-L	Slider 'High Performance L'	680	660	0150-3701
PL01-20x900/840-HP-L	Slider 'High Performance L'	780	760	0150-3702
PL01-20x1000/940-HP-L	Slider 'High Performance L'	880	860	0150-2510
PL01-20x1200/1140-HP-L	Slider 'High Performance L'	1080	1060	on request
PL01-20x1400/1340-HP-L	Slider 'High Performance L'	1280	1260	on request
PL01-20x1600/1540-HP-L	Slider 'High Performance L'	1480	1460	on request

High-Clearance Slider

Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-19x240/160	Slider 'high clearance'	100	80	0150-1448
PL01-19x300/220	Slider 'high clearance'	160	140	0150-1449
PL01-19x395/320	Slider 'high clearance'	260	240	0150-1452
PL01-19x500/420	Slider 'high clearance'	360	340	0150-1455
PL01-19x600/520	Slider 'high clearance'	460	440	0150-1456
PL01-19x700/620	Slider 'high clearance'	560	540	0150-1457

P01-37x120F/40x120-HP

Max. Stroke: 120 mm
Peak Force: 255 N

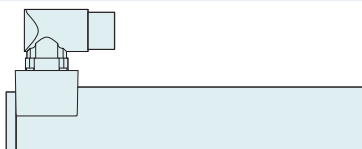


Dimensions in mm

*Cable Type

Technical Data P01-37x120F/40x120-HP

Stroke			
Standard Stroke (SS)	mm (in)	40 (1.57)	
Extended Stroke (ES)	mm (in)	120 (4.71)	
Force			
Max. Force @ 48VDC	N (lbf)	255 (57.3)	
Max. Force @ 72VDC	N (lbf)	255 (57.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	48 / 87 / - (11 / 20 / -)	
Max. Border Force relative	%	67	
Force Constant	N/A _{pk} (lbf/A _{pk})	17 (3.82)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)	3.8 (149.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.5	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	14.9	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2.8 / 5.1 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.9 / 0.88 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1200 / 350 / -	
Mechanical Data			
Slider Length	mm (in)	240 (9.4)	
Slider Mass	g (lb)	490 (1.08)	



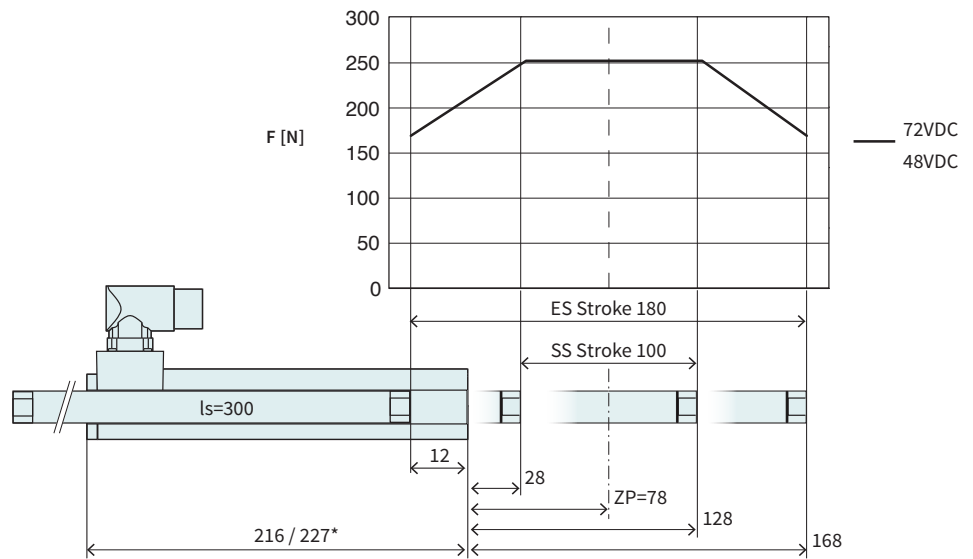
Item	Description	Item-No.
PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251
PS01-37x120F-HP-C20	Stator HP, 0.2 m Cable, IP67 St. M23/9(m)	0150-1252
PL01-20x240/180-HP	Slider 'High Performance'	0150-1505
PL02-20x240/180-HP	Slider 'heavy duty' 'High Performance'	0150-2162
PL01-20x240/180-HP-L*	Slider 'High Performance L'	0150-2540
PL01-19x240/160*	Slider 'high clearance'	0150-1448

* With this slider, the motor specifications above change.

P01-37x120F/100x180-HP

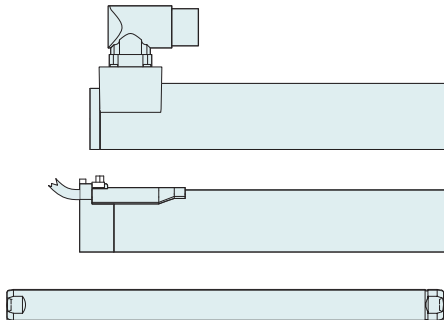
Max. Stroke: 180 mm
Peak Force: 255 N

Dimensions in mm
 *Cable Type



Technical Data P01-37x120F/100x180-HP

Stroke			
Standard Stroke (SS)	mm (in)	100 (3.93)	
Extended Stroke (ES)	mm (in)	180 (7.08)	
Force			
Max. Force @ 48VDC	N (lbf)	255 (57.3)	
Max. Force @ 72VDC	N (lbf)	255 (57.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	48 / 87 / - (11 / 20 / -)	
Max. Border Force relative	%	67	
Force Constant	N/A _{pk} (lbf/A _{pk})	17 (3.82)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)	3.8 (149.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.4	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	14.9	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2.8 / 5.1 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.9 / 0.88 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1200 / 350 / -	
Mechanical Data			
Slider Length	mm (in)	300 (12)	
Slider Mass	g (lb)	630 (1.4)	



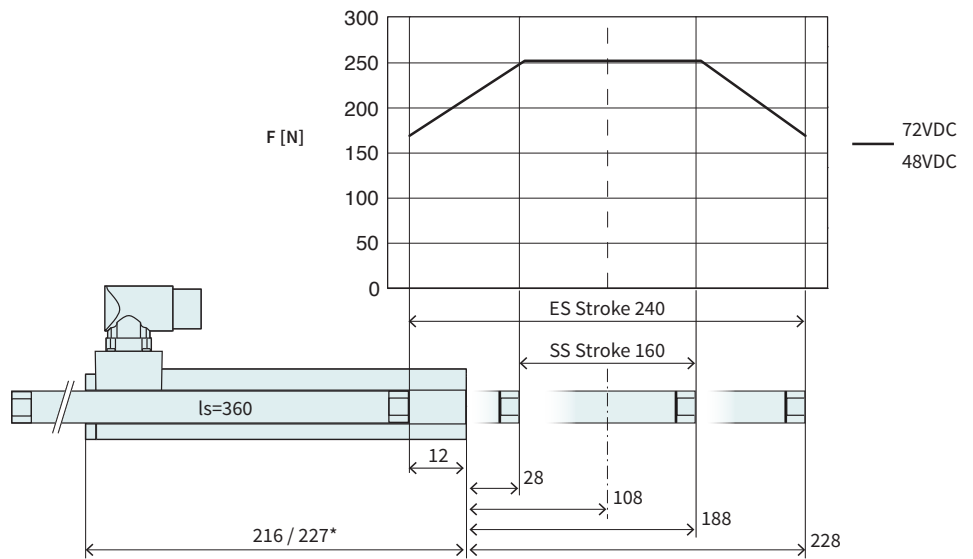
Item	Description	Item-No.
PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251
PS01-37x120F-HP-C20	Stator HP, 0.2 m Cable, IP67 St. M23/9(m)	0150-1252
PL01-20x300/240-HP	Slider 'High Performance'	0150-1506
PL02-20x300/240-HP	Slider 'heavy duty' 'High Performance'	0150-2163
PL01-20x300/240-HP-L*	Slider 'High Performance L'	0150-3696
PL01-19x300/220*	Slider 'high clearance'	0150-1449

* With this slider, the motor specifications above change.

P01-37x120F/160x240-HP

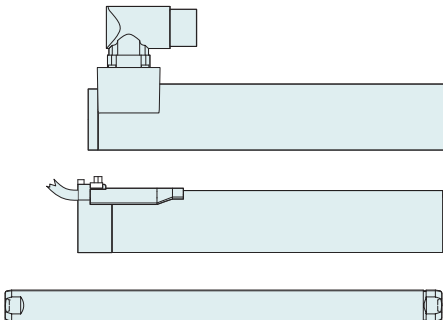
3

Max. Stroke: 240 mm
Peak Force: 255 N



Technical Data P01-37x120F/160x240-HP

Stroke			
Standard Stroke (SS)	mm (in)	160 (6.29)	
Extended Stroke (ES)	mm (in)	240 (9.44)	
Force			
Max. Force @ 48VDC	N (lbf)	255 (57.3)	
Max. Force @ 72VDC	N (lbf)	255 (57.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	48 / 87 / -	(11 / 20 / -)
Max. Border Force relative	%	67	
Force Constant	N/A _{pk} (lbf/A _{pk})	17 (3.82)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)	3.8 (149.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.3	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	14.9	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2.8 / 5.1 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.9 / 0.88 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1200 / 350 / -	
Mechanical Data			
Slider Length	mm (in)	360 (14)	
Slider Mass	g (lb)	760 (1.67)	



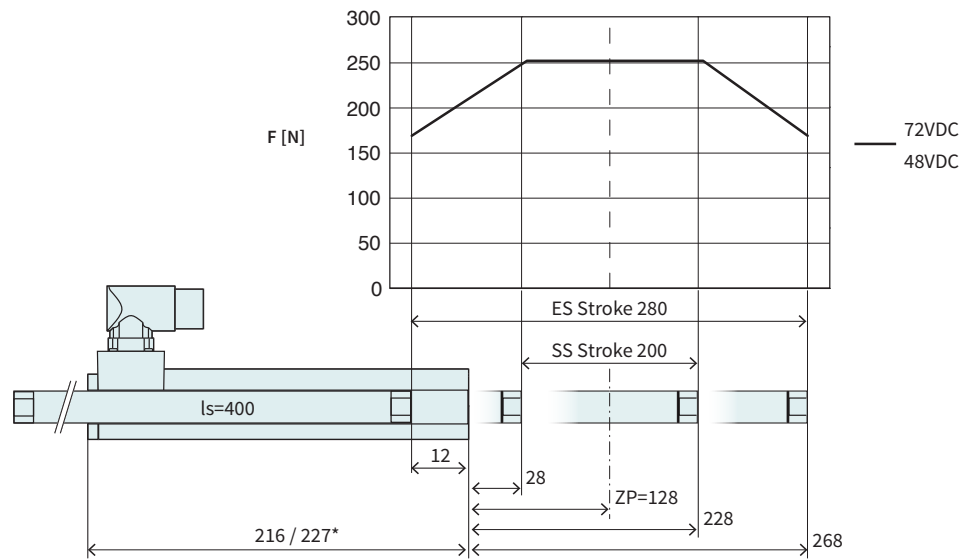
Item	Description	Item-No.
PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251
PS01-37x120F-HP-C20	Stator HP, 0.2 m Cable, IP67 St. M23/9(m)	0150-1252
PL01-20x360/300-HP	Slider 'High Performance'	0150-1507
PL02-20x360/300-HP	Slider 'heavy duty' 'High Performance'	0150-2164
PL01-20x360/300-HP-L*	Slider 'High Performance L'	0150-1537

* With this slider, the motor specifications above change.

P01-37x120F/200x280-HP

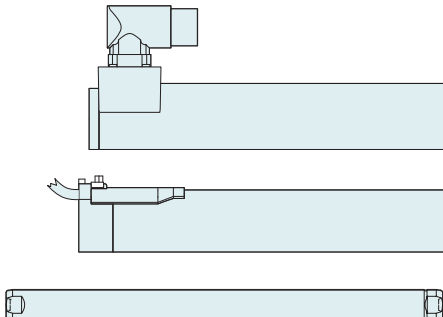
Max. Stroke: 280 mm
Peak Force: 255 N

Dimensions in mm
 *Cable Type



Technical Data P01-37x120F/200x280-HP

Stroke				
Standard Stroke (SS)	mm	(in)	200	(7.86)
Extended Stroke (ES)	mm	(in)	280	(10.99)
Force				
Max. Force @ 48VDC	N	(lbf)	255	(57.3)
Max. Force @ 72VDC	N	(lbf)	255	(57.3)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	48 / 87 / -	(11 / 20 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk}	(lbf/A _{pk})	17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.5	(99.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.8	(149.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.8 / 5.1 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.9 / 0.88 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 350 / -	
Mechanical Data				
Slider Length	mm	(in)	400	(16)
Slider Mass	g	(lb)	860	(1.89)



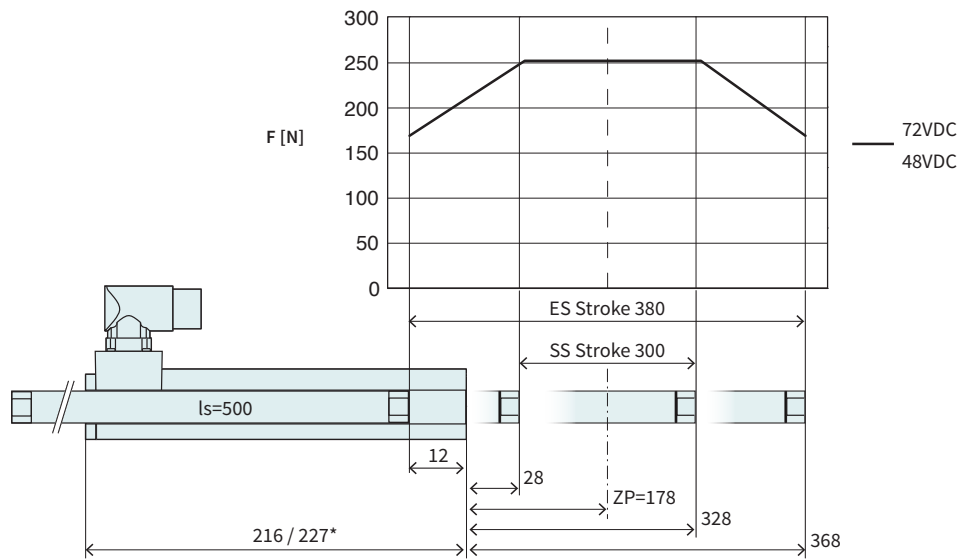
Item	Description	Item-No.
PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251
PS01-37x120F-HP-C20	Stator HP, 0.2 m Cable, IP67 St. M23/9(m)	0150-1252
PL01-20x400/340-HP	Slider 'High Performance'	0150-1508
PL02-20x400/340-HP	Slider 'heavy duty' 'High Performance'	0150-2165
PL01-20x400/340-HP-L*	Slider 'High Performance L'	0150-3697
PL01-19x395/320*	Slider 'high clearance'	0150-1452

* With this slider, the motor specifications above change.

P01-37x120F/300x380-HP

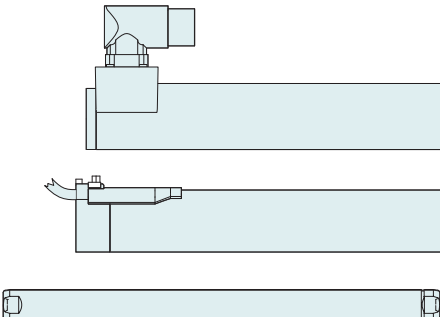
3

Max. Stroke: 380 mm
Peak Force: 255 N



Technical Data P01-37x120F/300x380-HP

Stroke				
Standard Stroke (SS)	mm (in)		300 (11.8)	
Extended Stroke (ES)	mm (in)		380 (14.99)	
Force				
Max. Force @ 48VDC	N (lbf)		255 (57.3)	
Max. Force @ 72VDC	N (lbf)		255 (57.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		48 / 87 / -	(11 / 20 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk} (lbf/A _{pk})		17 (3.82)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)		3.8 (149.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.8 / 5.1 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.9 / 0.88 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 350 / -	
Mechanical Data				
Slider Length	mm (in)		500 (20)	
Slider Mass	g (lb)		1090 (2.4)	

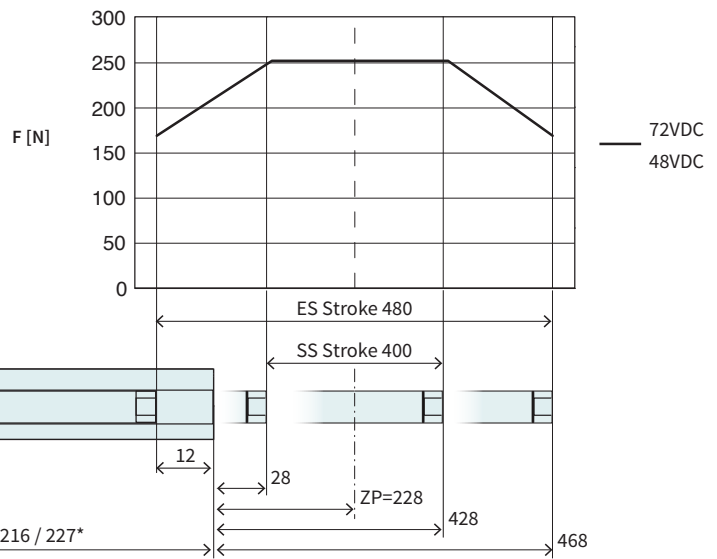


Item	Description	Item-No.
PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251
PS01-37x120F-HP-C20	Stator HP, 0.2 m Cable, IP67 St. M23/9(m)	0150-1252
PL01-20x500/440-HP	Slider 'High Performance'	0150-1509
PL02-20x500/440-HP	Slider 'heavy duty' 'High Performance'	0150-2166
PL01-20x500/440-HP-L*	Slider 'High Performance L'	0150-3698
PL01-19x500/420*	Slider 'high clearance'	0150-1455

* With this slider, the motor specifications above change.

P01-37x120F/400x480-HP

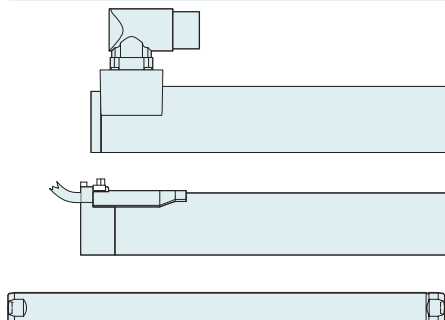
Max. Stroke: 480 mm
Peak Force: 255 N



Dimensions in mm
 *Cable Type

Technical Data P01-37x120F/400x480-HP

Stroke			
Standard Stroke (SS)	mm (in)	400 (15.69)	
Extended Stroke (ES)	mm (in)	480 (18.89)	
Force			
Max. Force @ 48VDC	N (lbf)	255 (57.3)	
Max. Force @ 72VDC	N (lbf)	255 (57.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	48 / 87 / - (11 / 20 / -)	
Max. Border Force relative	%	67	
Force Constant	N/A _{pk} (lbf/A _{pk})	17 (3.82)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)	3.8 (149.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	14.9	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2.8 / 5.1 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.9 / 0.88 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1200 / 350 / -	
Mechanical Data			
Slider Length	mm (in)	600 (24)	
Slider Mass	g (lb)	1330 (2.93)	



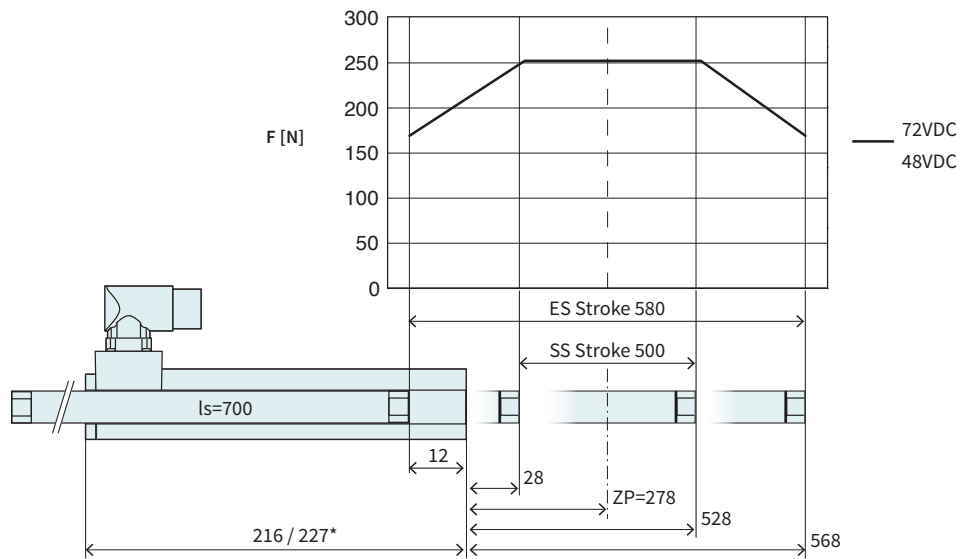
Item	Description	Item-No.
PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251
PS01-37x120F-HP-C20	Stator HP, 0.2 m Cable, IP67 St. M23/9(m)	0150-1252
PL01-20x600/540-HP	Slider 'High Performance'	0150-1510
PL02-20x600/540-HP	Slider 'heavy duty' 'High Performance'	0150-2167
PL01-20x600/540-HP-L*	Slider 'High Performance L'	0150-3699
PL01-19x600/520*	Slider 'high clearance'	0150-1456

* With this slider, the motor specifications above change.

P01-37x120F/500x580-HP

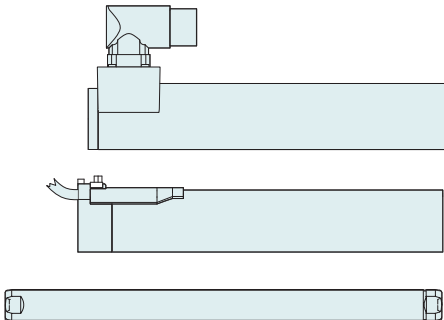
3

Max. Stroke: 580 mm
Peak Force: 255 N



Dimensions in mm
 *Cable Type

Technical Data P01-37x120F/500x580-HP				
Stroke				
Standard Stroke (SS)	mm (in)		500 (19.69)	
Extended Stroke (ES)	mm (in)		580 (22.8)	
Force				
Max. Force @ 48VDC	N (lbf)		255 (57.3)	
Max. Force @ 72VDC	N (lbf)		255 (57.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		48 / 87 / -	(11 / 20 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk} (lbf/A _{pk})		17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)		3.8 (149.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.8 / 5.1 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.9 / 0.88 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 350 / -	
Mechanical Data				
Slider Length	mm (in)		700 (28)	
Slider Mass	g (lb)		1560 (3.43)	



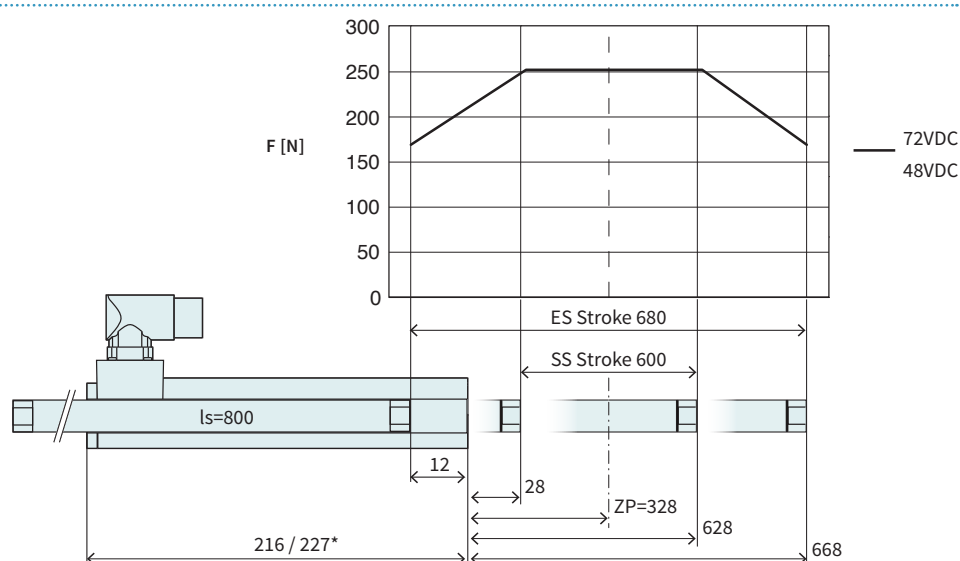
Item	Description	Item-No.
PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251
PS01-37x120F-HP-C20	Stator HP, 0.2 m Cable, IP67 St. M23/9(m)	0150-1252
PL01-20x700/640-HP	Slider 'High Performance'	0150-1511
PL02-20x700/640-HP	Slider 'heavy duty' 'High Performance'	0150-2168
PL01-20x700/640-HP-L*	Slider 'High Performance L'	0150-3700
PL01-19x700/620*	Slider 'high clearance'	0150-1457

* With this slider, the motor specifications above change.

P01-37x120F/600x680-HP

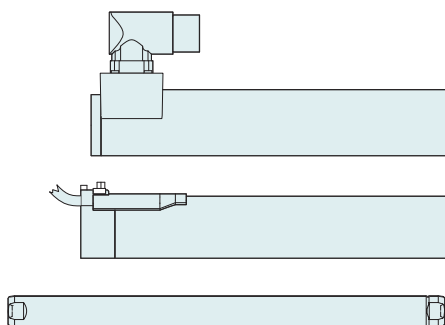
Max. Stroke: 680 mm
Peak Force: 255 N

Dimensions in mm
 *Cable Type



Technical Data P01-37x120F/600x680-HP

Stroke				
Standard Stroke (SS)	mm	(in)	600	(23.6)
Extended Stroke (ES)	mm	(in)	680	(26.8)
Force				
Max. Force @ 48VDC	N	(lbf)	255	(57.3)
Max. Force @ 72VDC	N	(lbf)	255	(57.3)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	48 / 87 / -	(11 / 20 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk}	(lbf/A _{pk})	17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.5	(99.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.8	(149.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.8 / 5.1 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.9 / 0.88 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 350 / -	
Mechanical Data				
Slider Length	mm	(in)	800	(31)
Slider Mass	g	(lb)	1790	(3.94)



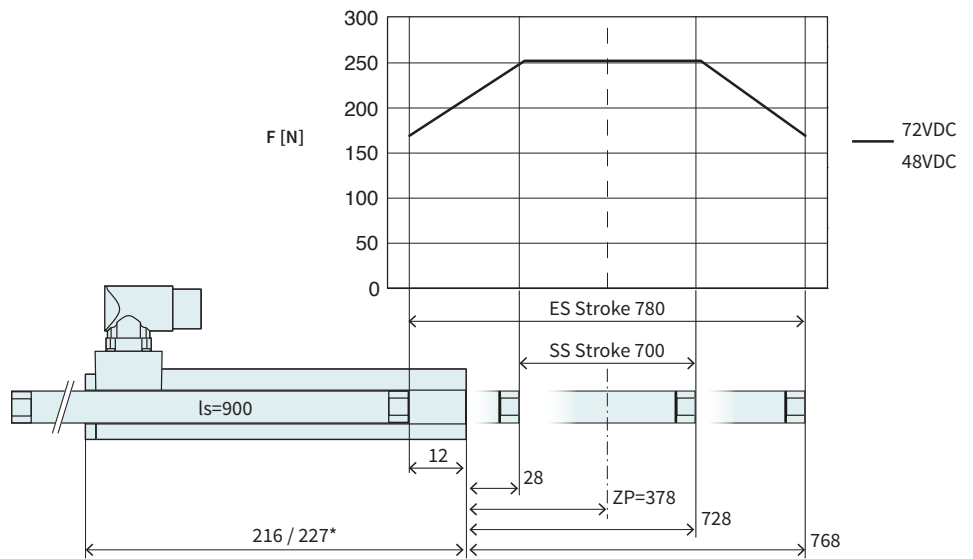
Item	Description	Item-No.
PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251
PS01-37x120F-HP-C20	Stator HP, 0.2 m Cable, IP67 St. M23/9(m)	0150-1252
PL01-20x800/740-HP	Slider 'High Performance'	0150-1512
PL02-20x800/740-HP	Slider 'heavy duty' 'High Performance'	0150-2169
PL01-20x800/740-HP-L*	Slider 'High Performance L'	0150-3701

* With this slider, the motor specifications above change.

P01-37x120F/700x780-HP

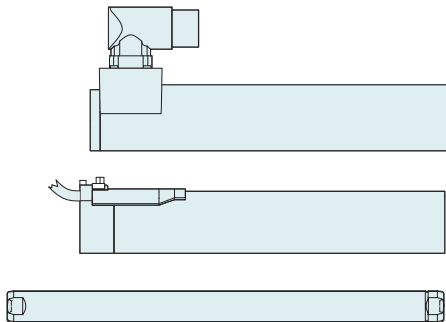
3

Max. Stroke: 780 mm
Peak Force: 255 N



Dimensions in mm
 *Cable Type

Technical Data P01-37x120F/700x780-HP				
Stroke				
Standard Stroke (SS)	mm (in)		700 (27.6)	
Extended Stroke (ES)	mm (in)		780 (30.69)	
Force				
Max. Force @ 48VDC	N (lbf)		255 (57.3)	
Max. Force @ 72VDC	N (lbf)		255 (57.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		48 / 87 / -	(11 / 20 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk} (lbf/A _{pk})		17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)		3.8 (149.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.8 / 5.1 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.9 / 0.88 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 350 / -	
Mechanical Data				
Slider Length	mm (in)		900 (35)	
Slider Mass	g (lb)		2020 (4.44)	



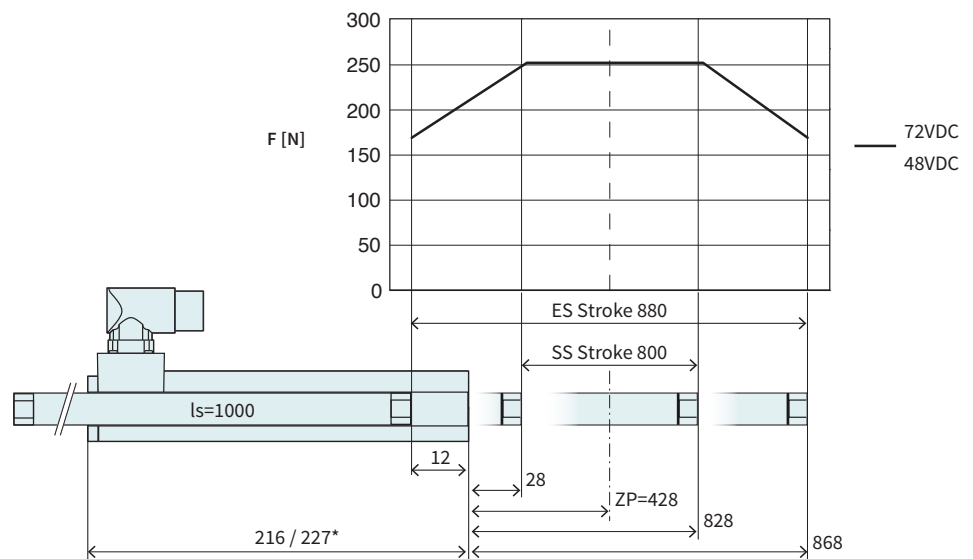
Item	Description	Item-No.
PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251
PS01-37x120F-HP-C20	Stator HP, 0.2 m Cable, IP67 St. M23/9(m)	0150-1252
PL01-20x900/840-HP	Slider 'High Performance'	0150-1513
PL02-20x900/840-HP	Slider 'heavy duty' 'High Performance'	0150-2170
PL01-20x900/840-HP-L*	Slider 'High Performance L'	0150-3702

* With this slider, the motor specifications above change.

P01-37x120F/800x880-HP

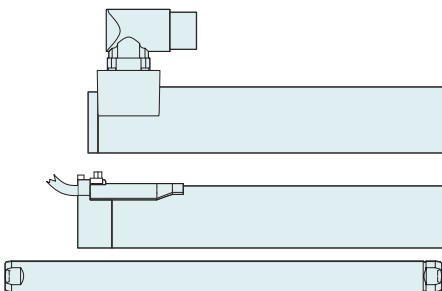
Max. Stroke: 880 mm
Peak Force: 255 N

Dimensions in mm
 *Cable Type



Technical Data P01-37x120F/800x880-HP

Stroke				
Standard Stroke (SS)	mm	(in)	800	(31.49)
Extended Stroke (ES)	mm	(in)	880	(34.6)
Force				
Max. Force @ 48VDC	N	(lbf)	255	(57.3)
Max. Force @ 72VDC	N	(lbf)	255	(57.3)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	48 / 87 / -	(11 / 20 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk}	(lbf/A _{pk})	17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.5	(99.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.8	(149.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.8 / 5.1 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.9 / 0.88 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 350 / -	
Mechanical Data				
Slider Length	mm	(in)	1000	(39)
Slider Mass	g	(lb)	2230	(4.91)

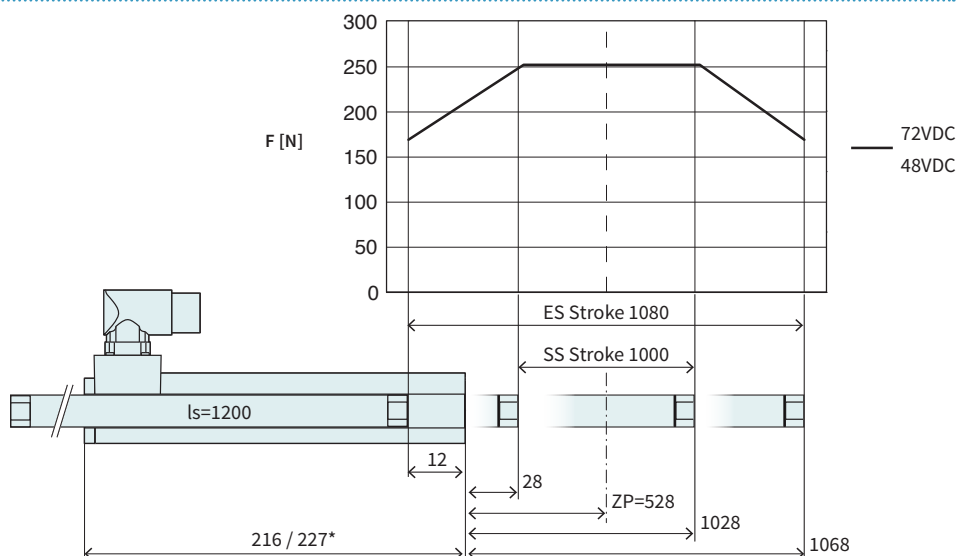


Item	Description	Item-No.
PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251
PS01-37x120F-HP-C20	Stator HP, 0.2 m Cable, IP67 St. M23/9(m)	0150-1252
PL01-20x1000/940-HP	Slider 'High Performance'	0150-1514
PL01-20x1000/940-HP-L*	Slider 'High Performance L'	0150-3703

* With this slider, the motor specifications above change.

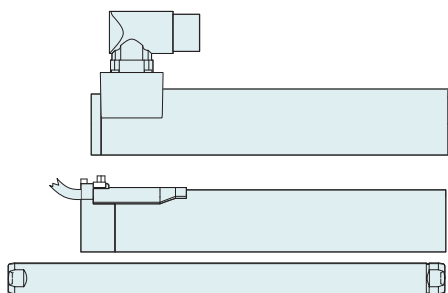
P01-37x120F/1000x1080-HP

Max. Stroke: 1080 mm
Peak Force: 255 N



Dimensions in mm
 *Cable Type

Technical Data P01-37x120F/1000x1080-HP				
Stroke				
Standard Stroke (SS)	mm (in)		1000	(39.39)
Extended Stroke (ES)	mm (in)		1080	(42.49)
Force				
Max. Force @ 48VDC	N (lbf)		255	(57.3)
Max. Force @ 72VDC	N (lbf)		255	(57.3)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		48 / 87 / -	(11 / 20 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk} (lbf/A _{pk})		17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.5	(99.9)
Max. Velocity @ 72VDC	m/s (in/s)		3.8	(149.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.8 / 5.1 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.9 / 0.88 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 350 / -	
Mechanical Data				
Slider Length	mm (in)		1200	(47)
Slider Mass	g (lb)		2690	(5.92)

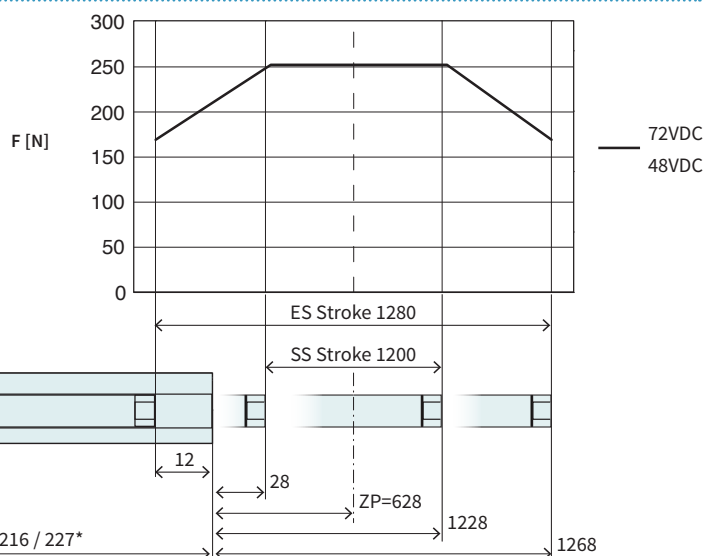


Item	Description	Item-No.
PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251
PS01-37x120F-HP-C20	Stator HP, 0.2 m Cable, IP67 St. M23/9(m)	0150-1252
PL01-20x1200/1140-HP	Slider 'High Performance'	0150-1515
PL01-20x1200/1140-HP-L*	Slider 'High Performance L'	0150-2510

* With this slider, the motor specifications above change.

P01-37x120F/1200x1280-HP

Max. Stroke: 1280 mm
Peak Force: 255 N

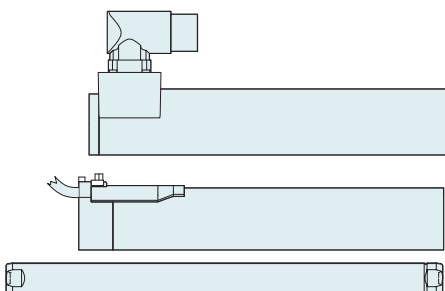


Dimensions in mm

*Cable Type

Technical Data P01-37x120F/1200x1280-HP

Stroke			
Standard Stroke (SS)	mm (in)	1200 (47.2)	
Extended Stroke (ES)	mm (in)	1280 (50.39)	
Force			
Max. Force @ 48VDC	N (lbf)	255 (57.3)	
Max. Force @ 72VDC	N (lbf)	255 (57.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	48 / 87 / - (11 / 20 / -)	
Max. Border Force relative	%	67	
Force Constant	N/A _{pk} (lbf/A _{pk})	17 (3.82)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)	3.8 (149.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	14.9	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2.8 / 5.1 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.9 / 0.88 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1200 / 350 / -	
Mechanical Data			
Slider Length	mm (in)	1400 (55)	
Slider Mass	g (lb)	3160 (6.95)	



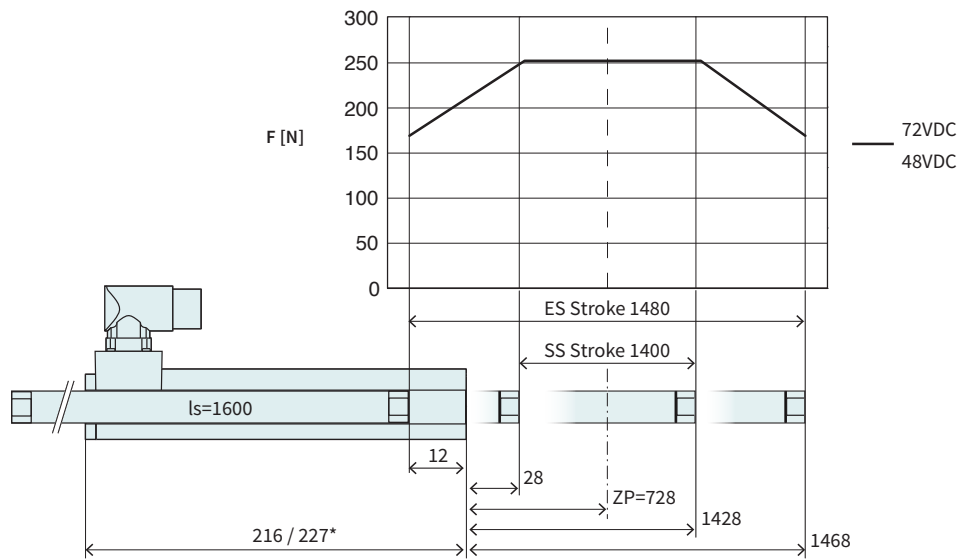
Item	Description	Item-No.
PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251
PS01-37x120F-HP-C20	Stator HP, 0.2 m Cable, IP67 St. M23/9(m)	0150-1252
PL01-20x1400/1340-HP	Slider 'High Performance'	0150-1516
PL01-20x1400/1340-HP-L*	Slider 'High Performance L'	on request

* With this slider, the motor specifications above change.

P01-37x120F/1400x1480-HP

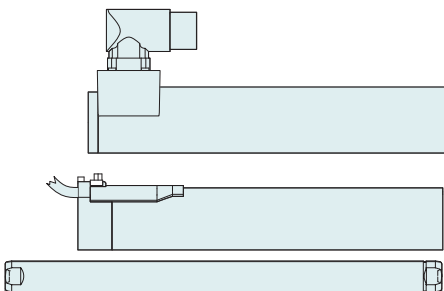
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Max. Stroke: 1480 mm
Peak Force: 255 N



Dimensions in mm
 *Cable Type

Technical Data P01-37x120F/1400x1480-HP				
Stroke				
Standard Stroke (SS)	mm (in)		1400 (55.1)	
Extended Stroke (ES)	mm (in)		1480 (58.29)	
Force				
Max. Force @ 48VDC	N (lbf)		255 (57.3)	
Max. Force @ 72VDC	N (lbf)		255 (57.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		48 / 87 / -	(11 / 20 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk} (lbf/A _{pk})		17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)		3.8 (149.9)	
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.8 / 5.1 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.9 / 0.88 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 350 / -	
Mechanical Data				
Slider Length	mm (in)		1600 (63)	
Slider Mass	g (lb)		3620 (7.96)	



Item	Description	Item-No.
PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251
PS01-37x120F-HP-C20	Stator HP, 0.2 m Cable, IP67 St. M23/9(m)	0150-1252
PL01-20x1600/1540-HP	Slider 'High Performance'	0150-1517
PL01-20x1600/1540-HP-L*	Slider 'High Performance L'	on request

* With this slider, the motor specifications above change.

Linear Guides H01

3



HM01-37x120/80		Linear Module 37x120 with 80 mm Stroke			
<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	→	H-Guide	H01-37x166/80	H-Guide for P01-37x120, Stroke max 80 mm	0150-5020
			H01-37x166/80-GF	H-Guide for P01-37x120, Stroke max 80 mm	0150-5080
	→	Stator	PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251
			PS01-37x120F-HP-C20	Stator HP, 0.2m Cable, IP67 St. M23/9(m)	0150-1252
	→	Slider	PL01-20x300/240-HP	Slider 'High Performance'	0150-1506
			PL02-20x300/240-HP	Slider 'heavy duty' 'High Performance'	0150-2163
HM01-37x120/180		Linear Module 37x120 with 180 mm Stroke			
<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	→	H-Guide	H01-37x166/180	H-Guide for P01-37x120, Stroke max 180 mm	0150-5021
			H01-37x166/180-GF	H-Guide for P01-37x120, Stroke max 180mm	0150-5081
	→	Stator	PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251
			PS01-37x120F-HP-C20	Stator HP, 0.2m Cable, IP67 St. M23/9(m)	0150-1252
	→	Slider	PL01-20x400/340-HP	Slider 'High Performance'	0150-1508
			PL02-20x400/340-HP	Slider 'heavy duty' 'High Performance'	0150-2165
HM01-37x120/280		Linear Module 37x120 with 280 mm Stroke			
<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	→	H-Guide	H01-37x166/280	H-Guide for P01-37x120, Stroke max 280mm	0150-5022
			H01-37x166/280-GF	H-Guide for P01-37x120, Stroke max 280mm	0150-5082
	→	Stator	PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251
			PS01-37x120F-HP-C20	Stator HP, 0.2m Cable, IP67 St. M23/9(m)	0150-1252
	→	Slider	PL01-20x500/440-HP	Slider 'High Performance'	0150-1509
			PL02-20x500/440-HP	Slider 'heavy duty' 'High Performance'	0150-2166
Accessories					
<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	→	Brake	HB01-37	Pneumatic Brake for H01-37/600N (4-6Bar)	0150-5052
		Fan	HV01-37/48	Fan cooling for H01-37/48 &PF02-37/48	0150-5051
	→	MagSpring	MF01-37/H37	Flange MagSpring 37 / H-Guide 23/37/48	0250-2307
			MA01-37/H37	Adapter MagSpring 37&20 / H-Guide 37	0250-0117
	→	Centering sleeve	HC01-09/04	Centering sleeve D9x4 mm	0150-3251
		Wipers	HA01-27/20-F	Wiper for H01-37 guides, front side	0150-5108

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

Bridge Guide B01

3

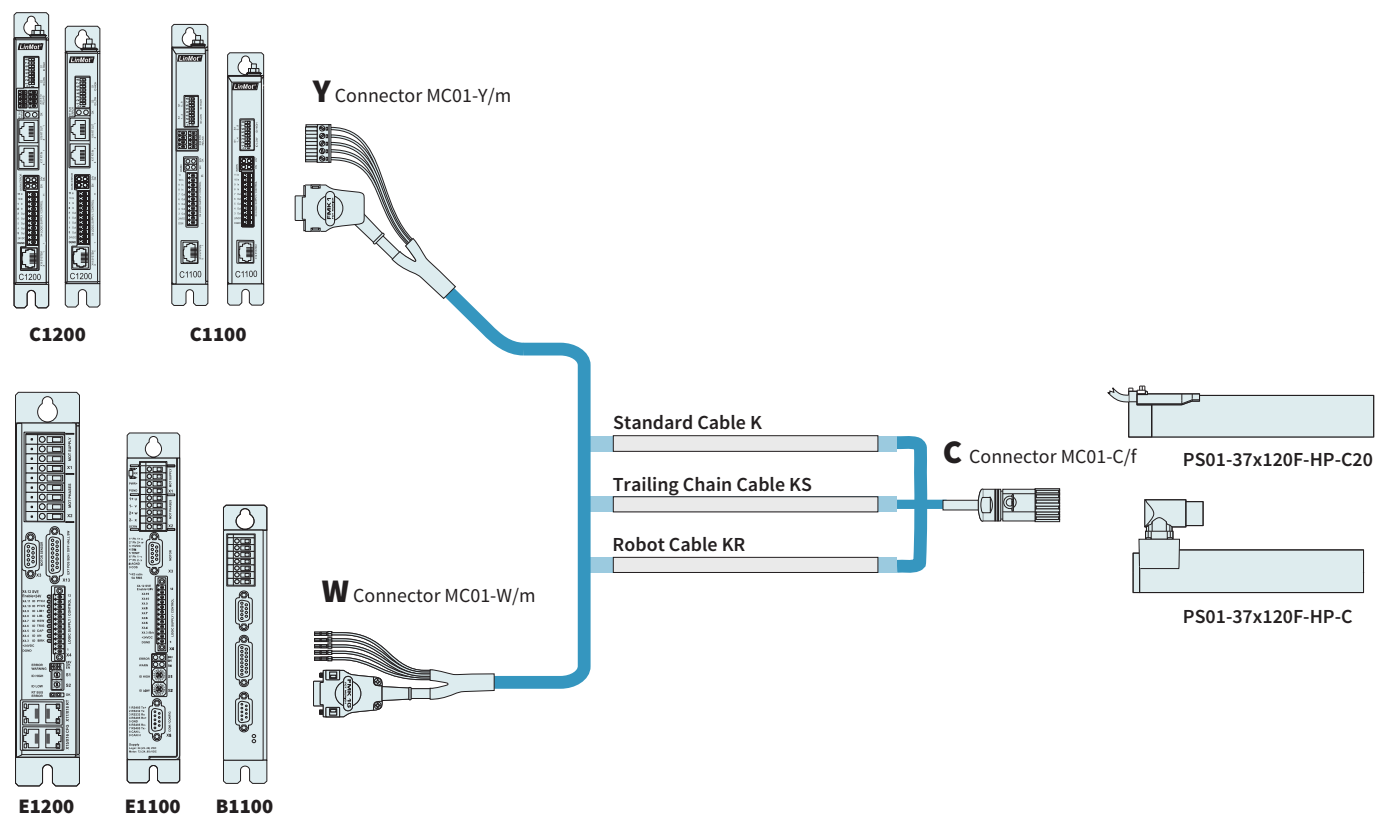


BM01-37x120/160 Bridge Module 37x120 with 160 mm Stroke ¹⁾				
→	B-Guide	B01-37x166/160	B-Guide for P01-37x120, Stroke max 160mm	0150-5138
		B01-37x166/160-GF	B-Guide for P01-37x120, Stroke max 160mm	0150-5141
→	Stator	PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251
		PS01-37x120F-HP-C20	Stator HP, 0.2m Cable, IP67 St. M23/9(m)	0150-1252
→	Slider	PL01-19x395/320	Slider 'high clearance'	0150-1452
BM01-37x120/260 Bridge Module 37x120 with 260 mm Stroke ¹⁾				
→	B-Guide	B01-37x166/260	B-Guide for P01-37x120, Stroke max 260mm	0150-5139
		B01-37x166/260-GF	B-Guide for P01-37x120, Stroke max 260mm	0150-5142
→	Stator	PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251
		PS01-37x120F-HP-C20	Stator HP, 0.2m Cable, IP67 St. M23/9(m)	0150-1252
→	Slider	PL01-19x500/420	Slider 'high clearance'	0150-1455
BM01-37x120/360 Bridge Module 37x120 with 360 mm Stroke ¹⁾				
→	B-Guide	B01-37x166/360	B-Guide for P01-37x120, Stroke max 360mm	0150-5140
		B01-37x166/360-GF	B-Guide for P01-37x120, Stroke max 360mm	0150-5143
→	Stator	PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251
		PS01-37x120F-HP-C20	Stator HP, 0.2m Cable, IP67 St. M23/9(m)	0150-1252
→	Slider	PL01-19x600/520	Slider 'high clearance'	0150-1456
Accessories				
→	Brake	HB01-37	Pneumatic brake for H01-37 guides	0150-5052
→	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051
→	MagSpring	MF01-37/H37	Flange MagSpring 37 / H-Guide 23/37/48	0250-2307
		MA01-37/H37	Adapter MagSpring 37&20 / H-Guide 37	0250-0117
→	Centering sleeve	HC01-09/04	Centering sleeve D9x4 mm	0150-3251
→	Wipers	HA01-37/19-F	Wiper for H01-37 guides, front side	0150-5177

¹⁾ The stroke is reduced by 18mm when using cable models.

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

Motor Cable



ORDERING INFORMATION

STANDARD CABLE		
Item	Description	Item-No.
K05-W/C-2	Motor Cable W/C, 2 m	0150-2123
K05-W/C-4	Motor Cable W/C, 4 m	0150-2124
K05-W/C-6	Motor Cable W/C, 6 m	0150-2125
K05-W/C-8	Motor Cable W/C, 8 m	0150-2126
K05-W/C-	Motor Cable W/C, Custom length	0150-3263
K05-Y/C-2	Motor Cable Y/R, 2 m	0150-2425
K05-Y/C-4	Motor Cable Y/R, 4 m	0150-2426
K05-Y/C-6	Motor Cable Y/R, 6 m	0150-2427
K05-Y/C-8	Motor Cable Y/R, 8 m	0150-2428
K05-Y-Fe/C-	Motor Cable Y-Fe/R, Custom length	0150-3502

TRAILING CHAIN CABLE

Item	Description	Item-No.
KS05-W/C-4	Trailing Chain Cable W/C, 4 m	0150-2127
KS05-W/C-6	Trailing Chain Cable W/C, 6 m	0150-2128
KS05-W/C-8	Trailing Chain Cable W/C, 8 m	0150-2129
KS05-W/C-	Trailing Chain Cable W/C, Custom length	0150-3204
KS05-Y/C-4	Trailing Chain Cable Y/C, 4 m	0150-2436
KS05-Y/C-6	Trailing Chain Cable Y/C, 6 m	0150-2437
KS05-Y/C-8	Trailing Chain Cable Y/C, 8 m	0150-2438
KS05-Y/C-	Trailing Chain Cable Y-Fe/C, Custom length	0150-3508

ROBOT CABLE

Item	Description	Item-No.
KR05-W/C-	Robot Cable KR05-W/C, Custom length	0150-3644
KR05-Y-Fe/C-	Robot Cable KR05-Y-Fe/C, Custom length	0150-3513

CONNECTOR & CABLE (INDIVIDUAL)

Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-C/f	Motor Connector C/f	0150-3080
MC01-P/f	Motor Connector P/f	0150-3021
K05-04/05	Motor Cable per m	0150-1920
KS05-04/05	Trailing Chain Cable per m	0150-1938
KR05-04/05	Robot Cable per m	0150-1846

MOTOR FLANGES



Item	Description	Item-No.
PF02-37x100	Flange 37x100 mm	0150-1998
PF02-37x140	Flange 37x140 mm	0150-2105

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37, B01-37 and PF02-37	0150-5051

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-20	Fixed Bearing Set for 19mm and 20mm Slider	0150-3083
PLF01-20-SS	Fixed Bearing Set for 19mm and 20mm Slider, Stainless steel	0150-3296
PLL01-19	Floating Bearing for PL01-19 Slider	0150-3335
PLL01-20	Floating Bearing for PL01-20 Slider	0150-3084
PLM01-20-MK	Mounting Kit for PL01-20 Slider	0150-3079

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

WIPERS



Item	Description	Item-No.
PA01-37/19-F	Wipers for PS01-37x...	0150-3225
PA01-37/19-R	Wipers for PS01-37x...-C	0150-3226
PA01-37/19-R cable	Wipers for PS01-37x... Cable Type	0150-3227
PA01-37/20-F	Wipers for PS01-37x...	0150-3126
PA01-37/20-R	Wipers for PS01-37x...-C	0150-3201
PA01-37/20-R cable	Wipers for PS01-37x...-Cable Type	0150-3221

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for inc. strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D-Encoder	Encoder Cable (Length in m)	0150-3166
KS025-D/D15-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

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LINEAR MOTORS P01-37Sx120F-HP



- ✓ Short design
- ✓ Integrated mounting flange
- ✓ Pluggable motor cable with cover
- ✓ Free positionable cable outlet
- ✓ For use where space is limited and in multi-axis applications

LINEAR MOTORS P01-37Sx120F-HP

Technical Data	249
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Motor Specifications

P01-37Sx120F/40x120-HP	253
P01-37Sx120F/100x180-HP	254
P01-37Sx120F/160x240-HP	255
P01-37Sx120F/200x280-HP	256
P01-37Sx120F/300x380-HP	257
P01-37Sx120F/400x480-HP	258
P01-37Sx120F/500x580-HP	259
P01-37Sx120F/600x680-HP	260
P01-37Sx120F/700x780-HP	261
P01-37Sx120F/800x880-HP	262
P01-37Sx120F/1000x1080-HP	263
P01-37Sx120F/1200x1280-HP	264
P01-37Sx120F/1400x1480-HP	265

Accessories	266
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Cable outlet -90°



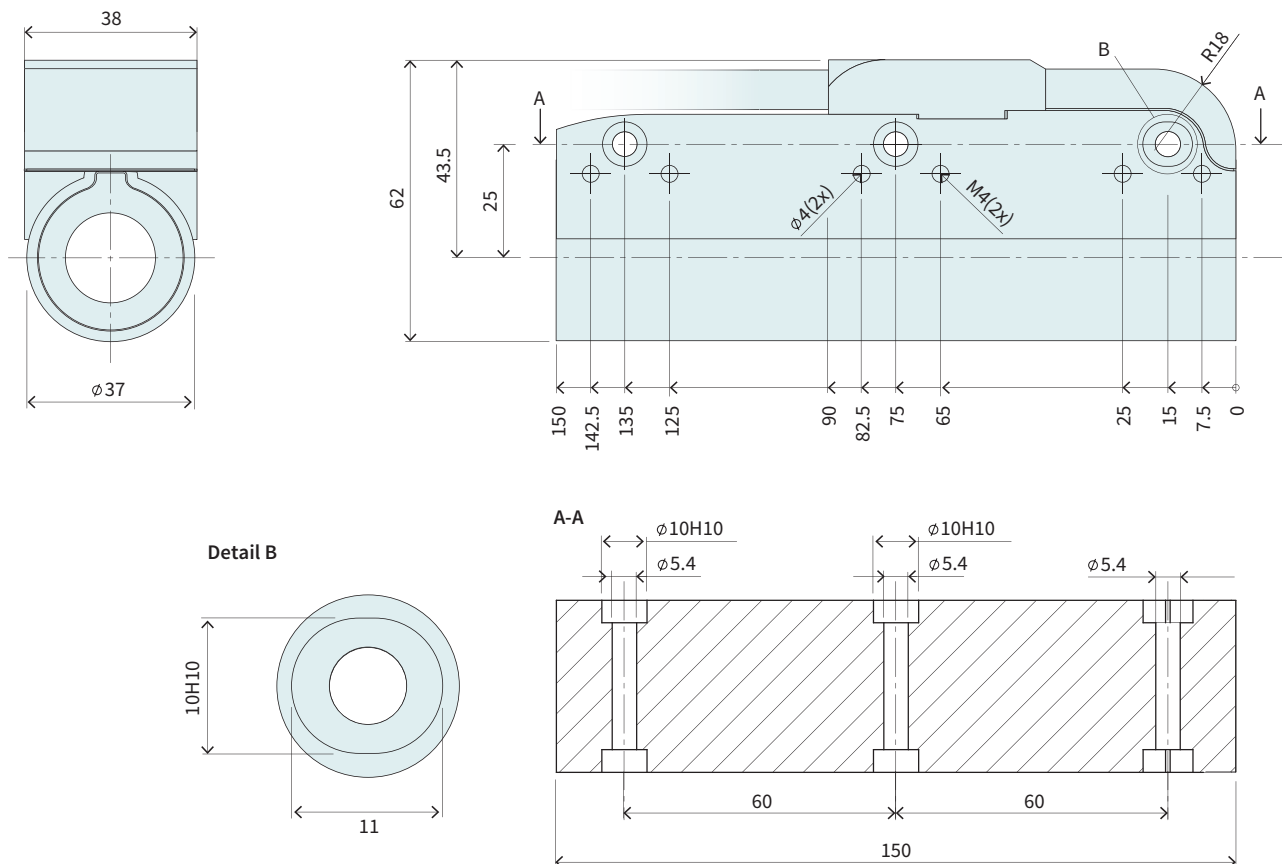
Cable outlet 0°



Cable outlet 90°

MOTOR FAMILY P01-37Sx120F-HP

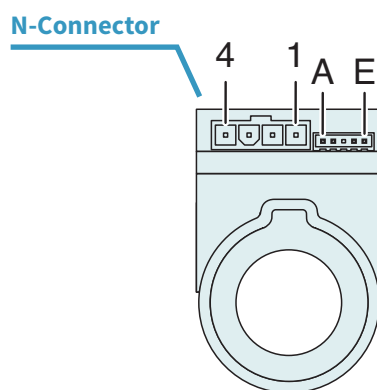
Technical Data				
Stroke				
Standard Stroke (SS)	mm (in)		≤ 1400	(≤ 55.1)
Extended Stroke (ES)	mm (in)		≤ 1480	(≤ 58.3)
Force				
Max. Force @ 48VDC	N (lbf)		255	(57.3)
Max. Force @ 72VDC	N (lbf)		255	(57.3)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		35 / 67 / -	(7.8 / 15 / -)
Max. Border Force relative	%		≤ 67	
Force Constant	N/A _{pk} (lbf/A _{pk})		17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.5	(99.9)
Max. Velocity @ 72VDC	m/s (in/s)		3.8	(149.9)
Position Detection				
Position Resolution	mm (in)		0.005	(0.0002)
Repeatability	mm (in)		±0.05	(±0.002)
Position Resolution with ES	mm (in)		0.001	(0.00004)
Repeatability with ES	mm (in)		±0.01	(±0.0004)
Linearity with ES	mm (in)		±0.01	(±0.0004)
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.1 / 3.9 / -	
Terminal Resistance 25 °C / 120 °C	Ohm		2.4 / 3.5	
Terminal Inductivity	mH		1.6	
Magnetic Period	mm (in)		40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		5.5 / 1.5 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2200 / 600 / -	
Mechanical Data				
Stator Diameter	mm (in)		37	(1.5)
Stator Length [Connector type / Cable type]	mm (in)		150	(5.9)
Stator Mass	g (lb)		800	(1.76)
Slider Diameter	mm (in)		20	(0.79)
Slider Length	mm (in)		240 - 1600	(9.4 - 63)
Slider Mass	g (lb)		490 - 3620	(1.08 - 7.96)
IP Code			IP 50	



Item	Description	Item-No.
PS01-375x120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296

CONNECTOR

Motor Connector Wiring	N-Connector	Wire color motor cable
Phase 1+	Pin 4	red
Phase 1-	Pin 3	pink
Phase 2+	Pin 2	blue
Phase 2-	Pin 1	grey
+5V	Pin A	white
GND	Pin B	Inner Shield
Sensor Sin	Pin C	yellow
Sensor Cos	Pin D	green
Temp Sensor	Pin E	black
Housing		Outer Shield



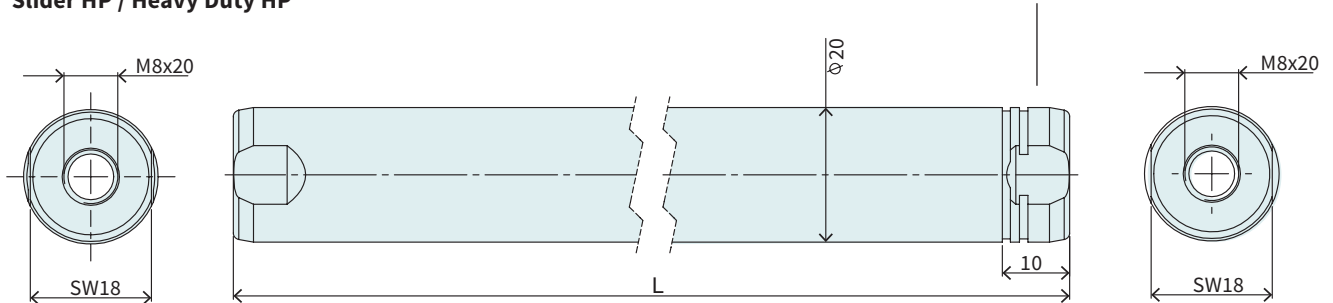
View: Motor Connector, plug side

SLIDER

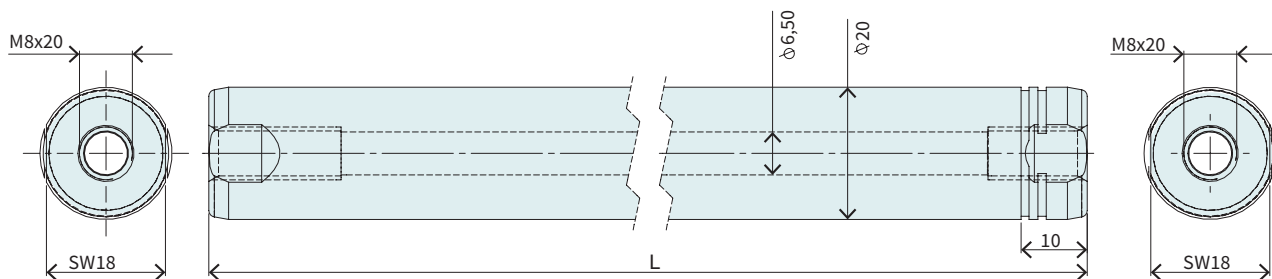
3

Slider HP / Heavy Duty HP

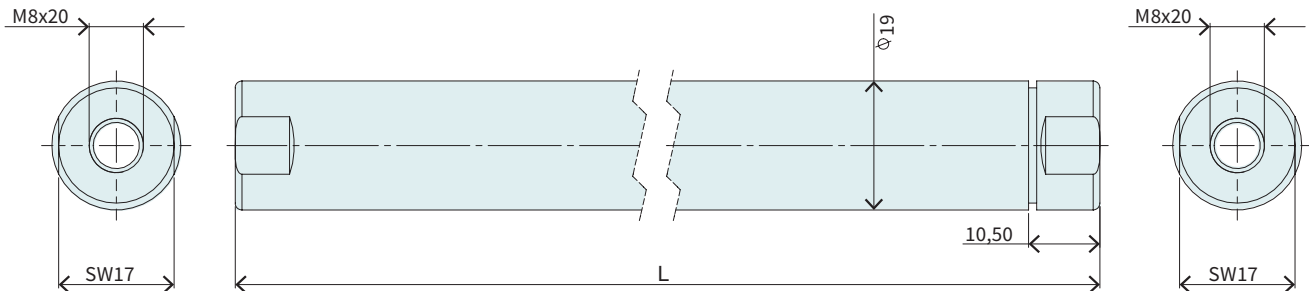
Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.



Hollow slider HP



High-Clearance Slider



Slider High Performance				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-20x240/180-HP	Slider 'High Performance'	120	100	0150-1505
PL01-20x300/240-HP	Slider 'High Performance'	180	160	0150-1506
PL01-20x360/300-HP	Slider 'High Performance'	240	220	0150-1507
PL01-20x400/340-HP	Slider 'High Performance'	280	260	0150-1508
PL01-20x500/440-HP	Slider 'High Performance'	380	360	0150-1509
PL01-20x600/540-HP	Slider 'High Performance'	480	460	0150-1510
PL01-20x700/640-HP	Slider 'High Performance'	580	560	0150-1511
PL01-20x800/740-HP	Slider 'High Performance'	680	660	0150-1512
PL01-20x900/840-HP	Slider 'High Performance'	780	760	0150-1513
PL01-20x1000/940-HP	Slider 'High Performance'	880	860	0150-1514
PL01-20x1200/1140-HP	Slider 'High Performance'	1080	1060	0150-1515
PL01-20x1400/1340-HP	Slider 'High Performance'	1280	1260	0150-1516
PL01-20x1600/1540-HP	Slider 'High Performance'	1480	1460	0150-1517

Slider Heavy Duty High Performance

Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL02-20x240/180-HP	Slider 'heavy duty' 'High Performance'	120	100	0150-2162
PL02-20x300/240-HP	Slider 'heavy duty' 'High Performance'	180	160	0150-2163
PL02-20x360/300-HP	Slider 'heavy duty' 'High Performance'	240	220	0150-2164
PL02-20x400/340-HP	Slider 'heavy duty' 'High Performance'	280	260	0150-2165
PL02-20x500/440-HP	Slider 'heavy duty' 'High Performance'	380	360	0150-2166
PL02-20x600/540-HP	Slider 'heavy duty' 'High Performance'	480	460	0150-2167
PL02-20x700/640-HP	Slider 'heavy duty' 'High Performance'	580	560	0150-2168
PL02-20x800/740-HP	Slider 'heavy duty' 'High Performance'	680	660	0150-2169
PL02-20x900/840-HP	Slider 'heavy duty' 'High Performance'	780	760	0150-2170

Hollow slider High Performance

Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-20x240/180-HP-L	Slider 'High Performance L'	120	100	0150-2540
PL01-20x300/240-HP-L	Slider 'High Performance L'	180	160	0150-3696
PL01-20x360/300-HP-L	Slider 'High Performance L'	240	220	0150-1537
PL01-20x400/340-HP-L	Slider 'High Performance L'	280	260	0150-3697
PL01-20x500/440-HP-L	Slider 'High Performance L'	380	360	0150-3698
PL01-20x600/540-HP-L	Slider 'High Performance L'	480	460	0150-3699
PL01-20x700/640-HP-L	Slider 'High Performance L'	580	560	0150-3700
PL01-20x800/740-HP-L	Slider 'High Performance L'	680	660	0150-3701
PL01-20x900/840-HP-L	Slider 'High Performance L'	780	760	0150-3702
PL01-20x1000/940-HP-L	Slider 'High Performance L'	880	860	0150-3703
PL01-20x1200/1140-HP-L	Slider 'High Performance L'	1080	1060	0150-2510
PL01-20x1400/1340-HP-L	Slider 'High Performance L'	1280	1260	on request
PL01-20x1600/1540-HP-L	Slider 'High Performance L'	1480	1460	on request

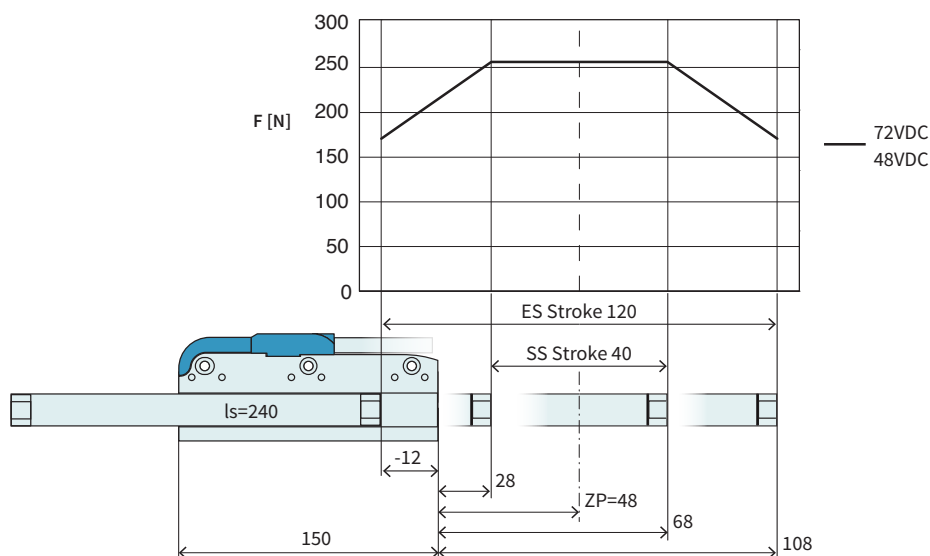
High-Clearance Slider

Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-19x240/160	Slider 'high clearance'	100	80	0150-1448
PL01-19x300/220	Slider 'high clearance'	160	140	0150-1449
PL01-19x395/320	Slider 'high clearance'	260	240	0150-1452
PL01-19x500/420	Slider 'high clearance'	360	340	0150-1455
PL01-19x600/520	Slider 'high clearance'	460	440	0150-1456
PL01-19x700/620	Slider 'high clearance'	560	540	0150-1457

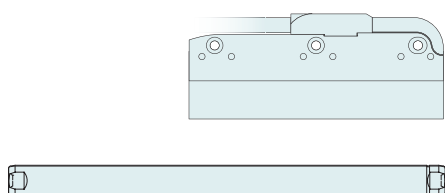
P01-37Sx120F/40x120-HP

Max. Stroke: 120 mm
Peak Force: 255 N

Dimensions in mm



Technical Data P01-37Sx120F/40x120-HP				
Stroke				
Standard Stroke (SS)	mm (in)		40 (1.57)	
Extended Stroke (ES)	mm (in)		120 (4.71)	
Force				
Max. Force @ 48VDC	N (lbf)		255 (57.3)	
Max. Force @ 72VDC	N (lbf)		255 (57.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		35 / 67 / - (7.8 / 15 / -)	
Max. Border Force relative	%		67	
Force Constant	N/A _{pk} (lbf/A _{pk})		17 (3.82)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)		3.8 (149.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.5	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.1 / 3.9 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		5.5 / 1.5 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2200 / 600 / -	
Mechanical Data				
Slider Length	mm (in)		240 (9.4)	
Slider Mass	g (lb)		490 (1.08)	



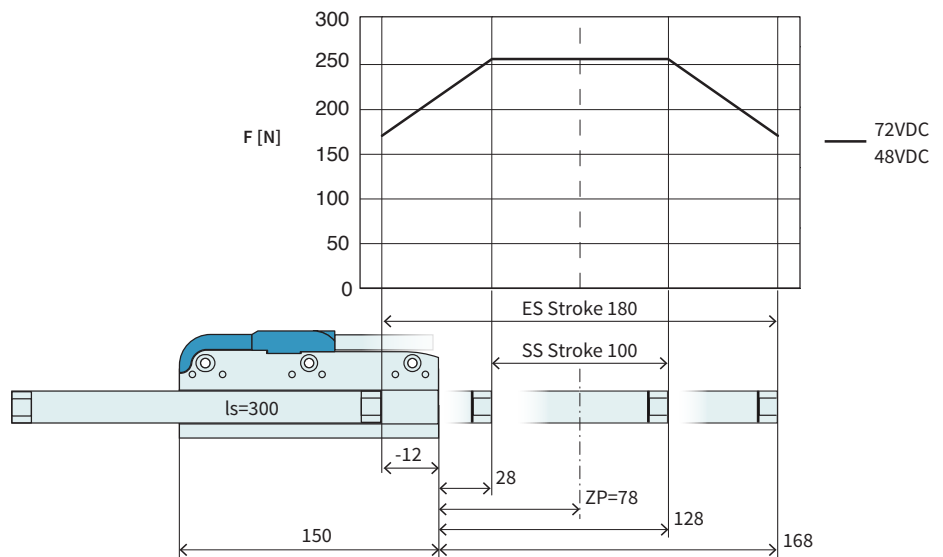
Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x240/180-HP	Slider 'High Performance'	0150-1505
PL02-20x240/180-HP	Slider 'heavy duty' 'High Performance'	0150-2162
PL01-20x240/180-HP-L*	Slider 'High Performance L'	0150-2540
PL01-19x240/160*	Slider 'high clearance'	0150-1448

* With this slider, the motor specifications above change.

P01-37Sx120F/100x180-HP

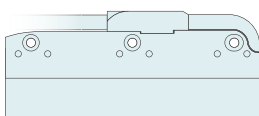
Max. Stroke: 180 mm
Peak Force: 255 N

Dimensions in mm



Technical Data P01-37Sx120F/100x180-HP

Stroke				
Standard Stroke (SS)	mm	(in)	100	(3.93)
Extended Stroke (ES)	mm	(in)	180	(7.08)
Force				
Max. Force @ 48VDC	N	(lbf)	255	(57.3)
Max. Force @ 72VDC	N	(lbf)	255	(57.3)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	35 / 67 / -	(7.8 / 15 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk}	(lbf/A _{pk})	17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.5	(99.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.8	(149.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.4	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.1 / 3.9 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		5.5 / 1.5 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2200 / 600 / -	
Mechanical Data				
Slider Length	mm	(in)	300	(12)
Slider Mass	g	(lb)	630	(1.39)

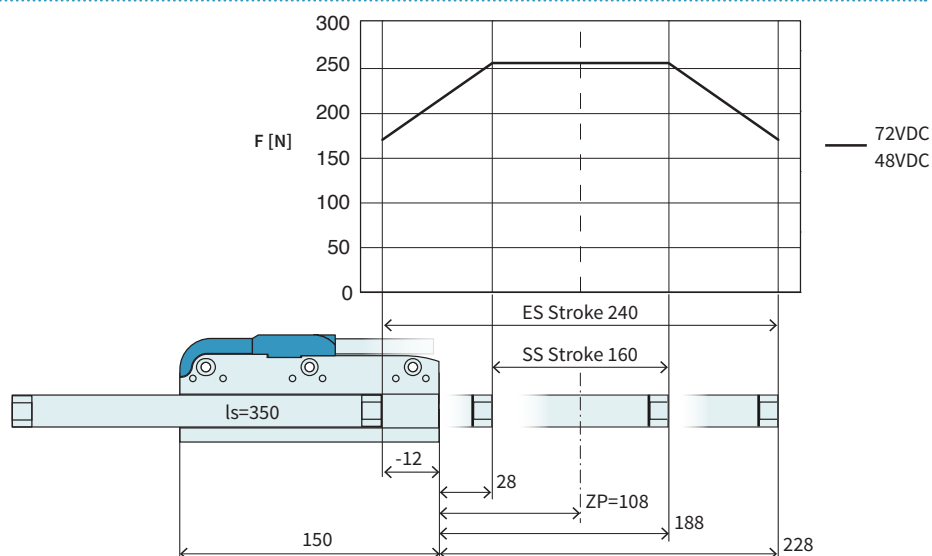


Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x300/240-HP	Slider 'High Performance'	0150-1506
PL02-20x300/240-HP	Slider 'heavy duty' 'High Performance'	0150-2163
PL01-20x300/240-HP-L*	Slider 'High Performance L'	0150-3696
PL01-19x300/220*	Slider 'high clearance'	0150-1449

* With this slider, the motor specifications above change.

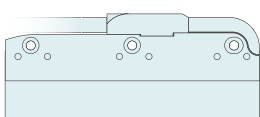
P01-37Sx120F/160x240-HP

Max. Stroke: 240 mm
Peak Force: 255 N



Technical Data P01-37Sx120F/160x240-HP

Stroke			
Standard Stroke (SS)	mm (in)	160	(6.29)
Extended Stroke (ES)	mm (in)	240	(9.44)
Force			
Max. Force @ 48VDC	N (lbf)	255	(57.3)
Max. Force @ 72VDC	N (lbf)	255	(57.3)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	35 / 67 / -	(7.8 / 15 / -)
Max. Border Force relative	%	67	
Force Constant	N/A _{pk} (lbf/A _{pk})	17	(3.82)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.5	(99.9)
Max. Velocity @ 72VDC	m/s (in/s)	3.8	(149.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.3	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	14.9	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2.1 / 3.9 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	5.5 / 1.5 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2200 / 600 / -	
Mechanical Data			
Slider Length	mm (in)	360	(14)
Slider Mass	g (lb)	760	(1.67)



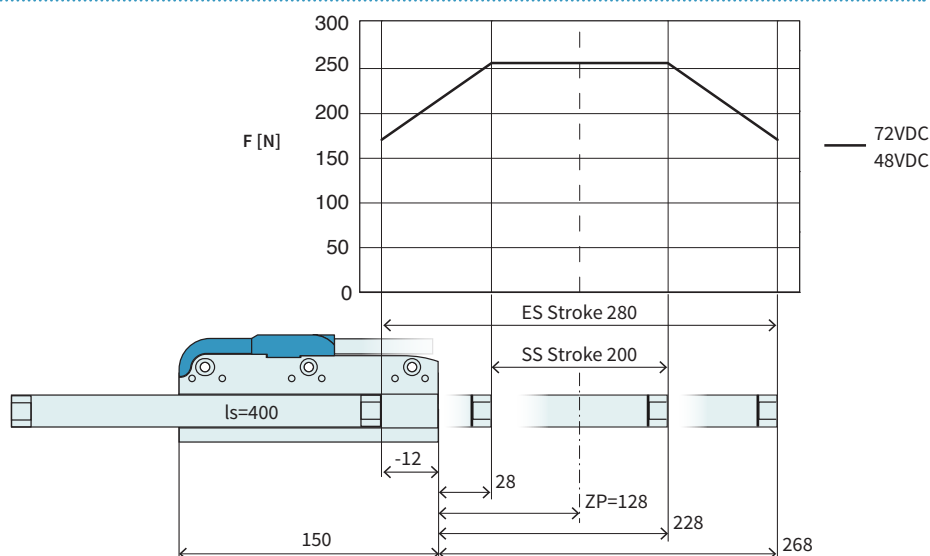
Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x360/300-HP	Slider 'High Performance'	0150-1507
PL02-20x360/300-HP	Slider 'heavy duty' 'High Performance'	0150-2164
PL01-20x360/300-HP-L*	Slider 'High Performance L'	0150-1537

* With this slider, the motor specifications above change.

P01-37Sx120F/200x280-HP

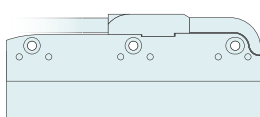
Max. Stroke: 280 mm
Peak Force: 255 N

Dimensions in mm



Technical Data P01-37Sx120F/200x280-HP

Stroke			
Standard Stroke (SS)	mm (in)	200	(7.86)
Extended Stroke (ES)	mm (in)	280	(10.99)
Force			
Max. Force @ 48VDC	N (lbf)	255	(57.3)
Max. Force @ 72VDC	N (lbf)	255	(57.3)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N (lbf)	35 / 67 / -	(7.8 / 15 / -)
Max. Border Force relative	%	67	
Force Constant	N/A _{pk} (lbf/A _{pk})	17	(3.82)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.5	(99.9)
Max. Velocity @ 72VDC	m/s (in/s)	3.8	(149.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.3	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	14.9	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2.1 / 3.9 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	5.5 / 1.5 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2200 / 600 / -	
Mechanical Data			
Slider Length	mm (in)	400	(16)
Slider Mass	g (lb)	860	(1.9)



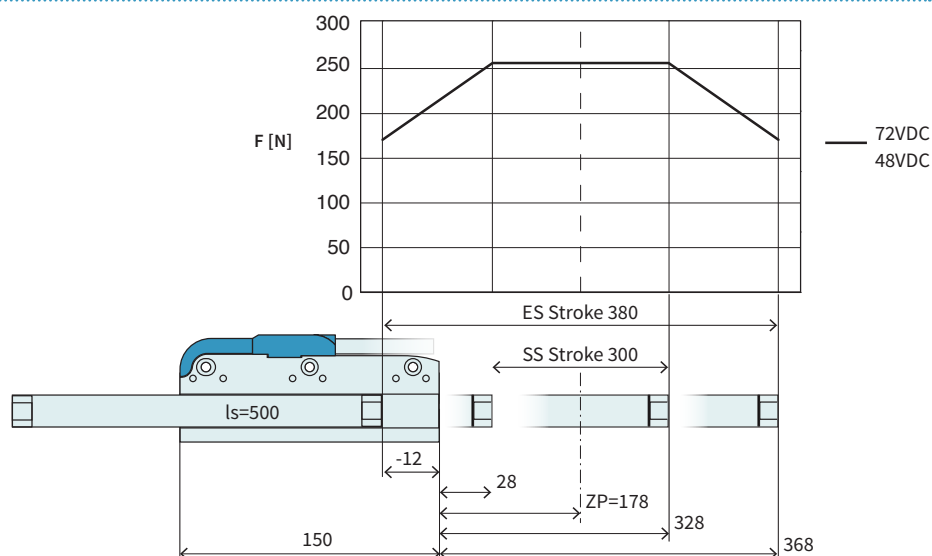
Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x400/340-HP	Slider 'High Performance'	0150-1508
PL02-20x400/340-HP	Slider 'heavy duty' 'High Performance'	0150-2165
PL01-20x400/340-HP-L*	Slider 'High Performance L'	0150-3697
PL01-19x395/320*	Slider 'high clearance'	0150-1452

* With this slider, the motor specifications above change.

P01-37Sx120F/300x380-HP

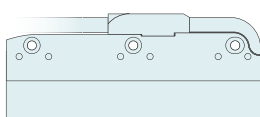
Max. Stroke: 380 mm
Peak Force: 255 N

Dimensions in mm



Technical Data P01-37Sx120F/300x380-HP

Stroke				
Standard Stroke (SS)	mm (in)		300 (11.8)	
Extended Stroke (ES)	mm (in)		380 (14.99)	
Force				
Max. Force @ 48VDC	N (lbf)		255 (57.3)	
Max. Force @ 72VDC	N (lbf)		255 (57.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		35 / 67 / -	(7.8 / 15 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk} (lbf/A _{pk})		17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)		3.8 (149.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.1 / 3.9 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		5.5 / 1.5 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2200 / 600 / -	
Mechanical Data				
Slider Length	mm (in)		500 (20)	
Slider Mass	g (lb)		1090 (2.4)	



Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x500/440-HP	Slider 'High Performance'	0150-1509
PL02-20x500/440-HP	Slider 'heavy duty' 'High Performance'	0150-2166
PL01-20x500/440-HP-L*	Slider 'High Performance L'	0150-3698
PL01-19x500/420*	Slider 'high clearance'	0150-1455

* With this slider, the motor specifications above change.

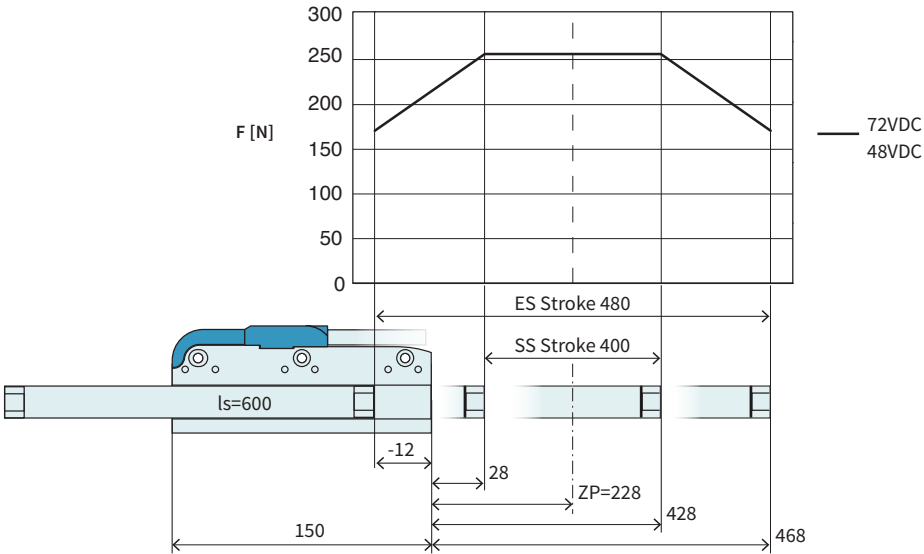
P01-37Sx120F/400x480-HP

Max. Stroke:

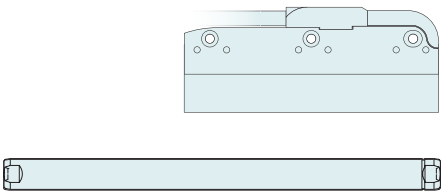
480 mm

Peak Force:

255 N



Technical Data P01-37Sx120F/400x480-HP				
Stroke				
Standard Stroke (SS)	mm	(in)	400	(15.69)
Extended Stroke (ES)	mm	(in)	480	(18.89)
Force				
Max. Force @ 48VDC	N	(lbf)	255	(57.3)
Max. Force @ 72VDC	N	(lbf)	255	(57.3)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	35 / 67 / -	(7.8 / 15 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk}	(lbf/A _{pk})	17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.5	(99.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.8	(149.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.1 / 3.9 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		5.5 / 1.5 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2200 / 600 / -	
Mechanical Data				
Slider Length	mm	(in)	600	(24)
Slider Mass	g	(lb)	1330	(2.93)

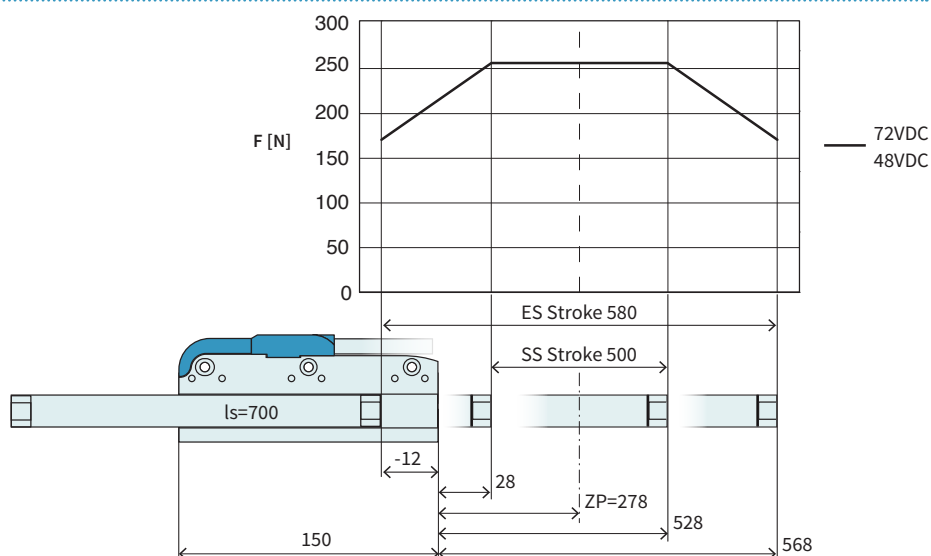


Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x600/540-HP	Slider 'High Performance'	0150-1510
PL02-20x600/540-HP	Slider 'heavy duty' 'High Performance'	0150-2167
PL01-20x600/540-HP-L*	Slider 'High Performance L'	0150-3699
PL01-19x600/520*	Slider 'high clearance'	0150-1456

* With this slider, the motor specifications above change.

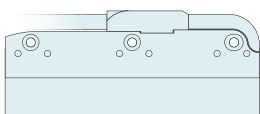
P01-37Sx120F/500x580-HP

Max. Stroke: 580 mm
Peak Force: 255 N



Dimensions in mm

Technical Data P01-37Sx120F/500x580-HP				
Stroke				
Standard Stroke (SS)	mm (in)		500 (19.69)	
Extended Stroke (ES)	mm (in)		580 (22.8)	
Force				
Max. Force @ 48VDC	N (lbf)		255 (57.3)	
Max. Force @ 72VDC	N (lbf)		255 (57.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		35 / 67 / -	(7.8 / 15 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk} (lbf/A _{pk})		17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)		3.8 (149.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.1 / 3.9 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		5.5 / 1.5 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2200 / 600 / -	
Mechanical Data				
Slider Length	mm (in)		700 (28)	
Slider Mass	g (lb)		1560 (3.43)	



Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x700/640-HP	Slider 'High Performance'	0150-1511
PL02-20x700/640-HP	Slider 'heavy duty' 'High Performance'	0150-2168
PL01-20x700/640-HP-L*	Slider 'High Performance L'	0150-3700
PL01-19x700/620*	Slider 'high clearance'	0150-1457

* With this slider, the motor specifications above change.

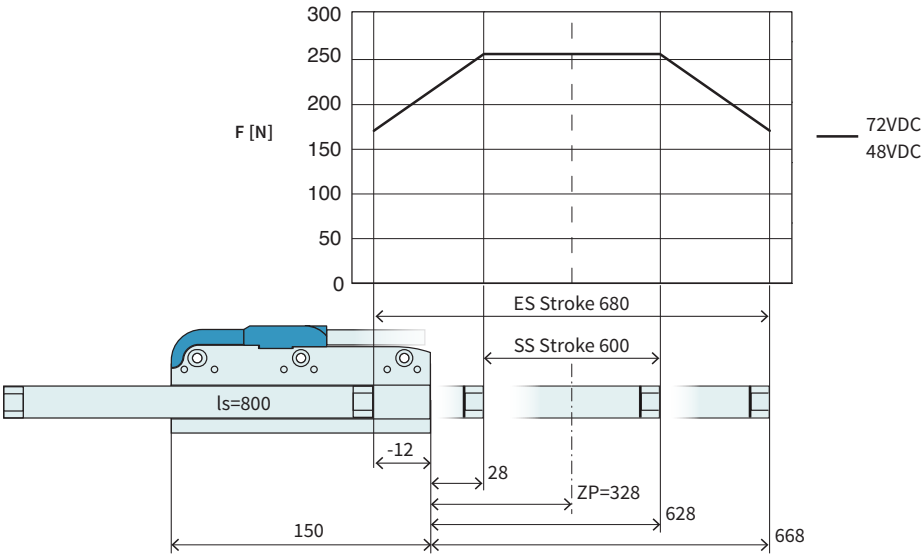
P01-37Sx120F/600x680-HP

Max. Stroke:

680 mm

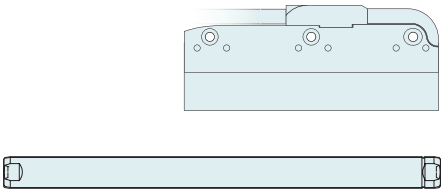
Peak Force:

255 N



Dimensions in mm

Technical Data P01-37Sx120F/600x680-HP				
Stroke				
Standard Stroke (SS)	mm (in)		600 (23.6)	
Extended Stroke (ES)	mm (in)		680 (26.8)	
Force				
Max. Force @ 48VDC	N (lbf)		255 (57.3)	
Max. Force @ 72VDC	N (lbf)		255 (57.3)	
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N (lbf)		35 / 67 / -	(7.8 / 15 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk} (lbf/A _{pk})		17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)		3.8 (149.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.1 / 3.9 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		5.5 / 1.5 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2200 / 600 / -	
Mechanical Data				
Slider Length	mm (in)		800 (31)	
Slider Mass	g (lb)		1790 (3.94)	



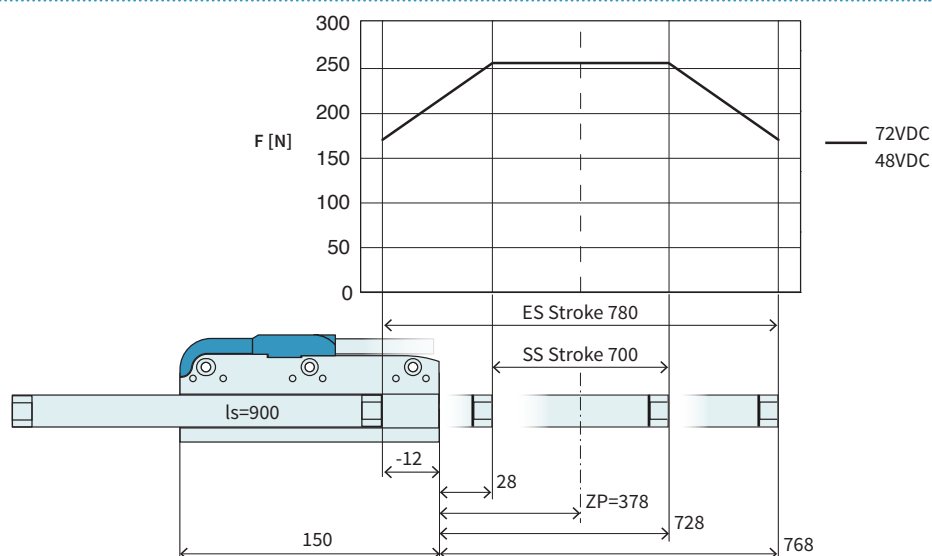
Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x800/740-HP	Slider 'High Performance'	0150-1512
PL02-20x800/740-HP	Slider 'heavy duty' 'High Performance'	0150-2169
PL01-20x800/740-HP-L*	Slider 'High Performance L'	0150-3701

* With this slider, the motor specifications above change.

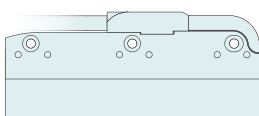
P01-37Sx120F/700x780-HP

Max. Stroke: 780 mm
Peak Force: 255 N

Dimensions in mm



Technical Data P01-37Sx120F/700x780-HP				
Stroke				
Standard Stroke (SS)	mm (in)		700 (27.6)	
Extended Stroke (ES)	mm (in)		780 (30.69)	
Force				
Max. Force @ 48VDC	N (lbf)		255 (57.3)	
Max. Force @ 72VDC	N (lbf)		255 (57.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		35 / 67 / -	(7.8 / 15 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk} (lbf/A _{pk})		17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)		3.8 (149.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.1 / 3.9 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		5.5 / 1.5 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2200 / 600 / -	
Mechanical Data				
Slider Length	mm (in)		900 (35)	
Slider Mass	g (lb)		2020 (4.44)	



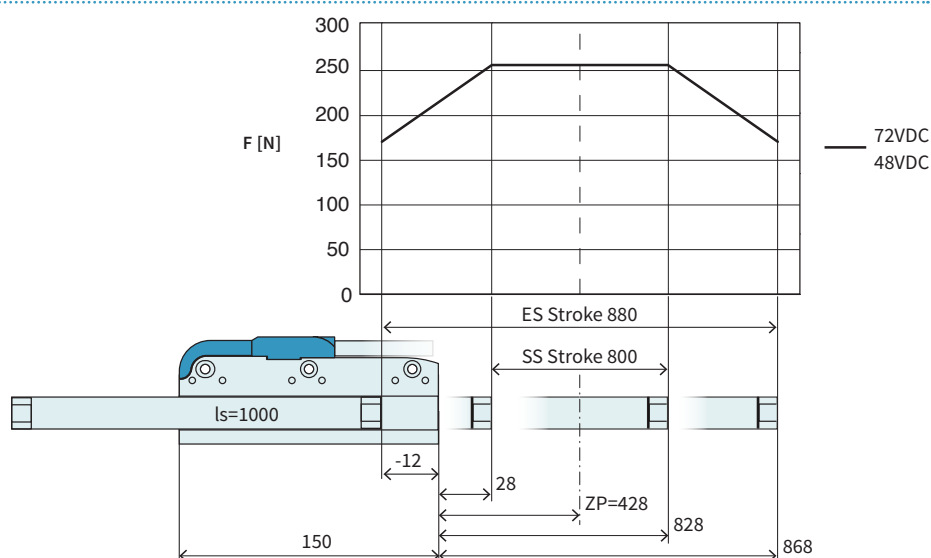
Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x900/840-HP	Slider 'High Performance'	0150-1513
PL02-20x900/840-HP	Slider 'heavy duty' 'High Performance'	0150-2170
PL01-20x900/840-HP-L*	Slider 'High Performance L'	0150-3702

* With this slider, the motor specifications above change.

P01-37Sx120F/800x880-HP

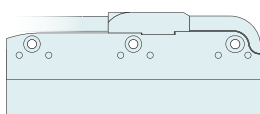
Max. Stroke: 880 mm
Peak Force: 255 N

Dimensions in mm



Technical Data P01-37Sx120F/800x880-HP

Stroke			
Standard Stroke (SS)	mm (in)	800	(31.49)
Extended Stroke (ES)	mm (in)	880	(34.6)
Force			
Max. Force @ 48VDC	N (lbf)	255	(57.3)
Max. Force @ 72VDC	N (lbf)	255	(57.3)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	35 / 67 / -	(7.8 / 15 / -)
Max. Border Force relative	%	67	
Force Constant	N/A _{pk} (lbf/A _{pk})	17	(3.82)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.5	(99.9)
Max. Velocity @ 72VDC	m/s (in/s)	3.8	(149.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	14.9	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2.1 / 3.9 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	5.5 / 1.5 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2200 / 600 / -	
Mechanical Data			
Slider Length	mm (in)	1000	(39)
Slider Mass	g (lb)	2230	(4.91)

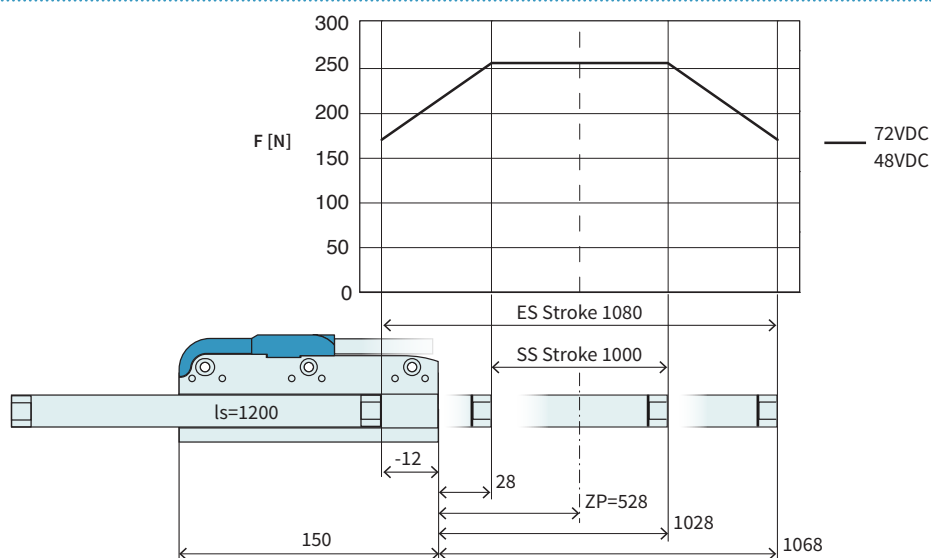


Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x1000/940-HP	Slider 'High Performance'	0150-1514
PL01-20x1000/940-HP-L*	Slider 'High Performance L'	0150-3703

* With this slider, the motor specifications above change.

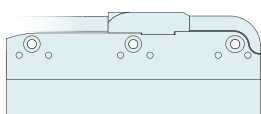
P01-37Sx120F/1000x1080-HP

Max. Stroke: 1080 mm
Peak Force: 255 N



Dimensions in mm

Technical Data P01-37Sx120F/1000x1080-HP				
Stroke				
Standard Stroke (SS)	mm (in)		1000	(39.39)
Extended Stroke (ES)	mm (in)		1080	(42.49)
Force				
Max. Force @ 48VDC	N (lbf)		255	(57.3)
Max. Force @ 72VDC	N (lbf)		255	(57.3)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		35 / 67 / -	(7.8 / 15 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk} (lbf/A _{pk})		17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.5	(99.9)
Max. Velocity @ 72VDC	m/s (in/s)		3.8	(149.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.1 / 3.9 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		5.5 / 1.5 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2200 / 600 / -	
Mechanical Data				
Slider Length	mm (in)		1200	(47)
Slider Mass	g (lb)		2690	(5.92)

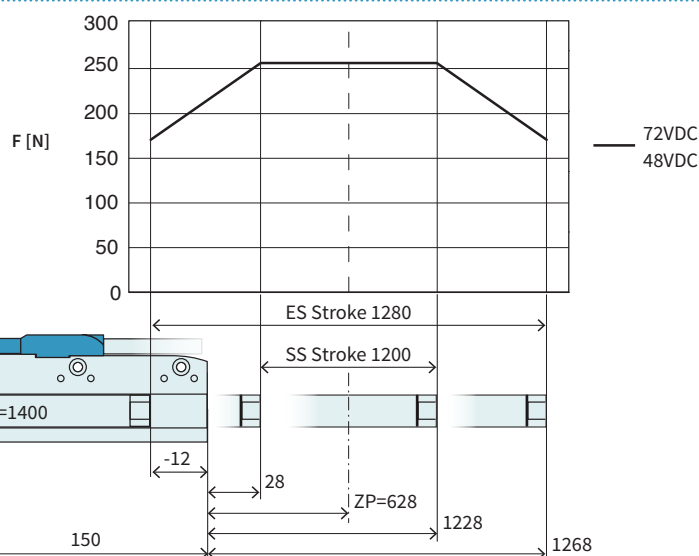


Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x1200/1140-HP	Slider 'High Performance'	0150-1515
PL01-20x1200/1140-HP-L*	Slider 'High Performance L'	0150-2510

* With this slider, the motor specifications above change.

P01-37Sx120F/1200x1280-HP

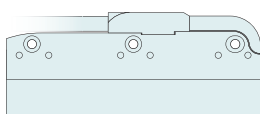
Max. Stroke: 1280 mm
Peak Force: 255 N



Dimensions in mm

Technical Data P01-37Sx120F/1200x1280-HP

Stroke			
Standard Stroke (SS)	mm (in)	1200 (47.2)	
Extended Stroke (ES)	mm (in)	1280 (50.39)	
Force			
Max. Force @ 48VDC	N (lbf)	255 (57.3)	
Max. Force @ 72VDC	N (lbf)	255 (57.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	35 / 67 / -	(7.8 / 15 / -)
Max. Border Force relative	%	67	
Force Constant	N/A _{pk} (lbf/A _{pk})	17 (3.82)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)	3.8 (149.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	14.9	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2.1 / 3.9 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	5.5 / 1.5 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2200 / 600 / -	
Mechanical Data			
Slider Length	mm (in)	1400 (55)	
Slider Mass	g (lb)	3160 (6.95)	

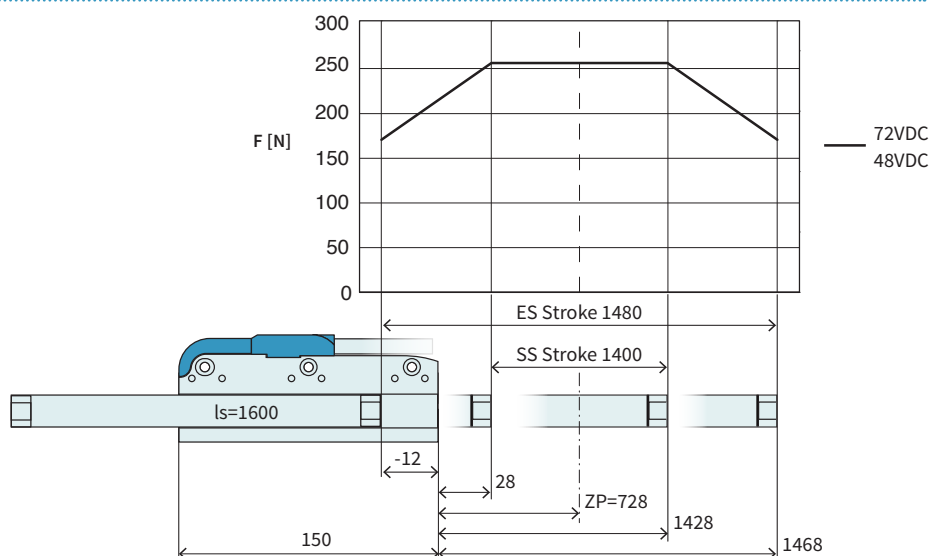


Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x1400/1340-HP	Slider 'High Performance'	0150-1516
PL01-20x1400/1340-HP-L*	Slider 'High Performance L'	on request

* With this slider, the motor specifications above change.

P01-37Sx120F/1400x1480-HP

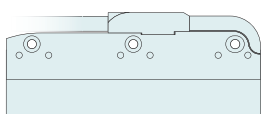
Max. Stroke: 1480 mm
Peak Force: 255 N



Dimensions in mm

Technical Data P01-37Sx120F/1400x1480-HP

Stroke				
Standard Stroke (SS)	mm	(in)	1400	(55.1)
Extended Stroke (ES)	mm	(in)	1480	(58.29)
Force				
Max. Force @ 48VDC	N	(lbf)	255	(57.3)
Max. Force @ 72VDC	N	(lbf)	255	(57.3)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	35 / 67 / -	(7.8 / 15 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk}	(lbf/A _{pk})	17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.5	(99.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.8	(149.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.1 / 3.9 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		5.5 / 1.5 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2200 / 600 / -	
Mechanical Data				
Slider Length	mm	(in)	1600	(63)
Slider Mass	g	(lb)	3620	(7.96)

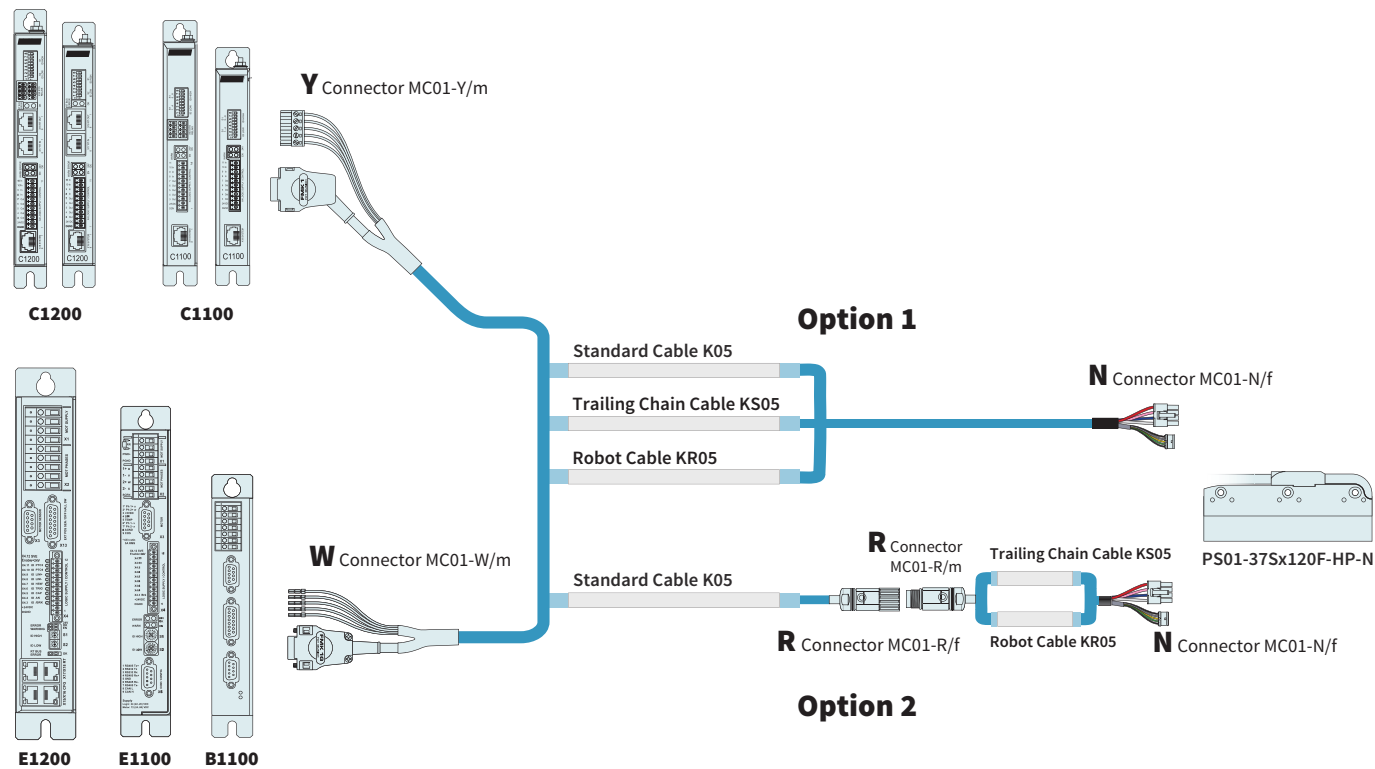


Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x1600/1540-HP	Slider 'High Performance'	0150-1517
PL01-20x1600/1540-HP-L*	Slider 'High Performance L'	on request

* With this slider, the motor specifications above change.

Motor Cable

3



ORDERING INFORMATION

OPTION 1		
Item	Description	Item-No.
K05-W/N-	Motor Cable W/N, Custom length	0150-3756
K05-Y-Fe/N-	Motor Cable Y/N, Custom length	0150-3503
KS05-W/N-2	Trailing Chain Cable W/N, 2 m	0150-2296
KS05-W/N-4	Trailing Chain Cable W/N, 4 m	0150-2297
KS05-W/N-6	Trailing Chain Cable W/N, 6 m	0150-2298
KS05-W/N-8	Trailing Chain Cable W/N, 8 m	0150-2299
KS05-W/N-	Trailing Chain Cable W/N, Custom length	0150-3412
KS05-Y/N-2	Trailing Chain Cable Y/N, 2 m	0150-2442
KS05-Y/N-4	Trailing Chain Cable Y/N, 4 m	0150-2443
KS05-Y/N-6	Trailing Chain Cable Y/N, 6 m	0150-2444
KS05-Y/N-8	Trailing Chain Cable Y/N, 8 m	0150-2445
KS05-Y-Fe/N-	Trailing Chain Cable Y/N, Custom length	0150-3509
KR05-W/N-	Robot Cable W/N, Custom length	0150-3406
KR05-Y-Fe/N-	Robot Cable Y/N, Custom length	0150-3514

OPTION 2		
Item	Description	Item-No.
K05-W/R-2	Motor Cable W/R, 2 m	0150-2119
K05-W/R-4	Motor Cable W/R, 4 m	0150-2120
K05-W/R-6	Motor Cable W/R, 6 m	0150-2121
K05-W/R-8	Motor Cable W/R, 8 m	0150-2122
K05-W/R-	Motor Cable W/R, Custom length	0150-3262
K05-Y/R-2	Motor Cable Y/R, 2 m	0150-2421
K05-Y/R-4	Motor Cable Y/R, 4 m	0150-2422
K05-Y/R-6	Motor Cable Y/R, 6 m	0150-2423
K05-Y/R-8	Motor Cable Y/R, 8 m	0150-2424
K05-Y-Fe/R-	Motor Cable Y/R, Custom length	0150-3501
KS05-R/N-	Trailing Chain Cable R/N, Custom length	0150-3486
KR05-R/N-	Robot Cable R/N, Custom length	0150-3757

CONNECTOR & CABLE (INDIVIDUAL)		
Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-R/f	Motor Connector R/f	0150-3129
MC01-N/f	Motor Connector N/f	0150-3407
K05-04/05	Motor Cable per m	0150-1920
KS05-04/05	Trailing Chain Cable per m	0150-1938
KR05-04/05	Robot Cable per m	0150-1846

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-20	Fixed Bearing Set for 19/20 mm sliders	0150-3083
PLF01-20-SS	Fixed Bearing Set for 19/20 mm sliders, stainless steel	0150-3296
PLL01-19	Floating Bearing for 19 mm sliders	0150-3335
PLL01-20	Floating Bearing for 20 mm sliders	0150-3084
PLM01-20-MK	Mounting Kit for 20 mm sliders	0150-3079

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for inc. strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D-Encoder	Encoder Cable (Length in m)	0150-3166
KS025-D/D15-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P01-37x240



- ✓ Highly dynamic drives
- ✓ Wide stroke range
- ✓ Available with cable outlet or with rotatable connector
- ✓ Optional with air cooling
- ✓ Wide range of applications in handling modules as well as in plant and machine construction

LINEAR MOTORS P01-37x240

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Motor Specifications

P01-37x240/80x120-LC	274
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P01-37x240/80x280-LC	276
P01-37x240/180x380-LC	277
P01-37x240/280x480-LC	278
P01-37x240/380x580-LC	279
P01-37x240/480x680-LC	280
P01-37x240/580x780-LC	281
P01-37x240/680x880-LC	282
P01-37x240/880x1080-LC	283
P01-37x240/1080x1280-LC	284
P01-37x240/1280x1480-LC	285

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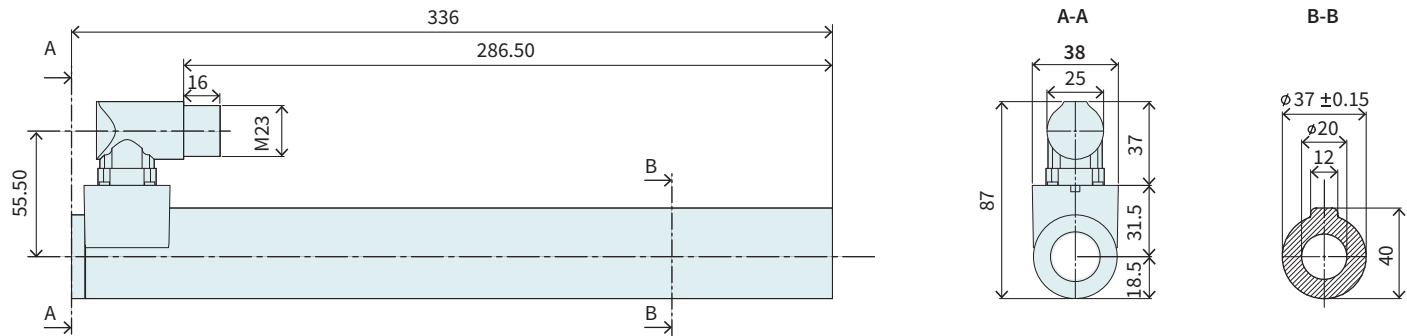
Accessories	288
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MOTOR FAMILY P01-37x240

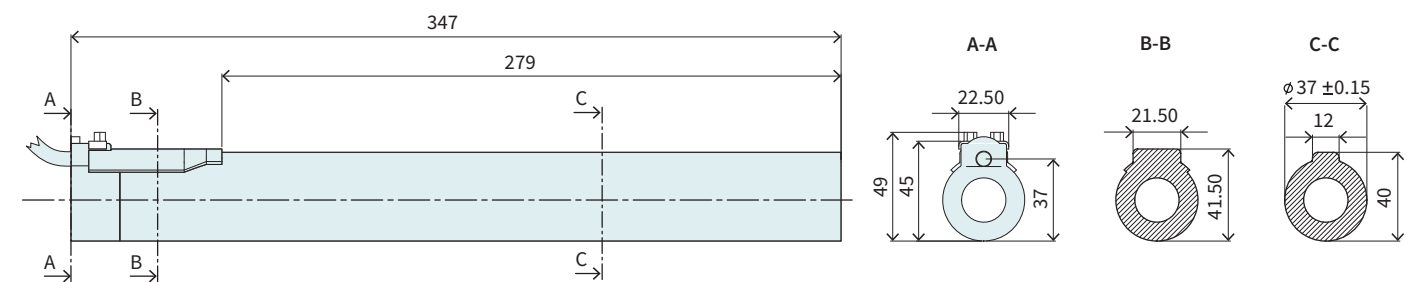
Technical Data				
Stroke				
Standard Stroke (SS)	mm (in)		≤ 1280	(≤ 50.4)
Extended Stroke (ES)	mm (in)		≤ 1480	(≤ 58.3)
Force				
Max. Force @ 48VDC	N (lbf)		136	(30.5)
Max. Force @ 72VDC	N (lbf)		203	(45.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		52 / 96 / -	(12 / 22 / -)
Max. Border Force relative	%		≤ 88	
Force Constant	N/A _{pk} (lbf/A _{pk})		40.8	(9.17)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		1.6	(63.9)
Max. Velocity @ 72VDC	m/s (in/s)		2.3	(95.9)
Position Detection				
Position Resolution	mm (in)		0.005	(0.0002)
Repeatability	mm (in)		±0.05	(±0.002)
Position Resolution with ES	mm (in)		0.001	(0.00004)
Repeatability with ES	mm (in)		±0.01	(±0.0004)
Linearity with ES	mm (in)		±0.01	(±0.0004)
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.3	
Max. Current @ 72VDC	A _{pk}		4.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2.3 / -	
Terminal Resistance 25 °C / 120 °C	Ohm		12 / 16	
Terminal Inductivity	mH		6	
Magnetic Period	mm (in)		40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.1 / 0.61 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 410 / -	
Mechanical Data				
Stator Diameter	mm (in)		37	(1.5)
Stator Length [Connector type / Cable type]	mm (in)		336 / 347	(13 / 14)
Stator Mass	g (lb)		1385	(3.0)
Slider Diameter	mm (in)		20	(0.79)
Slider Length	mm (in)		240 - 1600	(9.4 - 63)
Slider Mass	g (lb)		490 - 3620	(1.1 - 7.96)
IP Code			IP 65	

STATOR CONNECTOR TYPE



Item	Description	Item-No.
PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224

STATOR CABLE TYPE

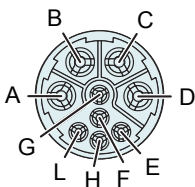


Item	Description	Item-No.
PS01-37x240	Stator, 1.5m Cable, Connector P/10(m)	0150-1203
PS01-37x240-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1238

CONNECTOR

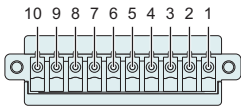
Motor Connector Wiring	PS01-37x240-C PS01-37x240-C20	PS01-37x240	Wire color motor cable
	C-Connector	P-Connector	
Ph 1+	A	1	red
Ph 1-	B	2	pink
Ph 2+	C	3	blue
Ph 2-	D	4	grey
+5VDC	E	5	white
GND	F	6	inner shield
Sin	G	7	yellow
Cos	H	8	green
Temp.	L	9	black
Shield	Housing	10	outer Shield

C-Connector



View: Motor Connector, plug side

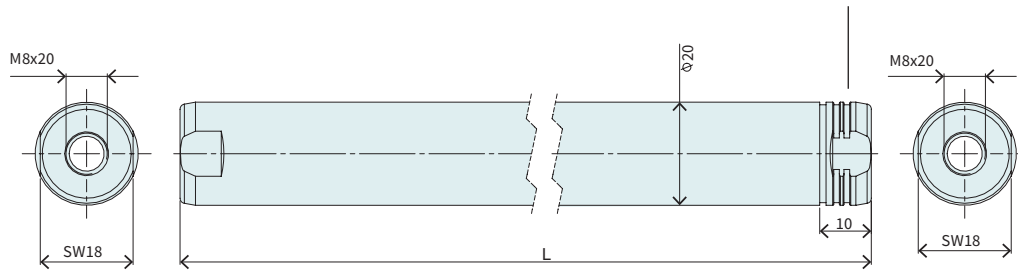
P-Connector



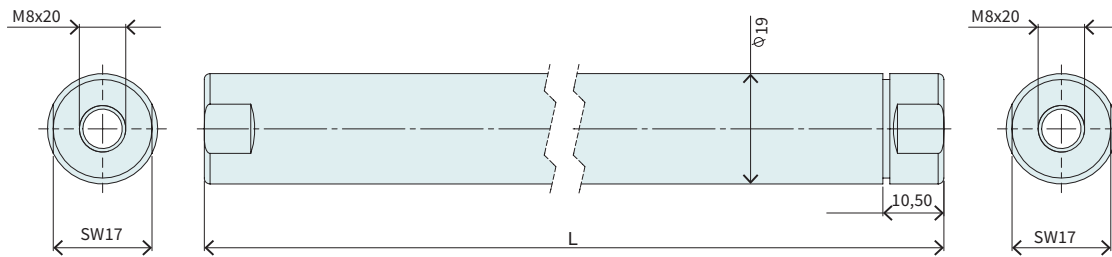
SLIDER

Slider Standard / Heavy Duty

Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.



High-Clearance Slider



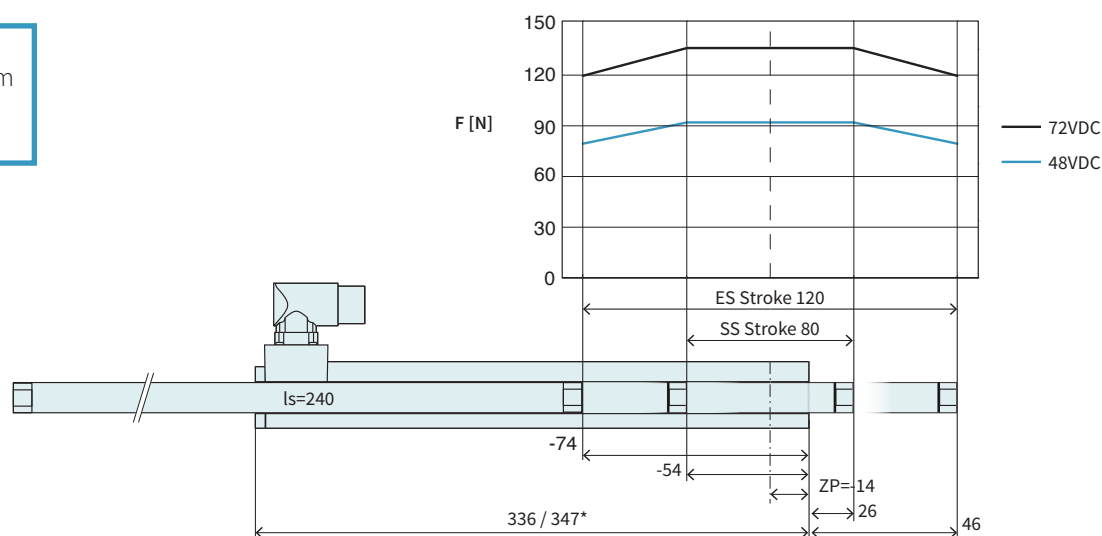
Slider Standard				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-20x240/180-LC	Slider 'standard LC'	120	40	0150-2560
PL01-20x300/240-LC	Slider 'standard LC'	180	100	0150-2561
PL01-20x400/340-LC	Slider 'standard LC'	280	200	0150-2562
PL01-20x500/440-LC	Slider 'standard LC'	380	300	0150-2563
PL01-20x600/540-LC	Slider 'standard LC'	480	400	0150-2564
PL01-20x700/640-LC	Slider 'standard LC'	580	500	0150-2565
PL01-20x800/740-LC	Slider 'standard LC'	680	600	0150-2566
PL01-20x900/840-LC	Slider 'standard LC'	780	700	0150-2567
PL01-20x1000/940-LC	Slider 'standard LC'	880	800	0150-2568
PL01-20x1200/1140-LC	Slider 'standard LC'	1080	1000	0150-2569
PL01-20x1400/1340-LC	Slider 'standard LC'	1280	1200	0150-2570
PL01-20x1600/1540-LC	Slider 'standard LC'	1480	1400	0150-2571

Slider Heavy Duty				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL02-20x240/180-LC	Slider 'heavy duty LC'	120	40	0150-2572
PL02-20x300/240-LC	Slider 'heavy duty LC'	180	100	0150-2573
PL02-20x400/340-LC	Slider 'heavy duty LC'	280	200	0150-2574
PL02-20x500/440-LC	Slider 'heavy duty LC'	380	300	0150-2575
PL02-20x600/540-LC	Slider 'heavy duty LC'	480	400	0150-2576
PL02-20x700/640-LC	Slider 'heavy duty LC'	580	500	0150-2577
PL02-20x800/740-LC	Slider 'heavy duty LC'	680	600	0150-2578
PL02-20x900/840-LC	Slider 'heavy duty LC'	780	700	0150-2579

High-Clearance Slider				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-19x240/160	Slider 'high clearance'	100	80	0150-1448
PL01-19x300/220	Slider 'high clearance'	160	140	0150-1449
PL01-19x395/320	Slider 'high clearance'	260	240	0150-1452
PL01-19x500/420	Slider 'high clearance'	360	340	0150-1455
PL01-19x600/520	Slider 'high clearance'	460	440	0150-1456
PL01-19x700/620	Slider 'high clearance'	560	540	0150-1457

P01-37x240/80x120-LC

Max. Stroke: 120 mm
Peak Force: 136 N

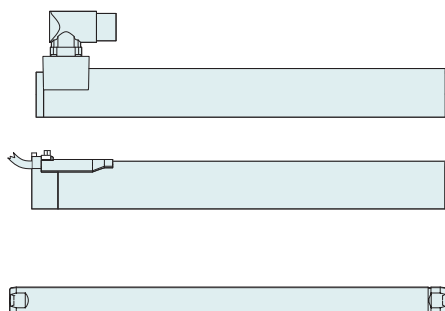


Dimensions in mm

*Cable Type

Technical Data P01-37x240/80x120-LC

Stroke				
Standard Stroke (SS)	mm	(in)	80	(3.14)
Extended Stroke (ES)	mm	(in)	120	(4.71)
Force				
Max. Force @ 48VDC	N	(lbf)	90.4	(20.3)
Max. Force @ 72VDC	N	(lbf)	136	(30.5)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	35 / 64 / -	(7.8 / 14 / -)
Max. Border Force relative	%		88	
Force Constant	N/A _{pk}	(lbf/A _{pk})	27.2	(6.11)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.6	(63.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.3	(95.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.5	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.3	
Max. Current @ 72VDC	A _{pk}		4.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2.3 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.1 / 0.61 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 410 / -	
Mechanical Data				
Slider Length	mm	(in)	240	(9.4)
Slider Mass	g	(lb)	490	(1.08)

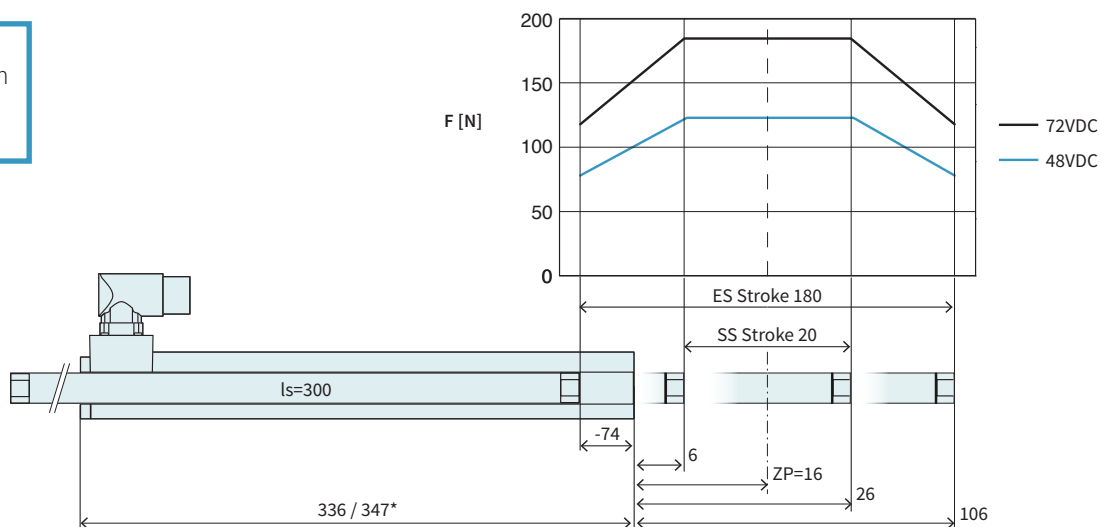


Item	Description	Item-No.
PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
PS01-37x240	Stator, 1.5m Cable, Connector P/10(m)	0150-1203
PS01-37x240-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1238
PL01-20x240/180-LC	Slider 'standard LC'	0150-2560
PL02-20x240/180-LC	Slider 'heavy duty LC'	0150-2572
PL01-19x240/160*	Slider 'high clearance'	0150-1448

* With this slider, the motor specifications above change.

P01-37x240/20x180-LC

Max. Stroke: 180 mm
Peak Force: 186 N



Technical Data P01-37x240/20x180-LC

Stroke			
Standard Stroke (SS)	mm (in)	20 (0.78)	
Extended Stroke (ES)	mm (in)	180 (7.08)	
Force			
Max. Force @ 48VDC	N (lbf)	124 (27.9)	
Max. Force @ 72VDC	N (lbf)	186 (41.9)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	48 / 88 / - (11 / 20 / -)	
Max. Border Force relative	%	64	
Force Constant	N/A _{pk} (lbf/A _{pk})	37.4 (8.41)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (45.9)	
Max. Velocity @ 72VDC	m/s (in/s)	1.7 (69.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.4	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	3.3	
Max. Current @ 72VDC	A _{pk}	4.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.3 / 2.3 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 0.61 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1400 / 410 / -	
Mechanical Data			
Slider Length	mm (in)	300 (12)	
Slider Mass	g (lb)	630 (1.39)	



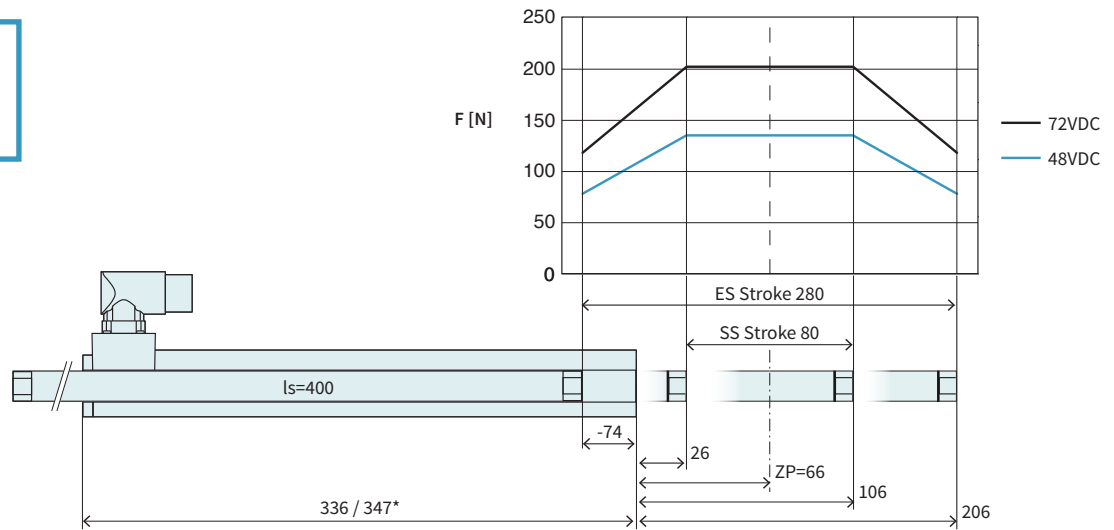
Item	Description	Item-No.
PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
PS01-37x240	Stator, 1.5m Cable, Connector P/10(m)	0150-1203
PS01-37x240-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1238

PL01-20x300/240-LC	Slider 'standard LC'	0150-2561
PL02-20x300/240-LC	Slider 'heavy duty LC'	0150-2573
PL01-19x300/220*	Slider 'high clearance'	0150-1449

* With this slider, the motor specifications above change.

P01-37x240/80x280-LC

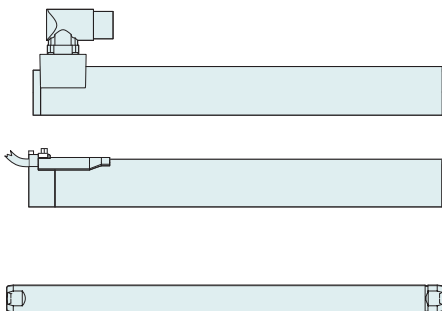
Max. Stroke: 280 mm
Peak Force: 203 N



Dimensions in mm
 *Cable Type

Technical Data P01-37x240/80x280-LC

Stroke				
Standard Stroke (SS)	mm	(in)	80	(3.14)
Extended Stroke (ES)	mm	(in)	280	(10.99)
Force				
Max. Force @ 48VDC	N	(lbf)	136	(30.5)
Max. Force @ 72VDC	N	(lbf)	203	(45.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	52 / 96 / -	(12 / 22 / -)
Max. Border Force relative	%		58	
Force Constant	N/A _{pk}	(lbf/A _{pk})	40.8	(9.17)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.1	(42.9)
Max. Velocity @ 72VDC	m/s	(in/s)	1.6	(63.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.3	
Max. Current @ 72VDC	A _{pk}		4.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2.3 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.1 / 0.61 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 410 / -	
Mechanical Data				
Slider Length	mm	(in)	400	(16)
Slider Mass	g	(lb)	860	(1.9)



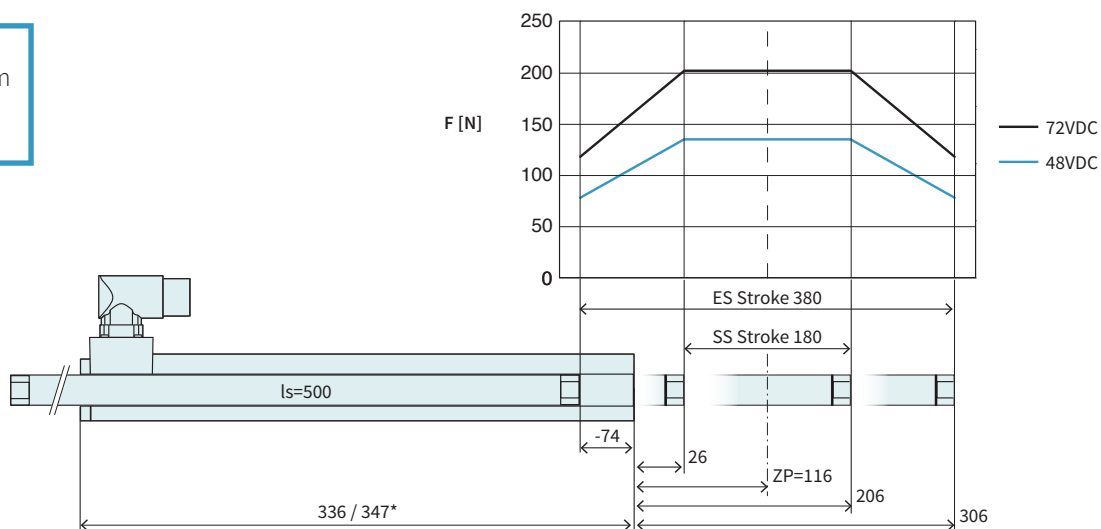
Item	Description	Item-No.
PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
PS01-37x240	Stator, 1.5m Cable, Connector P/10(m)	0150-1203
PS01-37x240-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1238
PL01-20x400/340-LC	Slider 'standard LC'	0150-2562
PL02-20x400/340-LC	Slider 'heavy duty LC'	0150-2574
PL01-19x395/320*	Slider 'high clearance'	0150-1452

* With this slider, the motor specifications above change.

P01-37x240/180x380-LC

3

Max. Stroke: 380 mm
Peak Force: 203 N



Dimensions in mm
 *Cable Type

Technical Data P01-37x240/180x380-LC

Stroke			
Standard Stroke (SS)	mm (in)	180 (7.08)	
Extended Stroke (ES)	mm (in)	380 (14.99)	
Force			
Max. Force @ 48VDC	N (lbf)	136 (30.5)	
Max. Force @ 72VDC	N (lbf)	203 (45.7)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	52 / 96 / - (12 / 22 / -)	
Max. Border Force relative	%	58	
Force Constant	N/A _{pk} (lbf/A _{pk})	40.8 (9.17)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (42.9)	
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (63.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.25	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	3.3	
Max. Current @ 72VDC	A _{pk}	4.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.3 / 2.3 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 0.61 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1400 / 410 / -	
Mechanical Data			
Slider Length	mm (in)	500 (20)	
Slider Mass	g (lb)	1090 (2.4)	



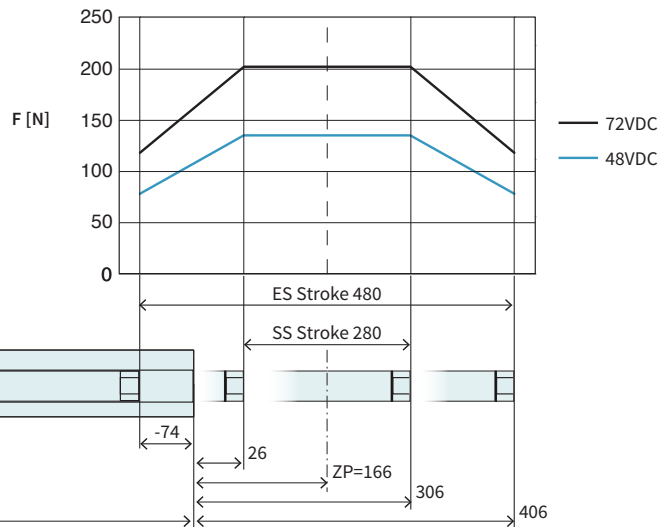
Item	Description	Item-No.
PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
PS01-37x240	Stator, 1.5m Cable, Connector P/10(m)	0150-1203
PS01-37x240-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1238

PL01-20x500/440-LC	Slider 'standard LC'	0150-2563
PL02-20x500/440-LC	Slider 'heavy duty LC'	0150-2575
PL01-19x500/420*	Slider 'high clearance'	0150-1455

* With this slider, the motor specifications above change.

P01-37x240/280x480-LC

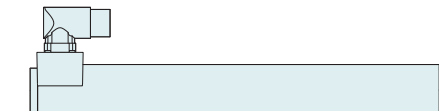
Max. Stroke: 480 mm
Peak Force: 203 N



Dimensions in mm
 *Cable Type

Technical Data P01-37x240/280x480-LC

Stroke				
Standard Stroke (SS)	mm	(in)	280	(10.99)
Extended Stroke (ES)	mm	(in)	480	(18.89)
Force				
Max. Force @ 48VDC	N	(lbf)	136	(30.5)
Max. Force @ 72VDC	N	(lbf)	203	(45.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	52 / 96 / -	(12 / 22 / -)
Max. Border Force relative	%		58	
Force Constant	N/A _{pk}	(lbf/A _{pk})	40.8	(9.17)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.1	(42.9)
Max. Velocity @ 72VDC	m/s	(in/s)	1.6	(63.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.3	
Max. Current @ 72VDC	A _{pk}		4.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2.3 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.1 / 0.61 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 410 / -	
Mechanical Data				
Slider Length	mm	(in)	600	(24)
Slider Mass	g	(lb)	1330	(2.93)



Item	Description	Item-No.
PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
PS01-37x240	Stator, 1.5m Cable, Connector P/10(m)	0150-1203
PS01-37x240-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1238

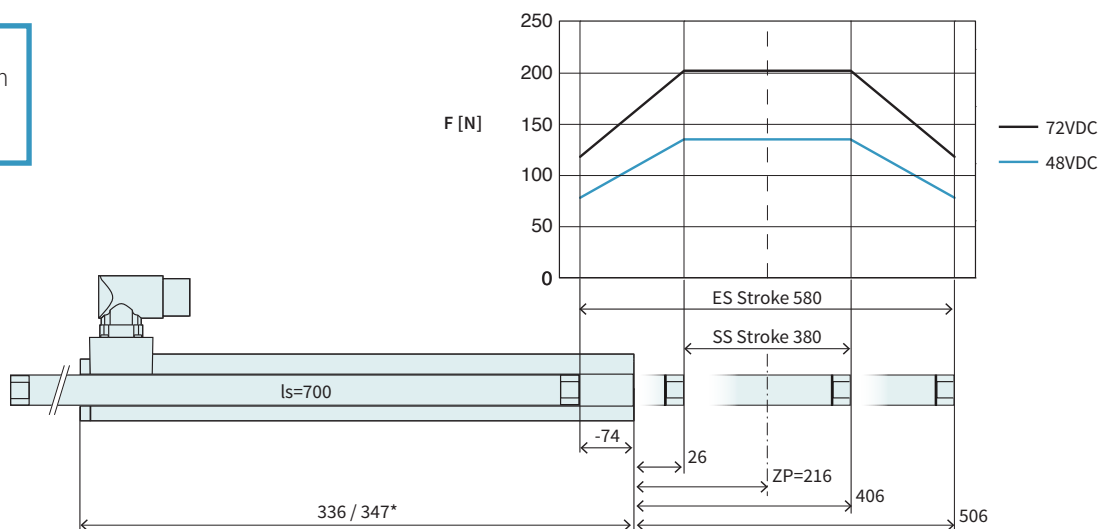
PL01-20x600/540-LC	Slider 'standard LC'	0150-2564
PL02-20x600/540-LC	Slider 'heavy duty LC'	0150-2576
PL01-19x600/520*	Slider 'high clearance'	0150-1456

* With this slider, the motor specifications above change.

P01-37x240/380x580-LC

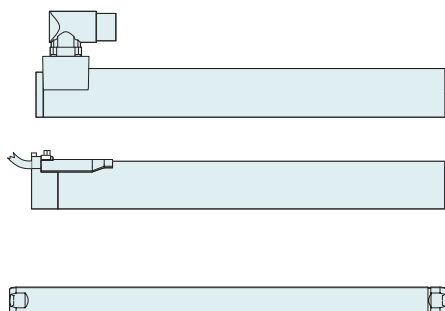
3

Max. Stroke: 580 mm
Peak Force: 203 N



Technical Data P01-37x240/380x580-LC

Stroke			
Standard Stroke (SS)	mm (in)	380 (14.99)	
Extended Stroke (ES)	mm (in)	580 (22.8)	
Force			
Max. Force @ 48VDC	N (lbf)	136 (30.5)	
Max. Force @ 72VDC	N (lbf)	203 (45.7)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	52 / 96 / - (12 / 22 / -)	
Max. Border Force relative	%	58	
Force Constant	N/A _{pk} (lbf/A _{pk})	40.8 (9.17)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (42.9)	
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (63.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	3.3	
Max. Current @ 72VDC	A _{pk}	4.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.3 / 2.3 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 0.61 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1400 / 410 / -	
Mechanical Data			
Slider Length	mm (in)	700 (28)	
Slider Mass	g (lb)	1560 (3.4)	

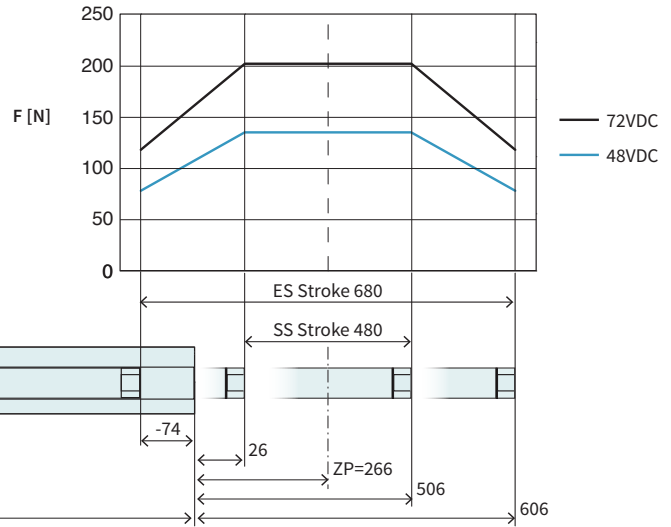


Item	Description	Item-No.
PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
PS01-37x240	Stator, 1.5m Cable, Connector P/10(m)	0150-1203
PS01-37x240-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1238
PL01-20x700/640-LC	Slider 'standard LC'	0150-2565
PL02-20x700/640-LC	Slider 'heavy duty LC'	0150-2577
PL01-19x700/620*	Slider 'high clearance'	0150-1457

* With this slider, the motor specifications above change.

P01-37x240/480x680-LC

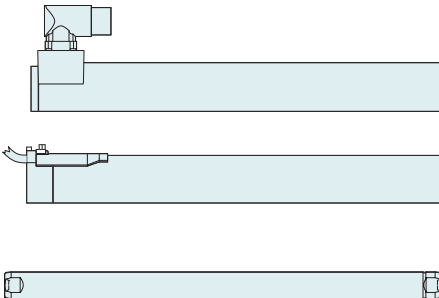
Max. Stroke: 680 mm
Peak Force: 203 N



Dimensions in mm
 *Cable Type

Technical Data P01-37x240/480x680-LC

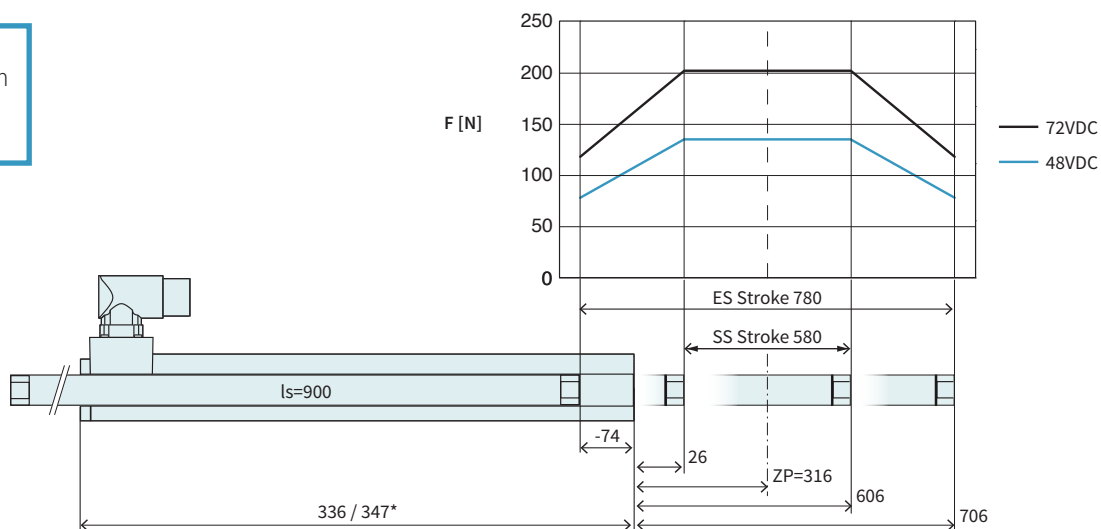
Stroke				
Standard Stroke (SS)	mm	(in)	480	(18.89)
Extended Stroke (ES)	mm	(in)	680	(26.8)
Force				
Max. Force @ 48VDC	N	(lbf)	136	(30.5)
Max. Force @ 72VDC	N	(lbf)	203	(45.7)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	52 / 96 / -	(12 / 22 / -)
Max. Border Force relative	%		58	
Force Constant	N/A _{pk}	(lbf/A _{pk})	40.8	(9.17)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.1	(42.9)
Max. Velocity @ 72VDC	m/s	(in/s)	1.6	(63.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.3	
Max. Current @ 72VDC	A _{pk}		4.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2.3 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.1 / 0.61 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 410 / -	
Mechanical Data				
Slider Length	mm	(in)	800	(31)
Slider Mass	g	(lb)	1790	(3.94)



Item	Description	Item-No.
PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
PS01-37x240	Stator, 1.5m Cable, Connector P/10(m)	0150-1203
PS01-37x240-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1238
PL01-20x800/740-LC	Slider 'standard LC'	0150-2566
PL02-20x800/740-LC	Slider 'heavy duty LC'	0150-2578

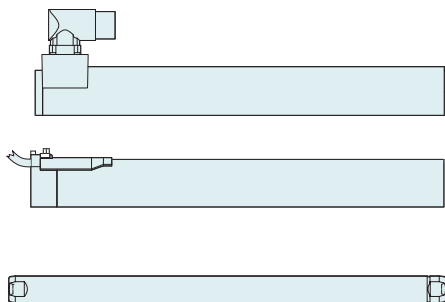
P01-37x240/580x780-LC

Max. Stroke: 780 mm
Peak Force: 203 N



Technical Data P01-37x240/580x780-LC

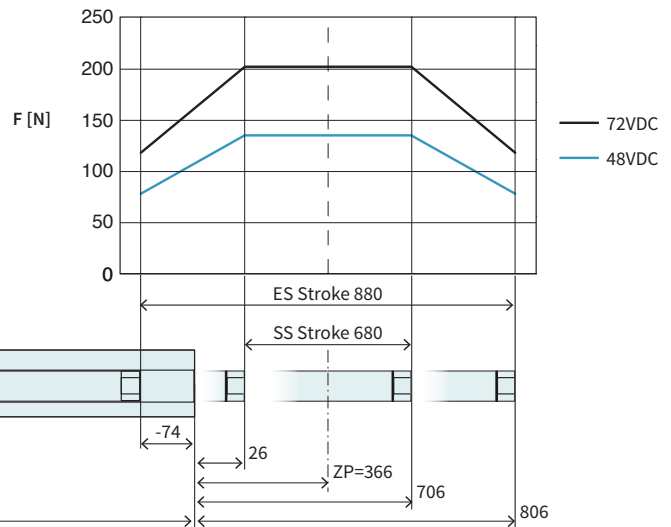
Stroke			
Standard Stroke (SS)	mm (in)	580 (22.8)	
Extended Stroke (ES)	mm (in)	780 (30.69)	
Force			
Max. Force @ 48VDC	N (lbf)	136 (30.5)	
Max. Force @ 72VDC	N (lbf)	203 (45.7)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	52 / 96 / - (12 / 22 / -)	
Max. Border Force relative	%	58	
Force Constant	N/A _{pk} (lbf/A _{pk})	40.8 (9.17)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (42.9)	
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (63.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	3.3	
Max. Current @ 72VDC	A _{pk}	4.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.3 / 2.3 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 0.61 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1400 / 410 / -	
Mechanical Data			
Slider Length	mm (in)	900 (35)	
Slider Mass	g (lb)	2020 (4.44)	



Item	Description	Item-No.
PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
PS01-37x240	Stator, 1.5m Cable, Connector P/10(m)	0150-1203
PS01-37x240-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1238
PL01-20x900/840-LC	Slider 'standard LC'	0150-2567
PL02-20x900/840-LC	Slider 'heavy duty LC'	0150-2579

P01-37x240/680x880-LC

Max. Stroke: 880 mm
Peak Force: 203 N

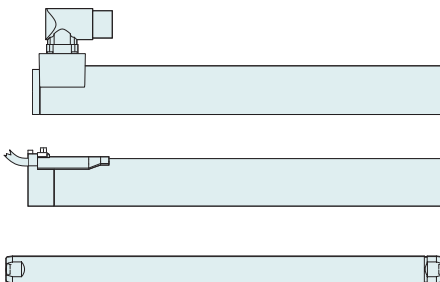


Dimensions in mm

*Cable Type

Technical Data P01-37x240/680x880-LC

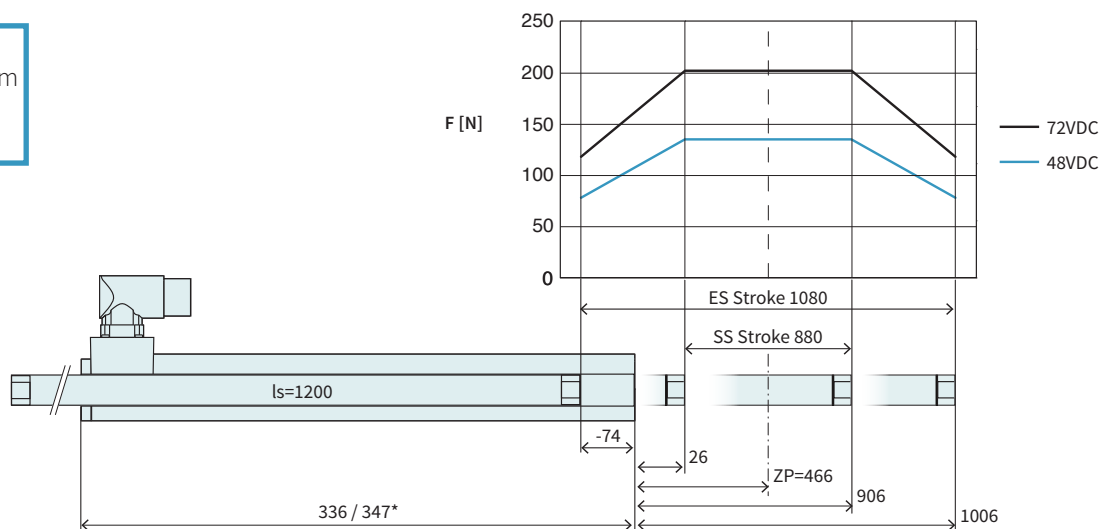
Stroke			
Standard Stroke (SS)	mm (in)	680 (26.8)	
Extended Stroke (ES)	mm (in)	880 (34.6)	
Force			
Max. Force @ 48VDC	N (lbf)	136 (30.5)	
Max. Force @ 72VDC	N (lbf)	203 (45.7)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	52 / 96 / - (12 / 22 / -)	
Max. Border Force relative	%	58	
Force Constant	N/A _{pk} (lbf/A _{pk})	40.8 (9.17)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (42.9)	
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (63.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	3.3	
Max. Current @ 72VDC	A _{pk}	4.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.3 / 2.3 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 0.61 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1400 / 410 / -	
Mechanical Data			
Slider Length	mm (in)	1000 (39)	
Slider Mass	g (lb)	2230 (4.91)	



Item	Description	Item-No.
PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
PS01-37x240	Stator, 1.5m Cable, Connector P/10(m)	0150-1203
PS01-37x240-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1238
PL01-20x1000/940-LC	Slider 'standard LC'	0150-2568

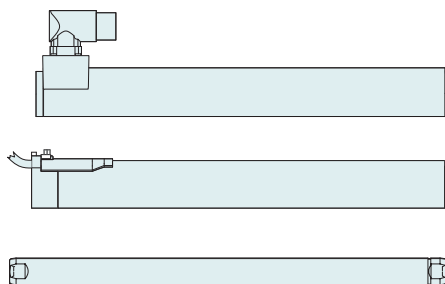
P01-37x240/880x1080-LC

Max. Stroke: 1080 mm
Peak Force: 203 N



Technical Data P01-37x240/880x1080-LC

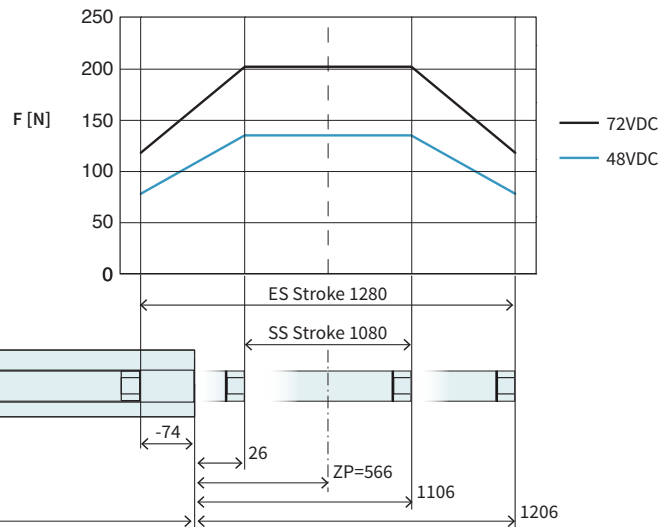
Stroke			
Standard Stroke (SS)	mm (in)	880 (34.6)	
Extended Stroke (ES)	mm (in)	1080 (42.49)	
Force			
Max. Force @ 48VDC	N (lbf)	136 (30.5)	
Max. Force @ 72VDC	N (lbf)	203 (45.7)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	52 / 96 / - (12 / 22 / -)	
Max. Border Force relative	%	58	
Force Constant	N/A _{pk} (lbf/A _{pk})	40.8 (9.17)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (42.9)	
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (63.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	3.3	
Max. Current @ 72VDC	A _{pk}	4.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.3 / 2.3 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 0.61 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1400 / 410 / -	
Mechanical Data			
Slider Length	mm (in)	1200 (47)	
Slider Mass	g (lb)	2690 (5.92)	



Item	Description	Item-No.
PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
PS01-37x240	Stator, 1.5m Cable, Connector P/10(m)	0150-1203
PS01-37x240-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1238
PL01-20x1200/1140-LC	Slider 'standard LC'	0150-2569

P01-37x240/1080x1280-LC

Max. Stroke: 1280 mm
Peak Force: 203 N

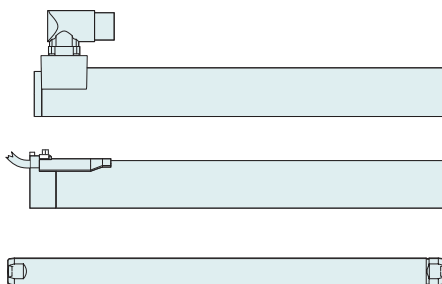


Dimensions in mm

*Cable Type

Technical Data P01-37x240/1080x1280-LC

Stroke			
Standard Stroke (SS)	mm (in)	1080 (42.49)	
Extended Stroke (ES)	mm (in)	1280 (50.39)	
Force			
Max. Force @ 48VDC	N (lbf)	136 (30.5)	
Max. Force @ 72VDC	N (lbf)	203 (45.7)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	52 / 96 / - (12 / 22 / -)	
Max. Border Force relative	%	58	
Force Constant	N/A _{pk} (lbf/A _{pk})	40.8 (9.17)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (42.9)	
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (63.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	3.3	
Max. Current @ 72VDC	A _{pk}	4.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.3 / 2.3 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 0.61 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1400 / 410 / -	
Mechanical Data			
Slider Length	mm (in)	1400 (55)	
Slider Mass	g (lb)	3160 (6.95)	

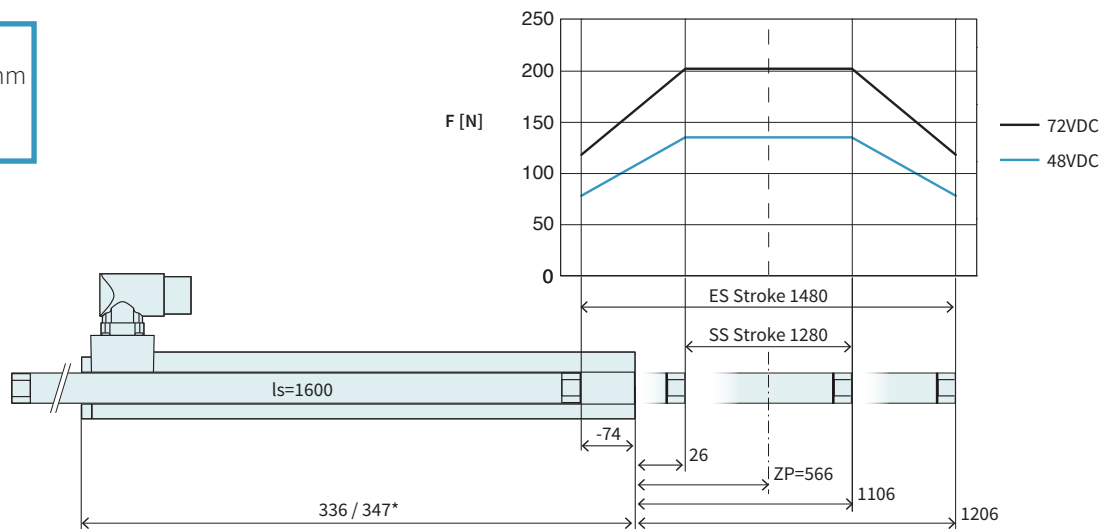


Item	Description	Item-No.
PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
PS01-37x240	Stator, 1.5m Cable, Connector P/10(m)	0150-1203
PS01-37x240-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1238
PL01-20x1400/1340-LC	Slider 'standard LC'	0150-2570

P01-37x240/1280x1480-LC

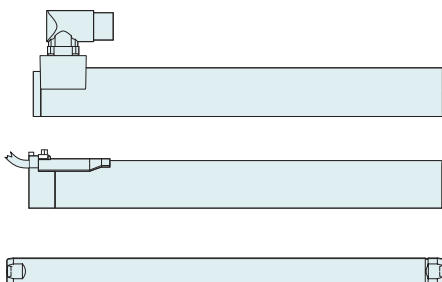
3

Max. Stroke: 1480 mm
Peak Force: 203 N



Technical Data P01-37x240/1280x1480-LC

Stroke			
Standard Stroke (SS)	mm (in)	1280 (50.39)	
Extended Stroke (ES)	mm (in)	1480 (58.29)	
Force			
Max. Force @ 48VDC	N (lbf)	136 (30.5)	
Max. Force @ 72VDC	N (lbf)	203 (45.7)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	52 / 96 / - (12 / 22 / -)	
Max. Border Force relative	%	58	
Force Constant	N/A _{pk} (lbf/A _{pk})	40.8 (9.17)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (42.9)	
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (63.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	3.3	
Max. Current @ 72VDC	A _{pk}	4.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.3 / 2.3 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 0.61 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1400 / 410 / -	
Mechanical Data			
Slider Length	mm (in)	1600 (63)	
Slider Mass	g (lb)	3620 (7.9)	



Item	Description	Item-No.
PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
PS01-37x240	Stator, 1.5m Cable, Connector P/10(m)	0150-1203
PS01-37x240-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1238
PL01-20x1600/1540-LC	Slider 'standard LC'	0150-2571

Linear Guides H01

3



HM01-37x240/60 Linear Module 37x240 with 60 mm Stroke				
→	H-Guide	H01-37x286/60	H-Guide for P01-37x240, Stroke max 60mm	0150-5023
		H01-37x286/60-GF	H-Guide for P01-37x240, Stroke max 60mm	0150-5083
→	Stator	PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
		PS01-37x240	Stator, 1.5m Cable, Connector P/10(m)	0150-1203
		PS01-37x240-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1238
→	Slider	PL01-20x400/340-LC	Slider 'standard LC'	0150-2562

HM01-37x240/160 Linear Module 37x240 with 160 mm Stroke				
→	H-Guide	H01-37x286/160	H-Guide for P01-37x240, Stroke max 160mm	0150-5024
		H01-37x286/160-GF	H-Guide for P01-37x240, Stroke max 160mm	0150-5084
→	Stator	PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
		PS01-37x240	Stator, 1.5m Cable, Connector P/10(m)	0150-1203
		PS01-37x240-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1238
→	Slider	PL01-20x500/440-LC	Slider 'standard LC'	0150-2563

HM01-37x240/260 Linear Module 37x240 with 260 mm Stroke				
→	H-Guide	H01-37x286/260	H-Guide for P01-37x240, Stroke max 260mm	0150-5025
		H01-37x286/260-GF	H-Guide for P01-37x240, Stroke max 260mm	0150-5085
→	Stator	PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
		PS01-37x240	Stator, 1.5m Cable, Connector P/10(m)	0150-1203
		PS01-37x240-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1238
→	Slider	PL01-20x600/540-LC	Slider 'standard LC'	0150-2564

Accessories				
→	Brake	HB01-37	Pneumatic brake for H01-37 guides	0150-5052
→	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051
→	MagSpring	MF01-37/H37	Flange MagSpring 37 / H-Guide 23/37/48	0250-2307
		MA01-37/H37	Adapter MagSpring 37&20 / H-Guide 37	0250-0117
→	Centering sleeve	HC01-09/04	Centering sleeve D9x4 mm	0150-3251
→	Wipers	HA01-27/20-F	Wiper for H01-37 guides, front side	0150-5108

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

Bridge Guide B01

3



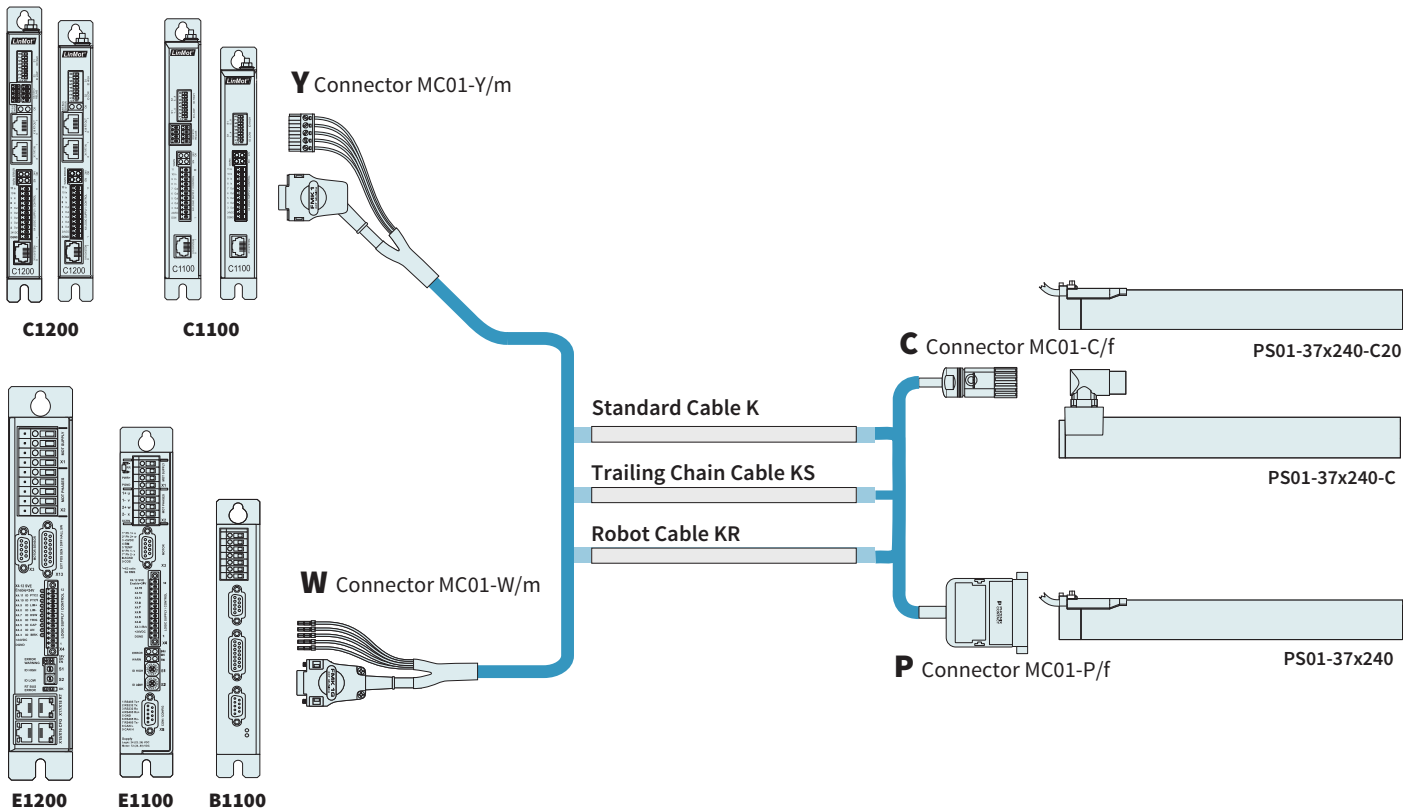
BM01-37x240/140 Bridge Module 37x240 with 140 mm Stroke ¹⁾				
→	B-Guide	B01-37x286/140	B-Guide for P01-37x240, Stroke max 140mm	0150-5144
		B01-37x286/140-GF	B-Guide for P01-37x240, Stroke max 140mm	0150-5147
→	Stator	PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
		PS01-37x240	Stator, 1.5m Cable, Connector P/10(m)	0150-1203
		PS01-37x240-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1238
→	Slider	PL01-19x500/420	Slider 'high clearance' B01-37x286/140	0150-1455
BM01-37x240/240 Bridge Module 37x240 with 240 mm Stroke ¹⁾				
→	B-Guide	B01-37x286/240	B-Guide for P01-37x240, Stroke max 240mm	0150-5145
		B01-37x286/240-GF	B-Guide for P01-37x240, Stroke max 240mm	0150-5148
→	Stator	PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
		PS01-37x240	Stator, 1.5m Cable, Connector P/10(m)	0150-1203
		PS01-37x240-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1238
→	Slider	PL01-19x600/520	Slider 'high clearance'	0150-1456
BM01-37x240/340 Bridge Module 37x240 with 340 mm Stroke ¹⁾				
→	B-Guide	B01-37x286/340	B-Guide for P01-37x240, Stroke max 340mm	0150-5146
		B01-37x286/340-GF	B-Guide for P01-37x240, Stroke max 340mm	0150-5149
→	Stator	PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
		PS01-37x240	Stator, 1.5m Cable, Connector P/10(m)	0150-1203
		PS01-37x240-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1238
→	Slider	PL01-19x700/620	Slider 'high clearance'	0150-1457
Accessories				
→	Brake	HB01-37	Pneumatic Brake for H01-37/600N (4-6Bar)	0150-5052
→	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051
→	MagSpring	MF01-37/H37	Flange MagSpring 37 / H-Guide 23/37/48	0250-2307
		MA01-37/H37	Adapter MagSpring 37&20 / H-Guide 37	0250-0117
→	Centering sleeve	HC01-09/04	Centering sleeve D9x4 mm	0150-3251
→	Wipers	HA01-27/20-F	Wiper for H01-37 guides, front side	0150-5108

¹⁾ The stroke is reduced by 18mm when using cable models.

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

Motor Cable

3



ORDERING INFORMATION

STANDARD CABLE		
Item	Description	Item-No.
K05-W/C-2	Motor Cable W/C, 2 m	0150-2123
K05-W/C-4	Motor Cable W/C, 4 m	0150-2124
K05-W/C-6	Motor Cable W/C, 6 m	0150-2125
K05-W/C-8	Motor Cable W/C, 8 m	0150-2126
K05-W/C-	Motor Cable W/C, Custom length	0150-3263
K05-W/P	Motor Cable W/P, Custom length	0150-3113
K05-Y/C-2	Motor Cable Y/R, 2 m	0150-2425
K05-Y/C-4	Motor Cable Y/R, 4 m	0150-2426
K05-Y/C-6	Motor Cable Y/R, 6 m	0150-2427
K05-Y/C-8	Motor Cable Y/R, 8 m	0150-2428
K05-Y-Fe/C-	Motor Cable Y-Fe/R, Custom length	0150-3502

TRAILING CHAIN CABLE

Item	Description	Item-No.
KS05-W/C-4	Trailing Chain Cable W/C, 4 m	0150-2127
KS05-W/C-6	Trailing Chain Cable W/C, 6 m	0150-2128
KS05-W/C-8	Trailing Chain Cable W/C, 8 m	0150-2129
KS05-W/C-	Trailing Chain Cable W/C, Custom length	0150-3204
KS05-W/P-	Trailing Chain Cable W/P, Custom length	0150-3114
KS05-Y/C-4	Trailing Chain Cable Y/C, 4 m	0150-2436
KS05-Y/C-6	Trailing Chain Cable Y/C, 6 m	0150-2437
KS05-Y/C-8	Trailing Chain Cable Y/C, 8 m	0150-2438
KS05-Y-Fe/C-	Trailing Chain Cable Y-Fe/C, Custom length	0150-3508

ROBOT CABLE

Item	Description	Item-No.
KR05-W/C-	Robot Cable KR05-W/C, Custom length	0150-3644
KR05-Y-Fe/C-	Robot Cable KR05-Y-Fe/C, Custom length	0150-3513

CONNECTOR & CABLE (INDIVIDUAL)

Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-C/f	Motor Connector C/f	0150-3080
MC01-P/f	Motor Connector P/f	0150-3021
K05-04/05	Motor Cable per m	0150-1920
KS05-04/05	Trailing Chain Cable per m	0150-1938
KR05-04/05	Robot Cable per m	0150-1846

MOTOR FLANGES



Item	Description	Item-No.
PF02-37x200	Flange 37x200 mm	0150-1999

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-20	Fixed Bearing Set for 19mm and 20mm Slider	0150-3083
PLF01-20-SS	Fixed Bearing Set for 19mm and 20mm Slider, Stainless steel	0150-3296
PLL01-19	Floating Bearing for PL01-19 Slider	0150-3335
PLL01-20	Floating Bearing for PL01-20 Slider	0150-3084
PLM01-20-MK	Mounting Kit for PL01-20 Slider	0150-3079

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

WIPERS



Item	Description	Item-No.
PA01-37/19-F	Wipers for PS01-37x...	0150-3225
PA01-37/19-R	Wipers for PS01-37x...-C	0150-3226
PA01-37/19-R cable	Wipers for PS01-37x... Cable Type	0150-3227
PA01-37/20-F	Wipers for PS01-37x...	0150-3126
PA01-37/20-R	Wipers for PS01-37x...-C Typ	0150-3201
PA01-37/20-R cable	Wipers for PS01-37x...-Cable Type	0150-3221

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for inc. strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D-Encoder	Encoder Cable (Length in m)	0150-3166
KS025-D/D15-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

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LINEAR MOTORS P01-37x240F



- ✓ Highly dynamic drives
- ✓ With a special F-winding for a higher maximum speed
- ✓ Wide stroke range
- ✓ Available with cable outlet or with rotatable connector
- ✓ Optional with air cooling
- ✓ Wide range of applications in handling modules as well as in plant and machine construction

LINEAR MOTORS P01-37x240F

Technical Data	295
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Motor Specifications

P01-37x240F/80x120-LC	298
P01-37x240F/20x180-LC	299
P01-37x240F/80x280-LC	300
P01-37x240F/180x380-LC	301
P01-37x240F/280x480-LC	302
P01-37x240F/380x580-LC	303
P01-37x240F/480x680-LC	304
P01-37x240F/580x780-LC	305
P01-37x240F/680x880-LC	306
P01-37x240F/880x1080-LC	307
P01-37x240F/1080x1280-LC	308
P01-37x240F/1280x1480-LC	309

Linear Guides	310
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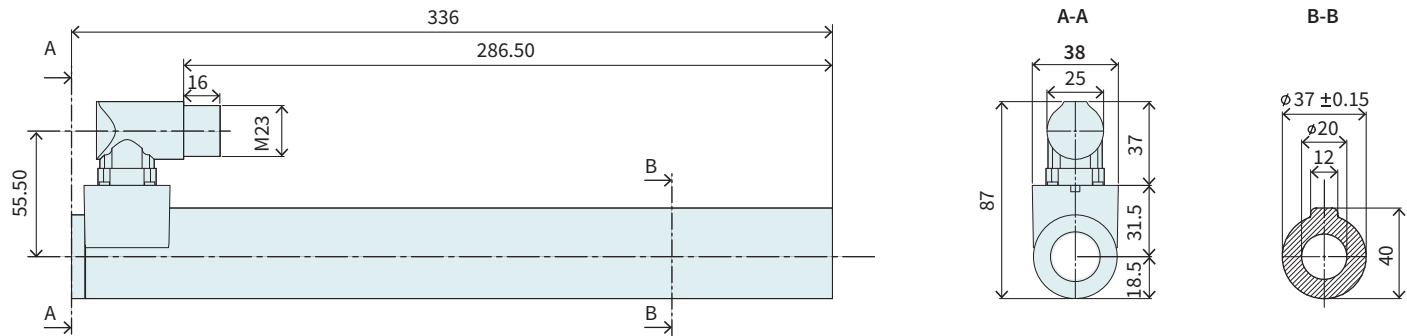
Accessories	312
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MOTOR FAMILY P01-37x240F

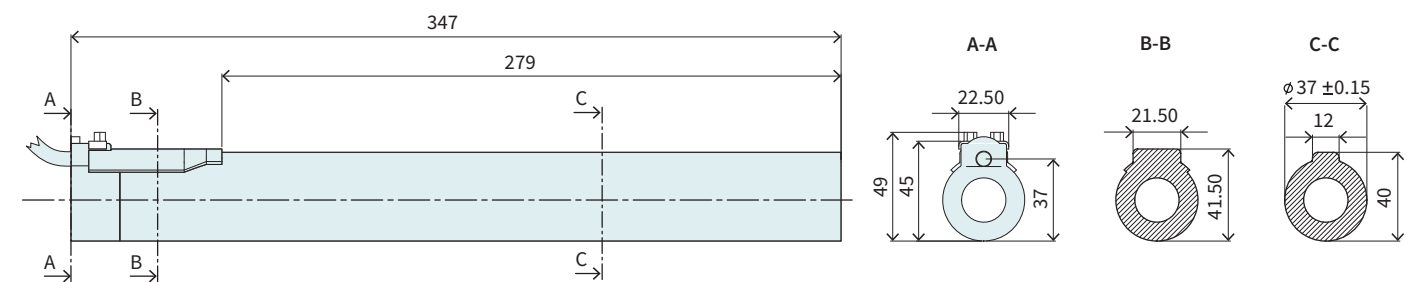
Technical Data				
Stroke				
Standard Stroke (SS)	mm (in)		≤ 1280 (≤ 50.4)	
Extended Stroke (ES)	mm (in)		≤ 1480 (≤ 58.3)	
Force				
Max. Force @ 48VDC	N (lbf)		205 (46.2)	
Max. Force @ 72VDC	N (lbf)		308 (69.2)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		52 / 96 / - (12 / 22 / -)	
Max. Border Force relative	%		≤ 88	
Force Constant	N/A _{pk} (lbf/A _{pk})		25.8 (5.8)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)		3.8 (149.9)	
Position Detection				
Position Resolution	mm (in)		0.005 (0.0002)	
Repeatability	mm (in)		±0.05 (±0.002)	
Position Resolution with ES	mm (in)		0.001 (0.00004)	
Repeatability with ES	mm (in)		±0.01 (±0.0004)	
Linearity with ES	mm (in)		±0.01 (±0.0004)	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.9	
Max. Current @ 72VDC	A _{pk}		11.8	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2 / 3.7 / -	
Terminal Resistance 25 °C / 120 °C	Ohm		4.9 / 6.7	
Terminal Inductivity	mH		2.4	
Magnetic Period	mm (in)		40 (1.57)	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2 / 0.58 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Stator Diameter	mm (in)		37 (1.5)	
Stator Length [Connector type / Cable type]	mm (in)		336 / 347 (13 / 14)	
Stator Mass	g (lb)		1385 (3.05)	
Slider Diameter	mm (in)		20 (0.79)	
Slider Length	mm (in)		240 - 1600 (9.4 - 63)	
Slider Mass	g (lb)		490 - 3620 (1.08 - 7.96)	
IP Code			IP 65	

STATOR CONNECTOR TYPE



Item	Description	Item-No.
PS01-37x240F-C	Stator with IP67 Connector M23/9(m)	0150-1225

STATOR CABLE TYPE

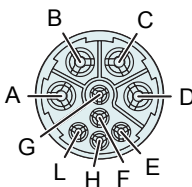


Item	Description	Item-No.
PS01-37x240F	Stator, 1.5m Cable, Connector P/10(m)	0150-1256
PS01-37x240F-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1239

CONNECTOR

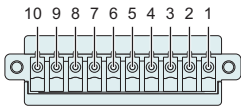
Motor Connector Wiring	PS01-37x240F-C PS01-37x240F-C20	PS01-37x240F	Wire color motor cable
	C-Connector	P-Connector	
Ph 1+	A	1	red
Ph 1-	B	2	pink
Ph 2+	C	3	blue
Ph 2-	D	4	grey
+5VDC	E	5	white
GND	F	6	inner shield
Sin	G	7	yellow
Cos	H	8	green
Temp.	L	9	black
Shield	Housing	10	outer Shield

C-Connector



View: Motor Connector, plug side

P-Connector

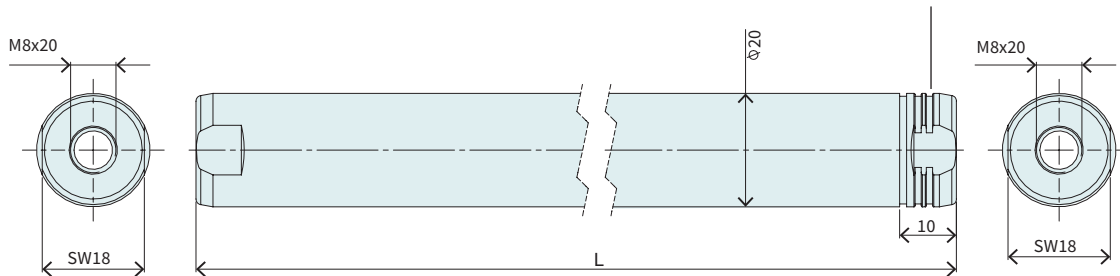


SLIDER

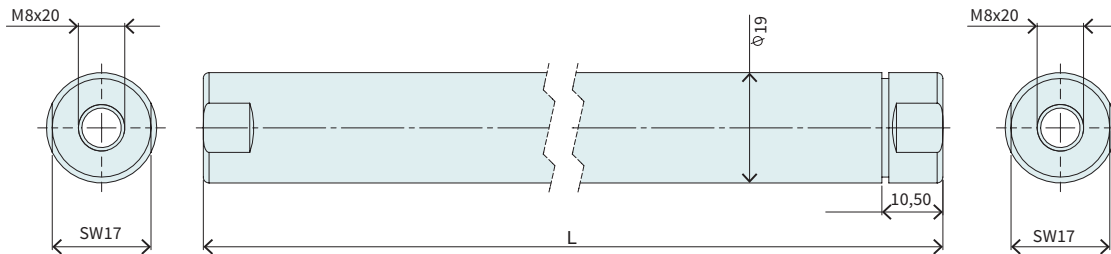
3

Slider Standard / Heavy Duty

Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.



High-Clearance Slider



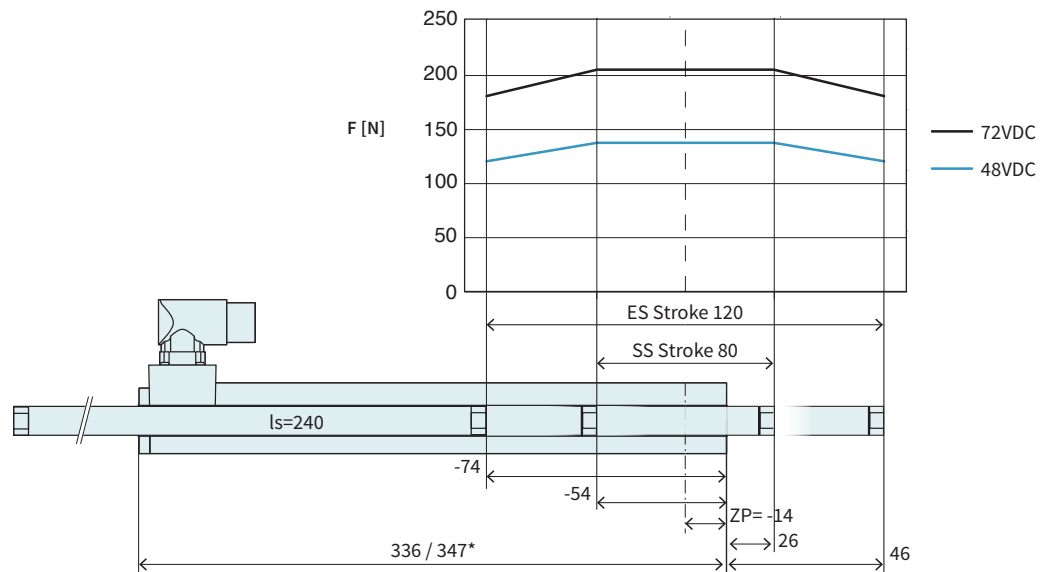
Slider Standard				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-20x240/180-LC	Slider 'standard LC'	120	40	0150-2560
PL01-20x300/240-LC	Slider 'standard LC'	180	100	0150-2561
PL01-20x400/340-LC	Slider 'standard LC'	280	200	0150-2562
PL01-20x500/440-LC	Slider 'standard LC'	380	300	0150-2563
PL01-20x600/540-LC	Slider 'standard LC'	480	400	0150-2564
PL01-20x700/640-LC	Slider 'standard LC'	580	500	0150-2565
PL01-20x800/740-LC	Slider 'standard LC'	680	600	0150-2566
PL01-20x900/840-LC	Slider 'standard LC'	780	700	0150-2567
PL01-20x1000/940-LC	Slider 'standard LC'	880	800	0150-2568
PL01-20x1200/1140-LC	Slider 'standard LC'	1080	1000	0150-2569
PL01-20x1400/1340-LC	Slider 'standard LC'	1280	1200	0150-2570
PL01-20x1600/1540-LC	Slider 'standard LC'	1480	1400	0150-2571

Slider Heavy Duty				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL02-20x240/180-LC	Slider 'heavy duty LC'	120	40	0150-2572
PL02-20x300/240-LC	Slider 'heavy duty LC'	180	100	0150-2573
PL02-20x400/340-LC	Slider 'heavy duty LC'	280	200	0150-2574
PL02-20x500/440-LC	Slider 'heavy duty LC'	380	300	0150-2575
PL02-20x600/540-LC	Slider 'heavy duty LC'	480	400	0150-2576
PL02-20x700/640-LC	Slider 'heavy duty LC'	580	500	0150-2577
PL02-20x800/740-LC	Slider 'heavy duty LC'	680	600	0150-2578
PL02-20x900/840-LC	Slider 'heavy duty LC'	780	700	0150-2579

High-Clearance Slider				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-19x240/160	Slider 'high clearance'	100	80	0150-1448
PL01-19x300/220	Slider 'high clearance'	160	140	0150-1449
PL01-19x395/320	Slider 'high clearance'	260	240	0150-1452
PL01-19x500/420	Slider 'high clearance'	360	340	0150-1455
PL01-19x600/520	Slider 'high clearance'	460	440	0150-1456
PL01-19x700/620	Slider 'high clearance'	560	540	0150-1457

P01-37x240F/80x120-LC

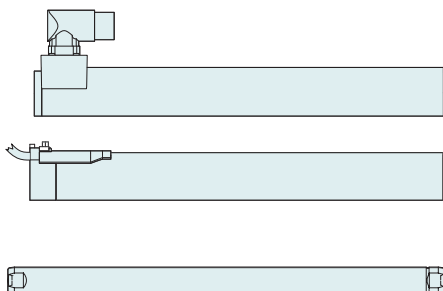
Max. Stroke: 120 mm
Peak Force: 205 N



Dimensions in mm
 *Cable Type

Technical Data P01-37x240F/80x120-LC

Stroke			
Standard Stroke (SS)	mm (in)	80 (3.14)	
Extended Stroke (ES)	mm (in)	120 (4.71)	
Force			
Max. Force @ 48VDC	N (lbf)	137 (30.8)	
Max. Force @ 72VDC	N (lbf)	205 (46.2)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	35 / 64 / - (7.8 / 14 / -)	
Max. Border Force relative	%	88	
Force Constant	N/A _{pk} (lbf/A _{pk})	17.2 (3.87)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)	3.8 (149.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.5	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.9	
Max. Current @ 72VDC	A _{pk}	11.8	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2 / 3.7 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2 / 0.58 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1300 / 390 / -	
Mechanical Data			
Slider Length	mm (in)	240 (9.4)	
Slider Mass	g (lb)	490 (1.08)	

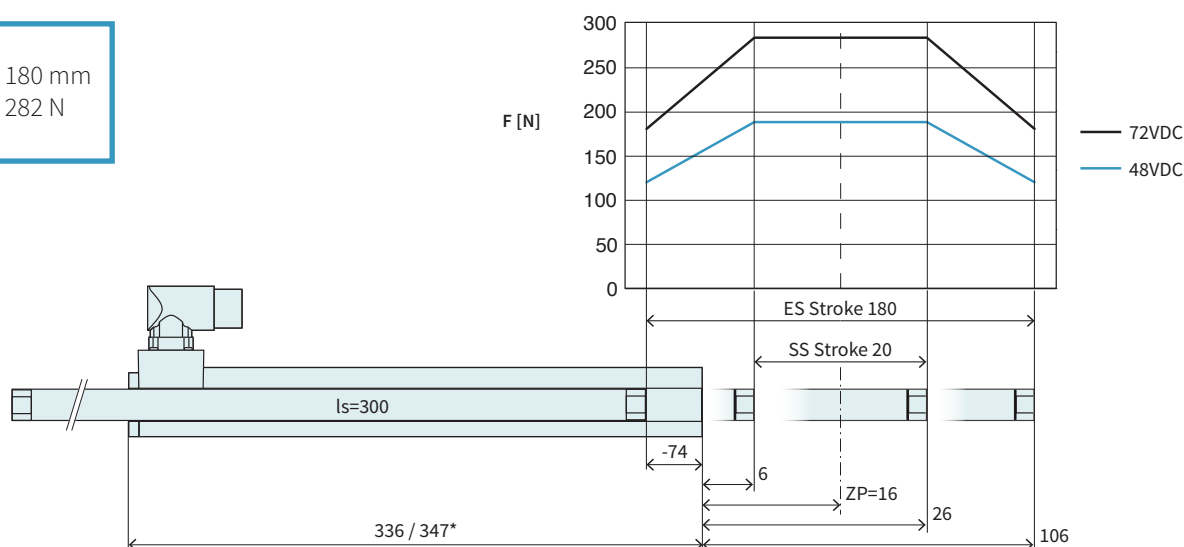


Item	Description	Item-No.
PS01-37x240F-C	Stator with IP67 Connector M23/9(m)	0150-1225
PS01-37x240F-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1239
PL01-20x240/180-LC	Slider 'standard LC'	0150-2560
PL02-20x240/180-LC	Slider 'heavy duty LC'	0150-2572
PL01-19x240/160*	Slider 'high clearance'	0150-1448

* With this slider, the motor specifications above change.

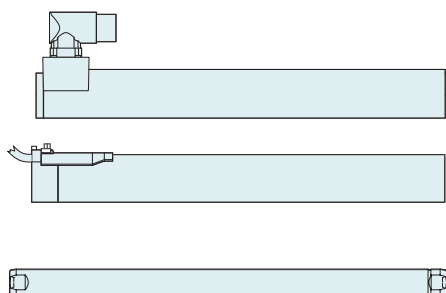
P01-37x240F/20x180-LC

Max. Stroke: 180 mm
Peak Force: 282 N



Technical Data P01-37x240F/20x180-LC

Stroke				
Standard Stroke (SS)	mm (in)	20	(0.78)	
Extended Stroke (ES)	mm (in)	180	(7.08)	
Force				
Max. Force @ 48VDC	N (lbf)	188	(42.3)	
Max. Force @ 72VDC	N (lbf)	282	(63.5)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	48 / 88 / -	(11 / 20 / -)	
Max. Border Force relative	%	64		
Force Constant	N/A _{pk} (lbf/A _{pk})	23.6	(5.32)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)	1.8	(73.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2.7	(109.9)	
Position Detection				
Repeatability	mm (in)	±0.05	(±0.002)	
Linearity	%	± 0.4		
Electrical Data				
Max. Current @ 48VDC	A _{pk}	7.9		
Max. Current @ 72VDC	A _{pk}	11.8		
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2 / 3.7 / -		
Thermal Data				
Max. Winding Temperature (Sensor)	°C	90		
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2 / 0.58 / -		
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1300 / 390 / -		
Mechanical Data				
Slider Length	mm (in)	300	(12)	
Slider Mass	g (lb)	630	(1.39)	

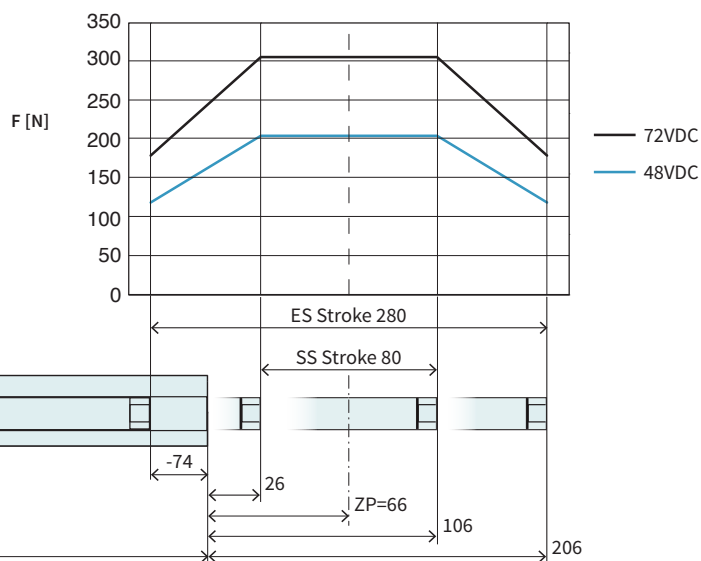


Item	Description	Item-No.
PS01-37x240F-C	Stator with IP67 Connector M23/9(m)	0150-1225
PS01-37x240F-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1239
PL01-20x300/240-LC	Slider 'standard LC'	0150-2561
PL02-20x300/240-LC	Slider 'heavy duty LC'	0150-2573
PL01-19x300/220*	Slider 'high clearance'	0150-1449

* With this slider, the motor specifications above change.

P01-37x240F/80x280-LC

Max. Stroke: 280 mm
Peak Force: 308 N



Technical Data P01-37x240F/80x280-LC

Stroke

Standard Stroke (SS)	mm (in)	80 (3.14)
Extended Stroke (ES)	mm (in)	280 (10.99)

Force

Max. Force @ 48VDC	N (lbf)	205 (46.2)
Max. Force @ 72VDC	N (lbf)	308 (69.2)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	52 / 96 / - (12 / 22 / -)
Max. Border Force relative	%	58
Force Constant	N/A _{pk} (lbf/A _{pk})	25.8 (5.8)

Velocity

Max. Velocity @ 48VDC	m/s (in/s)	1.6 (66.9)
Max. Velocity @ 72VDC	m/s (in/s)	2.5 (99.9)

Position Detection

Repeatability	mm (in)	±0.05 (±0.002)
Linearity	%	± 0.3

Electrical Data

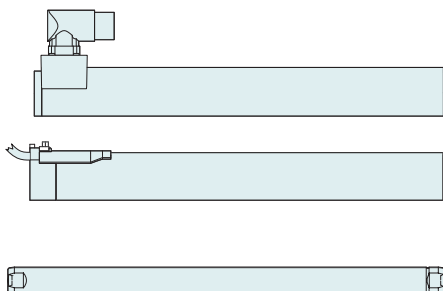
Max. Current @ 48VDC	A _{pk}	7.9
Max. Current @ 72VDC	A _{pk}	11.8
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2 / 3.7 / -

Thermal Data

Max. Winding Temperature (Sensor)	°C	90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2 / 0.58 / -
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1300 / 390 / -

Mechanical Data

Slider Length	mm (in)	400 (16)
Slider Mass	g (lb)	860 (1.9)

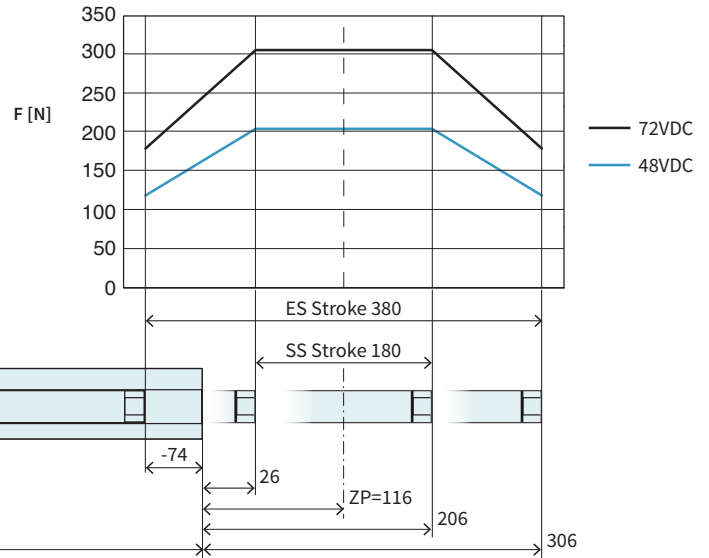


Item	Description	Item-No.
PS01-37x240F-C	Stator with IP67 Connector M23/9(m)	0150-1225
PS01-37x240F-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1239
PL01-20x400/340-LC	Slider 'standard LC'	0150-2562
PL02-20x400/340-LC	Slider 'heavy duty LC'	0150-2574
PL01-19x395/320*	Slider 'high clearance'	0150-1452

* With this slider, the motor specifications above change.

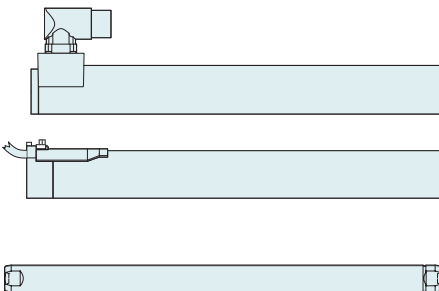
P01-37x240F/180x380-LC

Max. Stroke: 380 mm
Peak Force: 308 N



Dimensions in mm
 *Cable Type

Technical Data P01-37x240F/180x380-LC				
Stroke				
Standard Stroke (SS)	mm (in)	180	(7.08)	
Extended Stroke (ES)	mm (in)	380	(14.99)	
Force				
Max. Force @ 48VDC	N (lbf)	205	(46.2)	
Max. Force @ 72VDC	N (lbf)	308	(69.2)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	52 / 96 / -	(12 / 22 / -)	
Max. Border Force relative	%	58		
Force Constant	N/A _{pk} (lbf/A _{pk})	25.8	(5.8)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)	1.6	(66.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2.5	(99.9)	
Position Detection				
Repeatability	mm (in)	±0.05	(±0.002)	
Linearity	%	± 0.25		
Electrical Data				
Max. Current @ 48VDC	A _{pk}	7.9		
Max. Current @ 72VDC	A _{pk}	11.8		
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2 / 3.7 / -		
Thermal Data				
Max. Winding Temperature (Sensor)	°C	90		
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2 / 0.58 / -		
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1300 / 390 / -		
Mechanical Data				
Slider Length	mm (in)	500	(20)	
Slider Mass	g (lb)	1090	(2.4)	

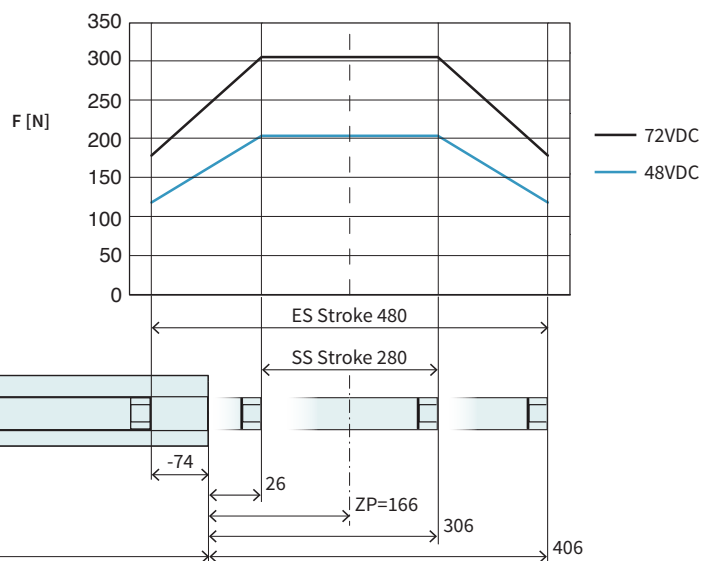


Item	Description	Item-No.
PS01-37x240F-C	Stator with IP67 Connector M23/9(m)	0150-1225
PS01-37x240F-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1239
PL01-20x500/440-LC	Slider 'standard LC'	0150-2563
PL02-20x500/440-LC	Slider 'heavy duty LC'	0150-2575
PL01-19x500/420*	Slider 'high clearance'	0150-1455

* With this slider, the motor specifications above change.

P01-37x240F/280x480-LC

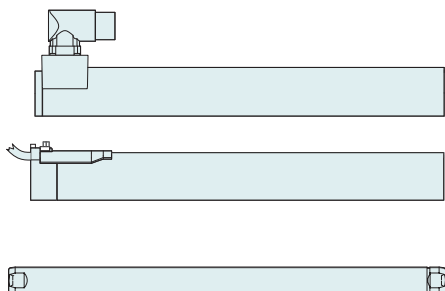
Max. Stroke: 480 mm
Peak Force: 308 N



Dimensions in mm
 *Cable Type

Technical Data P01-37x240F/280x480-LC

Stroke			
Standard Stroke (SS)	mm (in)	280	(10.99)
Extended Stroke (ES)	mm (in)	480	(18.89)
Force			
Max. Force @ 48VDC	N (lbf)	205	(46.2)
Max. Force @ 72VDC	N (lbf)	308	(69.2)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	52 / 96 / -	(12 / 22 / -)
Max. Border Force relative	%	58	
Force Constant	N/A _{pk} (lbf/A _{pk})	25.8	(5.8)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.6	(66.9)
Max. Velocity @ 72VDC	m/s (in/s)	2.5	(99.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.9	
Max. Current @ 72VDC	A _{pk}	11.8	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2 / 3.7 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2 / 0.58 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1300 / 390 / -	
Mechanical Data			
Slider Length	mm (in)	600	(24)
Slider Mass	g (lb)	1330	(2.93)

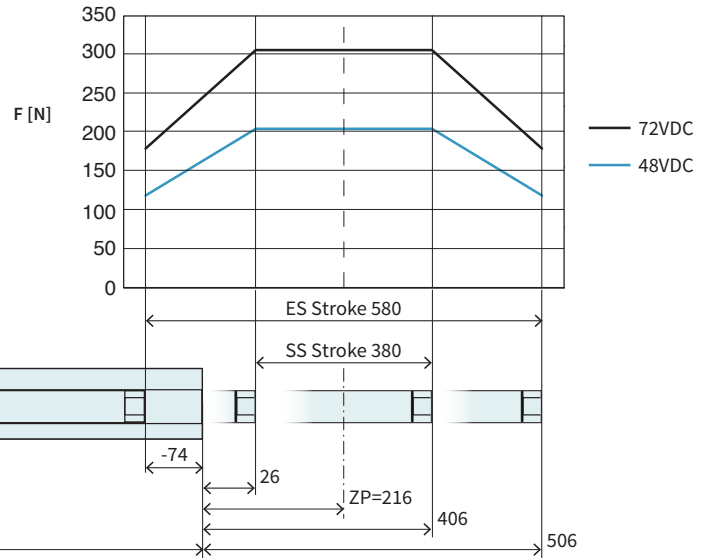


Item	Description	Item-No.
PS01-37x240F-C	Stator with IP67 Connector M23/9(m)	0150-1225
PS01-37x240F-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1239
PL01-20x600/540-LC	Slider 'standard LC'	0150-2564
PL02-20x600/540-LC	Slider 'heavy duty LC'	0150-2576
PL01-19x600/520*	Slider 'high clearance'	0150-1456

* With this slider, the motor specifications above change.

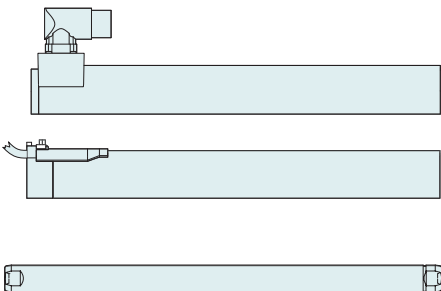
P01-37x240F/380x580-LC

Max. Stroke: 580 mm
Peak Force: 308 N



Dimensions in mm
 *Cable Type

Technical Data P01-37x240F/380x580-LC				
Stroke				
Standard Stroke (SS)	mm (in)		380 (14.99)	
Extended Stroke (ES)	mm (in)		580 (22.8)	
Force				
Max. Force @ 48VDC	N (lbf)		205 (46.2)	
Max. Force @ 72VDC	N (lbf)		308 (69.2)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		52 / 96 / - (12 / 22 / -)	
Max. Border Force relative	%		58	
Force Constant	N/A _{pk} (lbf/A _{pk})		25.8 (5.8)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		1.6 (66.9)	
Max. Velocity @ 72VDC	m/s (in/s)		2.5 (99.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.9	
Max. Current @ 72VDC	A _{pk}		11.8	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2 / 3.7 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2 / 0.58 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm (in)		700 (28)	
Slider Mass	g (lb)		1560 (3.43)	

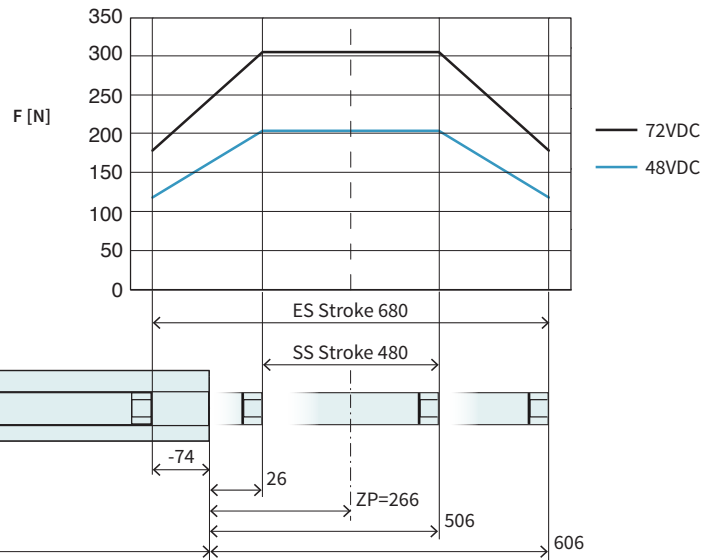


Item	Description	Item-No.
PS01-37x240F-C	Stator with IP67 Connector M23/9(m)	0150-1225
PS01-37x240F-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1239
PL01-20x700/640-LC	Slider 'standard LC'	0150-2565
PL02-20x700/640-LC	Slider 'heavy duty LC'	0150-2577
PL01-19x700/620*	Slider 'high clearance'	0150-1457

* With this slider, the motor specifications above change.

P01-37x240F/480x680-LC

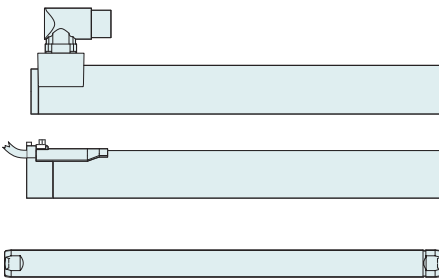
Max. Stroke: 680 mm
Peak Force: 308 N



Dimensions in mm
 *Cable Type

Technical Data P01-37x240F/480x680-LC

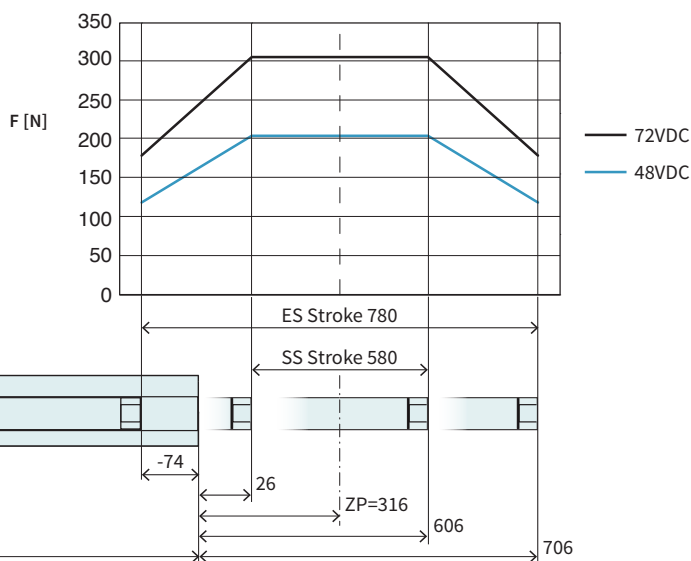
Stroke			
Standard Stroke (SS)	mm (in)	480 (18.89)	
Extended Stroke (ES)	mm (in)	680 (26.8)	
Force			
Max. Force @ 48VDC	N (lbf)	205 (46.2)	
Max. Force @ 72VDC	N (lbf)	308 (69.2)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	52 / 96 / - (12 / 22 / -)	
Max. Border Force relative	%	58	
Force Constant	N/A _{pk} (lbf/A _{pk})	25.8 (5.8)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.6 (66.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2.5 (99.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.9	
Max. Current @ 72VDC	A _{pk}	11.8	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2 / 3.7 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2 / 0.58 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1300 / 390 / -	
Mechanical Data			
Slider Length	mm (in)	800 (31)	
Slider Mass	g (lb)	1790 (3.94)	



Item	Description	Item-No.
PS01-37x240F-C	Stator with IP67 Connector M23/9(m)	0150-1225
PS01-37x240F-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1239
PL01-20x800/740-LC	Slider 'standard LC'	0150-2566
PL02-20x800/740-LC	Slider 'heavy duty LC'	0150-2578

P01-37x240F/580x780-LC

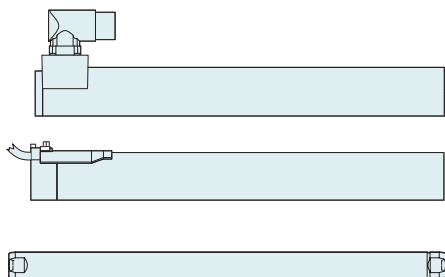
Max. Stroke: 780 mm
Peak Force: 308 N



Dimensions in mm
 *Cable Type

Technical Data P01-37x240F/580x780-LC

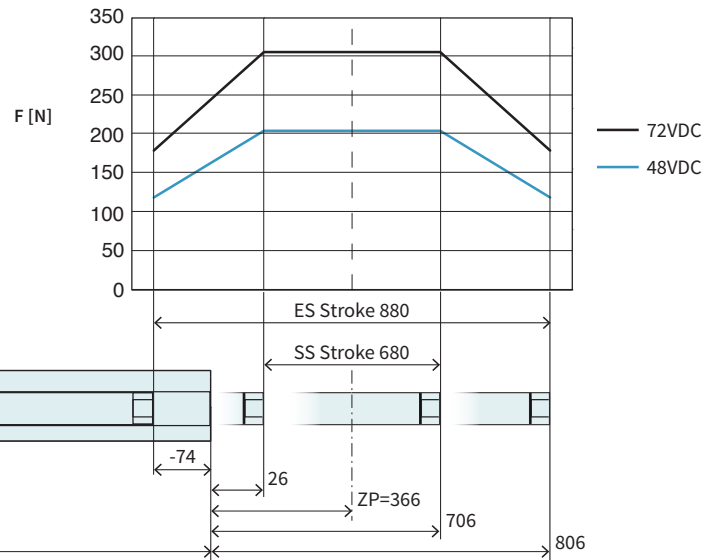
Stroke				
Standard Stroke (SS)	mm (in)		580 (22.8)	
Extended Stroke (ES)	mm (in)		780 (30.69)	
Force				
Max. Force @ 48VDC	N (lbf)		205 (46.2)	
Max. Force @ 72VDC	N (lbf)		308 (69.2)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		52 / 96 / - (12 / 22 / -)	
Max. Border Force relative	%		58	
Force Constant	N/A _{pk} (lbf/A _{pk})		25.8 (5.8)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		1.6 (66.9)	
Max. Velocity @ 72VDC	m/s (in/s)		2.5 (99.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.9	
Max. Current @ 72VDC	A _{pk}		11.8	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2 / 3.7 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2 / 0.58 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm (in)		900 (35)	
Slider Mass	g (lb)		2020 (4.44)	



Item	Description	Item-No.
PS01-37x240F-C	Stator with IP67 Connector M23/9(m)	0150-1225
PS01-37x240F-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1239
PL01-20x900/840-LC	Slider 'standard LC'	0150-2567
PL02-20x900/840-LC	Slider 'heavy duty LC'	0150-2579

P01-37x240F/680x880-LC

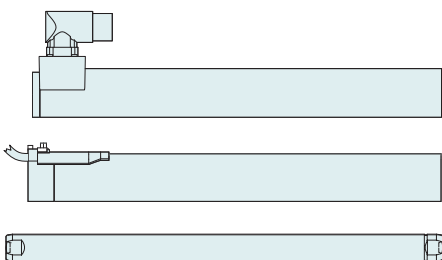
Max. Stroke: 880 mm
Peak Force: 308 N



Dimensions in mm
 *Cable Type

Technical Data P01-37x240F/680x880-LC

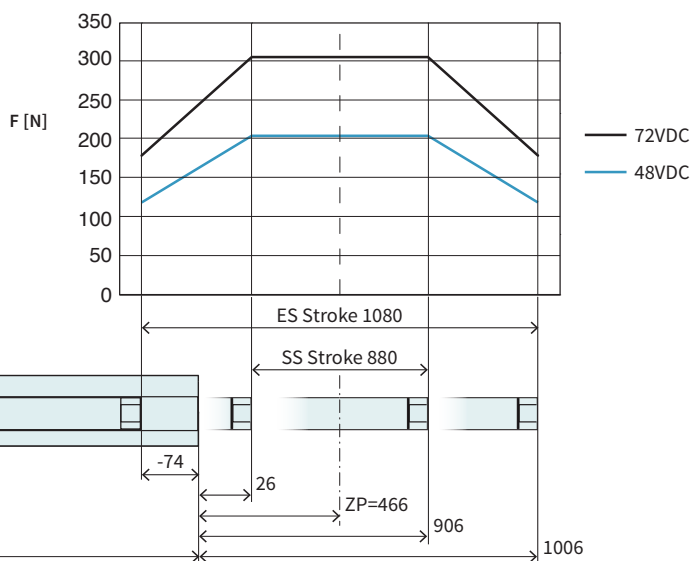
Stroke			
Standard Stroke (SS)	mm (in)	680 (26.8)	
Extended Stroke (ES)	mm (in)	880 (34.6)	
Force			
Max. Force @ 48VDC	N (lbf)	205 (46.2)	
Max. Force @ 72VDC	N (lbf)	308 (69.2)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	52 / 96 / - (12 / 22 / -)	
Max. Border Force relative	%	58	
Force Constant	N/A _{pk} (lbf/A _{pk})	25.8 (5.8)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.6 (66.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2.5 (99.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.9	
Max. Current @ 72VDC	A _{pk}	11.8	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2 / 3.7 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2 / 0.58 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1300 / 390 / -	
Mechanical Data			
Slider Length	mm (in)	1000 (39)	
Slider Mass	g (lb)	2230 (4.91)	



Item	Description	Item-No.
PS01-37x240F-C	Stator with IP67 Connector M23/9(m)	0150-1225
PS01-37x240F-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1239
PL01-20x1000/940-LC	Slider 'standard LC'	0150-2568

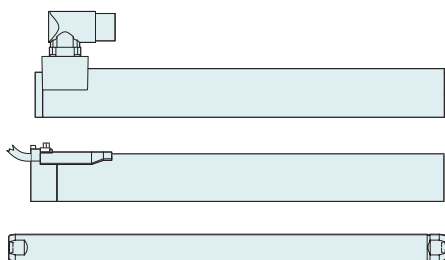
P01-37x240F/880x1080-LC

Max. Stroke: 1080 mm
Peak Force: 308 N



Dimensions in mm
 *Cable Type

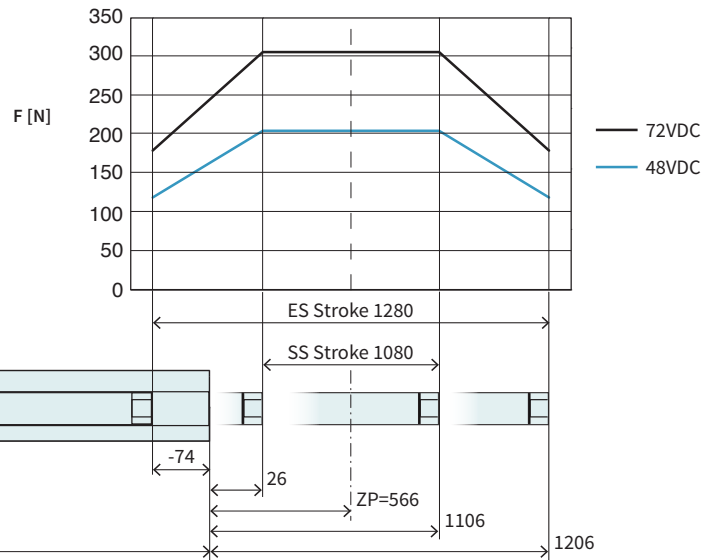
Technical Data P01-37x240F/880x1080-LC				
Stroke				
Standard Stroke (SS)	mm (in)	880	(34.6)	
Extended Stroke (ES)	mm (in)	1080	(42.49)	
Force				
Max. Force @ 48VDC	N (lbf)	205	(46.2)	
Max. Force @ 72VDC	N (lbf)	308	(69.2)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	52 / 96 / -	(12 / 22 / -)	
Max. Border Force relative	%	58		
Force Constant	N/A _{pk} (lbf/A _{pk})	25.8	(5.8)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)	1.6	(66.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2.5	(99.9)	
Position Detection				
Repeatability	mm (in)	±0.05	(±0.002)	
Linearity	%	± 0.15		
Electrical Data				
Max. Current @ 48VDC	A _{pk}	7.9		
Max. Current @ 72VDC	A _{pk}	11.8		
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2 / 3.7 / -		
Thermal Data				
Max. Winding Temperature (Sensor)	°C	90		
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2 / 0.58 / -		
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1300 / 390 / -		
Mechanical Data				
Slider Length	mm (in)	1200	(47)	
Slider Mass	g (lb)	2690	(5.92)	



Item	Description	Item-No.
PS01-37x240F-C	Stator with IP67 Connector M23/9(m)	0150-1225
PS01-37x240F-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1239
PL01-20x1200/1140-LC	Slider 'standard LC'	0150-2569

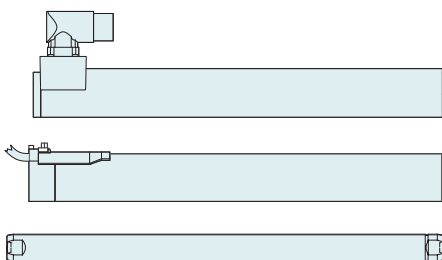
P01-37x240F/1080x1280-LC

Max. Stroke: 1280 mm
Peak Force: 308 N



Technical Data P01-37x240F/1080x1280-LC

Stroke			
Standard Stroke (SS)	mm (in)	1080 (42.49)	
Extended Stroke (ES)	mm (in)	1280 (50.39)	
Force			
Max. Force @ 48VDC	N (lbf)	205 (46.2)	
Max. Force @ 72VDC	N (lbf)	308 (69.2)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	52 / 96 / - (12 / 22 / -)	
Max. Border Force relative	%	58	
Force Constant	N/A _{pk} (lbf/A _{pk})	25.8 (5.8)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.6 (66.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2.5 (99.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.9	
Max. Current @ 72VDC	A _{pk}	11.8	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2 / 3.7 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2 / 0.58 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1300 / 390 / -	
Mechanical Data			
Slider Length	mm (in)	1400 (55)	
Slider Mass	g (lb)	3160 (6.95)	

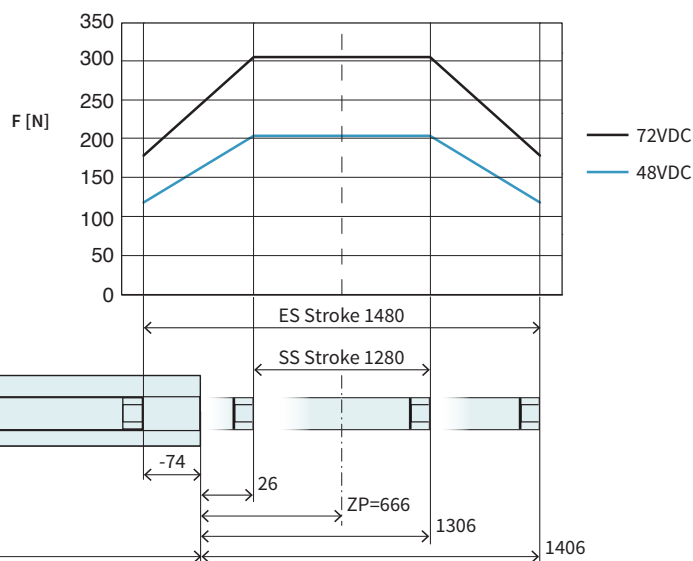


Item	Description	Item-No.
PS01-37x240F-C	Stator with IP67 Connector M23/9(m)	0150-1225
PS01-37x240F-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1239
PL01-20x1400/1340-LC	Slider 'standard LC'	0150-2570

P01-37x240F/1280x1480-LC

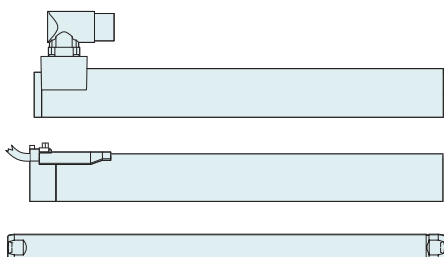
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Max. Stroke: 1480 mm
Peak Force: 308 N



Dimensions in mm
 *Cable Type

Technical Data P01-37x240F/1280x1480-LC				
Stroke				
Standard Stroke (SS)	mm (in)		1280 (50.39)	
Extended Stroke (ES)	mm (in)		1480 (58.29)	
Force				
Max. Force @ 48VDC	N (lbf)		205 (46.2)	
Max. Force @ 72VDC	N (lbf)		308 (69.2)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		52 / 96 / -	(12 / 22 / -)
Max. Border Force relative	%		58	
Force Constant	N/A _{pk} (lbf/A _{pk})		25.8 (5.8)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		1.6 (66.9)	
Max. Velocity @ 72VDC	m/s (in/s)		2.5 (99.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.9	
Max. Current @ 72VDC	A _{pk}		11.8	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2 / 3.7 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2 / 0.58 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm (in)		1600 (63)	
Slider Mass	g (lb)		3620 (7.9)	



Item	Description	Item-No.
PS01-37x240F-C	Stator with IP67 Connector M23/9(m)	0150-1225
PS01-37x240F-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1239
PL01-20x1600/1540-LC	Slider 'standard LC'	0150-2571

Linear Guides H01

3



HM01-37x240/60	Linear Module 37x240 with 60 mm Stroke			
→	H-Guide	H01-37x286/60	H-Guide for P01-37x240, Stroke max 60mm	0150-5023
		H01-37x286/60-GF	H-Guide for P01-37x240, Stroke max 60mm	0150-5083
	Stator	PS01-37x240F-C	Stator with IP67 Connector M23/9(m)	0150-1225
		PS01-37x240F-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1239
→	Slider	PL01-20x400/340-LC	Slider 'standard LC'	0150-2562

HM01-37x240/160	Linear Module 37x240 with 160 mm Stroke			
→	H-Guide	H01-37x286/160	H-Guide for P01-37x240, Stroke max 160mm	0150-5024
		H01-37x286/160-GF	H-Guide for P01-37x240, Stroke max 160mm	0150-5084
→	Stator	PS01-37x240F-C	Stator with IP67 Connector M23/9(m)	0150-1225
		PS01-37x240F-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1239
→	Slider	PL01-20x500/440-LC	Slider 'standard LC'	0150-2563

HM01-37x240/260	Linear Module 37x240 with 260 mm Stroke			
→	H-Guide	H01-37x286/260	H-Guide for P01-37x240, Stroke max 260mm	0150-5025
		H01-37x286/260-GF	H-Guide for P01-37x240, Stroke max 260mm	0150-5085
→	Stator	PS01-37x240F-C	Stator with IP67 Connector M23/9(m)	0150-1225
		PS01-37x240F-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1239
→	Slider	PL01-20x600/540-LC	Slider 'standard LC'	0150-2564

Accessories				
→	Brake	HB01-37	Pneumatic Brake for H01-37/600N (4-6Bar)	0150-5052
	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051
	MagSpring	MF01-37/H37	Flange MagSpring 37 / H-Guide 23/37/48	0250-2307
		MA01-37/H37	Adapter MagSpring 37&20 / H-Guide 37	0250-0117
	Centering sleeve	HC01-09/04	Centering sleeve D9x4 mm	0150-3251
	Wipers	HA01-27/20-F	Wiper for H01-37 guides, front side	0150-5108

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

Bridge Guide B01

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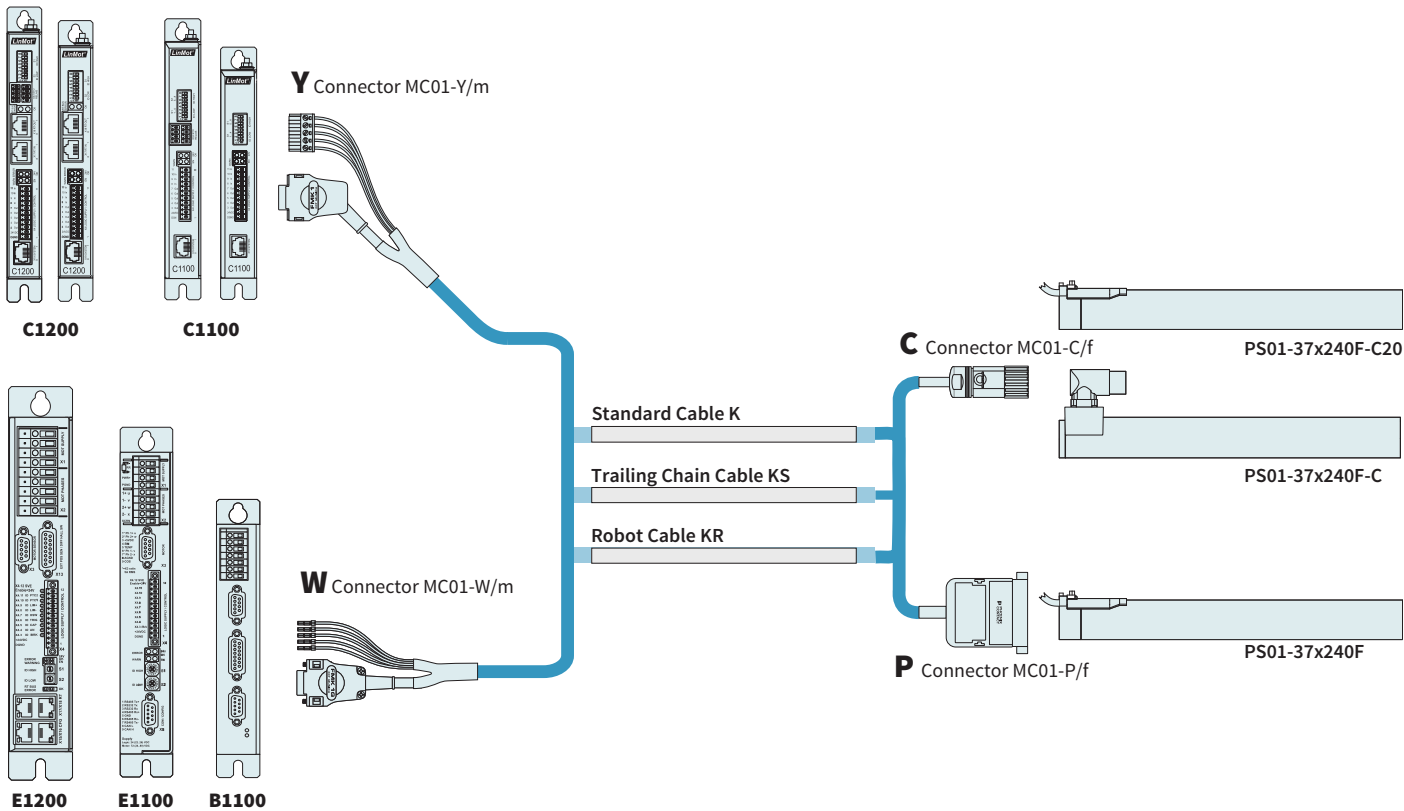
BM01-37x240/140 Bridge Module 37x240 with 140 mm Stroke ¹⁾				
→	B-Guide	B01-37x286/140	B-Guide for P01-37x240, Stroke max 140mm	0150-5144
		B01-37x286/140-GF	B-Guide for P01-37x240, Stroke max 140mm	0150-5147
→	Stator	PS01-37x240F-C	Stator with IP67 Connector M23/9(m)	0150-1225
		PS01-37x240F-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1239
→	Slider	PL01-19x500/420	Slider 'high clearance'	0150-1455
BM01-37x240/240 Bridge Module 37x240 with 240 mm Stroke ¹⁾				
→	B-Guide	B01-37x286/240	B-Guide for P01-37x240, Stroke max 240mm	0150-5145
		B01-37x286/240-GF	B-Guide for P01-37x240, Stroke max 240mm	0150-5148
→	Stator	PS01-37x240F-C	Stator with IP67 Connector M23/9(m)	0150-1225
		PS01-37x240F-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1239
→	Slider	PL01-19x600/520	Slider 'high clearance'	0150-1456
BM01-37x240/340 Bridge Module 37x240 with 340 mm Stroke ¹⁾				
→	B-Guide	B01-37x286/340	B-Guide for P01-37x240, Stroke max 340mm	0150-5146
		B01-37x286/340-GF	B-Guide for P01-37x240, Stroke max 340mm	0150-5149
→	Stator	PS01-37x240F-C	Stator with IP67 Connector M23/9(m)	0150-1225
		PS01-37x240F-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1239
→	Slider	PL01-19x700/620	Slider 'high clearance'	0150-1457
Accessories				
→	Brake	HB01-37	Pneumatic Brake for H01-37/600N (4-6 Bar)	0150-5052
→	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051
→	MagSpring	MF01-37/H37	Flange MagSpring 37 / H-Guide 23/37/48	0250-2307
		MA01-37/H37	Adapter MagSpring 37&20 / H-Guide 37	0250-0117
→	Centering sleeve	HC01-09/04	Centering sleeve D9x4 mm	0150-3251
→	Wipers	HA01-27/20-F	Wiper for H01-37 guides, front side	0150-5108

¹⁾ The stroke is reduced by 18mm when using cable models.

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

Motor Cable

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ORDERING INFORMATION

STANDARD CABLE		
Item	Description	Item-No.
K05-W/C-2	Motor Cable W/C, 2 m	0150-2123
K05-W/C-4	Motor Cable W/C, 4 m	0150-2124
K05-W/C-6	Motor Cable W/C, 6 m	0150-2125
K05-W/C-8	Motor Cable W/C, 8 m	0150-2126
K05-W/C-	Motor Cable W/C, Custom length	0150-3263
K05-Y/C-2	Motor Cable Y/R, 2 m	0150-2425
K05-Y/C-4	Motor Cable Y/R, 4 m	0150-2426
K05-Y/C-6	Motor Cable Y/R, 6 m	0150-2427
K05-Y/C-8	Motor Cable Y/R, 8 m	0150-2428
K05-Y-Fe/C-	Motor Cable Y-Fe/R, Custom length	0150-3502

TRAILING CHAIN CABLE

Item	Description	Item-No.
KS05-W/C-4	Trailing Chain Cable W/C, 4 m	0150-2127
KS05-W/C-6	Trailing Chain Cable W/C, 6 m	0150-2128
KS05-W/C-8	Trailing Chain Cable W/C, 8 m	0150-2129
KS05-W/C-	Trailing Chain Cable W/C, Custom length	0150-3204
KS05-Y/C-4	Trailing Chain Cable Y/C, 4 m	0150-2436
KS05-Y/C-6	Trailing Chain Cable Y/C, 6 m	0150-2437
KS05-Y/C-8	Trailing Chain Cable Y/C, 8 m	0150-2438
KS05-Y/C-	Trailing Chain Cable Y-Fe/C, Custom length	0150-3508

ROBOT CABLE

Item	Description	Item-No.
KR05-W/C-	Robot Cable KR05-W/C, Custom length	0150-3644
KR05-Y-Fe/C-	Robot Cable KR05-Y-Fe/C, Custom length	0150-3513

CONNECTOR & CABLE (INDIVIDUAL)

Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-C/f	Motor Connector C/f	0150-3080
K05-04/05	Motor Cable per m	0150-1920
KS05-04/05	Trailing Chain Cable per m	0150-1938
KR05-04/05	Robot Cable per m	0150-1846

MOTOR FLANGES



Item	Description	Item-No.
PF02-37x200	Flange 37x200 mm	0150-1999

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37, B01-37 and PF02-37	0150-5051

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-20	Fixed Bearing Set for 19mm and 20mm Slider	0150-3083
PLF01-20-SS	Fixed Bearing Set for 19mm and 20mm Slider, Stainless steel	0150-3296
PLL01-19	Floating Bearing for PL01-19 Slider	0150-3335
PLL01-20	Floating Bearing for PL01-20 Slider	0150-3084
PLM01-20-MK	Mounting Kit for PL01-20 Slider	0150-3079

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

WIPERS



Item	Description	Item-No.
PA01-37/19-F	Wipers for PS01-37x...	0150-3225
PA01-37/19-R	Wipers for PS01-37x...-C	0150-3226
PA01-37/19-R cable	Wipers for PS01-37x... Cable Type	0150-3227
PA01-37/20-F	Wipers for PS01-37x...	0150-3126
PA01-37/20-R	Wipers for PS01-37x...-C	0150-3201
PA01-37/20-R cable	Wipers for PS01-37x...-Cable Type	0150-3221

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for inc. strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D-Encoder	Encoder Cable (Length in m)	0150-3166
KS025-D/D15-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

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LINEAR MOTORS P01-48x240



- ✓ Highly dynamic drives
- ✓ Wide stroke range
- ✓ Available with rotatable connector
- ✓ Optional with air cooling
- ✓ Wide range of applications in handling modules as well as in plant and machine construction

LINEAR MOTORS P01-48x240

Technical Data 319

Motor Specifications

P01-48x240/30x180	323
P01-48x240/90x240	324
P01-48x240/180x330	325
P01-48x240/300x450	326
P01-48x240/390x540	327
P01-48x240/480x630	328
P01-48x240/600x750	329
P01-48x240/690x840	330
P01-48x240/900x1050	331
P01-48x240/1080x1230	332
P01-48x240/1290x1440	333
P01-48x240/1500x1650	334
P01-48x240/1680x1830	335

Linear Guides 336

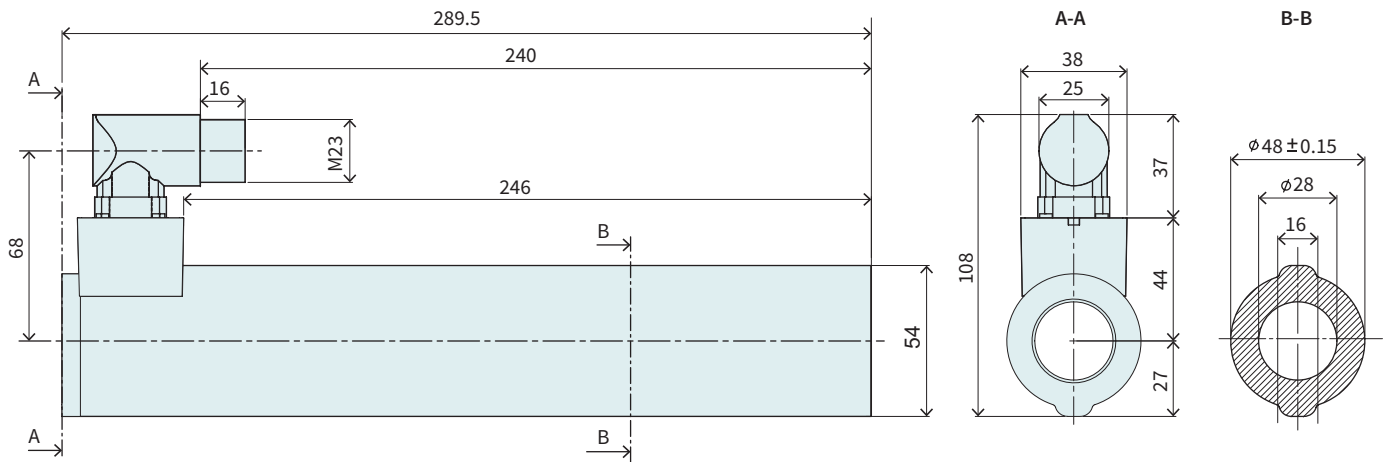
Accessories 338



MOTOR FAMILY P01-48x240

Technical Data				
Stroke				
Standard Stroke (SS)	mm	(in)	≤ 1680	(≤ 66.1)
Extended Stroke (ES)	mm	(in)	≤ 1830	(≤ 72)
Force				
Max. Force @ 48VDC	N	(lbf)	497	(112)
Max. Force @ 72VDC	N	(lbf)	585	(132)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 250 / -	(32 / 56 / -)
Max. Border Force relative	%		≤ 69	
Force Constant	N/A _{pk}	(lbf/A _{pk})	39	(8.77)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.1	(44.9)
Max. Velocity @ 72VDC	m/s	(in/s)	1.6	(66.9)
Position Detection				
Position Resolution	mm	(in)	0.007	(0.0003)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 48VDC	A _{pk}		12.6	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		3.6 / 6.4 / -	
Terminal Resistance 25 °C / 120 °C	Ohm		3.1 / 4.2	
Terminal Inductivity	mH		3	
Magnetic Period	mm	(in)	60	(2.35)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.31 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 320 / -	
Mechanical Data				
Stator Diameter	mm	(in)	48	(1.9)
Stator Length [Connector type / Cable type]	mm	(in)	289.5	(11)
Stator Mass	g	(lb)	1930	(4.25)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	350 - 2000	(14 - 79)
Slider Mass	g	(lb)	1460 - 9140	(3.21 - 20.1)
IP Code			IP 65	

STATOR

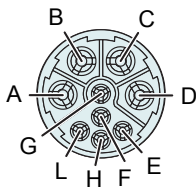


Item	Description	Item-No.
PS01-48x240-C	Stator with IP67 Connector M23/9(m)	0150-1219

CONNECTOR

Motor Connector Wiring	PS01-37x240-C PS01-37x240-C20	Wire color motor cable
	C-Connector	
Ph 1+	A	red
Ph 1-	B	pink
Ph 2+	C	blue
Ph 2-	D	grey
+5VDC	E	white
GND	F	inner shield
Sin	G	yellow
Cos	H	green
Temp.	L	black
Shield	Housing	outer Shield

C-Connector



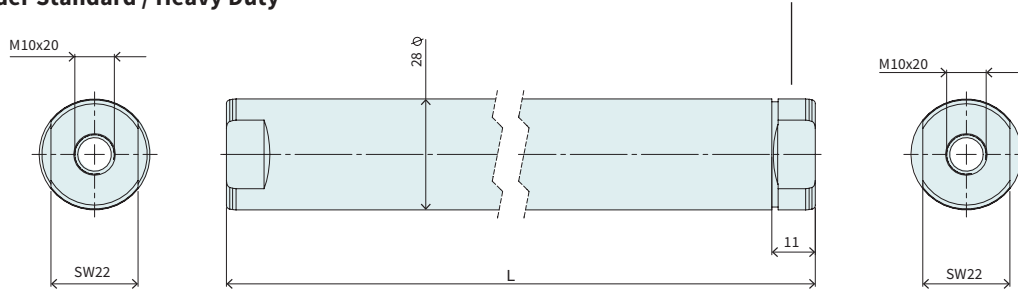
View: Motor Connector, plug side

SLIDER

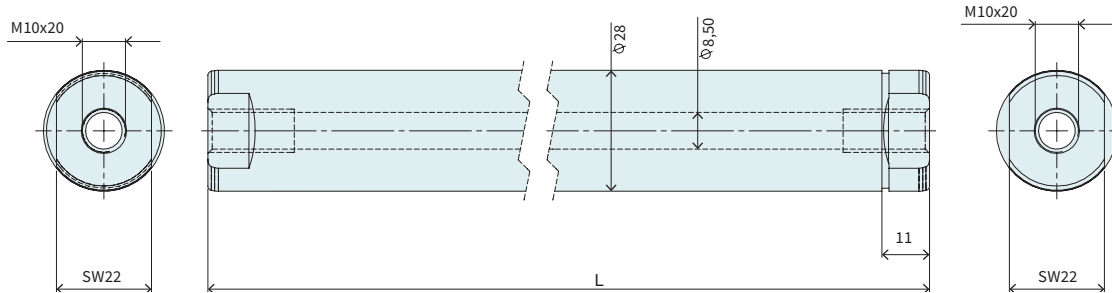
3

Slider Standard / Heavy Duty

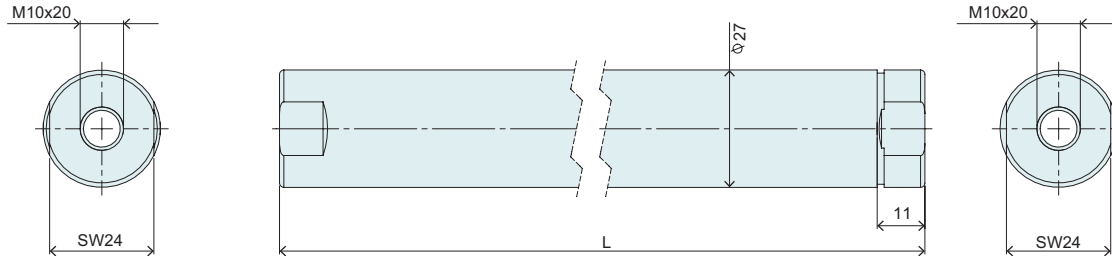
Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.



Hollow slider



High-Clearance Slider



Slider Standard				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-28x350/270	Slider 'standard'	180	30	0150-1380
PL01-28x410/330	Slider 'standard'	240	90	0150-1381
PL01-28x500/420	Slider 'standard'	330	180	0150-1382
PL01-28x620/540	Slider 'standard'	450	300	0150-1383
PL01-28x710/630	Slider 'standard'	540	390	0150-1384
PL01-28x800/720	Slider 'standard'	630	480	0150-1385
PL01-28x920/840	Slider 'standard'	750	600	0150-1386
PL01-28x1010/930	Slider 'standard'	840	690	0150-1387
PL01-28x1220/1140	Slider 'standard'	1050	900	0150-1388
PL01-28x1400/1320	Slider 'standard'	1230	1080	0150-1389
PL01-28x1610/1530	Slider 'standard'	1440	1290	0150-1390
PL01-28x1820/1740	Slider 'standard'	1650	1500	0150-1395
PL01-28x2000/1920	Slider 'standard'	1830	1680	0150-1396

Slider Heavy Duty				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL02-28x350/270	Slider 'heavy duty'	180	30	0150-1411
PL02-28x410/330	Slider 'heavy duty'	240	90	0150-1412
PL02-28x500/420	Slider 'heavy duty'	330	180	0150-1413
PL02-28x620/540	Slider 'heavy duty'	450	300	0150-1414
PL02-28x710/630	Slider 'heavy duty'	540	390	0150-1415
PL02-28x800/720	Slider 'heavy duty'	630	480	0150-1416
PL02-28x920/840	Slider 'heavy duty'	750	600	0150-1417

Slider Hollow slider

Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-28x350/270	Slider 'standard L'	180	30	0150-1475
PL01-28x410/330	Slider 'standard L'	240	90	0150-1476
PL01-28x500/420	Slider 'standard L'	330	180	0150-1480
PL01-28x620/540	Slider 'standard L'	450	300	0150-1481
PL01-28x710/630	Slider 'standard L'	540	390	0150-1482
PL01-28x800/720	Slider 'standard L'	630	480	0150-1483
PL01-28x920/840	Slider 'standard L'	750	600	0150-1484

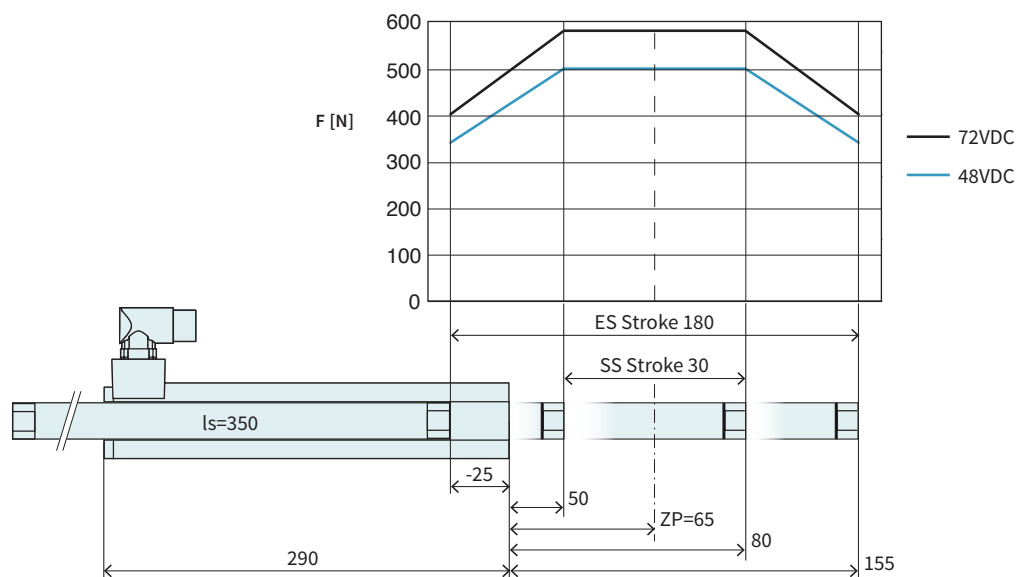
High-Clearance Slider

Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-27x350/270	Slider 'high clearance'	180	30	0150-1467
PL01-27x410/330	Slider 'high clearance'	240	90	0150-1468
PL01-27x500/420	Slider 'high clearance'	330	180	0150-1469
PL01-27x620/540	Slider 'high clearance'	450	300	0150-1470
PL01-27x710/630	Slider 'high clearance'	540	390	0150-1471

P01-48x240/30x180

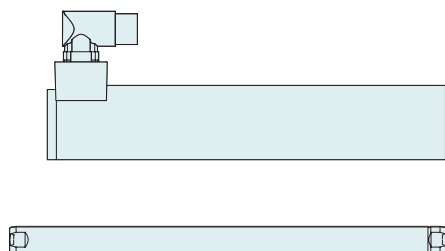
3

Max. Stroke: 180 mm
Peak Force: 585 N



Dimensions in mm

Technical Data P01-48x240/30x180				
Stroke				
Standard Stroke (SS)	mm (in)		30 (1.17)	
Extended Stroke (ES)	mm (in)		180 (7.08)	
Force				
Max. Force @ 48VDC	N (lbf)		497 (112)	
Max. Force @ 72VDC	N (lbf)		585 (132)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		140 / 250 / -	(32 / 56 / -)
Max. Border Force relative	%		69	
Force Constant	N/A _{pk} (lbf/A _{pk})		39	(8.77)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		1.1 (44.9)	
Max. Velocity @ 72VDC	m/s (in/s)		1.6 (66.9)	
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.5	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		12.6	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		3.6 / 6.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.31 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 320 / -	
Mechanical Data				
Slider Length	mm (in)		350 (14)	
Slider Mass	g (lb)		1460 (3.21)	

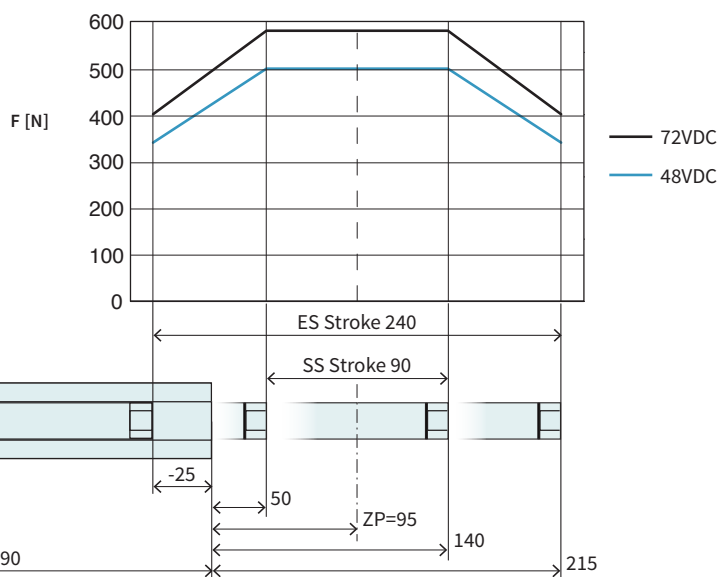


Item	Description	Item-No.
PS01-48x240-C	Stator with IP67 Connector M23/9(m)	0150-1219
PL01-28x350/270	Slider 'standard'	0150-1380
PL02-28x350/270	Slider 'heavy duty'	0150-1411
PL01-28x350/270-L*	Slider 'standard L'	0150-1475
PL01-27x350/270*	Slider 'high clearance'	0150-1467

* With this slider, the motor specifications above change.

P01-48x240/90x240

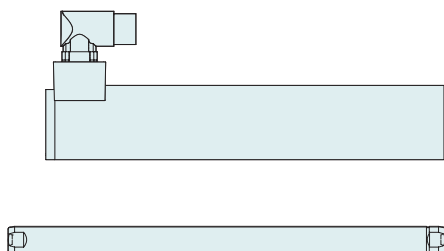
Max. Stroke: 240 mm
Peak Force: 585 N



Dimensions in mm

Technical Data P01-48x240/90x240

Stroke			
Standard Stroke (SS)	mm (in)	90 (3.53)	
Extended Stroke (ES)	mm (in)	240 (9.44)	
Force			
Max. Force @ 48VDC	N (lbf)	497 (112)	
Max. Force @ 72VDC	N (lbf)	585 (132)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	140 / 250 / - (32 / 56 / -)	
Max. Border Force relative	%	69	
Force Constant	N/A _{pk} (lbf/A _{pk})	39 (8.77)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (44.9)	
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (66.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.4	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	12.6	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	3.6 / 6.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.95 / 0.31 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	970 / 320 / -	
Mechanical Data			
Slider Length	mm (in)	410 (16)	
Slider Mass	g (lb)	1740 (3.83)	



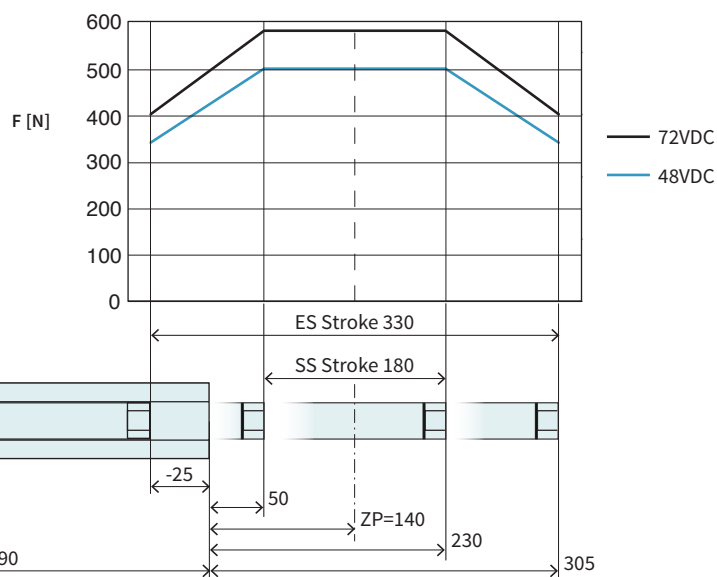
Item	Description	Item-No.
PS01-48x240-C	Stator with IP67 Connector M23/9(m)	0150-1219
PL01-28x410/330	Slider 'standard'	0150-1381
PL02-28x410/330	Slider 'heavy duty'	0150-1412
PL01-28x410/330-L*	Slider 'standard L'	0150-1476
PL01-27x410/330*	Slider 'high clearance'	0150-1468

* With this slider, the motor specifications above change.

P01-48x240/180x330

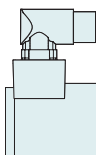
3

Max. Stroke: 330 mm
Peak Force: 585 N



Technical Data P01-48x240/180x330

Stroke			
Standard Stroke (SS)	mm (in)	180 (7.08)	
Extended Stroke (ES)	mm (in)	330 (12.99)	
Force			
Max. Force @ 48VDC	N (lbf)	497 (112)	
Max. Force @ 72VDC	N (lbf)	585 (132)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	140 / 250 / -	(32 / 56 / -)
Max. Border Force relative	%	69	
Force Constant	N/A _{pk} (lbf/A _{pk})	39 (8.77)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (44.9)	
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (66.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.35	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	12.6	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	3.6 / 6.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.95 / 0.31 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	970 / 320 / -	
Mechanical Data			
Slider Length	mm (in)	500 (20)	
Slider Mass	g (lb)	2160 (4.75)	



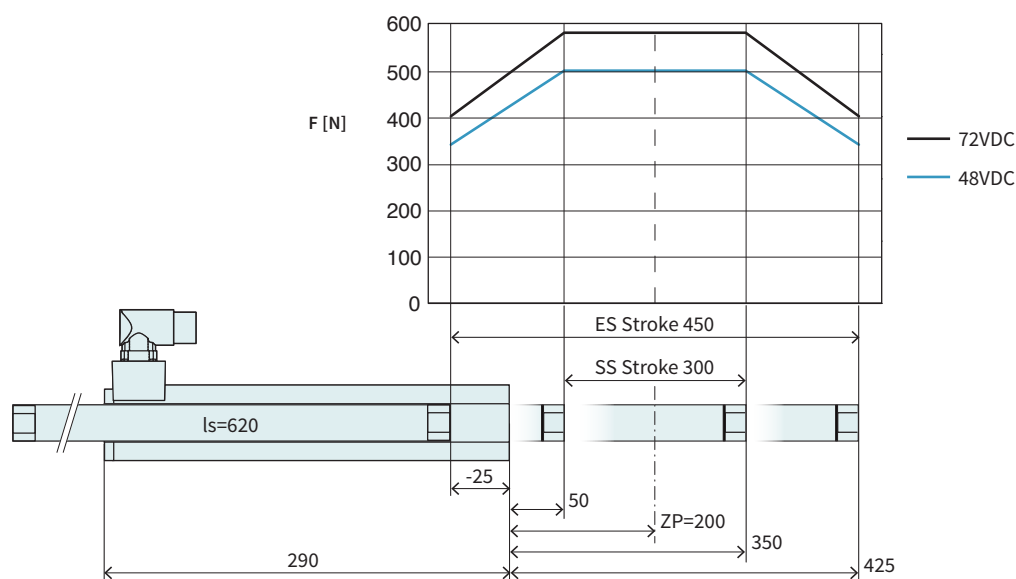
Item	Description	Item-No.
PS01-48x240-C	Stator with IP67 Connector M23/9(m)	0150-1219
PL01-28x500/420	Slider 'standard'	0150-1382
PL02-28x500/420	Slider 'heavy duty'	0150-1413
PL01-28x500/420-L*	Slider 'standard L'	0150-1480
PL01-27x500/420*	Slider 'high clearance'	0150-1469

* With this slider, the motor specifications above change.

P01-48x240/300x450

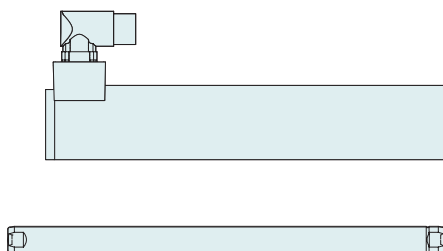
Max. Stroke: 450 mm
Peak Force: 585 N

Dimensions in mm



Technical Data P01-48x240/300x450

Stroke			
Standard Stroke (SS)	mm (in)	300	(11.8)
Extended Stroke (ES)	mm (in)	450	(17.69)
Force			
Max. Force @ 48VDC	N (lbf)	497	(112)
Max. Force @ 72VDC	N (lbf)	585	(132)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	140 / 250 / -	(32 / 56 / -)
Max. Border Force relative	%	69	
Force Constant	N/A _{pk} (lbf/A _{pk})	39	(8.77)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.1	(44.9)
Max. Velocity @ 72VDC	m/s (in/s)	1.6	(66.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.25	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	12.6	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	3.6 / 6.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.95 / 0.31 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	970 / 320 / -	
Mechanical Data			
Slider Length	mm (in)	620	(24)
Slider Mass	g (lb)	2720	(5.98)

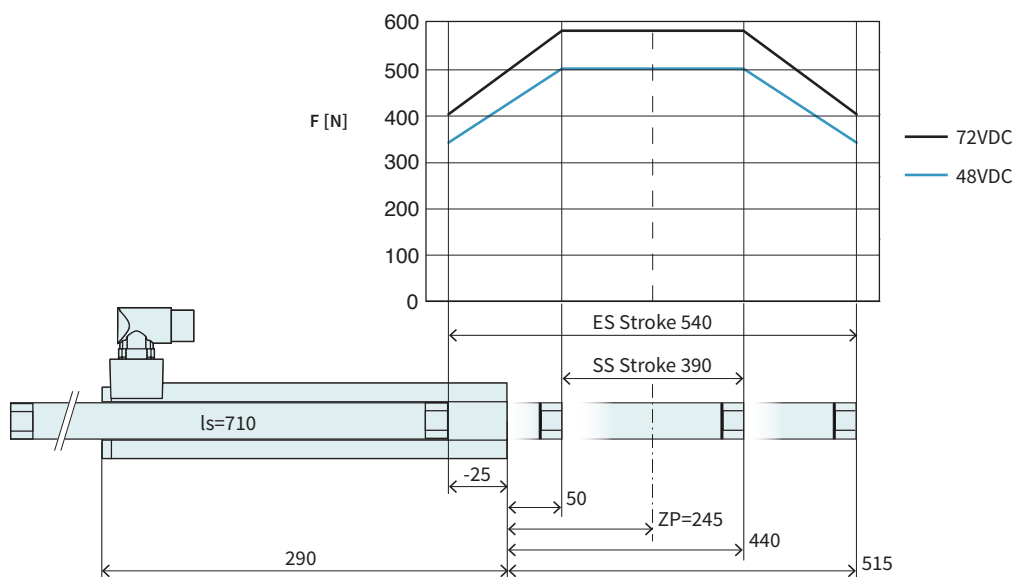


Item	Description	Item-No.
PS01-48x240-C	Stator with IP67 Connector M23/9(m)	0150-1219
PL01-28x620/540	Slider 'standard'	0150-1383
PL02-28x620/540	Slider 'heavy duty'	0150-1414
PL01-28x620/540-L*	Slider 'standard L'	0150-1481
PL01-27x620/540*	Slider 'high clearance'	0150-1470

* With this slider, the motor specifications above change.

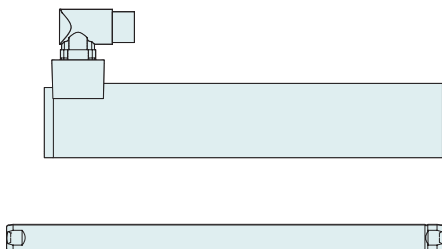
P01-48x240/390x540

Max. Stroke: 540 mm
Peak Force: 585 N



Technical Data P01-48x240/390x540

Stroke				
Standard Stroke (SS)	mm (in)		390 (15.4)	
Extended Stroke (ES)	mm (in)		540 (21.3)	
Force				
Max. Force @ 48VDC	N (lbf)		497 (112)	
Max. Force @ 72VDC	N (lbf)		585 (132)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		140 / 250 / -	(32 / 56 / -)
Max. Border Force relative	%		69	
Force Constant	N/A _{pk} (lbf/A _{pk})		39	(8.77)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		1.1 (44.9)	
Max. Velocity @ 72VDC	m/s (in/s)		1.6 (66.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		12.6	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		3.6 / 6.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.31 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 320 / -	
Mechanical Data				
Slider Length	mm (in)		710 (28)	
Slider Mass	g (lb)		3140 (6.91)	

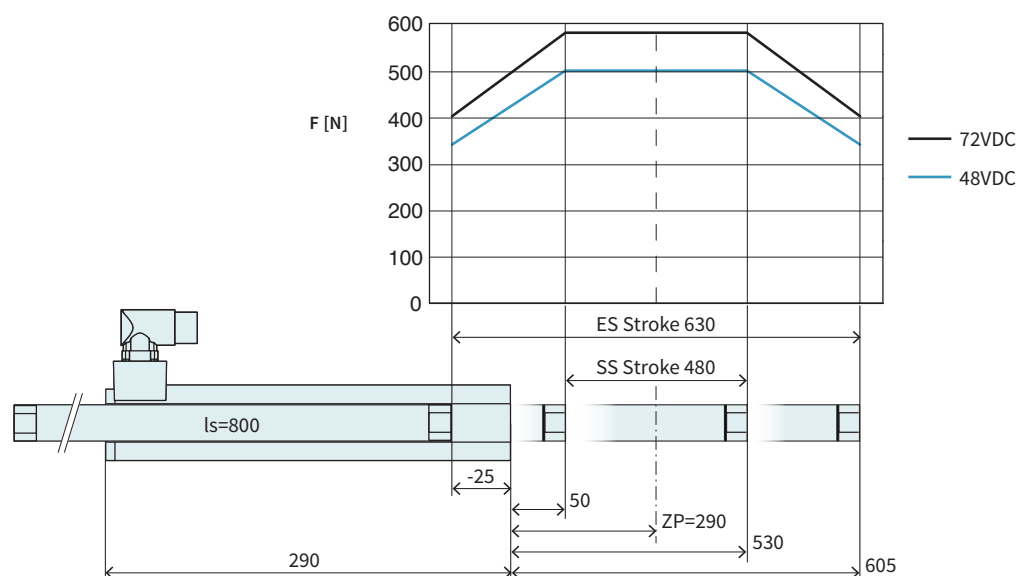


Item	Description	Item-No.
PS01-48x240-C	Stator with IP67 Connector M23/9(m)	0150-1219
PL01-28x710/630	Slider 'standard'	0150-1384
PL02-28x710/630	Slider 'heavy duty'	0150-1415
PL01-28x710/630-L*	Slider 'standard L'	0150-1482
PL01-27x710/630*	Slider 'high clearance'	0150-1471

* With this slider, the motor specifications above change.

P01-48x240/480x630

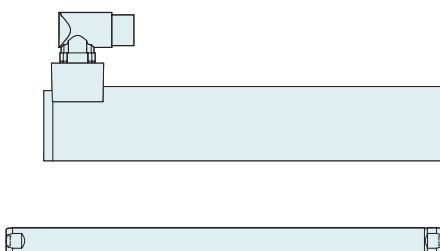
Max. Stroke: 630 mm
Peak Force: 585 N



Dimensions in mm

Technical Data P01-48x240/480x630

Stroke			
Standard Stroke (SS)	mm (in)	480 (18.89)	
Extended Stroke (ES)	mm (in)	630 (24.8)	
Force			
Max. Force @ 48VDC	N (lbf)	497 (112)	
Max. Force @ 72VDC	N (lbf)	585 (132)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	140 / 250 / - (32 / 56 / -)	
Max. Border Force relative	%	69	
Force Constant	N/A _{pk} (lbf/A _{pk})	39 (8.77)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (44.9)	
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (66.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	12.6	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	3.6 / 6.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.95 / 0.31 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	970 / 320 / -	
Mechanical Data			
Slider Length	mm (in)	800 (31)	
Slider Mass	g (lb)	3560 (7.83)	



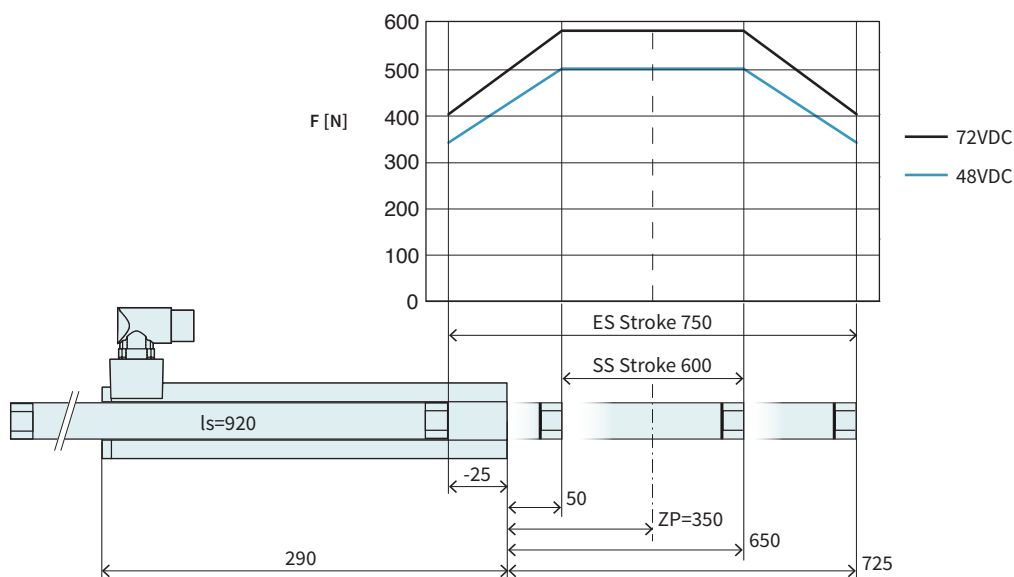
Item	Description	Item-No.
PS01-48x240-C	Stator with IP67 Connector M23/9(m)	0150-1219
PL01-28x800/720	Slider 'standard'	0150-1385
PL02-28x800/720	Slider 'heavy duty'	0150-1416
PL01-28x800/720-L*	Slider 'standard L'	0150-1483

* With this slider, the motor specifications above change.

P01-48x240/600x750

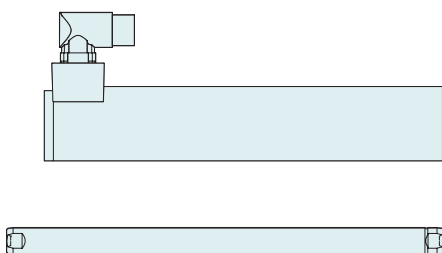
Max. Stroke: 750 mm
Peak Force: 585 N

Dimensions in mm



Technical Data P01-48x240/600x750

Stroke				
Standard Stroke (SS)	mm	(in)	600	(23.6)
Extended Stroke (ES)	mm	(in)	750	(29.49)
Force				
Max. Force @ 48VDC	N	(lbf)	497	(112)
Max. Force @ 72VDC	N	(lbf)	585	(132)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 250 / -	(32 / 56 / -)
Max. Border Force relative	%		69	
Force Constant	N/A _{pk}	(lbf/A _{pk})	39	(8.77)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.1	(44.9)
Max. Velocity @ 72VDC	m/s	(in/s)	1.6	(66.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		12.6	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		3.6 / 6.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.31 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 320 / -	
Mechanical Data				
Slider Length	mm	(in)	920	(36)
Slider Mass	g	(lb)	4120	(9.06)

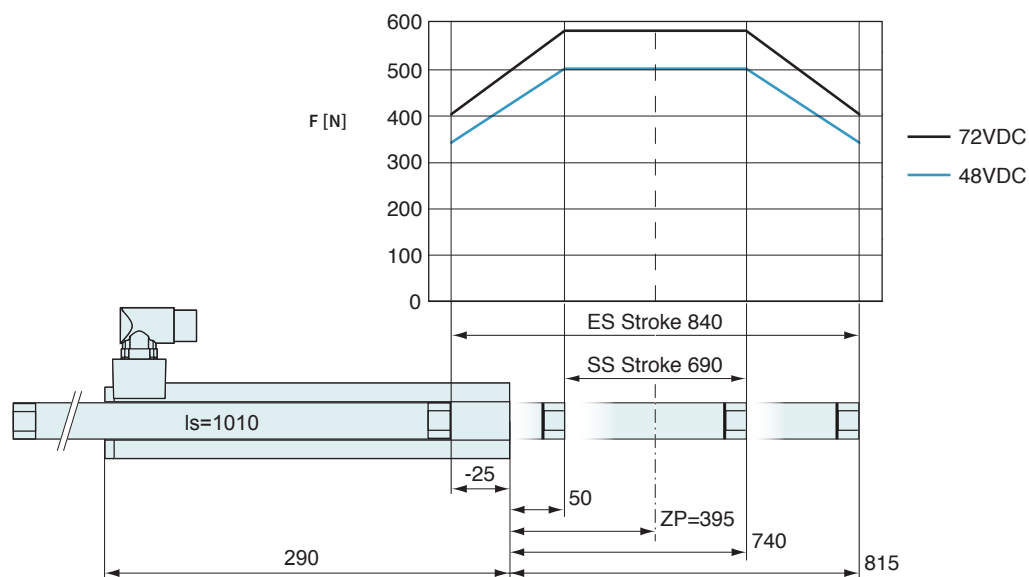


Item	Description	Item-No.
PS01-48x240-C	Stator with IP67 Connector M23/9(m)	0150-1219
PL01-28x920/840	Slider 'standard'	0150-1386
PL02-28x920/840	Slider 'heavy duty'	0150-1417
PL01-28x920/840-L*	Slider 'standard L'	0150-1484

* With this slider, the motor specifications above change.

P01-48x240/690x840

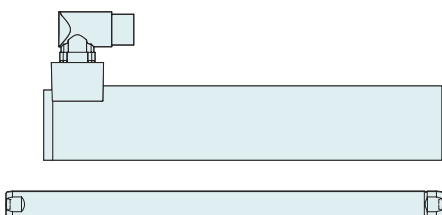
Max. Stroke: 840 mm
Peak Force: 585 N



Dimensions in mm

Technical Data P01-48x240/690x840

Stroke			
Standard Stroke (SS)	mm	(in)	690 (27.19)
Extended Stroke (ES)	mm	(in)	840 (33.1)
Force			
Max. Force @ 48VDC	N	(lbf)	497 (112)
Max. Force @ 72VDC	N	(lbf)	585 (132)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 250 / - (32 / 56 / -)
Max. Border Force relative	%		69
Force Constant	N/A _{pk}	(lbf/A _{pk})	39 (8.77)
Velocity			
Max. Velocity @ 48VDC	m/s	(in/s)	1.1 (44.9)
Max. Velocity @ 72VDC	m/s	(in/s)	1.6 (66.9)
Position Detection			
Repeatability	mm	(in)	±0.05 (±0.002)
Linearity	%		± 0.2
Electrical Data			
Max. Current @ 48VDC	A _{pk}		12.6
Max. Current @ 72VDC	A _{pk}		14.9
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		3.6 / 6.4 / -
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.31 / -
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 320 / -
Mechanical Data			
Slider Length	mm	(in)	1010 (40)
Slider Mass	g	(lb)	4540 (10)

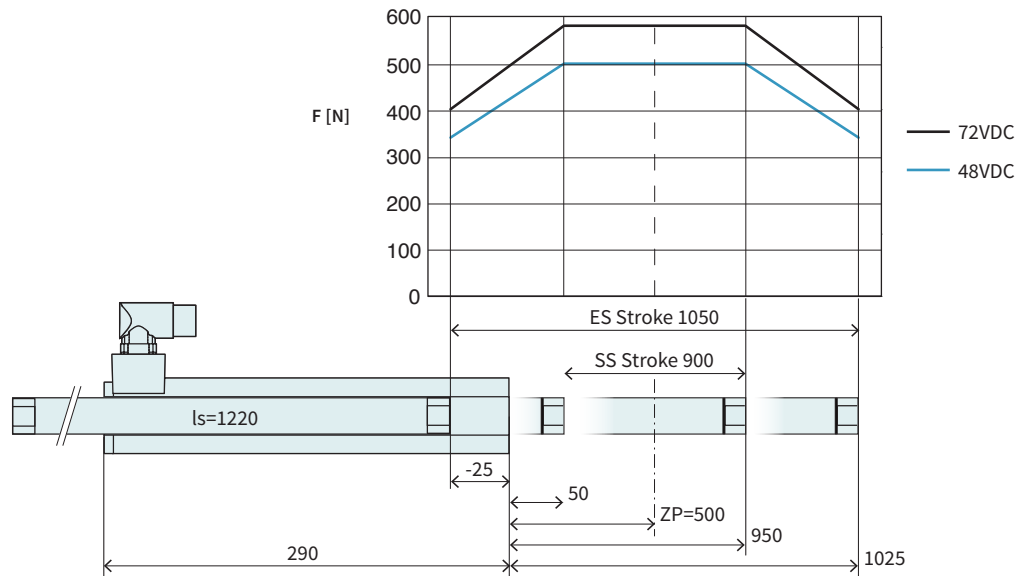


Item	Description	Item-No.
PS01-48x240-C	Stator with IP67 Connector M23/9(m)	0150-1219
PL01-28x1010/930	Slider 'standard'	0150-1387

P01-48x240/900x1050

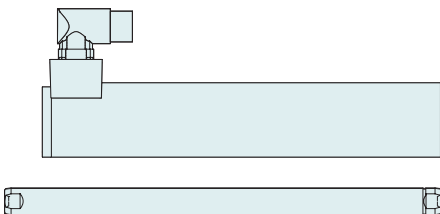
3

Max. Stroke: 1050 mm
Peak Force: 585 N



Dimensions in mm

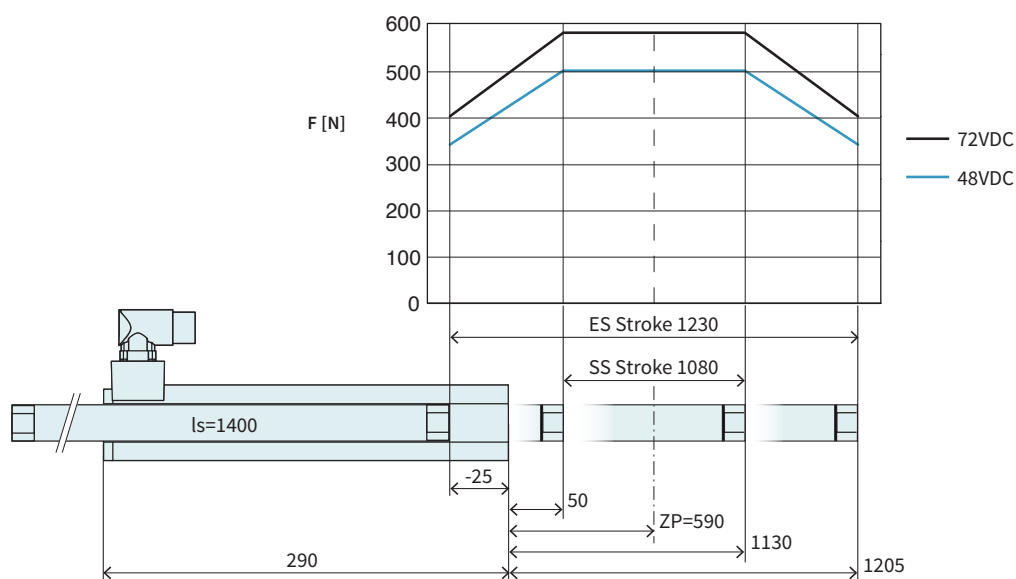
Technical Data P01-48x240/900x1050				
Stroke				
Standard Stroke (SS)	mm (in)		900 (35.39)	
Extended Stroke (ES)	mm (in)		1050 (41.29)	
Force				
Max. Force @ 48VDC	N (lbf)		497 (112)	
Max. Force @ 72VDC	N (lbf)		585 (132)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		140 / 250 / -	(32 / 56 / -)
Max. Border Force relative	%		69	
Force Constant	N/A _{pk} (lbf/A _{pk})		39	(8.77)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		1.1 (44.9)	
Max. Velocity @ 72VDC	m/s (in/s)		1.6 (66.9)	
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		12.6	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		3.6 / 6.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.31 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 320 / -	
Mechanical Data				
Slider Length	mm (in)		1220 (48)	
Slider Mass	g (lb)		5510 (12.12)	



Item	Description	Item-No.
PS01-48x240-C	Stator with IP67 Connector M23/9(m)	0150-1219
PL01-28x1220/1140	Slider 'standard'	0150-1388

P01-48x240/1080x1230

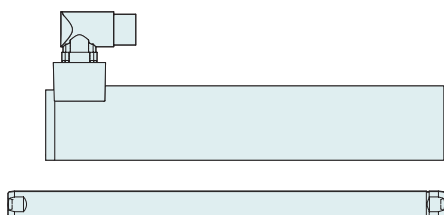
Max. Stroke: 1230 mm
Peak Force: 585 N



Dimensions in mm

Technical Data P01-48x240/1080x1230

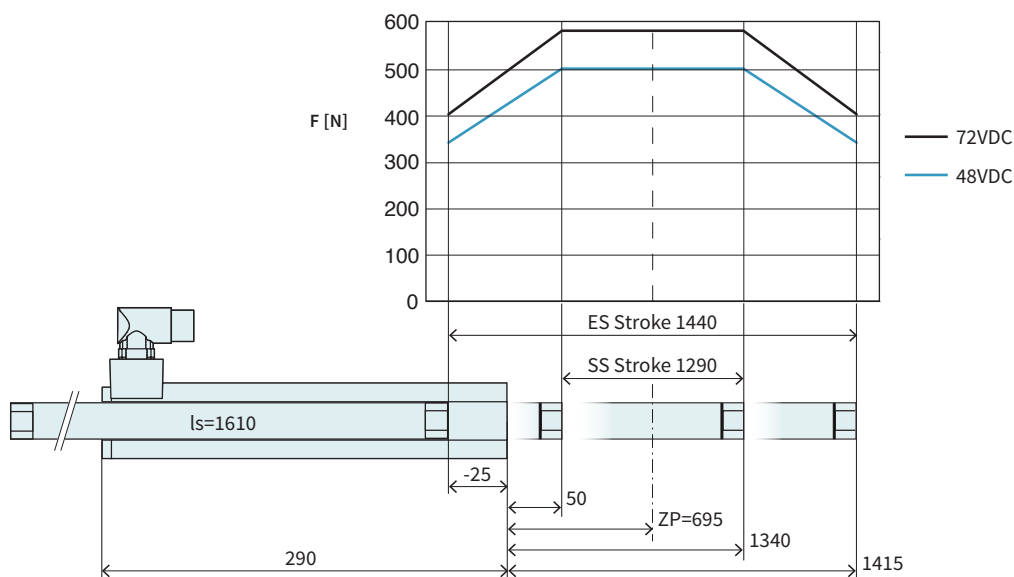
Stroke				
Standard Stroke (SS)	mm	(in)	1080	(42.49)
Extended Stroke (ES)	mm	(in)	1230	(48.39)
Force				
Max. Force @ 48VDC	N	(lbf)	497	(112)
Max. Force @ 72VDC	N	(lbf)	585	(132)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 250 / -	(32 / 56 / -)
Max. Border Force relative	%		69	
Force Constant	N/A _{pk}	(lbf/A _{pk})	39	(8.77)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.1	(44.9)
Max. Velocity @ 72VDC	m/s	(in/s)	1.6	(66.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		12.6	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		3.6 / 6.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.31 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 320 / -	
Mechanical Data				
Slider Length	mm	(in)	1400	(55)
Slider Mass	g	(lb)	6350	(13.97)



Item	Description	Item-No.
PS01-48x240-C	Stator with IP67 Connector M23/9(m)	0150-1219
PL01-28x1400/1320	Slider 'standard'	0150-1389

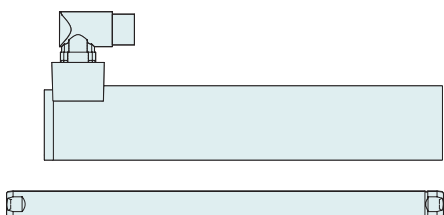
P01-48x240/1290x1440

Max. Stroke: 1440 mm
Peak Force: 585 N



Technical Data P01-48x240/1290x1440

Stroke			
Standard Stroke (SS)	mm (in)	1290 (50.79)	
Extended Stroke (ES)	mm (in)	1440 (56.7)	
Force			
Max. Force @ 48VDC	N (lbf)	497 (112)	
Max. Force @ 72VDC	N (lbf)	585 (132)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	140 / 250 / -	(32 / 56 / -)
Max. Border Force relative	%	69	
Force Constant	N/A _{pk} (lbf/A _{pk})	39 (8.77)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (44.9)	
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (66.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	12.6	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	3.6 / 6.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.95 / 0.31 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	970 / 320 / -	
Mechanical Data			
Slider Length	mm (in)	1610 (63)	
Slider Mass	g (lb)	7330 (16.13)	

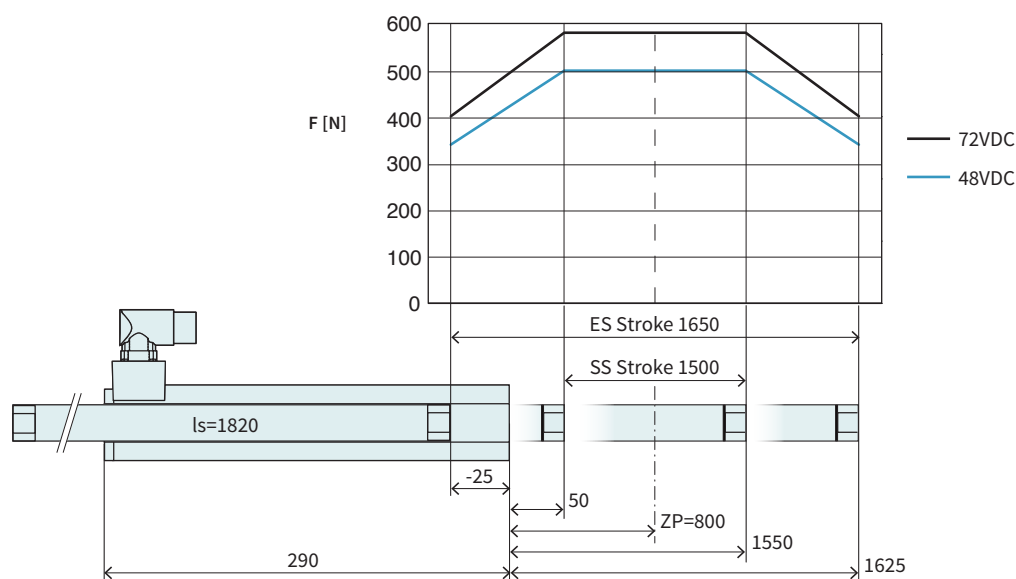


Item	Description	Item-No.
PS01-48x240-C	Stator with IP67 Connector M23/9(m)	0150-1219
PL01-28x1610/1530	Slider 'standard'	0150-1390

P01-48x240/1500x1650

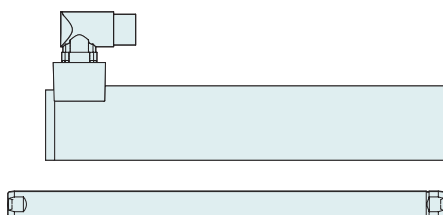
Max. Stroke: 1650 mm
Peak Force: 585 N

Dimensions in mm



Technical Data P01-48x240/1500x1650

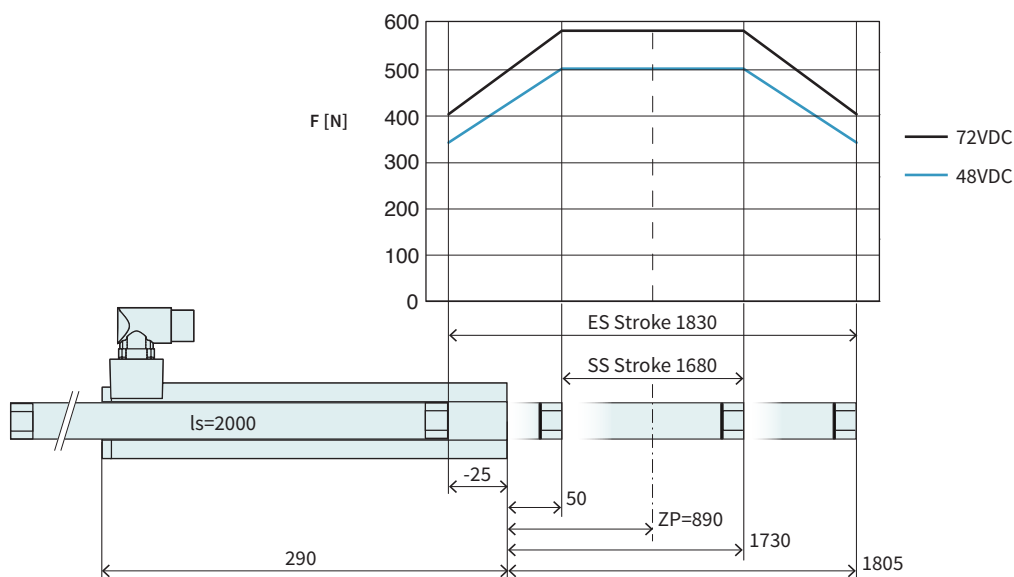
Stroke			
Standard Stroke (SS)	mm (in)	1500 (59.1)	
Extended Stroke (ES)	mm (in)	1650 (64.99)	
Force			
Max. Force @ 48VDC	N (lbf)	497 (112)	
Max. Force @ 72VDC	N (lbf)	585 (132)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	140 / 250 / -	(32 / 56 / -)
Max. Border Force relative	%	69	
Force Constant	N/A _{pk} (lbf/A _{pk})	39 (8.77)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (44.9)	
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (66.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	12.6	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	3.6 / 6.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.95 / 0.31 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	970 / 320 / -	
Mechanical Data			
Slider Length	mm (in)	1820 (72)	
Slider Mass	g (lb)	8300 (18.26)	



Item	Description	Item-No.
PS01-48x240-C	Stator with IP67 Connector M23/9(m)	0150-1219
PL01-28x1820/1740	Slider 'standard'	0150-1395

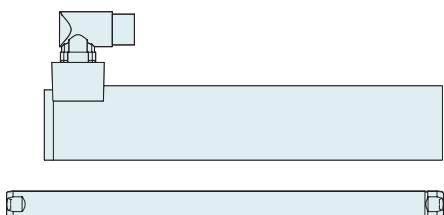
P01-48x240/1680x1830

Max. Stroke: 1830 mm
Peak Force: 585 N



Technical Data P01-48x240/1680x1830

Stroke			
Standard Stroke (SS)	mm (in)	1680	(66.09)
Extended Stroke (ES)	mm (in)	1830	(71.99)
Force			
Max. Force @ 48VDC	N (lbf)	497	(112)
Max. Force @ 72VDC	N (lbf)	585	(132)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	140 / 250 / -	(32 / 56 / -)
Max. Border Force relative	%	69	
Force Constant	N/A _{pk} (lbf/A _{pk})	39	(8.77)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.1	(44.9)
Max. Velocity @ 72VDC	m/s (in/s)	1.6	(66.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	12.6	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	3.6 / 6.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.95 / 0.31 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	970 / 320 / -	
Mechanical Data			
Slider Length	mm (in)	2000	(79)
Slider Mass	g (lb)	9140	(20.11)



Item	Description	Item-No.
PS01-48x240-C	Stator with IP67 Connector M23/9(m)	0150-1219
PL01-28x2000/1920	Slider 'standard'	0150-1396

Linear Guides H01



HM01-48x240/120	Linear Module 48x240 with 120 mm Stroke			
→	H-Guide	H01-48x250/120	H-Guide for P01-48x240, Stroke max 120mm	0150-5100
		H01-48x250/120-GF	H-Guide for P01-48x240, Stroke max 120mm	0150-5104
	Stator	PS01-48x240-C	Linearmotor Stator, Connector C - IP67	0150-1219
→	Slider	PL01-28x410/330	Slider Standard for H01-48x250/120	0150-1381
HM01-48x240/210	Linear Module 48x240 with 210 mm Stroke			
→	H-Guide	H01-48x250/210	H-Guide for P01-48x240, Stroke max 210mm	0150-5101
		H01-48x250/210-GF	H-Guide for P01-48x240, Stroke max 210mm	0150-5105
→	Stator	PS01-48x240-C	Linearmotor Stator, Connector C - IP67	0150-1219
→	Slider	PL01-28x500/420	Slider Standard for H01-48x250/210	0150-1382
HM01-48x240/330	Linear Module 48x240 with 330 mm Stroke			
→	H-Guide	H01-48x250/330	H01 for P01-48x240, 330 mm Stroke, Kugelbüchsen	0150-5102
		H01-48x250/330-GF	H01 for P01-48x240, 330mm Stroke, Gleitlager	0150-5106
→	Stator	PS01-48x240-C	Linearmotor Stator, Connector C - IP67	0150-1219
→	Slider	PL01-28x620/540	Slider Standard for H01-48x250/330	0150-1383
HM01-48x240/420	Linear Module 48x240 with 420 mm Stroke			
→	H-Guide	H01-48x250/420	H-Guide for P01-48x240, Stroke max 420mm	0150-5103
		H01-48x250/420-GF	H-Guide for P01-48x240, Stroke max 420mm	0150-5107
→	Stator	PS01-48x240-C	Linearmotor Stator, Connector C - IP67	0150-1219
→	Slider	PL01-28x710/630	Slider Standard for H01-48x250/420	0150-1384
Accessories				
→	Brake	HB01-48	Pneumatic Brake for H01-48/1000N(4-6Bar)	0150-5098
→	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051
→	MagSpring	MF01-37/H37	Flange MagSpring 37 / H-Guide 23/37/48	0250-2307
→		MA01-37/H48	Adapter MagSpring 37 / H-Guide 48	0250-0118
→	Sliding block	PFN01-8/M6	Sliding block 8mm, M6 thread	0250-3245
→	Centering sleeve	HC01-11/05	Centering sleeve D11x5 mm	0150-3252
→	Wipers	HA01-48/28-F	Wiper for H01-48 guides, front side	0150-5109

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

Bridge Guide B01

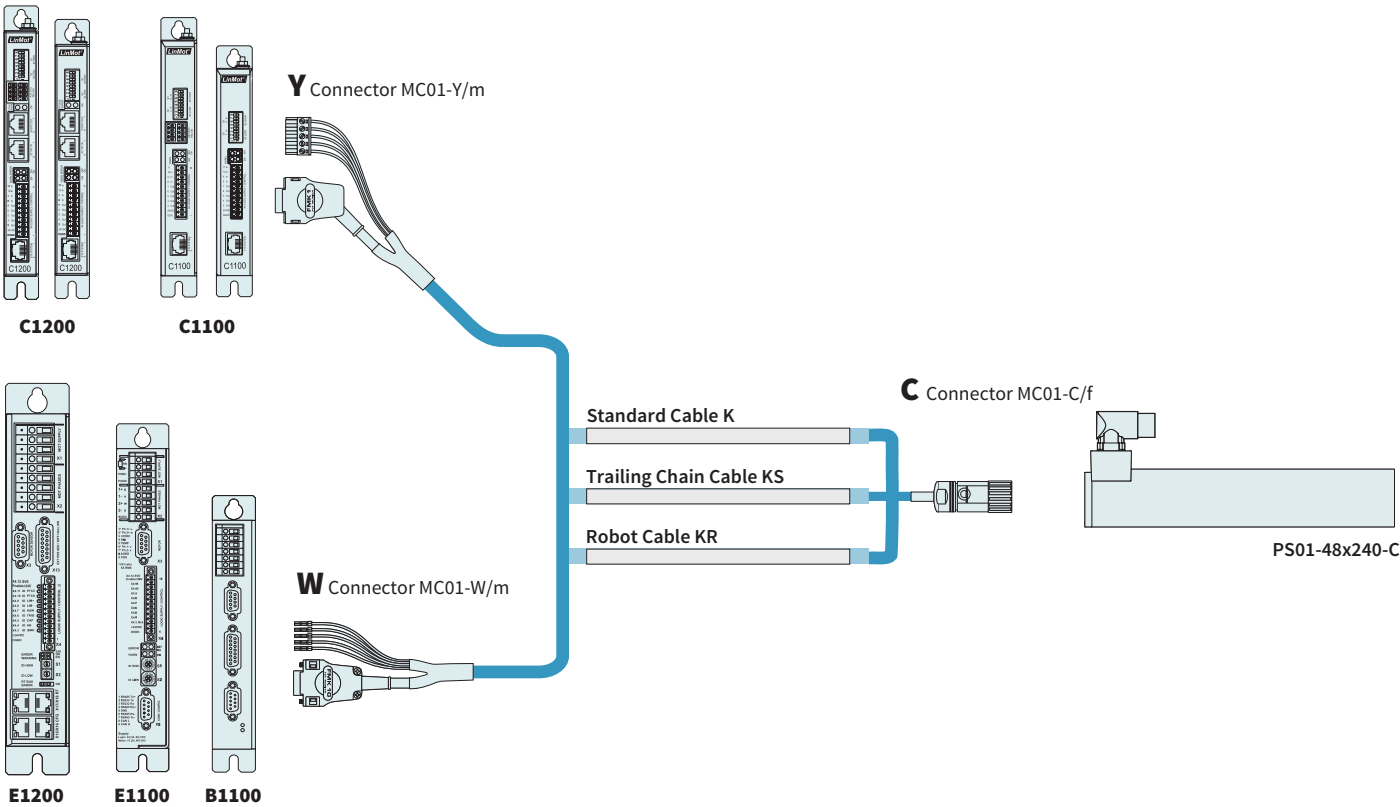


BM01-48x240/90		Bridge Module 48x240 with 90 mm Stroke		
→	B-Guide	B01-48x250/90	B-Guide for P01-48x240, Stroke max 90mm	0150-5150
		B01-48x250/90-GF	B-Guide for P01-48x240, Stroke max 90mm	0150-5154
→	Stator	PS01-48x240-C	Linearmotor Stator, Connector C - IP67	0150-1219
→	Slider	PL01-27x410/330	High Clearance Slider for B01-48x250/90	0150-1468
BM01-48x240/180		Bridge Module 48x240 with 180 mm Stroke		
→	B-Guide	B01-48x250/180	B-Guide for P01-48x240, Stroke max 180mm	0150-5151
		B01-48x250/180-GF	B-Guide for P01-48x240, Stroke max 180mm	0150-5155
→	Stator	PS01-48x240-C	Linearmotor Stator, Connector C - IP67	0150-1219
→	Slider	PL01-27x500/420	High Clearance Slider for B01-48x250/180	0150-1469
BM01-48x240/300		Bridge Module 48x240 with 300 mm Stroke		
→	B-Guide	B01-48x250/300	B-Guide for P01-48x240, Stroke max 300mm	0150-5152
		B01-48x250/300-GF	B-Guide for P01-48x240, Stroke max 300mm	0150-5156
→	Stator	PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
→	Slider	PL01-27x620/540	High Clearance Slider for B01-48x250/300	0150-1470
BM01-48x240/390		Bridge Module 48x240 with 390 mm Stroke		
→	B-Guide	B01-48x250/390	B-Guide for P01-48x240, Stroke max 390mm	0150-5153
		B01-48x250/390-GF	B-Guide for P01-48x240, Stroke max 390mm	0150-5157
→	Stator	PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
→	Slider	PL01-27x710/630	High Clearance Slider for B01-48x250/390	0150-1471
Accessories				
→	Brake	HB01-48	Pneumatic Brake for H01-48/1000N(4-6Bar)	0150-5098
→	Fan	HV01-37/48	Fan for H01-37 and -48 H-Guideen	0150-5051
→	MagSpring	MF01-37/H37	Flange MagSpring 37 / H-Guide 23/37/48	0250-2307
→		MA01-37/H48	Adapter MagSpring 37 / H-Guide 48	0250-0118
→	Sliding block	PFN01-8/M6	Sliding block 8mm, M6 thread	0250-3245
→	Centering sleeve	HC01-11/05	Centering sleeve D11x5 mm	0150-3252
→	Wipers	HA01-48/27-F	Wiper for H01-48 guides, front side	0150-5178

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

Motor Cable

3



ORDERING INFORMATION

STANDARD CABLE		
Item	Description	Item-No.
K15-W/C-2	Motor Cable W/C, 2 m	0150-1811
K15-W/C-4	Motor Cable W/C, 4 m	0150-1801
K15-W/C-6	Motor Cable W/C, 6 m	0150-1802
K15-W/C-8	Motor Cable W/C, 8 m	0150-1803
K15-W/C-	Motor Cable W/C, Custom length	0150-3131
K15-Y/C-2	Motor Cable Y/R, 2 m	0150-2429
K15-Y/C-4	Motor Cable Y/R, 4 m	0150-2430
K15-Y/C-6	Motor Cable Y/R, 6 m	0150-2431
K15-Y/C-8	Motor Cable Y/R, 8 m	0150-2432
K15-Y-Fe/C-	Motor Cable Y-Fe/R, Custom length	0150-3506

TRAILING CHAIN CABLE

Item	Description	Item-No.
KS10-W/C-4	Trailing Chain Cable W/C, 4 m	0150-1807
KS10-W/C-6	Trailing Chain Cable W/C, 6 m	0150-1858
KS10-W/C-8	Trailing Chain Cable W/C, 8 m	0150-1808
KS10-W/C-	Trailing Chain Cable W/C, Custom length	0150-3139
KS10-Y/C-4	Trailing Chain Cable Y/C, 4 m	0150-2439
KS10-Y/C-6	Trailing Chain Cable Y/C, 6 m	0150-2440
KS10-Y/C-8	Trailing Chain Cable Y/C, 8 m	0150-2441
KS10-Y/C-	Trailing Chain Cable Y-Fe/C, Custom length	0150-3511

ROBOT CABLE

Item	Description	Item-No.
KR10-W/C-	Robot Cable KR10-W/C, Custom length	0150-3199
KR10-Y-Fe/C-	Robot Cable KR10-Y-Fe/C, Custom length	0150-3515

CONNECTOR & CABLE (INDIVIDUAL)

Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-C/f	Motor Connector C/f	0150-3080
MC01-P/f	Motor Connector P/f	0150-3021
K15-04/05	Motor Cable per m	0150-1978
KS10-04/05	Trailing Chain Cable per m	0150-1977
KR10-04/05	Robot Cable per m	0150-1830

MOTOR FLANGES



Item	Description	Item-No.
PF01-48x120	Flange 48x120 mm	0150-1976
PF01-48x226	Flange 48x226 mm	0150-2108

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37, B01-37 and PF02-37	0150-5051

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-28	Fixed Bearing Set for 27/28 mm sliders	0150-3087
PLF01-28-SS	Fixed Bearing Set for 27/28 mm sliders, stainless steel	0150-3297
PLL01-27	Floating Bearing for 27 mm sliders	0150-3294
PLL01-28	Floating Bearing for 28 mm sliders	0150-3094
PLM01-28-MK	Mounting Kit for PL01-28 Slider	0150-3095

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

WIPERS



Item	Description	Item-No.
PA01-48/27-F	Wiper front side for PS01-48x...	0150-3228
PA01-48/27-R	Wiper back side for PS01-48x...-C	0150-3229
PA01-48/28-F	Wiper front side for PS01-48x...	0150-3127
PA01-48/28-R	Wiper back side for PS01-48x...-C	0150-3202

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for inc. strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D-Encoder	Encoder Cable (Length in m)	0150-3166
KS025-D/D15-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P01-48x240F



- ✓ Highly dynamic drives
- ✓ With a special F-winding for a higher maximum speed
- ✓ Wide stroke range
- ✓ Available with rotatable connector
- ✓ Optional with air cooling
- ✓ Wide range of applications in handling modules as well as in plant and machine construction

LINEAR MOTORS P01-48x240F

Technical Data 345

Motor Specifications

P01-48x240F/30x180	349
P01-48x240F/90x240	350
P01-48x240F/180x330	351
P01-48x240F/300x450	352
P01-48x240F/390x540	353
P01-48x240F/480x630	354
P01-48x240F/600x750	355
P01-48x240F/690x840	356
P01-48x240F/900x1050	357
P01-48x240F/1080x1230	358
P01-48x240F/1290x1440	359
P01-48x240F/1500x1650	360
P01-48x240F/1680x1830	361

Linear Guides 362

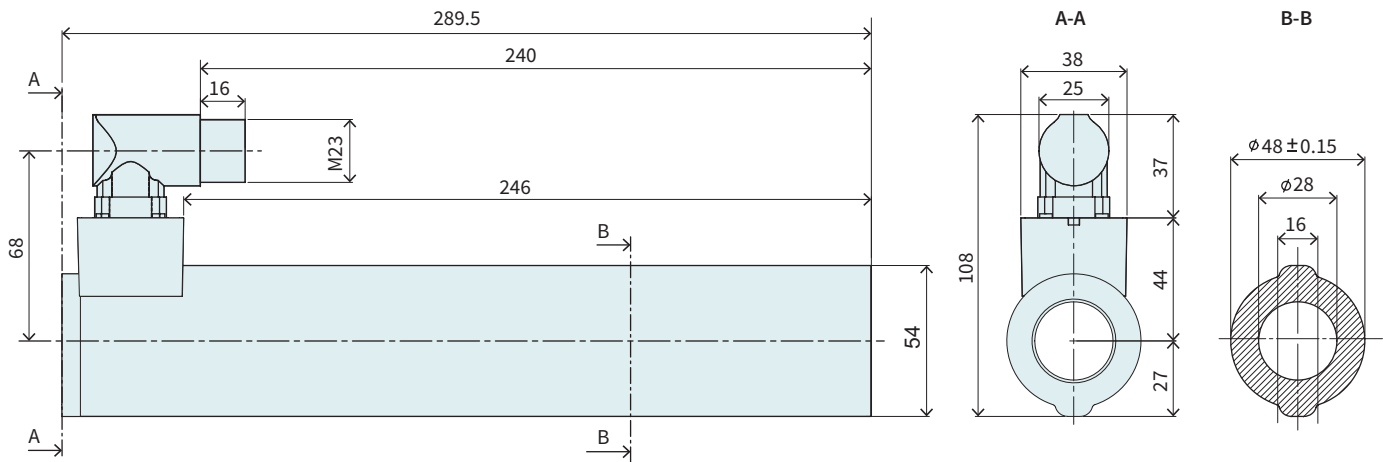
Accessories 364



MOTOR FAMILY P01-48x240F

Technical Data				
Stroke				
Standard Stroke (SS)	mm (in)		≤ 1680 (≤ 66.1)	
Extended Stroke (ES)	mm (in)		≤ 1830 (≤ 72)	
Force				
Max. Force @ 48VDC	N (lbf)		572 (129)	
Max. Force @ 72VDC	N (lbf)		572 (129)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		140 / 240 / - (32 / 55 / -)	
Max. Border Force relative	%		≤ 69	
Force Constant	N/A _{pk} (lbf/A _{pk})		22 (4.95)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		1.9 (78.9)	
Max. Velocity @ 72VDC	m/s (in/s)		2.9 (119.9)	
Position Detection				
Position Resolution	mm (in)		0.007 (0.0003)	
Repeatability	mm (in)		±0.05 (±0.002)	
Position Resolution with ES	mm (in)		0.001 (0.00004)	
Repeatability with ES	mm (in)		±0.01 (±0.0004)	
Linearity with ES	mm (in)		±0.01 (±0.0004)	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		6.5 / 11 / -	
Terminal Resistance 25 °C / 120 °C	Ohm		0.97 / 1.3	
Terminal Inductivity	mH		1.1	
Magnetic Period	mm (in)		60 (2.35)	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.32 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 330 / -	
Mechanical Data				
Stator Diameter	mm (in)		48 (1.9)	
Stator Length [Connector type / Cable type]	mm (in)		289.5 (11)	
Stator Mass	g (lb)		1930 (4.25)	
Slider Diameter	mm (in)		28 (1.1)	
Slider Length	mm (in)		350 - 2000 (14 - 79)	
Slider Mass	g (lb)		1460 - 9140 (3.21 - 20.1)	
IP Code			IP 65	

STATOR

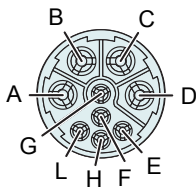


Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220

CONNECTOR

Motor Connector Wiring	PS01-37x240-C PS01-37x240-C20	Wire color motor cable
	C-Connector	
Ph 1+	A	red
Ph 1-	B	pink
Ph 2+	C	blue
Ph 2-	D	grey
+5VDC	E	white
GND	F	inner shield
Sin	G	yellow
Cos	H	green
Temp.	L	black
Shield	Housing	outer Shield

C-Connector



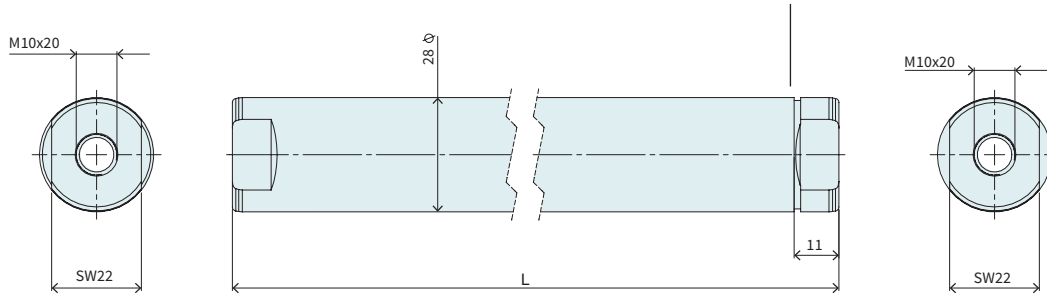
View: Motor Connector, plug side

SLIDER

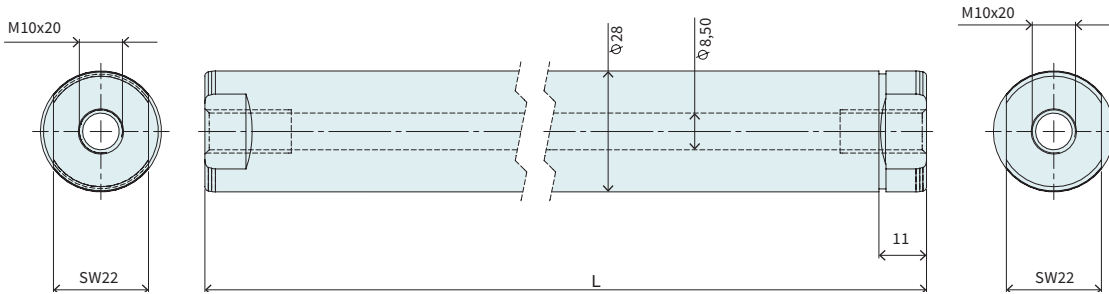
3

Slider Standard / Heavy Duty

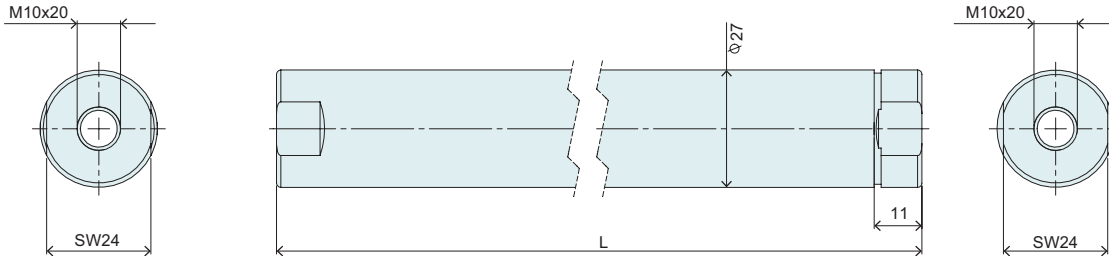
Number of grooves determines the slider type (see chapter 2 / slider) and marks the front end.



Hollow slider



High-Clearance Slider



Slider Standard				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-28x350/270	Slider 'standard'	180	30	0150-1380
PL01-28x410/330	Slider 'standard'	240	90	0150-1381
PL01-28x500/420	Slider 'standard'	330	180	0150-1382
PL01-28x620/540	Slider 'standard'	450	300	0150-1383
PL01-28x710/630	Slider 'standard'	540	390	0150-1384
PL01-28x800/720	Slider 'standard'	630	480	0150-1385
PL01-28x920/840	Slider 'standard'	750	600	0150-1386
PL01-28x1010/930	Slider 'standard'	840	690	0150-1387
PL01-28x1220/1140	Slider 'standard'	1050	900	0150-1388
PL01-28x1400/1320	Slider 'standard'	1230	1080	0150-1389
PL01-28x1610/1530	Slider 'standard'	1440	1290	0150-1390
PL01-28x1820/1740	Slider 'standard'	1650	1500	0150-1395
PL01-28x2000/1920	Slider 'standard'	1830	1680	0150-1396

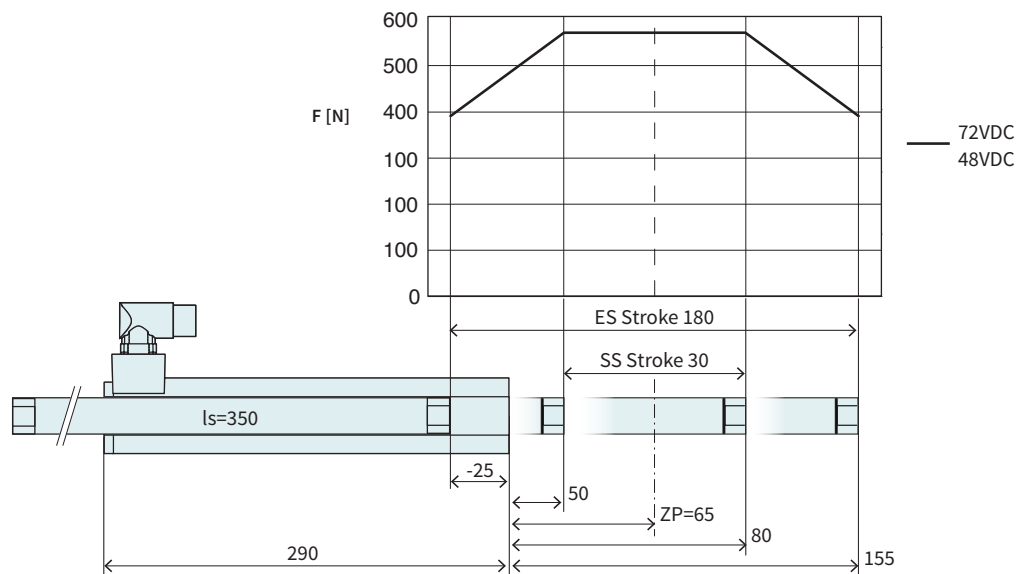
Slider Heavy Duty				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL02-28x350/270	Slider 'heavy duty'	180	30	0150-1411
PL02-28x410/330	Slider 'heavy duty'	240	90	0150-1412
PL02-28x500/420	Slider 'heavy duty'	330	180	0150-1413
PL02-28x620/540	Slider 'heavy duty'	450	300	0150-1414
PL02-28x710/630	Slider 'heavy duty'	540	390	0150-1415
PL02-28x800/720	Slider 'heavy duty'	630	480	0150-1416
PL02-28x920/840	Slider 'heavy duty'	750	600	0150-1417

Hollow slider				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-28x350/270	Slider 'standard L'	180	30	0150-1475
PL01-28x410/330	Slider 'standard L'	240	90	0150-1476
PL01-28x500/420	Slider 'standard L'	330	180	0150-1480
PL01-28x620/540	Slider 'standard L'	450	300	0150-1481
PL01-28x710/630	Slider 'standard L'	540	390	0150-1482
PL01-28x800/720	Slider 'standard L'	630	480	0150-1483
PL01-28x920/840	Slider 'standard L'	750	600	0150-1484

High-Clearance Slider				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-27x350/270	Slider 'high clearance'	180	30	0150-1467
PL01-27x410/330	Slider 'high clearance'	240	90	0150-1468
PL01-27x500/420	Slider 'high clearance'	330	180	0150-1469
PL01-27x620/540	Slider 'high clearance'	450	300	0150-1470
PL01-27x710/630	Slider 'high clearance'	540	390	0150-1471

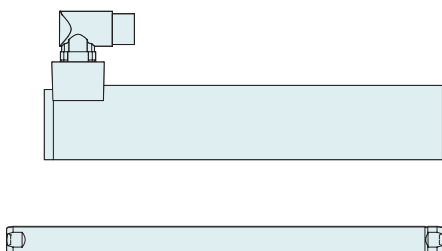
P01-48x240F/30x180

Max. Stroke: 180 mm
Peak Force: 572 N



Dimensions in mm

Technical Data P01-48x240F/30x180				
Stroke				
Standard Stroke (SS)	mm	(in)	30	(1.17)
Extended Stroke (ES)	mm	(in)	180	(7.08)
Force				
Max. Force @ 48VDC	N	(lbf)	572	(129)
Max. Force @ 72VDC	N	(lbf)	572	(129)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	140 / 240 / -	(32 / 55 / -)
Max. Border Force relative	%		69	
Force Constant	N/A _{pk} (lbf/A _{pk})		22	(4.95)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.9	(78.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.9	(119.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.5	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling /Fan / Fluid]	A _{pk}		6.5 / 11 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.32 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 330 / -	
Mechanical Data				
Slider Length	mm	(in)	350	(14)
Slider Mass	g	(lb)	1460	(3.21)



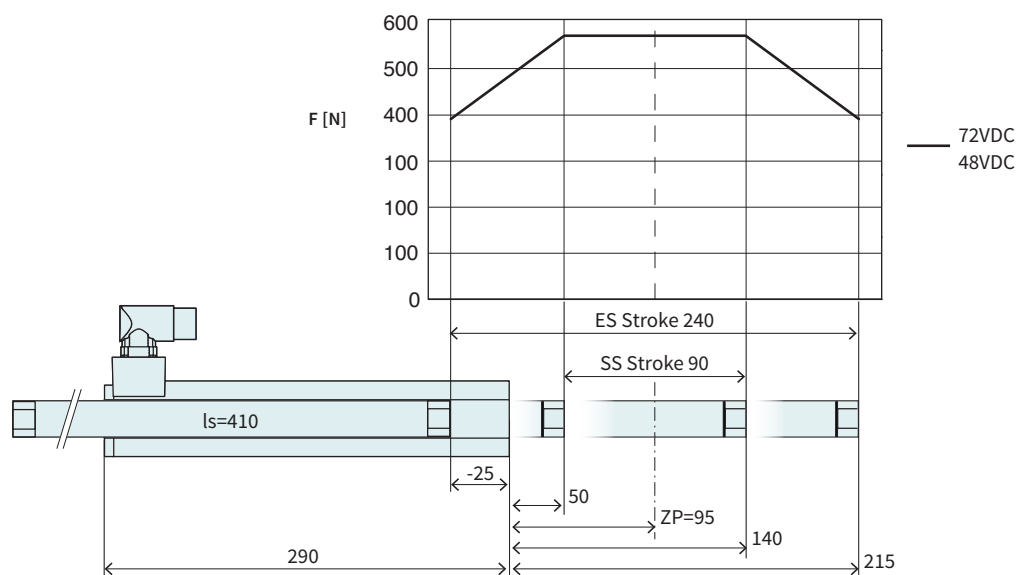
Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PL01-28x350/270	Slider 'standard'	0150-1380
PL02-28x350/270	Slider 'heavy duty'	0150-1411
PL01-28x350/270-L*	Slider 'standard L'	0150-1475
PL01-27x350/270*	Slider 'high clearance'	0150-1467

* With this slider, the motor specifications above change.

P01-48x240F/90x240

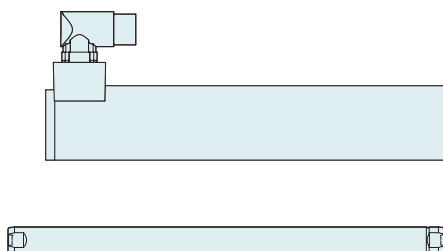
Max. Stroke: 240 mm
Peak Force: 572 N

Dimensions in mm



Technical Data P01-48x240F/90x240

Stroke			
Standard Stroke (SS)	mm (in)	90 (3.53)	
Extended Stroke (ES)	mm (in)	240 (9.44)	
Force			
Max. Force @ 48VDC	N (lbf)	572 (129)	
Max. Force @ 72VDC	N (lbf)	572 (129)	
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N (lbf)	140 / 240 / - (32 / 55 / -)	
Max. Border Force relative	%	69	
Force Constant	N/A _{pk} (lbf/A _{pk})	22 (4.95)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.9 (78.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2.9 (119.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.4	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	25.9	
Max. Current @ 72VDC	A _{pk}	25.9	
Max. Cont. Current [Passive cooling/ Fan / Fluid]	A _{pk}	6.5 / 11 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.95 / 0.32 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	970 / 330 / -	
Mechanical Data			
Slider Length	mm (in)	410 (16)	
Slider Mass	g (lb)	1740 (3.83)	

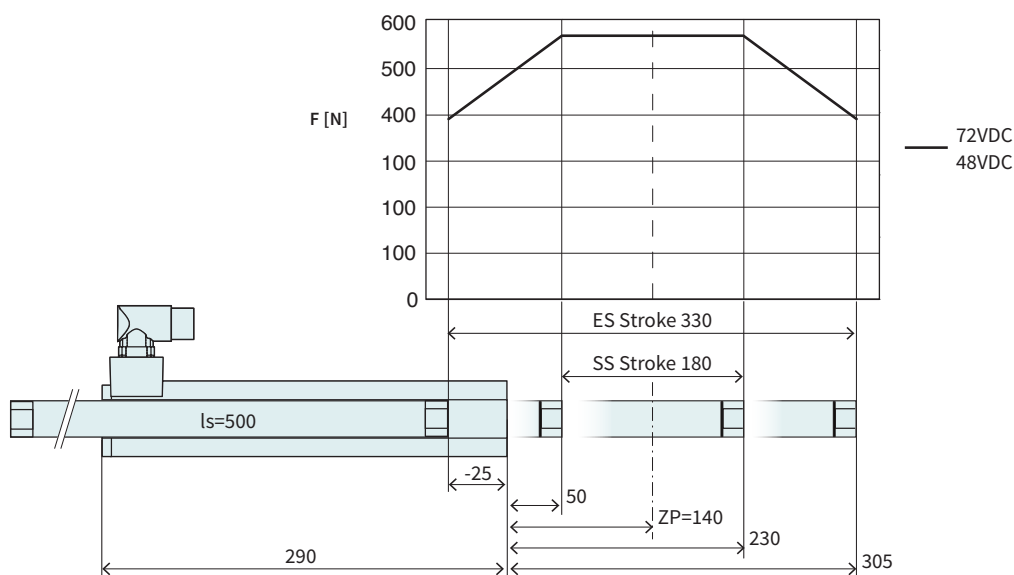


Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PL01-28x410/330	Slider 'standard'	0150-1381
PL02-28x410/330	Slider 'heavy duty'	0150-1412
PL01-28x410/330-L*	Slider 'standard L'	0150-1476
PL01-27x410/330*	Slider 'high clearance'	0150-1468

* With this slider, the motor specifications above change.

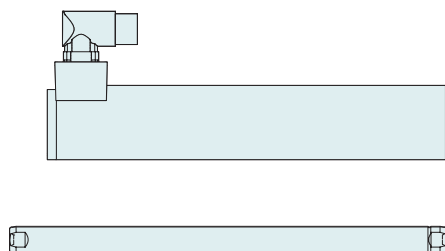
P01-48x240F/180x330

Max. Stroke: 330 mm
Peak Force: 572 N



Dimensions in mm

Technical Data P01-48x240F/180x330				
Stroke				
Standard Stroke (SS)	mm (in)		180 (7.08)	
Extended Stroke (ES)	mm (in)		330 (12.99)	
Force				
Max. Force @ 48VDC	N (lbf)		572 (129)	
Max. Force @ 72VDC	N (lbf)		572 (129)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		140 / 240 / - (32 / 55 / -)	
Max. Border Force relative	%		69	
Force Constant	N/A _{pk} (lbf/A _{pk})		22 (4.95)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		1.9 (78.9)	
Max. Velocity @ 72VDC	m/s (in/s)		2.9 (119.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.35	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		6.5 / 11 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.32 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 330 / -	
Mechanical Data				
Slider Length	mm (in)		500 (20)	
Slider Mass	g (lb)		2160 (4.75)	

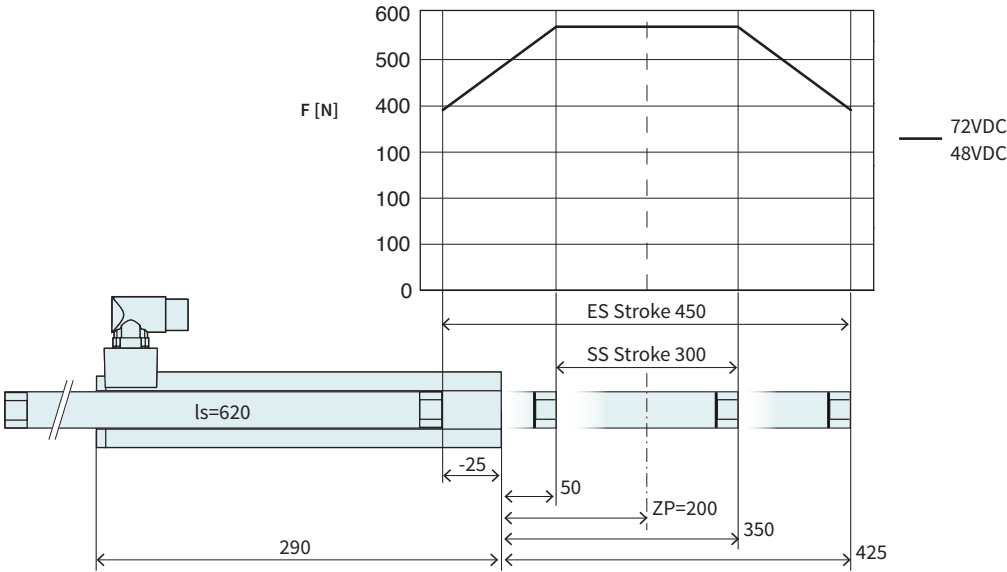


Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PL01-28x500/420	Slider 'standard'	0150-1382
PL02-28x500/420	Slider 'heavy duty'	0150-1413
PL01-28x500/420-L*	Slider 'standard L'	0150-1480
PL01-27x500/420*	Slider 'high clearance'	0150-1469

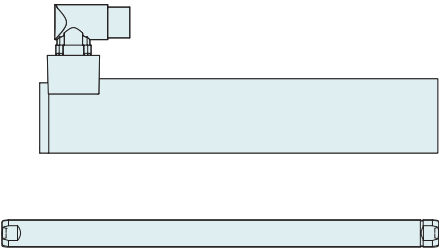
* With this slider, the motor specifications above change.

P01-48x240F/300x450

Max. Stroke: 450 mm
Peak Force: 572 N



Technical Data P01-48x240F/300x450				
Stroke				
Standard Stroke (SS)	mm	(in)	300	(11.8)
Extended Stroke (ES)	mm	(in)	450	(17.69)
Force				
Max. Force @ 48VDC	N	(lbf)	572	(129)
Max. Force @ 72VDC	N	(lbf)	572	(129)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	140 / 240 / -	(32 / 55 / -)
Max. Border Force relative	%		69	
Force Constant	N/A _{pk}	(lbf/A _{pk})	22	(4.95)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.9	(78.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.9	(119.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling/ Fan / Fluid]	A _{pk}		6.5 / 11 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.32 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 330 / -	
Mechanical Data				
Slider Length	mm	(in)	620	(24)
Slider Mass	g	(lb)	2720	(5.98)



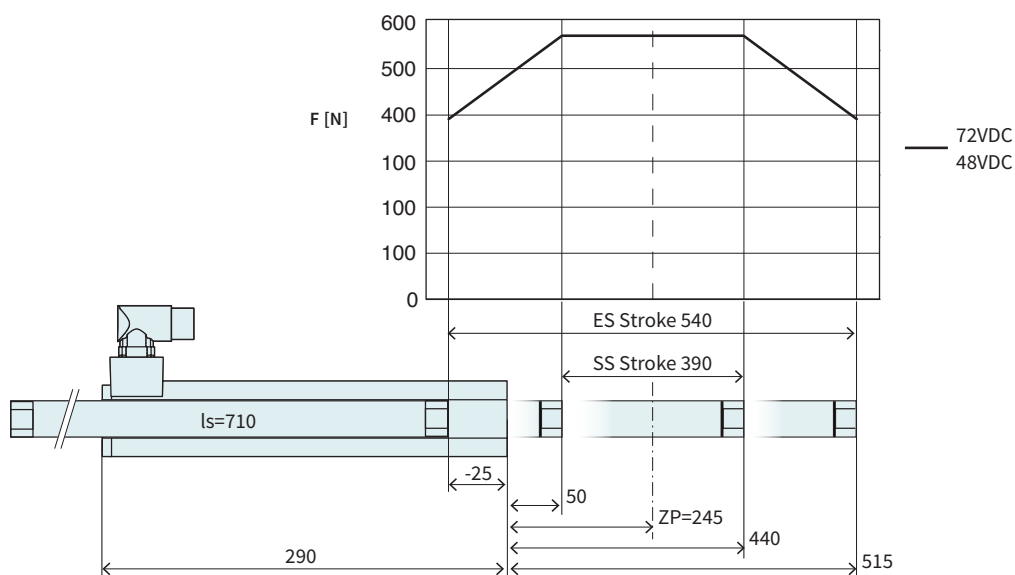
Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PL01-28x620/540	Slider 'standard'	0150-1383
PL02-28x620/540	Slider 'heavy duty'	0150-1414
PL01-28x620/540-L*	Slider 'standard L'	0150-1481
PL01-27x620/540*	Slider 'high clearance'	0150-1470

* With this slider, the motor specifications above change.

P01-48x240F/390x540

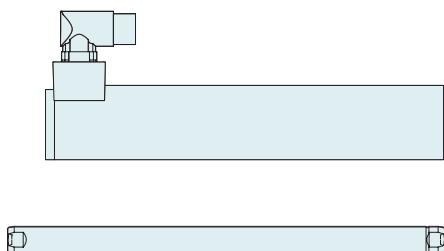
Max. Stroke: 540 mm
Peak Force: 572 N

Dimensions in mm



Technical Data P01-48x240F/390x540

Stroke				
Standard Stroke (SS)	mm (in)		390 (15.4)	
Extended Stroke (ES)	mm (in)		540 (21.3)	
Force				
Max. Force @ 48VDC	N (lbf)		572 (129)	
Max. Force @ 72VDC	N (lbf)		572 (129)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		140 / 240 / -	(32 / 55 / -)
Max. Border Force relative	%		69	
Force Constant	N/A _{pk} (lbf/A _{pk})		22	(4.95)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		1.9	(78.9)
Max. Velocity @ 72VDC	m/s (in/s)		2.9	(119.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		6.5 / 11 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.32 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 330 / -	
Mechanical Data				
Slider Length	mm (in)		710 (28)	
Slider Mass	g (lb)		3140 (6.91)	

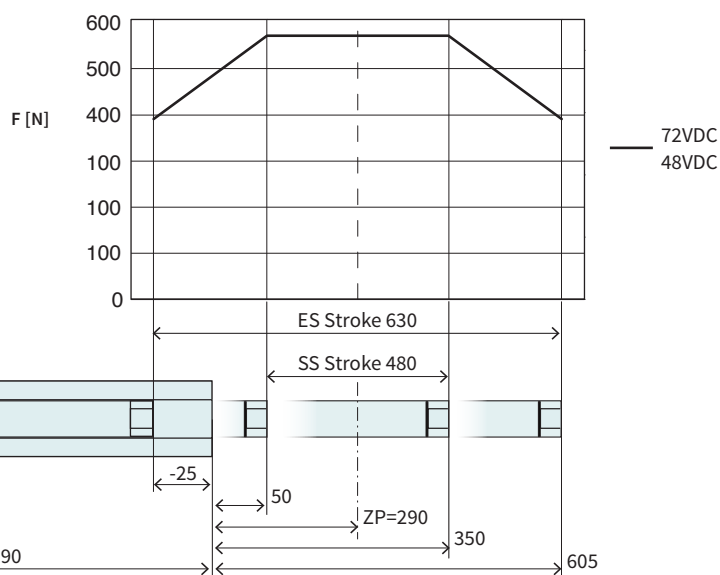


Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PL01-28x710/630	Slider 'standard'	0150-1384
PL02-28x710/630	Slider 'heavy duty'	0150-1415
PL01-28x710/630-L*	Slider 'standard L'	0150-1482
PL01-27x710/630*	Slider 'high clearance'	0150-1471

* With this slider, the motor specifications above change.

P01-48x240F/480x630

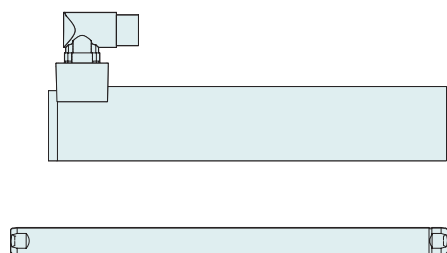
Max. Stroke: 630 mm
Peak Force: 572 N



Dimensions in mm

Technical Data P01-48x240F/480x630

Stroke			
Standard Stroke (SS)	mm (in)	480 (18.89)	
Extended Stroke (ES)	mm (in)	630 (24.8)	
Force			
Max. Force @ 48VDC	N (lbf)	572 (129)	
Max. Force @ 72VDC	N (lbf)	572 (129)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	140 / 240 / - (32 / 55 / -)	
Max. Border Force relative	%	69	
Force Constant	N/A _{pk} (lbf/A _{pk})	22 (4.95)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.9 (78.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2.9 (119.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	25.9	
Max. Current @ 72VDC	A _{pk}	25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	6.5 / 11 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.95 / 0.32 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	970 / 330 / -	
Mechanical Data			
Slider Length	mm (in)	800 (31)	
Slider Mass	g (lb)	3560 (7.83)	

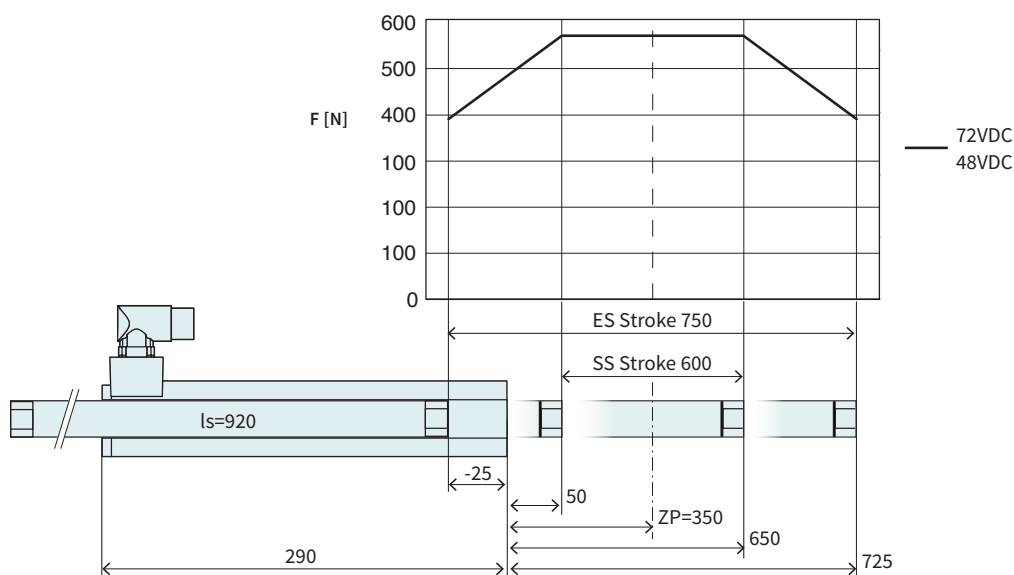


Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PL01-28x800/720	Slider 'standard'	0150-1385
PL02-28x800/720	Slider 'heavy duty'	0150-1416
PL01-28x800/720-L*	Slider 'standard L'	0150-1483

* With this slider, the motor specifications above change.

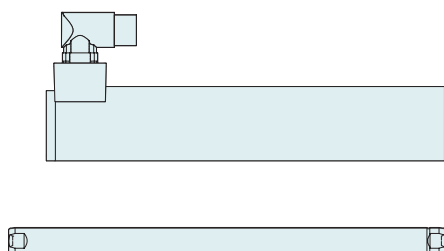
P01-48x240F/600x750

Max. Stroke: 750 mm
Peak Force: 572 N



Technical Data P01-48x240F/600x750

Stroke				
Standard Stroke (SS)	mm (in)		600 (23.6)	
Extended Stroke (ES)	mm (in)		750 (29.49)	
Force				
Max. Force @ 48VDC	N (lbf)		572 (129)	
Max. Force @ 72VDC	N (lbf)		572 (129)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		140 / 240 / -	(32 / 55 / -)
Max. Border Force relative	%		69	
Force Constant	N/A _{pk} (lbf/A _{pk})		22 (4.95)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		1.9 (78.9)	
Max. Velocity @ 72VDC	m/s (in/s)		2.9 (119.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		6.5 / 11 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.32 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 330 / -	
Mechanical Data				
Slider Length	mm (in)		920 (36)	
Slider Mass	g (lb)		4120 (9.06)	

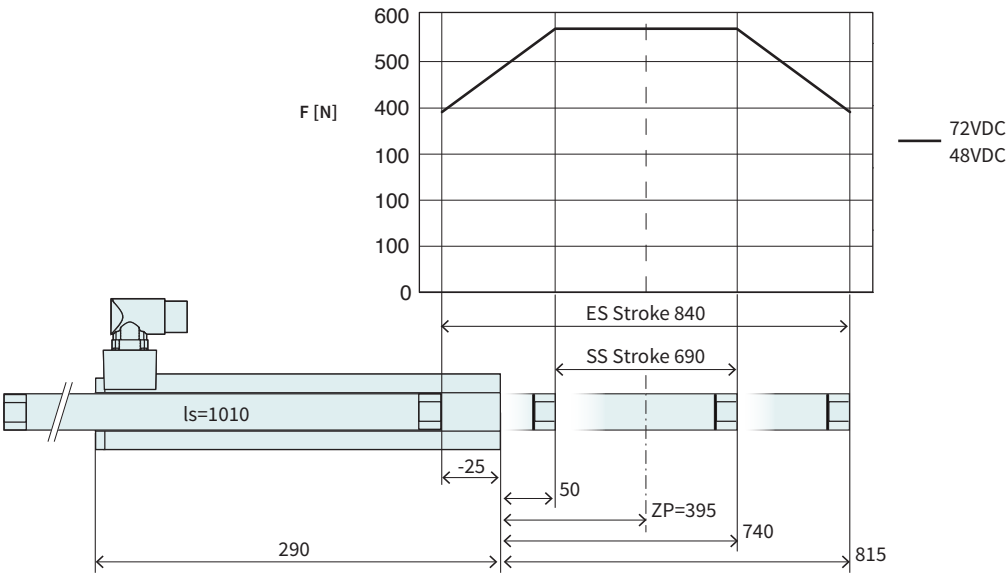


Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PL01-28x920/840	Slider 'standard'	0150-1386
PL02-28x920/840	Slider 'heavy duty'	0150-1417
PL01-28x920/840-L*	Slider 'standard L'	0150-1484

* With this slider, the motor specifications above change.

P01-48x240F/690x840

Max. Stroke: 840 mm
Peak Force: 572 N



Dimensions in mm

Technical Data P01-48x240F/690x840				
Stroke				
Standard Stroke (SS)	mm	(in)	690	(27.19)
Extended Stroke (ES)	mm	(in)	840	(33.1)
Force				
Max. Force @ 48VDC	N	(lbf)	572	(129)
Max. Force @ 72VDC	N	(lbf)	572	(129)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	140 / 240 / -	(32 / 55 / -)
Max. Border Force relative	%		69	
Force Constant	N/A _{pk}	(lbf/A _{pk})	22	(4.95)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.9	(78.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.9	(119.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling/ Fan / Fluid]	A _{pk}		6.5 / 11 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.32 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 330 / -	
Mechanical Data				
Slider Length	mm	(in)	1010	(40)
Slider Mass	g	(lb)	4540	(10)

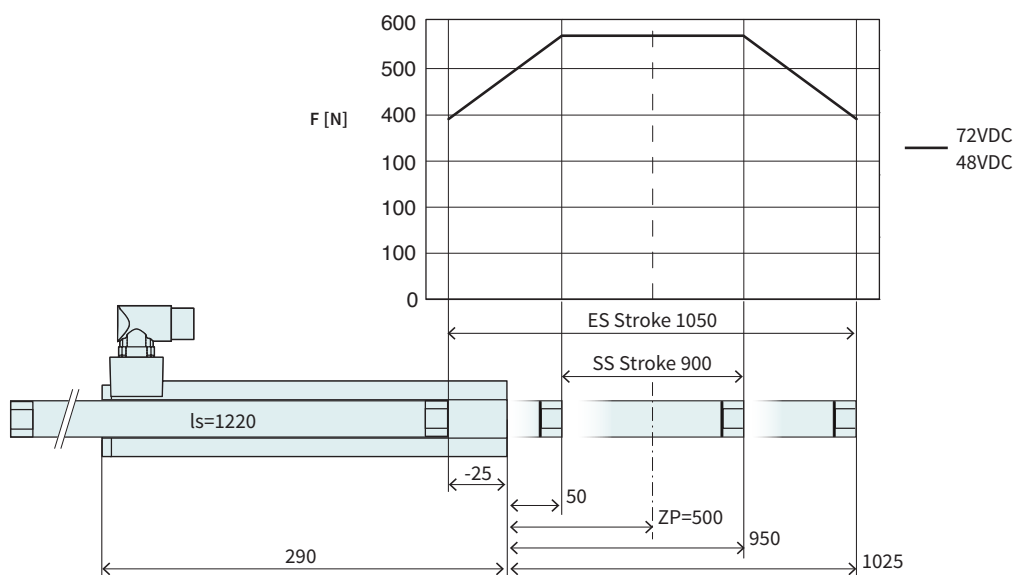


Item	Description	Item-No.
PS01-48x240F-C	ator with IP67 Connector M23/9(m)	0150-1220
PL01-28x1010/930	Slider 'standard'	0150-1387

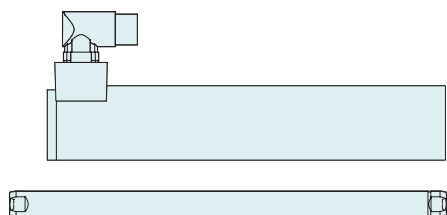
P01-48x240F/900x1050

Max. Stroke: 1050 mm
Peak Force: 572 N

Dimensions in mm



Technical Data P01-48x240F/900x1050				
Stroke				
Standard Stroke (SS)	mm (in)		900 (35.39)	
Extended Stroke (ES)	mm (in)		1050 (41.29)	
Force				
Max. Force @ 48VDC	N (lbf)		572 (129)	
Max. Force @ 72VDC	N (lbf)		572 (129)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		140 / 240 / -	(32 / 55 / -)
Max. Border Force relative	%		69	
Force Constant	N/A _{pk} (lbf/A _{pk})		22 (4.95)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		1.9 (78.9)	
Max. Velocity @ 72VDC	m/s (in/s)		2.9 (119.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		6.5 / 11 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.32 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 330 / -	
Mechanical Data				
Slider Length	mm (in)		1220 (48)	
Slider Mass	g (lb)		5510 (12.12)	

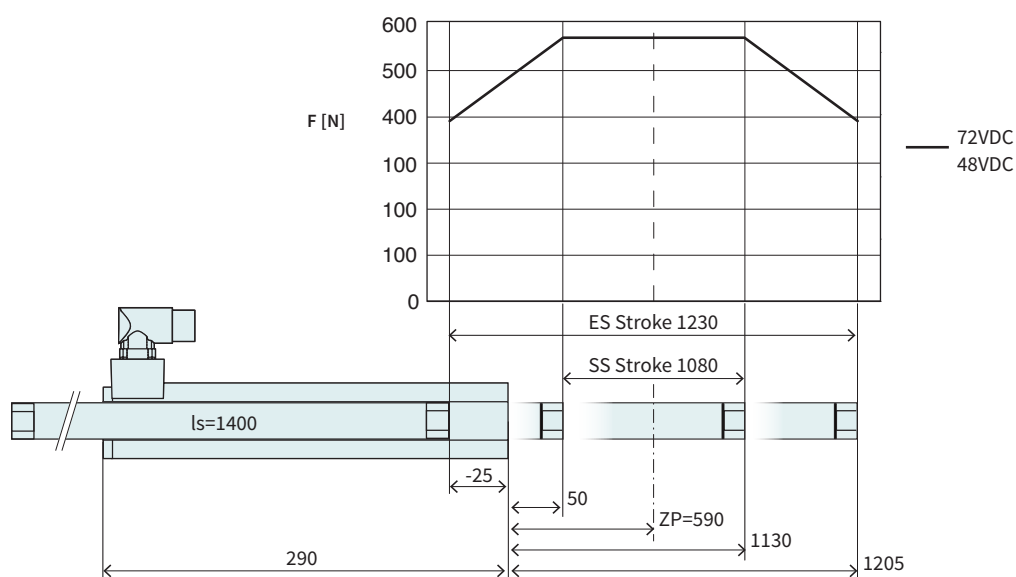


Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PL01-28x1220/1140	Slider 'standard'	0150-1388

P01-48x240F/1080x1230

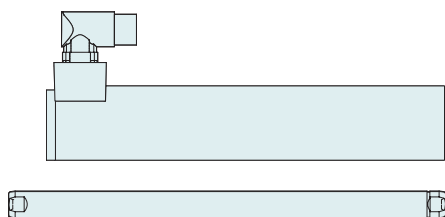
Max. Stroke: 1230 mm
Peak Force: 572 N

Dimensions in mm



Technical Data P01-48x240F/1080x1230

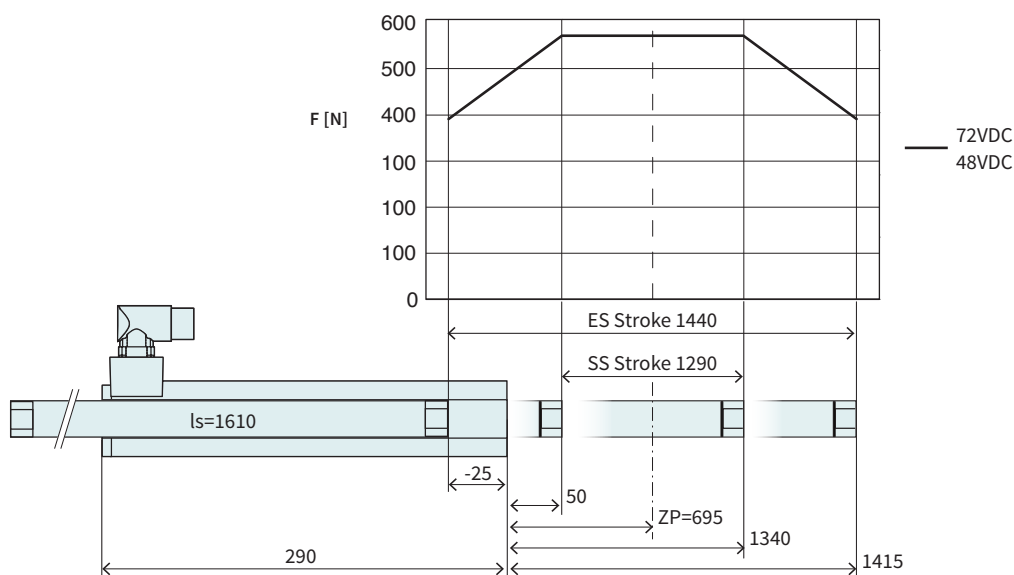
Stroke			
Standard Stroke (SS)	mm (in)	1080 (42.49)	
Extended Stroke (ES)	mm (in)	1230 (48.39)	
Force			
Max. Force @ 48VDC	N (lbf)	572 (129)	
Max. Force @ 72VDC	N (lbf)	572 (129)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	140 / 240 / - (32 / 55 / -)	
Max. Border Force relative	%	69	
Force Constant	N/A _{pk} (lbf/A _{pk})	22 (4.95)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.9 (78.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2.9 (119.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	25.9	
Max. Current @ 72VDC	A _{pk}	25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	6.5 / 11 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.95 / 0.32 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	970 / 330 / -	
Mechanical Data			
Slider Length	mm (in)	1400 (55)	
Slider Mass	g (lb)	6350 (13.97)	



Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PL01-28x1400/1320	Slider 'standard'	0150-1389

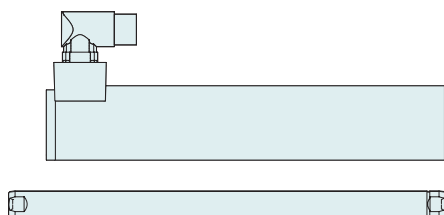
P01-48x240F/1290x1440

Max. Stroke: 1440 mm
Peak Force: 572 N



Technical Data P01-48x240F/1290x1440

Stroke			
Standard Stroke (SS)	mm (in)	1290 (50.79)	
Extended Stroke (ES)	mm (in)	1440 (56.7)	
Force			
Max. Force @ 48VDC	N (lbf)	572 (129)	
Max. Force @ 72VDC	N (lbf)	572 (129)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	140 / 240 / -	(32 / 55 / -)
Max. Border Force relative	%	69	
Force Constant	N/A _{pk} (lbf/A _{pk})	22 (4.95)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.9 (78.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2.9 (119.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	25.9	
Max. Current @ 72VDC	A _{pk}	25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	6.5 / 11 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.95 / 0.32 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	970 / 330 / -	
Mechanical Data			
Slider Length	mm (in)	1610 (63)	
Slider Mass	g (lb)	7330 (16.13)	



Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PL01-28x1610/1530	Slider 'standard'	0150-1390

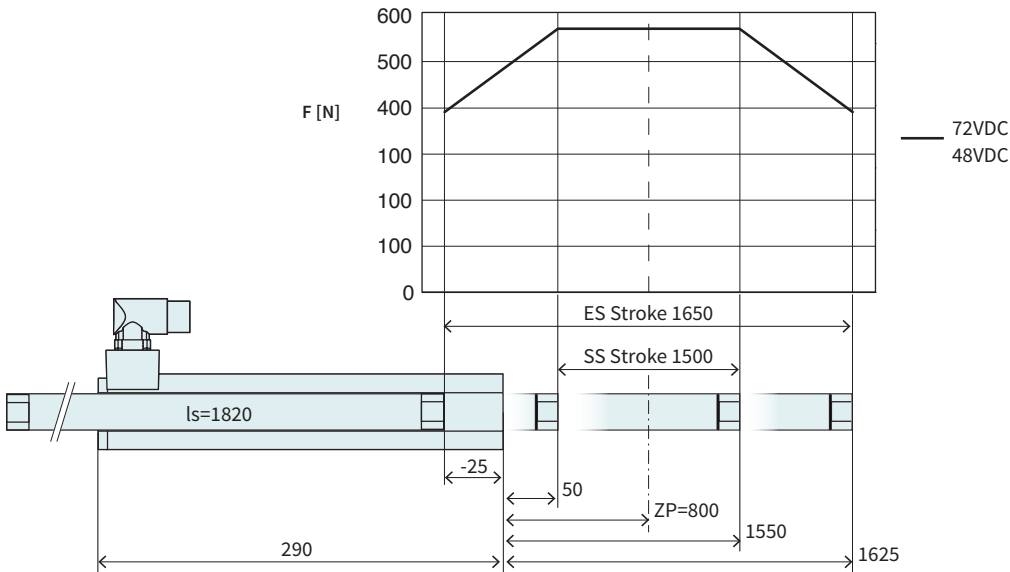
P01-48x240F/1500x1650

Max. Stroke:

1650 mm

Peak Force:

572 N



Dimensions in mm

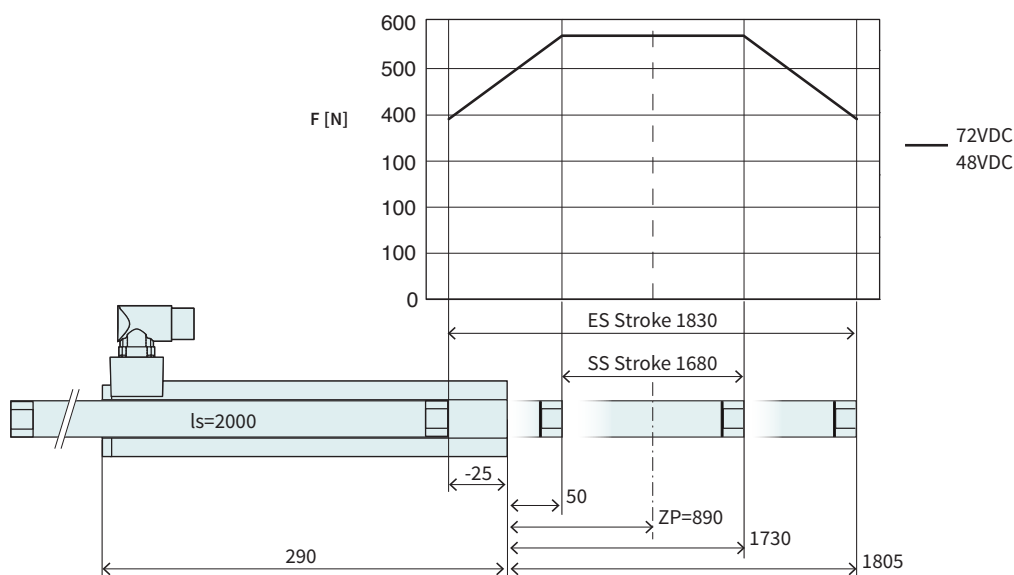
Technical Data P01-48x240F/1500x1650				
Stroke				
Standard Stroke (SS)	mm	(in)	1500	(59.1)
Extended Stroke (ES)	mm	(in)	1650	(64.99)
Force				
Max. Force @ 48VDC	N	(lbf)	572	(129)
Max. Force @ 72VDC	N	(lbf)	572	(129)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 240 / -	(32 / 55 / -)
Max. Border Force relative	%		69	
Force Constant	N/A _{pk}	(lbf/A _{pk})	22	(4.95)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.9	(78.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.9	(119.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		6.5 / 11 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.32 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 330 / -	
Mechanical Data				
Slider Length	mm	(in)	1820	(72)
Slider Mass	g	(lb)	8300	(18.26)



Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PL01-28x1820/1740	Slider 'standard'	0150-1395

P01-48x240F/1680x1830

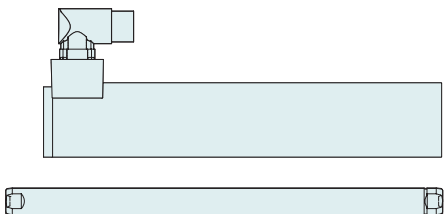
Max. Stroke: 1830 mm
Peak Force: 572 N



Dimensions in mm

Technical Data P01-48x240F/1680x1830

Stroke				
Standard Stroke (SS)	mm (in)		1680 (66.09)	
Extended Stroke (ES)	mm (in)		1830 (71.99)	
Force				
Max. Force @ 48VDC	N (lbf)		572 (129)	
Max. Force @ 72VDC	N (lbf)		572 (129)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		140 / 240 / -	(32 / 55 / -)
Max. Border Force relative	%		69	
Force Constant	N/A _{pk} (lbf/A _{pk})		22 (4.95)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		1.9 (78.9)	
Max. Velocity @ 72VDC	m/s (in/s)		2.9 (119.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		6.5 / 11 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.32 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 330 / -	
Mechanical Data				
Slider Length	mm (in)		2000 (79)	
Slider Mass	g (lb)		9140 (20.11)	



Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PL01-28x2000/1920	Slider 'standard'	0150-1396

Linear Guides H01

3



HM01-48x240/120	Linear Module 48x240 with 120 mm Stroke			
→	H-Guide	H01-48x250/120	H-Guide for P01-48x240, Stroke max 120 mm	0150-5100
		H01-48x250/120-GF	H-Guide for P01-48x240, Stroke max 120 mm	0150-5104
	Stator	PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
→	Slider	PL01-28x410/330	Slider Standard for H01-48x250/120	0150-1381
HM01-48x240/210	Linear Module 48x240 with 210 mm Stroke			
→	H-Guide	H01-48x250/210	H-Guide for P01-48x240, Stroke max 210 mm	0150-5101
		H01-48x250/210-GF	H-Guide for P01-48x240, Stroke max 210 mm	0150-5105
	Stator	PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
→	Slider	PL01-28x500/420	Slider Standard for H01-48x250/210	0150-1382
HM01-48x240/330	Linear Module 48x240 with 330 mm Stroke			
→	H-Guide	H01-48x250/330	H-Guide for P01-48x240, Stroke max 330 mm	0150-5102
		H01-48x250/330-GF	H-Guide for P01-48x240, Stroke max 330 mm	0150-5106
	Stator	PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
→	Slider	PL01-28x620/540	Slider Standard for H01-48x250/330	0150-1383
HM01-48x240/420	Linear Module 48x240 with 420 mm Stroke			
→	H-Guide	H01-48x250/420	H-Guide for P01-48x240, Stroke max 420 mm	0150-5103
		H01-48x250/420-GF	H-Guide for P01-48x240, Stroke max 420 mm	0150-5107
	Stator	PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
→	Slider	PL01-28x710/630	Slider Standard for H01-48x250/420	0150-1384
Accessories				
→	Brake	HB01-48	Pneumatic Brake for H01-48/1000N(4-6Bar)	0150-5098
	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051
	MagSpring	MF01-37/H37	Flange MagSpring 37 / H-Guide 23/37/48	0250-2307
		MA01-37/H48	Adapter MagSpring 37 / H-Guide 48	0250-0118
	Sliding block	PFN01-8/M6	Sliding block 8mm, M6 thread	0250-3245
	Centering sleeve	HC01-11/05	Centering sleeve D11x5 mm	0150-3252
	Wipers	HA01-48/28-F	Wiper for H01-48 guides, front side	0150-5109

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

Bridge Guide B01

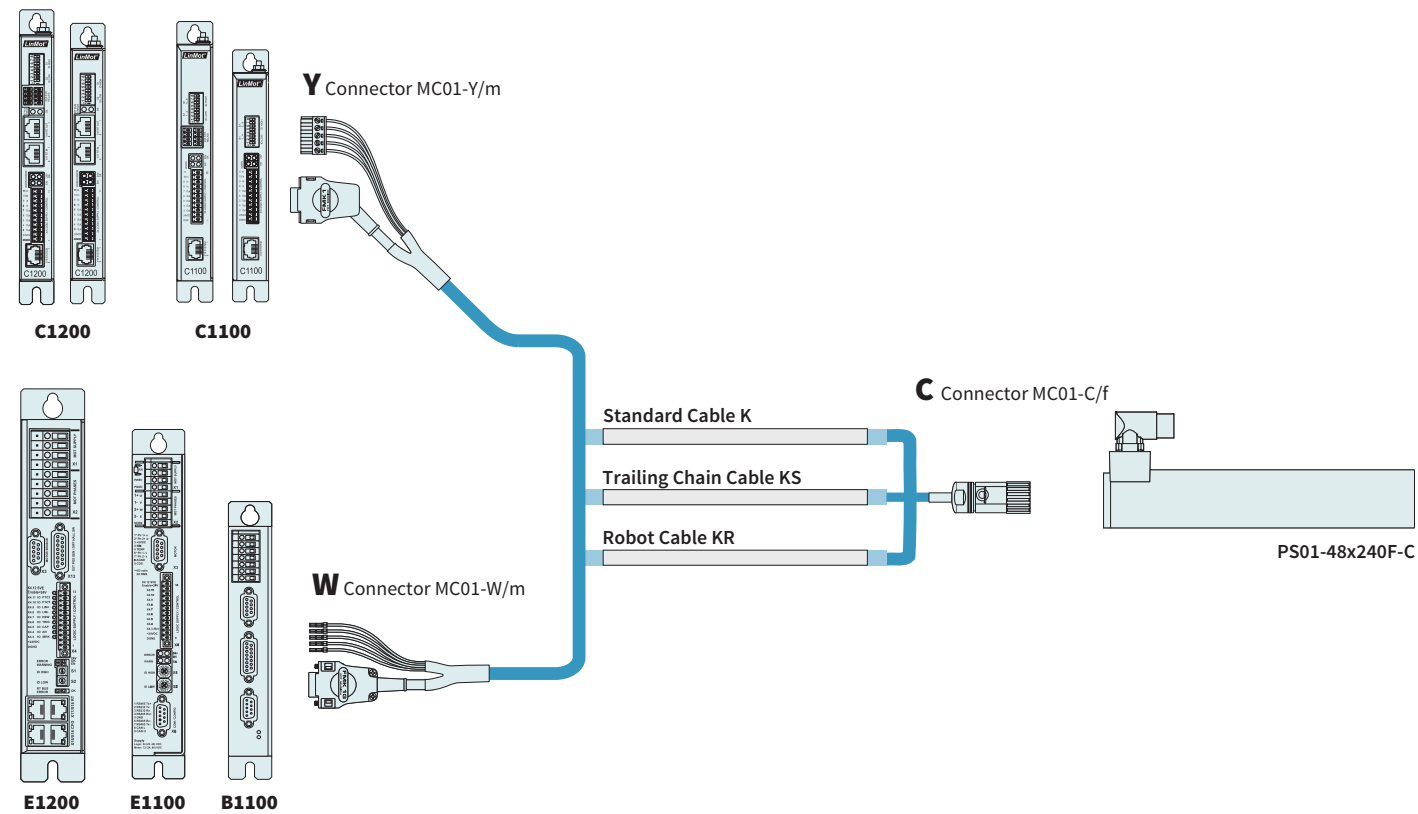


BM01-48x240/90		Bridge Module 48x240 with 90 mm Stroke		
→	B-Guide	B01-48x250/90	B-Guide for P01-48x240, Stroke max 90 mm	0150-5150
		B01-48x250/90-GF	B-Guide for P01-48x240, Stroke max 90 mm	0150-5154
→	Stator	PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
→	Slider	PL01-27x410/330	High Clearance Slider for B01-48x250/90	0150-1468
BM01-48x240/180		Bridge Module 48x240 with 180 mm Stroke		
→	B-Guide	B01-48x250/180	B-Guide for P01-48x240, Stroke max 180mm	0150-5151
		B01-48x250/180-GF	B-Guide for P01-48x240, Stroke max 180mm	0150-5155
→	Stator	PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
→	Slider	PL01-27x500/420	High Clearance Slider for B01-48x250/180	0150-1469
BM01-48x240/300		Bridge Module 48x240 with 300 mm Stroke		
→	B-Guide	B01-48x250/300	B-Guide for P01-48x240, Stroke max 300 mm	0150-5152
		B01-48x250/300-GF	B-Guide for P01-48x240, Stroke max 300 mm	0150-5156
→	Stator	PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
→	Slider	PL01-27x620/540	High Clearance Slider for B01-48x250/300	0150-1470
BM01-48x240/390		Bridge Module 48x240 with 390 mm Stroke		
→	B-Guide	B01-48x250/390	B-Guide for P01-48x240, Stroke max 390 mm	0150-5153
		B01-48x250/390-GF	B-Guide for P01-48x240, Stroke max 390 mm	0150-5157
→	Stator	PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
→	Slider	PL01-27x710/630	High Clearance Slider for B01-48x250/390	0150-1471
Accessories				
→	Brake	HB01-48	Pneumatic Brake for H01-48/1000N(4-6Bar)	0150-5098
→	Fan	HV01-37/48	Fan for H01-37 and -48 H-Guideen	0150-5051
→	MagSpring	MF01-37/H37	Flange MagSpring 37 / H-Guide 23/37/48	0250-2307
		MA01-37/H48	Adapter MagSpring 37 / H-Guide 48	0250-0118
→	Sliding block	PFN01-8/M6	Sliding block 8mm, M6 thread	0250-3245
→	Centering sleeve	HC01-11/05	Centering sleeve D11x5 mm	0150-3252
→	Wipers	HA01-48/27-F	Wiper for H01-48 guides, front side	0150-5178

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

Motor Cable

3



ORDERING INFORMATION

STANDARD CABLE		
Item	Description	Item-No.
K15-W/C-2	Motor Cable W/C, 2 m	0150-1811
K15-W/C-4	Motor Cable W/C, 4 m	0150-1801
K15-W/C-6	Motor Cable W/C, 6 m	0150-1802
K15-W/C-8	Motor Cable W/C, 8 m	0150-1803
K15-W/C-	Motor Cable W/C, Custom length	0150-3131
K15-Y/C-2	Motor Cable Y/R, 2 m	0150-2429
K15-Y/C-4	Motor Cable Y/R, 4 m	0150-2430
K15-Y/C-6	Motor Cable Y/R, 6 m	0150-2431
K15-Y/C-8	Motor Cable Y/R, 8 m	0150-2432
K15-Y-Fe/C-	Motor Cable Y-Fe/R, Custom length	0150-3506

TRAILING CHAIN CABLE		
Item	Description	Item-No.
KS10-W/C-4	Trailing Chain Cable W/C, 4 m	0150-1807
KS10-W/C-6	Trailing Chain Cable W/C, 6 m	0150-1858
KS10-W/C-8	Trailing Chain Cable W/C, 8 m	0150-1808
KS10-W/C-	Trailing Chain Cable W/C, Custom length	0150-3139
KS10-Y/C-4	Trailing Chain Cable Y/C, 4 m	0150-2439
KS10-Y/C-6	Trailing Chain Cable Y/C, 6 m	0150-2440
KS10-Y/C-8	Trailing Chain Cable Y/C, 8 m	0150-2441
KS10-Y/C-	Trailing Chain Cable Y-Fe/C, Custom length	0150-3511

ROBOT CABLE		
Item	Description	Item-No.
KR10-W/C-	Robot Cable KR10-W/C, Custom length	0150-3199
KR10-Y-Fe/C-	Robot Cable KR10-Y-Fe/C, Custom length	0150-3515

CONNECTOR & CABLE (INDIVIDUAL)		
Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-C/f	Motor Connector C/f	0150-3080
MC01-P/f	Motor Connector P/f	0150-3021
K15-04/05	Motor Cable per m	0150-1978
KS10-04/05	Trailing Chain Cable per m	0150-1977
KR10-04/05	Robot Cable per m	0150-1830

MOTOR FLANGES



Item	Description	Item-No.
PF01-48x120	Flange 48x120 mm	0150-1976
PF01-48x226	Flange 48x226 mm	0150-2108

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37, B01-37 and PF02-37	0150-5051

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-28	Fixed Bearing Set for 27 mm and 28mm Slider	0150-3087
PLF01-28-SS	Fixed Bearing Set for 27 mm and 28 mm Slider, Stainless steel	0150-3297
PLL01-27	Floating Bearing for PL01-27 Slider	0150-3294
PLL01-28	Floating Bearing for PL01-28 Slider	0150-3094
PLM01-28-MK	Mounting Kit for PL01-28 Slider	0150-3095

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

WIPERS



Item	Description	Item-No.
PA01-48/27-F	Wipers for PS01-48x...	0150-3228
PA01-48/27-R	Wipers for PS01-48x...-C	0150-3229
PA01-48/28-F	Wipers for PS01-48x...	0150-3127
PA01-48/28-R	Wipers for PS01-48x...-C	0150-3202

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for inc. strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D-Encoder	Encoder Cable (Length in m)	0150-3166
KS025-D/D15-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

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LINEAR MOTORS P01-48x360F



- ✓ Highly dynamic drives
- ✓ With a special F-winding for a higher maximum speed
- ✓ Wide stroke range
- ✓ Available with rotatable connector
- ✓ Optional with air cooling
- ✓ Wide range of applications in handling modules as well as in plant and machine construction

LINEAR MOTORS P01-48x360F

Technical Data	371
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Motor Specifications

P01-48x360F/60x210	375
P01-48x360F/180x330	376
P01-48x360F/270x420	377
P01-48x360F/360x510	378
P01-48x360F/480x630	379
P01-48x360F/570x720	380
P01-48x360F/780x930	381
P01-48x360F/960x1110	382
P01-48x360F/1170x1320	383
P01-48x360F/1380x1530	384
P01-48x360F/1560x1710	385

Linear Guides	386
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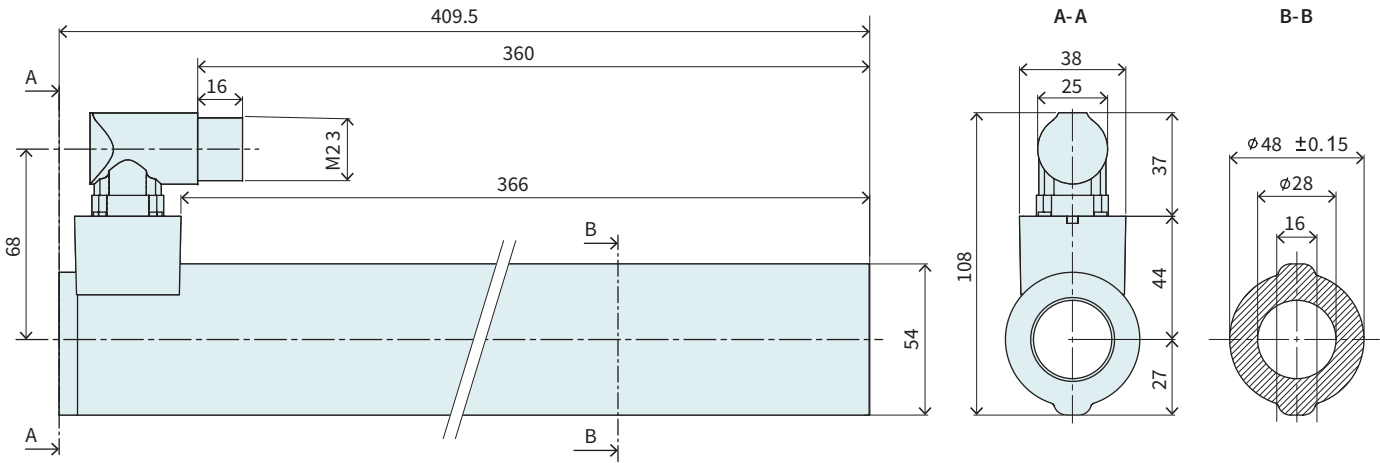
Accessories	387
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MOTOR FAMILY P01-48x360F

Technical Data				
Stroke				
Standard Stroke (SS)	mm	(in)	≤ 1560	(≤ 61.4)
Extended Stroke (ES)	mm	(in)	≤ 1710	(≤ 67.3)
Force				
Max. Force @ 48VDC	N	(lbf)	905	(204)
Max. Force @ 72VDC	N	(lbf)	1020	(230)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	200 / 340 / -	(45 / 77 / -)
Max. Border Force relative	%		≤ 79	
Force Constant	N/A _{pk}	(lbf/A _{pk})	32	(7.19)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.3	(53.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2	(80.9)
Position Detection				
Position Resolution	mm	(in)	0.007	(0.0003)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 48VDC	A _{pk}		28.2	
Max. Current @ 72VDC	A _{pk}		31.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		6.2 / 11 / -	
Terminal Resistance 25 °C / 120 °C	Ohm		1.4 / 1.9	
Terminal Inductivity	mH		1.6	
Magnetic Period	mm	(in)	60	(2.35)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.72 / 0.24 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1000 / 340 / -	
Mechanical Data				
Stator Diameter	mm	(in)	48	(1.9)
Stator Length [Connector type / Cable type]	mm	(in)	409.5	(16)
Stator Mass	g	(lb)	2880	(6.34)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	500 - 2000	(20 - 79)
Slider Mass	g	(lb)	2160 - 9140	(4.75 - 20.1)
IP Code			IP 65	

STATOR

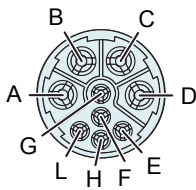


Item	Description	Item-No.
PS01-48x360F-C	Stator with IP67 Connector M23/9(m)	0150-1269

CONNECTOR

Motor Connector Wiring	PS01-37x240-C PS01-37x240-C20	Wire color motor cable
	C-Connector	
Ph 1+	A	red
Ph 1-	B	pink
Ph 2+	C	blue
Ph 2-	D	grey
+5VDC	E	white
GND	F	inner shield
Sin	G	yellow
Cos	H	green
Temp.	L	black
Shield	Housing	outer Shield

C-Connector

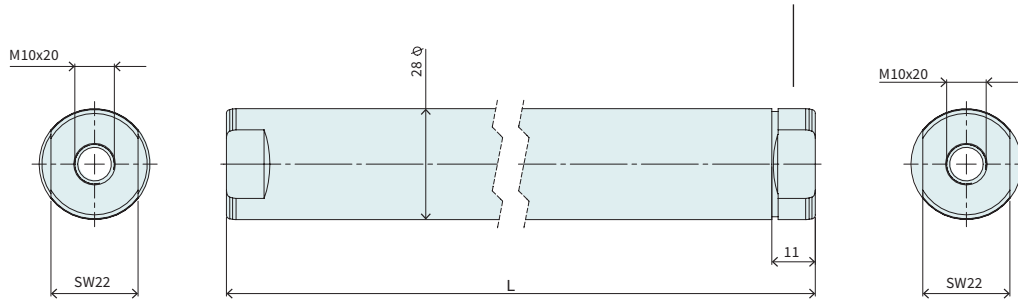


View: Motor Connector, plug side

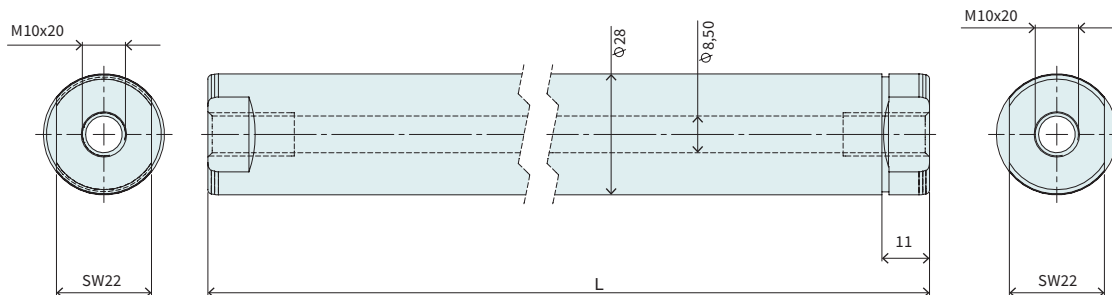
SLIDER

Slider Standard / Heavy Duty

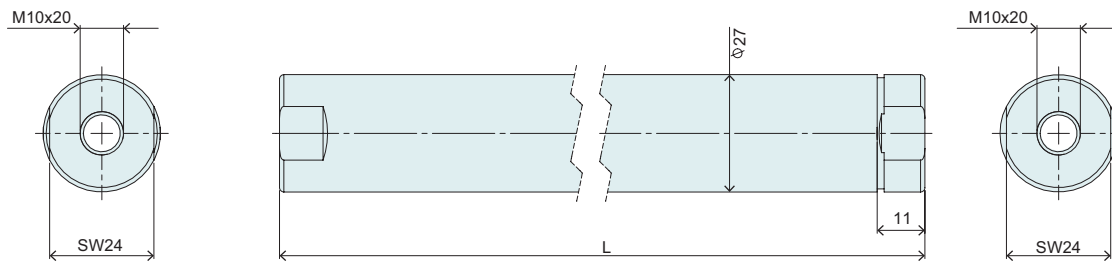
Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.



Hollow slider



High-Clearance Slider



Slider Standard				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-28x500/420	Slider 'standard'	330	180	0150-1382
PL01-28x620/540	Slider 'standard'	450	300	0150-1383
PL01-28x710/630	Slider 'standard'	540	390	0150-1384
PL01-28x800/720	Slider 'standard'	630	480	0150-1385
PL01-28x920/840	Slider 'standard'	750	600	0150-1386
PL01-28x1010/930	Slider 'standard'	840	690	0150-1387
PL01-28x1220/1140	Slider 'standard'	1050	900	0150-1388
PL01-28x1400/1320	Slider 'standard'	1230	1080	0150-1389
PL01-28x1610/1530	Slider 'standard'	1440	1290	0150-1390
PL01-28x1820/1740	Slider 'standard'	1650	1500	0150-1395
PL01-28x2000/1920	Slider 'standard'	1830	1680	0150-1396

Slider Heavy Duty				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL02-28x500/420	Slider 'heavy duty'	330	180	0150-1413
PL02-28x620/540	Slider 'heavy duty'	450	300	0150-1414
PL02-28x710/630	Slider 'heavy duty'	540	390	0150-1415
PL02-28x800/720	Slider 'heavy duty'	630	480	0150-1416
PL02-28x920/840	Slider 'heavy duty'	750	600	0150-1417

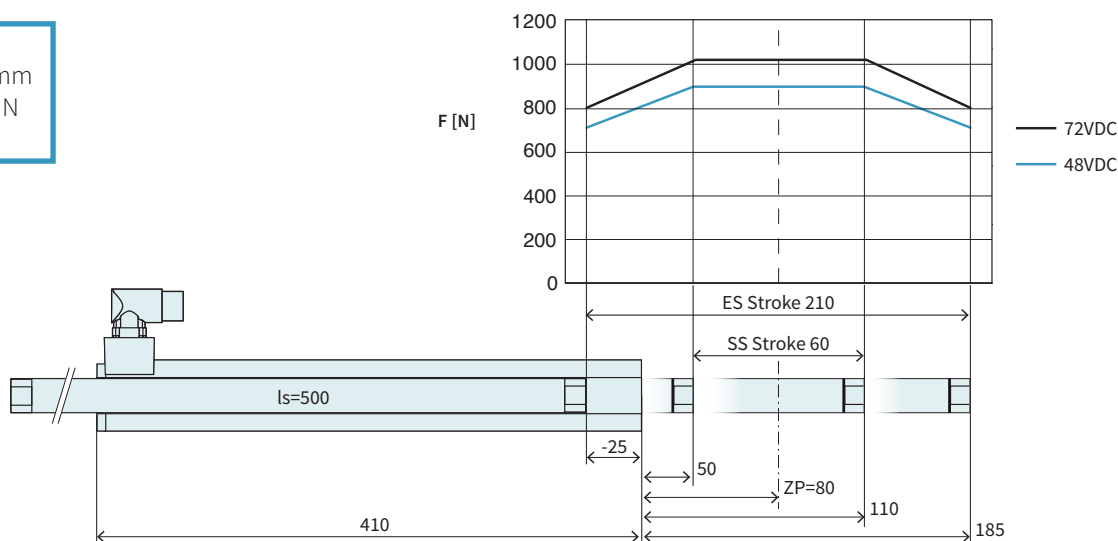
Hollow slider				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-28x500/420-L	Slider 'standard L'	330	180	0150-1480
PL01-28x620/540-L	Slider 'standard L'	450	300	0150-1481
PL01-28x710/630-L	Slider 'standard L'	540	390	0150-1482
PL01-28x800/720-L	Slider 'standard L'	630	480	0150-1483
PL01-28x920/840-L	Slider 'standard L'	750	600	0150-1484

High-Clearance Slider				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-27x500/420	Slider 'high clearance'	330	180	0150-1469
PL01-27x620/540	Slider 'high clearance'	450	300	0150-1470
PL01-27x710/630	Slider 'high clearance'	540	390	0150-1471

P01-48x360F/60x210

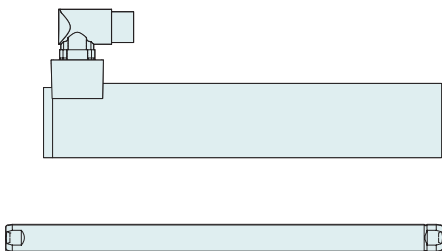
3

Max. Stroke: 210 mm
Peak Force: 1020 N



Dimensions in mm

Technical Data P01-48x360F/60x210				
Stroke				
Standard Stroke (SS)	mm (in)		60 (2.35)	
Extended Stroke (ES)	mm (in)		210 (8.26)	
Force				
Max. Force @ 48VDC	N (lbf)		905 (204)	
Max. Force @ 72VDC	N (lbf)		1020 (230)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		200 / 340 / - (45 / 77 / -)	
Max. Border Force relative	%		79	
Force Constant	N/A _{pk} (lbf/A _{pk})		32 (7.19)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		1.3 (53.9)	
Max. Velocity @ 72VDC	m/s (in/s)		2 (80.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.45	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		28.2	
Max. Current @ 72VDC	A _{pk}		31.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		6.2 / 11 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.72 / 0.24 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1000 / 340 / -	
Mechanical Data				
Slider Length	mm (in)		500 (20)	
Slider Mass	g (lb)		2160 (4.75)	



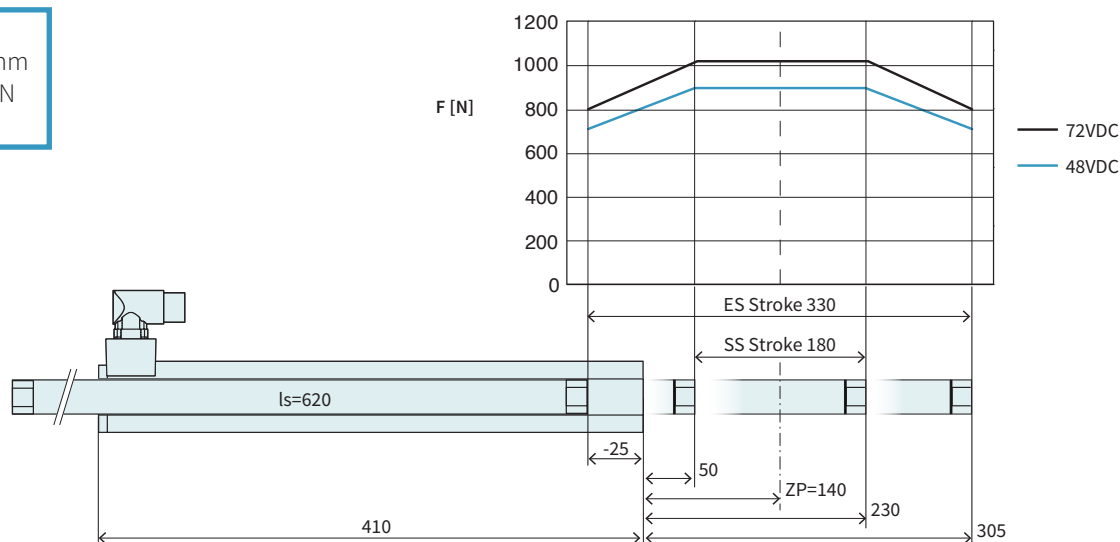
Item	Description	Item-No.
PS01-48x360F-C	Stator with IP67 Connector M23/9(m)	0150-1269
PL01-28x500/420	Slider 'standard'	0150-1382
PL02-28x500/420	Slider 'heavy duty'	0150-1413
PL01-28x500/420-L*	Slider 'standard L'	0150-1480
PL01-27x500/420*	Slider 'high clearance'	0150-1469

* With this slider, the motor specifications above change.

P01-48x360F/180x330

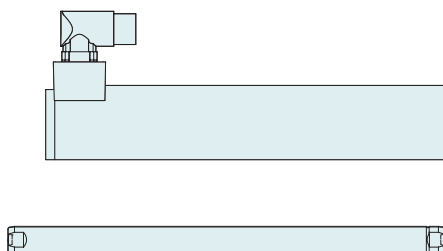
Max. Stroke: 330 mm
Peak Force: 1020 N

Dimensions in mm



Technical Data P01-48x360F/180x330

Stroke			
Standard Stroke (SS)	mm (in)	180 (7.08)	
Extended Stroke (ES)	mm (in)	330 (12.99)	
Force			
Max. Force @ 48VDC	N (lbf)	905 (204)	
Max. Force @ 72VDC	N (lbf)	1020 (230)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	200 / 340 / - (45 / 77 / -)	
Max. Border Force relative	%	79	
Force Constant	N/A _{pk} (lbf/A _{pk})	32 (7.19)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.3 (53.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2 (80.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.35	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	28.2	
Max. Current @ 72VDC	A _{pk}	31.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	6.2 / 11 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.72 / 0.24 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1000 / 340 / -	
Mechanical Data			
Slider Length	mm (in)	620 (24)	
Slider Mass	g (lb)	2720 (5.98)	



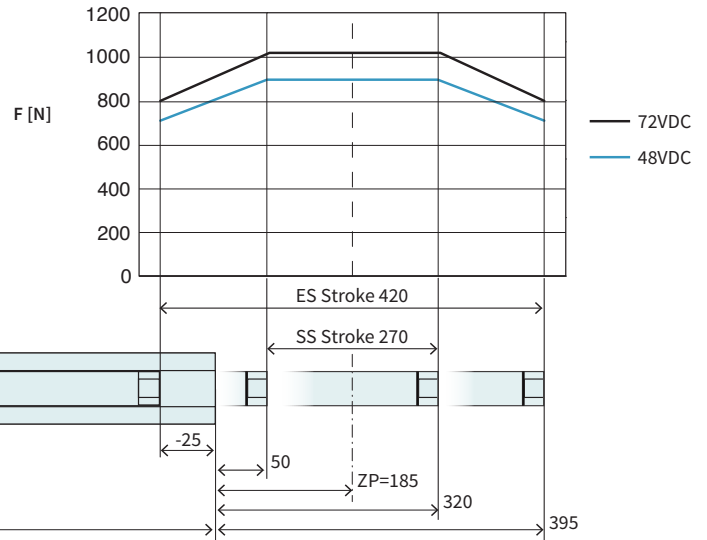
Item	Description	Item-No.
PS01-48x360F-C	Stator with IP67 Connector M23/9(m)	0150-1269
PL01-28x620/540	Slider 'standard'	0150-1383
PL02-28x620/540	Slider 'heavy duty'	0150-1414
PL01-28x620/540-L*	Slider 'standard L'	0150-1481
PL01-27x620/540*	Slider 'high clearance'	0150-1470

* With this slider, the motor specifications above change.

P01-48x360F/270x420

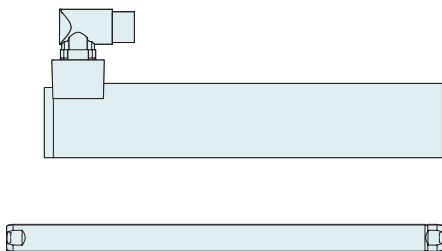
3

Max. Stroke: 420 mm
Peak Force: 1020 N



Dimensions in mm

Technical Data P01-48x360F/270x420				
Stroke				
Standard Stroke (SS)	mm (in)	270	(10.59)	
Extended Stroke (ES)	mm (in)	420	(16.49)	
Force				
Max. Force @ 48VDC	N (lbf)	905	(204)	
Max. Force @ 72VDC	N (lbf)	1020	(230)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	200 / 340 / -	(45 / 77 / -)	
Max. Border Force relative	%	79		
Force Constant	N/A _{pk} (lbf/A _{pk})	32	(7.19)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)	1.3	(53.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2	(80.9)	
Position Detection				
Repeatability	mm (in)	±0.05	(±0.002)	
Linearity	%	± 0.3		
Electrical Data				
Max. Current @ 48VDC	A _{pk}	28.2		
Max. Current @ 72VDC	A _{pk}	31.9		
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	6.2 / 11 / -		
Thermal Data				
Max. Winding Temperature (Sensor)	°C	90		
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.72 / 0.24 / -		
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1000 / 340 / -		
Mechanical Data				
Slider Length	mm (in)	710	(28)	
Slider Mass	g (lb)	3140	(6.91)	



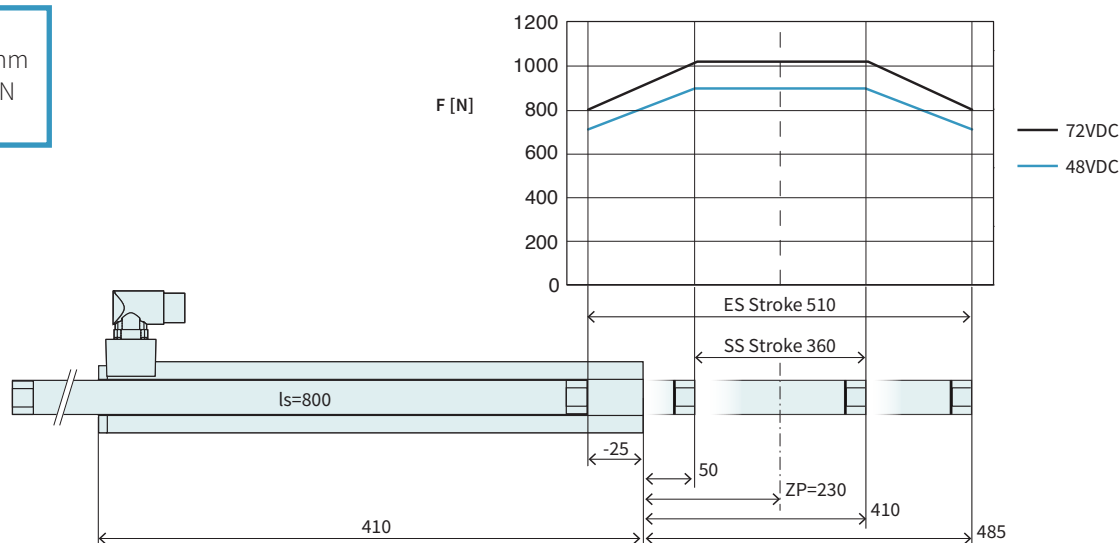
Item	Description	Item-No.
PS01-48x360F-C	Stator with IP67 Connector M23/9(m)	0150-1269
PL01-28x710/630	Slider 'standard'	0150-1384
PL02-28x710/630	Slider 'heavy duty'	0150-1415
PL01-28x710/630-L*	Slider 'standard L'	0150-1482
PL01-27x710/630*	Slider 'high clearance'	0150-1471

* With this slider, the motor specifications above change.

P01-48x360F/360x510

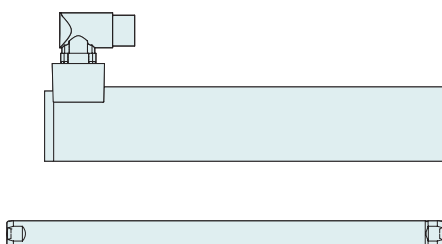
Max. Stroke: 510 mm
Peak Force: 1020 N

Dimensions in mm



Technical Data P01-48x360F/360x510

Stroke			
Standard Stroke (SS)	mm (in)	360 (14.19)	
Extended Stroke (ES)	mm (in)	510 (20.1)	
Force			
Max. Force @ 48VDC	N (lbf)	905 (204)	
Max. Force @ 72VDC	N (lbf)	1020 (230)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	200 / 340 / - (45 / 77 / -)	
Max. Border Force relative	%	79	
Force Constant	N/A _{pk} (lbf/A _{pk})	32 (7.19)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.3 (53.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2 (80.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.25	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	28.2	
Max. Current @ 72VDC	A _{pk}	31.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	6.2 / 11 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.72 / 0.24 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1000 / 340 / -	
Mechanical Data			
Slider Length	mm (in)	800 (31)	
Slider Mass	g (lb)	3560 (7.83)	

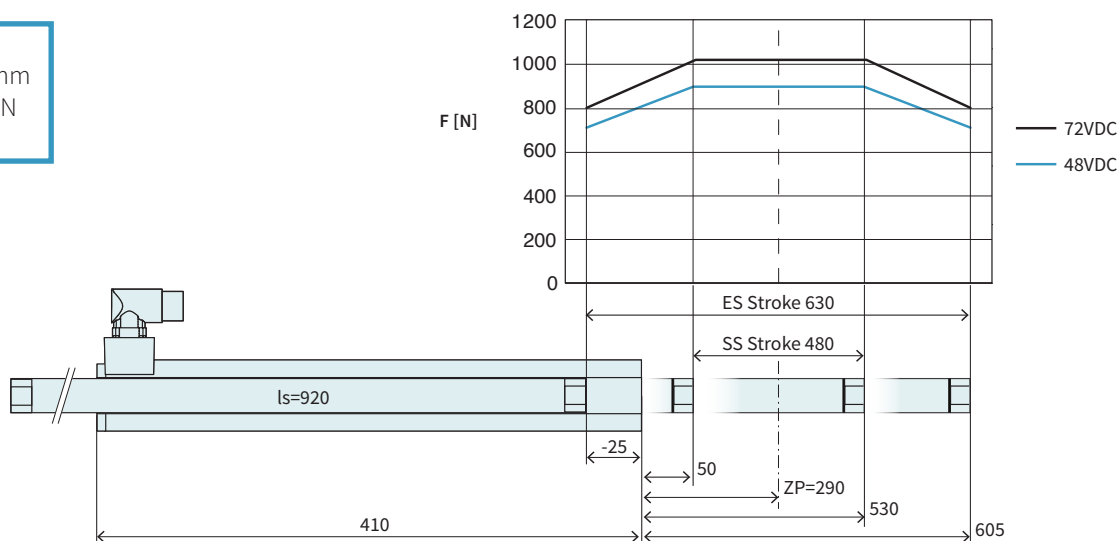


Item	Description	Item-No.
PS01-48x360F-C	Stator with IP67 Connector M23/9(m)	0150-1269
PL01-28x800/720	Slider 'standard'	0150-1385
PL02-28x800/720	Slider 'heavy duty'	0150-1416
PL01-28x800/720-L*	Slider 'standard L'	0150-1483

* With this slider, the motor specifications above change.

P01-48x360F/480x630

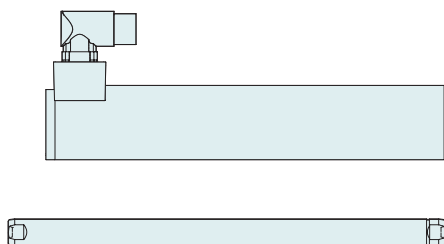
Max. Stroke: 630 mm
Peak Force: 1020 N



Dimensions in mm

Technical Data P01-48x360F/480x630

Stroke			
Standard Stroke (SS)	mm (in)	480	(18.89)
Extended Stroke (ES)	mm (in)	630	(24.8)
Force			
Max. Force @ 48VDC	N (lbf)	905	(204)
Max. Force @ 72VDC	N (lbf)	1020	(230)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	200 / 340 / -	(45 / 77 / -)
Max. Border Force relative	%	79	
Force Constant	N/A _{pk} (lbf/A _{pk})	32	(7.19)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.3	(53.9)
Max. Velocity @ 72VDC	m/s (in/s)	2	(80.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	28.2	
Max. Current @ 72VDC	A _{pk}	31.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	6.2 / 11 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.72 / 0.24 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1000 / 340 / -	
Mechanical Data			
Slider Length	mm (in)	920	(36)
Slider Mass	g (lb)	4120	(9.06)

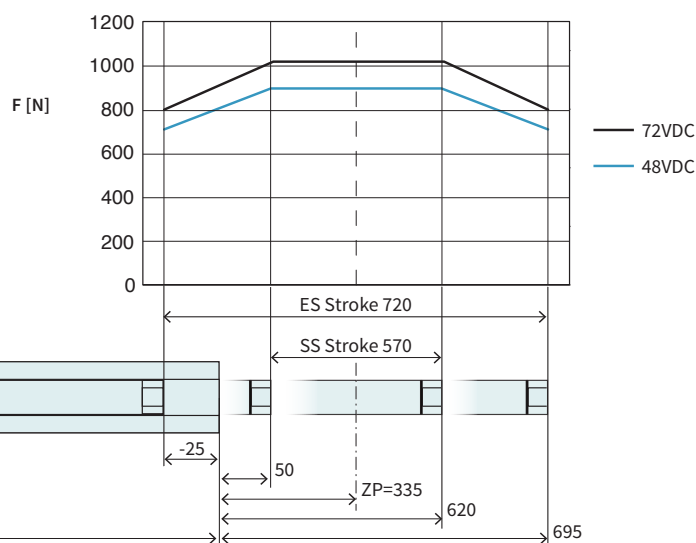


Item	Description	Item-No.
PS01-48x360F-C	Stator with IP67 Connector M23/9(m)	0150-1269
PL01-28x920/840	Slider 'standard'	0150-1386
PL02-28x920/840	Slider 'heavy duty'	0150-1417
PL01-28x920/840-L*	Slider 'standard L'	0150-1484

* With this slider, the motor specifications above change.

P01-48x360F/570x720

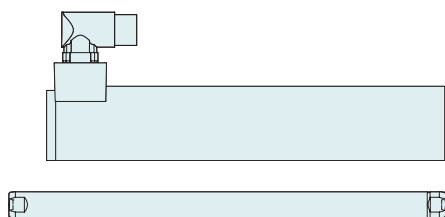
Max. Stroke: 720 mm
Peak Force: 1020 N



Dimensions in mm

Technical Data P01-48x360F/570x720

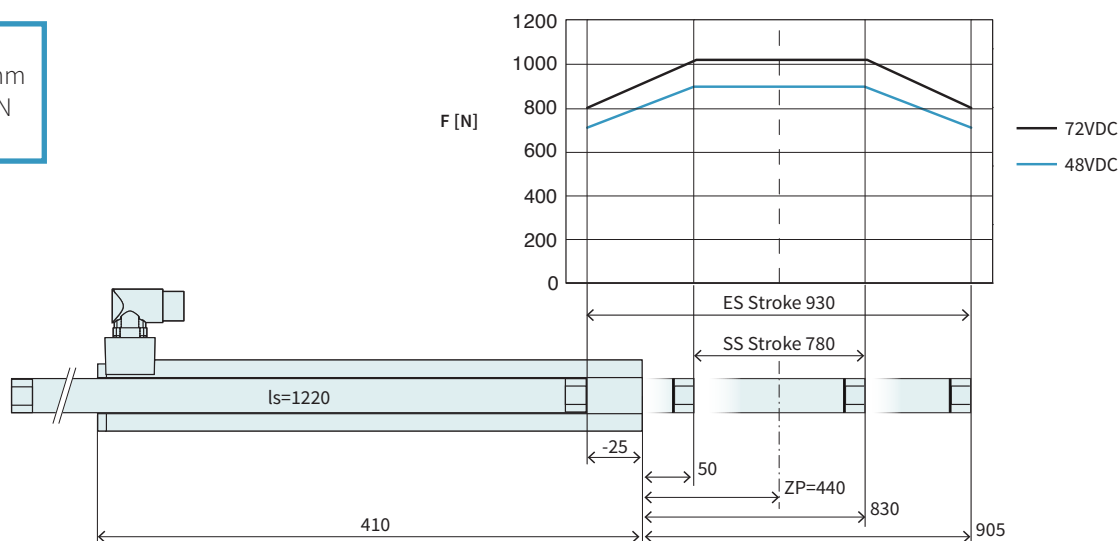
Stroke			
Standard Stroke (SS)	mm (in)	570 (22.39)	
Extended Stroke (ES)	mm (in)	720 (28.3)	
Force			
Max. Force @ 48VDC	N (lbf)	905 (204)	
Max. Force @ 72VDC	N (lbf)	1020 (230)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	200 / 340 / - (45 / 77 / -)	
Max. Border Force relative	%	79	
Force Constant	N/A _{pk} (lbf/A _{pk})	32 (7.19)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.3 (53.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2 (80.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	28.2	
Max. Current @ 72VDC	A _{pk}	31.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	6.2 / 11 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.72 / 0.24 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1000 / 340 / -	
Mechanical Data			
Slider Length	mm (in)	1010 (40)	
Slider Mass	g (lb)	4540 (10)	



Item	Description	Item-No.
PS01-48x360F-C	Stator with IP67 Connector M23/9(m)	0150-1269
PL01-28x1010/930	Slider 'standard'	0150-1387

P01-48x360F/780x930

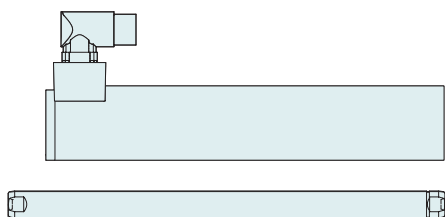
Max. Stroke: 930 mm
Peak Force: 1020 N



Dimensions in mm

Technical Data P01-48x360F/780x930

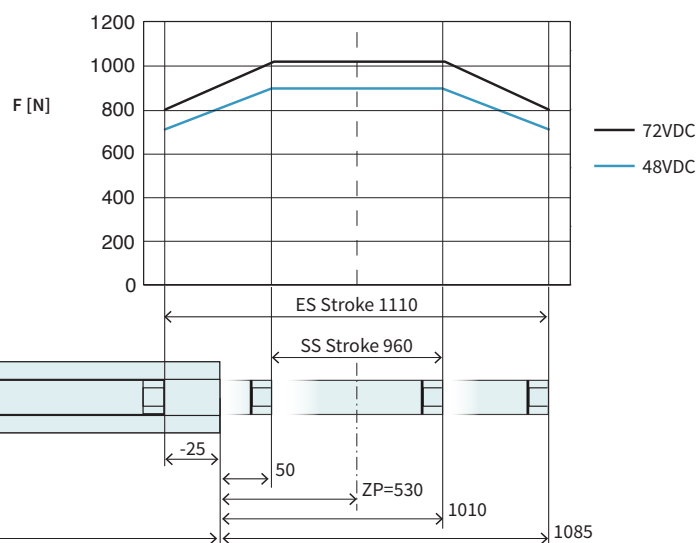
Stroke				
Standard Stroke (SS)	mm	(in)	780	(30.69)
Extended Stroke (ES)	mm	(in)	930	(36.6)
Force				
Max. Force @ 48VDC	N	(lbf)	905	(204)
Max. Force @ 72VDC	N	(lbf)	1020	(230)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	200 / 340 / -	(45 / 77 / -)
Max. Border Force relative	%		79	
Force Constant	N/A _{pk}	(lbf/A _{pk})	32	(7.19)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.3	(53.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2	(80.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		28.2	
Max. Current @ 72VDC	A _{pk}		31.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		6.2 / 11 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.72 / 0.24 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1000 / 340 / -	
Mechanical Data				
Slider Length	mm	(in)	1220	(48)
Slider Mass	g	(lb)	5510	(12.12)



Item	Description	Item-No.
PS01-48x360F-C	Stator with IP67 Connector M23/9(m)	0150-1269
PL01-28x1220/1140	Slider 'standard'	0150-1388

P01-48x360F/960x1110

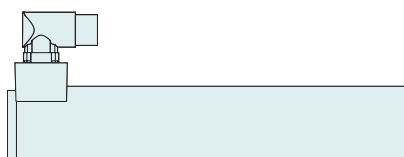
Max. Stroke: 1110 mm
Peak Force: 1020 N



Dimensions in mm

Technical Data P01-48x360F/960x1110

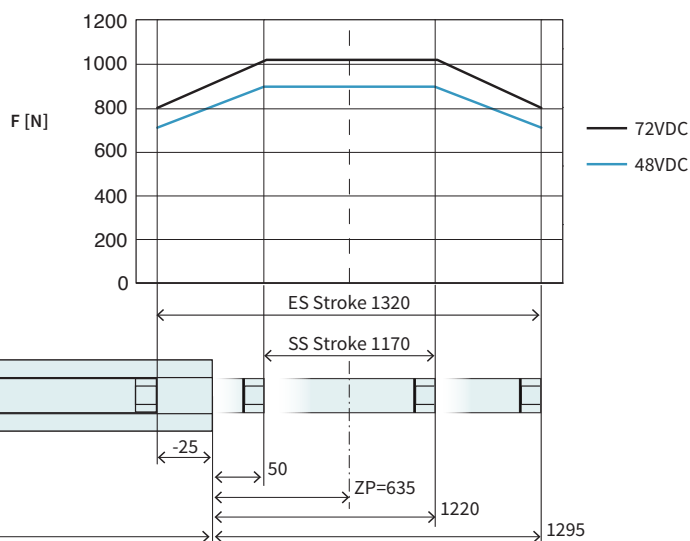
Stroke			
Standard Stroke (SS)	mm (in)	960 (37.79)	
Extended Stroke (ES)	mm (in)	1110 (43.7)	
Force			
Max. Force @ 48VDC	N (lbf)	905 (204)	
Max. Force @ 72VDC	N (lbf)	1020 (230)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	200 / 340 / - (45 / 77 / -)	
Max. Border Force relative	%	79	
Force Constant	N/A _{pk} (lbf/A _{pk})	32 (7.19)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.3 (53.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2 (80.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	28.2	
Max. Current @ 72VDC	A _{pk}	31.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	6.2 / 11 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.72 / 0.24 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1000 / 340 / -	
Mechanical Data			
Slider Length	mm (in)	1400 (55)	
Slider Mass	g (lb)	6350 (13.97)	



Item	Description	Item-No.
PS01-48x360F-C	Stator with IP67 Connector M23/9(m)	0150-1269
PL01-28x1400/1320	Slider 'standard'	0150-1389

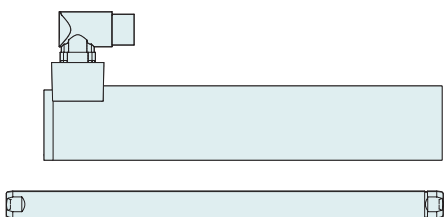
P01-48x360F/1170x1320

Max. Stroke: 1320 mm
Peak Force: 1020 N



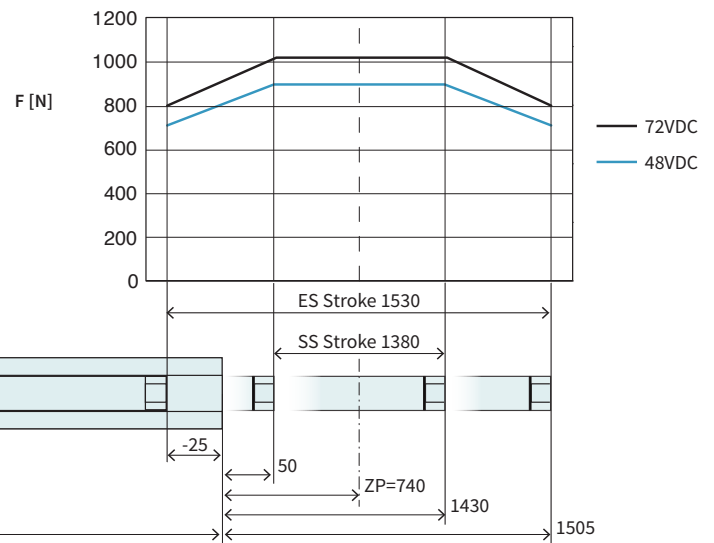
Dimensions in mm

Technical Data P01-48x360F/1170x1320				
Stroke				
Standard Stroke (SS)	mm (in)	1170	(46.1)	
Extended Stroke (ES)	mm (in)	1320	(51.99)	
Force				
Max. Force @ 48VDC	N (lbf)	905	(204)	
Max. Force @ 72VDC	N (lbf)	1020	(230)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	200 / 340 / -	(45 / 77 / -)	
Max. Border Force relative	%	79		
Force Constant	N/A _{pk} (lbf/A _{pk})	32	(7.19)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)	1.3	(53.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2	(80.9)	
Position Detection				
Repeatability	mm (in)	±0.05	(±0.002)	
Linearity	%	± 0.15		
Electrical Data				
Max. Current @ 48VDC	A _{pk}	28.2		
Max. Current @ 72VDC	A _{pk}	31.9		
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	6.2 / 11 / -		
Thermal Data				
Max. Winding Temperature (Sensor)	°C	90		
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.72 / 0.24 / -		
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1000 / 340 / -		
Mechanical Data				
Slider Length	mm (in)	1610	(63)	
Slider Mass	g (lb)	7330	(16.13)	



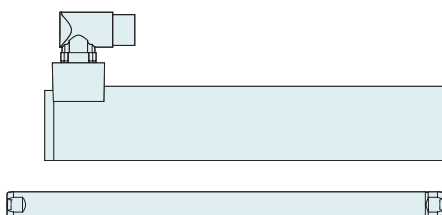
Item	Description	Item-No.
PS01-48x360F-C	Stator with IP67 Connector M23/9(m)	0150-1269
PL01-28x1610/1530	Slider 'standard'	0150-1390

Max. Stroke: 1530 mm
Peak Force: 1020 N



Dimensions in mm

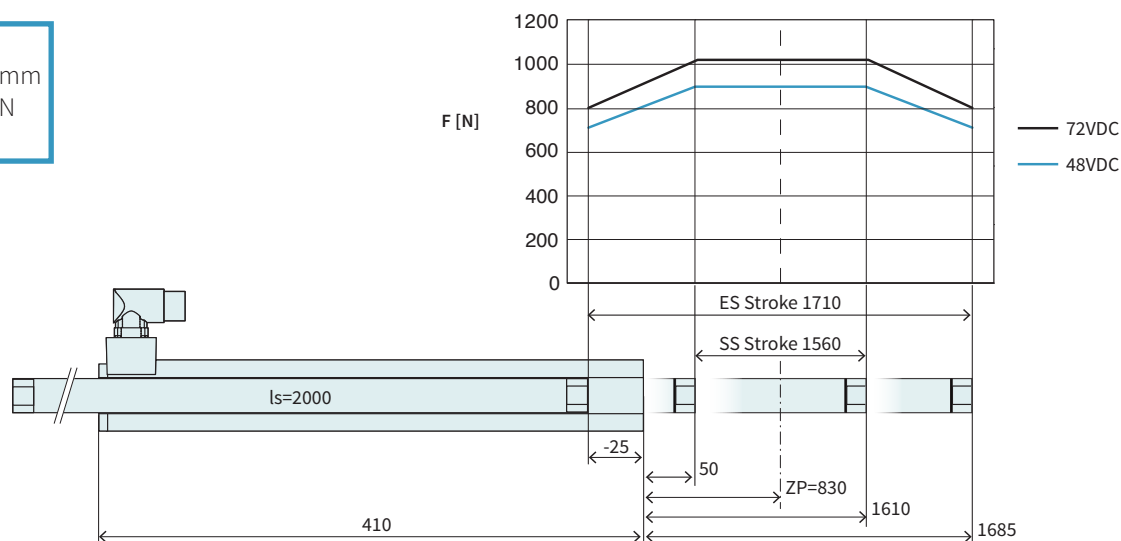
Technical Data P01-48x360F/1380x1530				
Stroke				
Standard Stroke (SS)	mm	(in)	1380	(54.29)
Extended Stroke (ES)	mm	(in)	1530	(60.2)
Force				
Max. Force @ 48VDC	N	(lbf)	905	(204)
Max. Force @ 72VDC	N	(lbf)	1020	(230)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	200 / 340 / -	(45 / 77 / -)
Max. Border Force relative	%		79	
Force Constant	N/A _{pk} (lbf/A _{pk})		32	(7.19)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.3	(53.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2	(80.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		28.2	
Max. Current @ 72VDC	A _{pk}		31.9	
Max. Cont. Current [Passive cooling /Fan / Fluid]	A _{pk}		6.2 / 11 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.72 / 0.24 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1000 / 340 / -	
Mechanical Data				
Slider Length	mm	(in)	1820	(72)
Slider Mass	g	(lb)	8300	(18.26)



Item	Description	Item-No.
PS01-48x360F-C	Stator with IP67 Connector M23/9(m)	0150-1269
PL01-28x1820/1740	Slider 'standard'	0150-1395

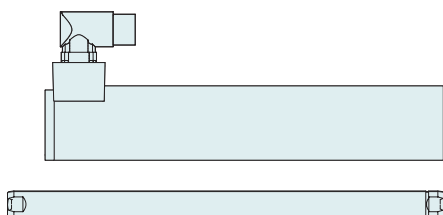
P01-48x360F/1560x1710

Max. Stroke: 1710 mm
Peak Force: 1020 N



Technical Data P01-48x360F/1560x1710

Stroke				
Standard Stroke (SS)	mm	(in)	1560	(61.39)
Extended Stroke (ES)	mm	(in)	1710	(67.29)
Force				
Max. Force @ 48VDC	N	(lbf)	905	(204)
Max. Force @ 72VDC	N	(lbf)	1020	(230)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	200 / 340 / -	(45 / 77 / -)
Max. Border Force relative	%		79	
Force Constant	N/A _{pk}	(lbf/A _{pk})	32	(7.19)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.3	(53.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2	(80.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		28.2	
Max. Current @ 72VDC	A _{pk}		31.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		6.2 / 11 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.72 / 0.24 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1000 / 340 / -	
Mechanical Data				
Slider Length	mm	(in)	2000	(79)
Slider Mass	g	(lb)	9140	(20.11)



Item	Description	Item-No.
PS01-48x360F-C	Stator with IP67 Connector M23/9(m)	0150-1269
PL01-28x2000/1920	Slider 'standard'	0150-1396

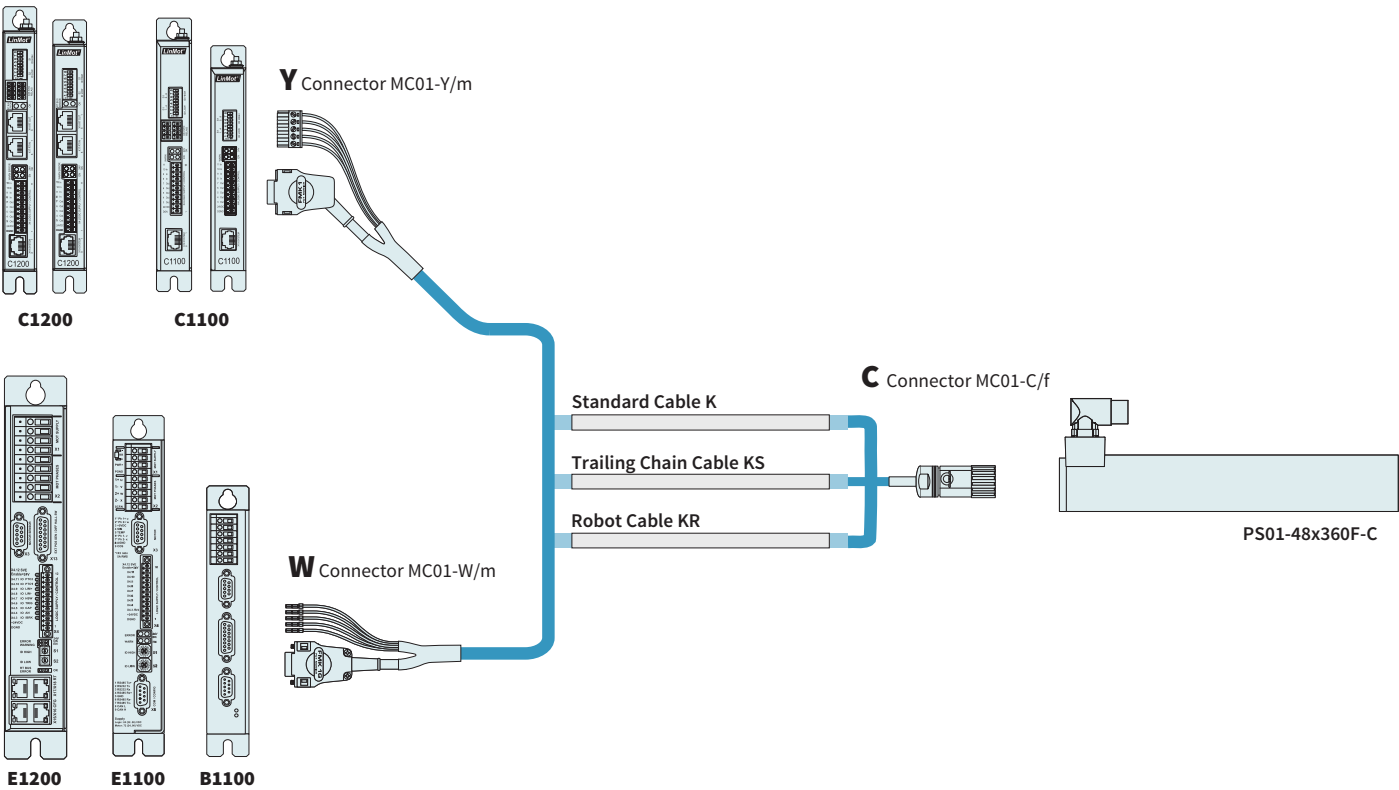
Linear Guides H01



HM01-48x360/90	Linear Module 48x360 with 90 mm Stroke			
→	H-Guide	H01-48x370/90	H-Guide for P01-48x360, Stroke max 90 mm	0150-5240
		H01-48x370/90-GF	H-Guide for P01-48x360, Stroke max 90 mm	0150-5243
	Stator	PS01-48x360F-C	Stator with IP67 Connector M23/9(m)	0150-1269
→	Slider	PL01-28x500/420	Slider Standard	0150-1382
HM01-48x360/210	Linear Module 48x360 with 210 mm Stroke			
→	H-Guide	H01-48x370/210	H-Guide for P01-48x360, Stroke max 210 mm	0150-5241
		H01-48x370/210-GF	H-Guide for P01-48x360, Stroke max 210 mm	0150-5244
→	Stator	PS01-48x360F-C	Stator with IP67 Connector M23/9(m)	0150-1269
→	Slider	PL01-28x620/540	Slider Standard	0150-1383
HM01-48x360/300	Linear Module 48x360 with 300 mm Stroke			
→	H-Guide	H01-48x370/300	H-Guide for P01-48x360, Stroke max 300 mm	0150-5242
		H01-48x370/300-GF	H-Guide for P01-48x360, Stroke max 300 mm	0150-5245
→	Stator	PS01-48x360F-C	Stator with IP67 Connector M23/9(m)	0150-1269
→	Slider	PL01-28x710/630	Slider Standard	0150-1383
HM01-48x360/510	Linear Module 48x360 with 510 mm Stroke			
→	H-Guide	H01-48x370/510	H-Guide for P01-48x360, Stroke max 510 mm	0150-5252
		H01-48x370/510-GF	H-Guide for P01-48x360, Stroke max 510 mm	on request
→	Stator	PS01-48x360F-C	Stator with IP67 Connector M23/9(m)	0150-1269
→	Slider	PL01-28x920/840	Slider Standard	0150-1386
Accessories				
→	Brake	HB01-48	Pneumatic Brake for H01-48/1000N(4-6Bar)	0150-5098
	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051
	MagSpring	MF01-37/H37	Flange MagSpring 37 / H-Guide 23/37/48	0250-2307
		MA01-37/H48	Adapter MagSpring 37 / H-Guide 48	0250-0118
	Sliding block	PFN01-8/M6	Sliding block 8mm, M6 thread	0250-3245
	Centering sleeve	HC01-11/05	Centering sleeve D11x5 mm	0150-3252
→	Wipers	HA01-48/28-F	Wiper for H01-48 guides, front side	0150-5109

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

Motor Cable



ORDERING INFORMATION

STANDARD CABLE		
Item	Description	Item-No.
K15-W/C-2	Motor Cable W/C, 2 m	0150-1811
K15-W/C-4	Motor Cable W/C, 4 m	0150-1801
K15-W/C-6	Motor Cable W/C, 6 m	0150-1802
K15-W/C-8	Motor Cable W/C, 8 m	0150-1803
K15-W/C-	Motor Cable W/C, Custom length	0150-3131
K15-Y/C-2	Motor Cable Y/R, 2 m	0150-2429
K15-Y/C-4	Motor Cable Y/R, 4 m	0150-2430
K15-Y/C-6	Motor Cable Y/R, 6 m	0150-2431
K15-Y/C-8	Motor Cable Y/R, 8 m	0150-2432
K15-Y-Fe/C-	Motor Cable Y-Fe/R, Custom length	0150-3506

TRAILING CHAIN CABLE

Item	Description	Item-No.
KS10-W/C-4	Trailing Chain Cable W/C, 4 m	0150-1807
KS10-W/C-6	Trailing Chain Cable W/C, 6 m	0150-1858
KS10-W/C-8	Trailing Chain Cable W/C, 8 m	0150-1808
KS10-W/C-	Trailing Chain Cable W/C, Custom length	0150-3139
KS10-Y/C-4	Trailing Chain Cable Y/C, 4 m	0150-2439
KS10-Y/C-6	Trailing Chain Cable Y/C, 6 m	0150-2440
KS10-Y/C-8	Trailing Chain Cable Y/C, 8 m	0150-2441
KS10-Y/C-	Trailing Chain Cable Y-Fe/C, Custom length	0150-3511

ROBOT CABLE

Item	Description	Item-No.
KR10-W/C-	Robot Cable KR10-W/C, Custom length	0150-3199
KR10-Y-Fe/C-	Robot Cable KR10-Y-Fe/C, Custom length	0150-3515

CONNECTOR & CABLE (INDIVIDUAL)

Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-C/f	Motor Connector C/f	0150-3080
MC01-P/f	Motor Connector P/f	0150-3021
K15-04/05	Motor Cable per m	0150-1978
KS10-04/05	Trailing Chain Cable per m	0150-1977
KR10-04/05	Robot Cable per m	0150-1830

MOTOR FLANGES



Item	Description	Item-No.
PF01-48x346	Flange 48x120 mm	0150-2145

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37, B01-37 and PF02-37	0150-5051

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

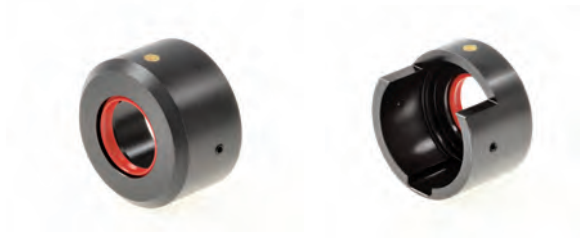
SLIDER MOUNTING



Item	Description	Item-No.
PLF01-28	Fixed Bearing Set for 27 mm and 28mm Slider	0150-3087
PLF01-28-SS	Fixed Bearing Set for 27 mm and 28 mm Slider, Stainless steel	0150-3297
PLL01-27	Floating Bearing for PL01-27 Slider	0150-3294
PLL01-28	Floating Bearing for PL01-28 Slider	0150-3094
PLM01-28-MK	Mounting Kit for PL01-28 Slider	0150-3095

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

WIPERS



Item	Description	Item-No.
PA01-48/27-F	Wipers for PS01-48x...	0150-3228
PA01-48/27-R	Wipers for PS01-48x...-C	0150-3229
PA01-48/28-F	Wipers for PS01-48x...	0150-3127
PA01-48/28-R	Wipers for PS01-48x...-C	0150-3202

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for inc. strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D-Encoder	Encoder Cable (Length in m)	0150-3166
KS025-D/D15-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P10



The power packages of the LinMot motor family offer the best possible flexibility in the control concept and the stroke range.

Product Description

4

The linear motors of the P10 series are the most powerful motors in the LinMot product family. With their higher performance and peak forces of up to 2700 N, the motors place higher demands on the drive units and servo drives. For this reason, LinMot has developed a completely new concept and relies exclusively on the 3x400VAC technology and servo drives with direct power supply from the grid for this motor series. Depending on the application, the motors can also be operated with rectified 1x230VAC.

The built-in standard encoders ensure better integration of the drives into external control concepts. The motors can thus be controlled by drives of any manufacturer without problems. As with the smaller drives, the motors are equipped with rotatable IP67 plugs. For the different stroke lengths there is a fixed, systematically ordered slider program.



P10-54 Linear Motors

Compact, tubular linear motors with medium power output for dynamic positioning tasks or to replace pneumatics. Optionally equipped with a 1Vpp sin/cos encoder or an A/B incremental encoder, the motors can be controlled by any manufacturer's drives. The P10-54 motors are available in 4 sizes, with peak forces from 350 to 900 N. The extensive selection of sliders produces a closely tiered range of strokes, with a maximum stroke of up to 2000 mm.



P10-70 Linear Motors

The most powerful LinMot motors for dynamic linear motions. They can be actuated by any manufacturer's drives or by the LinMot E1400 Servo Drive. The 70-series motors are available in 5 sizes, with peak forces from 550 to 2700 N. The maximum available stroke is 1770 mm. The motor data, with accelerations from 975 m/s² and a maximum speed of over 7 m/s, leave nothing to be desired in terms of dynamics.

FREELY POSITIONABLE

LinMot linear motors can be freely positioned. With absolute or relative movement commands, they can move to any desired position in the stroke range. Since the LinMot linear drive is a closed-loop system, not only the end positions are monitored, but also deviations in position during travel. This allows, among other things, precise specification of travel speeds, acceleration and braking ramps, and travel through curved paths.

HIGH AND CONTROLLED DYNAMICS

Max. acceleration values over 900 m/s² and travel speeds up to 10 m/s allow cyclical motion sequences of several Hertz.

For handling applications with sensitive products, such as transporting wafers in semiconductor production, very gentle, smooth motions with suitable accelerations can be obtained.

PROCESS STABILITY

Since not only the end positions, but also speed and acceleration are controlled and monitored, motions that are programmed once are carried out the same way over the entire life of the machine.

3X400 VAC TECHNOLOGY

LinMot is using 3x400VAC technology for the first time with this series of motors. This has increased the dynamism of the drives several times over, so that accelerations of well over 900 m/s² can be achieved. The three-phase alternating current allows the motors to be even better integrated in the machine environment and used more effectively as a component.

WORKS WITH THIRD-PARTY DRIVES

The P10 series of motors have been deliberately equipped with standard encoders. The position signals are output by an analog 1Vpp sin/cos sensor or by a digital A/B incremental encoder. Both types can be read by nearly all third-party drives, thus enabling optimal integration in existing control concepts. In addition to the position feedback, the outgoing temperature signals can also be interpreted by other drives without a problem. Either PTC/PT1000 or KTY sensors are installed for this purpose.

PLUGS FOR SENSORS AND POWER

Every designer is familiar with the problem of routing motor cables inside machinery. For this reason, LinMot Series P10 linear motors are available with two separate, robust, rotating plug connections with IP67 protection for signals and for power.

SYNCHRONIZATION

For synchronous machines, the linear motor can be synchronized to the main shaft. By replacing mechanical cam discs with LinMot linear motors, for example, great variations can be achieved, with format changeovers at the push of a button.

OVERLOAD PROTECTION

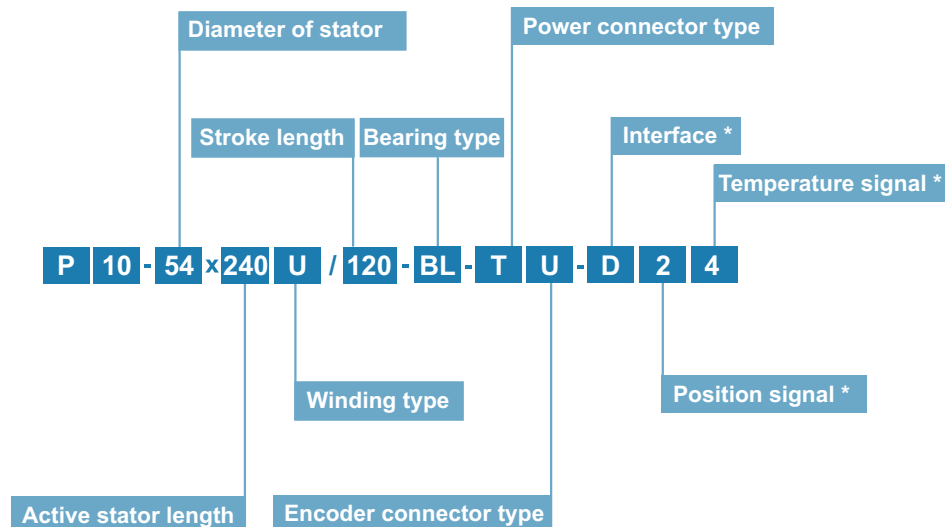
There are no mechanical components for force transfer that could be damaged in a crash or stall condition in a linear motor. Complex, expensive designs to protect gearboxes, gears, and shafts are thus eliminated.

If the linear motor stalls, it acts like a pneumatic cylinder and tries to reach the target position with maximum force. The following error monitor in the drive can, however, immediately recognize a stall condition. Temperature sensors integrated in the stator prevent the drive from overloading in any case.

LONG LIFESPAN

Since the linear motion is generated purely magnetically, and no mechanical force transmission takes place, even extremely dynamic applications can be implemented with a long lifespan.

Type Code



For explanations of the terms, please refer to the section "Glossary".

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LINEAR MOTORS P10-54x120U



- ✓ 230VAC and 3 x 400VAC technology
- ✓ Peak forces up to 335 N
- ✓ LinMot Encoder or Incremental Encoder
- ✓ Extremely high dynamic
- ✓ Rotating push-pull TWIN connector for power and encoder cables
- ✓ Can also be controlled by standard third-party servo drives

LINEAR MOTORS P10-54x120U

Technical Data **397**

Motor Specifications

P10-54x120U/70 **402**

P10-54x120U/130 **403**

P10-54x120U/220 **404**

P10-54x120U/340 **405**

P10-54x120U/430 **406**

P10-54x120U/520 **407**

P10-54x120U/640 **408**

P10-54x120U/730 **409**

P10-54x120U/940 **410**

P10-54x120U/1120 **411**

P10-54x120U/1330 **412**

P10-54x120U/1540 **413**

P10-54x120U/1720 **414**

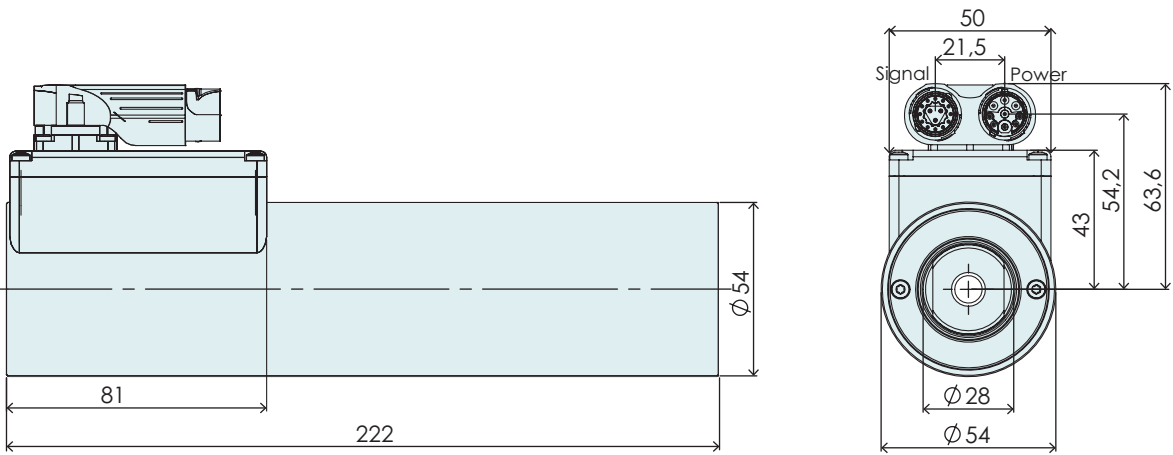
Accessories **415**



MOTOR FAMILY P10-54x120U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1720	(67.7)
Force				
Max. Force @ 1x230VAC	N	(lbf)	335	(75.4)
Max. Force @ 3x400VAC	N	(lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	60.8	(13.7)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.3	(289.9)
Position Detection				
Position Resolution	mm	(in)	0.007	(0.0003)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.99 / 1.3 / 1.8	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	49.7	(1.26)
Terminal Resistance 25 °C / 120 °C	Ohm		14 / 19	
Terminal Inductivity	mH		11	
Magnetic Period	mm	(in)	60	(2.35)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1100 / 600 / 310	
Mechanical Data				
Stator Diameter	mm	(in)	54	(2.1)
Stator Length	mm	(in)	222	(8.7)
Stator Mass	g	(lb)	1730	(3.8)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	350 - 2000	(14 - 79)
Slider Mass	g	(lb)	1460 - 9140	(3.21 - 20.1)
IP Code			IP 65	

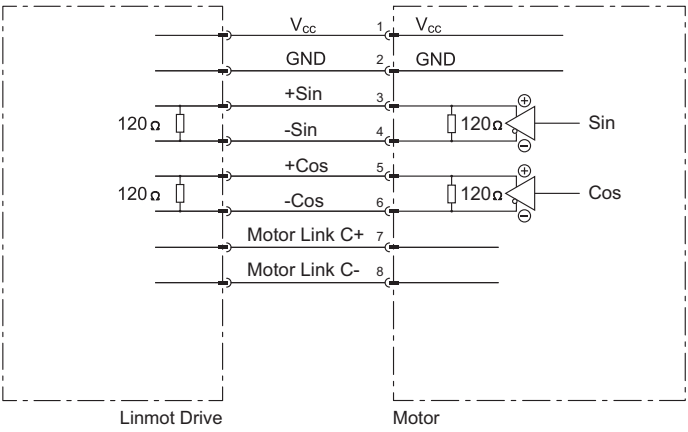
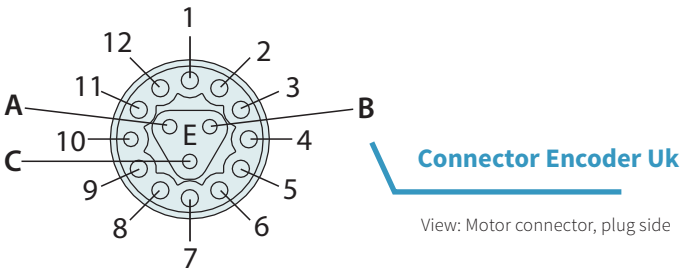
STATOR



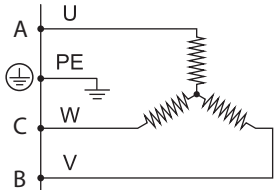
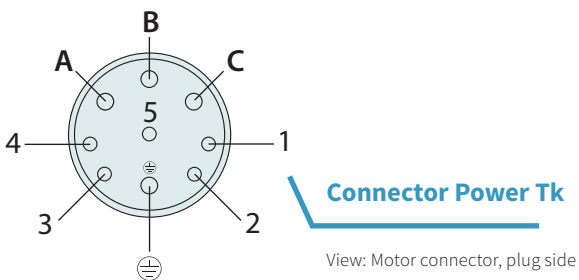
Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782

CONNECTOR PS10-54x120U-BL-TU

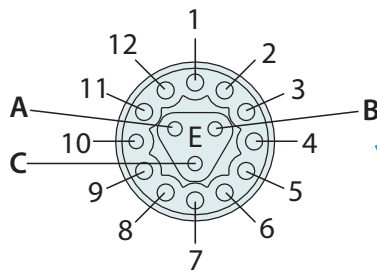
Motor Connector Wiring		Connector Encoder Uk	Wire Color Motor Cable
+Vcc	Supply	1	red
GND	Supply	2	black
Sin+	Encoder	3	yellow
Sin-	Encoder	4	orange
Cos+	Encoder	5	green
Cos-	Encoder	6	blue
Mot. Link C+	Communication	7	pink
Mot. Link C-	Communication	8	grey
n. c.	n. c.	9	n. c.
n. c.	n. c.	10	n. c.
n. c.	n. c.	11	n. c.
n. c.	n. c.	12	n. c.
n. c.	n. c.	A	n. c.
n. c.	n. c.	B	n. c.
n. c.	n. c.	C	n. c.



Motor Connector Wiring	Connector Power Tk	Wire Color Motor Cable
Phase U	A	red
PE	PE	yellow-green
Phase V	B	blue
Phase W	C	green
n. c.	1	n. c.
n. c.	2	n. c.
n. c.	3	n. c.
n. c.	4	n. c.
n. c.	5	n. c.

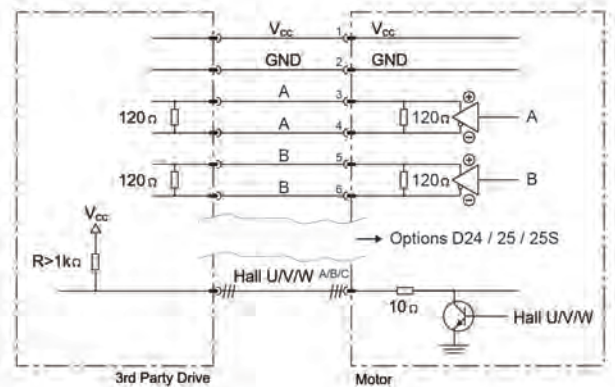


CONNECTOR PS10-54x120U-BL-TU-D24 / 25 / 25S

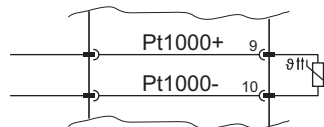


Connector Encoder Uk

View: Motor connector, plug side

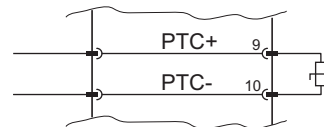


PS10-54x120U-BL-TU-D24



Pt1000 Characteristic
emulated

PS10-54x120U-BL-TU-D25 PS10-54x120U-BL-TU-D25S



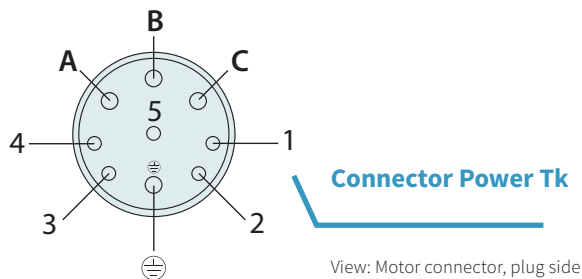
PTC (switching type)
350 Ω / 18 kΩ emulated¹

Motor Connector Wiring				
PS10-54x120U-BL-TU-D24	PS10-54x120U-BL-TU-D25 PS10-54x120U-BL-TU-D25S	Function	Connector Encoder Uk	Wire Color Motor Cable
+Vcc	+Vcc	Supply	1	white
GND	GND	Supply	2	brown
A	A	Encoder	3	grey
/A	/A	Encoder	4	pink
B	B	Encoder	5	blue
/B	/B	Encoder	6	red
-	-	-	7	green (do not connect)
-	-	-	8	yellow (do not connect)
Pt1000+	PTC+	Temp. ²	9	yellow-brown
Pt1000-	PTC-	Temp. ²	10	white-yellow
REF+	REF+	Encoder	11	black
REF-	REF-	Encoder	12	purple
Hall U	Hall U	Encoder	A	grey-red
Hall V	Hall V	Encoder	B	red-blue
Hall W	Hall W	Encoder	C	white-green

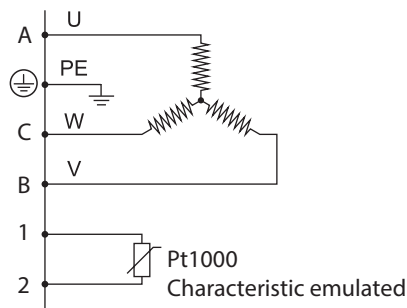
1) under 350 Ω = no fault, over 18 kΩ = Fault

2) The temperature evaluation circuit must be powered from the encoder supply and must be at the same potential.

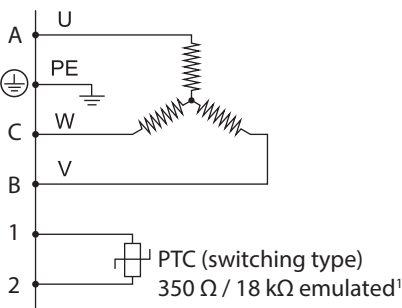
The grounds of the temperature evaluation circuit and the encoder have to be connected. The encoder must have been powered on for at least 50 ms, before valid temperatures can be measured. If the encoder is powered off, 20k Ohms are measured between Pins 9 and 10.



PS10-54x120U-BL-TU-D24



PS10-54x120U-BL-TU-D25
PS10-54x120U-BL-TU-D25S

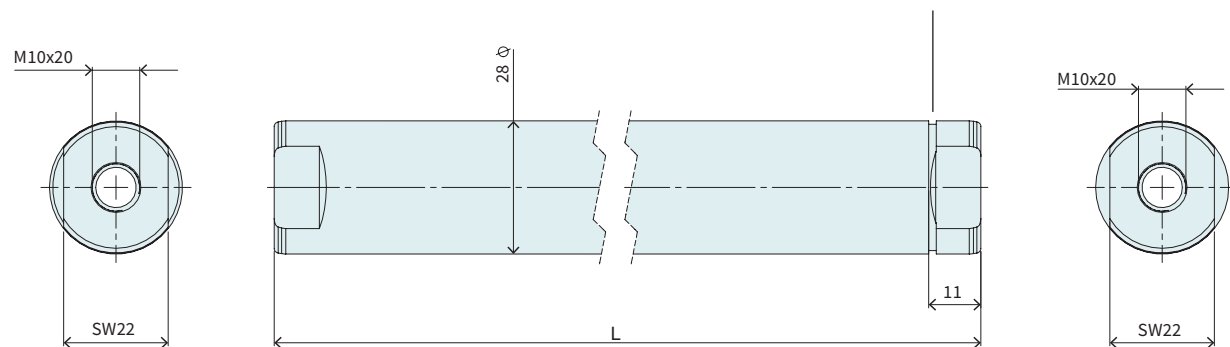


Motor Connector Wiring			
PS10-54x120U-BL-TU-D24	PS10-54x120U-BL-TU-D25 PS10-54x120U-BL-TU-D25S	Connector Power Tk	Wire Color Motor Cable
Phase U	Phase U	A	red
PE	PE	PE	yellow-green
Phase V	Phase V	B	blue
Phase W	Phase W	C	green
Pt1000+	PTC+	1	turquoise
Pt1000-	PTC-	2	grey
n. c.	n. c.	3	n. c.
n. c.	n. c.	4	n. c.
n. c.	n. c.	5	n. c.

1) under 350 Ω = no fault, over 18 Ω = Fault

SLIDER

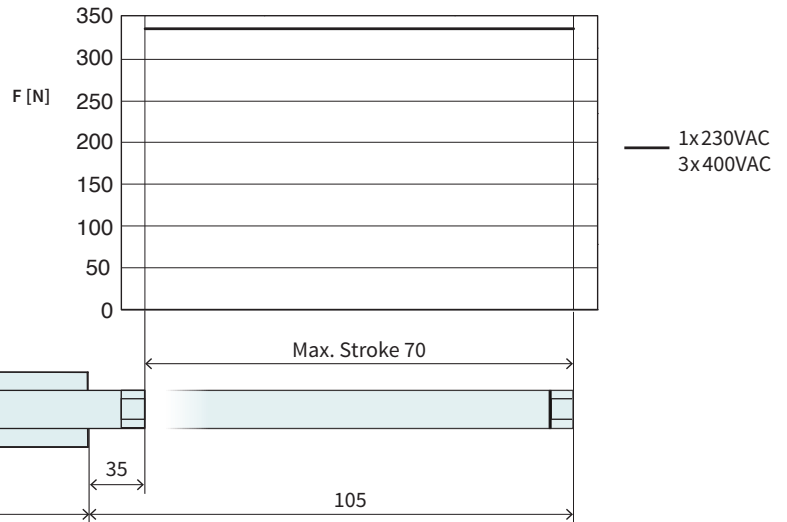
Slider Standard



Slider Standard			
Item	Description	Max. Stroke [mm]	Item-No.
PL01-28x350/270	Slider 'standard'	70	0150-1380
PL01-28x410/330	Slider 'standard'	130	0150-1381
PL01-28x500/420	Slider 'standard'	220	0150-1382
PL01-28x620/540	Slider 'standard'	340	0150-1383
PL01-28x710/630	Slider 'standard'	430	0150-1384
PL01-28x800/720	Slider 'standard'	520	0150-1385
PL01-28x920/840	Slider 'standard'	640	0150-1386
PL01-28x1010/930	Slider 'standard'	730	0150-1387
PL01-28x1220/1140	Slider 'standard'	940	0150-1388
PL01-28x1400/1320	Slider 'standard'	1120	0150-1389
PL01-28x1610/1530	Slider 'standard'	1330	0150-1390
PL01-28x1820/1740	Slider 'standard'	1540	0150-1395
PL01-28x2000/1920	Slider 'standard'	1720	0150-1396

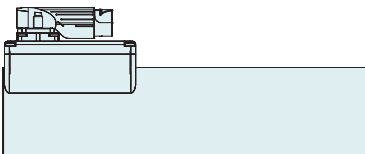
P10-54x120U/70-BL-TU

Max. Stroke: 70 mm
Peak Force: 335 N



Technical Data P10-54x120U/70

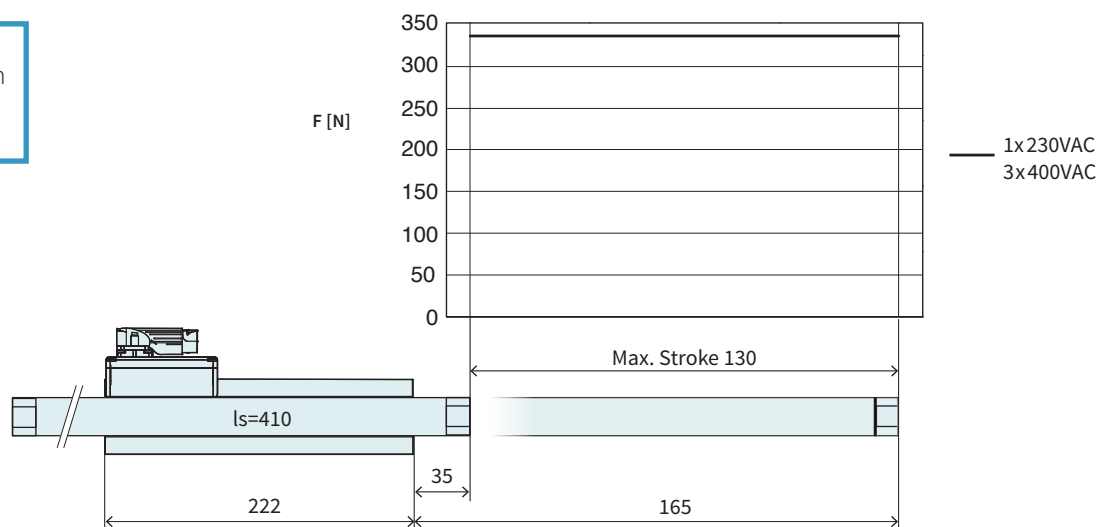
Stroke			
Max. Stroke	mm (in)	70	(2.75)
Force			
Max. Force @ 1x230VAC	N (lbf)	335	(75.4)
Max. Force @ 3x400VAC	N (lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	60.8	(13.7)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	7.3	(7.3)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 1.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.99 / 1.3 / 1.8	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1100 / 600 / 310	
Mechanical Data			
Slider Length	mm (in)	350	(14)
Slider Mass	g (lb)	1460	(3.21)



Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x350/270	Slider 'standard'	0150-1380

P10-54x120U/130-BL-TU

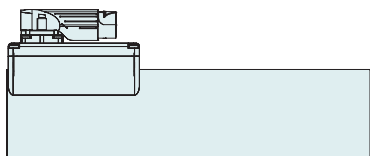
Max. Stroke: 130 mm
Peak Force: 335 N



Dimensions in mm

Technical Data P10-54x120U/130

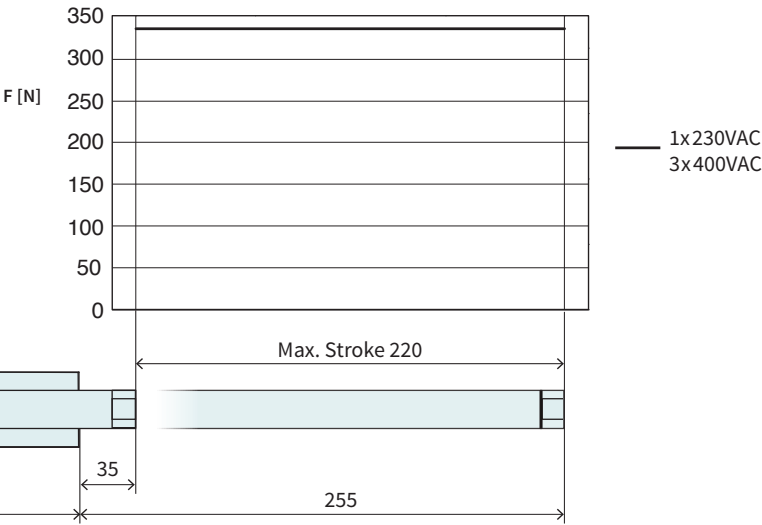
Stroke				
Max. Stroke	mm	(in)	130	(5.12)
Force				
Max. Force @ 1x230VAC	N	(lbf)	335	(75.4)
Max. Force @ 3x400VAC	N	(lbf)	335	(75.4)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	60.8	(13.7)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.3	(7.3)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.7	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling/ Fan / Fluid]	A _{pk}		1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling/ Fan / Fluid]	A _{rms}		0.99 / 1.3 / 1.8	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling/ Fan / Fluid]	°K/W		2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling/ Fan / Fluid]	s		1100 / 600 / 310	
Mechanical Data				
Slider Length	mm	(in)	410	(16)
Slider Mass	g	(lb)	1740	(3.83)



Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder Sum, PTC	0150-2782
PL01-28x410/330	Slider 'standard'	0150-1381

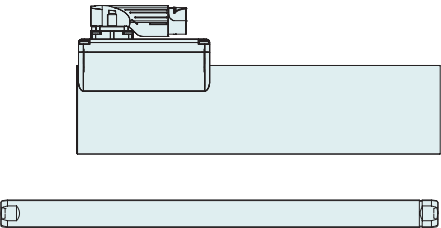
P10-54x120U/220-BL-TU

Max. Stroke: 220 mm
Peak Force: 335 N



Dimensions in mm

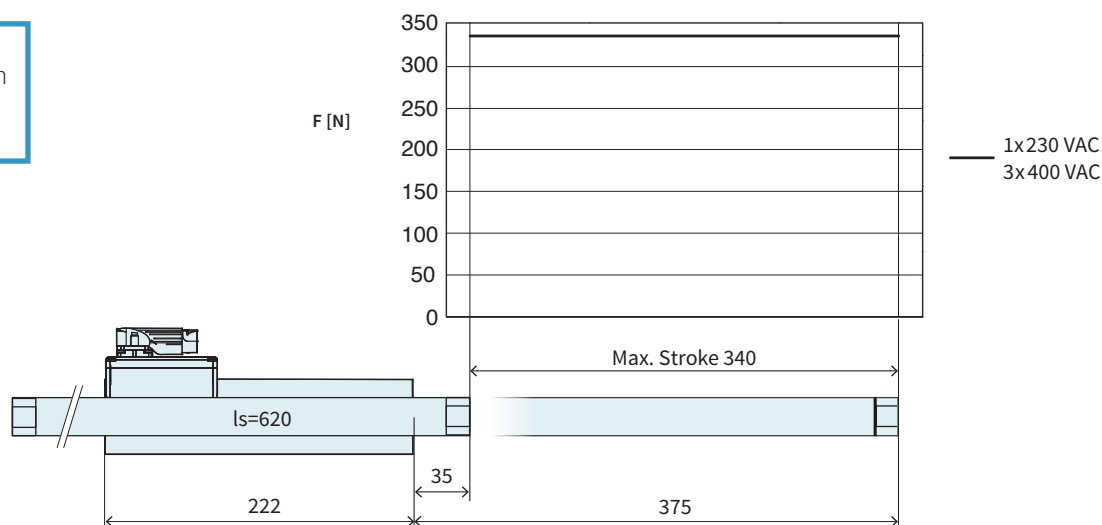
Technical Data P10-54x120U/220				
Stroke				
Max. Stroke	mm	(in)	220	(8.65)
Force				
Max. Force @ 1x230VAC	N	(lbf)	335	(75.4)
Max. Force @ 3x400VAC	N	(lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	60.8	(13.7)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.3	(7.3)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.45	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.99 / 1.3 / 1.8	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1100 / 600 / 310	
Mechanical Data				
Slider Length	mm	(in)	500	(20)
Slider Mass	g	(lb)	2160	(4.75)



Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x500/420	Slider 'standard'	0150-1382

P10-54x120U/340-BL-TU

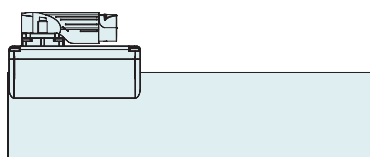
Max. Stroke: 340 mm
Peak Force: 335 N



Dimensions in mm

Technical Data P10-54x120U/340

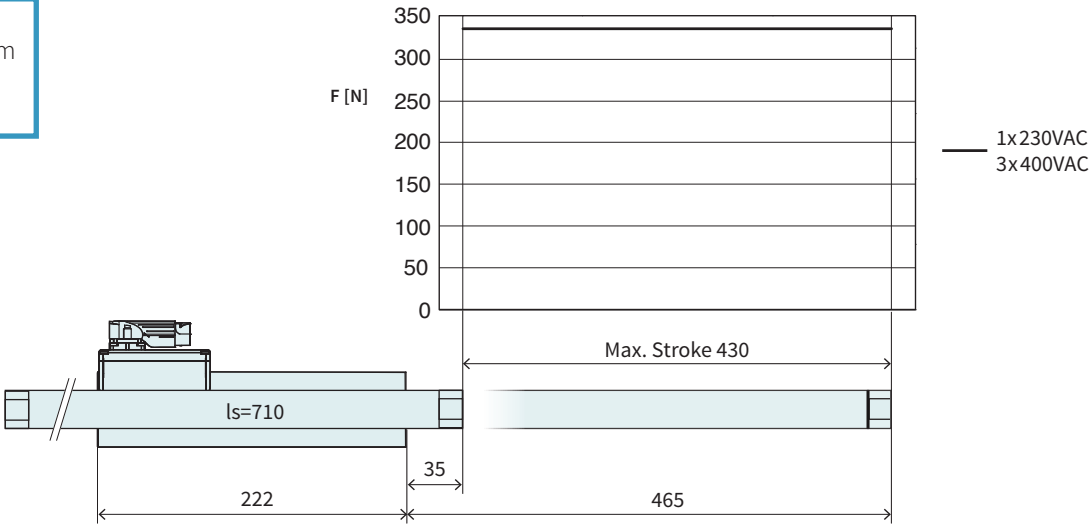
Stroke			
Max. Stroke	mm (in)	340	(13.4)
Force			
Max. Force @ 1x230VAC	N (lbf)	335	(75.4)
Max. Force @ 3x400VAC	N (lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	60.8	(13.7)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	7.3	(7.3)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.3	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.99 / 1.3 / 1.8	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1100 / 600 / 310	
Mechanical Data			
Slider Length	mm (in)	620	(24)
Slider Mass	g (lb)	2720	(5.98)



Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x620/540	Slider 'standard'	0150-1383

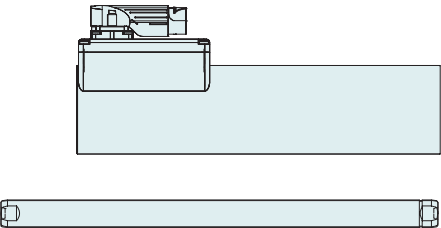
P10-54x120U/430-BL-TU

Max. Stroke: 430 mm
Peak Force: 335 N



Dimensions in mm

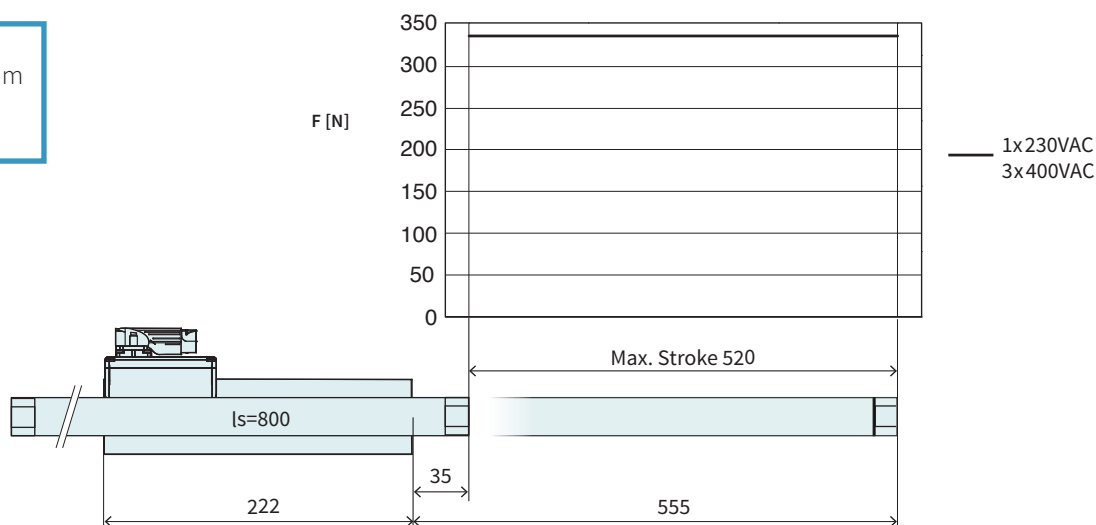
Technical Data P10-54x120U/430				
Stroke				
Max. Stroke	mm	(in)	430	(16.89)
Force				
Max. Force @ 1x230VAC	N	(lbf)	335	(75.4)
Max. Force @ 3x400VAC	N	(lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	60.8	(13.7)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.3	(7.3)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.99 / 1.3 / 1.8	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1100 / 600 / 310	
Mechanical Data				
Slider Length	mm	(in)	710	(28)
Slider Mass	g	(lb)	3140	(6.91)



Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x710/630	Slider 'standard'	0150-1384

P10-54x120U/520-BL-TU

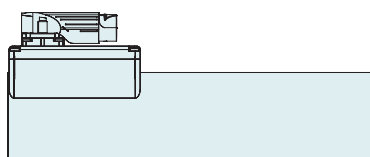
Max. Stroke: 520 mm
Peak Force: 335 N



Dimensions in mm

Technical Data P10-54x120U/520

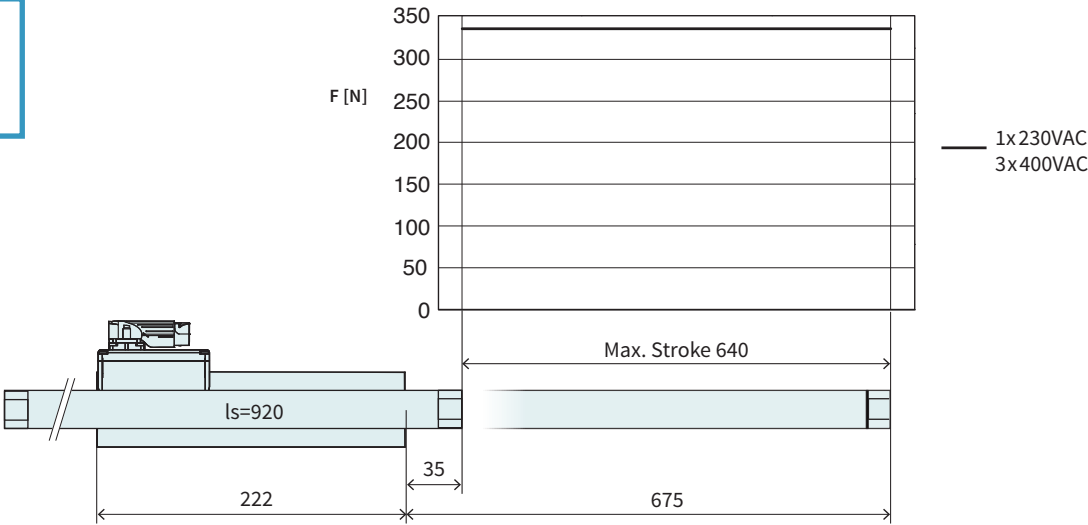
Stroke			
Max. Stroke	mm (in)	520	(20.49)
Force			
Max. Force @ 1x230VAC	N (lbf)	335	(75.4)
Max. Force @ 3x400VAC	N (lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	60.8	(13.7)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	7.3	(7.3)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	±0.25	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.99 / 1.3 / 1.8	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1100 / 600 / 310	
Mechanical Data			
Slider Length	mm (in)	800	(31)
Slider Mass	g (lb)	3560	(7.83)



Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x800/720	Slider 'standard'	0150-1385

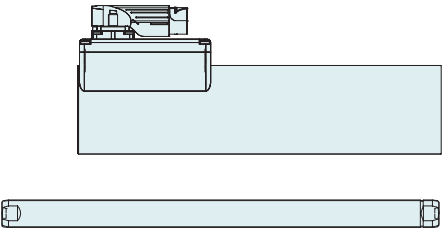
P10-54x120U/640-BL-TU

Max. Stroke: 640 mm
Peak Force: 335 N



Dimensions in mm

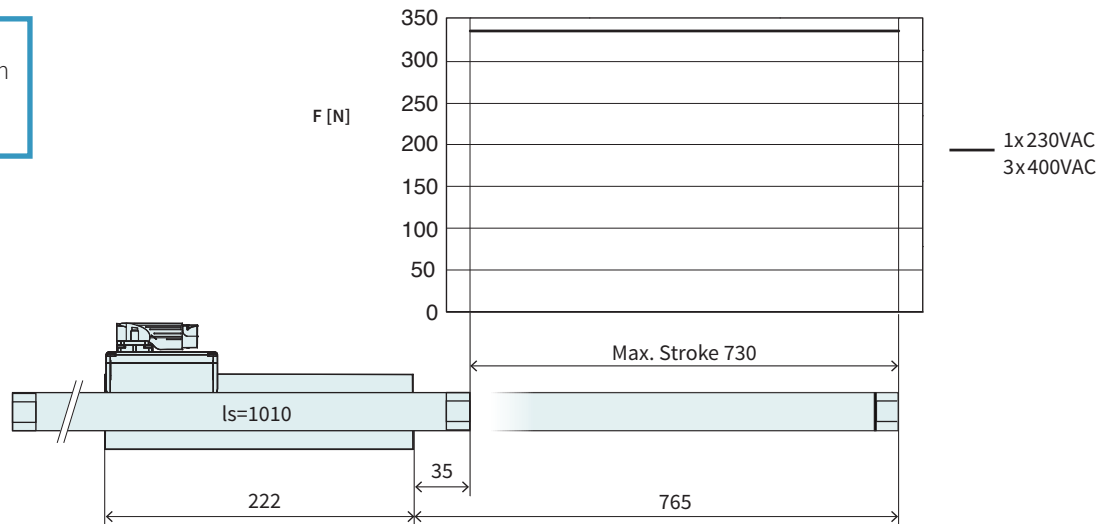
Technical Data P10-54x120U/640			
Stroke			
Max. Stroke	mm (in)	640	(25.19)
Force			
Max. Force @ 1x230VAC	N (lbf)	335	(75.4)
Max. Force @ 3x400VAC	N (lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	60.8	(13.7)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	7.3	(7.3)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.99 / 1.3 / 1.8	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1100 / 600 / 310	
Mechanical Data			
Slider Length	mm (in)	920	(36)
Slider Mass	g (lb)	4120	(9.06)



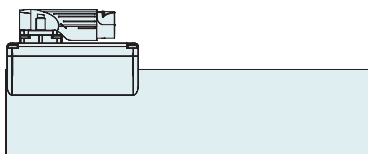
Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x920/840	Slider 'standard'	0150-1386

P10-54x120U/730-BL-TU

Max. Stroke: 730 mm
Peak Force: 335 N



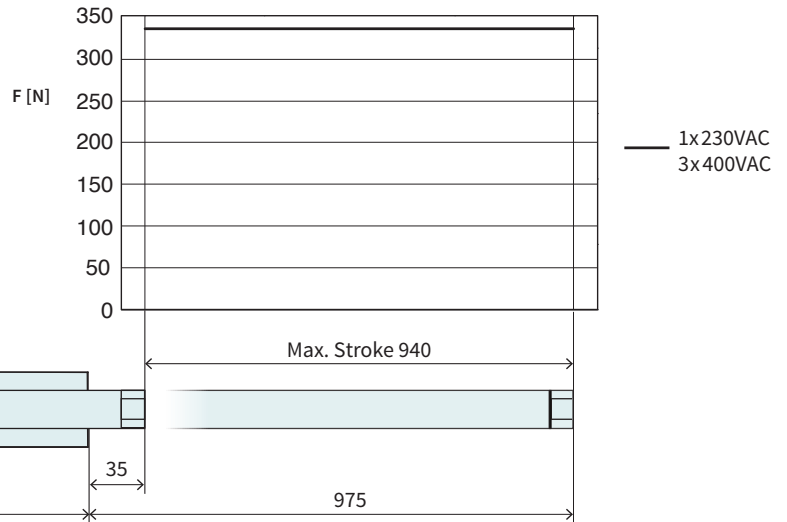
Technical Data P10-54x120U/730				
Stroke				
Max. Stroke	mm	(in)	730	(28.69)
Force				
Max. Force @ 1x230VAC	N	(lbf)	335	(75.4)
Max. Force @ 3x400VAC	N	(lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	60.8	(13.7)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.3	(7.3)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.99 / 1.3 / 1.8	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1100 / 600 / 310	
Mechanical Data				
Slider Length	mm	(in)	1010	(40)
Slider Mass	g	(lb)	4540	(10)



Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x1010/930	Slider 'standard'	0150-1387

P10-54x120U/940-BL-TU

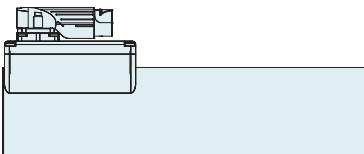
Max. Stroke: 940 mm
Peak Force: 335 N



Dimensions in mm

Technical Data P10-54x120U/940

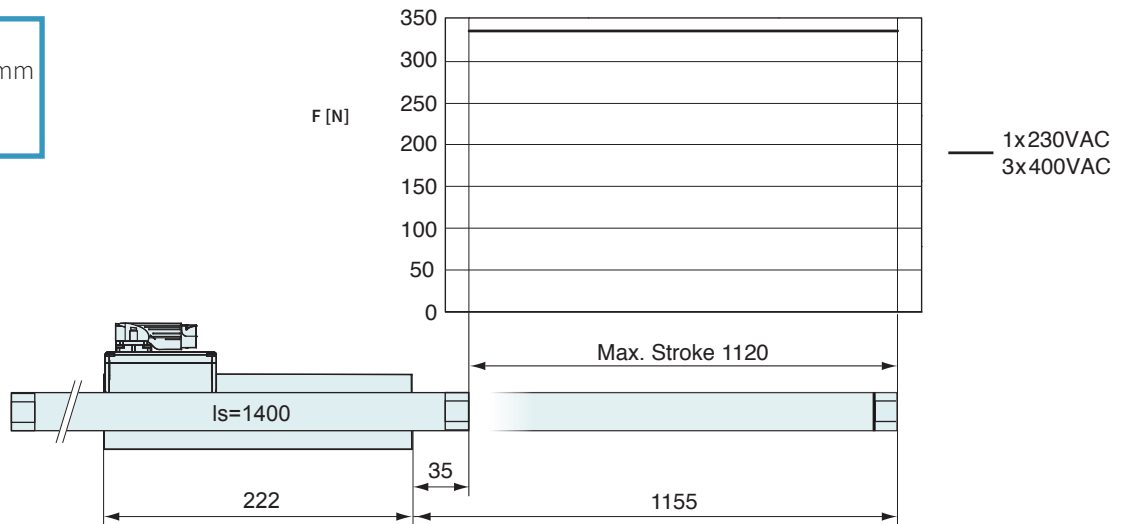
Stroke			
Max. Stroke	mm (in)	940	(36.99)
Force			
Max. Force @ 1x230VAC	N (lbf)	335	(75.4)
Max. Force @ 3x400VAC	N (lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	60.8	(13.7)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	7.3	(7.3)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.99 / 1.3 / 1.8	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1100 / 600 / 310	
Mechanical Data			
Slider Length	mm (in)	1220	(48)
Slider Mass	g (lb)	5510	(12.12)



Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x1220/1140	Slider 'standard'	0150-1388

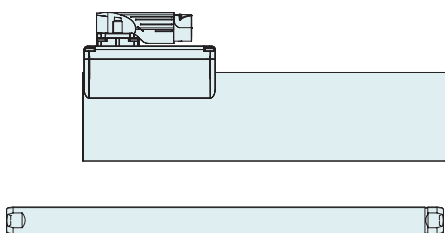
P10-54x120U/1120-BL-TU

Max. Stroke: 1120 mm
Peak Force: 335 N



Dimensions in mm

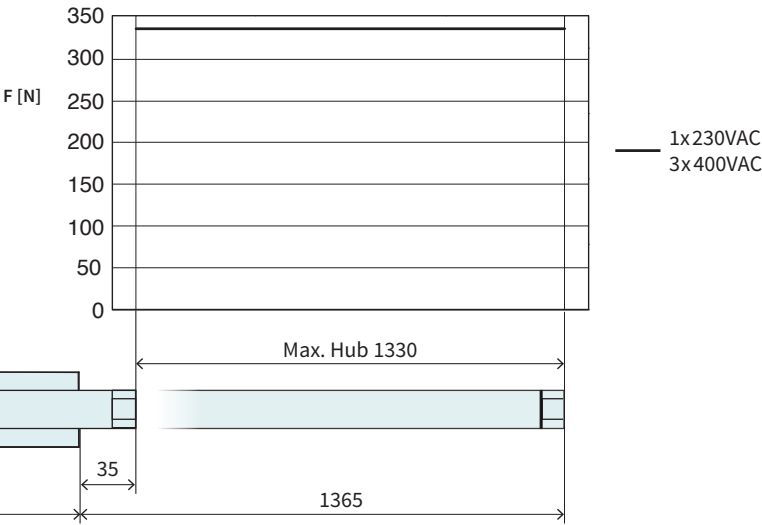
Technical Data P10-54x120U/1120				
Stroke				
Max. Stroke	mm	(in)	1120	(44.1)
Force				
Max. Force @ 1x230VAC	N	(lbf)	335	(75.4)
Max. Force @ 3x400VAC	N	(lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{yms}	(lbf/A _{yms})	60.8	(13.7)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.3	(7.3)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{yms}		7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{yms}		7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{yms}		0.99 / 1.3 / 1.8	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1100 / 600 / 310	
Mechanical Data				
Slider Length	mm	(in)	1400	(55)
Slider Mass	g	(lb)	6350	(13.97)



Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x1400/1320	Slider 'standard'	0150-1389

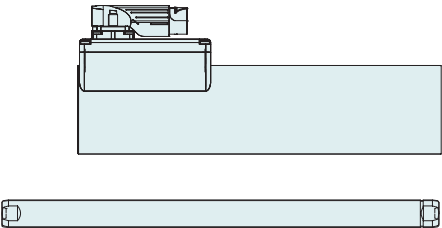
P10-54x120U/1330-BL-TU

Max. Stroke: 1330 mm
Peak Force: 335 N



Dimensions in mm

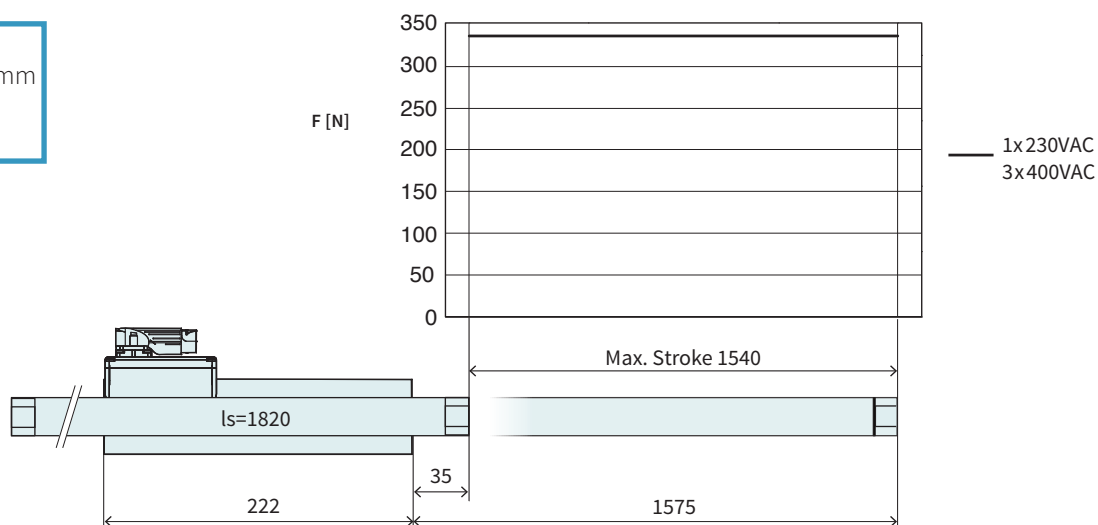
Technical Data P10-54x120U/1330				
Stroke				
Max. Stroke	mm	(in)	1330	(52.39)
Force				
Max. Force @ 1x230VAC	N	(lbf)	335	(75.4)
Max. Force @ 3x400VAC	N	(lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	60.8	(13.7)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.3	(7.3)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.99 / 1.3 / 1.8	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1100 / 600 / 310	
Mechanical Data				
Slider Length	mm	(in)	1610	(63)
Slider Mass	g	(lb)	7330	(16.13)



Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x1610/1530	Slider 'standard'	0150-1390

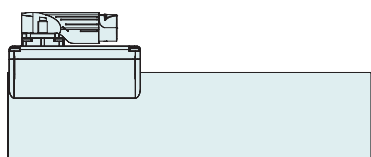
P10-54x120U/1540-BL-TU

Max. Stroke: 1540 mm
Peak Force: 335 N



Technical Data P10-54x120U/1540

Stroke			
Max. Stroke	mm (in)	1540	(60.6)
Force			
Max. Force @ 1x230VAC	N (lbf)	335	(75.4)
Max. Force @ 3x400VAC	N (lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	60.8	(13.7)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	7.3	(7.3)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.99 / 1.3 / 1.8	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1100 / 600 / 310	
Mechanical Data			
Slider Length	mm (in)	1820	(72)
Slider Mass	g (lb)	8300	(18.26)

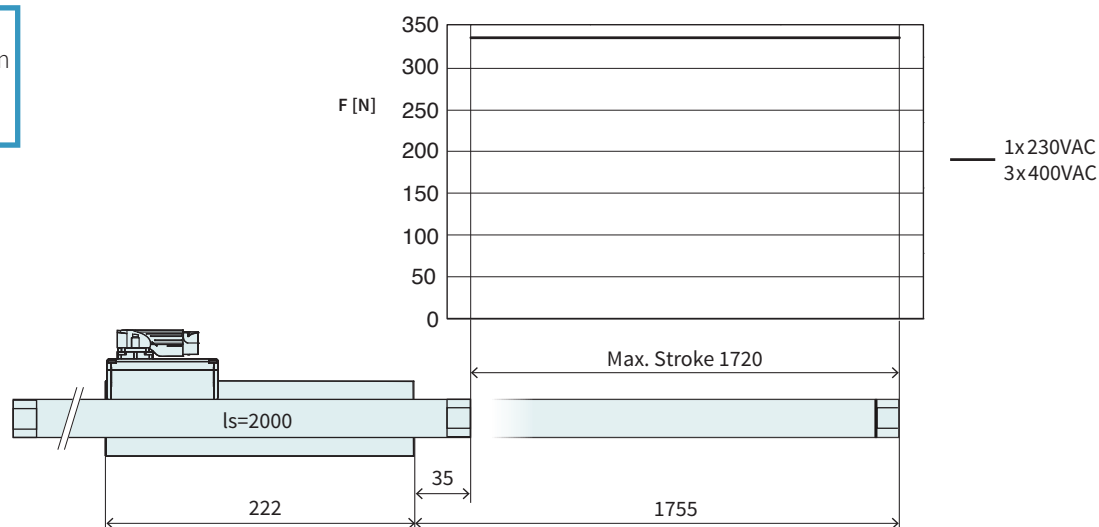


Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x1820/1740	Slider 'standard'	0150-1395

P10-54x120U/1720-BL-TU

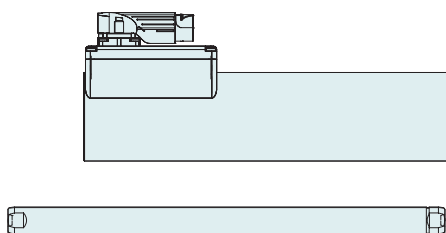
Max. Stroke: 1720 mm
Peak Force: 335 N

Dimensions in mm



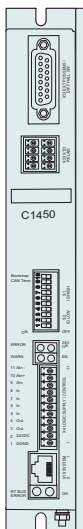
Technical Data P10-54x120U/1720

Stroke			
Max. Stroke	mm (in)	1720	(67.7)
Force			
Max. Force @ 1x230VAC	N (lbf)	335	(75.4)
Max. Force @ 3x400VAC	N (lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	60.8	(13.7)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	7.3	(7.3)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.99 / 1.3 / 1.8	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1100 / 600 / 310	
Mechanical Data			
Slider Length	mm (in)	2000	(79)
Slider Mass	g (lb)	9140	(20.11)



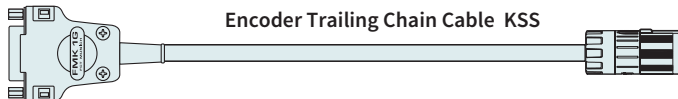
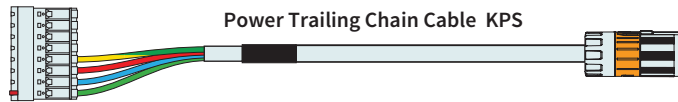
Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x2000/1920	Slider 'standard'	0150-1396

Motor Cable



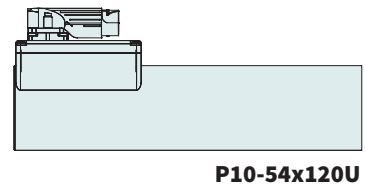
C1450

B Connector MC10-B/m



D15s Connector MC01-D15s-45°/f

Uk Connector MC10-Uk/f

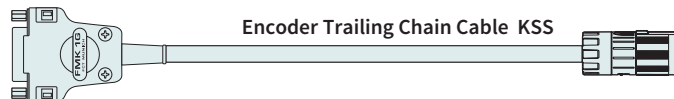
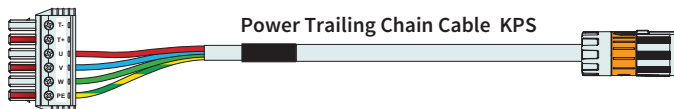


P10-54x120U



E1400

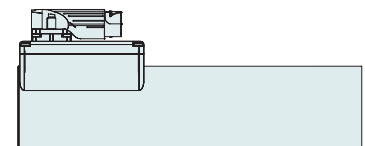
L Connector MC10-L/m



D15s Connector MC01-D15s-45°/f

Tk Connector MC10-Tk/f

Uk Connector MC10-Uk/f



P10-54x120U

ORDERING INFORMATION

TRAILING CHAIN CABLE FOR LINMOT DRIVES		
Item	Description	Item-No.
KPS07-04/02-L/Tk-3	Power Trailing Chain Cable E1400/P10-54, 3 m	0150-2670
KPS07-04/02-L/Tk-5	Power Trailing Chain Cable E1400/P10-54, 5 m	0150-2671
KPS07-04/02-L/Tk-8	Power Trailing Chain Cable E1400/P10-54, 8 m	0150-2672
KPS07-04/02-L/Tk-12	Power Trailing Chain Cable E1400/P10-54, 12 m	0150-2673
KPS07-04/02-B/Tk-3	Power Trailing Chain Cable C1400/P10-54, 3 m	0150-3648
KPS07-04/02-B/Tk-5	Power Trailing Chain Cable C1400/P10-54, 5 m	0150-3657
KPS07-04/02-B/Tk-8	Power Trailing Chain Cable C1400/P10-54, 8 m	0150-3658
KPS07-04/02-B/Tk-12	Power Trailing Chain Cable C1400/P10-54, 12 m	0150-3659
KSS 05-02/08-D15s/Uk-3	Encoder Trailing Chain Cable D15s/Uk, 3 m	0150-2650
KSS 05-02/08-D15s/Uk-5	Encoder Trailing Chain Cable D15s/Uk, 5 m	0150-2651
KSS 05-02/08-D15s/Uk-8	Encoder Trailing Chain Cable D15s/Uk, 8 m	0150-2652
KSS 05-02/08-D15s/Uk-12	Encoder Trailing Chain Cable D15s/Uk, 12 m	0150-2653

TRAILING CHAIN CABLES FOR THIRD PARTY DRIVES

Item	Description	Item-No.
KPS07-04/02-../Tk-10	Power Trailing Chain Cable ../Tk, 10 m	0150-3626
KPS07-04/02-../Tk-	Power Trailing Chain Cable ../Tk, Custom length	0150-3622
KSS 05-02/13-../Uk-10	Encoder Trailing Chain Cable ./Uk, 10 m	0150-3627
KSS 05-02/13-../Uk-	Encoder Trailing Chain Cable ./Uk, Custom length	0150-3619

CONNECTOR & CABLE (INDIVIDUAL)

Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
MC01-D15/f	Motor Connector D15 (f)	0150-3136
MC10-Tk/f	Connector Power PS10-54	0150-3482
MC10-Uk/f	Connector Encoder PS10-54	0150-3483
KPS07-04/02	Power Trailing Chain Cable P10-54 (per m)	0150-2372
KSS05-02/08	Trailing Chain Cable Encoder LinMot (per m)	0150-2258
KSS05-02/13	Trailing Chain Cable Encoder P10-...-Dxx (per m)	0150-2259

MOTOR FLANGES



Item	Description	Item-No.
PF10-54x140	Flange for PS10-54x120	0150-2733

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

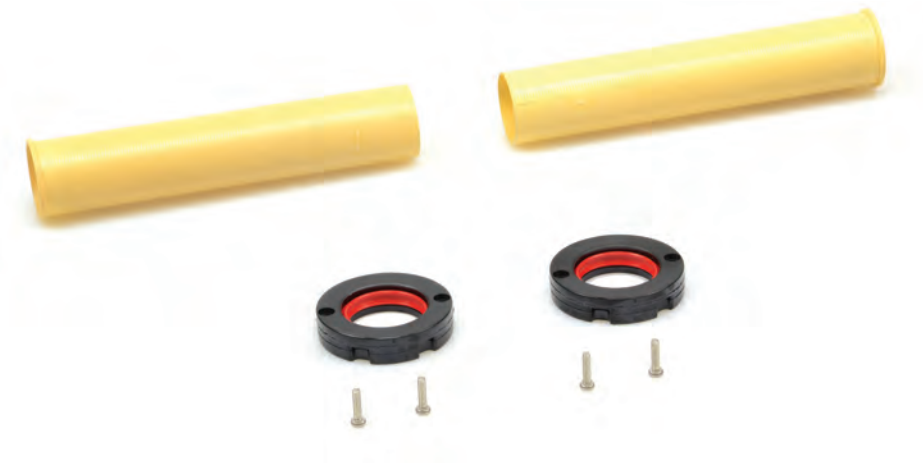
SLIDER MOUNTING



Item	Description	Item-No.
PLF01-28	Fixed Bearing Set for 27/28 mm sliders	0150-3087
PLF01-28-SS	Fixed Bearing Set for 27/28 mm sliders, stainless steel	0150-3297
PLL01-28	Floating Bearing for 28 mm sliders	0150-3094
PLM01-28-MK	Mounting Kit for 28 mm sliders	0150-3095

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



Item	Description	Item-No.
PB10-54x120-L	Bearing kit for PS10-54x120	0150-3671

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1μm, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D15/D-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1μm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P10-54x180U



- ✓ 230VAC and 3 x 400VAC technology
- ✓ Peak forces up to 502 N
- ✓ LinMot Encoder or Incremental Encoder
- ✓ Extremely high dynamic
- ✓ Rotating push-pull TWIN connector for power and encoder cables
- ✓ Can also be controlled by standard third-party servo drives

LINEAR MOTORS P10-54x180U

Technical Data **421**

Motor Specifications

P10-54x180U/10 **426**

P10-54x180U/70 **427**

P10-54x180U/160 **428**

P10-54x180U/280 **429**

P10-54x180U/370 **430**

P10-54x180U/460 **431**

P10-54x180U/580 **432**

P10-54x180U/670 **433**

P10-54x180U/880 **434**

P10-54x180U/1060 **435**

P10-54x180U/1270 **436**

P10-54x180U/1480 **437**

P10-54x180U/1660 **438**

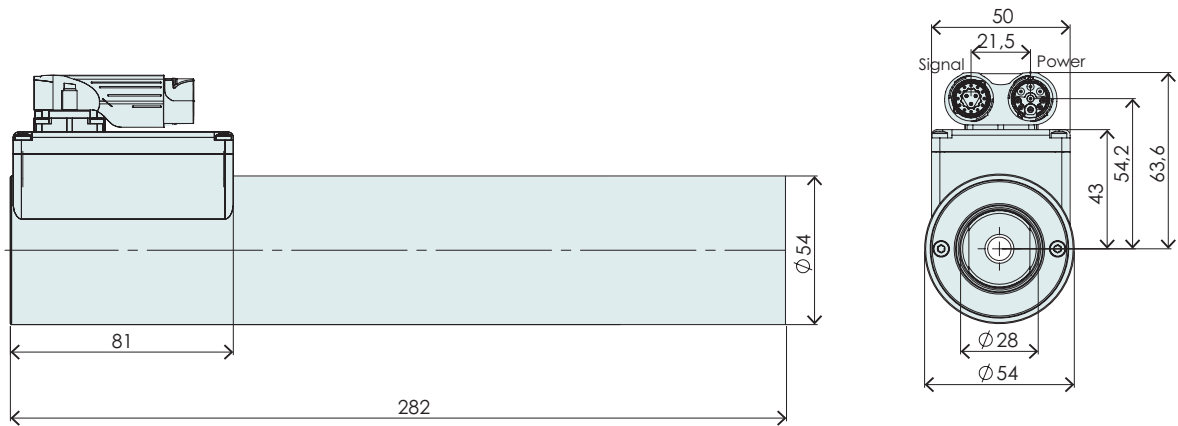
Accessories **439**



MOTOR FAMILY P10-54x180U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1660	(65.4)
Force				
Max. Force @ 1x230VAC	N	(lbf)	502	(113)
Max. Force @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(379.9)
Position Detection				
Position Resolution	mm	(in)	0.007	(0.0003)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	38.1	(0.968)
Terminal Resistance 25 °C / 120 °C	Ohm		5.7 / 7.8	
Terminal Inductivity	mH		4.6	
Magnetic Period	mm	(in)	60	(2.35)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Stator Diameter	mm	(in)	54	(2.1)
Stator Length	mm	(in)	282	(11)
Stator Mass	g	(lb)	2220	(4.88)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	350 - 2000	(14 - 79)
Slider Mass	g	(lb)	1460 - 9140	(3.21 - 20.11)
IP Code			IP 65	

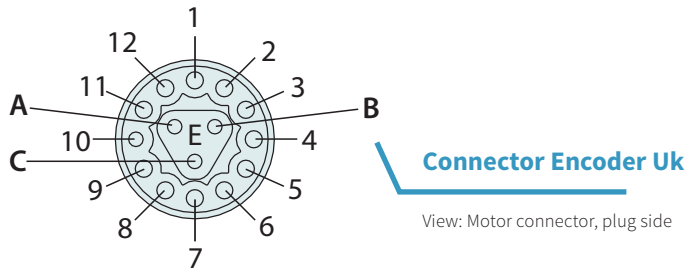
STATOR



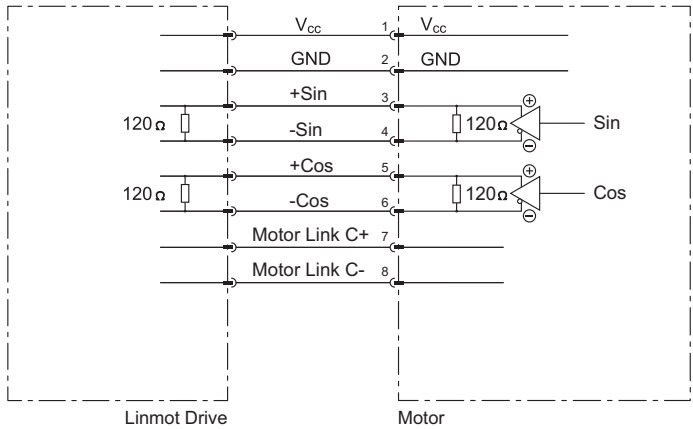
Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x180U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x180U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x180U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783

CONNECTOR PS10-54x180U-BL-TU

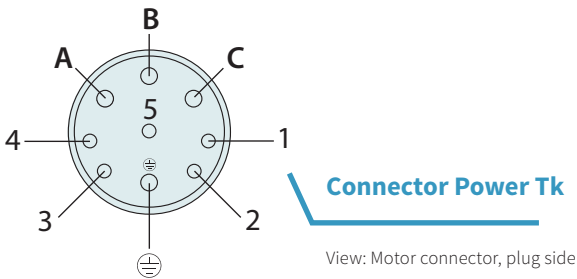
Motor Connector Wiring		Connector Encoder Uk	Wire Color Motor Cable
+Vcc	Supply	1	red
GND	Supply	2	black
Sin+	Encoder	3	yellow
Sin-	Encoder	4	orange
Cos+	Encoder	5	green
Cos-	Encoder	6	blue
Mot. Link C+	Communication	7	pink
Mot. Link C-	Communication	8	grey
n. c.	n. c.	9	n. c.
n. c.	n. c.	10	n. c.
n. c.	n. c.	11	n. c.
n. c.	n. c.	12	n. c.
n. c.	n. c.	A	n. c.
n. c.	n. c.	B	n. c.
n. c.	n. c.	C	n. c.



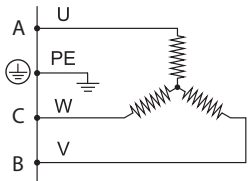
View: Motor connector, plug side



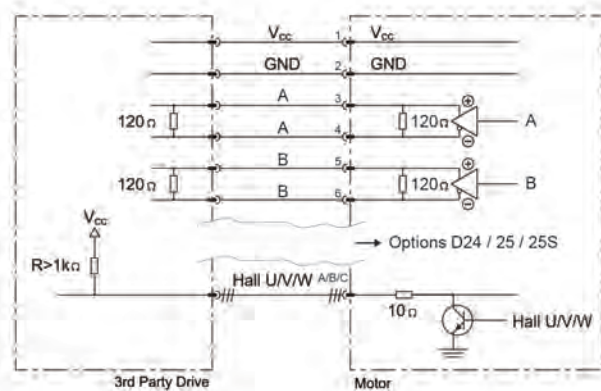
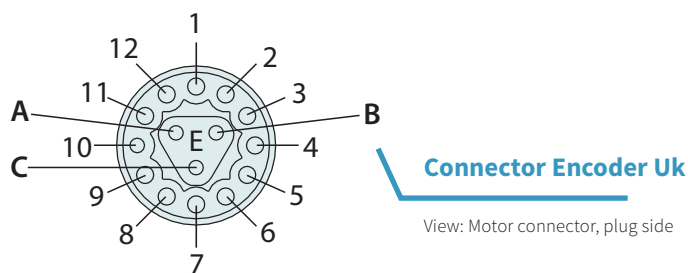
Motor Connector Wiring	Connector Power Tk	Wire Color Motor Cable
Phase U	A	red
PE	PE	yellow-green
Phase V	B	blue
Phase W	C	green
n. c.	1	n. c.
n. c.	2	n. c.
n. c.	3	n. c.
n. c.	4	n. c.
n. c.	5	n. c.



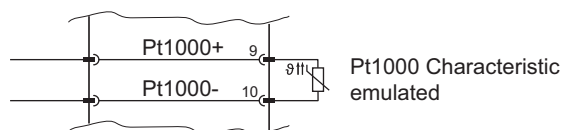
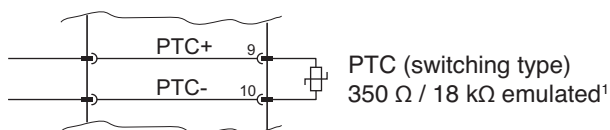
View: Motor connector, plug side



CONNECTOR PS10-54x180U-BL-TU-D24 / 25 / 25S



PS10-54x180U-BL-TU-D24

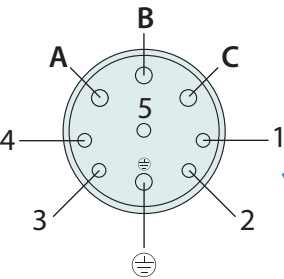
PS10-54x180U-BL-TU-D25
PS10-54x180U-BL-TU-D25S

Motor Connector Wiring				
PS10-54x180U-BL-TU-D24	PS10-54x180U-BL-TU-D25 PS10-54x180U-BL-TU-D25S	Function	Connector Encoder Uk	Wire Color Motor Cable
+Vcc	+Vcc	Supply	1	white
GND	GND	Supply	2	brown
A	A	Encoder	3	grey
/A	/A	Encoder	4	pink
B	B	Encoder	5	blue
/B	/B	Encoder	6	red
-	-	-	7	green (do not connect)
-	-	-	8	yellow (do not connect)
Pt1000+	PTC+	Temp. ²	9	yellow-brown
Pt1000-	PTC-	Temp. ²	10	white-yellow
REF+	REF+	Encoder	11	black
REF-	REF-	Encoder	12	purple
Hall U	Hall U	Encoder	A	grey-red
Hall V	Hall V	Encoder	B	red-blue
Hall W	Hall W	Encoder	C	white-green

1) under 350 Ω = no fault, over 18 k Ω = Fault

2) The temperature evaluation circuit must be powered from the encoder supply and must be at the same potential.

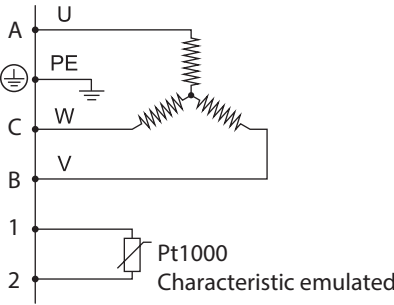
The grounds of the temperature evaluation circuit and the encoder have to be connected. The encoder must have been powered on for at least 50 ms, before valid temperatures can be measured. If the encoder is powered off, 20k Ohms are measured between Pins 9 and 10.



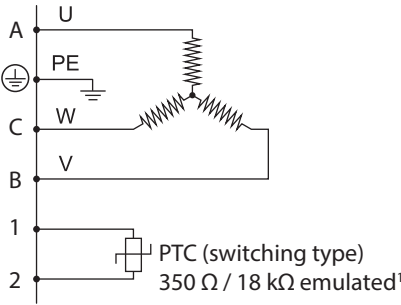
Connector Power Tk

View: Motor connector, plug side

PS10-54x180U-BL-TU-D24



PS10-54x180U-BL-TU-D25
PS10-54x180U-BL-TU-D25S



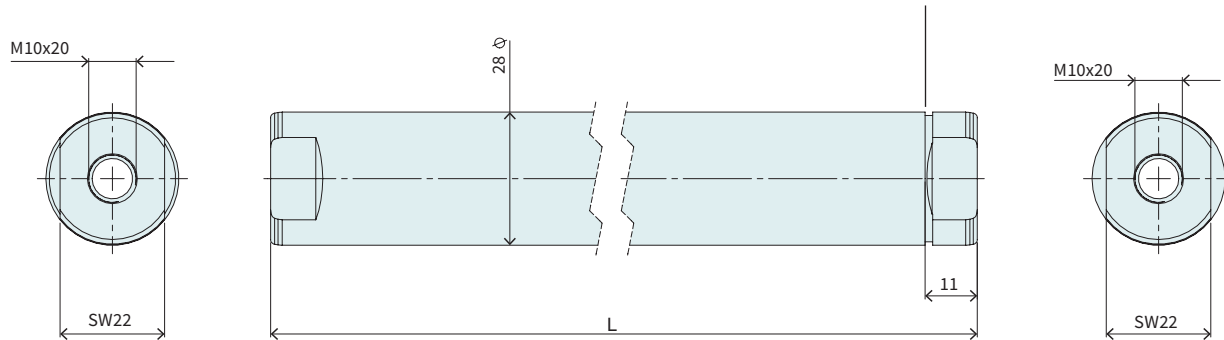
Motor Connector Wiring			
PS10-54x180U-BL-TU-D24	PS10-54x180U-BL-TU-D25 PS10-54x180U-BL-TU-D25S	Connector Power Tk	Wire Color Motor Cable
Phase U	Phase U	A	red
PE	PE	PE	yellow-green
Phase V	Phase V	B	blue
Phase W	Phase W	C	green
Pt1000+	PTC+	1	turquoise
Pt1000-	PTC-	2	grey
n. c.	n. c.	3	n. c.
n. c.	n. c.	4	n. c.
n. c.	n. c.	5	n. c.

1) under 350 Ω = no fault, over 18 Ω = Fault

SLIDER

Slider Standard

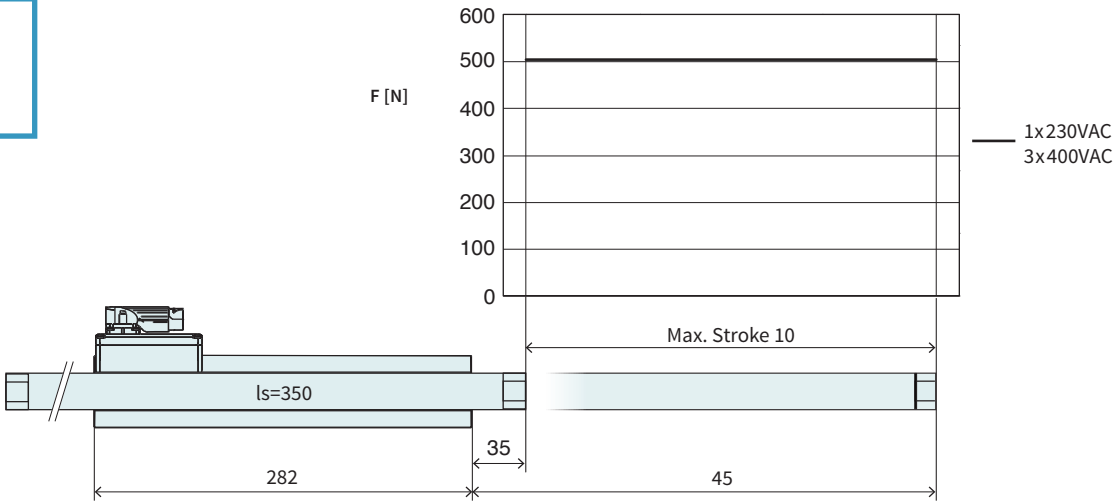
Number of grooves determines the slider type (see chapter 2 / slider) and marks the front end.



Slider Standard			
Item	Description	Max. Stroke [mm]	Item-No.
PL01-28x350/270	Slider 'standard'	10	0150-1380
PL01-28x410/330	Slider 'standard'	70	0150-1381
PL01-28x500/420	Slider 'standard'	160	0150-1382
PL01-28x620/540	Slider 'standard'	280	0150-1383
PL01-28x710/630	Slider 'standard'	370	0150-1384
PL01-28x800/720	Slider 'standard'	460	0150-1385
PL01-28x920/840	Slider 'standard'	580	0150-1386
PL01-28x1010/930	Slider 'standard'	670	0150-1387
PL01-28x1220/1140	Slider 'standard'	880	0150-1388
PL01-28x1400/1320	Slider 'standard'	1060	0150-1389
PL01-28x1610/1530	Slider 'standard'	1270	0150-1390
PL01-28x1820/1740	Slider 'standard'	1480	0150-1395
PL01-28x2000/1920	Slider 'standard'	1660	0150-1396

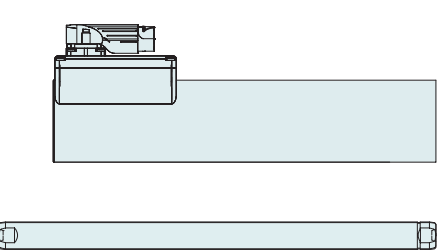
P10-54x180U/10-BL-TU

Max. Stroke: 10 mm
Peak Force: 502 N



Dimensions in mm

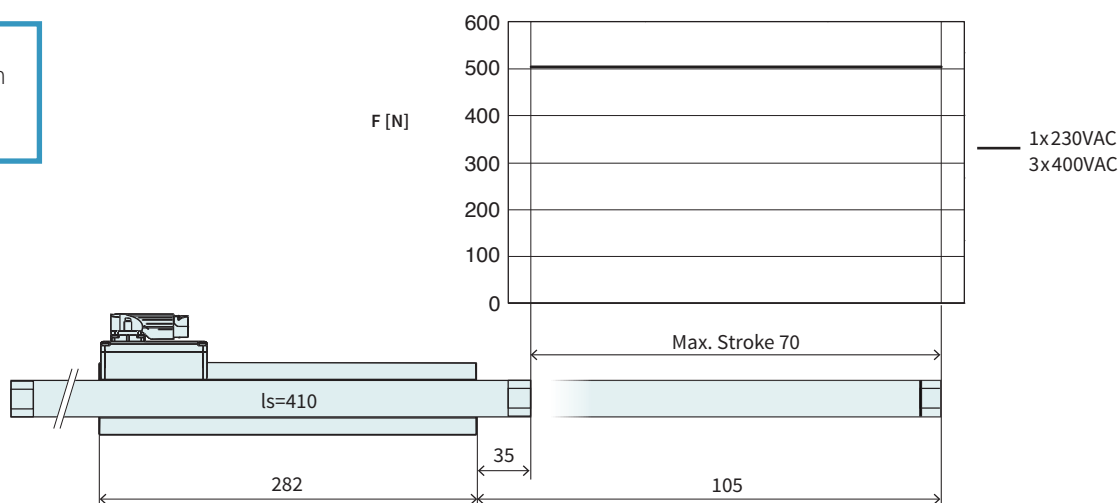
Technical Data P10-54x180U/10				
Stroke				
Max. Stroke	mm	(in)	10	(0.39)
Force				
Max. Force @ 1x230VAC	N	(lbf)	502	(113)
Max. Force @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 7.6	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	350	(14)
Slider Mass	g	(lb)	1460	(3.21)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x350/270	Slider 'standard'	0150-1380

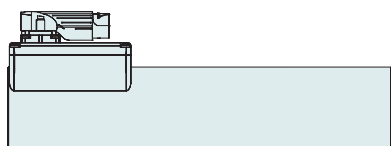
P10-54x180U/70-BL-TU

Max. Stroke: 70 mm
Peak Force: 502 N



Dimensions in mm

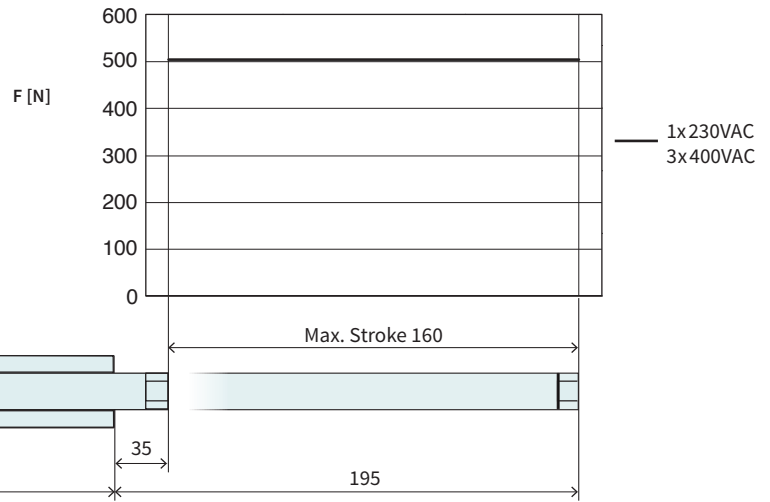
Technical Data P10-54x180U/70				
Stroke				
Max. Stroke	mm	(in)	70	(2.75)
Force				
Max. Force @ 1x230VAC	N	(lbf)	502	(113)
Max. Force @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 1.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	410	(16)
Slider Mass	g	(lb)	1740	(3.83)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x410/330	Slider 'standard'	0150-1381

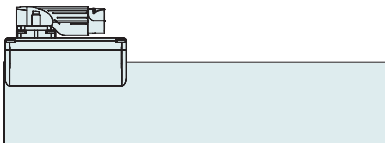
P10-54x180U/160-BL-TU

Max. Stroke: 160 mm
Peak Force: 502 N



Dimensions in mm

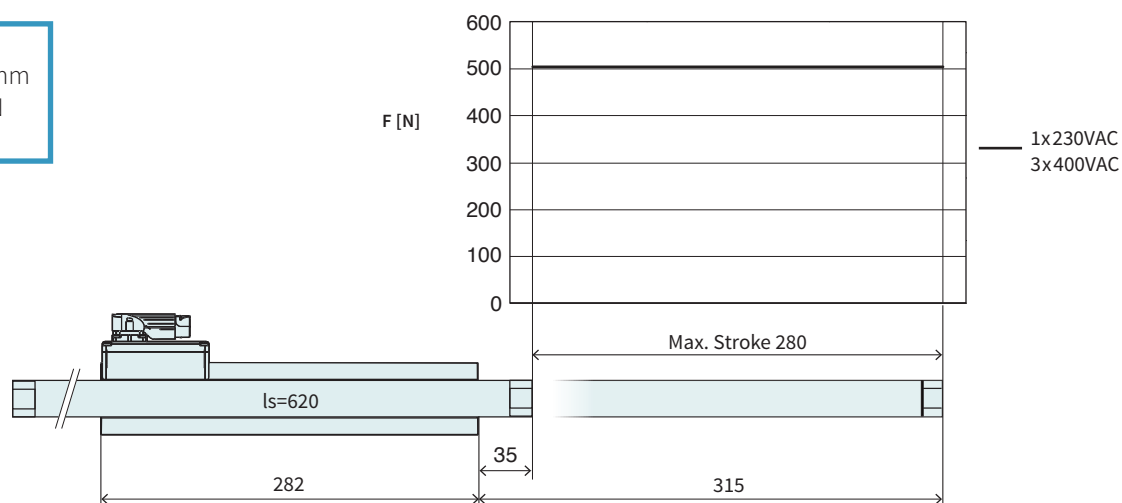
Technical Data P10-54x180U/160				
Stroke				
Max. Stroke	mm	(in)	160	(6.29)
Force				
Max. Force @ 1x230VAC	N	(lbf)	502	(113)
Max. Force @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.55	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	500	(20)
Slider Mass	g	(lb)	2160	(4.75)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x500/420	Slider 'standard'	0150-1382

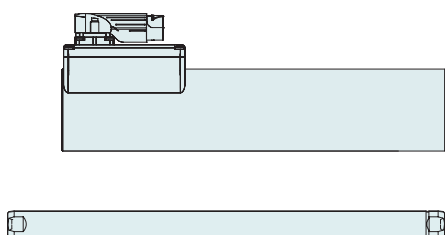
P10-54x180U/280-BL-TU

Max. Stroke: 280 mm
Peak Force: 502 N



Dimensions in mm

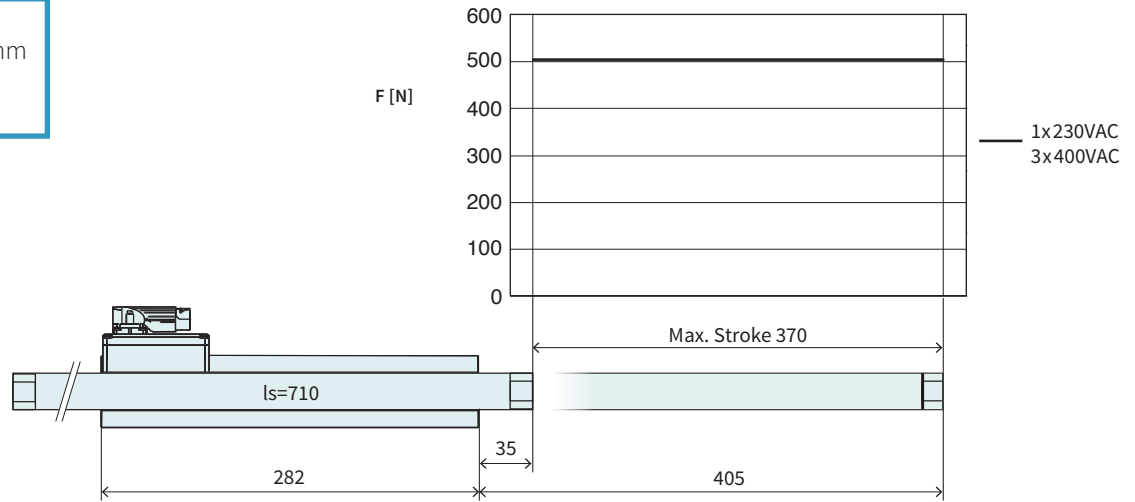
Technical Data P10-54x180U/280				
Stroke				
Max. Stroke	mm	(in)	280	(10.99)
Force				
Max. Force @ 1x230VAC	N	(lbf)	502	(113)
Max. Force @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.35	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	620	(24)
Slider Mass	g	(lb)	2720	(5.98)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x620/540	Slider 'standard'	0150-1383

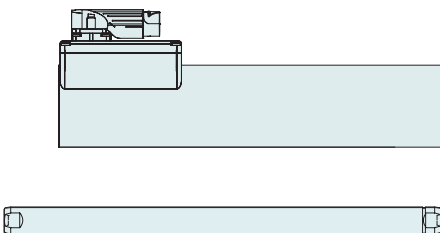
P10-54x180U/370-BL-TU

Max. Stroke: 370 mm
Peak Force: 502 N



Technical Data P10-54x180U/370

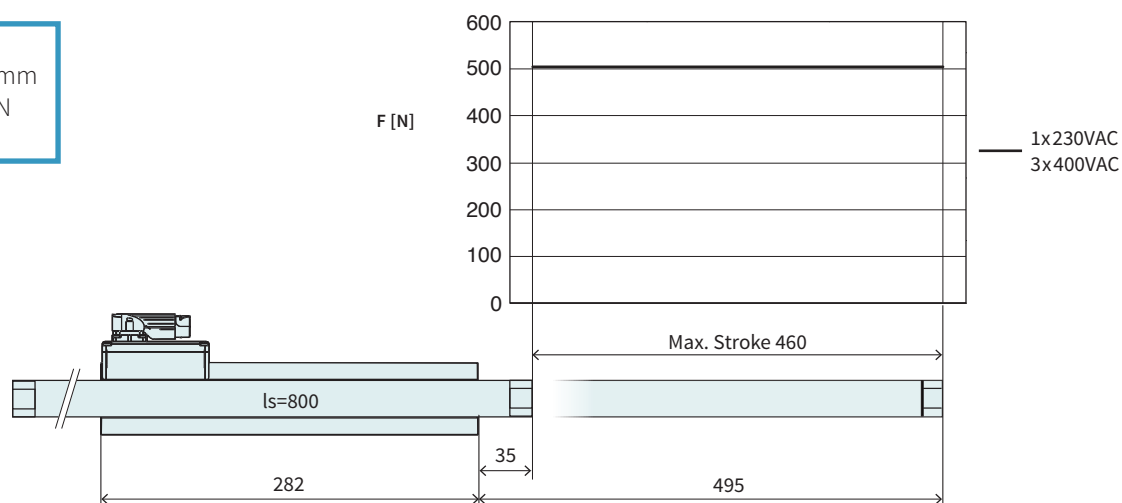
Stroke				
Max. Stroke	mm	(in)	370	(14.59)
Force				
Max. Force @ 1x230VAC	N	(lbf)	502	(113)
Max. Force @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	710	(28)
Slider Mass	g	(lb)	3140	(6.91)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x710/630	Slider 'standard'	0150-1384

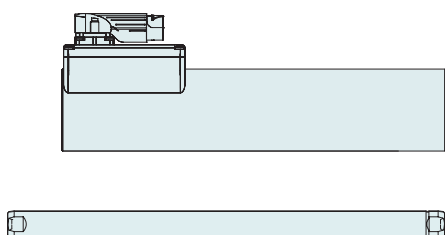
P10-54x180U/460-BL-TU

Max. Stroke: 460 mm
Peak Force: 502 N



Technical Data P10-54x180U/460

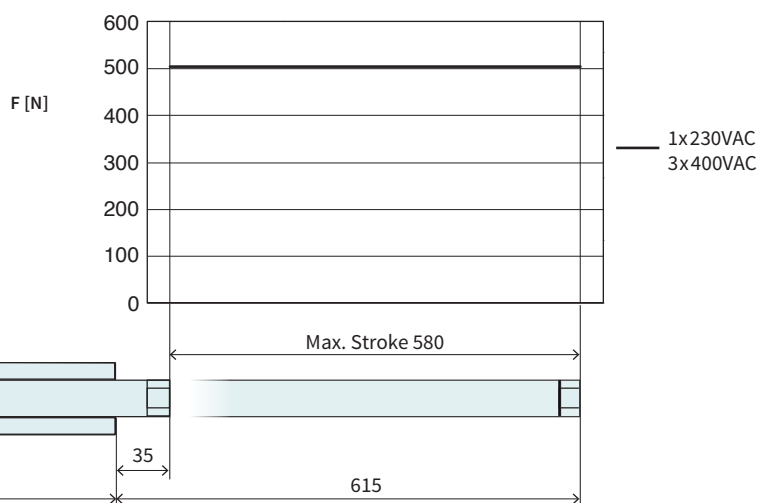
Stroke			
Max. Stroke	mm (in)	460	(18.1)
Force			
Max. Force @ 1x230VAC	N (lbf)	502	(113)
Max. Force @ 3x400VAC	N (lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	46.7	(10.5)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	9.5	(9.5)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.25	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	1.8 / 2.4 / 3.5	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1200 / 650 / 320	
Mechanical Data			
Slider Length	mm (in)	800	(31)
Slider Mass	g (lb)	3560	(7.83)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x800/720	Slider 'standard'	0150-1385

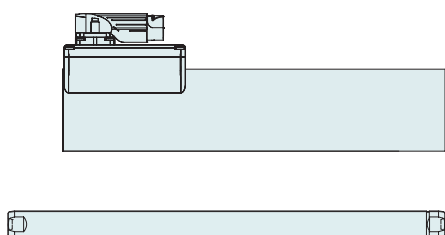
P10-54x180U/580-BL-TU

Max. Stroke: 580 mm
Peak Force: 502 N



Technical Data P10-54x180U/580

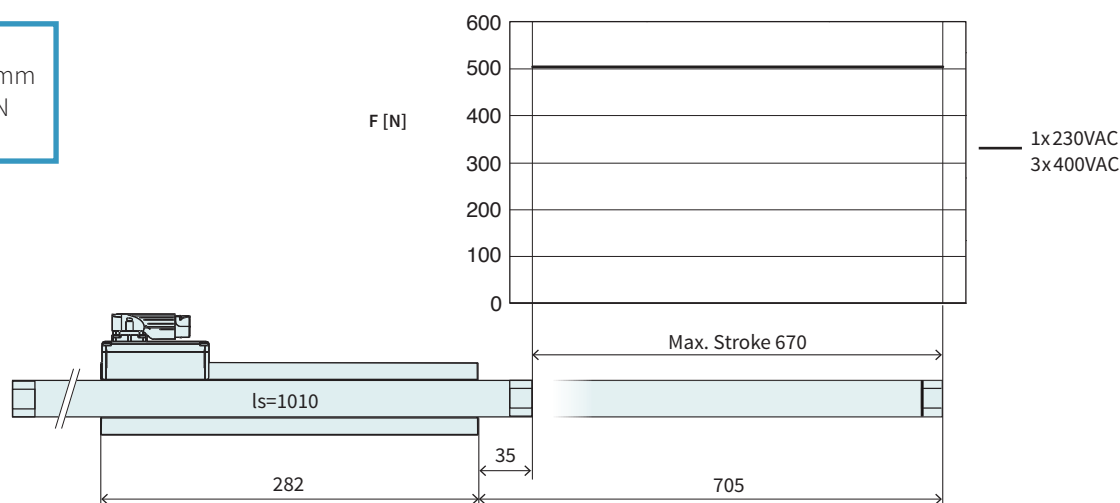
Stroke				
Max. Stroke	mm	(in)	580	(22.8)
Force				
Max. Force @ 1x230VAC	N	(lbf)	502	(113)
Max. Force @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	920	(36)
Slider Mass	g	(lb)	4120	(9.06)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x920/840	Slider 'standard'	0150-1386

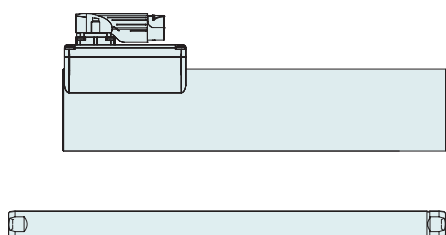
P10-54x180U/670-BL-TU

Max. Stroke: 670 mm
Peak Force: 502 N



Dimensions in mm

Technical Data P10-54x180U/670				
Stroke				
Max. Stroke	mm	(in)	670	(26.39)
Force				
Max. Force @ 1x230VAC	N	(lbf)	502	(113)
Max. Force @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{yms}	(lbf/A _{yms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{yms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{yms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{yms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	1010	(40)
Slider Mass	g	(lb)	4540	(10)

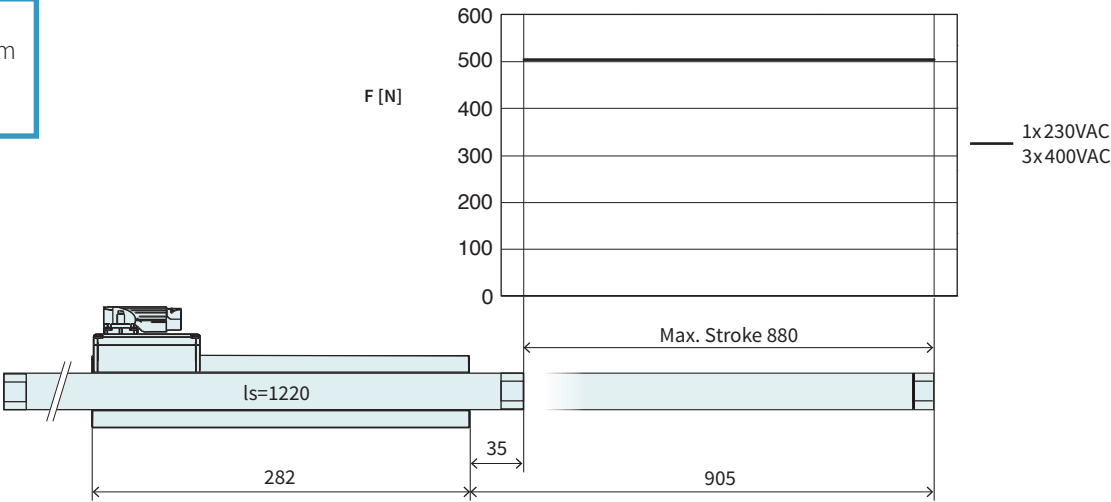


Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x1010/930	Slider 'standard'	0150-1387

P10-54x180U/880-BL-TU

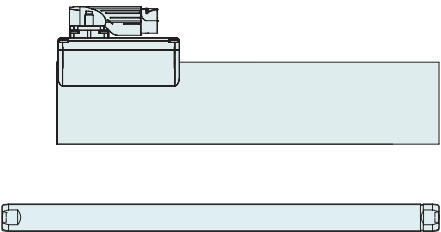
4

Max. Stroke: 880 mm
Peak Force: 502 N



Dimensions in mm

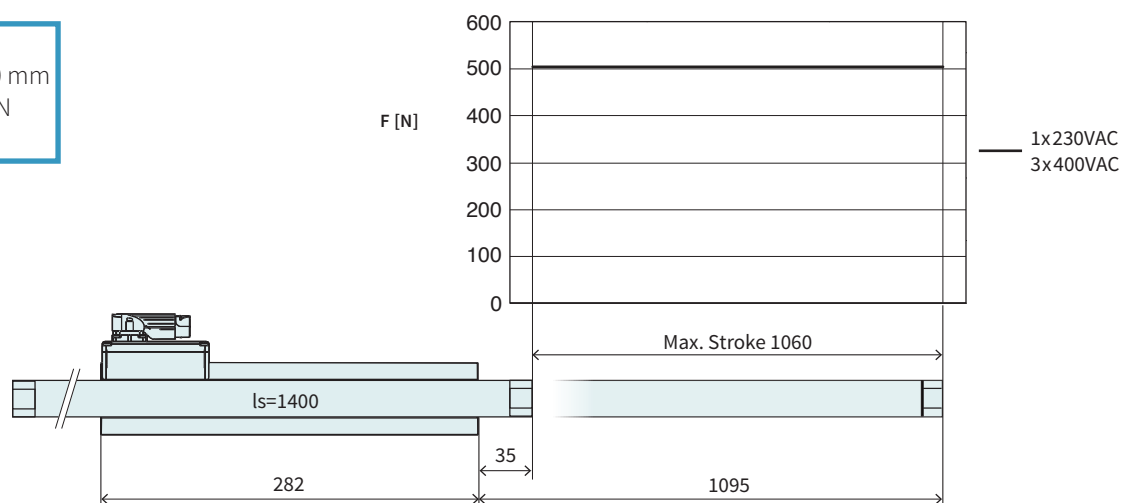
Technical Data P10-54x180U/880				
Stroke				
Max. Stroke	mm	(in)	880	(34.6)
Force				
Max. Force @ 1x230VAC	N	(lbf)	502	(113)
Max. Force @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	1220	(48)
Slider Mass	g	(lb)	5510	(12.12)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x1220/1140	Slider 'standard'	0150-1388

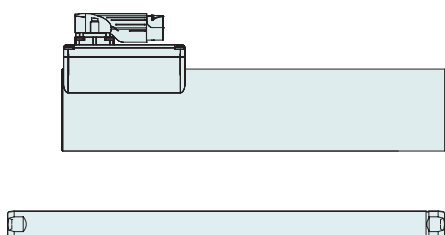
P10-54x180U/1060-BL-TU

Max. Stroke: 1060 mm
Peak Force: 502 N



Technical Data P10-54x180U/1060

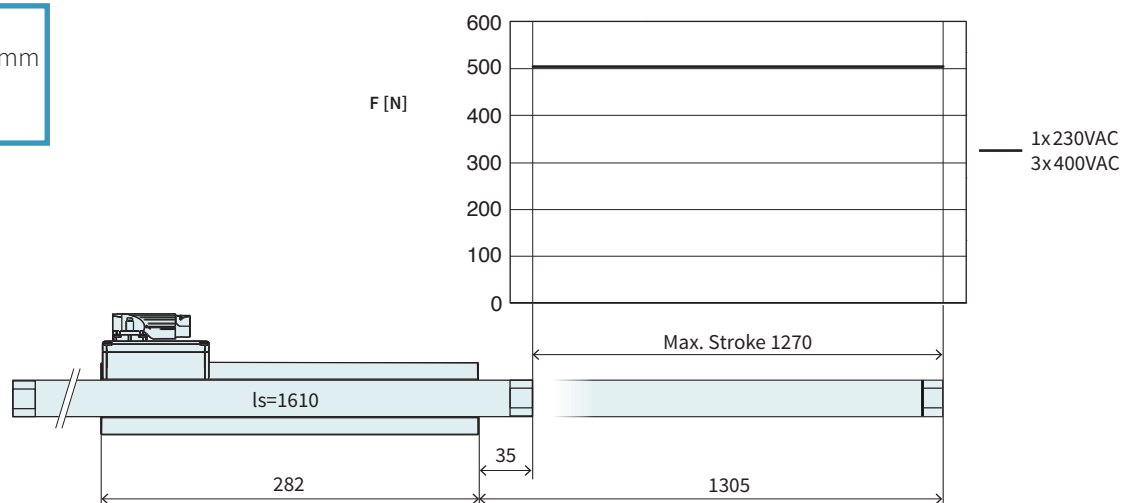
Stroke				
Max. Stroke	mm	(in)	1060	(41.7)
Force				
Max. Force @ 1x230VAC	N	(lbf)	502	(113)
Max. Force @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	1400	(55)
Slider Mass	g	(lb)	6350	(13.97)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x1400/1320	Slider 'standard'	0150-1389

P10-54x180U/1270-BL-TU

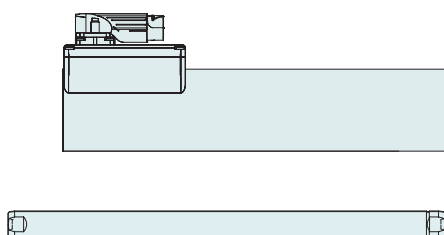
Max. Stroke: 1270 mm
Peak Force: 502 N



Dimensions in mm

Technical Data P10-54x180U/1270

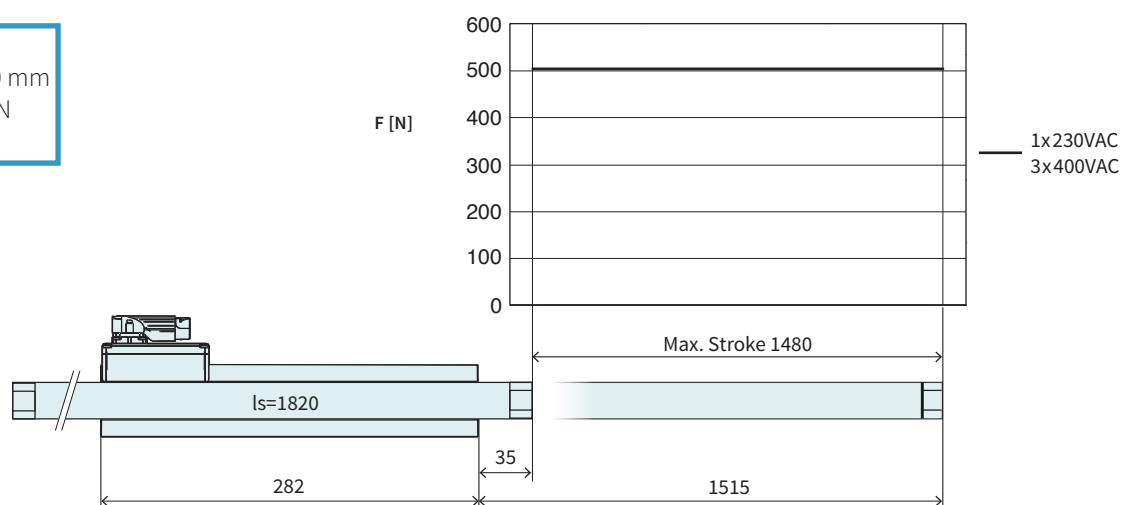
Stroke				
Max. Stroke	mm	(in)	1270	(49.99)
Force				
Max. Force @ 1x230VAC	N	(lbf)	502	(113)
Max. Force @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	1610	(63)
Slider Mass	g	(lb)	7330	(16.13)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x1610/1530	Slider 'standard'	0150-1390

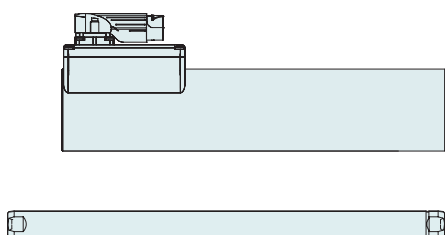
P10-54x180U/1480-BL-TU

Max. Stroke: 1480 mm
Peak Force: 502 N



Dimensions in mm

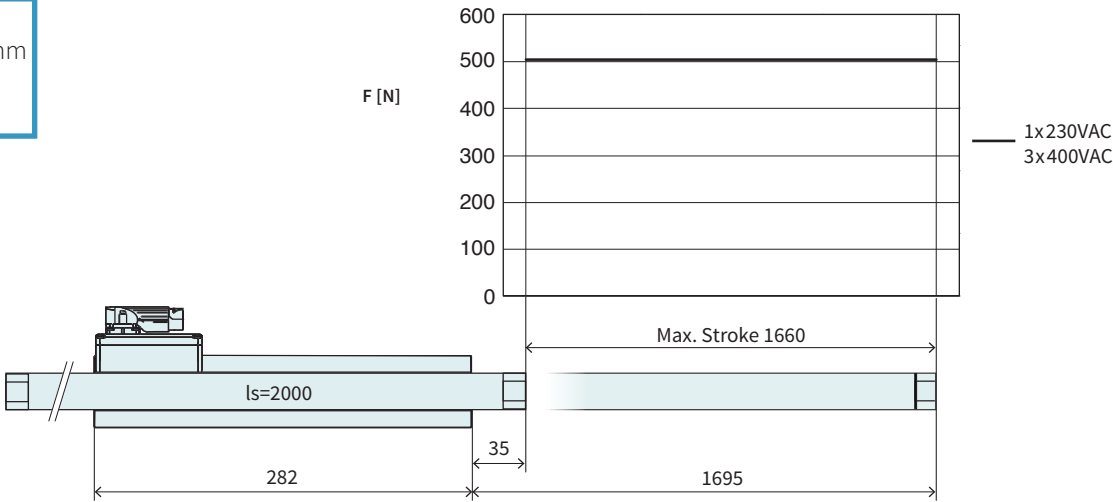
Technical Data P10-54x180U/1480				
Stroke				
Max. Stroke	mm	(in)	1480	(58.29)
Force				
Max. Force @ 1x230VAC	N	(lbf)	502	(113)
Max. Force @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	1820	(72)
Slider Mass	g	(lb)	8300	(18.26)



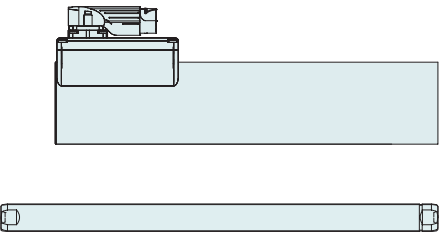
Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x1820/1740	Slider 'standard'	0150-1395

P10-54x180U/1660-BL-TU

Max. Stroke: 1660 mm
Peak Force: 502 N

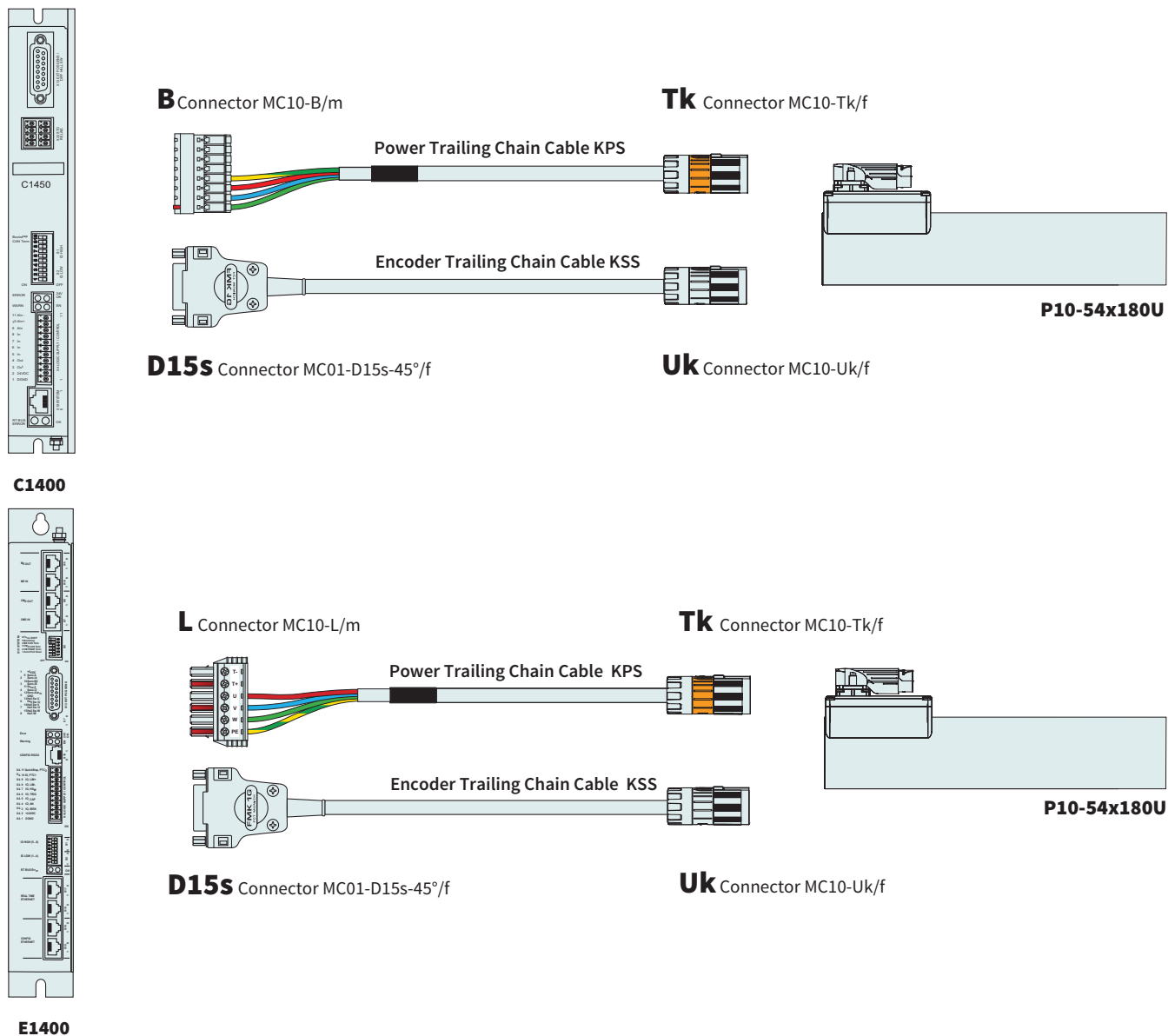


Technical Data P10-54x180U/1660				
Stroke				
Max. Stroke	mm	(in)	1660	(65.4)
Force				
Max. Force @ 1x230VAC	N	(lbf)	502	(113)
Max. Force @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	2000	(79)
Slider Mass	g	(lb)	9140	(20.11)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x2000/1920	Slider 'standard'	0150-1396

Motor Cable



ORDERING INFORMATION

TRAILING CHAIN CABLE FOR LINMOT DRIVES		
Item	Description	Item-No.
KPS07-04/02-L/Tk-3	Power Trailing Chain Cable E1400/P10-54, 3 m	0150-2670
KPS07-04/02-L/Tk-5	Power Trailing Chain Cable E1400/P10-54, 5 m	0150-2671
KPS07-04/02-L/Tk-8	Power Trailing Chain Cable E1400/P10-54, 8 m	0150-2672
KPS07-04/02-L/Tk-12	Power Trailing Chain Cable E1400/P10-54, 12 m	0150-2673
KPS07-04/02-B/Tk-3	Power Trailing Chain Cable C1400/P10-54, 3 m	0150-3648
KPS07-04/02-B/Tk-5	Power Trailing Chain Cable C1400/P10-54, 5 m	0150-3657
KPS07-04/02-B/Tk-8	Power Trailing Chain Cable C1400/P10-54, 8 m	0150-3658
KPS07-04/02-B/Tk-12	Power Trailing Chain Cable C1400/P10-54, 12 m	0150-3659
KSS 05-02/08-D15s/Uk-3	Encoder Trailing Chain Cable D15s/Uk, 3 m	0150-2650
KSS 05-02/08-D15s/Uk-5	Encoder Trailing Chain Cable D15s/Uk, 5 m	0150-2651
KSS 05-02/08-D15s/Uk-8	Encoder Trailing Chain Cable D15s/Uk, 8 m	0150-2652
KSS 05-02/08-D15s/Uk-12	Encoder Trailing Chain Cable D15s/Uk, 12 m	0150-2653

TRAILING CHAIN CABLES FOR THIRD PARTY DRIVES

Item	Description	Item-No.
KPS07-04/02-./Tk-10	Power Trailing Chain Cable .../Tk, 10 m	0150-3626
KPS07-04/02-./Tk-	Power Trailing Chain Cable .../Tk, Custom length	0150-3622
KSS 05-02/13-./Uk-10	Encoder Trailing Chain Cable ./Uk, 10 m	0150-3627
KSS 05-02/13-./Uk-	Encoder Trailing Chain Cable ./Uk, Custom length	0150-3619

CONNECTOR & CABLE (INDIVIDUAL)

Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
MC01-D15/f	Motor Connector D15 (f)	0150-3136
MC10-Tk/f	Connector Power PS10-54	0150-3482
MC10-Uk/f	Connector Encoder PS10-54	0150-3483
KPS07-04/02	Power Trailing Chain Cable P10-54 (per m)	0150-2372
KSS05-02/08	Trailing Chain Cable Encoder LinMot (per m)	0150-2258
KSS05-02/13	Trailing Chain Cable Encoder P10-...-Dxx (per m)	0150-2259

MOTOR FLANGES



Item	Description	Item-No.
PF10-54x200	Flange for PS10-54x180	0150-2734

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

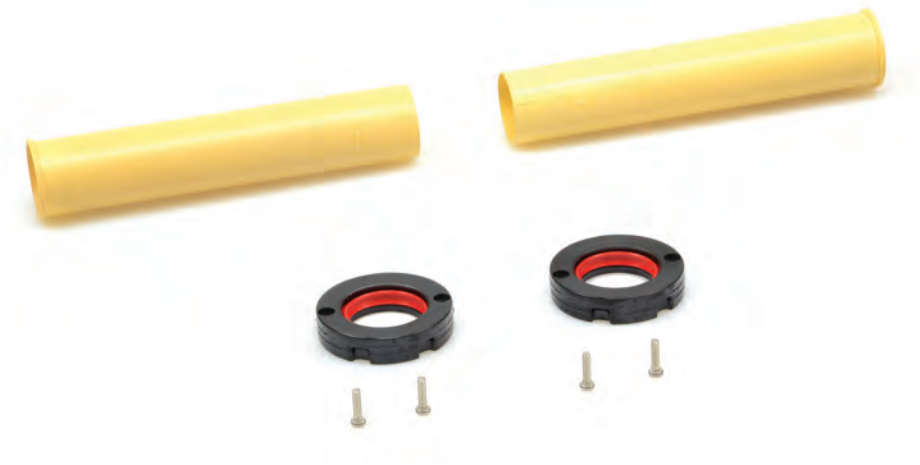
SLIDER MOUNTING



Item	Description	Item-No.
PLF01-28	Fixed Bearing Set for 27/28 mm sliders	0150-3087
PLF01-28-SS	Fixed Bearing Set for 27/28 mm sliders, stainless steel	0150-3297
PLL01-28	Floating Bearing for 28 mm sliders	0150-3094
PLM01-28-MK	Mounting Kit for 28 mm sliders	0150-3095

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



Item	Description	Item-No.
PB10-54x180-L	Bearing Kit for PS10-54x180	0150-3672

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1μm, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D15/D-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1μm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P10-54x240U



- ✓ 230VAC and 3 x 400VAC technology
- ✓ Peak forces up to 669 N
- ✓ LinMot Encoder or Incremental Encoder
- ✓ Extremely high dynamic
- ✓ Rotating push-pull TWIN connector for power and encoder cables
- ✓ Can also be controlled by standard third-party servo drives

LINEAR MOTORS P10-54x240U

Technical Data **445**

Motor Specifications

P10-54x240U/10 **450**

P10-54x240U/100 **451**

P10-54x240U/220 **452**

P10-54x240U/310 **453**

P10-54x240U/400 **454**

P10-54x240U/520 **455**

P10-54x240U/610 **456**

P10-54x240U/820 **457**

P10-54x240U/1000 **458**

P10-54x240U/1210 **459**

P10-54x240U/1420 **460**

P10-54x240U/1600 **461**

Accessories **462**

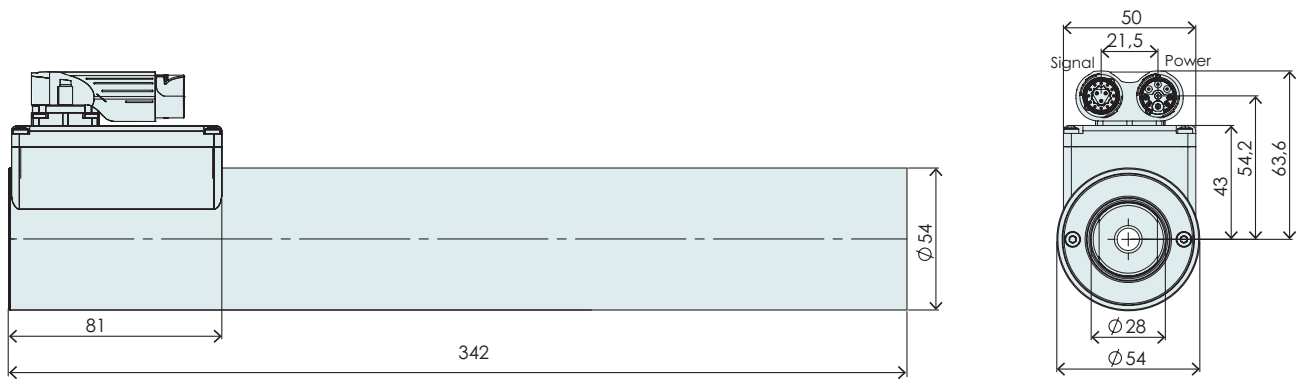


MOTOR FAMILY P10-54x240U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1600	(63)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(279.9)
Position Detection				
Position Resolution	mm	(in)	0.007	(0.0003)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	50.8	(1.29)
Terminal Resistance 25 °C / 120 °C	Ohm		7.5 / 10	
Terminal Inductivity	mH		6	
Magnetic Period	mm	(in)	60	(2.35)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Stator Diameter	mm	(in)	54	(2.1)
Stator Length	mm	(in)	342	(13)
Stator Mass	g	(lb)	2710	(5.96)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	410 - 2000	(16 - 79)
Slider Mass	g	(lb)	1740 - 9140	(3.83 - 20.11)
IP Code			IP 65	

STATOR

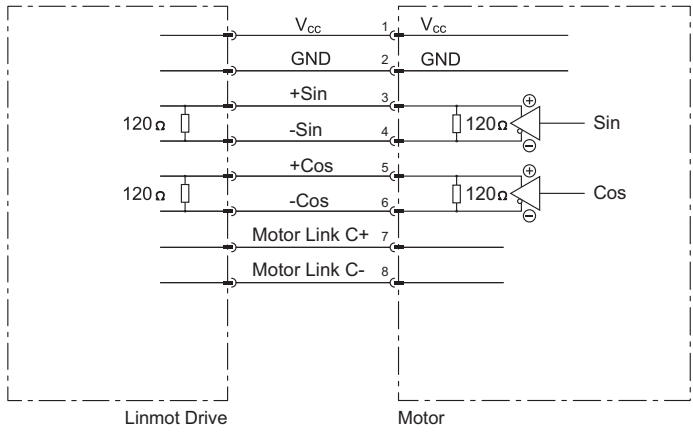
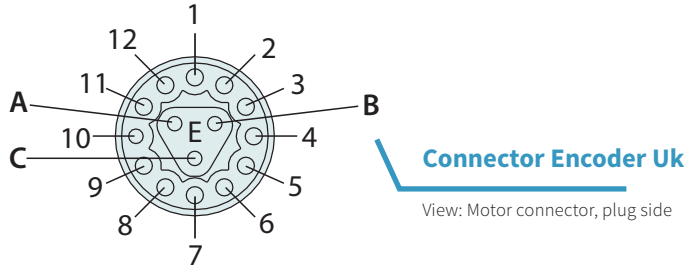
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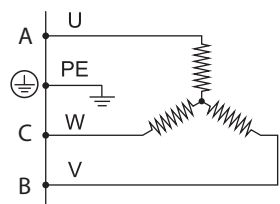
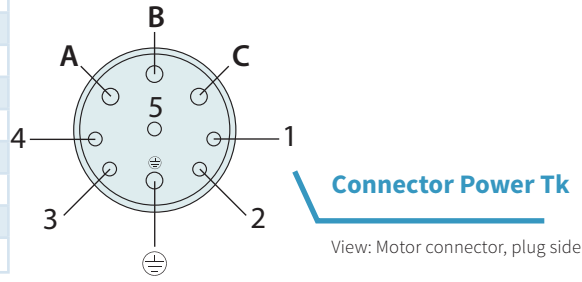
Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784

CONNECTOR PS10-54x240U-BL-TU

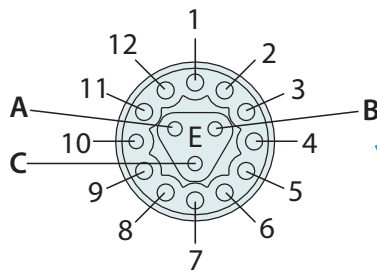
Motor Connector Wiring		Connector Encoder Uk	Wire Color Motor Cable
+Vcc	Supply	1	red
GND	Supply	2	black
Sin+	Encoder	3	yellow
Sin-	Encoder	4	orange
Cos+	Encoder	5	green
Cos-	Encoder	6	blue
Mot. Link C+	Communication	7	pink
Mot. Link C-	Communication	8	grey
n. c.	n. c.	9	n. c.
n. c.	n. c.	10	n. c.
n. c.	n. c.	11	n. c.
n. c.	n. c.	12	n. c.
n. c.	n. c.	A	n. c.
n. c.	n. c.	B	n. c.
n. c.	n. c.	C	n. c.



Motor Steckerbelegung	Connector Power Tk	Wire Color Motor Cable
Phase U	A	red
PE	PE	yellow-green
Phase V	B	blue
Phase W	C	green
n. c.	1	n. c.
n. c.	2	n. c.
n. c.	3	n. c.
n. c.	4	n. c.
n. c.	5	n. c.

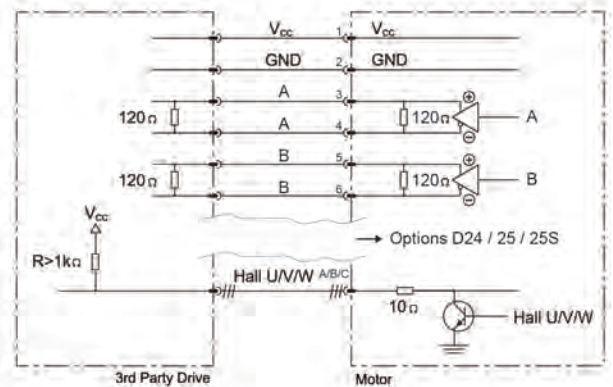


CONNECTOR PS10-54X240U-BL-TU-D24 / 25 / 25S

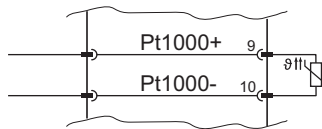


Connector Encoder Uk

View: Motor connector, plug side

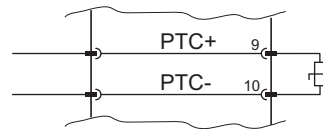


PS10-54x120U-BL-TU-D24



Pt1000 Characteristic emulated

PS10-54x120U-BL-TU-D25 PS10-54x120U-BL-TU-D25S



PTC (switching type)
350 Ω / 18 k Ω emulated¹

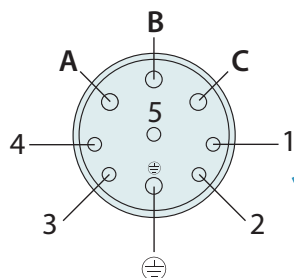
Motor Connector Wiring				
PS10-54x240U-BL-TU-D24	PS10-54x240U-BL-TU-D25 PS10-54x240U-BL-TU-D25S	Function	Connector Encoder Uk	Wire Color Motor Cable
+Vcc	+Vcc	Supply	1	white
GND	GND	Supply	2	brown
A	A	Encoder	3	grey
/A	/A	Encoder	4	pink
B	B	Encoder	5	blue
/B	/B	Encoder	6	red
-	-	-	7	green (do not connect)
-	-	-	8	yellow (do not connect)
Pt1000+	PTC+	Temp. ²	9	yellow-brown
Pt1000-	PTC-	Temp. ²	10	white-yellow
REF+	REF+	Encoder	11	black
REF-	REF-	Encoder	12	purple
Hall U	Hall U	Encoder	A	grey-red
Hall V	Hall V	Encoder	B	red-blue
Hall W	Hall W	Encoder	C	white-green

1) under 350 Ω = no fault, over 18 k Ω = Fault

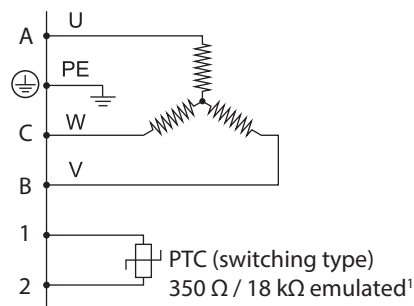
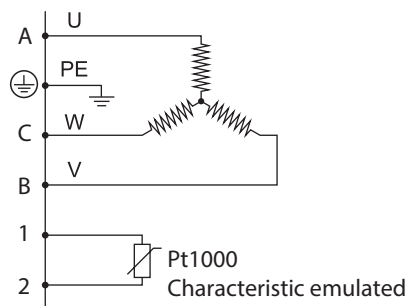
2) The temperature evaluation circuit must be powered from the encoder supply and must be at the same potential.

The grounds of the temperature evaluation circuit and the encoder have to be connected. The encoder must have been powered on for at least 50 ms, before valid temperatures can be measured. If the encoder is powered off, 20k Ohms are measured between Pins 9 and 10.

View: Motor connector, plug side



PS10-54x240U-BL-TU-D25
PS10-54x240U-BL-TU-D25S



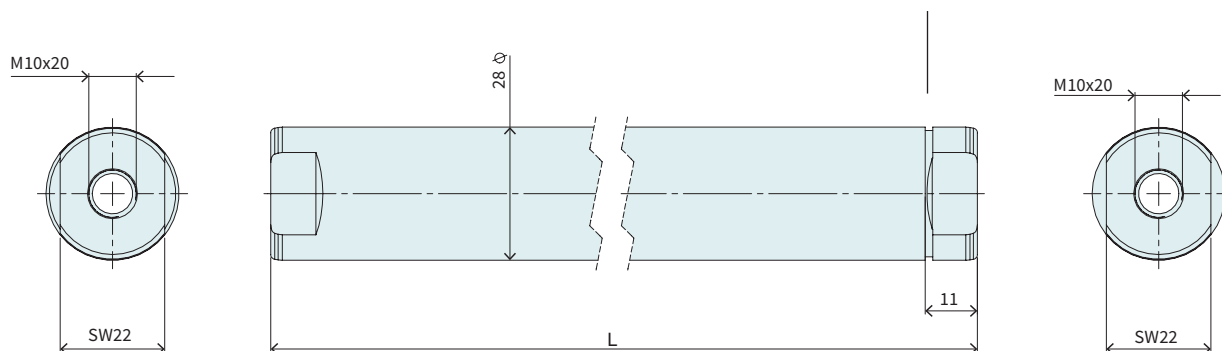
Motor Connector Wiring			
PS10-54x240U-BL-TU-D24	PS10-54x240U-BL-TU-D25 PS10-54x240U-BL-TU-D25S	Connector Power Tk	Wire Color Motor Cable
Phase U	Phase U	A	red
PE	PE	PE	yellow-green
Phase V	Phase V	B	blue
Phase W	Phase W	C	green
Pt1000+	PTC+	1	turquoise
Pt1000-	PTC-	2	grey
n. c.	n. c.	3	n. c.
n. c.	n. c.	4	n. c.
n. c.	n. c.	5	n. c.

1) under 350Ω = no fault, over 18Ω = Fault

SLIDER

Slider Standard

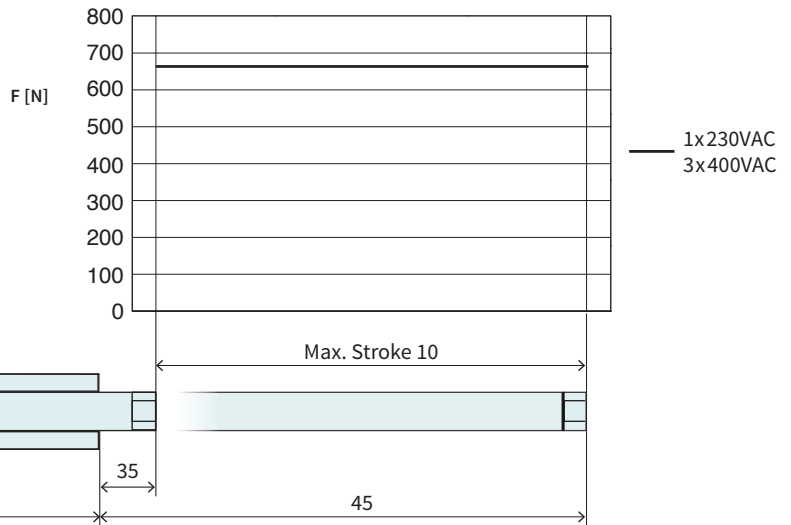
Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.



Slider Standard			
Item	Description	Max. Stroke [mm]	Item-No.
PL01-28x410/330	Slider 'standard'	10	0150-1381
PL01-28x500/420	Slider 'standard'	100	0150-1382
PL01-28x620/540	Slider 'standard'	220	0150-1383
PL01-28x710/630	Slider 'standard'	310	0150-1384
PL01-28x800/720	Slider 'standard'	400	0150-1385
PL01-28x920/840	Slider 'standard'	520	0150-1386
PL01-28x1010/930	Slider 'standard'	610	0150-1387
PL01-28x1220/1140	Slider 'standard'	820	0150-1388
PL01-28x1400/1320	Slider 'standard'	1000	0150-1389
PL01-28x1610/1530	Slider 'standard'	1210	0150-1390
PL01-28x1820/1740	Slider 'standard'	1420	0150-1395
PL01-28x2000/1920	Slider 'standard'	1600	0150-1396

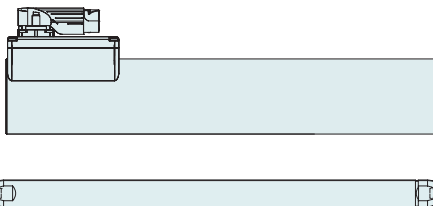
P10-54x240U/10-BL-TU

Max. Stroke: 10 mm
Peak Force: 669 N



Technical Data P10-54x240U/10

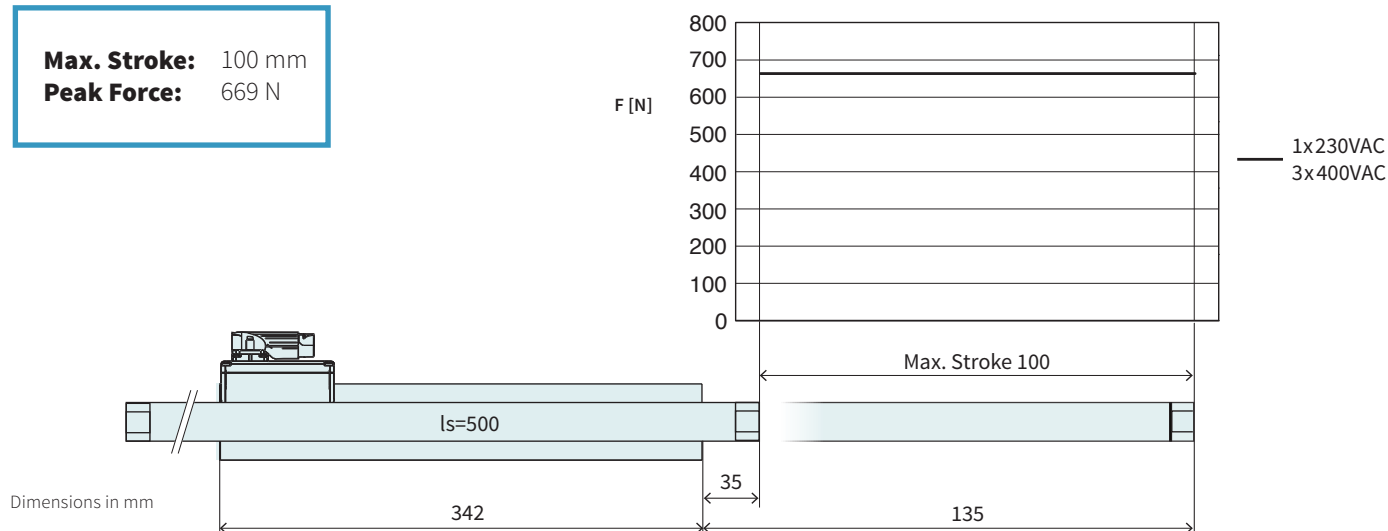
Stroke				
Max. Stroke	mm	(in)	10	(0.39)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 7.6	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm	(in)	410	(16)
Slider Mass	g	(lb)	1740	(3.83)



Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PL01-28x410/330	Slider 'standard'	0150-1381

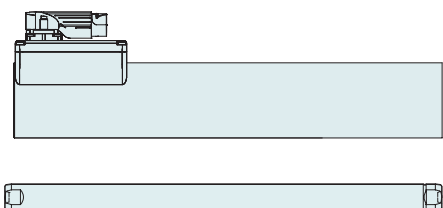
P10-54x240U/100-BL-TU

Max. Stroke: 100 mm
Peak Force: 669 N



Technical Data P10-54x240U/100

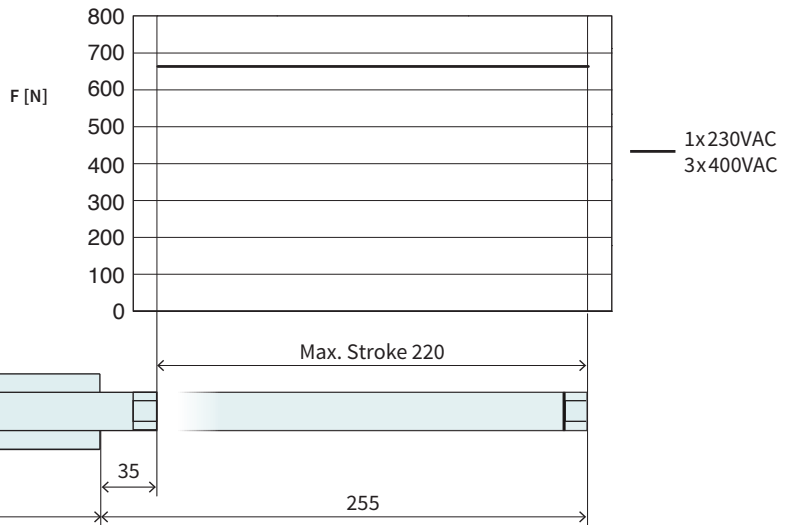
Stroke				
Max. Stroke	mm	(in)	100	(3.93)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.85	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm	(in)	500	(20)
Slider Mass	g	(lb)	2160	(4.75)



Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PL01-28x500/420	Slider 'standard'	0150-1382

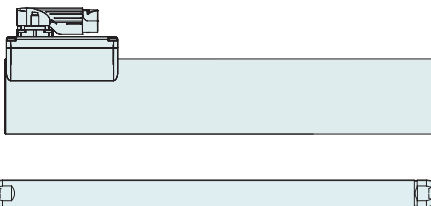
P10-54x240U/220-BL-TU

Max. Stroke: 220 mm
Peak Force: 669 N



Technical Data P10-54x240U/220

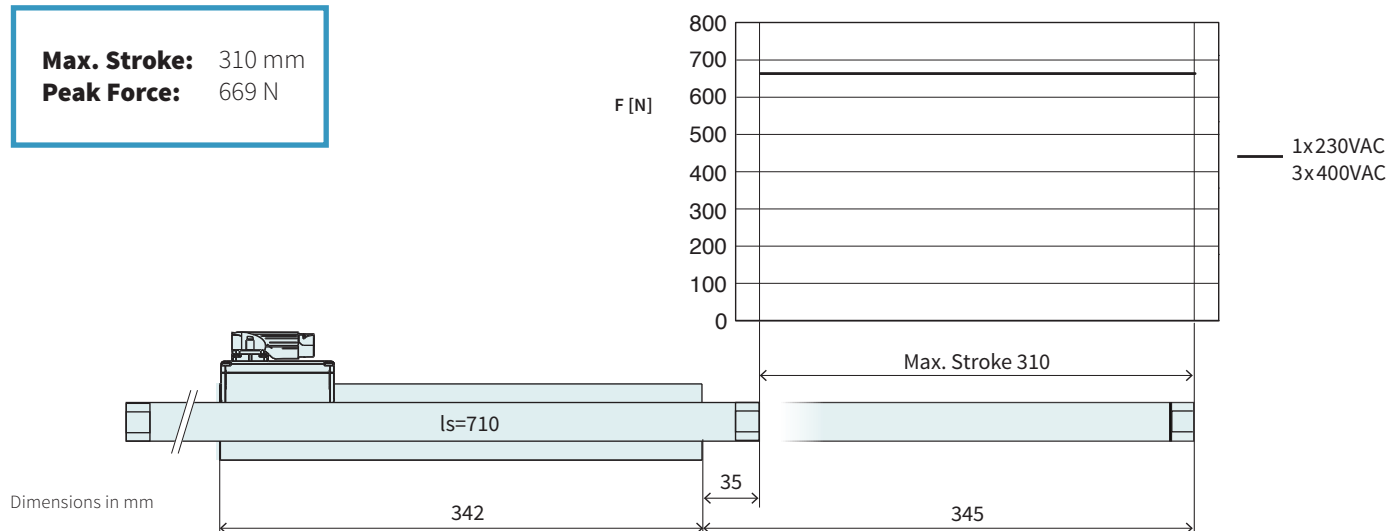
Stroke				
Max. Stroke	mm	(in)	220	(8.65)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.45	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm	(in)	620	(24)
Slider Mass	g	(lb)	2720	(5.98)



Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PL01-28x620/540	Slider 'standard'	0150-1383

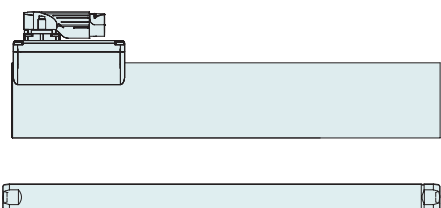
P10-54x240U/310-BL-TU

Max. Stroke: 310 mm
Peak Force: 669 N



Technical Data P10-54x240U/310

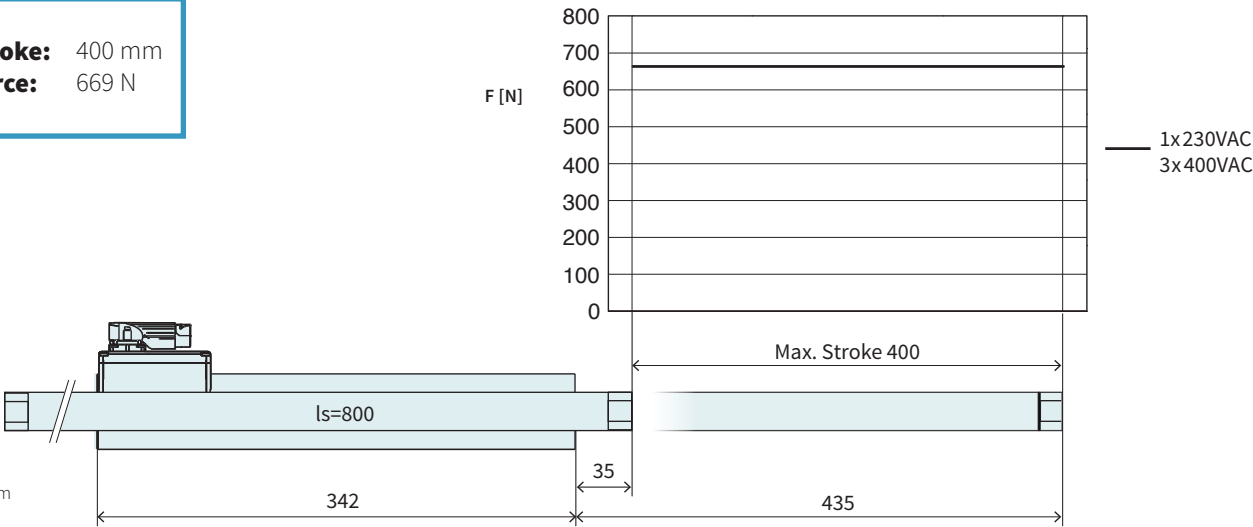
Stroke				
Max. Stroke	mm	(in)	310	(12.19)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.35	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm	(in)	710	(28)
Slider Mass	g	(lb)	3140	(6.91)



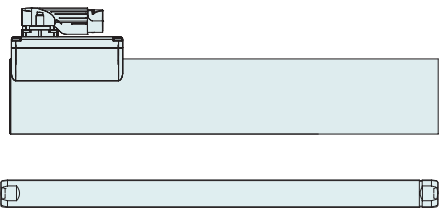
Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder Sum, PTC	0150-2784
PL01-28x710/630	Slider 'standard'	0150-1384

P10-54x240U/400-BL-TU

Max. Stroke: 400 mm
Peak Force: 669 N



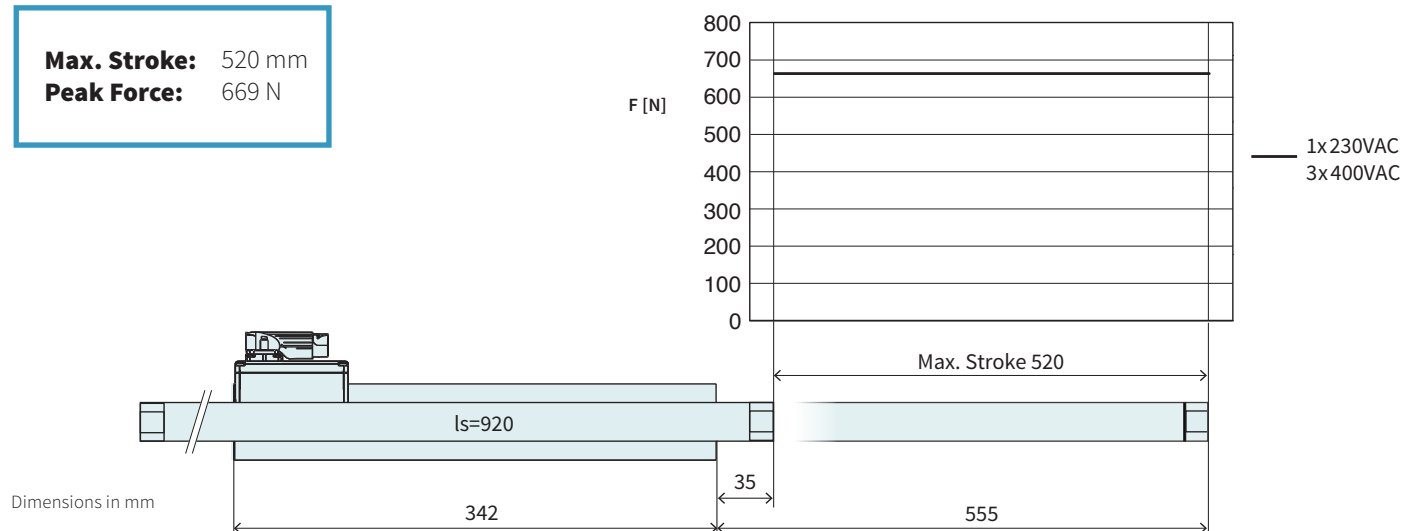
Technical Data P10-54x240U/400				
Stroke				
Max. Stroke	mm	(in)	400	(15.69)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm	(in)	800	(31)
Slider Mass	g	(lb)	3560	(7.83)



Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PL01-28x800/720	Slider 'standard'	0150-1385

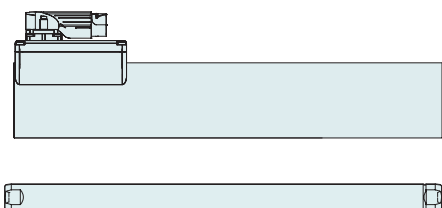
P10-54x240U/520-BL-TU

Max. Stroke: 520 mm
Peak Force: 669 N



Technical Data P10-54x240U/520

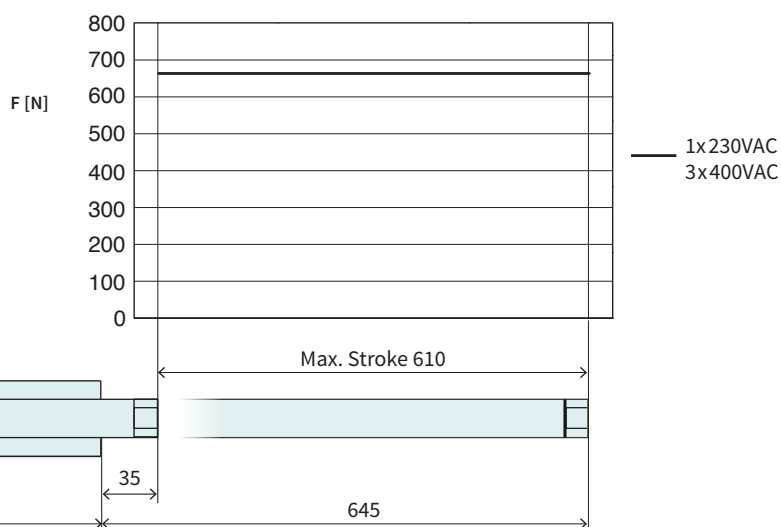
Stroke				
Max. Stroke	mm	(in)	520	(20.49)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm	(in)	920	(36)
Slider Mass	g	(lb)	4120	(9.06)



Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PL01-28x920/840	Slider 'standard'	0150-1386

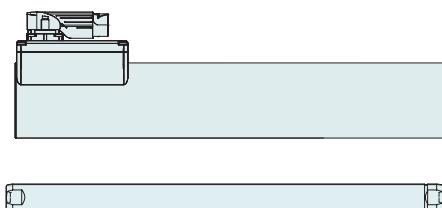
P10-54x240U/610-BL-TU

Max. Stroke: 610 mm
Peak Force: 669 N



Technical Data P10-54x240U/610

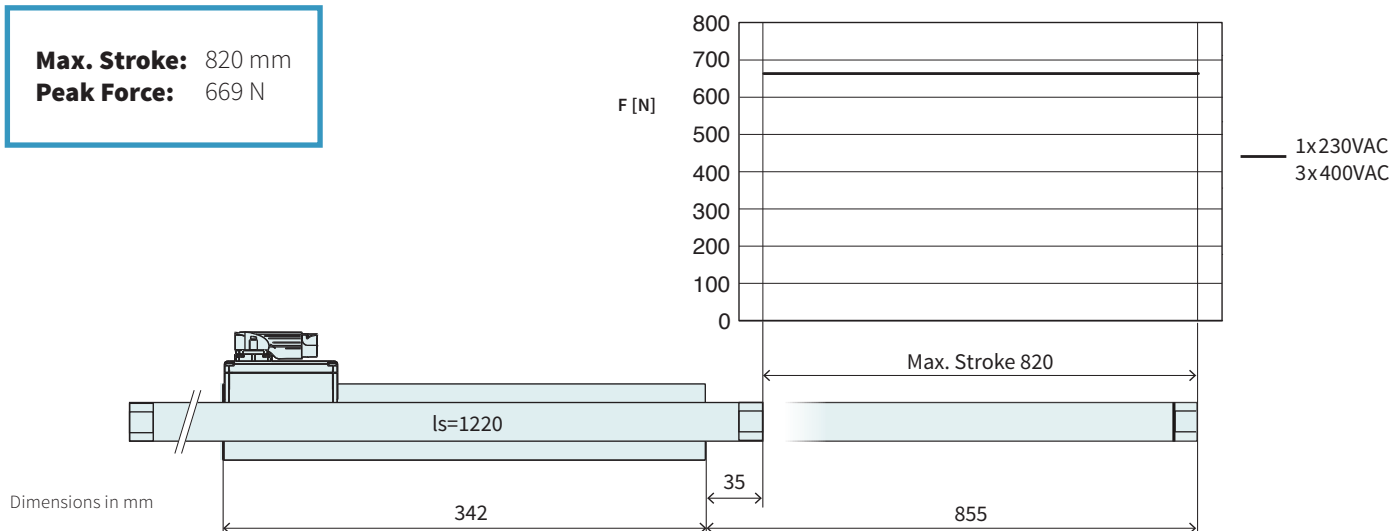
Stroke				
Max. Stroke	mm	(in)	610	(23.99)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm	(in)	1010	(40)
Slider Mass	g	(lb)	4540	(10)



Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PL01-28x1010/930	Slider 'standard'	0150-1387

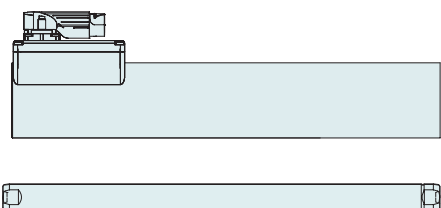
P10-54x240U/820-BL-TU

Max. Stroke: 820 mm
Peak Force: 669 N



Technical Data P10-54x240U/820

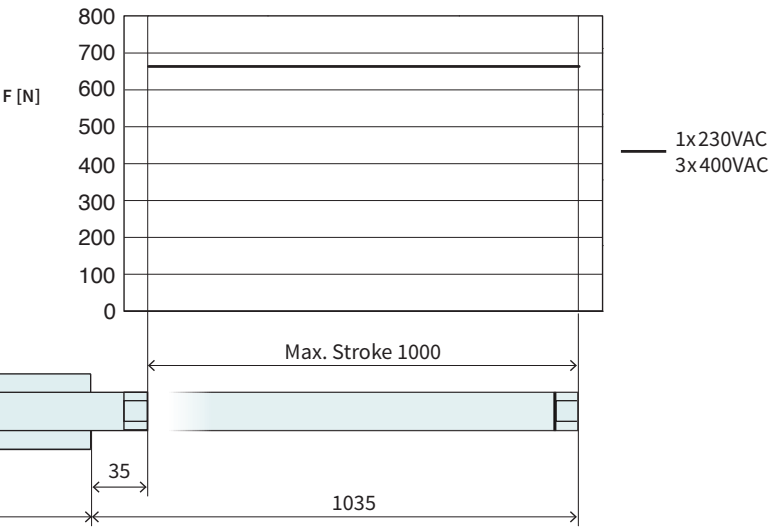
Stroke				
Max. Stroke	mm	(in)	820	(32.29)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm	(in)	1220	(48)
Slider Mass	g	(lb)	5510	(12.12)



Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PL01-28x1220/1140	Slider 'standard'	0150-1388

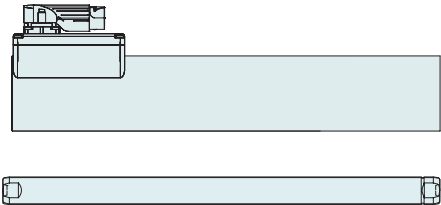
P10-54x240U/1000-BL-TU

Max. Stroke: 1000 mm
Peak Force: 669 N



Dimensions in mm

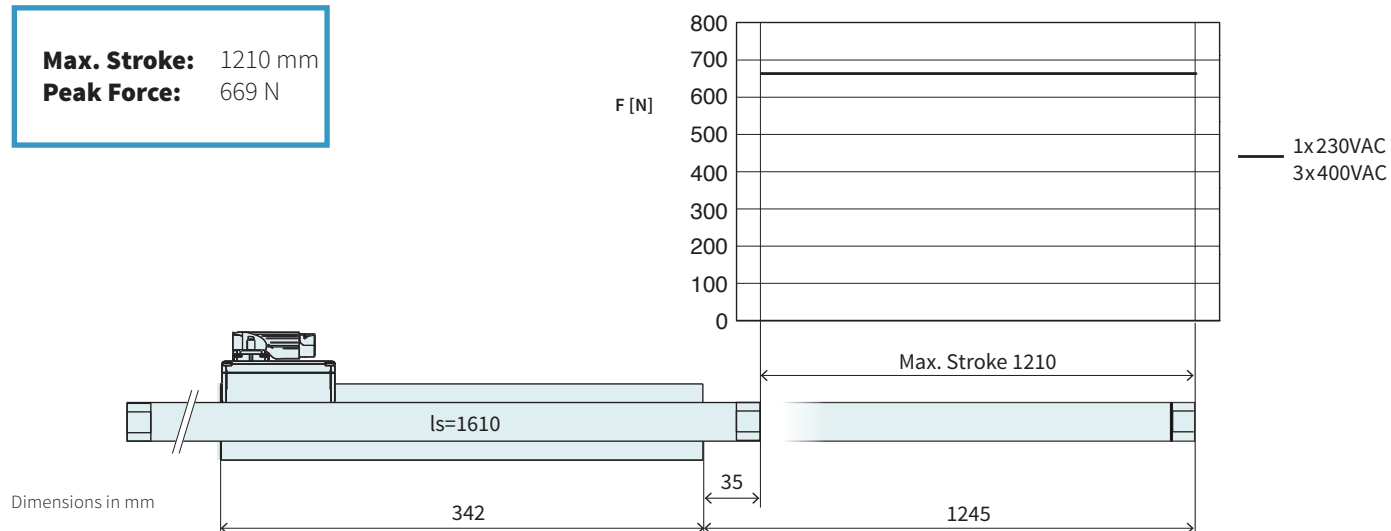
Technical Data P10-54x240U/1000				
Stroke				
Max. Stroke	mm	(in)	1000	(39.39)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm	(in)	1400	(55)
Slider Mass	g	(lb)	6350	(13.97)



Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PL01-28x1400/1320	Slider 'standard'	0150-1389

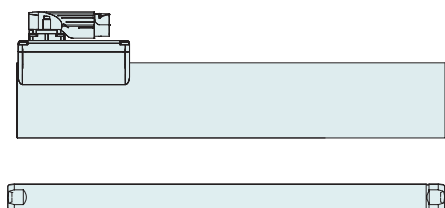
P10-54x240U/1210-BL-TU

Max. Stroke: 1210 mm
Peak Force: 669 N



Technical Data P10-54x240U/1210

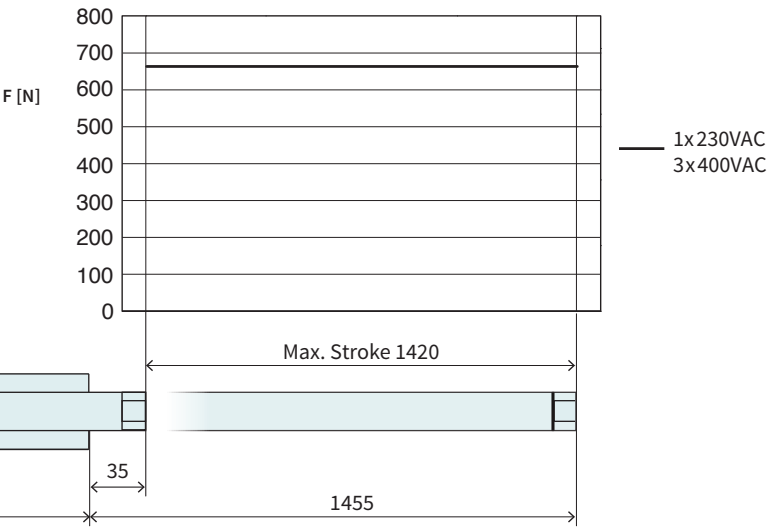
Stroke				
Max. Stroke	mm	(in)	1210	(47.6)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm	(in)	1610	(63)
Slider Mass	g	(lb)	7330	(16.13)



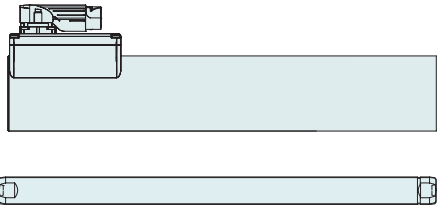
Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder Sum, PTC	0150-2784
PL01-28x1610/1530	Slider 'standard'	0150-1390

P10-54x240U/1420-BL-TU

Max. Stroke: 1420 mm
Peak Force: 669 N



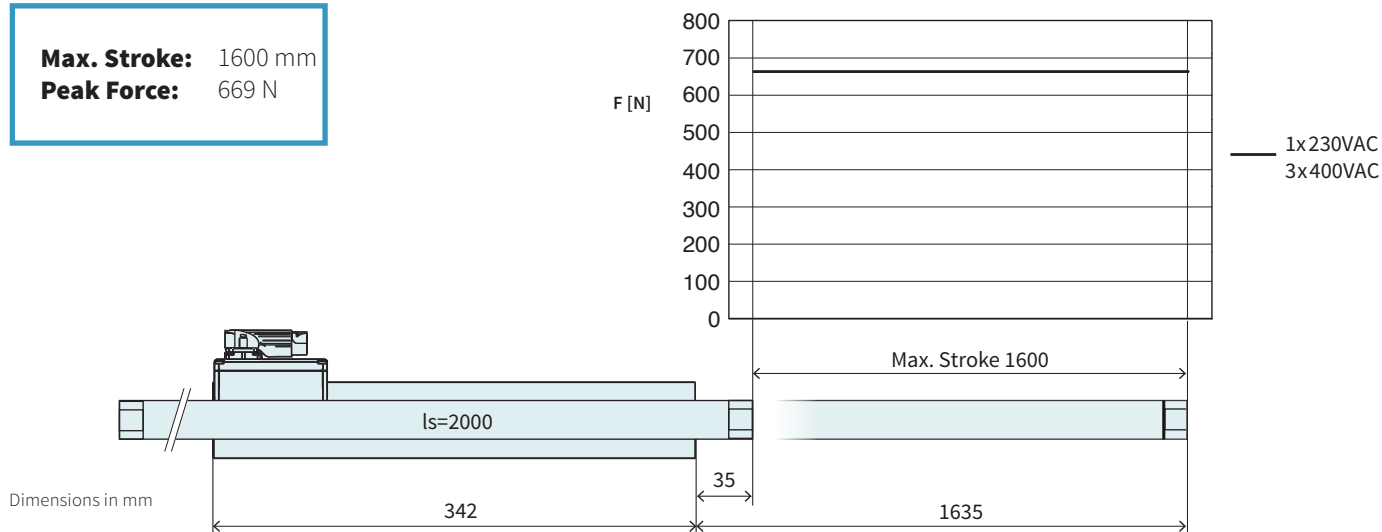
Technical Data P10-54x240U/1420				
Stroke				
Max. Stroke	mm	(in)	1420	(55.89)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm	(in)	1820	(72)
Slider Mass	g	(lb)	8300	(18.26)



Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PL01-28x1820/1740	Slider 'standard'	0150-1395

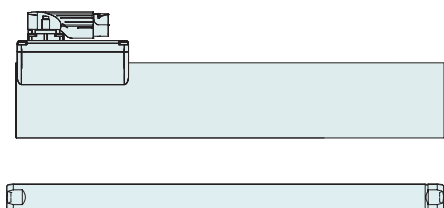
P10-54x240U/1600-BL-TU

Max. Stroke: 1600 mm
Peak Force: 669 N



Technical Data P10-54x240U/1600

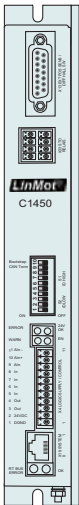
Stroke				
Max. Stroke	mm	(in)	1600	(62.99)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{yms}	(lbf/A _{yms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		±0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{yms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{yms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{yms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm	(in)	2000	(79)
Slider Mass	g	(lb)	9140	(20.11)



Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PL01-28x2000/1920	Slider 'standard'	0150-1396

Motor Cable

4



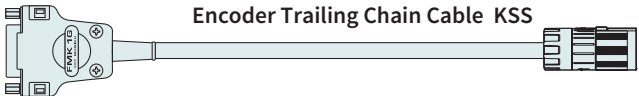
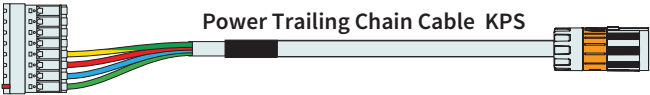
C1400



E1400

B Connector MC10-B/m

Tk Connector MC10-Tk/f



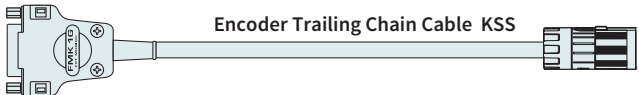
P10-54x240U

D15s Connector MC01-D15s-45°/f

Uk Connector MC10-Uk/f

L Connector MC10-L/m

Tk Connector MC10-Tk/f



P10-54x240U

D15s Connector MC01-D15s-45°/f

Uk Connector MC10-Uk/f

ORDERING INFORMATION

TRAILING CHAIN CABLE FOR LINMOT DRIVES		
Item	Description	Item-No.
KPS07-04/02-L/Tk-3	Power Trailing Chain Cable E1400/P10-54, 3 m	0150-2670
KPS07-04/02-L/Tk-5	Power Trailing Chain Cable E1400/P10-54, 5 m	0150-2671
KPS07-04/02-L/Tk-8	Power Trailing Chain Cable E1400/P10-54, 8 m	0150-2672
KPS07-04/02-L/Tk-12	Power Trailing Chain Cable E1400/P10-54, 12 m	0150-2673
KPS07-04/02-B/Tk-3	Power Trailing Chain Cable C1400/P10-54, 3 m	0150-3648
KPS07-04/02-B/Tk-5	Power Trailing Chain Cable C1400/P10-54, 5 m	0150-3657
KPS07-04/02-B/Tk-8	Power Trailing Chain Cable C1400/P10-54, 8 m	0150-3658
KPS07-04/02-B/Tk-12	Power Trailing Chain Cable C1400/P10-54, 12 m	0150-3659
KSS 05-02/08-D15s/Uk-3	Encoder Trailing Chain Cable D15s/Uk, 3 m	0150-2650
KSS 05-02/08-D15s/Uk-5	Encoder Trailing Chain Cable D15s/Uk, 5 m	0150-2651
KSS 05-02/08-D15s/Uk-8	Encoder Trailing Chain Cable D15s/Uk, 8 m	0150-2652
KSS 05-02/08-D15s/Uk-12	Encoder Trailing Chain Cable D15s/Uk, 12 m	0150-2653

TRAILING CHAIN CABLES FOR THIRD PARTY DRIVES

Item	Description	Item-No.
KPS07-04/02-./Tk-10	Power Trailing Chain Cable .../Tk, 10 m	0150-3626
KPS07-04/02-./Tk-	Power Trailing Chain Cable .../Tk, Custom length	0150-3622
KSS 05-02/13-./Uk-10	Encoder Trailing Chain Cable ./Uk, 10 m	0150-3627
KSS 05-02/13-./Uk-	Encoder Trailing Chain Cable ./Uk, Custom length	0150-3619

CONNECTOR & CABLE (INDIVIDUAL)

Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
MC01-D15/f	Motor Connector D15 (f)	0150-3136
MC10-Tk/f	Connector Power PS10-54	0150-3482
MC10-Uk/f	Connector Encoder PS10-54	0150-3483
KPS07-04/02	Power Trailing Chain Cable P10-54 (per m)	0150-2372
KSS05-02/08	Trailing Chain Cable Encoder LinMot (per m)	0150-2258
KSS05-02/13	Trailing Chain Cable Encoder P10-...-Dxx (per m)	0150-2259

MOTOR FLANGES



Item	Description	Item-No.
PF10-54x260	Flange for PS10-54x240	0150-2735

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

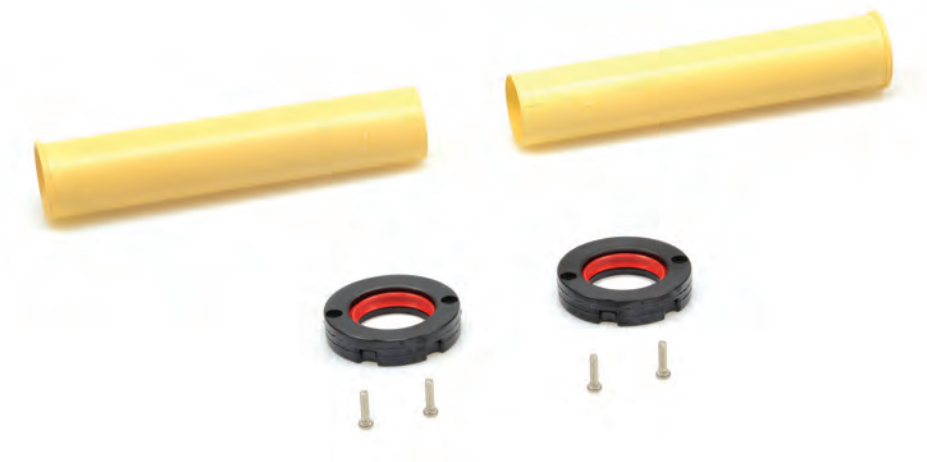
SLIDER MOUNTING



Item	Description	Item-No.
PLF01-28	Fixed Bearing Set for 27/28 mm sliders	0150-3087
PLF01-28-SS	Fixed Bearing Set for 27/28 mm sliders, stainless steel	0150-3297
PLL01-28	Floating Bearing for 28 mm sliders	0150-3094
PLM01-28-MK	Mounting Kit for 28 mm sliders	0150-3095

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



Item	Description	Item-No.
PB10-54x240-L	Bearing Kit for PS10-54x240	0150-3673

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1μm, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D15/D-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1μm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

Handwriting practice lines consisting of 20 horizontal dotted lines.

LINEAR MOTORS P10-54x300U



- ✓ 230VAC and 3 x 400VAC technology
- ✓ Peak forces up to 871 N
- ✓ LinMot Encoder or Incremental Encoder
- ✓ Extremely high dynamic
- ✓ Rotating push-pull TWIN connector for power and encoder cables
- ✓ Can also be controlled by standard third-party servo drives

LINEAR MOTORS P10-54x300U

Technical Data **469**

Motor Specifications

P10-54x300U/40 **474**

P10-54x300U/160 **475**

P10-54x300U/250 **476**

P10-54x300U/340 **477**

P10-54x300U/460 **478**

P10-54x300U/550 **479**

P10-54x300U/760 **480**

P10-54x300U/940 **481**

P10-54x300U/1150 **482**

P10-54x300U/1360 **483**

P10-54x300U/1540 **484**

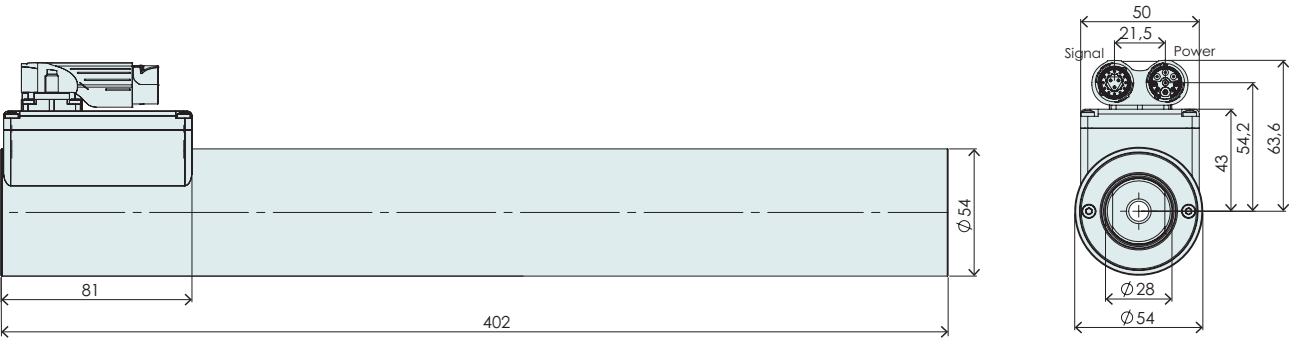
Accessories **485**



MOTOR FAMILY P10-54x300U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1540	(60.6)
Force				
Max. Force @ 1x230VAC	N	(lbf)	871	(196)
Max. Force @ 3x400VAC	N	(lbf)	871	(196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 190 / 270	(31 / 44 / 61)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(279.9)
Position Detection				
Position Resolution	mm	(in)	0.007	(0.0003)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.2 / 3.1 / 4.4	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	50.8	(1.29)
Terminal Resistance 25 °C / 120 °C	Ohm		5.7 / 7.8	
Terminal Inductivity	mH		4.8	
Magnetic Period	mm	(in)	60	(2.35)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 660 / 340	
Mechanical Data				
Stator Diameter	mm	(in)	54	(2.1)
Stator Length	mm	(in)	402	(16)
Stator Mass	g	(lb)	3200	(7.04)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	500 - 2000	(20 - 79)
Slider Mass	g	(lb)	2160 - 9140	(4.75 - 20.11)
IP Code			IP 65	

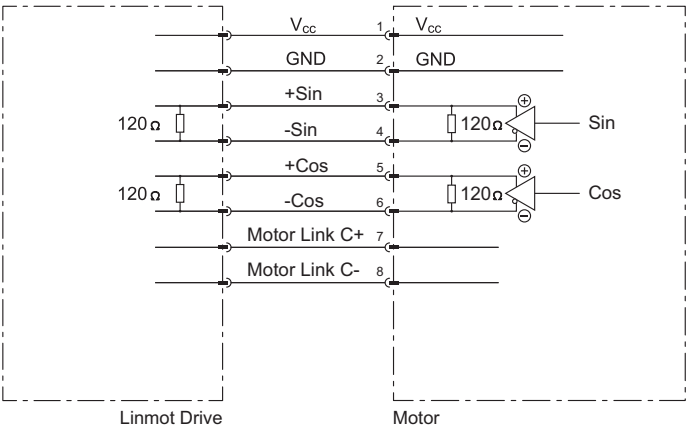
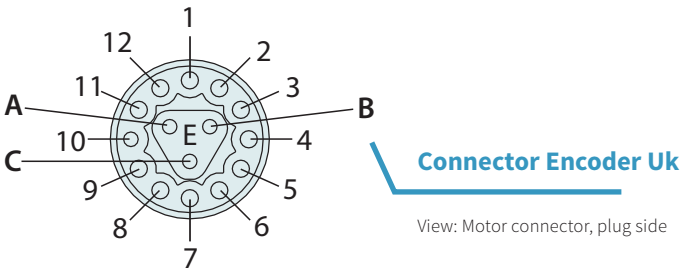
STATOR



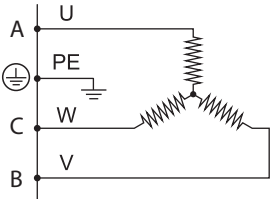
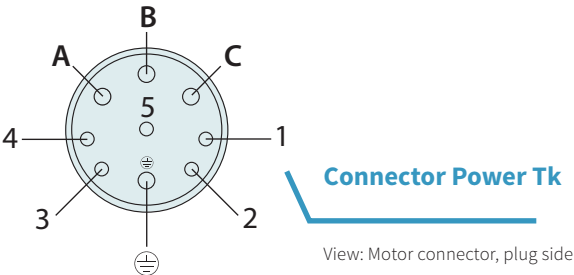
Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785

CONNECTOR PS10-54x240U-BL-TU

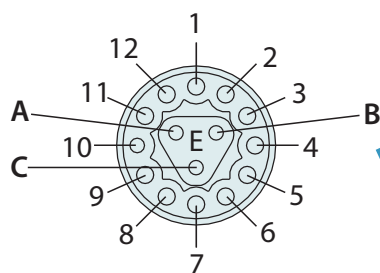
Motor Connector Wiring		Connector Encoder Uk	Wire Color Motor Cable
+Vcc	Supply	1	red
GND	Supply	2	black
Sin+	Encoder	3	yellow
Sin-	Encoder	4	orange
Cos+	Encoder	5	green
Cos-	Encoder	6	blue
Mot. Link C+	Communication	7	pink
Mot. Link C-	Communication	8	grey
n. c.	n. c.	9	n. c.
n. c.	n. c.	10	n. c.
n. c.	n. c.	11	n. c.
n. c.	n. c.	12	n. c.
n. c.	n. c.	A	n. c.
n. c.	n. c.	B	n. c.
n. c.	n. c.	C	n. c.



Motor Steckerbelegung	Connector Power Tk	Wire Color Motor Cable
Phase U	A	red
PE	PE	yellow-green
Phase V	B	blue
Phase W	C	green
n. c.	1	n. c.
n. c.	2	n. c.
n. c.	3	n. c.
n. c.	4	n. c.
n. c.	5	n. c.

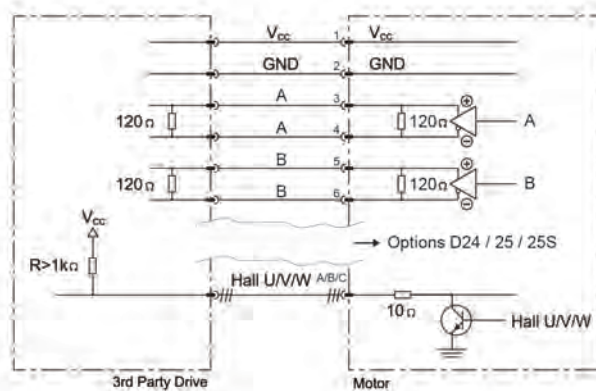


CONNECTOR PS10-54X300U-BL-TU-D24 / 25 / 25S

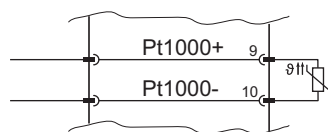
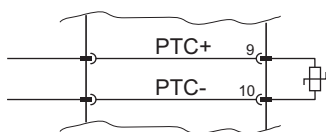


Connector Encoder Uk

View: Motor connector, plug side



PS10-54x300U-BL-TU-D24

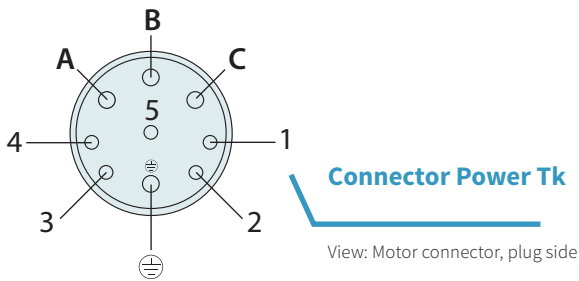
Pt1000 Characteristic
emulatedPS10-54x300U-BL-TU-D25
PS10-54x300U-BL-TU-D25SPTC (switching type)
350 Ω / 18 k Ω emulated¹

Motor Connector Wiring				
PS10-54x300U-BL-TU-D24	PS10-54x300U-BL-TU-D25 PS10-54x300U-BL-TU-D25S	Function	Connector Encoder Uk	Wire Color Motor Cable
+Vcc	+Vcc	Supply	1	white
GND	GND	Supply	2	brown
A	A	Encoder	3	grey
/A	/A	Encoder	4	pink
B	B	Encoder	5	blue
/B	/B	Encoder	6	red
-	-	-	7	green (do not connect)
-	-	-	8	yellow (do not connect)
Pt1000+	PTC+	Temp. ²	9	yellow-brown
Pt1000-	PTC-	Temp. ²	10	white-yellow
REF+	REF+	Encoder	11	black
REF-	REF-	Encoder	12	purple
Hall U	Hall U	Encoder	A	grey-red
Hall V	Hall V	Encoder	B	red-blue
Hall W	Hall W	Encoder	C	white-green

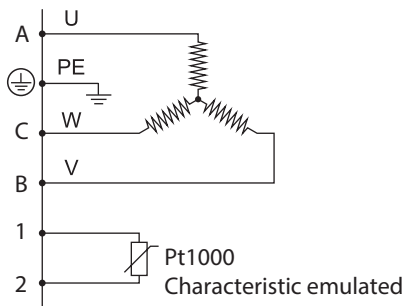
1) under 350 Ω = no fault, over 18 k Ω = Fault

2) The temperature evaluation circuit must be powered from the encoder supply and must be at the same potential.

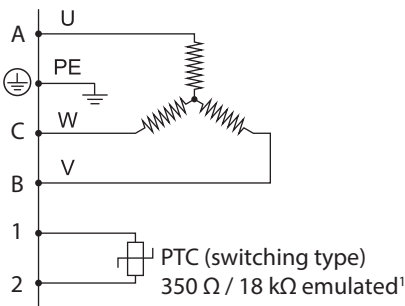
The grounds of the temperature evaluation circuit and the encoder have to be connected. The encoder must have been powered on for at least 50 ms, before valid temperatures can be measured. If the encoder is powered off, 20k Ohms are measured between Pins 9 and 10.



PS10-54x300U-BL-TU-D24



PS10-54x300U-BL-TU-D25
PS10-54x300U-BL-TU-D25S

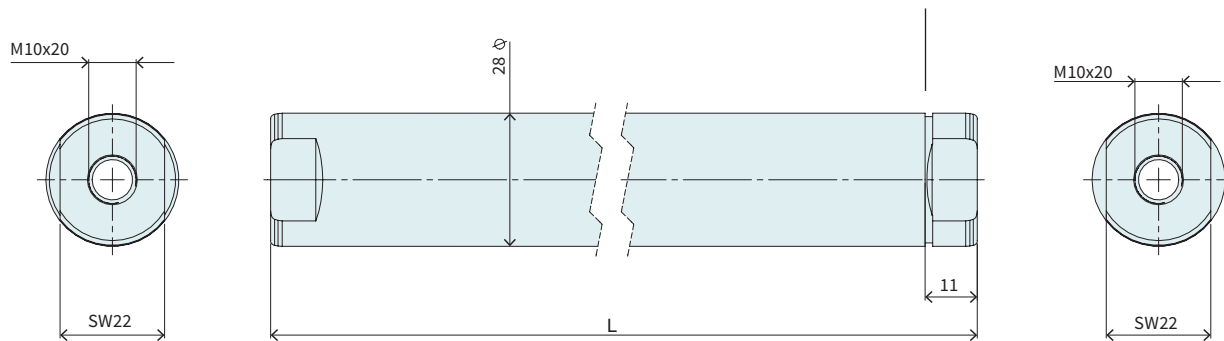


Motor Connector Wiring			
PS10-54x300U-BL-TU-D24	PS10-54x300U-BL-TU-D25 PS10-54x300U-BL-TU-D25S	Connector Power Tk	Wire Color Motor Cable
Phase U	Phase U	A	red
PE	PE	PE	yellow-green
Phase V	Phase V	B	blue
Phase W	Phase W	C	green
Pt1000+	PTC+	1	turquoise
Pt1000-	PTC-	2	grey
n. c.	n. c.	3	n. c.
n. c.	n. c.	4	n. c.
n. c.	n. c.	5	n. c.

1) under 350 Ω = no fault, over 18 Ω = Fault

SLIDER

Slider Standard

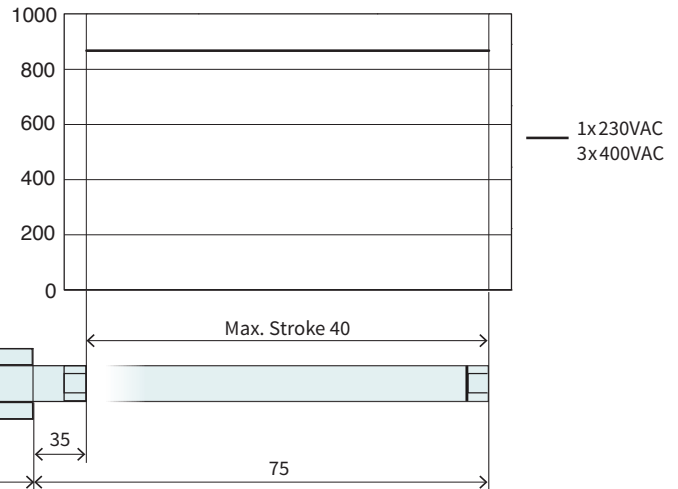


Slider Standard			
Item	Description	Max. Stroke [mm]	Item-No.
PL01-28x500/420	Slider 'standard'	40	0150-1382
PL01-28x620/540	Slider 'standard'	160	0150-1383
PL01-28x710/630	Slider 'standard'	250	0150-1384
PL01-28x800/720	Slider 'standard'	340	0150-1385
PL01-28x920/840	Slider 'standard'	460	0150-1386
PL01-28x1010/930	Slider 'standard'	550	0150-1387
PL01-28x1220/1140	Slider 'standard'	760	0150-1388
PL01-28x1400/1320	Slider 'standard'	940	0150-1389
PL01-28x1610/1530	Slider 'standard'	1150	0150-1390
PL01-28x1820/1740	Slider 'standard'	1360	0150-1395
PL01-28x2000/1920	Slider 'standard'	1540	0150-1396

P10-54x300U/40-BL-TU

Max. Stroke: 40 mm
Peak Force: 871 N

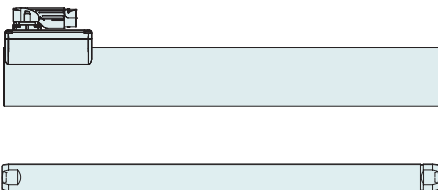
F [N]



Dimensions in mm

Technical Data P10-54x300U/40

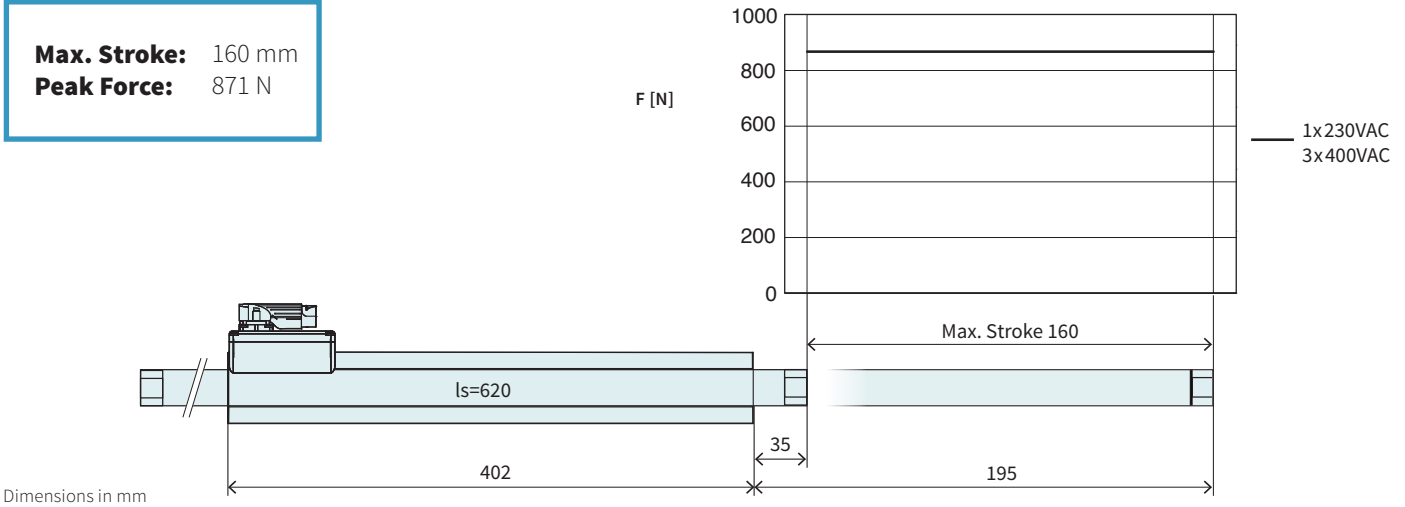
Stroke				
Max. Stroke	mm	(in)	40	(1.57)
Force				
Max. Force @ 1x230VAC	N	(lbf)	871	(196)
Max. Force @ 3x400VAC	N	(lbf)	871	(196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 190 / 270	(31 / 44 / 61)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.2 / 3.1 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 660 / 340	
Mechanical Data				
Slider Length	mm	(in)	500	(20)
Slider Mass	g	(lb)	2160	(4.75)



Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785
PL01-28x500/420	Slider 'standard'	0150-1382

P10-54x300U/160-BL-TU

Max. Stroke: 160 mm
Peak Force: 871 N



Dimensions in mm

Technical Data P10-54x300U/160				
Stroke				
Max. Stroke	mm	(in)	160	(6.29)
Force				
Max. Force @ 1x230VAC	N	(lbf)	871	(196)
Max. Force @ 3x400VAC	N	(lbf)	871	(196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 190 / 270	(31 / 44 / 61)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.55	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.2 / 3.1 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 660 / 340	
Mechanical Data				
Slider Length	mm	(in)	620	(24)
Slider Mass	g	(lb)	2720	(5.98)

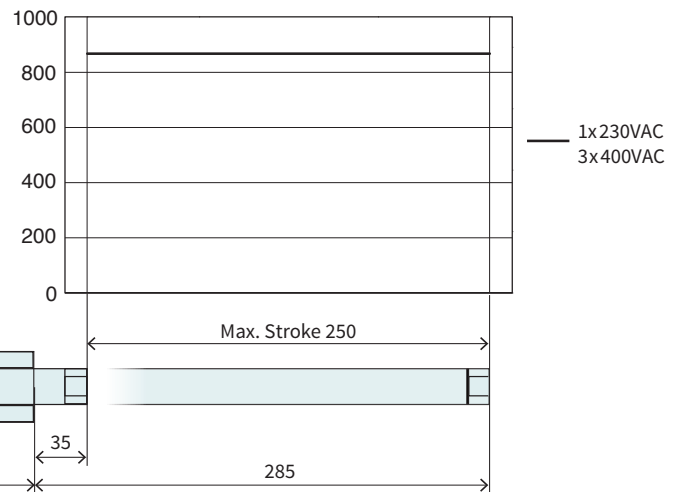


Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785
PL01-28x620/540	Slider 'standard'	0150-1383

P10-54x300U/250-BL-TU

Max. Stroke: 250 mm
Peak Force: 871 N

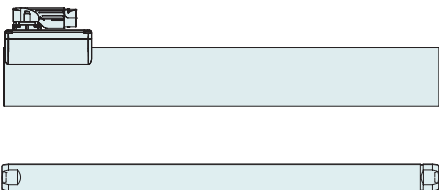
F [N]



Dimensions in mm

Technical Data P10-54x300U/250

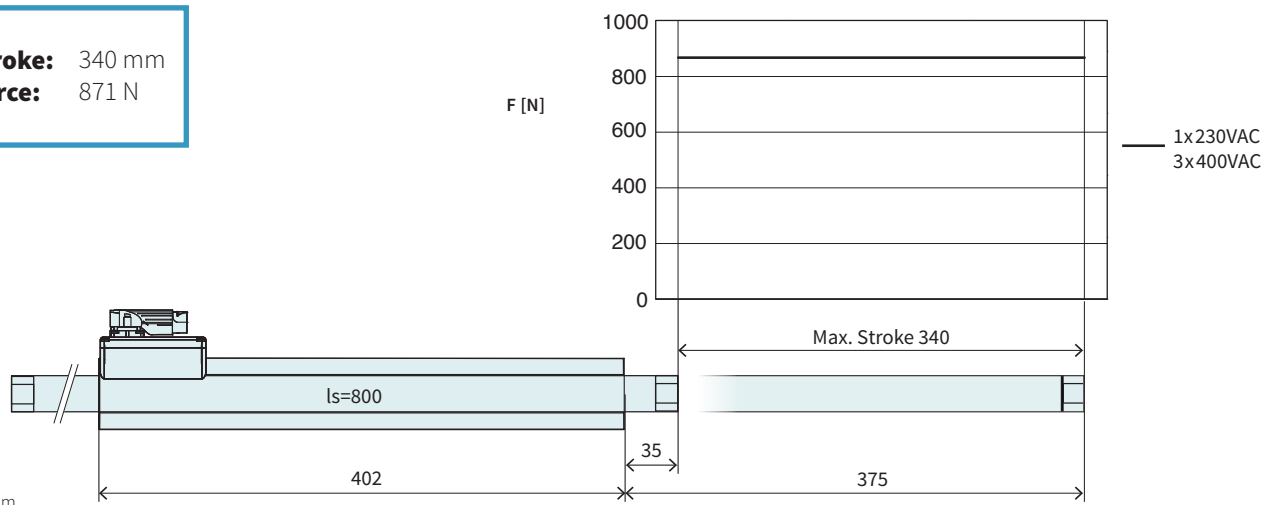
Stroke			
Max. Stroke	mm (in)	250	(9.83)
Force			
Max. Force @ 1x230VAC	N (lbf)	871	(196)
Max. Force @ 3x400VAC	N (lbf)	871	(196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	140 / 190 / 270	(31 / 44 / 61)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	62.2	(14)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	7.1	(7.1)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.4	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	19.7 / 13.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.2 / 3.1 / 4.4	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1400 / 660 / 340	
Mechanical Data			
Slider Length	mm (in)	710	(28)
Slider Mass	g (lb)	3140	(6.91)



Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785
PL01-28x710/630	Slider 'standard'	0150-1384

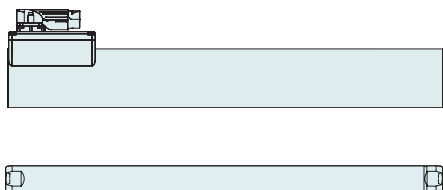
P10-54x300U/340-BL-TU

Max. Stroke: 340 mm
Peak Force: 871 N



Technical Data P10-54x300U/340

Stroke				
Max. Stroke	mm	(in)	340	(13.4)
Force				
Max. Force @ 1x230VAC	N	(lbf)	871	(196)
Max. Force @ 3x400VAC	N	(lbf)	871	(196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 190 / 270	(31 / 44 / 61)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.2 / 3.1 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 660 / 340	
Mechanical Data				
Slider Length	mm	(in)	800	(31)
Slider Mass	g	(lb)	3560	(7.83)



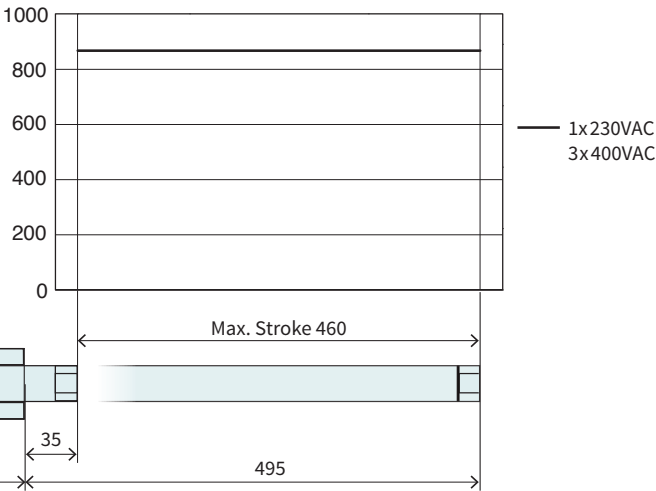
Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785
PL01-28x800/720	Slider 'standard'	0150-1385

P10-54x300U/460-BL-TU

4

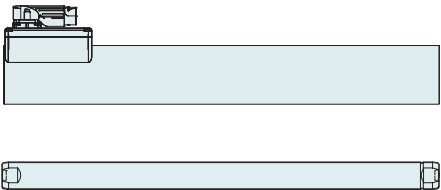
Max. Stroke: 460 mm
Peak Force: 871 N

F [N]



Dimensions in mm

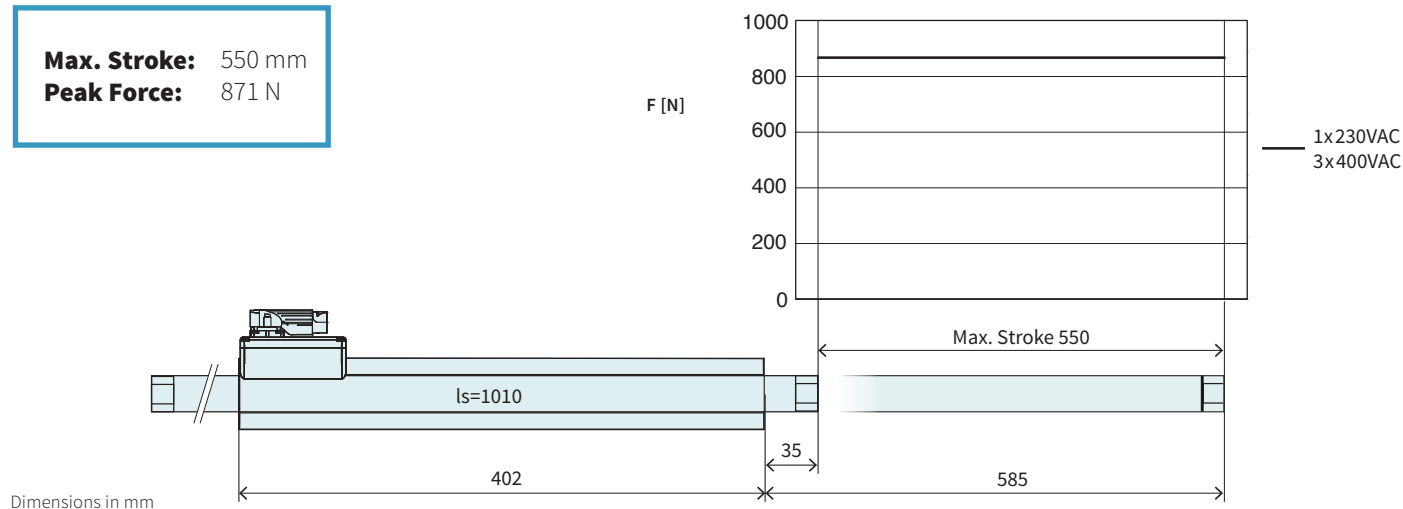
Technical Data P10-54x300U/460				
Stroke				
Max. Stroke	mm	(in)	460	(18.1)
Force				
Max. Force @ 1x230VAC	N	(lbf)	871	(196)
Max. Force @ 3x400VAC	N	(lbf)	871	(196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 190 / 270	(31 / 44 / 61)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.2 / 3.1 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 660 / 340	
Mechanical Data				
Slider Length	mm	(in)	920	(36)
Slider Mass	g	(lb)	4120	(9.06)



Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785
PL01-28x920/840	Slider 'standard'	0150-1386

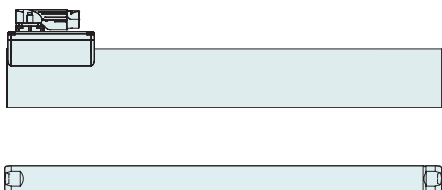
P10-54x300U/550-BL-TU

Max. Stroke: 550 mm
Peak Force: 871 N



Technical Data P10-54x300U/550

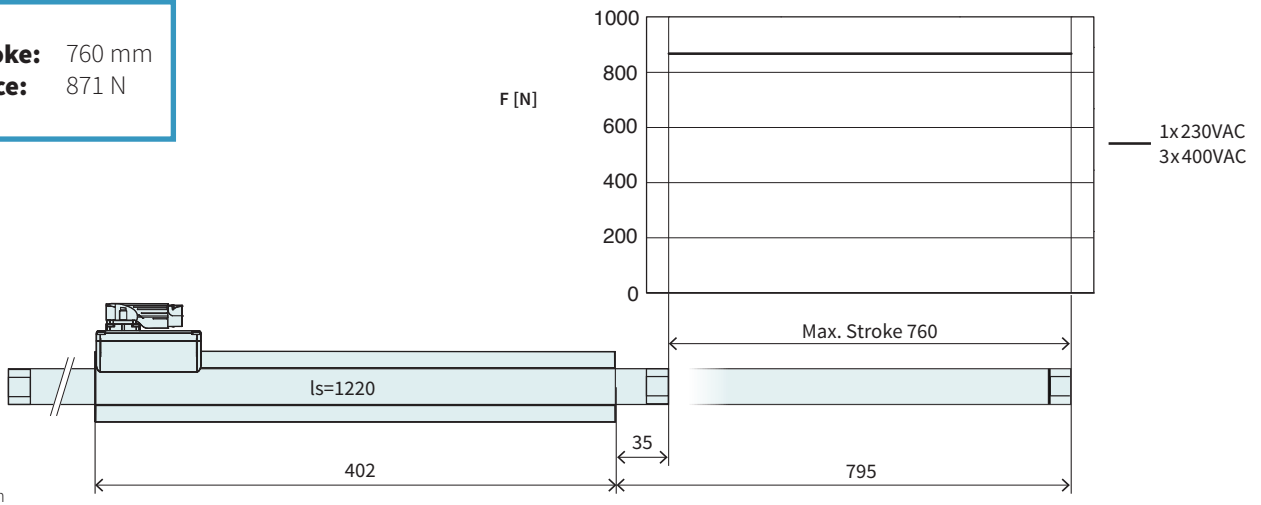
Stroke				
Max. Stroke	mm	(in)	550	(21.69)
Force				
Max. Force @ 1x230VAC	N	(lbf)	871	(196)
Max. Force @ 3x400VAC	N	(lbf)	871	(196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 190 / 270	(31 / 44 / 61)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.2 / 3.1 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 660 / 340	
Mechanical Data				
Slider Length	mm	(in)	1010	(40)
Slider Mass	g	(lb)	4540	(10)



Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder Sum, PTC	0150-2785
PL01-28x1010/930	Slider 'standard'	0150-1387

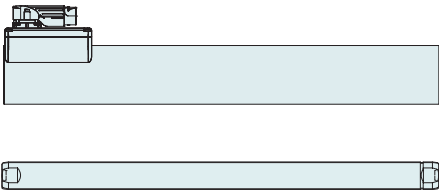
P10-54x300U/760-BL-TU

Max. Stroke: 760 mm
Peak Force: 871 N



Technical Data P10-54x300U/760

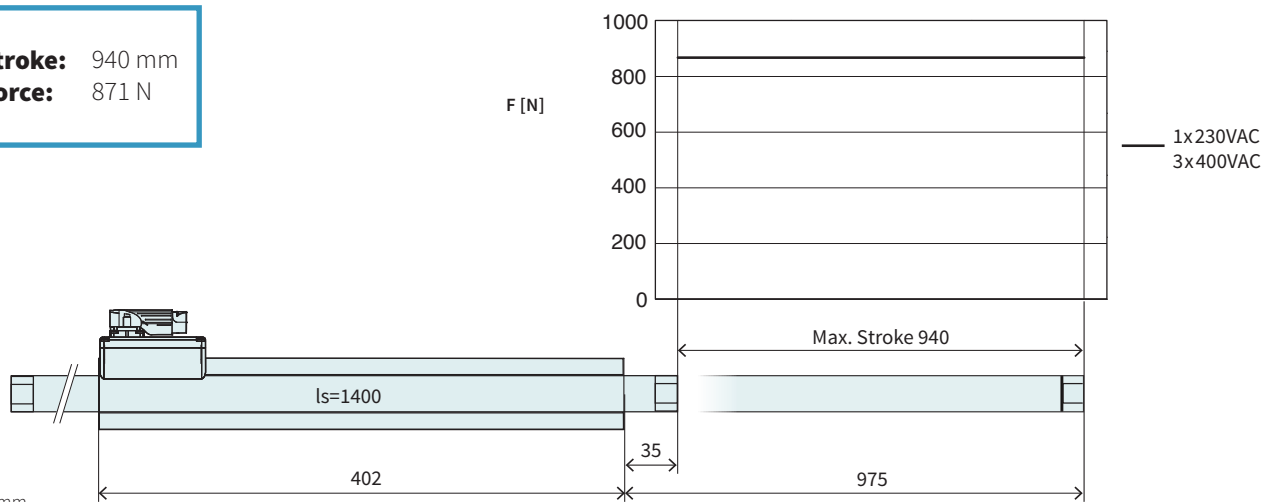
Stroke				
Max. Stroke	mm	(in)	760	(29.89)
Force				
Max. Force @ 1x230VAC	N	(lbf)	871	(196)
Max. Force @ 3x400VAC	N	(lbf)	871	(196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 190 / 270	(31 / 44 / 61)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.2 / 3.1 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 660 / 340	
Mechanical Data				
Slider Length	mm	(in)	1220	(48)
Slider Mass	g	(lb)	5510	(12.12)



Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785
PL01-28x1220/1140	Slider 'standard'	0150-1388

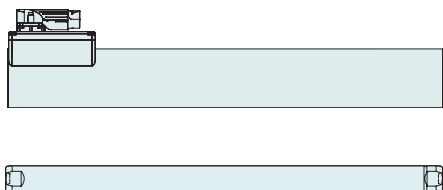
P10-54x300U/940-BL-TU

Max. Stroke: 940 mm
Peak Force: 871 N



Technical Data P10-54x300U/940

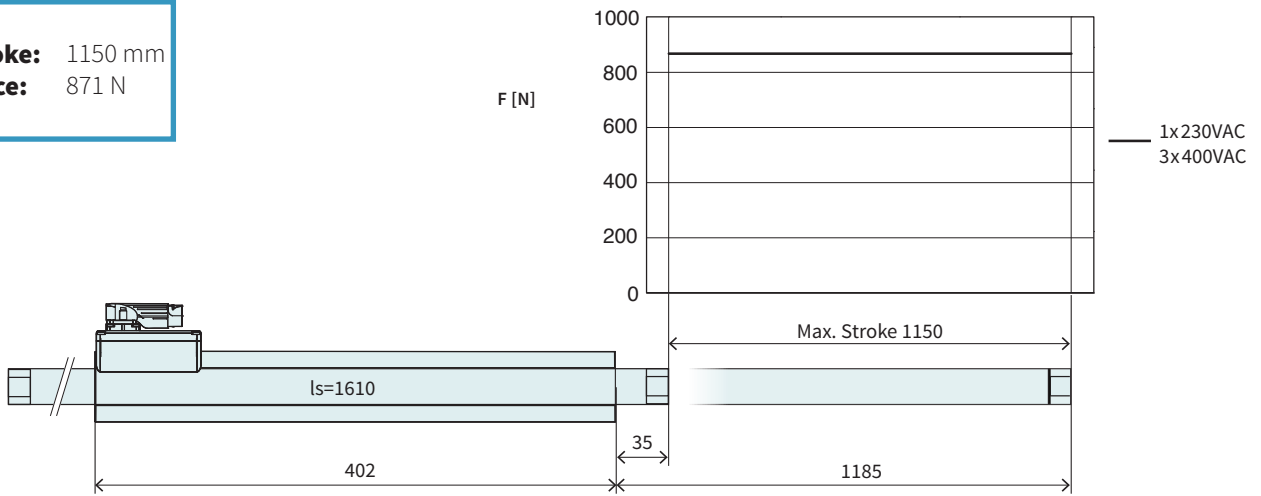
Stroke				
Max. Stroke	mm	(in)	940	(36.99)
Force				
Max. Force @ 1x230VAC	N	(lbf)	871	(196)
Max. Force @ 3x400VAC	N	(lbf)	871	(196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 190 / 270	(31 / 44 / 61)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.2 / 3.1 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 660 / 340	
Mechanical Data				
Slider Length	mm	(in)	1400	(55)
Slider Mass	g	(lb)	6350	(13.97)



Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785
PL01-28x1400/1320	Slider 'standard'	0150-1389

P10-54x300U/1150-BL-TU

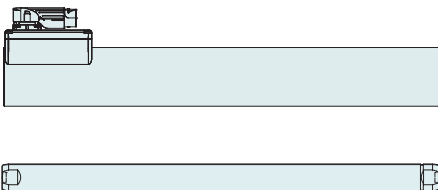
Max. Stroke: 1150 mm
Peak Force: 871 N



Dimensions in mm

Technical Data P10-54x300U/1150

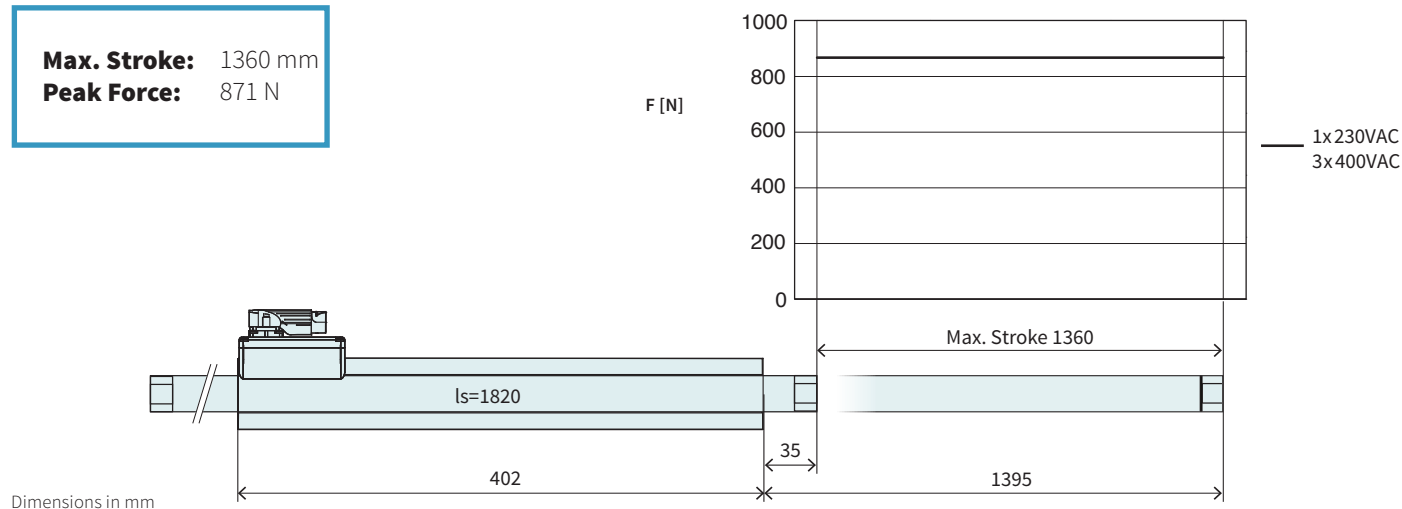
Stroke				
Max. Stroke	mm	(in)	1150	(45.29)
Force				
Max. Force @ 1x230VAC	N	(lbf)	871	(196)
Max. Force @ 3x400VAC	N	(lbf)	871	(196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 190 / 270	(31 / 44 / 61)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.2 / 3.1 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 660 / 340	
Mechanical Data				
Slider Length	mm	(in)	1610	(63)
Slider Mass	g	(lb)	7330	(16.13)



Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785
PL01-28x1610/1530	Slider 'standard'	0150-1390

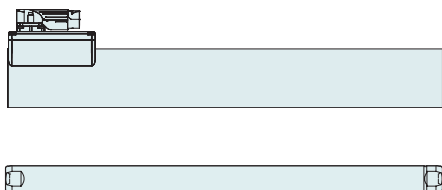
P10-54x300U/1360-BL-TU

Max. Stroke: 1360 mm
Peak Force: 871 N



Technical Data P10-54x300U/1360

Stroke			
Max. Stroke	mm (in)	1360	(53.49)
Force			
Max. Force @ 1x230VAC	N (lbf)	871	(196)
Max. Force @ 3x400VAC	N (lbf)	871	(196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	140 / 190 / 270	(31 / 44 / 61)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	62.2	(14)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	7.1	(7.1)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	±0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	19.7 / 13.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.2 / 3.1 / 4.4	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1400 / 660 / 340	
Mechanical Data			
Slider Length	mm (in)	1820	(72)
Slider Mass	g (lb)	8300	(18.26)

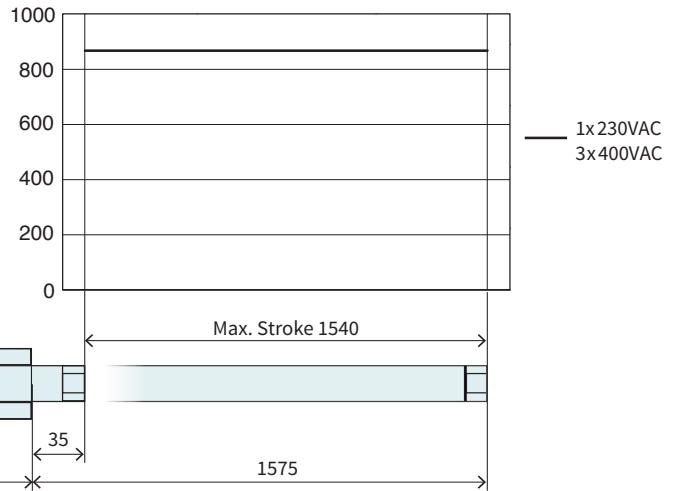


Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785
PL01-28x1820/1740	Slider 'standard'	0150-1395

P10-54x300U/1540-BL-TU

Max. Stroke: 1540 mm
Peak Force: 871 N

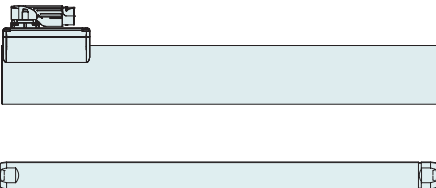
F [N]



Dimensions in mm

Technical Data P10-54x300U/1540

Stroke				
Max. Stroke	mm	(in)	1540	(60.6)
Force				
Max. Force @ 1x230VAC	N	(lbf)	871	(196)
Max. Force @ 3x400VAC	N	(lbf)	871	(196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 190 / 270	(31 / 44 / 61)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.2 / 3.1 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 660 / 340	
Mechanical Data				
Slider Length	mm	(in)	2000	(79)
Slider Mass	g	(lb)	9140	(20.11)



Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785
PL01-28x2000/1920	Slider 'standard'	0150-1396

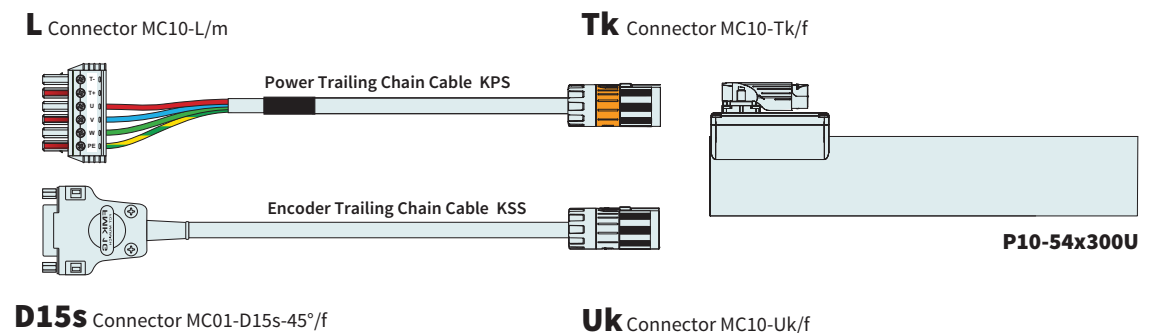
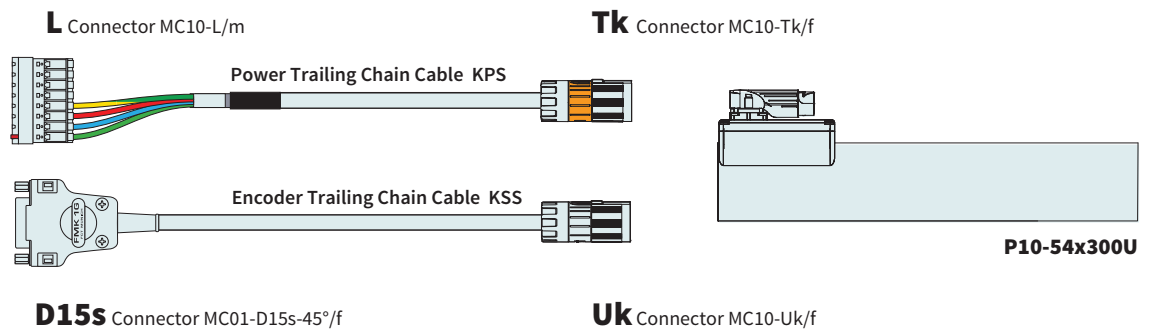
Motor Cable



C1400



E1400



ORDERING INFORMATION

TRAILING CHAIN CABLE FOR LINMOT DRIVES		
Item	Description	Item-No.
KPS07-04/02-L/Tk-3	Power Trailing Chain Cable E1400/P10-54, 3 m	0150-2670
KPS07-04/02-L/Tk-5	Power Trailing Chain Cable E1400/P10-54, 5 m	0150-2671
KPS07-04/02-L/Tk-8	Power Trailing Chain Cable E1400/P10-54, 8 m	0150-2672
KPS07-04/02-L/Tk-12	Power Trailing Chain Cable E1400/P10-54, 12 m	0150-2673
KPS07-04/02-B/Tk-3	Power Trailing Chain Cable C1400/P10-54, 3 m	0150-3648
KPS07-04/02-B/Tk-5	Power Trailing Chain Cable C1400/P10-54, 5 m	0150-3657
KPS07-04/02-B/Tk-8	Power Trailing Chain Cable C1400/P10-54, 8 m	0150-3658
KPS07-04/02-B/Tk-12	Power Trailing Chain Cable C1400/P10-54, 12 m	0150-3659
KSS 05-02/08-D15s/Uk-3	Encoder Trailing Chain Cable D15s/Uk, 3 m	0150-2650
KSS 05-02/08-D15s/Uk-5	Encoder Trailing Chain Cable D15s/Uk, 5 m	0150-2651
KSS 05-02/08-D15s/Uk-8	Encoder Trailing Chain Cable D15s/Uk, 8 m	0150-2652
KSS 05-02/08-D15s/Uk-12	Encoder Trailing Chain Cable D15s/Uk, 12 m	0150-2653

TRAILING CHAIN CABLES FOR THIRD PARTY DRIVES

Item	Description	Item-No.
KPS07-04/02-../Tk-10	Power Trailing Chain Cable ../Tk, 10 m	0150-3626
KPS07-04/02-../Tk-	Power Trailing Chain Cable ../Tk, Custom length	0150-3622
KSS05-02/13-../Uk-10	Encoder Trailing Chain Cable ./Uk, 10 m	0150-3627
KSS05-02/13-../Uk-	Encoder Trailing Chain Cable ./Uk, Custom length	0150-3619

CONNECTOR & CABLE (INDIVIDUAL)

Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
MC01-D15/f	Motor Connector D15 (f)	0150-3136
MC10-Tk/f	Connector Power PS10-54	0150-3482
MC10-Uk/f	Connector Encoder PS10-54	0150-3483
KPS07-04/02	Power Trailing Chain Cable P10-54 (per m)	0150-2372
KSS05-02/08	Trailing Chain Cable Encoder LinMot (per m)	0150-2258
KSS05-02/13	Trailing Chain Cable Encoder P10-...-Dxx (per m)	0150-2259

MOTOR FLANGES



Item	Description	Item-No.
PF10-54x320	Flange for PS10-54x300	0150-2736

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

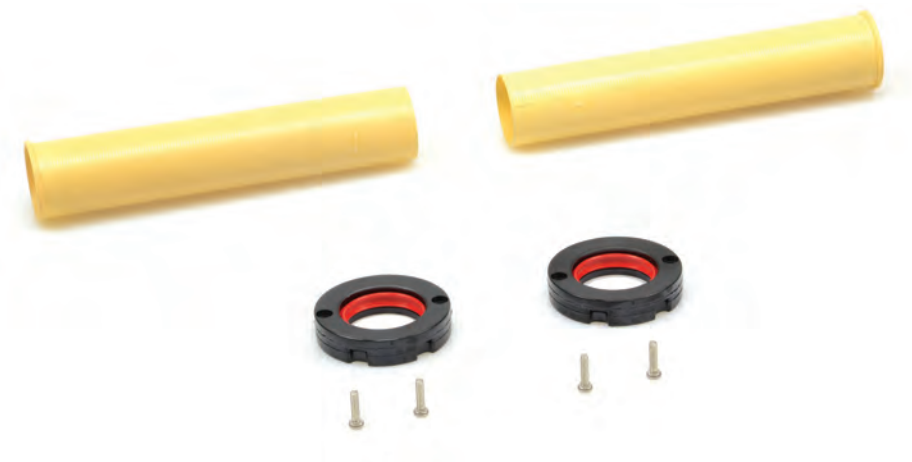
SLIDER MOUNTING



Item	Description	Item-No.
PLF01-28	Fixed Bearing Set for 27/28 mm sliders	0150-3087
PLF01-28-SS	Fixed Bearing Set for 27/28 mm sliders, stainless steel	0150-3297
PLL01-28	Floating Bearing for 28 mm sliders	0150-3094
PLM01-28-MK	Mounting Kit for 28 mm sliders	0150-3095

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



Item	Description	Item-No.
PB10-54x300-L	Bearing Kit for PS10-54x300	0150-3674

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D15/D-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P10-70x80U



- ✓ 3 x 400VAC technology
- ✓ Peak forces up to 561 N
- ✓ Extremely high dynamic
- ✓ Separate connector for sensor and power cable
- ✓ Can also be controlled by standard third-party servo drives

LINEAR MOTORS P10-70x80U

Technical Data **491**

Motor Specifications

P10-70x80U/70 **496**

P10-70x80U/170 **497**

P10-70x80U/270 **498**

P10-70x80U/370 **499**

P10-70x80U/470 **500**

P10-70x80U/570 **501**

P10-70x80U/670 **502**

P10-70x80U/770 **503**

P10-70x80U/970 **504**

P10-70x80U/1170 **505**

P10-70x80U/1370 **506**

P10-70x80U/1570 **507**

P10-70x80U/1770 **508**

Linear Guides **509**

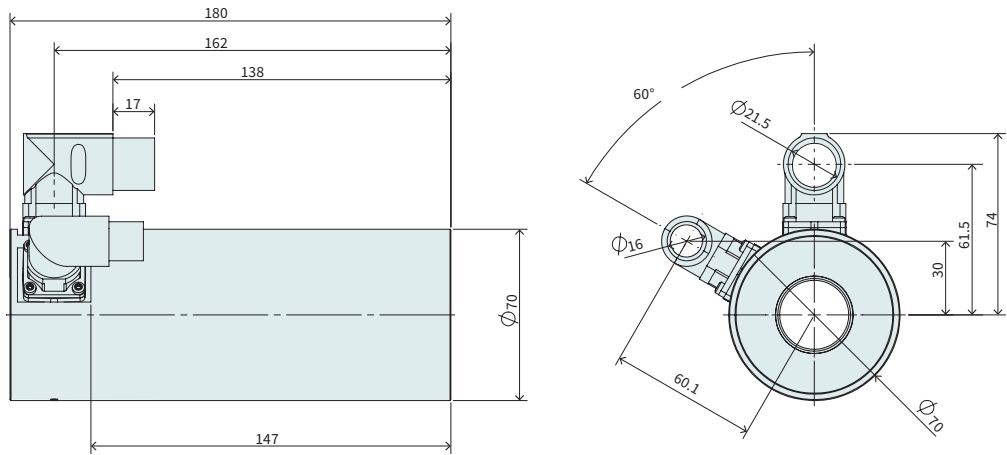
Accessories **511**



MOTOR FAMILY P10-70x80U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1770	(69.7)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	72.1	(16.2)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	6.1	(249.9)
Position Detection				
Position Resolution	mm	(in)	0.005	(0.0002)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.93 / 1.4 / 2.5	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	58.9	(1.5)
Terminal Resistance 25 °C / 120 °C	Ohm		13 / 18	
Terminal Inductivity	mH		25	
Magnetic Period	mm	(in)	40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Stator Diameter	mm	(in)	70	(2.8)
Stator Length	mm	(in)	180	(7.1)
Stator Mass	g	(lb)	2850	(6.27)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	290 - 1990	(11 - 78)
Slider Mass	g	(lb)	1360 - 9350	(3 - 20.57)
IP Code			IP 65	

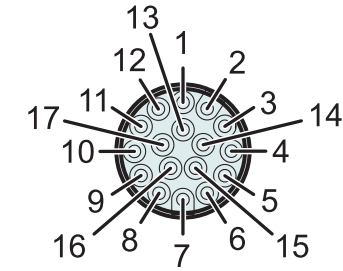
STATOR



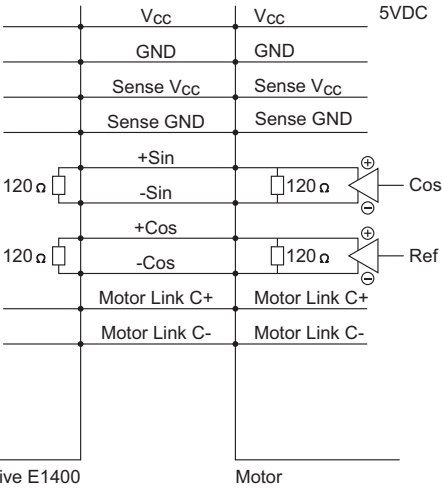
Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708

CONNECTOR PS10-70x80U-BL-QJ

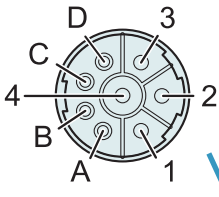
Motor Connector Wiring		Connector Encoder J	Wire Color Motor Cable
+5 VDC	Supply	1	red
GND	Supply	2	black
Sense +5V	Supply Sense	3	white
Sense GND	Supply Sense	4	brown
Mot. Link C+	Communication	5	pink
Mot. Link C-	Communication	6	grey
Sin+	Encoder	7	yellow
Sin-	Encoder	8	orange
Cos+	Encoder	9	green
Cos-	Encoder	10	blue
n. c.	n. c.	11	n. c.
n. c.	n. c.	12	n. c.
n. c.	n. c.	13	n. c.
n. c.	n. c.	14	n. c.
n. c.	n. c.	15	n. c.
n. c.	n. c.	16	n. c.
n. c.	n. c.	17	n. c.



Connector Encoder J
View: Motor connector, plug side

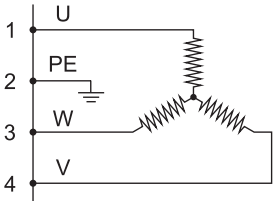


Motor Steckerbelegung	Connector Power Q	Wire Color Motor Cable
Phase U	1	red
PE	2	yellow-green
Phase W	3	green
Phase V	4	blue
n. c.	A	n. c.
n. c.	B	n. c.
n. c.	C	n. c.
n. c.	D	n. c.

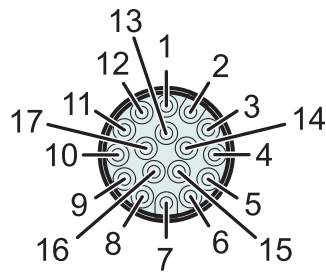


Connector Power Q

View: Motor connector, plug side



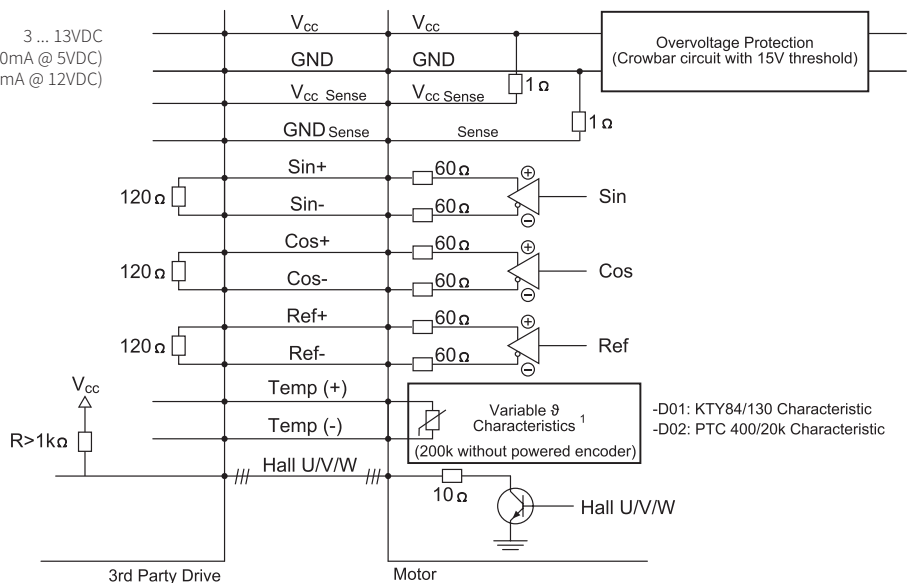
CONNECTOR PS10-70X80U-BL-QJ-D01/02



Connector Encoder J

View: Motor connector, plug side

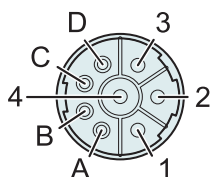
3 ... 13VDC
($I_{max} < 150\text{mA}$ @ 5VDC)
($I_{max} < 80\text{mA}$ @ 12VDC)



-D01: KTY84/130 Characteristic
-D02: PTC 400/20k Characteristic

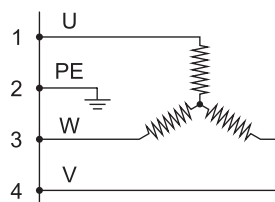
Motor Connector Wiring				
PS10-70x80U-BL-QJ-D01	PS10-70x80U-BL-QJ-D02	Function	Connector Encoder J	Wire Color Motor Cable
3 ... 13VDC	3 ... 13VDC	Supply	1	white
GND	GND	Supply	2	brown
Vcc Sense (optional)	Vcc Sense (optional)	Supply Sense	3	green
GND Sense (optional)	GND Sense (optional)	Supply Sense	4	yellow
Do not connect	Do not connect	-	5	-
Do not connect	Do not connect	-	6	-
Sin+	Sin+	Encoder 1 Vpp	7	grey
Sin-	Sin-	Encoder 1 Vpp	8	pink
Cos+	Cos+	Encoder 1 Vpp	9	blue
Cos-	Cos-	Encoder 1 Vpp	10	red
Ref+	Ref+	Encoder 1 Vpp	11	black
Ref-	Ref-	Encoder 1 Vpp	12	violet
Hall U	Hall U	Encoder (open collector)	13	grey-red
Hall V	Hall V	Encoder (open collector)	14	red-blue
Hall W	Hall W	Encoder (open collector)	15	white-green
Temp+ (KTY84/130 Char.)	Temp+ (PTC 400/20k Char.)	Temperature ¹	16	yellow-brown
Temp- (KTY84/130 Char.)	Temp- (PTC 400/20k Char.)	Temperature ¹	17	white-yellow

1) The temperature evaluation circuit must be powered from the encoder supply and must be at the same potential. The grounds of the temperature evaluation circuit and the encoder have to be connected. The encoder must have been powered on for at least 50 ms, before valid temperatures can be measured. If the encoder is powered off, 200k Ohms are measured between Pins 16 and 17. The maximum voltage between Pin 16 and 17 must not exceed 16 VDC. The maximum current must not exceed 15 mA.



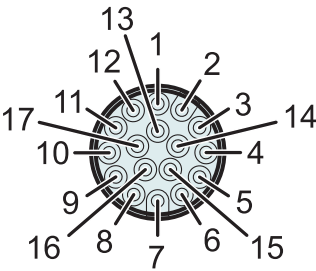
Connector Power Q

View: Motor connector, plug side



Motor Connector Wiring			
PS10-70x80U-BL-QJ-D01	PS10-70x80U-BL-QJ-D02	Connector Power Q	Wire Color Motor Cable
Phase U	Phase U	1	red
PE	PE	2	yellow-green
Phase W	Phase W	3	green
Phase V	Phase V	4	blue
n. c.	n. c.	A	n. c.
n. c.	n. c.	B	n. c.
n. c.	n. c.	C	n. c.
n. c.	n. c.	D	n. c.

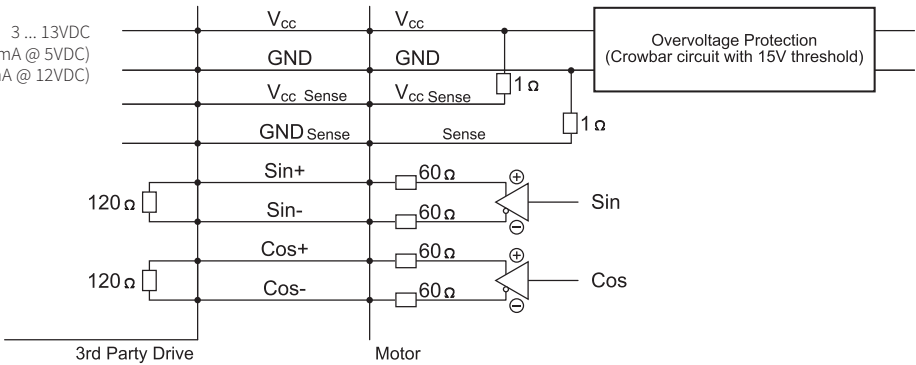
CONNECTOR PS10-70X80U-BL-QJ-D03



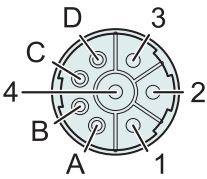
Connector Encoder J

View: Motor connector, plug side

3 ... 13VDC
($I_{max} < 150\text{mA}$ @ 5VDC)
($I_{max} < 80\text{mA}$ @ 12VDC)

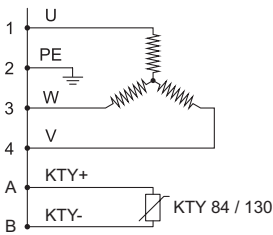


Motor Connector Wiring		Connector Encoder J	Wire Color Motor Cable
3 ... 13 VDC	Supply	1	red
GND	Supply	2	black
Vcc Sense (optional)	Supply Sense	3	white
GND Sense (optional)	Supply Sense	4	brown
Do not connect	–	5	–
Do not connect	–	6	–
Sin+	Encoder 1 Vpp	7	yellow
Sin-	Encoder 1 Vpp	8	orange
Cos+	Encoder 1 Vpp	9	green
Cos-	Encoder 1 Vpp	10	blue
n. c.	–	11	n. c.
n. c.	–	12	n. c.
n. c.	–	13	n. c.
Do not connect	–	14	n. c.
n. c.	–	15	n. c.
n. c.	–	16	n. c.
n. c.	–	17	n. c.



Connector Power Q

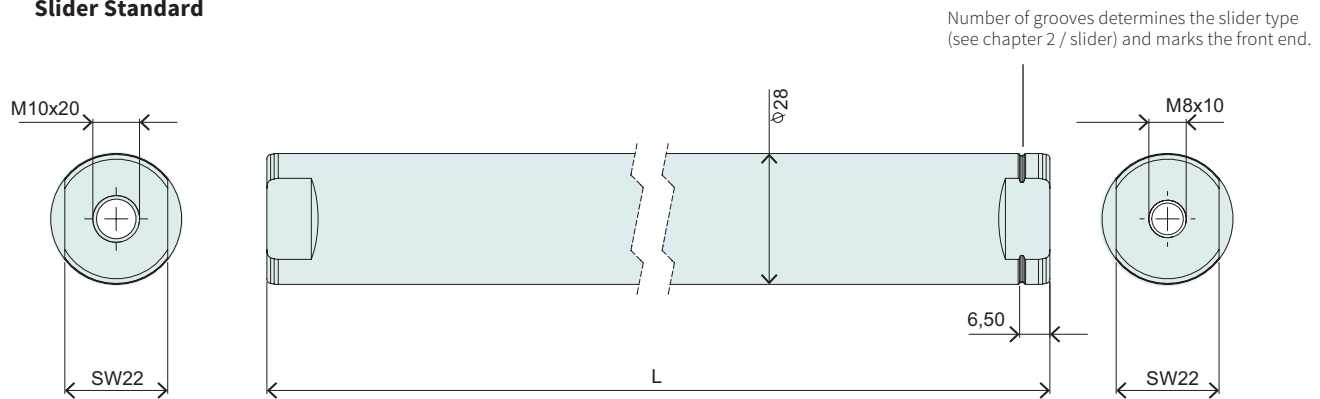
View: Motor connector, plug side



Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red (previously: black 1)
PE	2	yellow-green
Phase W	3	green (previously: black 3)
Phase V	4	blue (previously: black 2)
KTY +	A	purple (previously: black 5)
KTY -	B	grey (previously: black 6)
n. c.	C	yellow (previously: black 7)
n. c.	D	brown (previously: black 8)

SLIDER

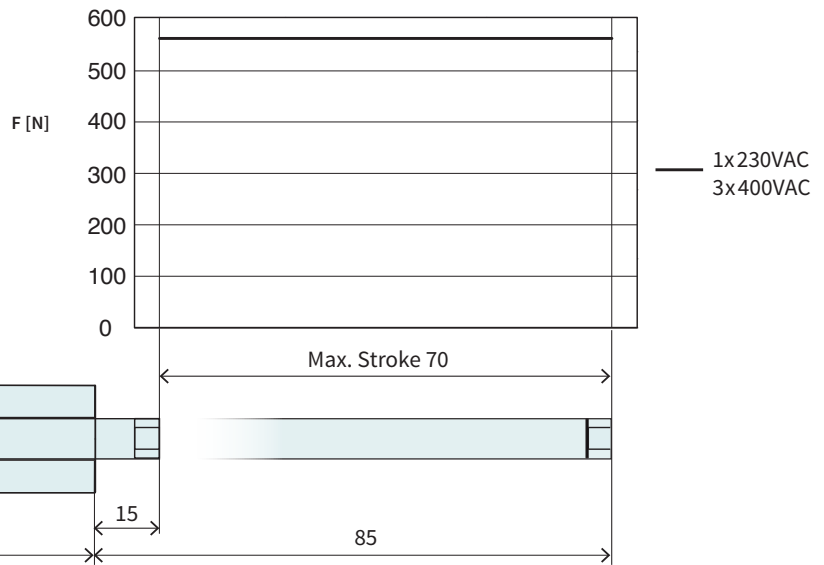
Slider Standard



Slider Standard			
Item	Description	Max. Stroke [mm]	Item-No.
PL10-28x290/240	Slider for P10-70 'standard'	70	0150-2193
PL10-28x390/340	Slider for P10-70 'standard'	170	0150-2194
PL10-28x490/440	Slider for P10-70 'standard'	270	0150-2195
PL10-28x590/540	Slider for P10-70 'standard'	370	0150-2196
PL10-28x690/640	Slider for P10-70 'standard'	470	0150-2197
PL10-28x790/740	Slider for P10-70 'standard'	570	0150-2198
PL10-28x890/840	Slider for P10-70 'standard'	670	0150-2199
PL10-28x990/940	Slider for P10-70 'standard'	770	0150-2203
PL10-28x1190/1140	Slider for P10-70 'standard'	970	0150-2204
PL10-28x1390/1340	Slider for P10-70 'standard'	1170	0150-2205
PL10-28x1590/1540	Slider for P10-70 'standard'	1370	0150-2206
PL10-28x1790/1740	Slider for P10-70 'standard'	1570	0150-2207
PL10-28x1990/1940	Slider for P10-70 'standard'	1770	0150-2208

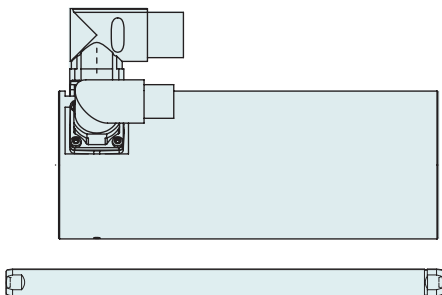
P10-70x80U/70-BL-QJ

Max. Stroke: 70 mm
Peak Force: 561 N



Technical Data P10-70x80U/70

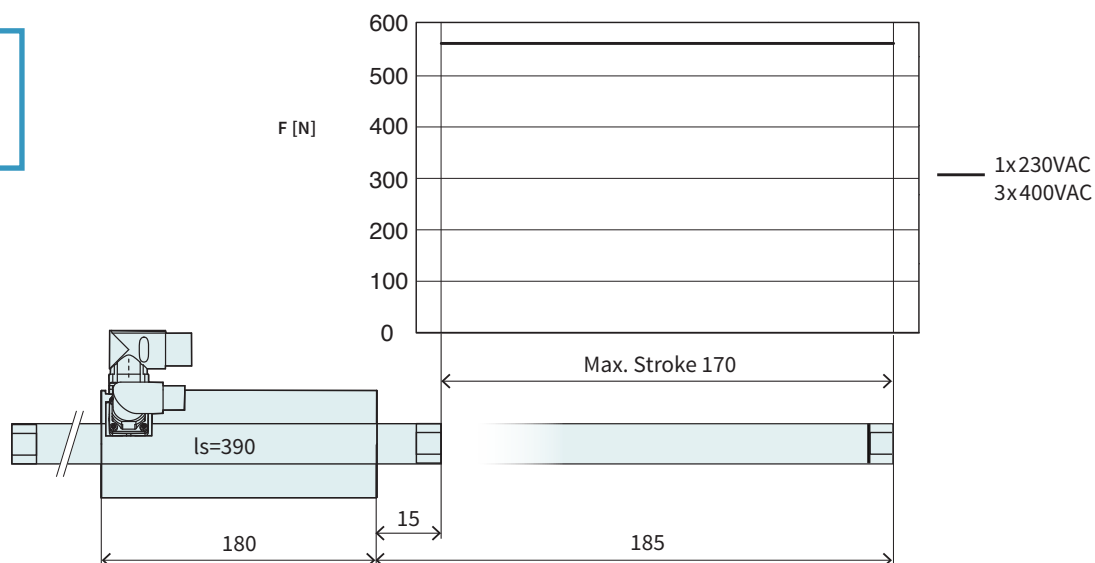
Stroke				
Max. Stroke	mm	(in)	70	(2.75)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	72.1	(16.2)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	6.1	(6.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.8	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.93 / 1.4 / 2.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	290	(11)
Slider Mass	g	(lb)	1360	(3)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x290/240	Slider for P10-70 'standard'	0150-2193

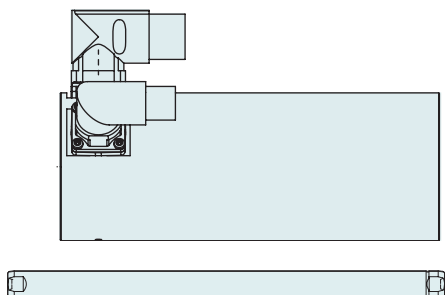
P10-70x80U/170-BL-QJ

Max. Stroke: 170 mm
Peak Force: 561 N



Technical Data P10-70x80U/170

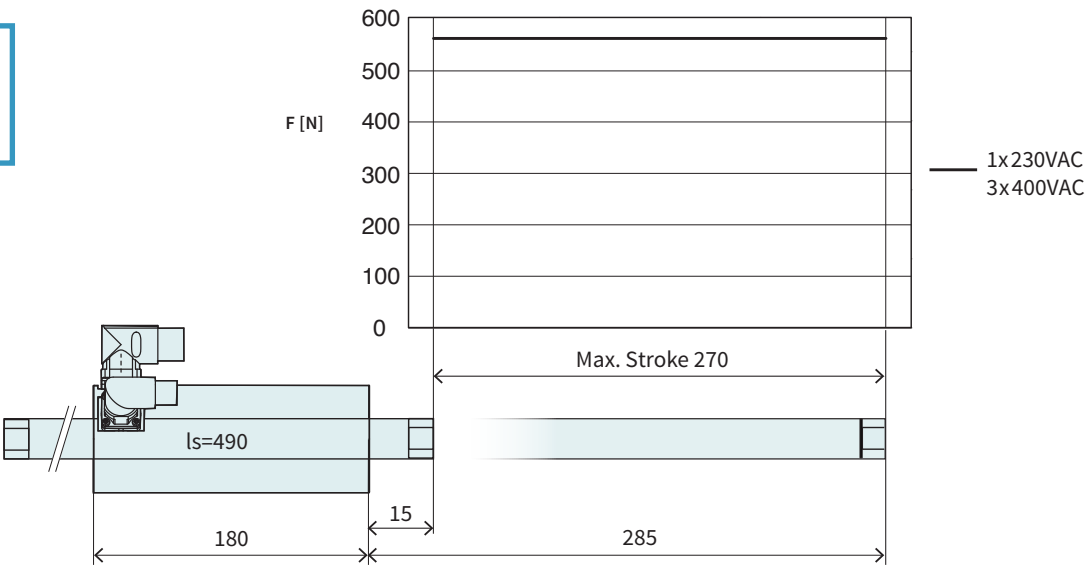
Stroke				
Max. Stroke	mm	(in)	170	(6.69)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	72.1	(16.2)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	6.1	(6.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.4	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.93 / 1.4 / 2.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	390	(15)
Slider Mass	g	(lb)	1830	(4.03)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x390/340	Slider for P10-70 'standard'	0150-2194

P10-70x80U/270-BL-QJ

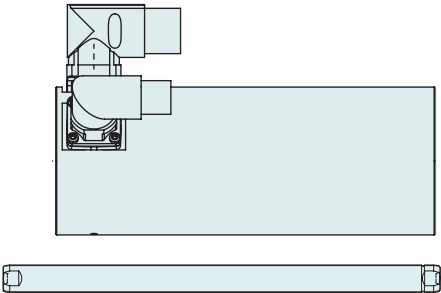
Max. Stroke: 270 mm
Peak Force: 561 N



Dimensions in mm

Technical Data P10-70x80U/270

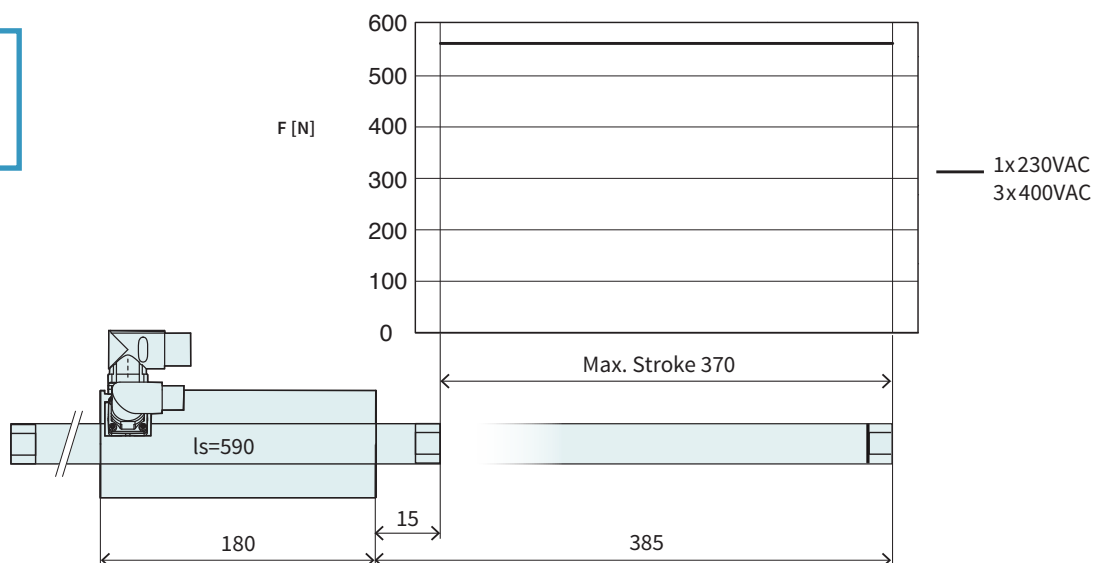
Stroke				
Max. Stroke	mm	(in)	270	(10.59)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	72.1	(16.2)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	6.1	(6.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.93 / 1.4 / 2.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	490	(19)
Slider Mass	g	(lb)	2300	(5.06)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x490/440	Slider for P10-70 'standard'	0150-2195

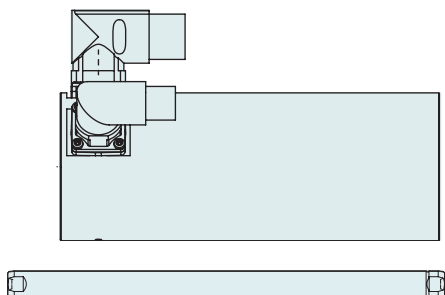
P10-70x80U/370-BL-QJ

Max. Stroke: 370 mm
Peak Force: 561 N



Technical Data P10-70x80U/370

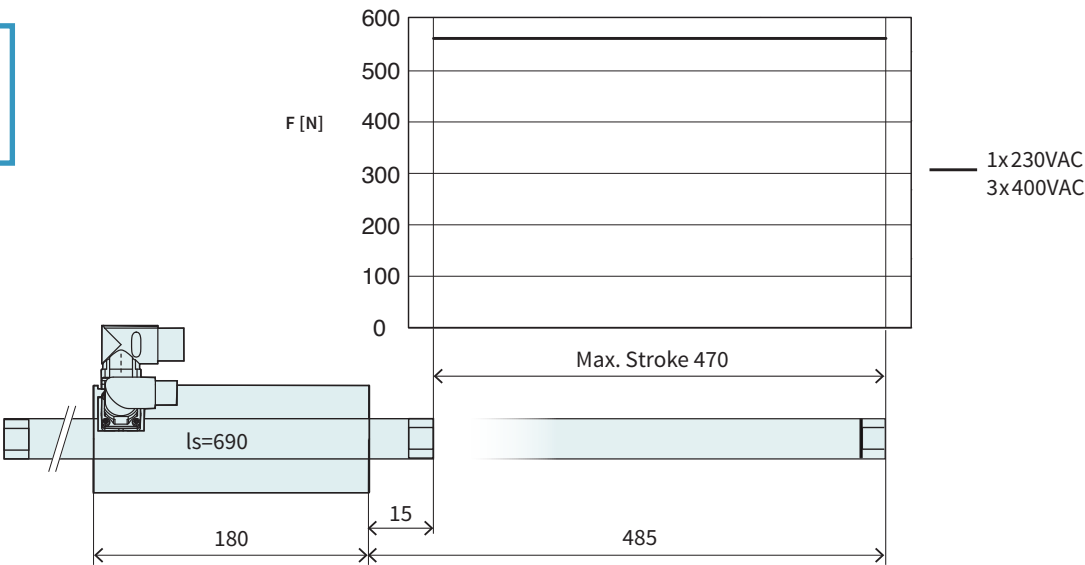
Stroke				
Max. Stroke	mm	(in)	370	(14.59)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	72.1	(16.2)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	6.1	(6.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.93 / 1.4 / 2.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	590	(23)
Slider Mass	g	(lb)	2770	(6.09)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x590/540	Slider for P10-70 'standard'	0150-2196

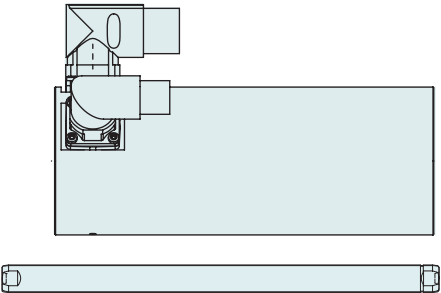
P10-70x80U/470-BL-QJ

Max. Stroke: 470 mm
Peak Force: 561 N



Dimensions in mm

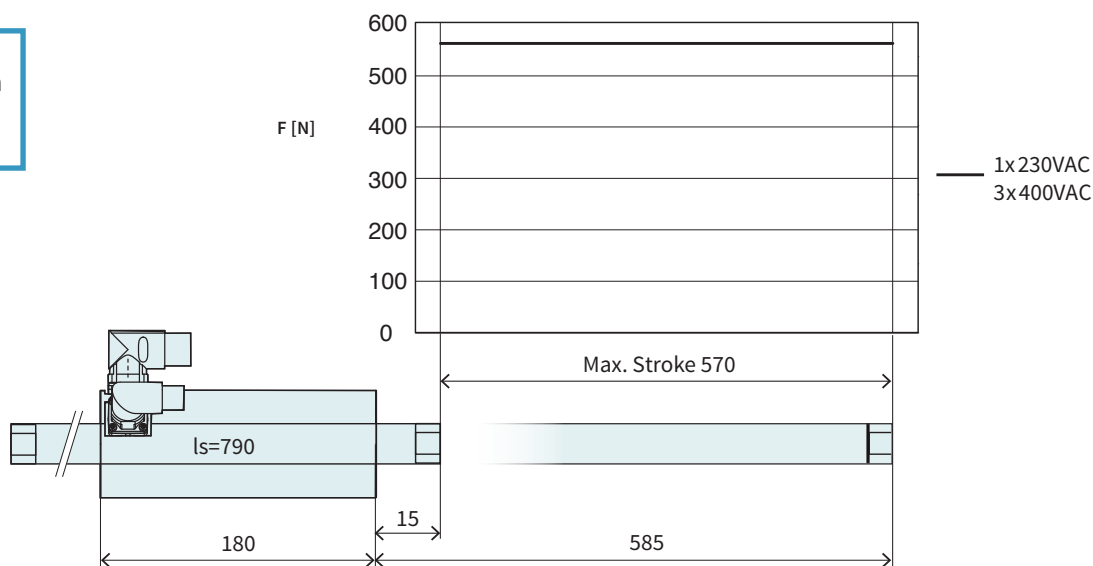
Technical Data P10-70x80U/470				
Stroke				
Max. Stroke	mm	(in)	470	(18.49)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	72.1	(16.2)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	6.1	(6.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.93 / 1.4 / 2.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	690	(27)
Slider Mass	g	(lb)	3240	(7.13)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x690/640	Slider for P10-70 'standard'	0150-2197

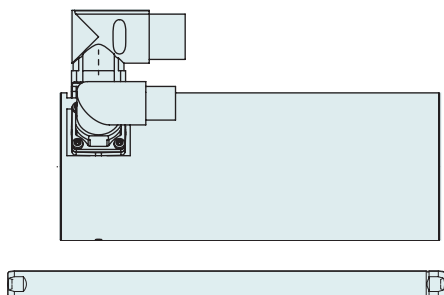
P10-70x80U/570-BL-QJ

Max. Stroke: 570 mm
Peak Force: 561 N



Technical Data P10-70x80U/570

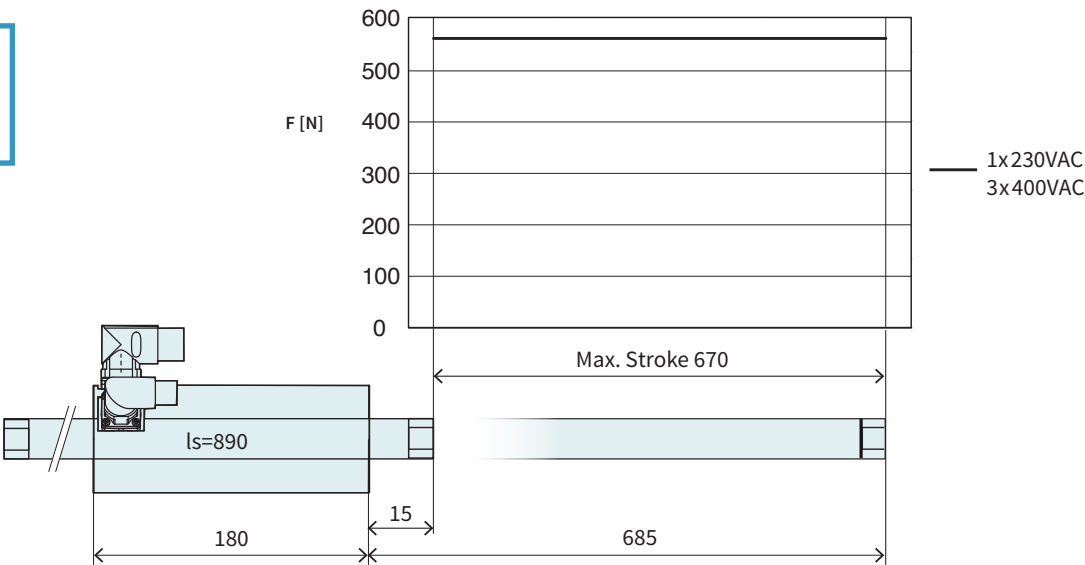
Stroke				
Max. Stroke	mm	(in)	570	(22.39)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	72.1	(16.2)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	6.1	(6.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling/ Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling/ Fan / Fluid]	A _{rms}		0.93 / 1.4 / 2.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling/ Fan / Fluid]	°K/W		2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling/ Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	790	(31)
Slider Mass	g	(lb)	3710	(8.16)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x790/740	Slider for P10-70 'standard'	0150-2198

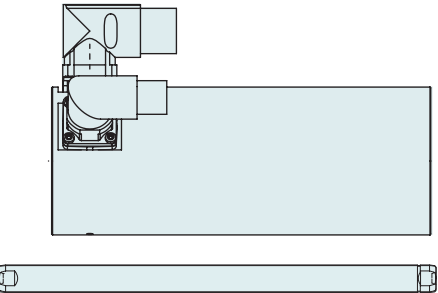
P10-70x80U/670-BL-QJ

Max. Stroke: 670 mm
Peak Force: 561 N



Dimensions in mm

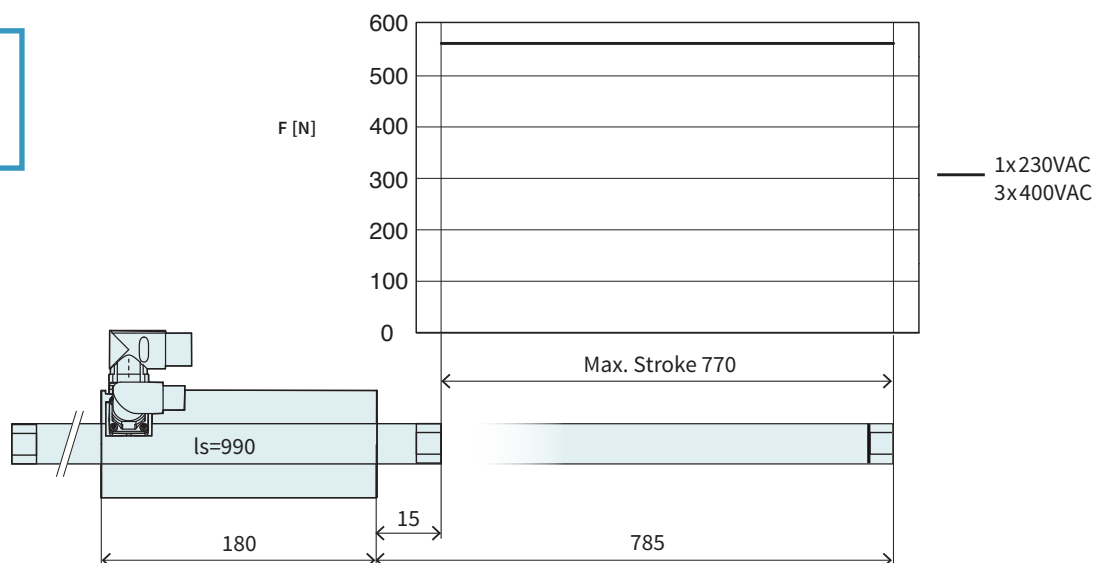
Technical Data P10-70x80U/670				
Stroke				
Max. Stroke	mm	(in)	670	(26.39)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	72.1	(16.2)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	6.1	(6.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.93 / 1.4 / 2.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	890	(35)
Slider Mass	g	(lb)	4180	(9.2)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x890/840	Slider for P10-70 'standard'	0150-2199

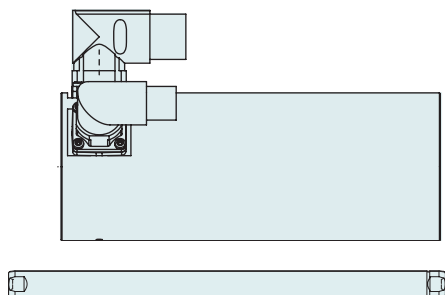
P10-70x80U/770-BL-QJ

Max. Stroke: 770 mm
Peak Force: 561 N



Technical Data P10-70x80U/770

Stroke				
Max. Stroke	mm	(in)	770	(30.3)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{yms}	(lbf/A _{yms})	72.1	(16.2)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	6.1	(6.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		±0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{yms}		10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{yms}		10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{yms}		0.93 / 1.4 / 2.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	990	(39)
Slider Mass	g	(lb)	4650	(10.23)

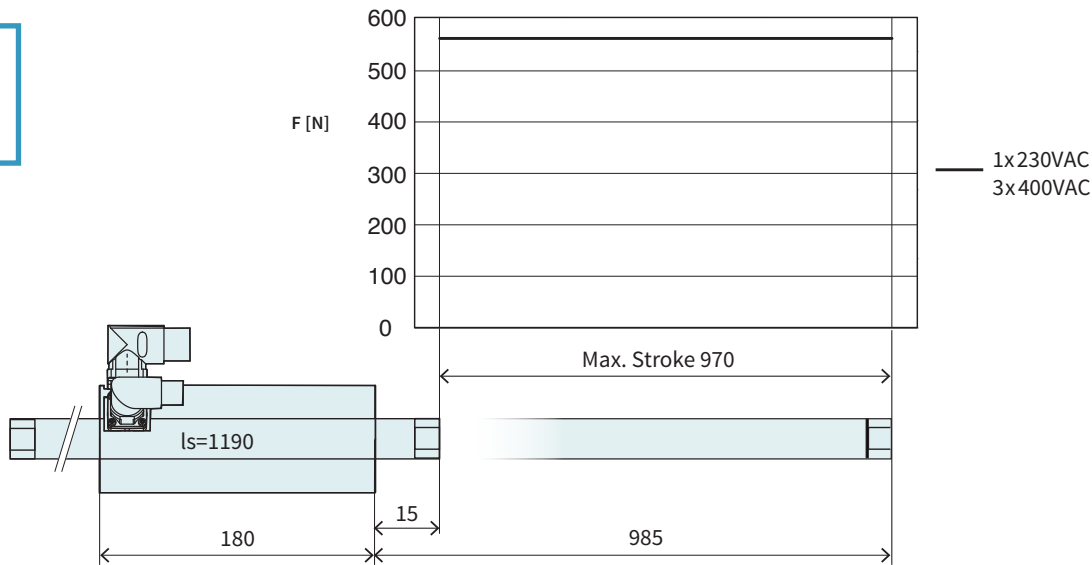


Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x990/940	Slider for P10-70 'standard'	0150-2203

P10-70x80U/970-BL-QJ

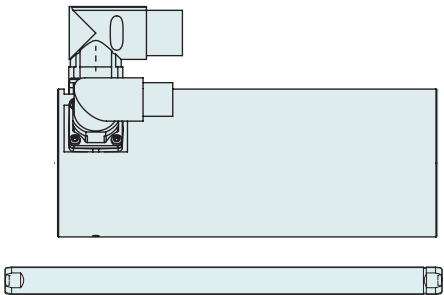
4

Max. Stroke: 970 mm
Peak Force: 561 N



Technical Data P10-70x80U/970

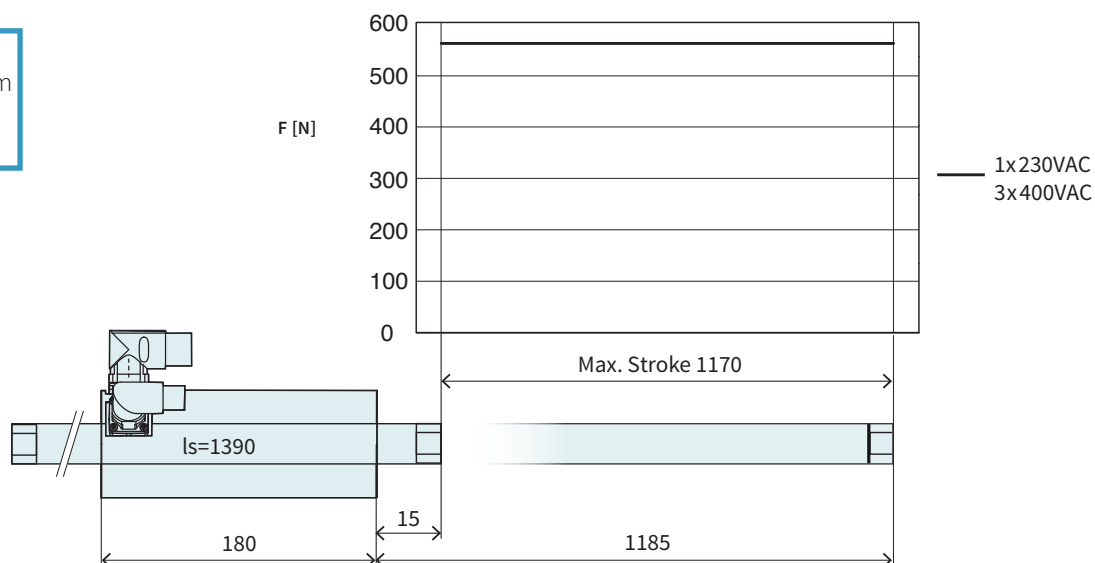
Stroke				
Max. Stroke	mm	(in)	970	(38.2)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	72.1	(16.2)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	6.1	(6.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.93 / 1.4 / 2.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	1190	(47)
Slider Mass	g	(lb)	5590	(12.3)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x1190/1140	Slider for P10-70 'standard'	0150-2204

P10-70x80U/1170-BL-QJ

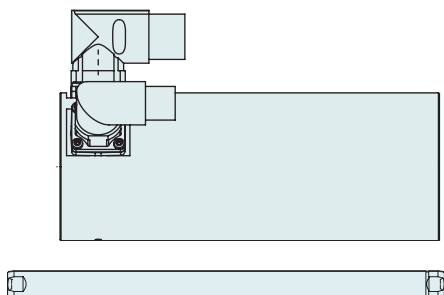
Max. Stroke: 1170 mm
Peak Force: 561 N



Dimensions in mm

Technical Data P10-70x80U/1170

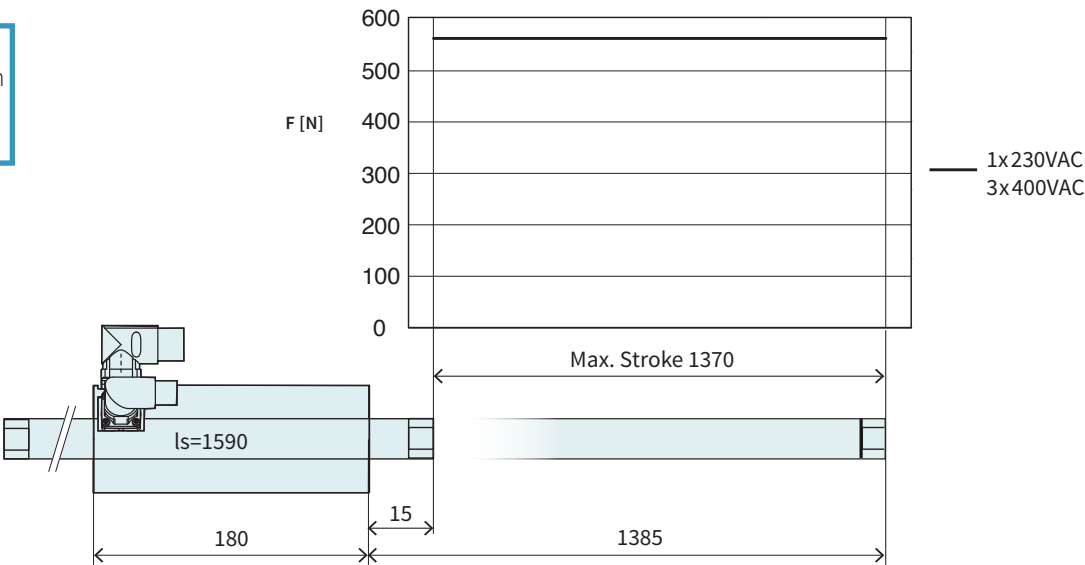
Stroke			
Max. Stroke	mm (in)	1170	(46.1)
Force			
Max. Force @ 1x230VAC	N (lbf)	561	(126)
Max. Force @ 3x400VAC	N (lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	72.1	(16.2)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	6.1	(6.1)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	±0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.93 / 1.4 / 2.5	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	1390	(55)
Slider Mass	g (lb)	6530	(14.37)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x1390/1340	Slider for P10-70 'standard'	0150-2205

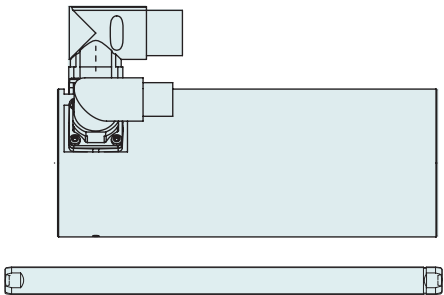
P10-70x80U/1370-BL-QJ

Max. Stroke: 1370 mm
Peak Force: 561 N



Technical Data P10-70x80U/1370

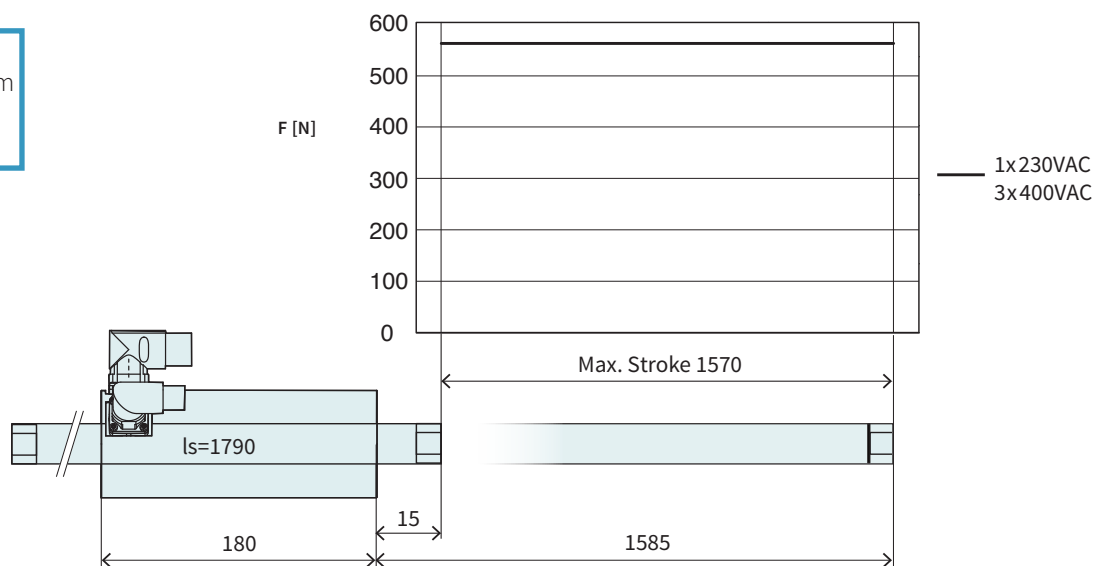
Stroke				
Max. Stroke	mm	(in)	1370	(53.89)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	72.1	(16.2)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	6.1	(6.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.93 / 1.4 / 2.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	1590	(63)
Slider Mass	g	(lb)	7470	(16.43)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x1590/1540	Slider for P10-70 'standard'	0150-2206

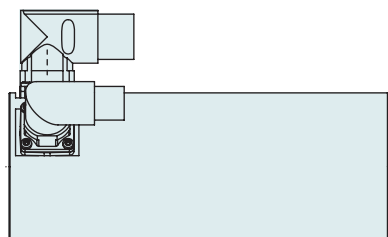
P10-70x80U/1570-BL-QJ

Max. Stroke: 1570 mm
Peak Force: 561 N



Technical Data P10-70x80U/1570

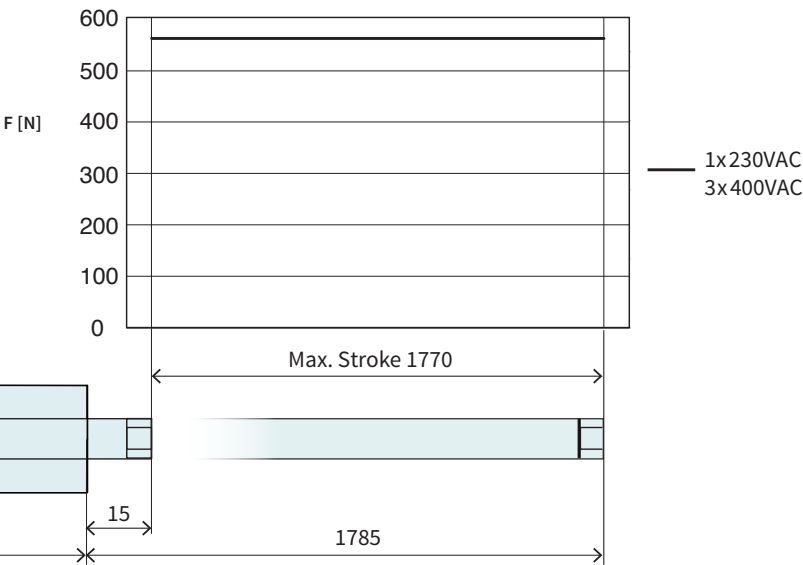
Stroke				
Max. Stroke	mm	(in)	1570	(61.79)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	72.1	(16.2)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	6.1	(6.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.93 / 1.4 / 2.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	1790	(70)
Slider Mass	g	(lb)	8413	(18.51)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x1790/1740	Slider for P10-70 'standard'	0150-2207

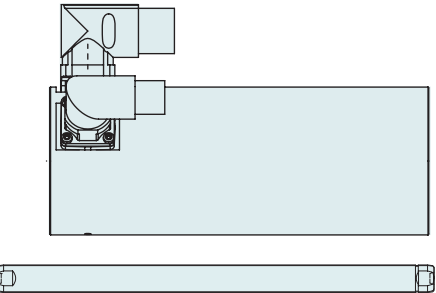
P10-70x80U/1770-BL-QJ

Max. Stroke: 1770 mm
Peak Force: 561 N



Dimensions in mm

Technical Data P10-70x80U/1770				
Stroke				
Max. Stroke	mm	(in)	1770	(69.7)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	72.1	(16.2)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	6.1	(6.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.93 / 1.4 / 2.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	1990	(78)
Slider Mass	g	(lb)	9350	(20.57)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x1990/1940	Slider for P10-70 'standard'	0150-2208

Linear Guides H10



HM10-70x80/70		Linear Module 70x80 with 70 mm Stroke		
→	H-Guide	H10-70x80/70	H-Guide for P10-70x80, Stroke max. 70 mm	0150-5404
	Stator	PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
		PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
		PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
		PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
→	Slider	PL10-28x290/240	Slider for P10-70 'standard'	0150-2193
HM10-70x80/170		Linear Module 70x80 with 170 mm Stroke		
→	H-Guide	H10-70x80/170	H-Guide for P10-70x80, Stroke max. 170 mm	0150-5405
	Stator	PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
		PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
		PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
		PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
→	Slider	PL10-28x390/340	Slider for P10-70 'standard'	0150-2194
HM10-70x80/270		Linear Module 70x80 with 270 mm Stroke		
→	H-Guide	H10-70x80/270	H-Guide for P10-70x80, Stroke max. 270 mm	0150-5406
	Stator	PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
		PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
		PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
		PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
→	Slider	PL10-28x590/540	Slider for P10-70 'standard'	0150-2196

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

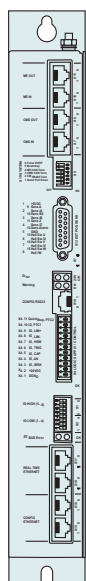
HM10-70x80/370		Linear Module 70x80 with 370 mm Stroke			
	H-Guide	H10-70x80/370	H-Guide for P10-70x80, Stroke max. 370 mm		0150-5407
	Stator	PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1291
		PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2282
		PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2360
		PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2708
	Slider	PL10-28x490/440	Slider for P10-70 'standard'		0150-2195
HM10-70x80/470		Linear Module 70x80 with 470 mm Stroke			
	H-Guide	H10-70x80/470	H-Guide for P10-70x80, Stroke max. 470 mm		0150-5408
	Stator	PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1291
		PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2282
		PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2360
		PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2708
	Slider	PL10-28x690/640	Slider for P10-70 'standard'		0150-2196
Accessories					
	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48		0150-5051

Motor Cable

4

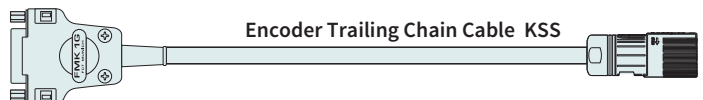
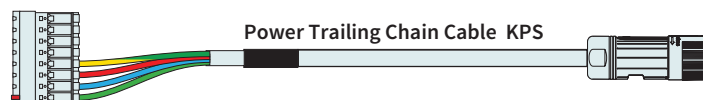


C1400

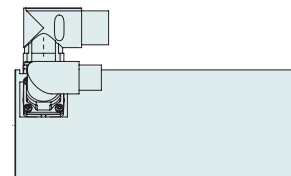


E1400

B Connector MC10-B/m



Q Connector MC10-Q/f

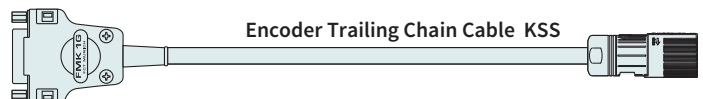
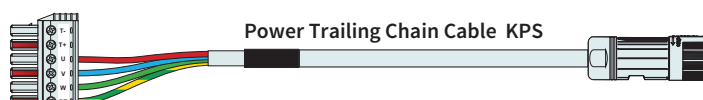


P10-70x80U

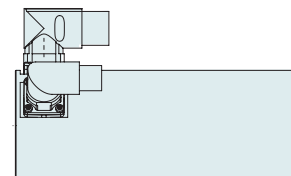
D15 Connector MC01-D15/f

J Connector MC10-J/f

L Connector MC10-L/m



Q Connector MC10-Q/f



P10-70x80U

D15 Connector MC01-D15/f

J Connector MC10-J/f

ORDERING INFORMATION

TRAILING CHAIN CABLE FOR LINMOT DRIVES		
Item	Description	Item-No.
KPS15-04-L/Q-3	Power Trailing Chain Cable E1400/P10-70, 3 m	0150-2266
KPS15-04-L/Q-5	Power Trailing Chain Cable E1400/P10-70, 5 m	0150-2261
KPS15-04-L/Q-8	Power Trailing Chain Cable E1400/P10-70, 8 m	0150-2267
KPS15-04-L/Q-12	Power Trailing Chain Cable E1400/P10-70, 12 m	0150-2268
KPS15-04-L/Q-	Power Trailing Chain Cable L/Q-, Custom length	0150-3388
KPS15-04-B/Q-3	Power Trailing Chain Cable C1400/P10-70, 3 m	0150-3660
KPS15-04-B/Q-5	Power Trailing Chain Cable C1400/P10-70, 5 m	0150-3661
KPS15-04-B/Q-8	Power Trailing Chain Cable C1400/P10-70, 8 m	0150-3662
KPS15-04-B/Q-12	Power Trailing Chain Cable C1400/P10-70, 12 m	0150-3663
KPS15-04-B/Q-	Power Trailing Chain Cable B/Q-, Custom length	0150-3608

KSS 05-02/08-D15/J-3	Encoder Trailing Chain Cable D15/J, 3 m	0150-2263
KSS 05-02/08-D15/J-5	Encoder Trailing Chain Cable D15/J, 5 m	0150-2262
KSS 05-02/08-D15/J-8	Encoder Trailing Chain Cable D15/J, 8 m	0150-2264
KSS 05-02/08-D15/J-12	Encoder Trailing Chain Cable D15/J, 12 m	0150-2265
KSS 05-02/08-D15(f)-45°/J-	Encoder Trailing Chain Cable D15/J-, Custom length	0150-3389

TRAILING CHAIN CABLE FOR STATOR SERIES D01 / D02

Item	Description	Item-No.
KPS15-04-.../Q-10	Power Trailing Chain Cable .../Q, 10 m for D0x	0150-2376
KPS15-04-.../Q-	Power Trailing Chain Cable .../Q, for D0x, Custom length	0150-3491
KSS05-02/13-.../J-10	Encoder Trailing Chain Cable .../J, 10 m for D0x	0150-2377
KSS05-02/13-.../J-	Encoder Trailing Chain Cable .../J, for D0x, Custom length	0150-3492
KPS15-04	Power Trailing Chain Cable P10-70 (per m)	0150-2257
KSS05-02/13	Trailing Chain Cable Encoder P10-...-Dxx (per m)	0150-2259

TRAILING CHAIN CABLE FOR STATOR SERIES D03

Item	Description	Item-No.
KPS15-04/04.../Q-10	Power Trailing Chain Cable .../Q, 10 m for D03	0150-3654
KPS15-04/04-.../Q-	Power Trailing Chain Cable .../Q, for D03, Custom length	0150-3579
KSS05-02/06-.../J-10	Encoder Trailing Chain Cable .../J, 10 m for D03	0150-3655
KSS05-02/06-.../J-	Encoder Trailing Chain Cable .../J, for D03, Custom length	0150-3611
KPS15-04/04	Power Trailing Chain Cable P10-...-Dx3 (per m)	0150-2269
KSS05-02/06	Trailing Chain Cable Encoder P10-...-Dx3 (per m)	0150-2490

CONNECTOR

Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
MC01-D15/f	Motor Connector D15 (f)	0150-3136
MC10-Q/f	Connector Power PS10-70	0150-2268
MC10-J/f	Connector Encoder PS10-70	0150-2269

MOTOR FLANGES



Item	Description	Item-No.
PF10-70x110	Flange for PS10-70x80	0150-2272



Item	Description	Item-No.
PF10-70x110-FC	Flange for PS10-70x80 fluid cooling	0150-2291

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-28	Fixed Bearing Set for 27/28 mm sliders	0150-3087
PLF01-28-SS	Fixed Bearing Set for 27/28 mm sliders, stainless steel	0150-3297
PLL01-28	Floating Bearing for 28 mm sliders	0150-3094
PLM01-28-MK	Mounting Kit for 28 mm sliders	0150-3095

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



Item	Description	Item-No.
PB10-70x80-L	Bearing Kit for PS10-70x80	0150-3431

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LUBRICANT RESERVOIR



Item	Description	Item-No.
PA10-70/28	Lubricant reservoir for PS10-70 with lubricating nipple	0150-3543

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D15/D-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

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LINEAR MOTORS P10-70x160U



- ✓ 3 x 400VAC Technology
- ✓ Peak forces up to 1120 N
- ✓ Extremely high dynamic
- ✓ Separate connector for sensor and power cable
- ✓ Can also be controlled by standard third-party servo drives

LINEAR MOTORS P10-70x160U

Technical Data **519**

Motor Specifications

P10-70x160U/90 **524**

P10-70x160U/190 **525**

P10-70x160U/290 **526**

P10-70x160U/390 **527**

P10-70x160U/490 **528**

P10-70x160U/590 **529**

P10-70x160U/690 **530**

P10-70x160U/890 **531**

P10-70x160U/1090 **532**

P10-70x160U/1290 **533**

P10-70x160U/1490 **534**

P10-70x160U/1690 **535**

Linear Guides **536**

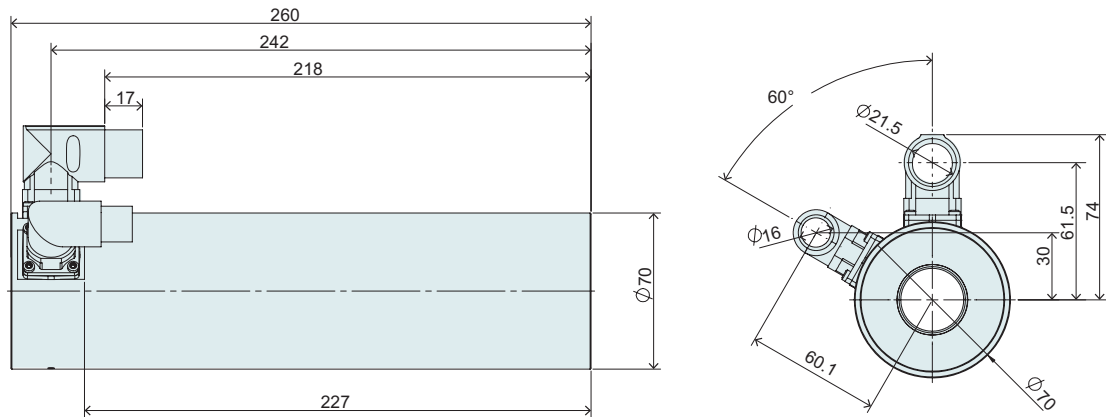
Accessories **538**



MOTOR FAMILY P10-70x160U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1690	(66.49)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1120	(252)
Max. Force @ 3x400VAC	N	(lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	56	(12.6)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	79.2	(17.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.6	(219.9)
Position Detection				
Position Resolution	mm	(in)	0.005	(0.0002)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.7 / 2.5 / 4.4	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	64.7	(1.64)
Terminal Resistance 25 °C / 120 °C	Ohm		8.3 / 11	
Terminal Inductivity	mH		16	
Magnetic Period	mm	(in)	40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Stator Diameter	mm	(in)	70	(2.8)
Stator Length	mm	(in)	260	(10)
Stator Mass	g	(lb)	4200	(9.24)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	390 - 1990	(15 - 78)
Slider Mass	g	(lb)	1830 - 9350	(4.03 - 20.57)
IP Code			IP 65	

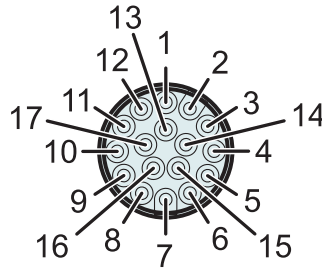
STATOR



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709

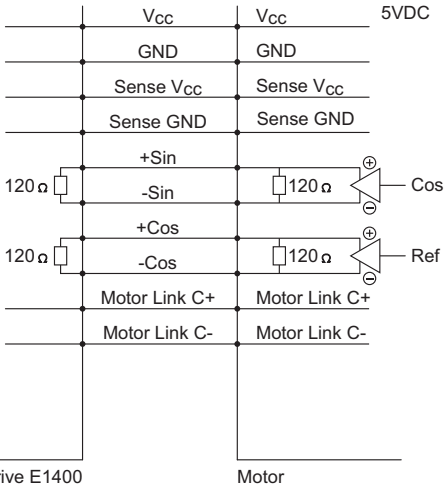
CONNECTOR PS10-70x160U-BL-QJ

Motor Connector Wiring		Connector Encoder J	Wire Color Motor Cable
+5 VDC	Supply	1	red
GND	Supply	2	black
Sense +5V	Supply Sense	3	white
Sense GND	Supply Sense	4	brown
Mot. Link C+	Communication	5	pink
Mot. Link C-	Communication	6	grey
Sin+	Encoder	7	yellow
Sin-	Encoder	8	orange
Cos+	Encoder	9	green
Cos-	Encoder	10	blue
n. c.	n. c.	11	n. c.
n. c.	n. c.	12	n. c.
n. c.	n. c.	13	n. c.
n. c.	n. c.	14	n. c.
n. c.	n. c.	15	n. c.
n. c.	n. c.	16	n. c.
n. c.	n. c.	17	n. c.

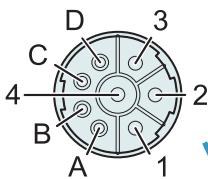


Connector Encoder J

View: Motor connector, plug side

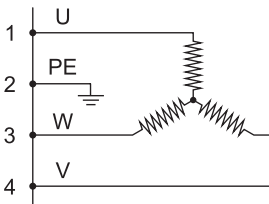


Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red
PE	2	yellow-green
Phase W	3	green
Phase V	4	blue
n. c.	A	n. c.
n. c.	B	n. c.
n. c.	C	n. c.
n. c.	D	n. c.

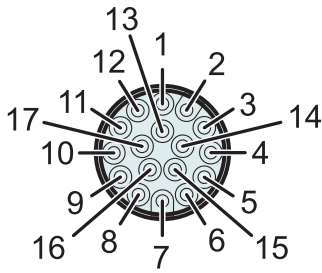


Connector Power Q

View: Motor connector, plug side



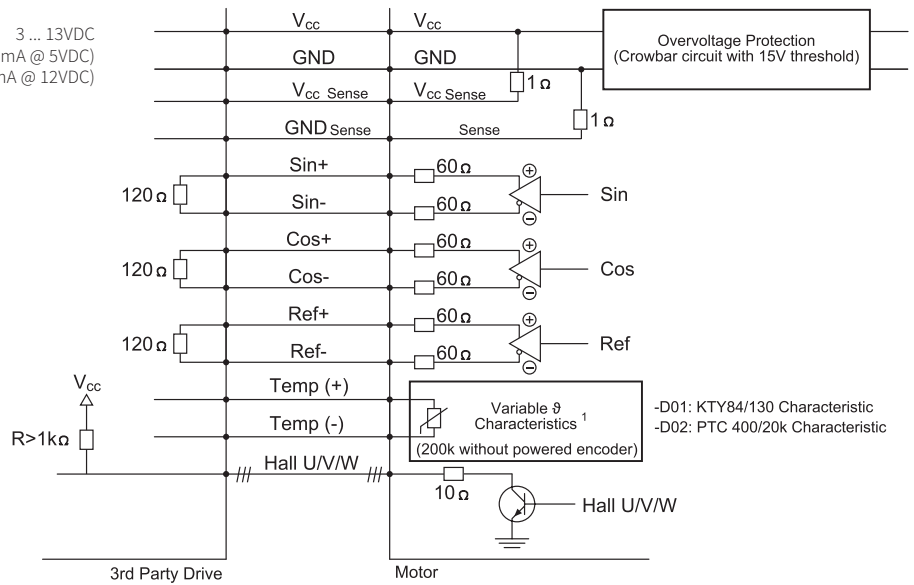
CONNECTOR PS10-70x160U-BL-QJ-D01/02



Connector Encoder J

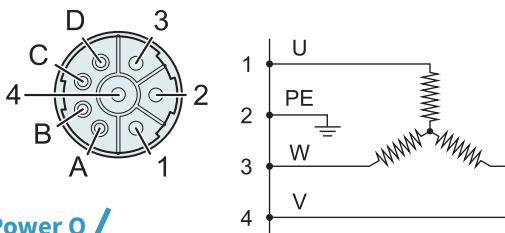
View: Motor connector, plug side

3 ... 13VDC
($I_{max} < 150\text{mA}$ @ 5VDC)
($I_{max} < 80\text{mA}$ @ 12VDC)



Motor Connector Wiring				
PS10-70x160U-BL-QJ-D01	PS10-70x160U-BL-QJ-D02	Function	Connector Encoder J	Wire Color Motor Cable
3 ... 13 VDC	3 ... 13 VDC	Supply	1	white
GND	GND	Supply	2	brown
Vcc Sense (optional)	Vcc Sense (optional)	Supply Sense	3	green
GND Sense (optional)	GND Sense (optional)	Supply Sense	4	yellow
Do not connect	Do not connect	-	5	-
Do not connect	Do not connect	-	6	-
Sin+	Sin+	Encoder 1 Vpp	7	grey
Sin-	Sin-	Encoder 1 Vpp	8	pink
Cos+	Cos+	Encoder 1 Vpp	9	blue
Cos-	Cos-	Encoder 1 Vpp	10	red
Ref+	Ref+	Encoder 1 Vpp	11	black
Ref-	Ref-	Encoder 1 Vpp	12	violett
Hall U	Hall U	Encoder (open collector)	13	grey-red
Hall V	Hall V	Encoder (open collector)	14	red-blue
Hall W	Hall W	Encoder (open collector)	15	white-green
Temp+ (KTY84/130 Char.)	Temp+ (PTC 400/20k Char.)	Temperature ¹	16	yellow-brown
Temp- (KTY84/130 Char.)	Temp- (PTC 400/20k Char.)	Temperature ¹	17	white-yellow

1) The temperature evaluation circuit must be powered from the encoder supply and must be at the same potential. The grounds of the temperature evaluation circuit and the encoder have to be connected. The encoder must have been powered on for at least 50 ms, before valid temperatures can be measured. If the encoder is powered off, 200k Ohms are measured between Pins 16 and 17. The maximum voltage between Pin 16 and 17 must not exceed 16 VDC. The maximum current must not exceed 15 mA.

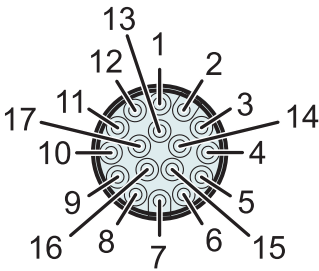


Connector Power Q

View: Motor connector, plug side

Motor Connector Wiring			
PS10-70x160U-BL-QJ-D01	PS10-70x160U-BL-QJ-D02	Connector Power Q	Wire Color Motor Cable
Phase U	Phase U	1	red
PE	PE	2	yellow-green
Phase W	Phase W	3	green
Phase V	Phase V	4	blue
n. c.	n. c.	A	n. c.
n. c.	n. c.	B	n. c.
n. c.	n. c.	C	n. c.
n. c.	n. c.	D	n. c.

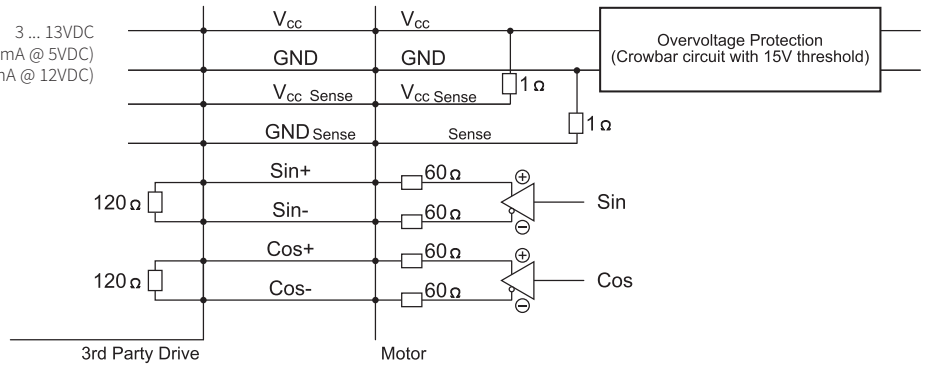
CONNECTOR PS10-70x160U-BL-QJ-D03



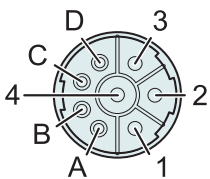
Connector Encoder J

View: Motor connector, plug side

3 ... 13VDC
($I_{max} < 150\text{mA}$ @ 5VDC)
($I_{max} < 80\text{mA}$ @ 12VDC)

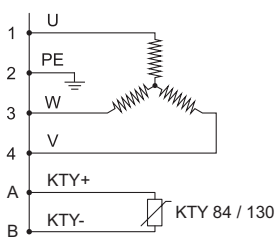


Motor Connector Wiring		Connector Encoder J	Wire Color Motor Cable
3 ... 13 VDC	Supply	1	red
GND	Supply	2	black
Vcc Sense (optional)	Supply Sense	3	white
GND Sense (optional)	Supply Sense	4	brown
Do not connect	–	5	–
Do not connect	–	6	–
Sin+	Encoder 1 Vpp	7	yellow
Sin-	Encoder 1 Vpp	8	orange
Cos+	Encoder 1 Vpp	9	green
Cos-	Encoder 1 Vpp	10	blue
n. c.	–	11	n. c.
n. c.	–	12	n. c.
n. c.	–	13	n. c.
Do not connect	–	14	n. c.
n. c.	–	15	n. c.
n. c.	–	16	n. c.
n. c.	–	17	n. c.



Connector Power Q

View: Motor connector, plug side

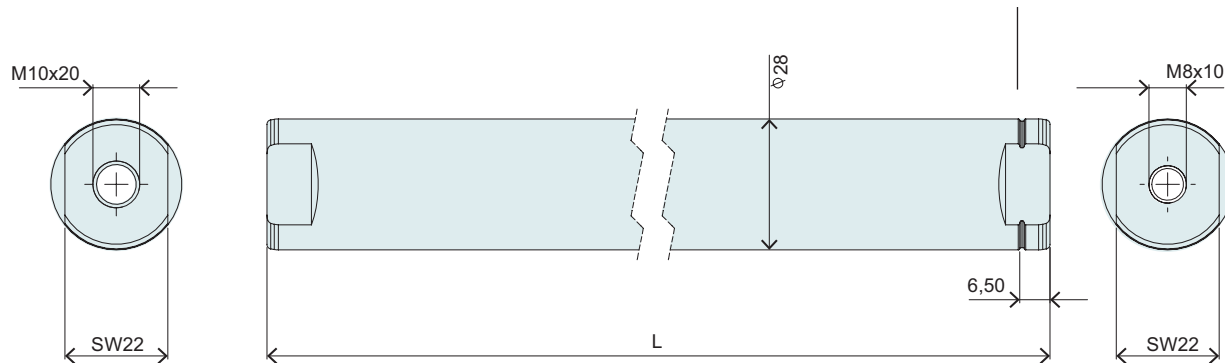


Motor Connector Wiring	Lesitungsstecker Q	Wire Color Motor Cable
Phase U	1	red (previously: black 1)
PE	2	yellow-green
Phase W	3	green (previously: black 3)
Phase V	4	blue (previously: black 2)
KTY+	A	purple (previously: black 5)
KTY-	B	grey (previously: black 6)
n. c.	C	yellow (previously: black 7)
n. c.	D	brown (previously: black 8)

SLIDER

Slider Standard

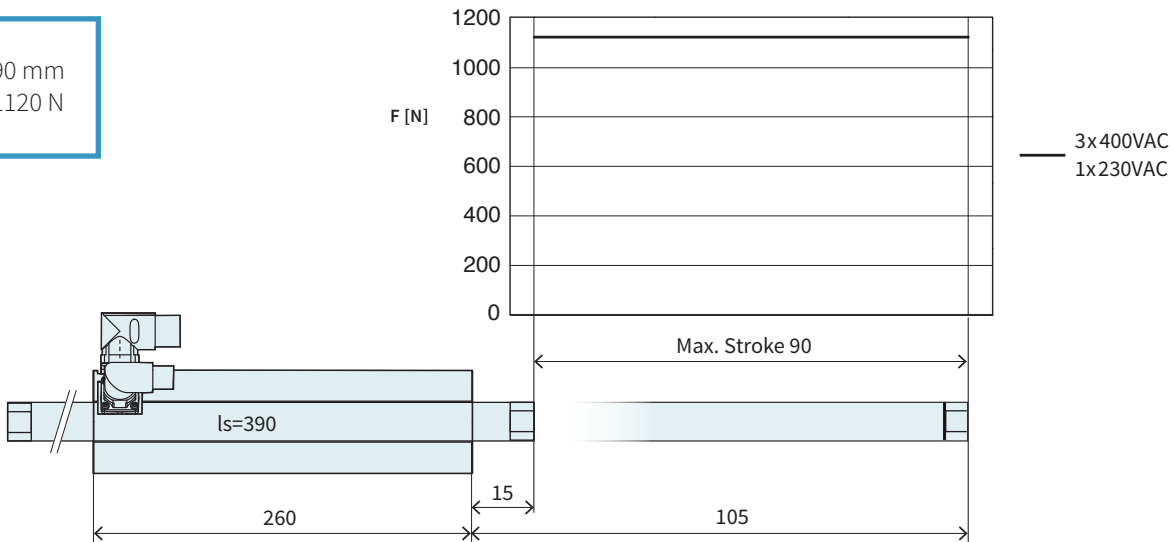
Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.



Slider Standard			
Item	Description	Max. Stroke [mm]	Item-No.
PL10-28x390/340	Slider for P10-70 'standard'	70	0150-2194
PL10-28x490/440	Slider for P10-70 'standard'	170	0150-2195
PL10-28x590/540	Slider for P10-70 'standard'	270	0150-2196
PL10-28x690/640	Slider for P10-70 'standard'	370	0150-2197
PL10-28x790/740	Slider for P10-70 'standard'	470	0150-2198
PL10-28x890/840	Slider for P10-70 'standard'	570	0150-2199
PL10-28x990/940	Slider for P10-70 'standard'	670	0150-2203
PL10-28x1190/1140	Slider for P10-70 'standard'	770	0150-2204
PL10-28x1390/1340	Slider for P10-70 'standard'	970	0150-2205
PL10-28x1590/1540	Slider for P10-70 'standard'	1170	0150-2206
PL10-28x1790/1740	Slider for P10-70 'standard'	1370	0150-2207
PL10-28x1990/1940	Slider for P10-70 'standard'	1570	0150-2208

P10-70x160U/90-BL-QJ

Max. Stroke: 90 mm
Peak Force: 1120 N



Dimensions in mm

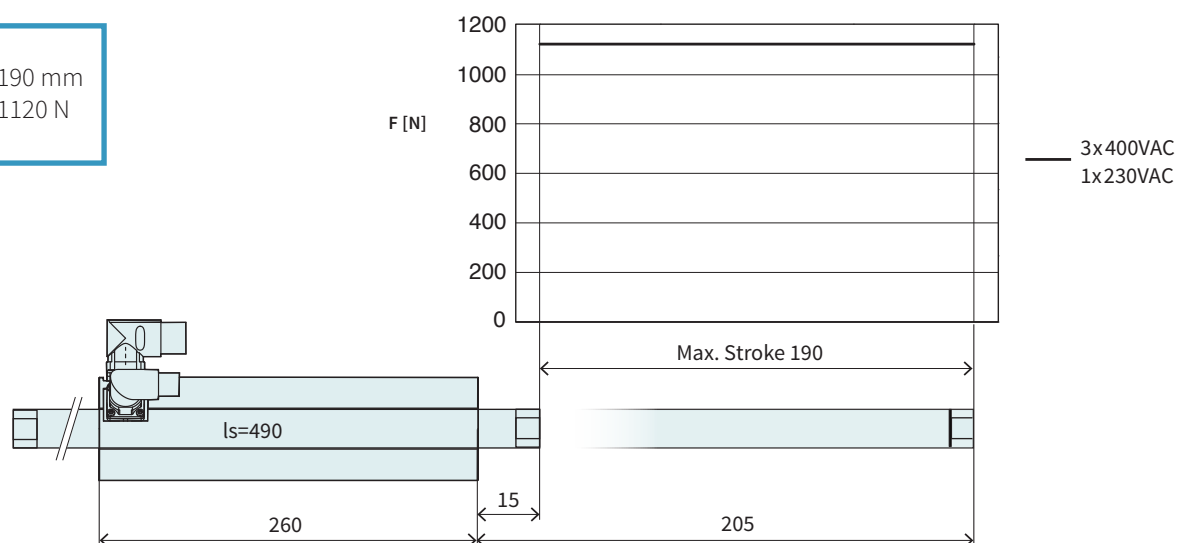
Technical Data P10-70x160U/90				
Stroke				
Max. Stroke	mm	(in)	90	(3.53)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1120	(252)
Max. Force @ 3x400VAC	N	(lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	56	(12.6)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	79.2	(17.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.6	(5.6)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.65	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.7 / 2.5 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	390	(15)
Slider Mass	g	(lb)	1830	(4.03)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x390/340	Slider for P10-70 'standard'	0150-2194

P10-70x160U/190-BL-QJ

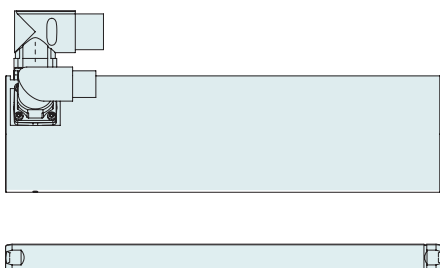
Max. Stroke: 190 mm
Peak Force: 1120 N



Dimensions in mm

Technical Data P10-70x160U/190

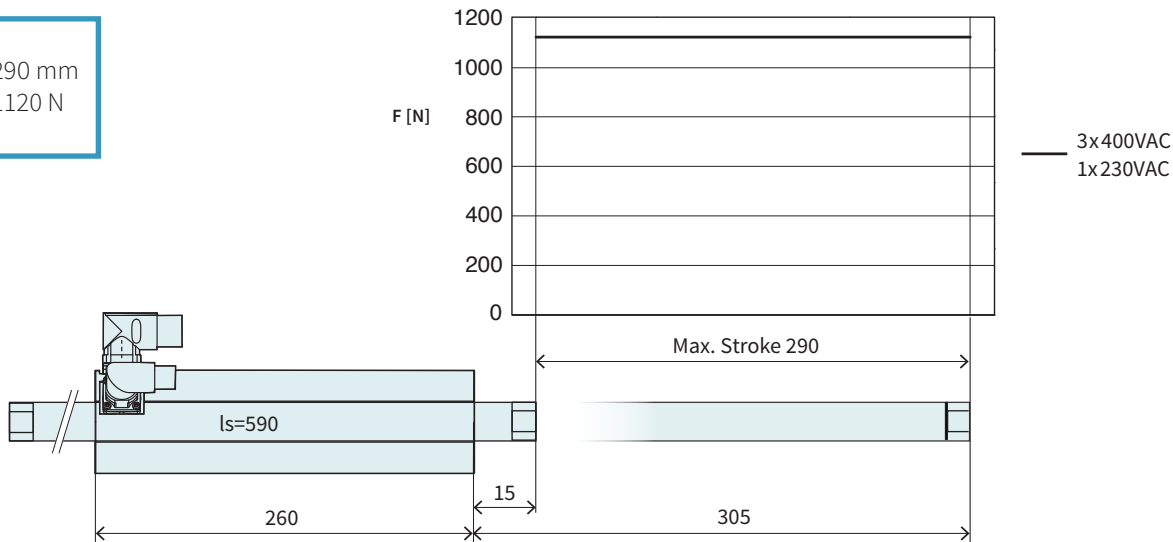
Stroke				
Max. Stroke	mm (in)		190	(7.48)
Force				
Max. Force @ 1x230VAC	N (lbf)		1120	(252)
Max. Force @ 3x400VAC	N (lbf)		1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})		56	(12.6)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		79.2	(17.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s (in/s)		3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		5.6	(5.6)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.35	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.7 / 2.5 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm (in)		490	(19)
Slider Mass	g (lb)		2300	(5.06)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x490/440	Slider for P10-70 'standard'	0150-2195

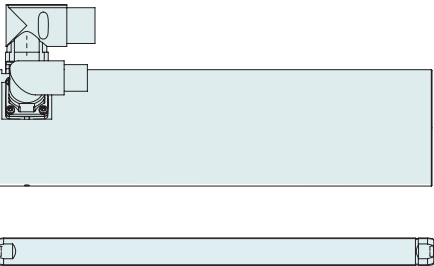
P10-70x160U/290-BL-QJ

Max. Stroke: 290 mm
Peak Force: 1120 N



Dimensions in mm

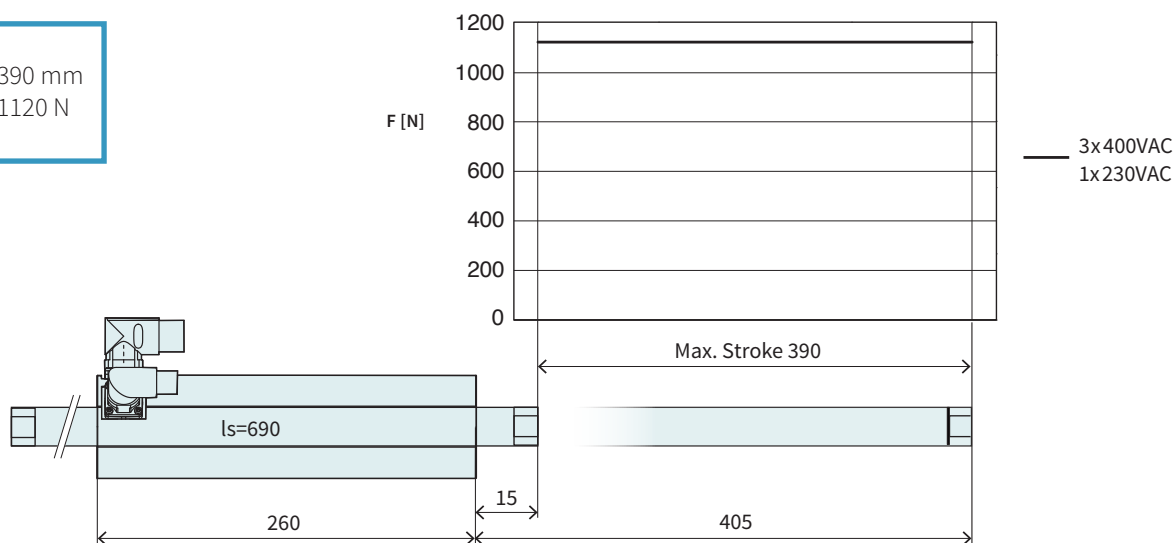
Technical Data P10-70x160U/290				
Stroke				
Max. Stroke	mm	(in)	290	(11.4)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1120	(252)
Max. Force @ 3x400VAC	N	(lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	56	(12.6)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	79.2	(17.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.6	(5.6)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.7 / 2.5 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	590	(23)
Slider Mass	g	(lb)	2770	(6.09)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x590/540	Slider for P10-70 'standard'	0150-2196

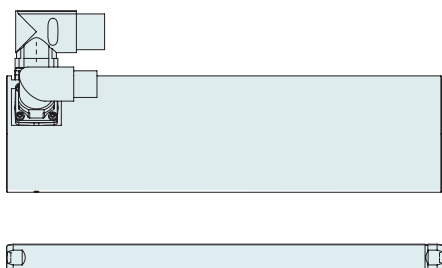
P10-70x160U/390-BL-QJ

Max. Stroke: 390 mm
Peak Force: 1120 N



Technical Data P10-70x160U/390

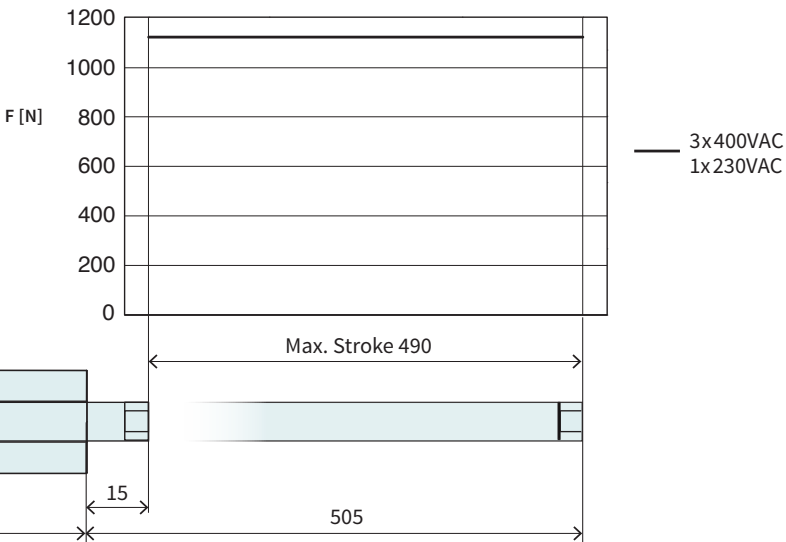
Stroke			
Max. Stroke	mm (in)	390	(15.4)
Force			
Max. Force @ 1x230VAC	N (lbf)	1120	(252)
Max. Force @ 3x400VAC	N (lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	56	(12.6)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	79.2	(17.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	5.6	(5.6)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.25	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	1.7 / 2.5 / 4.4	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	690	(27)
Slider Mass	g (lb)	3240	(7.13)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x690/640	Slider for P10-70 'standard'	0150-2197

P10-70x160U/490-BL-QJ

Max. Stroke: 490 mm
Peak Force: 1120 N



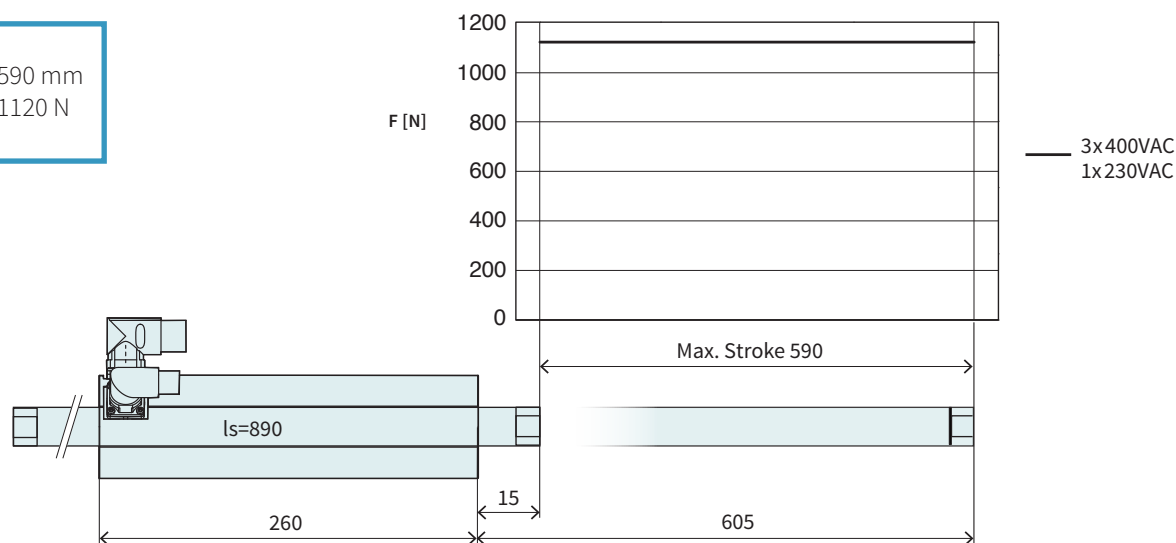
Technical Data P10-70x160U/490				
Stroke				
Max. Stroke	mm	(in)	490	(19.3)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1120	(252)
Max. Force @ 3x400VAC	N	(lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	56	(12.6)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	79.2	(17.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.6	(5.6)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.7 / 2.5 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	790	(31)
Slider Mass	g	(lb)	3710	(8.16)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x790/740	Slider for P10-70 'standard'	0150-2198

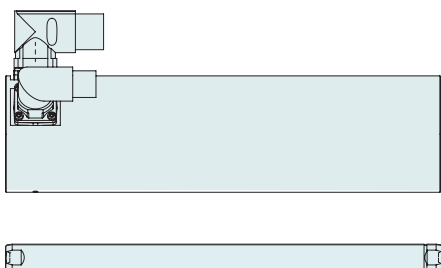
P10-70x160U/590-BL-QJ

Max. Stroke: 590 mm
Peak Force: 1120 N



Technical Data P10-70x160U/590

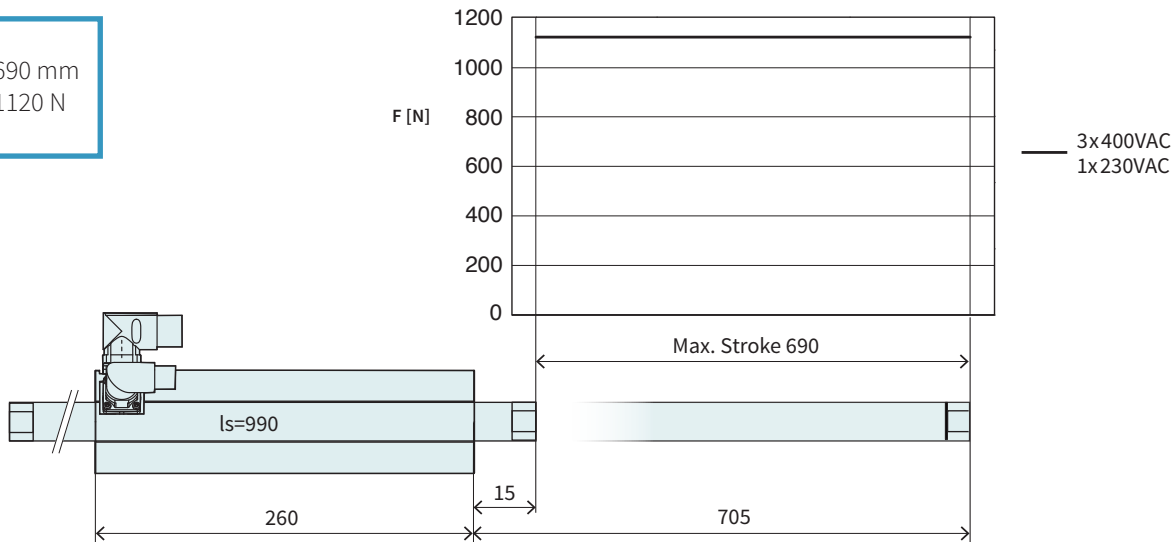
Stroke			
Max. Stroke	mm (in)	590	(23.19)
Force			
Max. Force @ 1x230VAC	N (lbf)	1120	(252)
Max. Force @ 3x400VAC	N (lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	56	(12.6)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	79.2	(17.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	5.6	(5.6)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	1.7 / 2.5 / 4.4	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	890	(35)
Slider Mass	g (lb)	4180	(9.2)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x890/840	Slider for P10-70 'standard'	0150-2199

P10-70x160U/690-BL-QJ

Max. Stroke: 690 mm
Peak Force: 1120 N



Dimensions in mm

Technical Data P10-70x160U/690

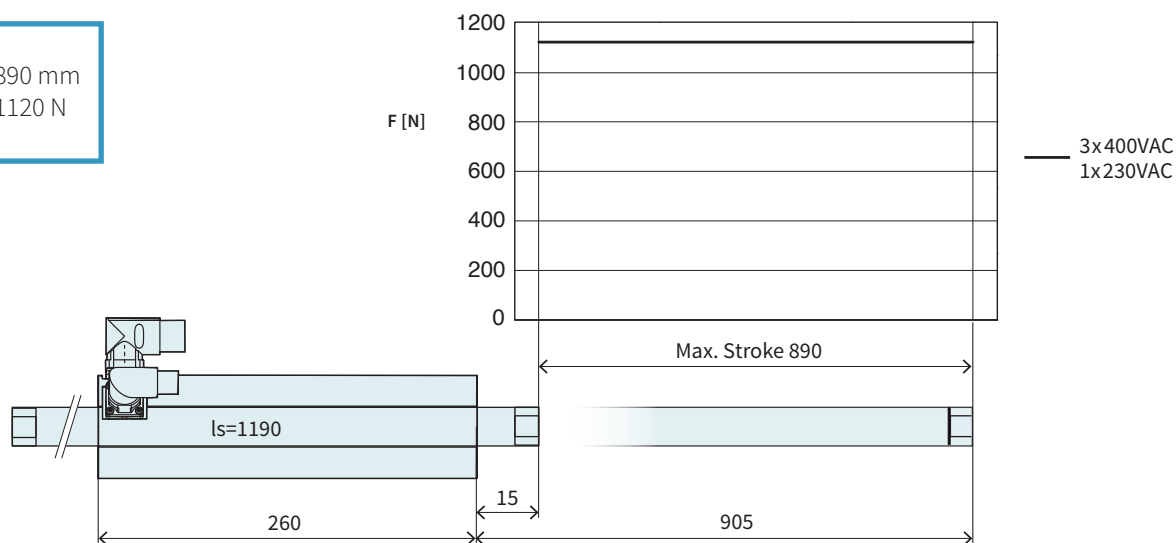
Stroke				
Max. Stroke	mm	(in)	690	(27.19)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1120	(252)
Max. Force @ 3x400VAC	N	(lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	56	(12.6)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	79.2	(17.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.6	(5.6)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.7 / 2.5 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	990	(39)
Slider Mass	g	(lb)	4650	(10.23)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x990/940	Slider for P10-70 'standard'	0150-2203

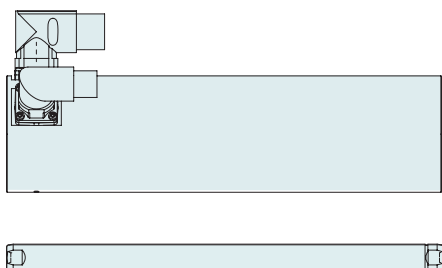
P10-70x160U/890-BL-QJ

Max. Stroke: 890 mm
Peak Force: 1120 N



Technical Data P10-70x160U/890

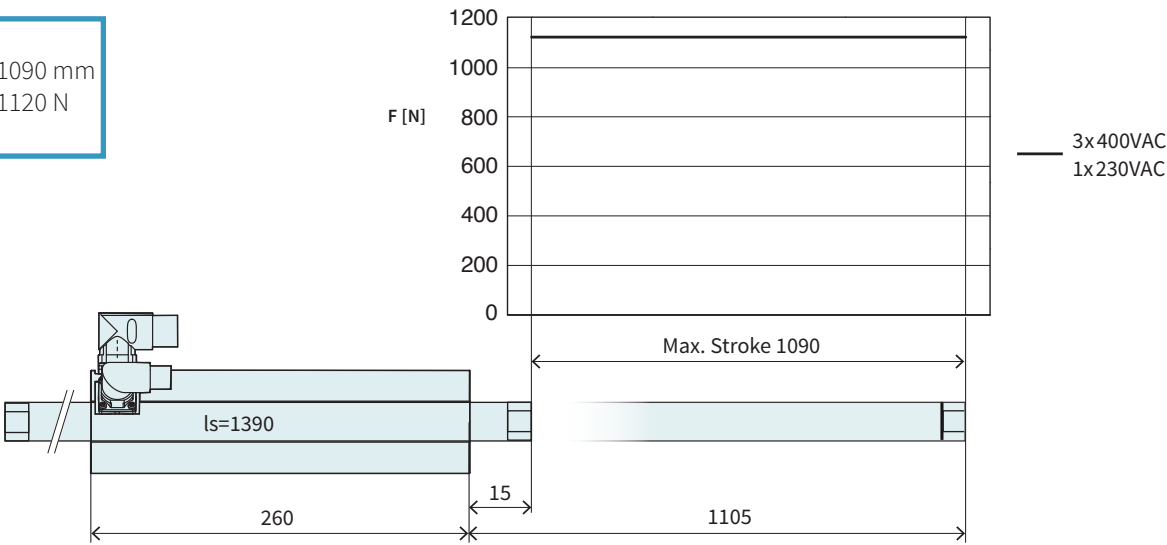
Stroke			
Max. Stroke	mm (in)	890	(34.99)
Force			
Max. Force @ 1x230VAC	N (lbf)	1120	(252)
Max. Force @ 3x400VAC	N (lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	56	(12.6)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	79.2	(17.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	5.6	(5.6)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	1.7 / 2.5 / 4.4	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	1190	(47)
Slider Mass	g (lb)	5590	(12.3)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x1190/1140	Slider for P10-70 'standard'	0150-2204

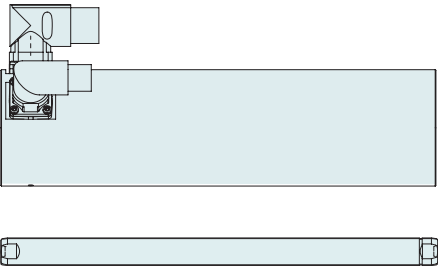
P10-70x160U/1090-BL-QJ

Max. Stroke: 1090 mm
Peak Force: 1120 N



Dimensions in mm

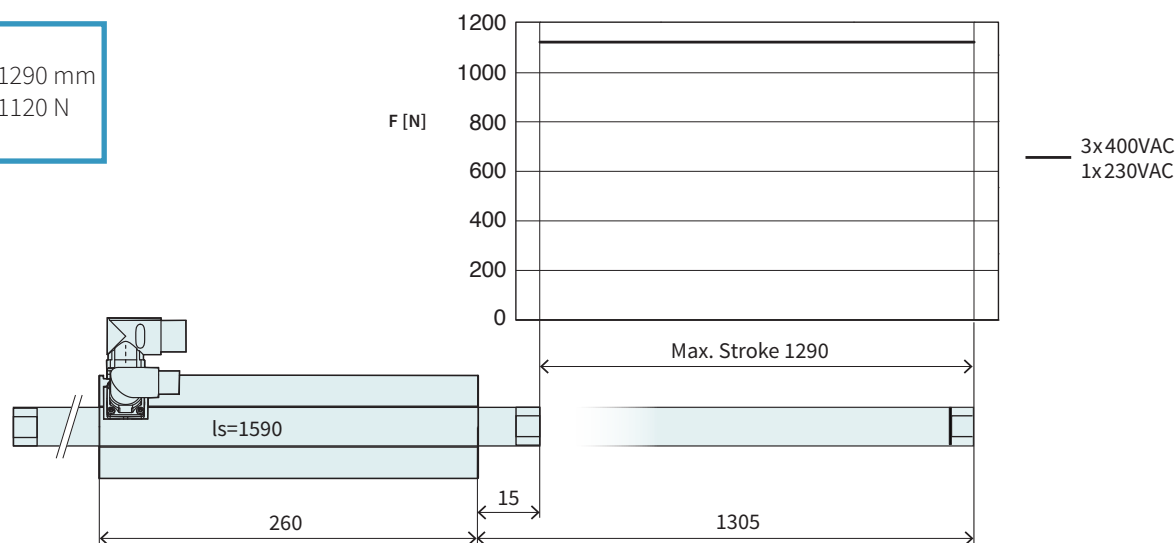
Technical Data P10-70x160U/1090				
Stroke				
Max. Stroke	mm	(in)	1090	(42.89)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1120	(252)
Max. Force @ 3x400VAC	N	(lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	56	(12.6)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	79.2	(17.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.6	(5.6)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.7 / 2.5 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	1390	(55)
Slider Mass	g	(lb)	6530	(14.37)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x1390/1340	Slider for P10-70 'standard'	0150-2205

P10-70x160U/1290-BL-QJ

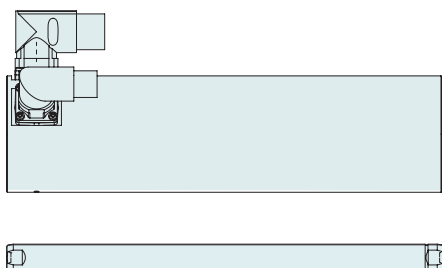
Max. Stroke: 1290 mm
Peak Force: 1120 N



Dimensions in mm

Technical Data P10-70x160U/1290

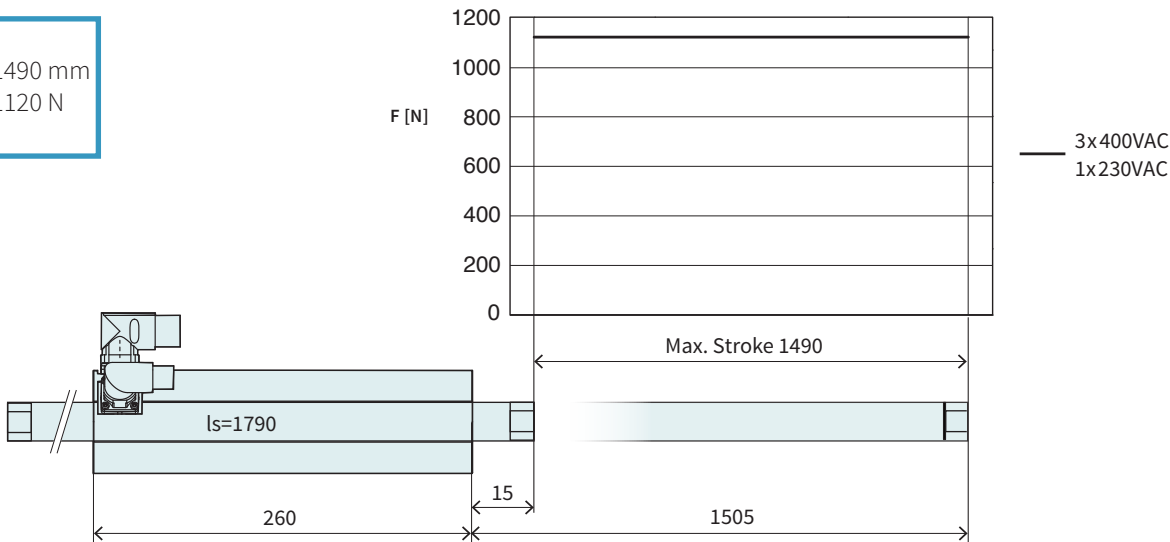
Stroke			
Max. Stroke	mm (in)	1290	(50.79)
Force			
Max. Force @ 1x230VAC	N (lbf)	1120	(252)
Max. Force @ 3x400VAC	N (lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	56	(12.6)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	79.2	(17.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	5.6	(5.6)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	1.7 / 2.5 / 4.4	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	1590	(63)
Slider Mass	g (lb)	7470	(16.43)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x1590/1540	Slider for P10-70 'standard'	0150-2206

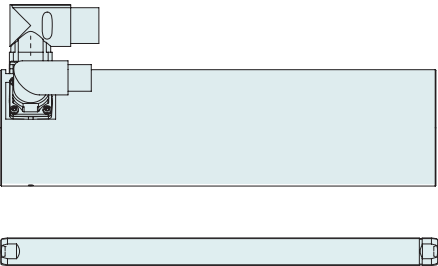
P10-70x160U/1490-BL-QJ

Max. Stroke: 1490 mm
Peak Force: 1120 N



Dimensions in mm

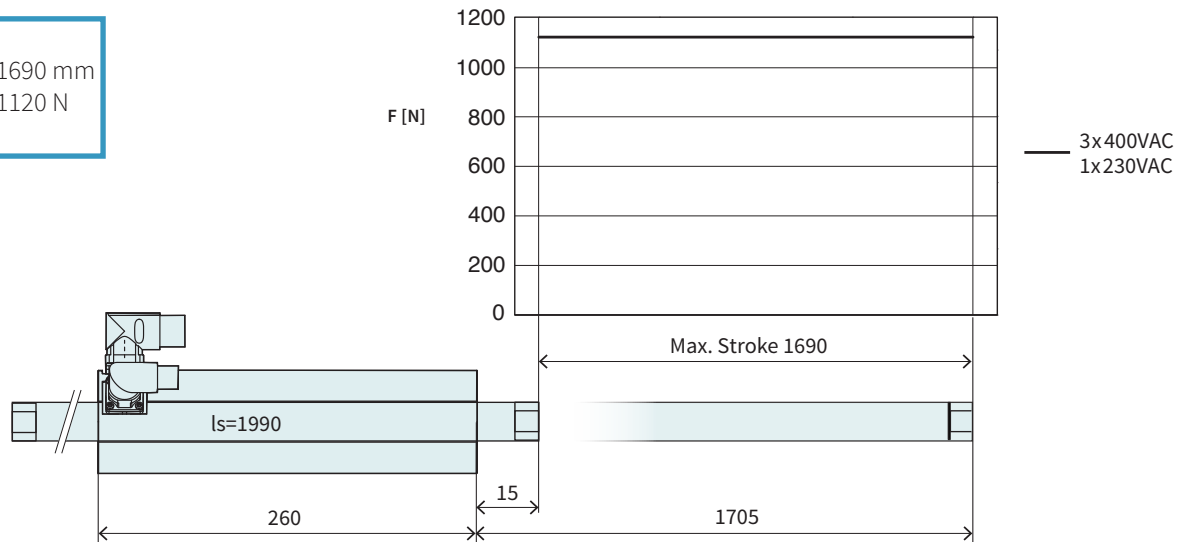
Technical Data P10-70x160U/1490				
Stroke				
Max. Stroke	mm	(in)	1490	(58.7)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1120	(252)
Max. Force @ 3x400VAC	N	(lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	56	(12.6)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	79.2	(17.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.6	(5.6)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.7 / 2.5 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	1790	(70)
Slider Mass	g	(lb)	8413	(18.51)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x1790/1740	Slider for P10-70 'standard'	0150-2207

P10-70x160U/1690-BL-QJ

Max. Stroke: 1690 mm
Peak Force: 1120 N



Dimensions in mm

Technical Data P10-70x160U/1690				
Stroke				
Max. Stroke	mm	(in)	1690	(66.49)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1120	(252)
Max. Force @ 3x400VAC	N	(lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	56	(12.6)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	79.2	(17.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.6	(5.6)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.7 / 2.5 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	1990	(78)
Slider Mass	g	(lb)	9350	(20.57)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x1990/1940	Slider for P10-70 'standard'	0150-2208

Linear Guides H10

4



HM10-70x160/90	Linear Module 70x160 with 90 mm Stroke			
→	H-Guide	H10-70x160/90	H-Guide for P10-70x160, Stroke max. 90 mm	0150-5409
→	Stator	PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
		PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
		PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
		PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
→	Slider	PL10-28x390/340	Slider for P10-70 'standard'	0150-2194

HM10-70x160/190	Linear Module 70x160 with 190 mm Stroke			
→	H-Guide	H10-70x160/190	H-Guide for P10-70x160, Stroke max. 190 mm	0150-5410
→	Stator	PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
		PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
		PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
		PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
→	Slider	PL10-28x490/440	Slider for P10-70 'standard'	0150-2195

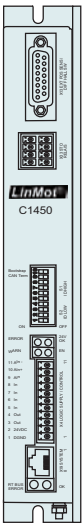
HM10-70x160/290	Linear Module 70x160 with 290 mm Stroke			
→	H-Guide	H10-70x160/290	H-Guide for P10-70x160, Stroke max. 290 mm	0150-5411
→	Stator	PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
		PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
		PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
		PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
→	Slider	PL10-28x590/540	Slider for P10-70 'standard'	0150-2196

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

HM10-70x160/390		Linear Module 70x160 with 390 mm Stroke		
	H-Guide	H10-70x160/390	H-Guide for P10-70x160, Stroke max. 390 mm	0150-5412
	Stator	PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
		PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
		PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
		PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
	Slider	PL10-28x690/640	Slider for P10-70 'standard'	0150-2197
HM10-70x160/490		Linear Module 70x160 with 490 mm Stroke		
	H-Guide	H10-70x160/490	H-Guide for P10-70x160, Stroke max. 490 mm	0150-5413
	Stator	PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
		PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
		PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
		PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
	Slider	PL10-28x790/740	Slider for P10-70 'standard'	0150-2198
Accessories				
	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

Motor Cable

4



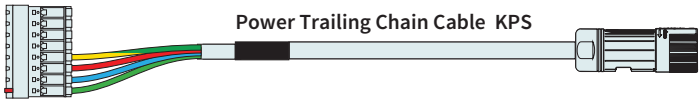
C1400



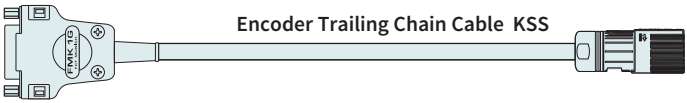
E1400

B Connector MC10-B/m

Q Connector MC10-Q/f



Power Trailing Chain Cable KPS



Encoder Trailing Chain Cable KSS



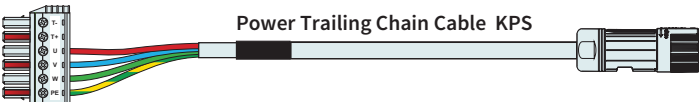
P10-70x160U

D15 Connector MC01-D15/f

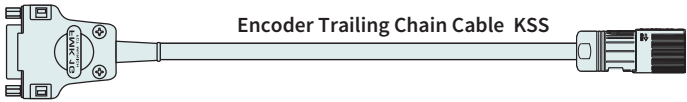
J Connector MC10-J/f

L Connector MC10-L/m

Q Connector MC10-Q/f



Power Trailing Chain Cable KPS



Encoder Trailing Chain Cable KSS



P10-70x160U

D15 Connector MC01-D15/f

J Connector MC10-J/f

ORDERING INFORMATION

TRAILING CHAIN CABLE FOR LINMOT DRIVES		
Item	Description	Item-No.
KPS15-04-L/Q-3	Power Trailing Chain Cable E1400/P10-70, 3 m	0150-2266
KPS15-04-L/Q-5	Power Trailing Chain Cable E1400/P10-70, 5 m	0150-2261
KPS15-04-L/Q-8	Power Trailing Chain Cable E1400/P10-70, 8 m	0150-2267
KPS15-04-L/Q-12	Power Trailing Chain Cable E1400/P10-70, 12 m	0150-2268
KPS15-04-L/Q-	Power Trailing Chain Cable L/Q-, Custom length	0150-3388
KPS15-04-B/Q-3	Power Trailing Chain Cable C1400/P10-70, 3 m	0150-3660
KPS15-04-B/Q-5	Power Trailing Chain Cable C1400/P10-70, 5 m	0150-3661
KPS15-04-B/Q-8	Power Trailing Chain Cable C1400/P10-70, 8 m	0150-3662
KPS15-04-B/Q-12	Power Trailing Chain Cable C1400/P10-70, 12 m	0150-3663
KPS15-04-B/Q-	Power Trailing Chain Cable B/Q-, Custom length	0150-3608

TRAILING CHAIN CABLE FOR LINMOT DRIVES

Item	Description	Item-No.
KSS 05-02/08-D15/J-3	Encoder Trailing Chain Cable D15/J, 3 m	0150-2263
KSS 05-02/08-D15/J-5	Encoder Trailing Chain Cable D15/J, 5 m	0150-2262
KSS 05-02/08-D15/J-8	Encoder Trailing Chain Cable D15/J, 8 m	0150-2264
KSS 05-02/08-D15/J-12	Encoder Trailing Chain Cable D15/J, 12 m	0150-2265
KSS 05-02/08-D15(f)-45°/J-	Encoder Trailing Chain Cable D15/J-, Custom length	0150-3389

TRAILING CHAIN CABLE FOR STATOR SERIES D01 / D02

Item	Description	Item-No.
KPS15-04-..../Q-10	Power Trailing Chain Cable .../Q, 10 m for D0x	0150-2376
KPS15-04-./Q-	Power Trailing Chain Cable .../Q, for D0x, Custom length	0150-3491
KSS05-02/13-./J-10	Encoder Trailing Chain Cable ./J, 10 m for D0x	0150-2377
KSS05-02/13-./J-	Encoder Trailing Chain Cable ./J, for D0x, Custom length	0150-3492
KPS15-04	Power Trailing Chain Cable P10-70 (per m)	0150-2257
KSS05-02/13	Trailing Chain Cable Encoder P10-....-Dxx (per m)	0150-2259

TRAILING CHAIN CABLE FOR STATOR SERIES D03

Item	Description	Item-No.
KPS15-04/04..../Q-10	Power Trailing Chain Cable .../Q, 10 m for D03	0150-3654
KPS15-04/04-./Q-	Power Trailing Chain Cable .../Q, for D03, Custom length	0150-3579
KSS05-02/06-./J-10	Encoder Trailing Chain Cable ./J, 10 m for D03	0150-3655
KSS05-02/06-./J-	Encoder Trailing Chain Cable ./J, for D03, Custom length	0150-3611
KPS15-04/04	Power Trailing Chain Cable P10-....-Dx3 (per m)	0150-2269
KSS05-02/06	Trailing Chain Cable Encoder P10-....-Dx3 (per m)	0150-2490

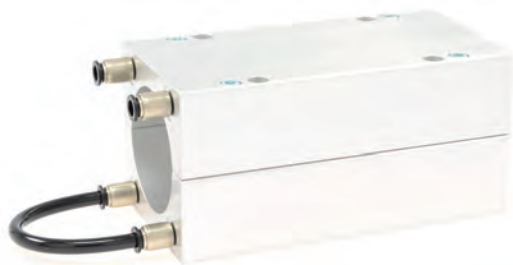
CONNECTOR

Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
MC01-D15/f	Motor Connector D15 (f)	0150-3136
MC10-Q/f	Connector Power PS10-70	0150-2268
MC10-J/f	Connector Encoder PS10-70	0150-2269

MOTOR FLANGES



Item	Description	Item-No.
PF10-70x190	Flange for PS10-70x160	0150-2273



Item	Description	Item-No.
PF10-70x190-FC	Flange for PS10-70x160 fluid cooling	0150-2292

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-28	Fixed Bearing Set for 27/28 mm sliders	0150-3087
PLF01-28-SS	Fixed Bearing Set for 27/28 mm sliders, stainless steel	0150-3297
PLL01-28	Floating Bearing for 28 mm sliders	0150-3094
PLM01-28-MK	Mounting Kit for 28 mm sliders	0150-3095

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



Item	Description	Item-No.
PB10-70x160-L	Bearing Kit for PS10-70x160	0150-3432

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LUBRICANT RESERVOIR



Item	Description	Item-No.
PA10-70/28	Lubricant reservoir for PS10-70 with lubricating nipple	0150-3543

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS

4



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D15/D-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P10-70x240U



- ✓ 3 x 400VAC Technology
- ✓ Peak forces up to 1650 N
- ✓ Extremely high dynamic
- ✓ Separate connector for sensor and power cable
- ✓ Can also be controlled by standard third-party servo drives

LINEAR MOTORS P10-70x240U

Technical Data **545**

Motor Specifications

P10-70x240U/10 **550**

P10-70x240U/110 **551**

P10-70x240U/210 **552**

P10-70x240U/310 **553**

P10-70x240U/410 **554**

P10-70x240U/510 **555**

P10-70x240U/610 **556**

P10-70x240U/810 **557**

P10-70x240U/1010 **558**

P10-70x240U/1210 **559**

P10-70x240U/1410 **560**

P10-70x240U/1610 **561**

Linear Guides **562**

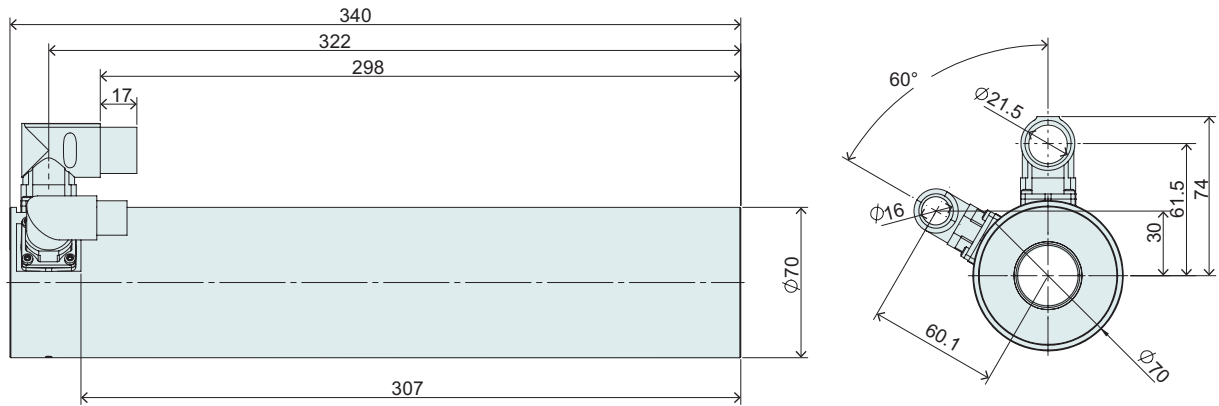
Accessories **564**



MOTOR FAMILY P10-70x240U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1610	(63.39)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1650	(371)
Max. Force @ 3x400VAC	N	(lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	83.4	(18.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.4	(209.9)
Position Detection				
Position Resolution	mm	(in)	0.005	(0.0002)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.3 / 3.5 / 6.1	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	68.1	(1.73)
Terminal Resistance 25 °C / 120 °C	Ohm		6.3 / 8.6	
Terminal Inductivity	mH		12	
Magnetic Period	mm	(in)	40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 510 / 110	
Mechanical Data				
Stator Diameter	mm	(in)	70	(2.8)
Stator Length	mm	(in)	340	(13)
Stator Mass	g	(lb)	5550	(12.21)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	390 - 1990	(15 - 78)
Slider Mass	g	(lb)	1830 - 9350	(4.03 - 20.57)
IP Code			IP 65	

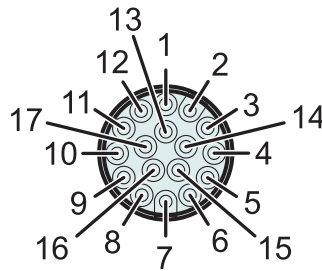
STATOR



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710

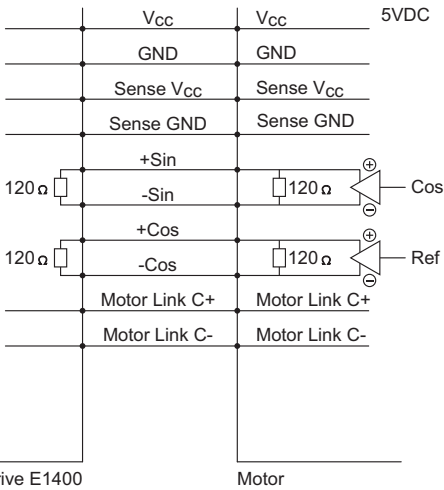
CONNECTOR PS10-70x240U-BL-QJ

Motor Connector Wiring		Connector Encoder J	Wire Color Motor Cable
+5 VDC	Supply	1	red
GND	Supply	2	black
Sense +5V	Supply Sense	3	white
Sense GND	Supply Sense	4	brown
Mot. Link C+	Communication	5	pink
Mot. Link C-	Communication	6	grey
Sin+	Encoder	7	yellow
Sin-	Encoder	8	orange
Cos+	Encoder	9	green
Cos-	Encoder	10	blue
n. c.	n. c.	11	n. c.
n. c.	n. c.	12	n. c.
n. c.	n. c.	13	n. c.
n. c.	n. c.	14	n. c.
n. c.	n. c.	15	n. c.
n. c.	n. c.	16	n. c.
n. c.	n. c.	17	n. c.

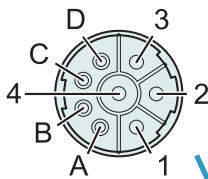


Connector Encoder J

View: Motor connector, plug side

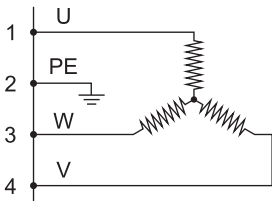


Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red
PE	2	yellow-green
Phase W	3	green
Phase V	4	blue
n. c.	A	n. c.
n. c.	B	n. c.
n. c.	C	n. c.
n. c.	D	n. c.

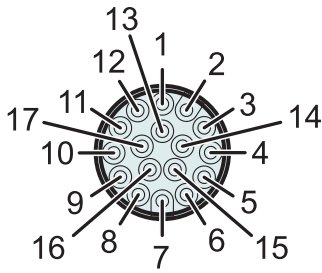


Connector Power Q

View: Motor connector, plug side



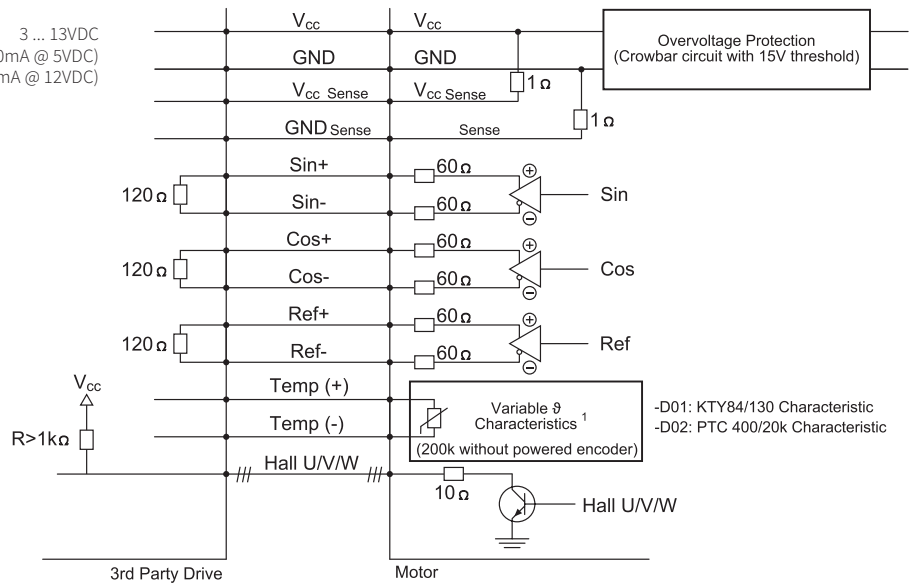
CONNECTOR PS10-70x240U-BL-QJ-D01/02



Connector Encoder J

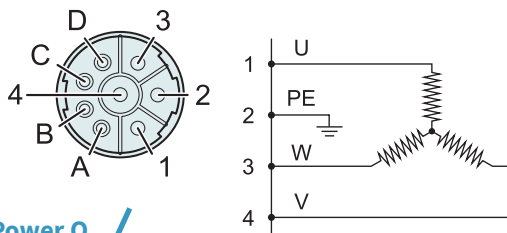
View: Motor connector, plug side

3 ... 13VDC
($I_{max} < 150\text{mA}$ @ 5VDC)
($I_{max} < 80\text{mA}$ @ 12VDC)



Motor Connector Wiring				
PS10-70x240U-BL-QJ-D01	PS10-70x240U-BL-QJ-D02	Function	Connector Encoder J	Wire Color Motor Cable
3 ... 13 VDC	3 ... 13 VDC	Supply	1	Motor Cable
GND	GND	Supply	2	brown
Vcc Sense (optional)	Vcc Sense (optional)	Supply Sense	3	green
GND Sense (optional)	GND Sense (optional)	Supply Sense	4	yellow
Do not connect	Do not connect	-	5	-
Do not connect	Do not connect	-	6	-
Sin+	Sin+	Encoder 1 Vpp	7	grey
Sin-	Sin-	Encoder 1 Vpp	8	pink
Cos+	Cos+	Encoder 1 Vpp	9	blue
Cos-	Cos-	Encoder 1 Vpp	10	red
Ref+	Ref+	Encoder 1 Vpp	11	black
Ref-	Ref-	Encoder 1 Vpp	12	violett
Hall U	Hall U	Encoder (open collector)	13	grey-red
Hall V	Hall V	Encoder (open collector)	14	red-blue
Hall W	Hall W	Encoder (open collector)	15	white-green
Temp+ (KTY84/130 Char.)	Temp+ (PTC 400/20k Char.)	Temperature ¹	16	yellow-brown
Temp- (KTY84/130 Char.)	Temp- (PTC 400/20k Char.)	Temperature ¹	17	white-yellow

1) The temperature evaluation circuit must be powered from the encoder supply and must be at the same potential. The grounds of the temperature evaluation circuit and the encoder have to be connected. The encoder must have been powered on for at least 50 ms, before valid temperatures can be measured. If the encoder is powered off, 200k Ohms are measured between Pins 16 and 17. The maximum voltage between Pin 16 and 17 must not exceed 16 VDC. The maximum current must not exceed 15 mA.

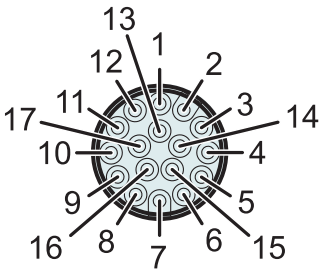


Connector Power Q

View: Motor connector, plug side

Motor Connector Wiring			
PS10-70x240U-BL-QJ-D01	PS10-70x240U-BL-QJ-D02	Connector Power Q	Wire Color Motor Cable
Phase U	Phase U	1	red
PE	PE	2	yellow-green
Phase W	Phase W	3	green
Phase V	Phase V	4	blue
n. c.	n. c.	A	n. c.
n. c.	n. c.	B	n. c.
n. c.	n. c.	C	n. c.
n. c.	n. c.	D	n. c.

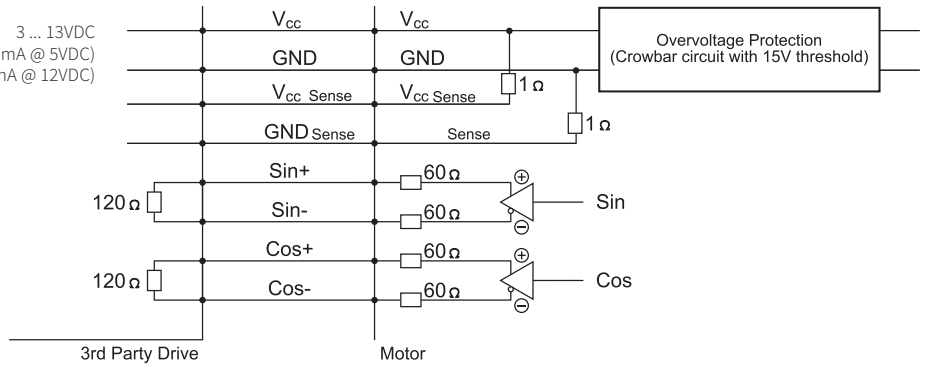
CONNECTOR PS10-70x240U-BL-QJ-D03



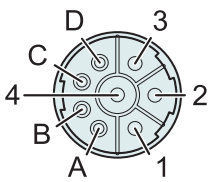
Connector Encoder J

View: Motor connector, plug side

3 ... 13VDC
(Imax < 150mA @ 5VDC)
(Imax < 80mA @ 12VDC)

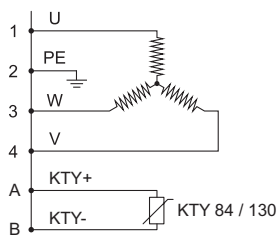


Motor Connector Wiring		Connector Encoder J	Wire Color Motor Cable
3 ... 13 VDC	Supply	1	red
GND	Supply	2	black
Vcc Sense (optional)	Supply Sense	3	white
GND Sense (optional)	Supply Sense	4	brown
Do not connect	–	5	–
Do not connect	–	6	–
Sin+	Encoder 1 Vpp	7	yellow
Sin-	Encoder 1 Vpp	8	orange
Cos+	Encoder 1 Vpp	9	green
Cos-	Encoder 1 Vpp	10	blue
n. c.	–	11	n. c.
n. c.	–	12	n. c.
n. c.	–	13	n. c.
Do not connect	–	14	n. c.
n. c.	–	15	n. c.
n. c.	–	16	n. c.
n. c.	–	17	n. c.



Connector Power Q

View: Motor connector, plug side

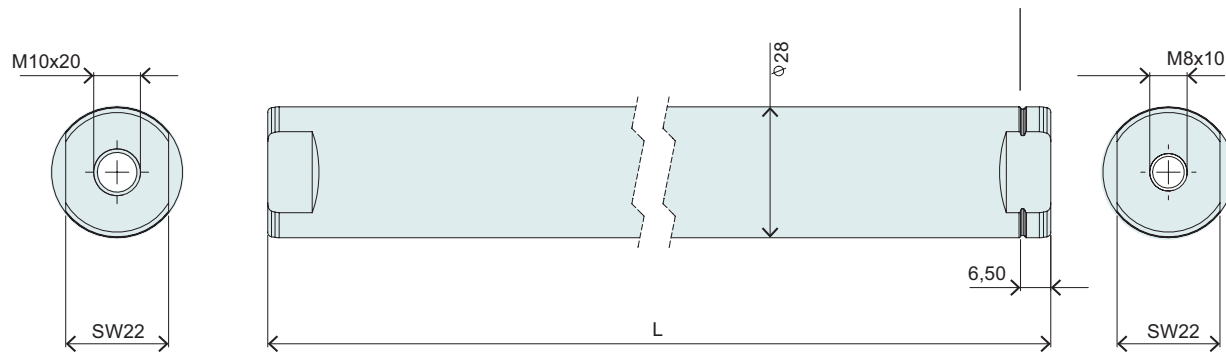


Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red (previously: black 1)
PE	2	yellow-green
Phase W	3	green (previously: black 3)
Phase V	4	blue (previously: black 2)
KTY +	A	purple (previously: black 5)
KTY -	B	grey (previously: black 6)
n. c.	C	yellow (previously: black 7)
n. c.	D	brown (previously: black 8)

SLIDER

Slider Standard

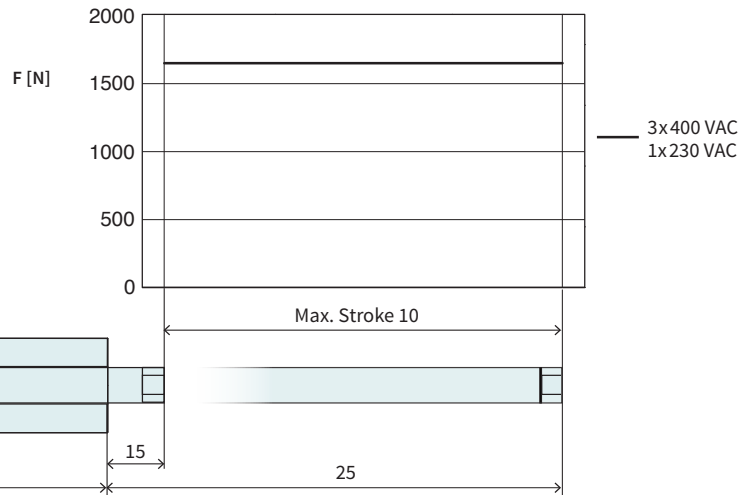
Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.



Slider Standard			
Item	Description	Max. Stroke [mm]	Item-No.
PL10-28x390/340	Slider for P10-70 'standard'	10	0150-2194
PL10-28x490/440	Slider for P10-70 'standard'	110	0150-2195
PL10-28x590/540	Slider for P10-70 'standard'	210	0150-2196
PL10-28x690/640	Slider for P10-70 'standard'	310	0150-2197
PL10-28x790/740	Slider for P10-70 'standard'	410	0150-2198
PL10-28x890/840	Slider for P10-70 'standard'	510	0150-2199
PL10-28x990/940	Slider for P10-70 'standard'	610	0150-2203
PL10-28x1190/1140	Slider for P10-70 'standard'	810	0150-2204
PL10-28x1390/1340	Slider for P10-70 'standard'	1010	0150-2205
PL10-28x1590/1540	Slider for P10-70 'standard'	1210	0150-2206
PL10-28x1790/1740	Slider for P10-70 'standard'	1410	0150-2207
PL10-28x1990/1940	Slider for P10-70 'standard'	1610	0150-2208

P10-70x240U/10-BL-QJ

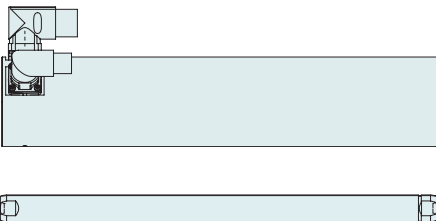
Max. Stroke: 10 mm
Peak Force: 1650 N



Dimensions in mm

Technical Data P10-70x240U/10

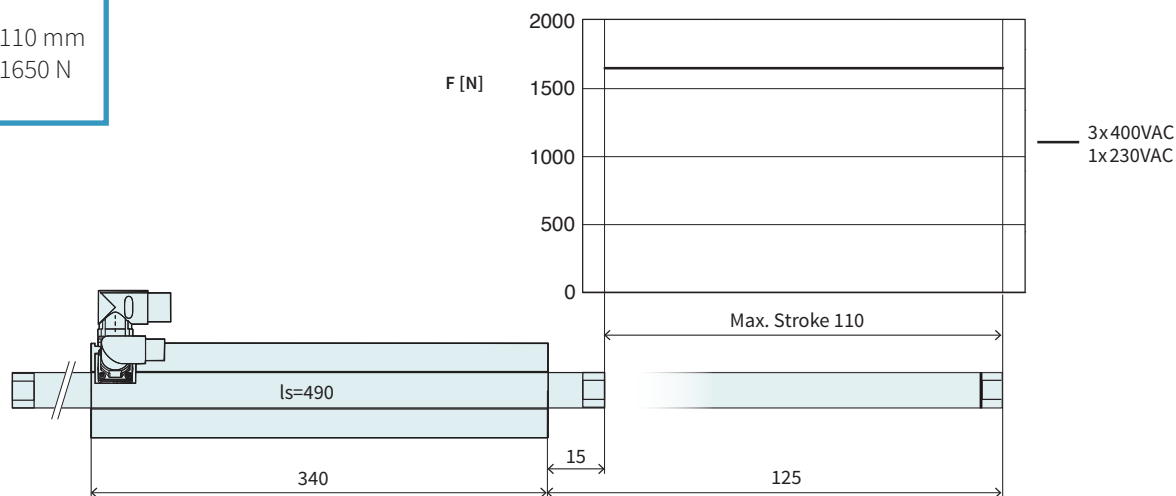
Stroke			
Max. Stroke	mm (in)	10	(0.39)
Force			
Max. Force @ 1x230VAC	N (lbf)	1650	(371)
Max. Force @ 3x400VAC	N (lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	83.4	(18.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	5.4	(5.4)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 5.1	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.3 / 3.5 / 6.1	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 510 / 110	
Mechanical Data			
Slider Length	mm (in)	390	(15)
Slider Mass	g (lb)	1830	(4.03)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x390/340	Slider for P10-70 'standard'	0150-2194

P10-70x240U/110-BL-QJ

Max. Stroke: 110 mm
Peak Force: 1650 N



Dimensions in mm

Technical Data P10-70x240U/110

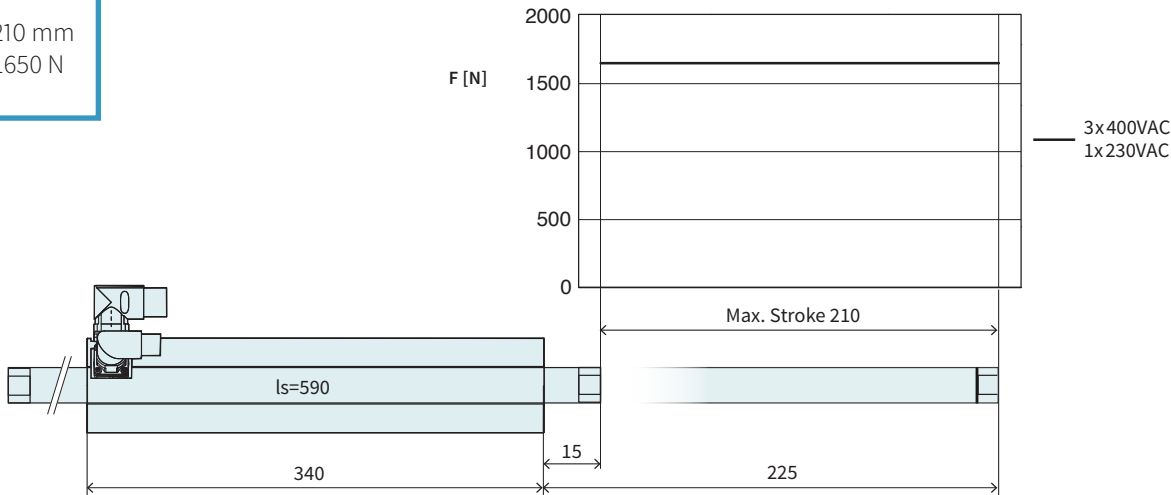
Stroke				
Max. Stroke	mm	(in)	110	(4.32)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1650	(371)
Max. Force @ 3x400VAC	N	(lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	83.4	(18.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.4	(5.4)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.55	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.3 / 3.5 / 6.1	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 510 / 110	
Mechanical Data				
Slider Length	mm	(in)	490	(19)
Slider Mass	g	(lb)	2300	(5.06)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x490/440	Slider for P10-70 'standard'	0150-2195

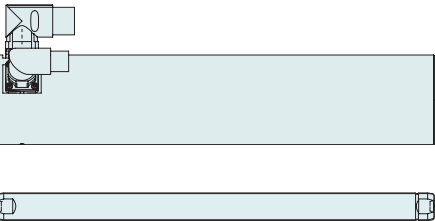
P10-70x240U/210-BL-QJ

Max. Stroke: 210 mm
Peak Force: 1650 N



Technical Data P10-70x240U/210

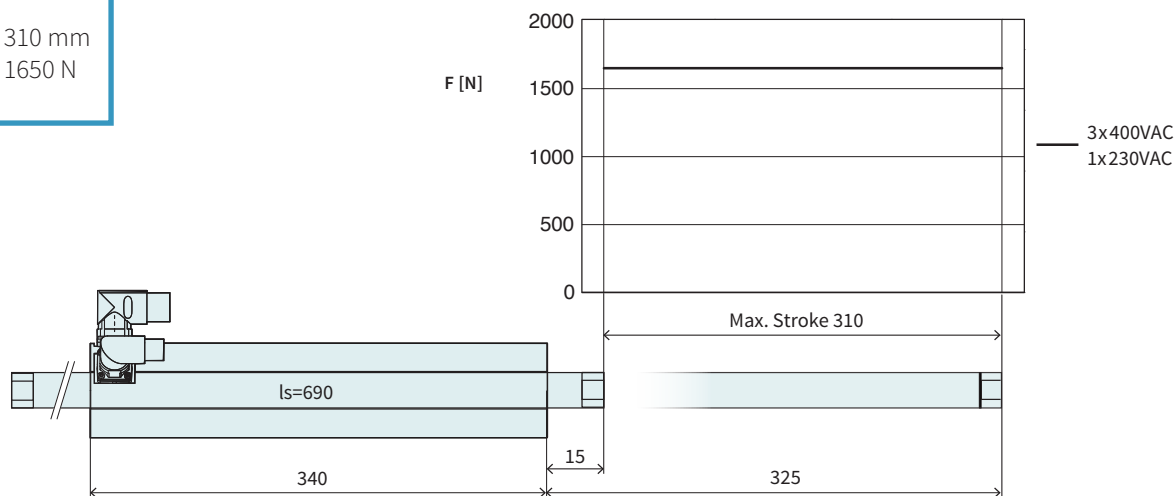
Stroke				
Max. Stroke	mm	(in)	210	(8.26)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1650	(371)
Max. Force @ 3x400VAC	N	(lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	83.4	(18.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.4	(5.4)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.35	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.3 / 3.5 / 6.1	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 510 / 110	
Mechanical Data				
Slider Length	mm	(in)	590	(23)
Slider Mass	g	(lb)	2770	(6.09)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x590/540	Slider for P10-70 'standard'	0150-2196

P10-70x240U/310-BL-QJ

Max. Stroke: 310 mm
Peak Force: 1650 N



Technical Data P10-70x240U/310

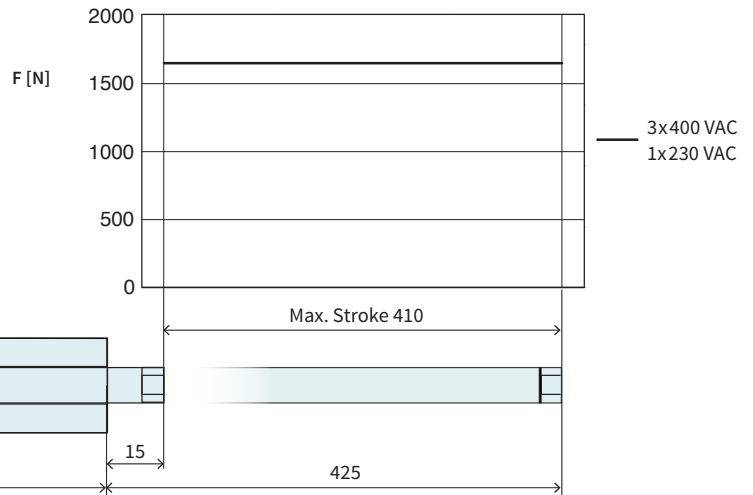
Stroke				
Max. Stroke	mm	(in)	310	(12.19)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1650	(371)
Max. Force @ 3x400VAC	N	(lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	83.4	(18.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.4	(5.4)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.3 / 3.5 / 6.1	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 510 / 110	
Mechanical Data				
Slider Length	mm	(in)	690	(27)
Slider Mass	g	(lb)	3240	(7.13)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x690/640	Slider for P10-70 'standard'	0150-2197

P10-70x240U/410-BL-QJ

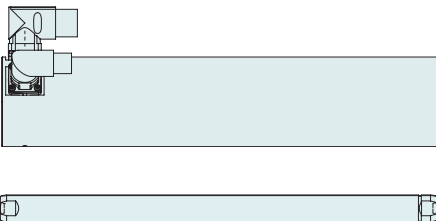
Max. Stroke: 410 mm
Peak Force: 1650 N



Dimensions in mm

Technical Data P10-70x240U/410

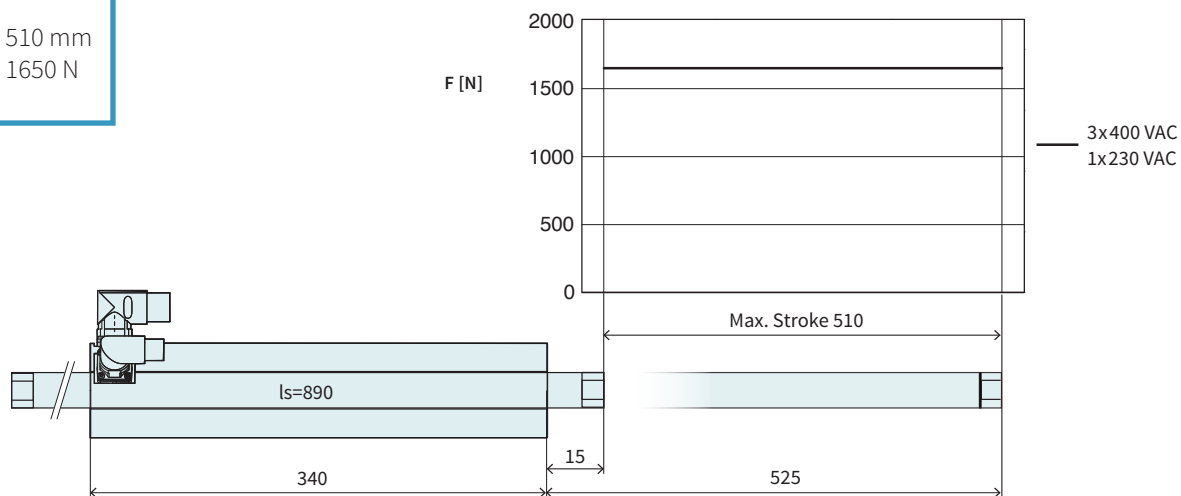
Stroke			
Max. Stroke	mm (in)	410	(16.1)
Force			
Max. Force @ 1x230VAC	N (lbf)	1650	(371)
Max. Force @ 3x400VAC	N (lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	83.4	(18.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	5.4	(5.4)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.3 / 3.5 / 6.1	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 510 / 110	
Mechanical Data			
Slider Length	mm (in)	790	(31)
Slider Mass	g (lb)	3710	(8.16)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x790/740	Slider for P10-70 'standard'	0150-2198

P10-70x240U/510-BL-QJ

Max. Stroke: 510 mm
Peak Force: 1650 N



Technical Data P10-70x240U/510

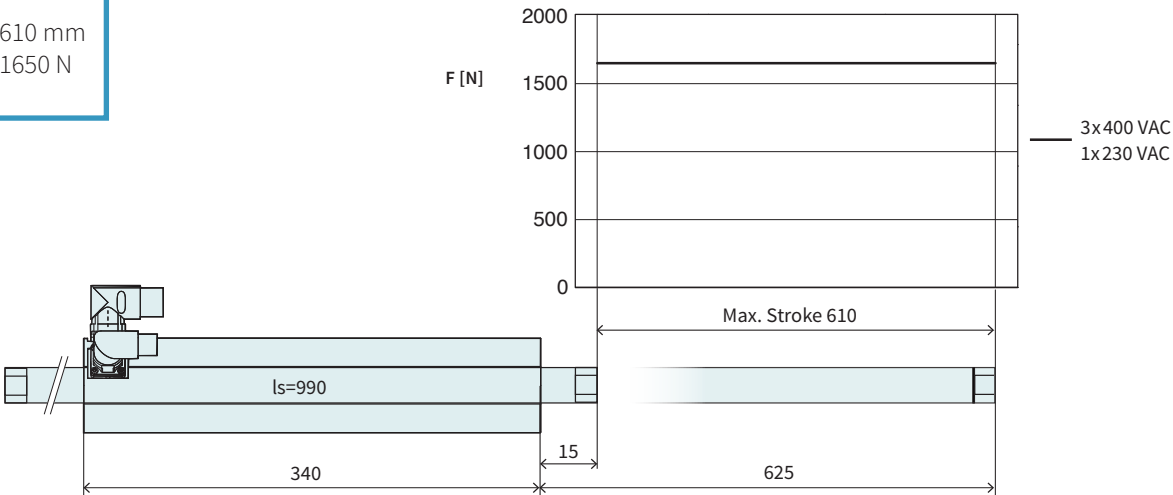
Stroke				
Max. Stroke	mm	(in)	510	(20.1)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1650	(371)
Max. Force @ 3x400VAC	N	(lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	83.4	(18.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.4	(5.4)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.3 / 3.5 / 6.1	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 510 / 110	
Mechanical Data				
Slider Length	mm	(in)	890	(35)
Slider Mass	g	(lb)	4180	(9.2)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x890/840	Slider for P10-70 'standard'	0150-2199

P10-70x240U/610-BL-QJ

Max. Stroke: 610 mm
Peak Force: 1650 N



Dimensions in mm

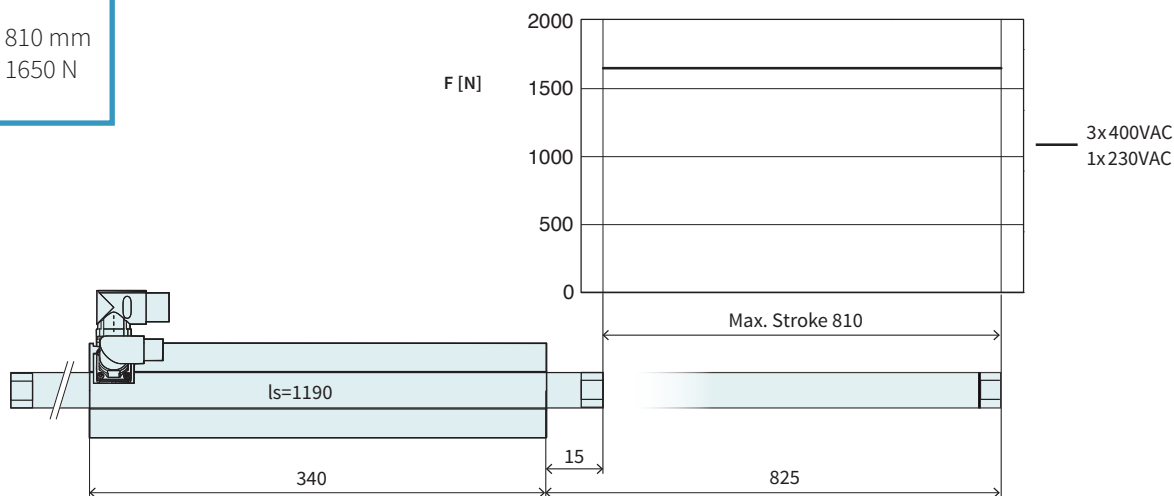
Technical Data P10-70x240U/610				
Stroke				
Max. Stroke	mm	(in)	610	(23.99)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1650	(371)
Max. Force @ 3x400VAC	N	(lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	83.4	(18.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.4	(5.4)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.3 / 3.5 / 6.1	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 510 / 110	
Mechanical Data				
Slider Length	mm	(in)	990	(39)
Slider Mass	g	(lb)	4650	(10.23)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x990/940	Slider for P10-70 'standard'	0150-2203

P10-70x240U/810-BL-QJ

Max. Stroke: 810 mm
Peak Force: 1650 N



Technical Data P10-70x240U/810

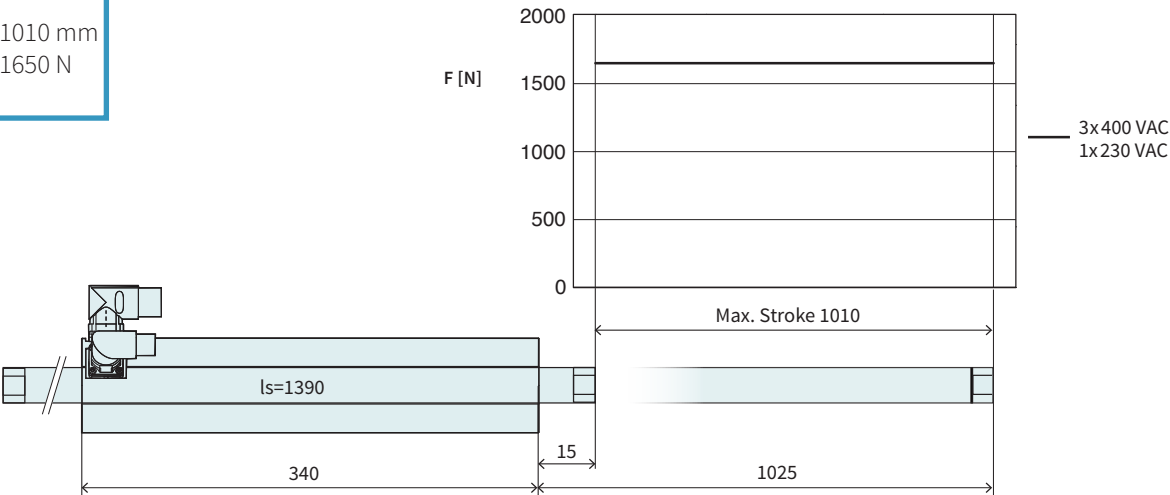
Stroke			
Max. Stroke	mm (in)	810	(31.89)
Force			
Max. Force @ 1x230VAC	N (lbf)	1650	(371)
Max. Force @ 3x400VAC	N (lbf)	1650	(371)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N (lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	83.4	(18.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	5.4	(5.4)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.3 / 3.5 / 6.1	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 510 / 110	
Mechanical Data			
Slider Length	mm (in)	1190	(47)
Slider Mass	g (lb)	5590	(12.3)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x1190/1140	Slider for P10-70 'standard'	0150-2204

P10-70x240U/1010-BL-QJ

Max. Stroke: 1010 mm
Peak Force: 1650 N



Dimensions in mm

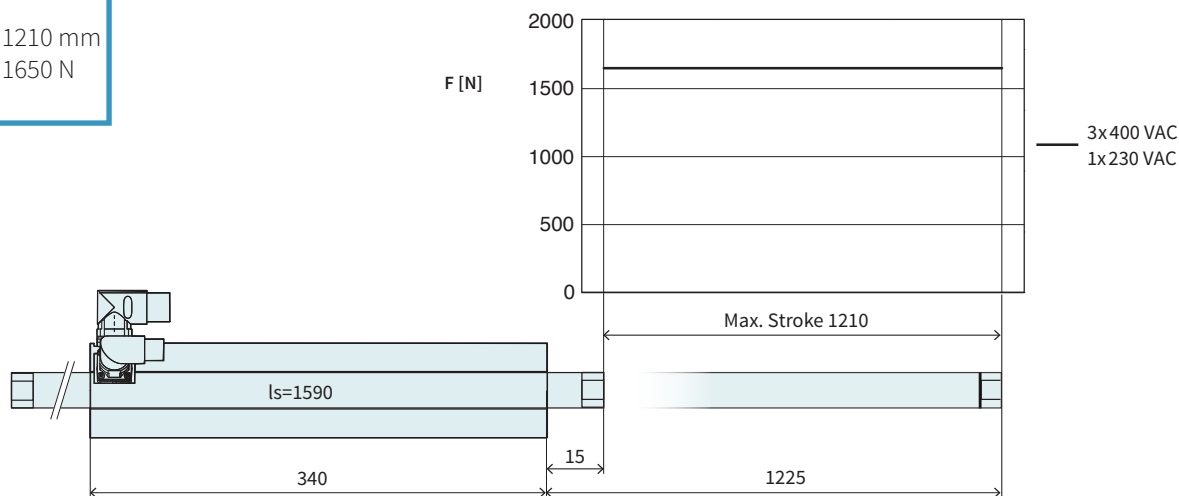
Technical Data P10-70x240U/1010				
Stroke				
Max. Stroke	mm	(in)	1010	(39.79)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1650	(371)
Max. Force @ 3x400VAC	N	(lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	83.4	(18.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.4	(5.4)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.3 / 3.5 / 6.1	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 510 / 110	
Mechanical Data				
Slider Length	mm	(in)	1390	(55)
Slider Mass	g	(lb)	6530	(14.37)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x1390/1340	Slider for P10-70 'standard'	0150-2205

P10-70x240U/1210-BL-QJ

Max. Stroke: 1210 mm
Peak Force: 1650 N



Technical Data P10-70x240U/1210

Stroke				
Max. Stroke	mm	(in)	1210	(47.6)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1650	(371)
Max. Force @ 3x400VAC	N	(lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	83.4	(18.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.4	(5.4)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.3 / 3.5 / 6.1	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 510 / 110	
Mechanical Data				
Slider Length	mm	(in)	1590	(63)
Slider Mass	g	(lb)	7470	(16.43)

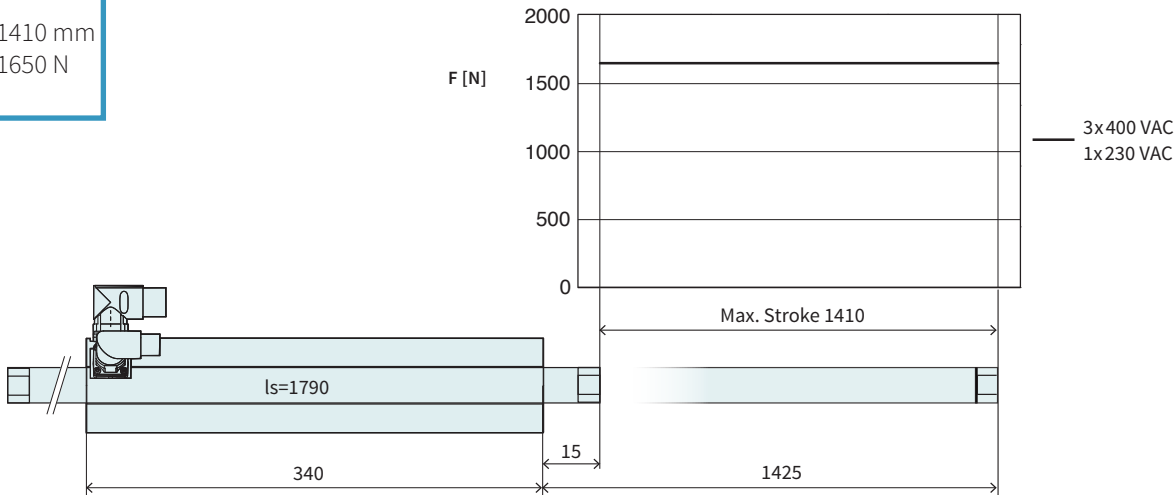


Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x1590/1540	Slider for P10-70 'standard'	0150-2206

P10-70x240U/1410-BL-QJ

4

Max. Stroke: 1410 mm
Peak Force: 1650 N



Dimensions in mm

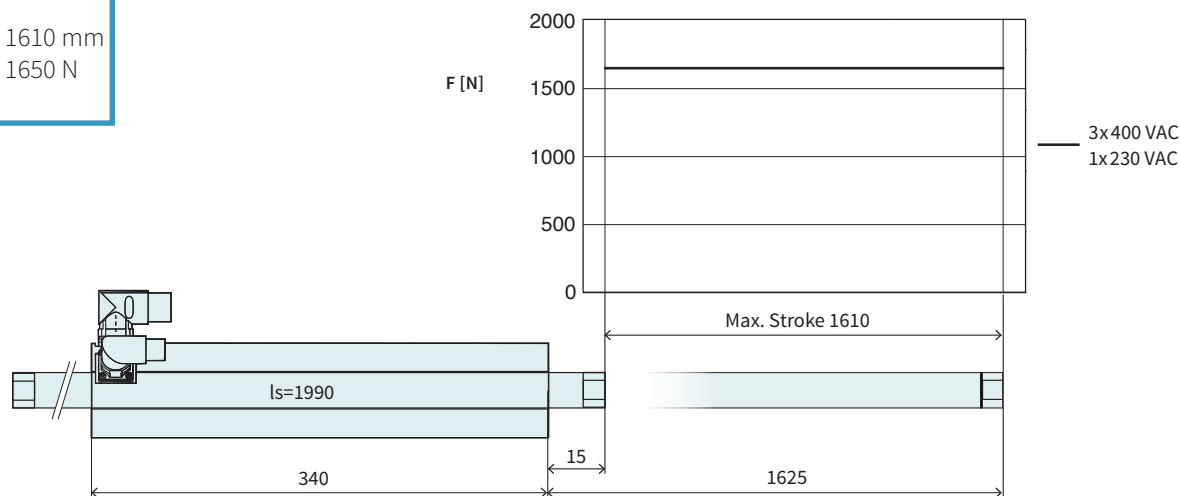
Technical Data P10-70x240U/1410				
Stroke				
Max. Stroke	mm	(in)	1410	(55.49)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1650	(371)
Max. Force @ 3x400VAC	N	(lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	83.4	(18.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.4	(5.4)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.3 / 3.5 / 6.1	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 510 / 110	
Mechanical Data				
Slider Length	mm	(in)	1790	(70)
Slider Mass	g	(lb)	8413	(18.51)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x1790/1740	Slider for P10-70 'standard'	0150-2207

P10-70x240U/1610-BL-QJ

Max. Stroke: 1610 mm
Peak Force: 1650 N



Dimensions in mm

Technical Data P10-70x240U/1610

Technical Data P10-70x240U/1610			
Stroke			
Max. Stroke	mm (in)	1610	(63.39)
Force			
Max. Force @ 1x230VAC	N (lbf)	1650	(371)
Max. Force @ 3x400VAC	N (lbf)	1650	(371)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N (lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	83.4	(18.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	5.4	(5.4)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling/ Fan / Fluid]	A _{pk}	3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling/ Fan / Fluid]	A _{rms}	2.3 / 3.5 / 6.1	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling/ Fan / Fluid]	°K/W	0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling/ Fan / Fluid]	s	2100 / 510 / 110	
Mechanical Data			
Slider Length	mm (in)	1990	(78)
Slider Mass	g (lb)	9350	(20.57)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x1990/1940	Slider for P10-70 'standard'	0150-2208

Linear Guides H10

4



HM10-70x240/110 Linear Module 70x240 with 110 mm Stroke				
	H-Guide	H10-70x240/110	H-Guide for P10-70x240, Stroke max. 110 mm	0150-5185
	Stator	PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
		PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
		PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
		PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
	Slider	PL10-28x490/440	Slider for P10-70 'standard'	0150-2195
HM10-70x240/210 Linear Module 70x240 with 210 mm Stroke				
	H-Guide	H10-70x240/210	H-Guide for P10-70x240, Stroke max. 210 mm	0150-5400
	Stator	PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
		PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
		PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
		PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
	Slider	PL10-28x590/540	Slider for P10-70 'standard'	0150-2196
HM10-70x240/310 Linear Module 70x240 with 310 mm Stroke				
	H-Guide	H10-70x240/310	H-Guide for P10-70x240, Stroke max. 310 mm	0150-5401
	Stator	PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
		PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
		PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
		PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
	Slider	PL10-28x690/640	Slider for P10-70 'standard'	0150-2197

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

HM10-70x240/410		Linear Module 70x240 with 410 mm Stroke		
	H-Guide	H10-70x240/410	H-Guide for P10-70x240, Stroke max. 410 mm	0150-5402
	Stator	PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
		PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
		PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
		PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
	Slider	PL10-28x790/740	Slider for P10-70 'standard'	0150-2198
HM10-70x240/510		Linear Module 70x240 with 510 mm Stroke		
	H-Guide	H10-70x240/510	H-Guide for P10-70x240, Stroke max. 510 mm	0150-5403
	Stator	PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
		PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
		PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
		PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
	Slider	PL10-28x890/840	Slider for P10-70 'standard'	0150-2199
Accessories				
	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

Motor Cable



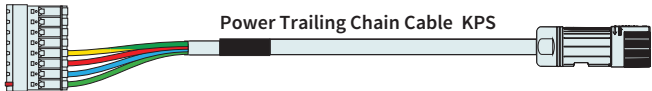
C1400



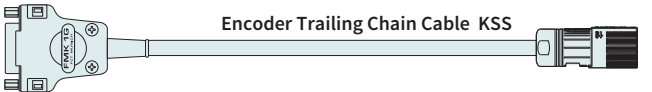
E1400

B Connector MC10-B/m

Q Connector MC10-Q/f



Power Trailing Chain Cable KPS



Encoder Trailing Chain Cable KSS



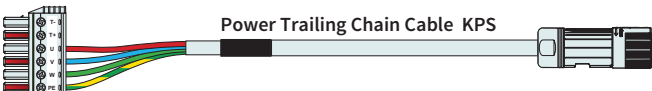
P10-70x240U

D15 Connector MC01-D15/f

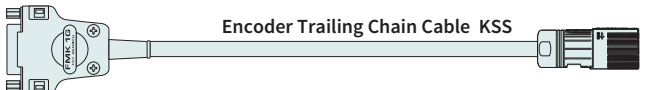
J Connector MC10-J/f

L Connector MC10-L/m

Q Connector MC10-Q/f



Power Trailing Chain Cable KPS



Encoder Trailing Chain Cable KSS



P10-70x240U

D15 Connector MC01-D15/f

J Connector MC10-J/f

ORDERING INFORMATION

TRAILING CHAIN CABLE FOR LINMOT DRIVES		
Item	Description	Item-No.
KPS15-04-L/Q-3	Power Trailing Chain Cable E1400/P10-70, 3 m	0150-2266
KPS15-04-L/Q-5	Power Trailing Chain Cable E1400/P10-70, 5 m	0150-2261
KPS15-04-L/Q-8	Power Trailing Chain Cable E1400/P10-70, 8 m	0150-2267
KPS15-04-L/Q-12	Power Trailing Chain Cable E1400/P10-70, 12 m	0150-2268
KPS15-04-L/Q-	Power Trailing Chain Cable L/Q-, Custom length	0150-3388
KPS15-04-B/Q-3	Power Trailing Chain Cable C1400/P10-70, 3 m	0150-3660
KPS15-04-B/Q-5	Power Trailing Chain Cable C1400/P10-70, 5 m	0150-3661
KPS15-04-B/Q-8	Power Trailing Chain Cable C1400/P10-70, 8 m	0150-3662
KPS15-04-B/Q-12	Power Trailing Chain Cable C1400/P10-70, 12 m	0150-3663
KPS15-04-B/Q-	Power Trailing Chain Cable B/Q-, Custom length	0150-3608

TRAILING CHAIN CABLE FOR LINMOT DRIVES

Item	Description	Item-No.
KSS 05-02/08-D15/J-3	Encoder Trailing Chain Cable D15/J, 3 m	0150-2263
KSS 05-02/08-D15/J-5	Encoder Trailing Chain Cable D15/J, 5 m	0150-2262
KSS 05-02/08-D15/J-8	Encoder Trailing Chain Cable D15/J, 8 m	0150-2264
KSS 05-02/08-D15/J-12	Encoder Trailing Chain Cable D15/J, 12 m	0150-2265
KSS 05-02/08-D15(f)-45°/J-	Encoder Trailing Chain Cable D15/J-, Custom length	0150-3389

TRAILING CHAIN CABLE FOR STATOR SERIES D03

Item	Description	Item-No.
KPS15-04/04..../Q-10	Power Trailing Chain Cable .../Q, 10 m for D03	0150-3654
KPS15-04/04-./Q-	Power Trailing Chain Cable .../Q, for D03, Custom length	0150-3579
KSS05-02/06-./J-10	Encoder Trailing Chain Cable ./J, 10 m for D03	0150-3655
KSS05-02/06-./J-	Encoder Trailing Chain Cable ./J, for D03, Custom length	0150-3611
KPS15-04/04	Power Trailing Chain Cable P10-...-Dx3 (per m)	0150-2269
KSS05-02/06	Trailing Chain Cable Encoder P10-...-Dx3 (per m)	0150-2490

CONNECTOR

Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
MC01-D15/f	Motor Connector D15 (f)	0150-3136
MC10-Q/f	Connector Power PS10-70	0150-2268
MC10-J/f	Connector Encoder PS10-70	0150-2269

MOTOR FLANGES

4



Item	Description	Item-No.
PF10-70x270	Flange for PS10-70x240	0150-2274



Item	Description	Item-No.
PF10-70x270-FC	Flange for PS10-70x240 fluid cooling	0150-2293

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-28	Fixed Bearing Set for 27/28 mm sliders	0150-3087
PLF01-28-SS	Fixed Bearing Set for 27/28 mm sliders, stainless steel	0150-3297
PLL01-28	Floating Bearing for 28 mm sliders	0150-3094
PLM01-28-MK	Mounting Kit for 28 mm sliders	0150-3095

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



Item	Description	Item-No.
PB10-70x240-L	Bearing Kit for PS10-70x240	0150-3433

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LUBRICANT RESERVOIR



Item	Description	Item-No.
PA10-70/28	Lubricant reservoir for PS10-70 with lubricating nipple	0150-3543

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D15/D-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P10-70x320U



- ✓ 3 x 400VAC Technology
- ✓ Peak forces up to 2180 N
- ✓ Extremely high dynamic
- ✓ Separate connector for sensor and power cable
- ✓ Can also be controlled by standard third-party servo drives

LINEAR MOTORS P10-70x320U

Technical Data **571**

Motor Specifications

P10-70x320U/30 **576**

P10-70x320U/130 **577**

P10-70x320U/230 **578**

P10-70x320U/330 **579**

P10-70x320U/430 **580**

P10-70x320U/530 **581**

P10-70x320U/730 **582**

P10-70x320U/930 **583**

P10-70x320U/1130 **584**

P10-70x320U/1330 **585**

P10-70x320U/1530 **586**

Linear Guides **587**

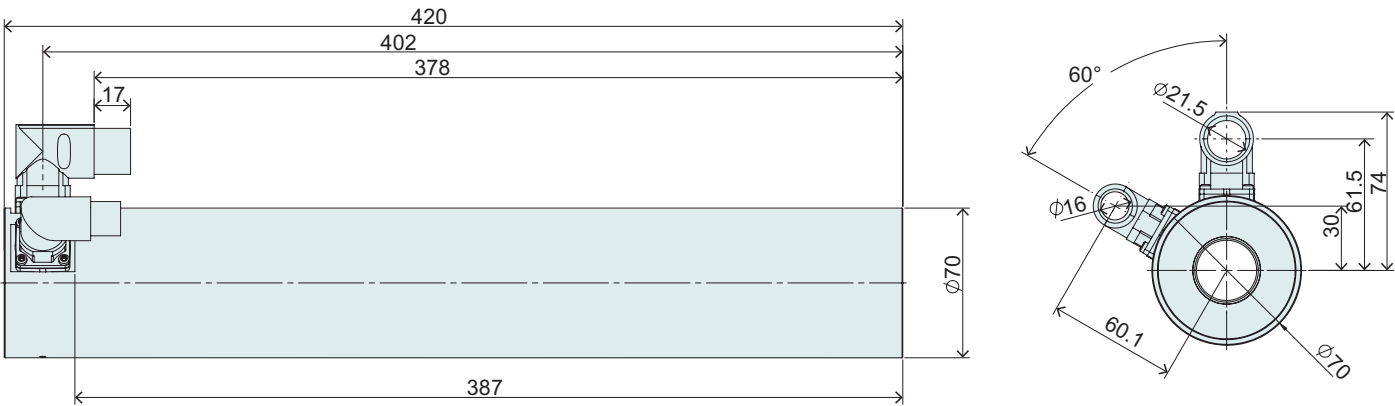
Accessories **589**



MOTOR FAMILY P10-70x320U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1530	(60.2)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	64	(14.4)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	90.5	(20.3)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.8	(109.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	4.9	(199.9)
Position Detection				
Position Resolution	mm	(in)	0.005	(0.0002)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		33.7 / 23.8	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4.1 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.7	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	73.9	(1.88)
Terminal Resistance 25 °C / 120 °C	Ohm		5.5 / 7.5	
Terminal Inductivity	mH		10	
Magnetic Period	mm	(in)	40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.65 / 0.28 / 0.09	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Stator Diameter	mm	(in)	70	(2.8)
Stator Length	mm	(in)	420	(17)
Stator Mass	g	(lb)	6900	(15.18)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	490 - 1990	(19 - 78)
Slider Mass	g	(lb)	2300 - 9350	(5.06 - 20.57)
IP Code			IP 65	

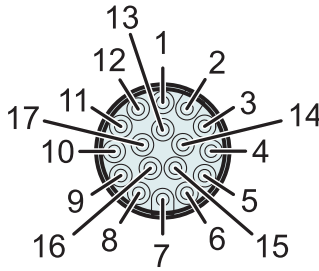
STATOR



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711

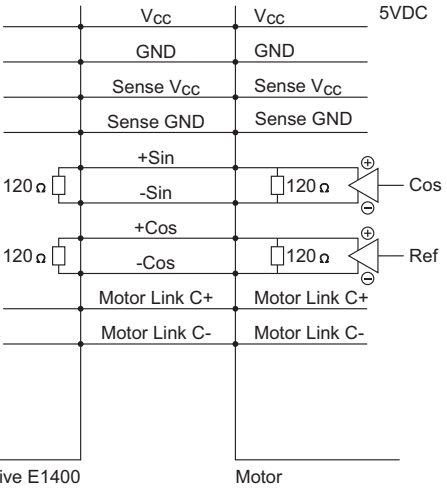
CONNECTOR PS10-70x320U-BL-QJ

Motor Connector Wiring		Connector Encoder J	Wire Color Motor Cable
+5 VDC	Supply	1	red
GND	Supply	2	black
Sense +5V	Supply Sense	3	white
Sense GND	Supply Sense	4	brown
Mot. Link C+	Communication	5	pink
Mot. Link C-	Communication	6	grey
Sin+	Encoder	7	yellow
Sin-	Encoder	8	orange
Cos+	Encoder	9	green
Cos-	Encoder	10	blue
n. c.	n. c.	11	n. c.
n. c.	n. c.	12	n. c.
n. c.	n. c.	13	n. c.
n. c.	n. c.	14	n. c.
n. c.	n. c.	15	n. c.
n. c.	n. c.	16	n. c.
n. c.	n. c.	17	n. c.

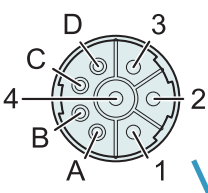


Connector Encoder J

View: Motor connector, plug side

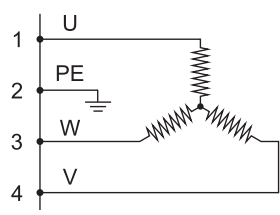


Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red
PE	2	yellow-green
Phase W	3	green
Phase V	4	blue
n. c.	A	n. c.
n. c.	B	n. c.
n. c.	C	n. c.
n. c.	D	n. c.

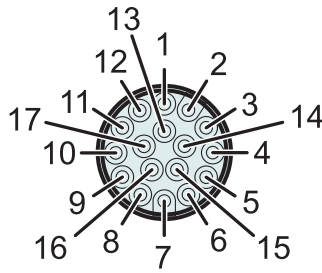


Connector Power Q

View: Motor connector, plug side



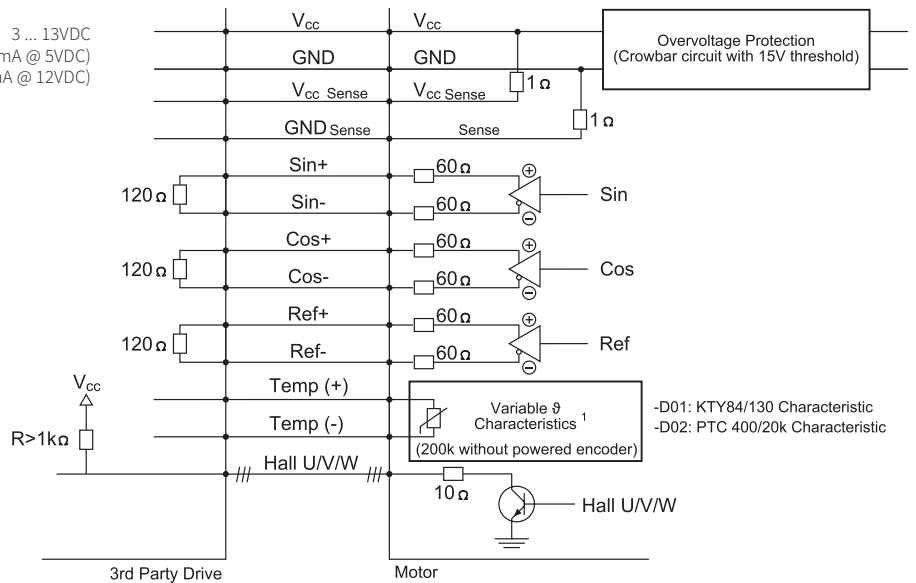
CONNECTOR PS10-70x320U-BL-QJ-D01/02



Connector Encoder J

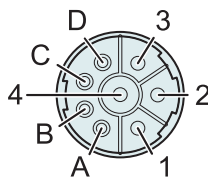
View: Motor connector, plug side

3 ... 13VDC
($I_{max} < 150\text{mA}$ @ 5VDC)
($I_{max} < 80\text{mA}$ @ 12VDC)



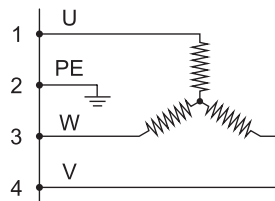
Motor Connector Wiring				
PS10-70x320U-BL-QJ-D01	PS10-70x320U-BL-QJ-D02	Function	Connector Encoder J	Wire Color Motor Cable
3 ... 13VDC	3 ... 13VDC	Supply	1	white
GND	GND	Supply	2	brown
Vcc Sense (optional)	Vcc Sense (optional)	Supply Sense	3	green
GND Sense (optional)	GND Sense (optional)	Supply Sense	4	yellow
Do not connect	Do not connect	-	5	-
Do not connect	Do not connect	-	6	-
Sin+	Sin+	Encoder 1 Vpp	7	grey
Sin-	Sin-	Encoder 1 Vpp	8	pink
Cos+	Cos+	Encoder 1 Vpp	9	blue
Cos-	Cos-	Encoder 1 Vpp	10	red
Ref+	Ref+	Encoder 1 Vpp	11	black
Ref-	Ref-	Encoder 1 Vpp	12	violet
Hall U	Hall U	Encoder (open collector)	13	grey-red
Hall V	Hall V	Encoder (open collector)	14	red-blue
Hall W	Hall W	Encoder (open collector)	15	white-green
Temp+ (KTY84/130 Char.)	Temp+ (PTC 400/20k Char.)	Temperature ¹	16	yellow-brown
Temp- (KTY84/130 Char.)	Temp- (PTC 400/20k Char.)	Temperature ¹	17	white-yellow

1) The temperature evaluation circuit must be powered from the encoder supply and must be at the same potential. The grounds of the temperature evaluation circuit and the encoder have to be connected. The encoder must have been powered on for at least 50 ms, before valid temperatures can be measured. If the encoder is powered off, 200k Ohms are measured between Pins 16 and 17. The maximum voltage between Pin 16 and 17 must not exceed 16 VDC. The maximum current must not exceed 15 mA.



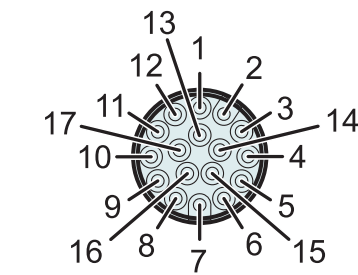
Connector Power Q

View: Motor connector, plug side



Motor Connector Wiring			
PS10-70x320U-BL-QJ-D01	PS10-70x320U-BL-QJ-D02	Connector Power Q	Wire Color Motor Cable
Phase U	Phase U	1	red
PE	PE	2	yellow-green
Phase W	Phase W	3	green
Phase V	Phase V	4	blue
n. c.	n. c.	A	n. c.
n. c.	n. c.	B	n. c.
n. c.	n. c.	C	n. c.
n. c.	n. c.	D	n. c.

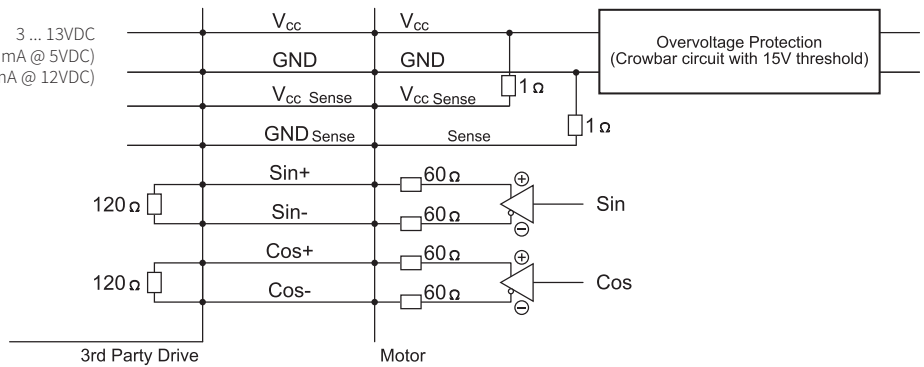
CONNECTOR PS10-70X320U-BL-QJ-D03



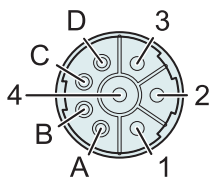
Connector Encoder J

View: Motor connector, plug side

3 ... 13VDC
($I_{max} < 150\text{mA}$ @ 5VDC)
($I_{max} < 80\text{mA}$ @ 12VDC)

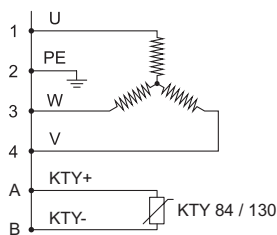


Motor Connector Wiring		Connector Encoder J	Wire Color Motor Cable
3 ... 13 VDC	Supply	1	red
GND	Supply	2	black
Vcc Sense (optional)	Supply Sense	3	white
GND Sense (optional)	Supply Sense	4	brown
Do not connect	–	5	–
Do not connect	–	6	–
Sin+	Encoder 1 Vpp	7	yellow
Sin-	Encoder 1 Vpp	8	orange
Cos+	Encoder 1 Vpp	9	green
Cos-	Encoder 1 Vpp	10	blue
n. c.	–	11	n. c.
n. c.	–	12	n. c.
n. c.	–	13	n. c.
Do not connect	–	14	n. c.
n. c.	–	15	n. c.
n. c.	–	16	n. c.
n. c.	–	17	n. c.



Connector Power Q

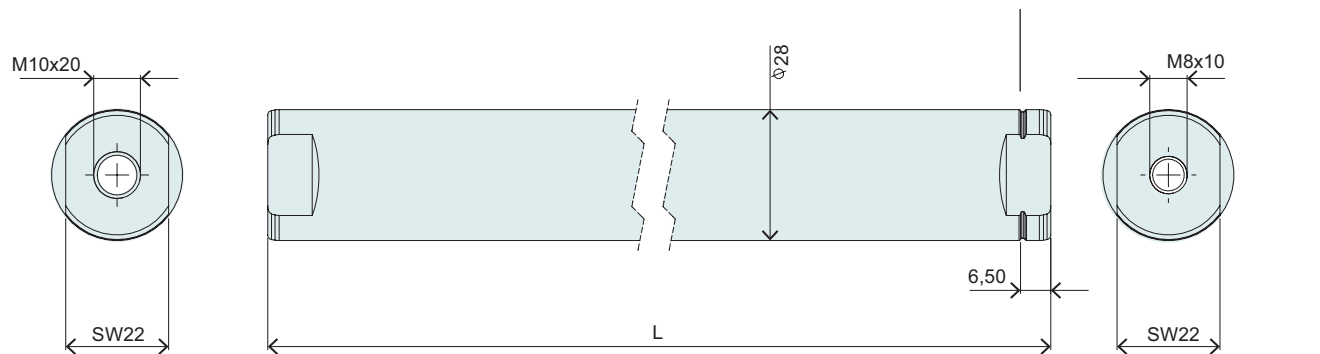
View: Motor connector, plug side



Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red (previously: black 1)
PE	2	yellow-green
Phase W	3	green (previously: black 3)
Phase V	4	blue (previously: black 2)
KTY +	A	purple (previously: black 5)
KTY -	B	grey (previously: black 6)
n. c.	C	yellow (previously: black 7)
n. c.	D	brown (previously: black 8)

SLIDER

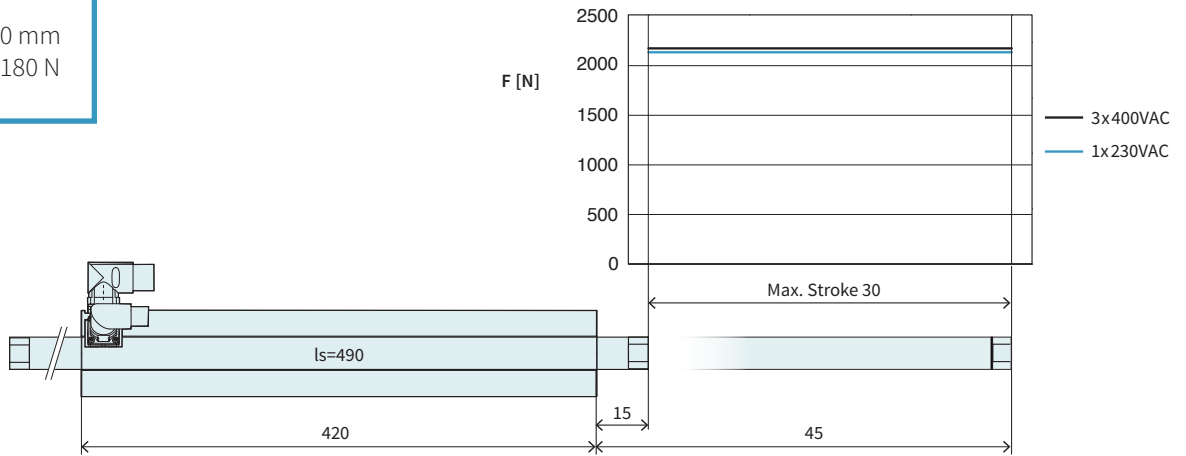
Slider Standard



Slider Standard			
Item	Description	Max. Stroke [mm]	Item-No.
PL10-28x490/440	Slider for P10-70 'standard'	30	0150-2195
PL10-28x590/540	Slider for P10-70 'standard'	130	0150-2196
PL10-28x690/640	Slider for P10-70 'standard'	230	0150-2197
PL10-28x790/740	Slider for P10-70 'standard'	330	0150-2198
PL10-28x890/840	Slider for P10-70 'standard'	430	0150-2199
PL10-28x990/940	Slider for P10-70 'standard'	530	0150-2203
PL10-28x1190/1140	Slider for P10-70 'standard'	730	0150-2204
PL10-28x1390/1340	Slider for P10-70 'standard'	930	0150-2205
PL10-28x1590/1540	Slider for P10-70 'standard'	1130	0150-2206
PL10-28x1790/1740	Slider for P10-70 'standard'	1330	0150-2207
PL10-28x1990/1940	Slider for P10-70 'standard'	1530	0150-2208

P10-70x320U/30-BL-QJ

Max. Stroke: 30 mm
Peak Force: 2180 N



Dimensions in mm

Technical Data P10-70x320U/30

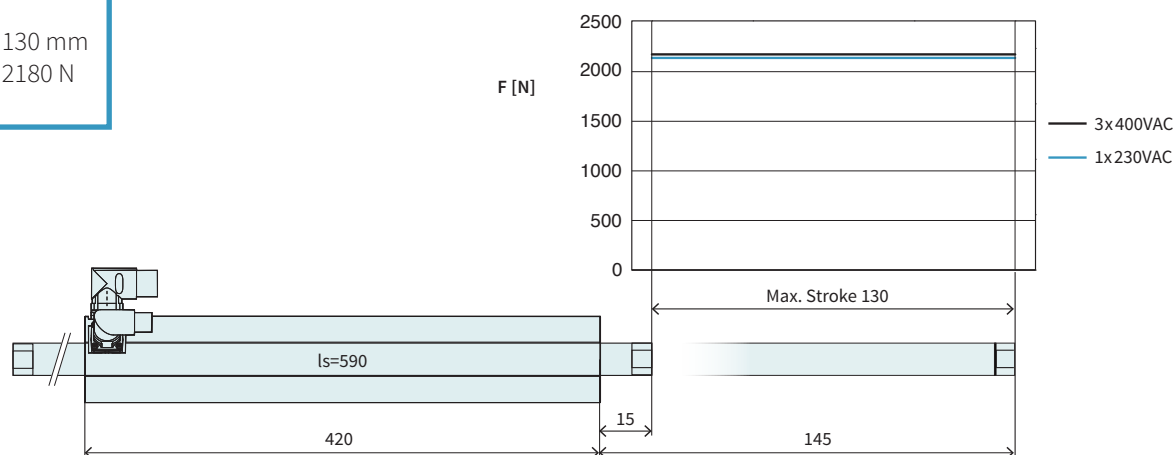
Stroke			
Max. Stroke	mm (in)	30	(1.17)
Force			
Max. Force @ 1x230VAC	N (lbf)	2170	(487)
Max. Force @ 3x400VAC	N (lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	64	(14.4)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	90.5	(20.3)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	2.8	(109.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	4.9	(4.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 1.75	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	33.7 / 23.8	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	4.1 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.9 / 4.4 / 7.7	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.65 / 0.28 / 0.09	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	490	(19)
Slider Mass	g (lb)	2300	(5.06)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x490/440	Slider for P10-70 'standard'	0150-2195

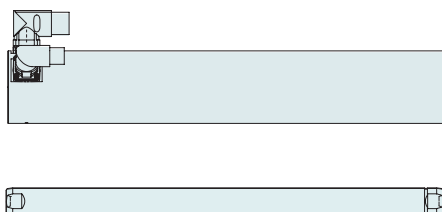
P10-70x320U/130-BL-QJ

Max. Stroke: 130 mm
Peak Force: 2180 N



Dimensions in mm

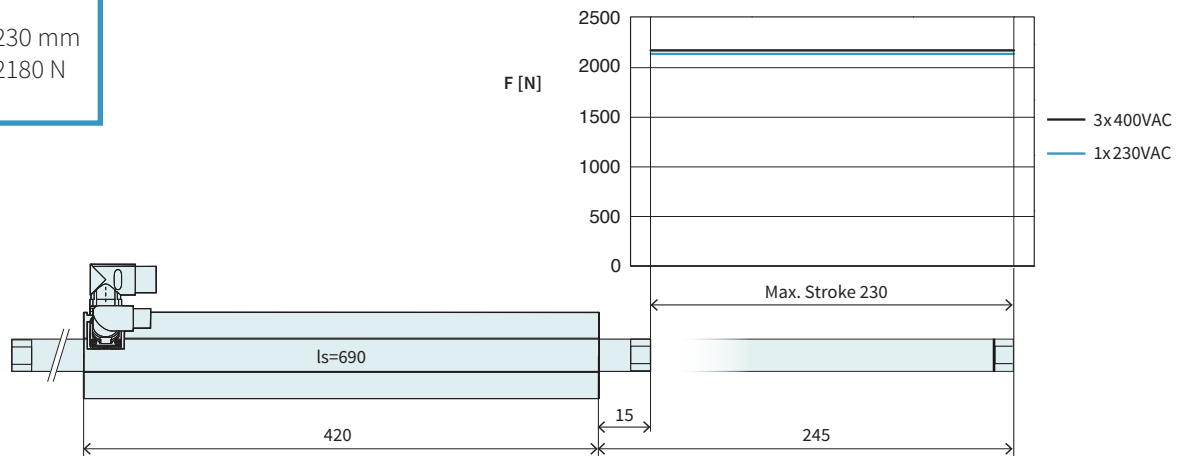
Technical Data P10-70x320U/130				
Stroke				
Max. Stroke	mm (in)		130	(5.12)
Force				
Max. Force @ 1x230VAC	N (lbf)		2170	(487)
Max. Force @ 3x400VAC	N (lbf)		2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})		64	(14.4)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		90.5	(20.3)
Velocity				
Max. Velocity @ 1x230VAC	m/s (in/s)		2.8	(109.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		4.9	(4.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.5	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		33.7 / 23.8	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4.1 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.7	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.65 / 0.28 / 0.09	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm (in)		590	(23)
Slider Mass	g (lb)		2770	(6.09)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x590/540	Slider for P10-70 'standard'	0150-2196

P10-70x320U/230-BL-QJ

Max. Stroke: 230 mm
Peak Force: 2180 N



Dimensions in mm

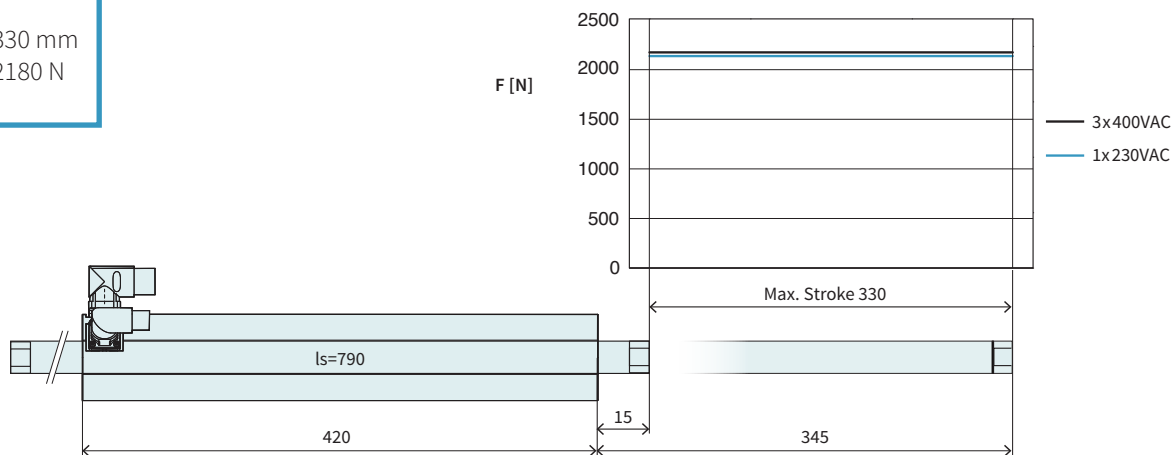
Technical Data P10-70x320U/230				
Stroke				
Max. Stroke	mm	(in)	230	(9.06)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	64	(14.4)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	90.5	(20.3)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.8	(109.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	4.9	(4.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		33.7 / 23.8	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4.1 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.7	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.65 / 0.28 / 0.09	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	690	(27)
Slider Mass	g	(lb)	3240	(7.13)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x690/640	Slider for P10-70 'standard'	0150-2197

P10-70x320U/330-BL-QJ

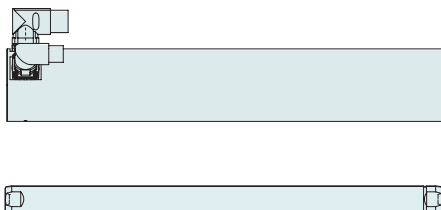
Max. Stroke: 330 mm
Peak Force: 2180 N



Dimensions in mm

Technical Data P10-70x320U/330

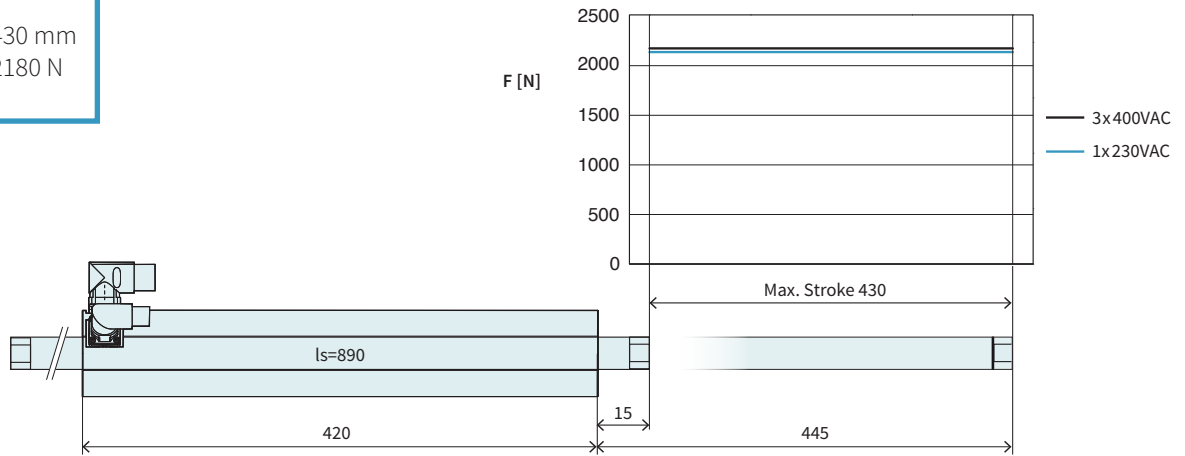
Stroke			
Max. Stroke	mm (in)	330	(12.99)
Force			
Max. Force @ 1x230VAC	N (lbf)	2170	(487)
Max. Force @ 3x400VAC	N (lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	64	(14.4)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	90.5	(20.3)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	2.8	(109.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	4.9	(4.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.25	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	33.7 / 23.8	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	4.1 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.9 / 4.4 / 7.7	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.65 / 0.28 / 0.09	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	790	(31)
Slider Mass	g (lb)	3710	(8.16)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x790/740	Slider for P10-70 'standard'	0150-2198

P10-70x320U/430-BL-QJ

Max. Stroke: 430 mm
Peak Force: 2180 N



Dimensions in mm

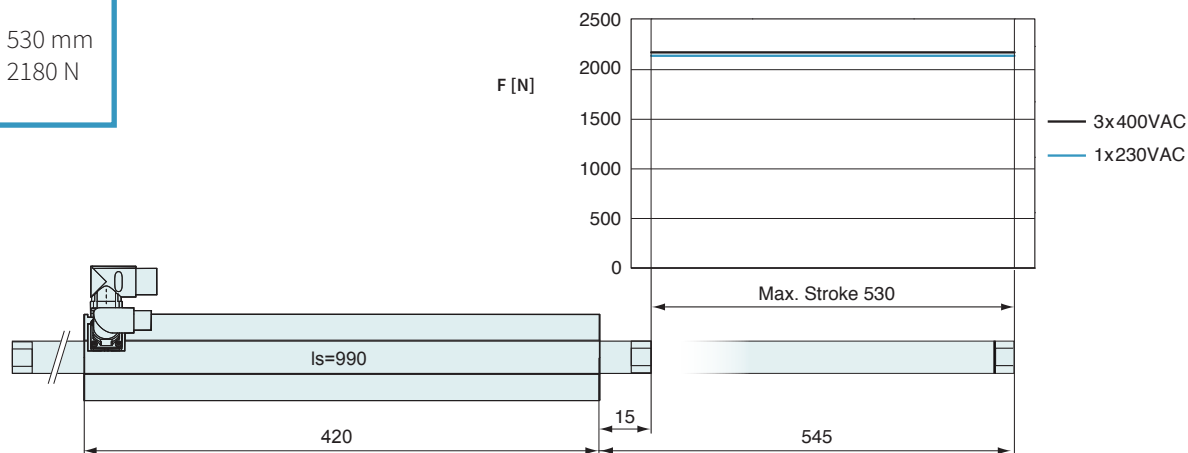
Technical Data P10-70x320U/430				
Stroke				
Max. Stroke	mm	(in)	430	(16.89)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	64	(14.4)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	90.5	(20.3)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.8	(109.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	4.9	(4.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		33.7 / 23.8	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4.1 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.7	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.65 / 0.28 / 0.09	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	890	(35)
Slider Mass	g	(lb)	4180	(9.2)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x890/840	Slider for P10-70 'standard'	0150-2199

P10-70x320U/530-BL-QJ

Max. Stroke: 530 mm
Peak Force: 2180 N



Dimensions in mm

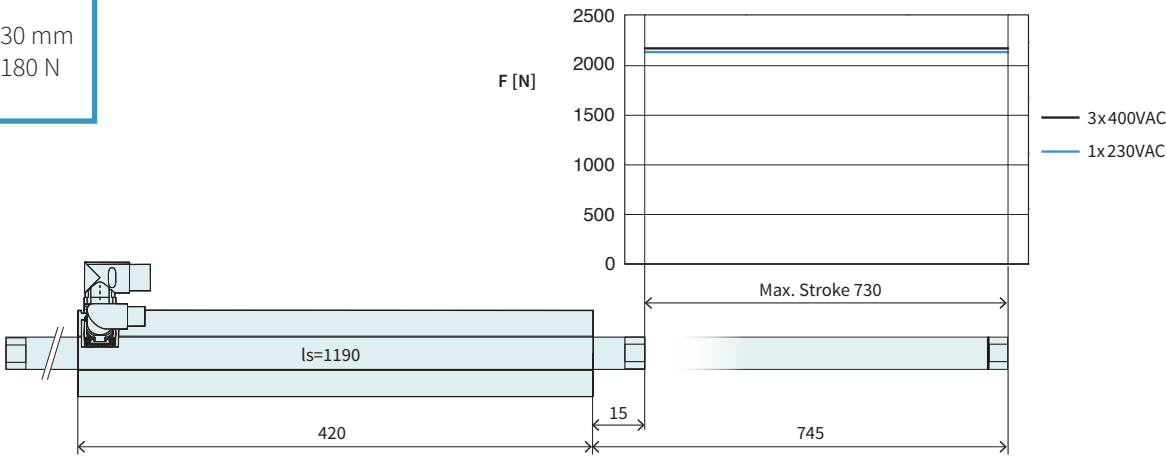
Technical Data P10-70x320U/530				
Stroke				
Max. Stroke	mm	(in)	530	(20.89)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	64	(14.4)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	90.5	(20.3)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.8	(109.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	4.9	(4.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		33.7 / 23.8	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4.1 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.7	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.65 / 0.28 / 0.09	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	990	(39)
Slider Mass	g	(lb)	4650	(10.23)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x990/940	Slider for P10-70 'standard'	0150-2203

P10-70x320U/730-BL-QJ

Max. Stroke: 730 mm
Peak Force: 2180 N



Dimensions in mm

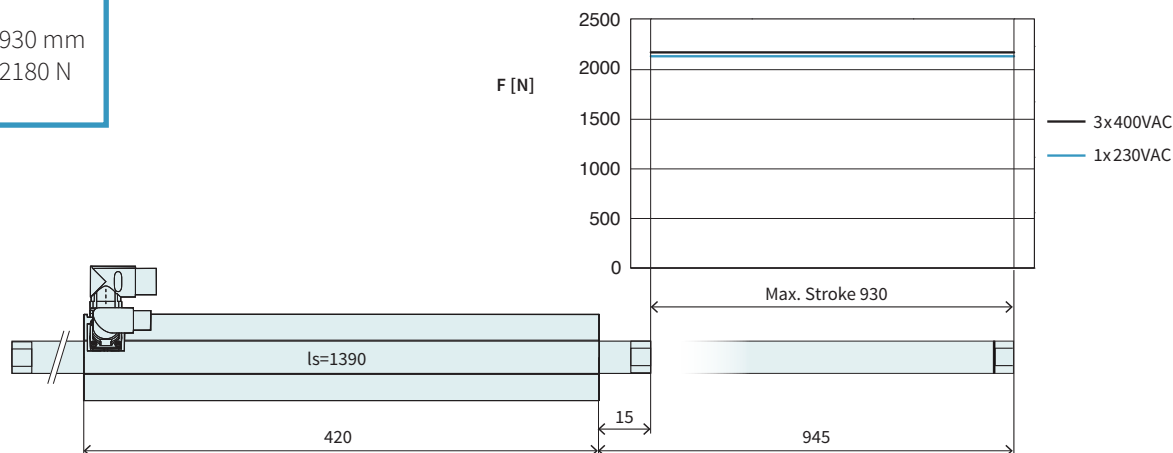
Technical Data P10-70x320U/730				
Stroke				
Max. Stroke	mm	(in)	730	(28.69)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	64	(14.4)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	90.5	(20.3)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.8	(109.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	4.9	(4.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		33.7 / 23.8	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4.1 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.7	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.65 / 0.28 / 0.09	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	1190	(47)
Slider Mass	g	(lb)	5590	(12.3)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x1190/1140	Slider for P10-70 'standard'	0150-2204

P10-70x320U/930-BL-QJ

Max. Stroke: 930 mm
Peak Force: 2180 N



Dimensions in mm

Technical Data P10-70x320U/930

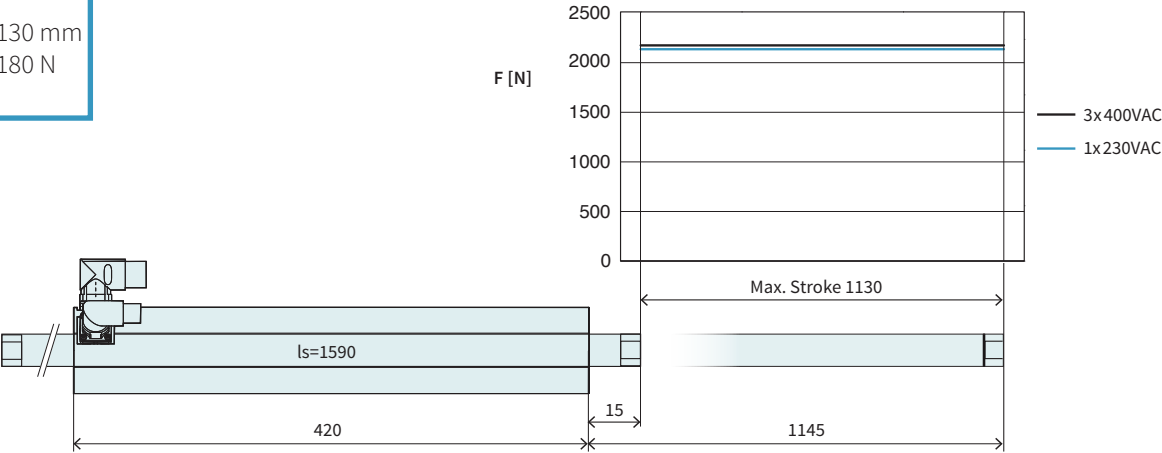
Stroke				
Max. Stroke	mm	(in)	930	(36.6)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	64	(14.4)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	90.5	(20.3)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.8	(109.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	4.9	(4.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		33.7 / 23.8	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4.1 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.7	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.65 / 0.28 / 0.09	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	1390	(55)
Slider Mass	g	(lb)	6530	(14.37)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x1390/1340	Slider for P10-70 'standard'	0150-2205

P10-70x320U/1130-BL-QJ

Max. Stroke: 1130 mm
Peak Force: 2180 N



Dimensions in mm

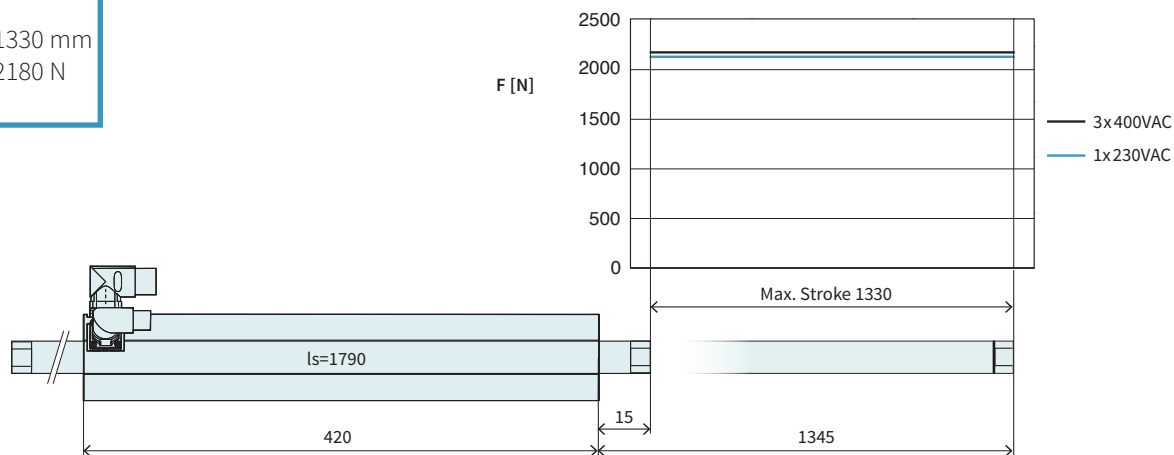
Technical Data P10-70x320U/1130				
Stroke				
Max. Stroke	mm	(in)	1130	(44.49)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	64	(14.4)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	90.5	(20.3)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.8	(109.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	4.9	(4.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		33.7 / 23.8	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4.1 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.7	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.65 / 0.28 / 0.09	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	1590	(63)
Slider Mass	g	(lb)	7470	(16.43)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x1590/1540	Slider for P10-70 'standard'	0150-2206

P10-70x320U/1330-BL-QJ

Max. Stroke: 1330 mm
Peak Force: 2180 N



Dimensions in mm

Technical Data P10-70x320U/1330

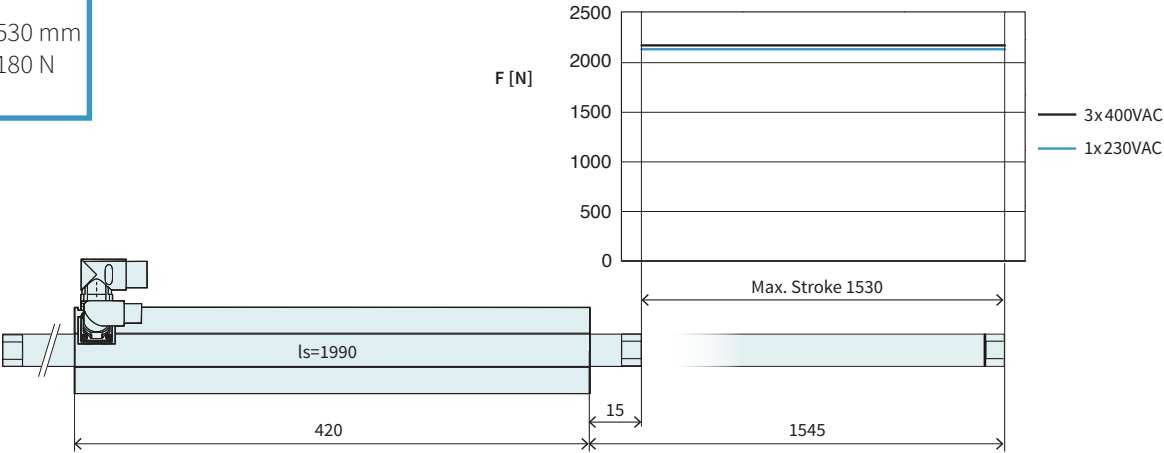
Stroke				
Max. Stroke	mm	(in)	1330	(52.39)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	64	(14.4)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	90.5	(20.3)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.8	(109.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	4.9	(4.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		33.7 / 23.8	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4.1 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.7	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.65 / 0.28 / 0.09	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	1790	(70)
Slider Mass	g	(lb)	8413	(18.51)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x1790/1740	Slider for P10-70 'standard'	0150-2207

P10-70x320U/1530-BL-QJ

Max. Stroke: 1530 mm
Peak Force: 2180 N



Dimensions in mm

Technical Data P10-70x320U/1530				
Stroke				
Max. Stroke	mm	(in)	1530	(60.2)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	64	(14.4)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	90.5	(20.3)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.8	(109.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	4.9	(4.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		33.7 / 23.8	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4.1 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.7	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.65 / 0.28 / 0.09	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	1990	(78)
Slider Mass	g	(lb)	9350	(20.57)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x1990/1940	Slider for P10-70 'standard'	0150-2208

Linear Guides H10

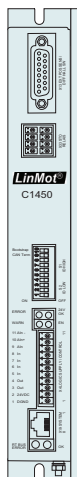


HM10-70x320/130		Linear Module 70x320 with 130 mm Stroke		
→	H-Guide	H10-70x320/130	H-Guide for P10-70x320, Stroke max. 130 mm	0150-5414
	Stator	PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
		PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
		PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
		PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
→	Slider	PL10-28x590/540	Slider for P10-70 'standard'	0150-2196
HM10-70x320/230		Linear Module 70x320 with 230 mm Stroke		
→	H-Guide	H10-70x320/230	H-Guide for P10-70x320, Stroke max. 230 mm	0150-5415
	Stator	PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
		PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
		PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
		PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
→	Slider	PL10-28x690/640	Slider for P10-70 'standard'	0150-2197
HM10-70x320/330		Linear Module 70x320 with 330 mm Stroke		
→	H-Guide	H10-70x320/330	H-Guide for P10-70x320, Stroke max. 330 mm	0150-5416
	Stator	PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
		PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
		PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
		PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
→	Slider	PL10-28x790/740	Slider for P10-70 'standard'	0150-2198

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

HM10-70x320/430		Linear Module 70x320 with 430 mm Stroke			
	→	H-Guide	H10-70x320/430	H-Guide for P10-70x320, Stroke max. 430 mm	0150-5417
	→	Stator	PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
			PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
			PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
			PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
	→	Slider	PL10-28x890/840	Slider for P10-70 'standard'	0150-2199
HM10-70x320/530		Linear Module 70x320 with 530 mm Stroke			
	→	H-Guide	H10-70x320/530	H-Guide for P10-70x320, Stroke max. 530 mm	0150-5418
	→	Stator	PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
			PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
			PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
			PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
	→	Slider	PL10-28x990/940	Slider for P10-70 'standard'	0150-2203
Accessories					
	→	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

Motor Cable



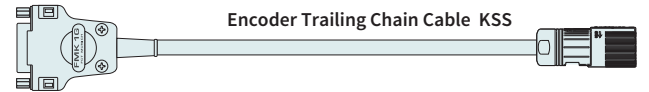
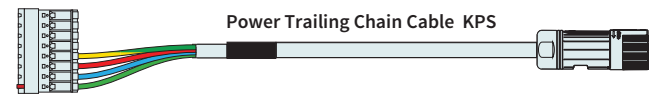
C1400



E1400

B Connector MC10-B/m

Q Connector MC10-Q/f



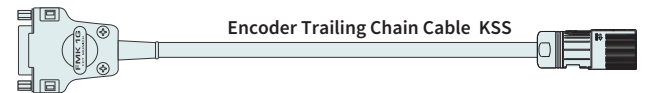
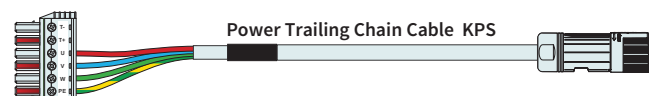
P10-70x320U

D15 Connector MC01-D15/f

J Connector MC10-J/f

L Connector MC10-L/m

Q Connector MC10-Q/f



P10-70x320U

D15 Connector MC01-D15/f

J Connector MC10-J/f

ORDERING INFORMATION

TRAILING CHAIN CABLE FOR LINMOT DRIVES		
Item	Description	Item-No.
KPS15-04-L/Q-3	Power Trailing Chain Cable E1400/P10-70, 3 m	0150-2266
KPS15-04-L/Q-5	Power Trailing Chain Cable E1400/P10-70, 5 m	0150-2261
KPS15-04-L/Q-8	Power Trailing Chain Cable E1400/P10-70, 8 m	0150-2267
KPS15-04-L/Q-12	Power Trailing Chain Cable E1400/P10-70, 12 m	0150-2268
KPS15-04-L/Q-	Power Trailing Chain Cable L/Q-, Custom length	0150-3388
KPS15-04-B/Q-3	Power Trailing Chain Cable C1400/P10-70, 3 m	0150-3660
KPS15-04-B/Q-5	Power Trailing Chain Cable C1400/P10-70, 5 m	0150-3661
KPS15-04-B/Q-8	Power Trailing Chain Cable C1400/P10-70, 8 m	0150-3662
KPS15-04-B/Q-12	Power Trailing Chain Cable C1400/P10-70, 12 m	0150-3663
KPS15-04-B/Q-	Power Trailing Chain Cable B/Q-, Custom length	0150-3608

TRAILING CHAIN CABLE FOR LINMOT DRIVES

Item	Description	Item-No.
KSS 05-02/08-D15/J-3	Encoder Trailing Chain Cable D15/J, 3 m	0150-2263
KSS 05-02/08-D15/J-5	Encoder Trailing Chain Cable D15/J, 5 m	0150-2262
KSS 05-02/08-D15/J-8	Encoder Trailing Chain Cable D15/J, 8 m	0150-2264
KSS 05-02/08-D15/J-12	Encoder Trailing Chain Cable D15/J, 12 m	0150-2265
KSS 05-02/08-D15(f)-45°/J-	Encoder Trailing Chain Cable D15/J-, Custom length	0150-3389

TRAILING CHAIN CABLE FOR STATOR SERIES D03

Item	Description	Item-No.
KPS15-04/04..../Q-10	Power Trailing Chain Cable .../Q, 10 m for D03	0150-3654
KPS15-04/04-./Q-	Power Trailing Chain Cable .../Q, for D03, Custom length	0150-3579
KSS05-02/06-./J-10	Encoder Trailing Chain Cable ./J, 10 m for D03	0150-3655
KSS05-02/06-./J-	Encoder Trailing Chain Cable ./J, for D03, Custom length	0150-3611
KPS15-04/04	Power Trailing Chain Cable P10-...-Dx3 (per m)	0150-2269
KSS05-02/06	Trailing Chain Cable Encoder P10-...-Dx3 (per m)	0150-2490

CONNECTOR

Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
MC01-D15/f	Motor Connector D15 (f)	0150-3136
MC10-Q/f	Connector Power PS10-70	0150-2268
MC10-J/f	Connector Encoder PS10-70	0150-2269

MOTOR FLANGES



Item	Description	Item-No.
PF10-70x350	Flange for PS10-70x320	0150-2290



Item	Description	Item-No.
PF10-70x350-FC	Flange for PS10-70x320 fluid cooling	0150-2294

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-28	Fixed Bearing Set for 27/28 mm sliders	0150-3087
PLF01-28-SS	Fixed Bearing Set for 27/28 mm sliders, stainless steel	0150-3297
PLL01-28	Floating Bearing for 28 mm sliders	0150-3094
PLM01-28-MK	Mounting Kit for 28 mm sliders	0150-3095

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



Item	Description	Item-No.
PB10-70x320-L	Bearing Kit for PS10-70x320	0150-3434

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LUBRICANT RESERVOIR



Item	Description	Item-No.
PA10-70/28	Lubricant reservoir for PS10-70 with lubricating nipple	0150-3543

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D15/D-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

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LINEAR MOTORS P10-70x400U



- ✓ 3 x 400VAC Technology
- ✓ Peak forces up to 2720 N
- ✓ Extremely high dynamic
- ✓ Separate connector for sensor and power cable
- ✓ Can also be controlled by standard third-party servo drives

LINEAR MOTORS P10-70x400U

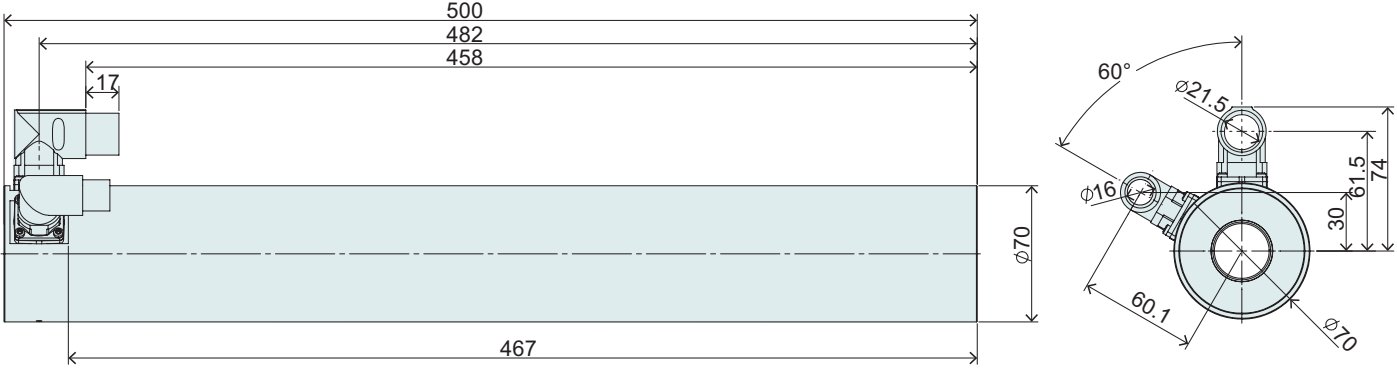
Technical Data	597
Motor Specifications	
P10-70x400U/50	602
P10-70x400U/150	603
P10-70x400U/250	604
P10-70x400U/350	605
P10-70x400U/450	606
P10-70x400U/650	607
P10-70x400U/850	608
P10-70x400U/1050	609
P10-70x400U/1250	610
P10-70x400U/1450	611
Linear Guides	612
Accessories	614



MOTOR FAMILY P10-70x400U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1450	(57.1)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	80	(18)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	113	(25.4)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.2	(89.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	3.9	(159.9)
Position Detection				
Position Resolution	mm	(in)	0.005	(0.0002)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	92.4	(2.35)
Terminal Resistance 25 °C / 120 °C	Ohm		6.9 / 9.5	
Terminal Inductivity	mH		13	
Magnetic Period	mm	(in)	40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.52 / 0.22 / 0.068	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100	
Mechanical Data				
Stator Diameter	mm	(in)	70	(2.8)
Stator Length	mm	(in)	500	(20)
Stator Mass	g	(lb)	8250	(18.15)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	590 - 1990	(23 - 78)
Slider Mass	g	(lb)	2770 - 9350	(6.09 - 20.57)
IP Code			IP 65	

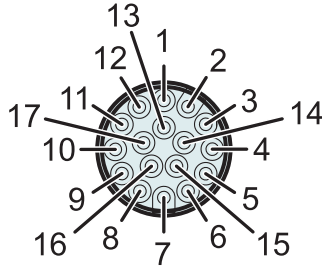
STATOR



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712

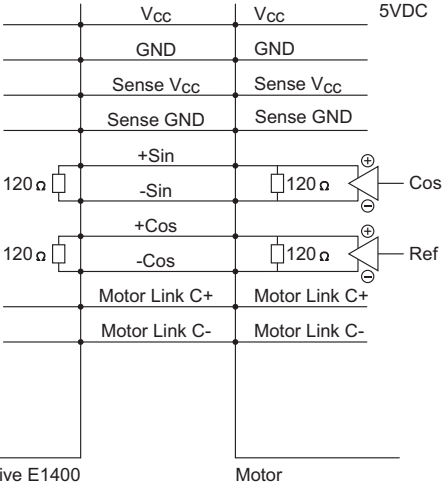
CONNECTOR PS10-70x400U-BL-QJ

Motor Connector Wiring		Connector Encoder J	Wire Color Motor Cable
+5 VDC	Supply	1	red
GND	Supply	2	black
Sense +5V	Supply Sense	3	white
Sense GND	Supply Sense	4	brown
Mot. Link C+	Communication	5	pink
Mot. Link C-	Communication	6	grey
Sin+	Encoder	7	yellow
Sin-	Encoder	8	orange
Cos+	Encoder	9	green
Cos-	Encoder	10	blue
n. c.	n. c.	11	n. c.
n. c.	n. c.	12	n. c.
n. c.	n. c.	13	n. c.
n. c.	n. c.	14	n. c.
n. c.	n. c.	15	n. c.
n. c.	n. c.	16	n. c.
n. c.	n. c.	17	n. c.

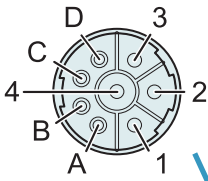


Connector Encoder J

View: Motor connector, plug side

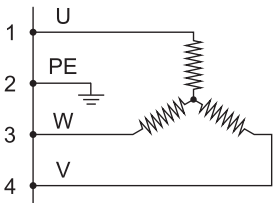


Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red
PE	2	yellow-green
Phase W	3	green
Phase V	4	blue
n. c.	A	n. c.
n. c.	B	n. c.
n. c.	C	n. c.
n. c.	D	n. c.

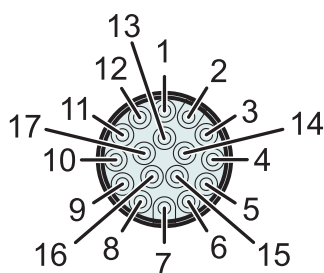


Connector Power Q

View: Motor connector, plug side



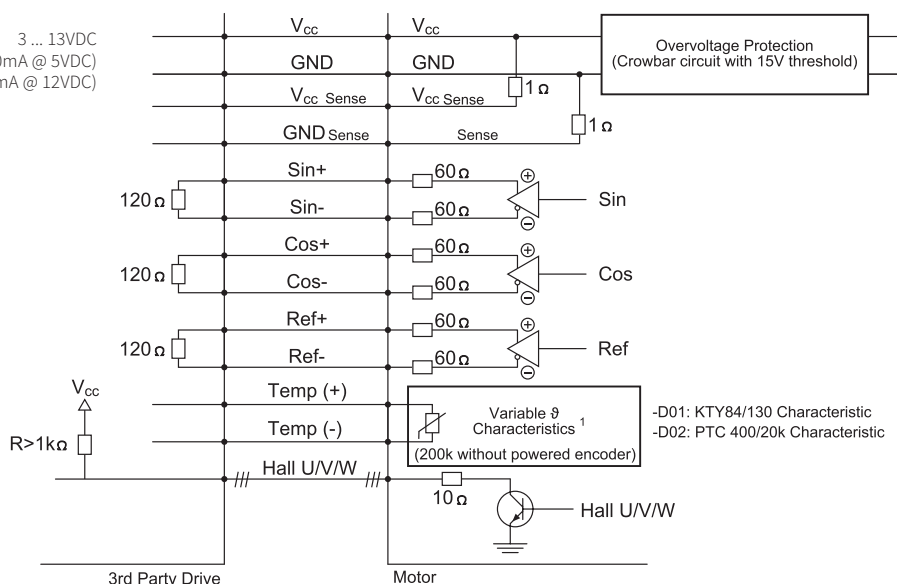
CONNECTOR PS10-70x400U-BL-QJ-D01/02



Connector Encoder J

View: Motor connector, plug side

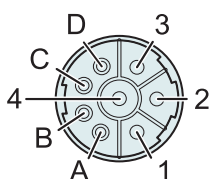
3 ... 13VDC
($I_{max} < 150\text{mA}$ @ 5VDC)
($I_{max} < 80\text{mA}$ @ 12VDC)



-D01: KTY84/130 Characteristic
-D02: PTC 400/20k Characteristic

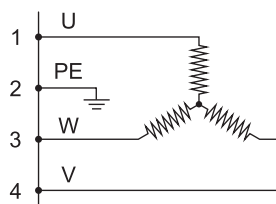
Motor Connector Wiring				
PS10-70x400U-BL-QJ-D01	PS10-70x400U-BL-QJ-D02	Function	Connector Encoder J	Wire Color Motor Cable
3 ... 13 VDC	3 ... 13 VDC	Supply	1	white
GND	GND	Supply	2	brown
Vcc Sense (optional)	Vcc Sense (optional)	Supply Sense	3	green
GND Sense (optional)	GND Sense (optional)	Supply Sense	4	yellow
Do not connect	Do not connect	-	5	-
Do not connect	Do not connect	-	6	-
Sin+	Sin+	Encoder 1 Vpp	7	grey
Sin-	Sin-	Encoder 1 Vpp	8	pink
Cos+	Cos+	Encoder 1 Vpp	9	blue
Cos-	Cos-	Encoder 1 Vpp	10	red
Ref+	Ref+	Encoder 1 Vpp	11	black
Ref-	Ref-	Encoder 1 Vpp	12	violett
Hall U	Hall U	Encoder (open collector)	13	grey-red
Hall V	Hall V	Encoder (open collector)	14	red-blue
Hall W	Hall W	Encoder (open collector)	15	white-green
Temp+ (KTY84/130 Char.)	Temp+ (PTC 400/20k Char.)	Temperature ¹	16	yellow-brown
Temp- (KTY84/130 Char.)	Temp- (PTC 400/20k Char.)	Temperature ¹	17	white-yellow

1) The temperature evaluation circuit must be powered from the encoder supply and must be at the same potential. The grounds of the temperature evaluation circuit and the encoder have to be connected. The encoder must have been powered on for at least 50 ms, before valid temperatures can be measured. If the encoder is powered off, 200k Ohms are measured between Pins 16 and 17. The maximum voltage between Pin 16 and 17 must not exceed 16 VDC. The maximum current must not exceed 15 mA.



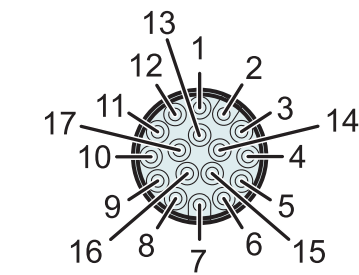
Connector Power Q

View: Motor connector, plug side



Motor Steckerbelegung			
PS10-70x400U-BL-QJ-D01	PS10-70x400U-BL-QJ-D02	Wire Color Motor Cable	Connector Power Q
Phase U	Phase U	red	1
PE	PE	yellow-green	2
Phase W	Phase W	green	3
Phase V	Phase V	blue	4
n. c.	n. c.	n. c.	A
n. c.	n. c.	n. c.	B
n. c.	n. c.	n. c.	C
n. c.	n. c.	n. c.	D

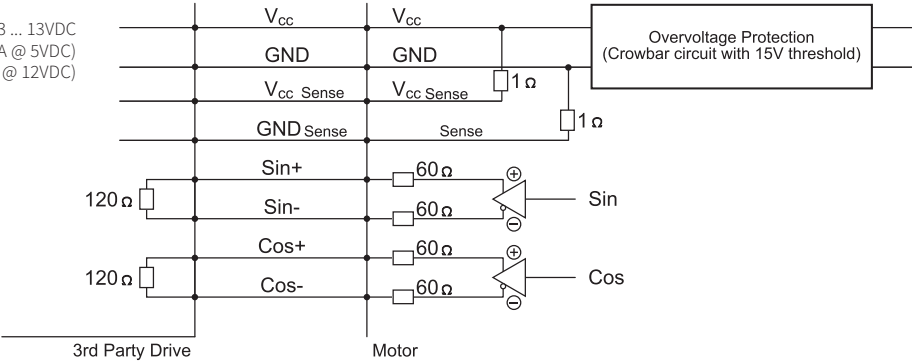
CONNECTOR PS10-70x400U-BL-QJ-D03



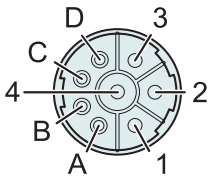
Connector Encoder J

View: Motor connector, plug side

3 ... 13VDC
(Imax < 150mA @ 5VDC)
(Imax < 80mA @ 12VDC)

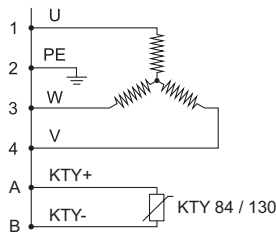


Motor Connector Wiring		Wire Color Motor Cable	Connector Encoder J
3 ... 13 VDC	Supply	red	1
GND	Supply	black	2
Vcc Sense (optional)	Supply Sense	white	3
GND Sense (optional)	Supply Sense	brown	4
Do not connect	–	–	5
Do not connect	–	–	6
Sin+	Encoder 1 Vpp	yellow	7
Sin-	Encoder 1 Vpp	orange	8
Cos+	Encoder 1 Vpp	green	9
Cos-	Encoder 1 Vpp	blue	10
n. c.	–	n. c.	11
n. c.	–	n. c.	12
n. c.	–	n. c.	13
Do not connect	–	n. c.	14
n. c.	–	n. c.	15
n. c.	–	n. c.	16
n. c.	–	n. c.	17



Connector Power Q

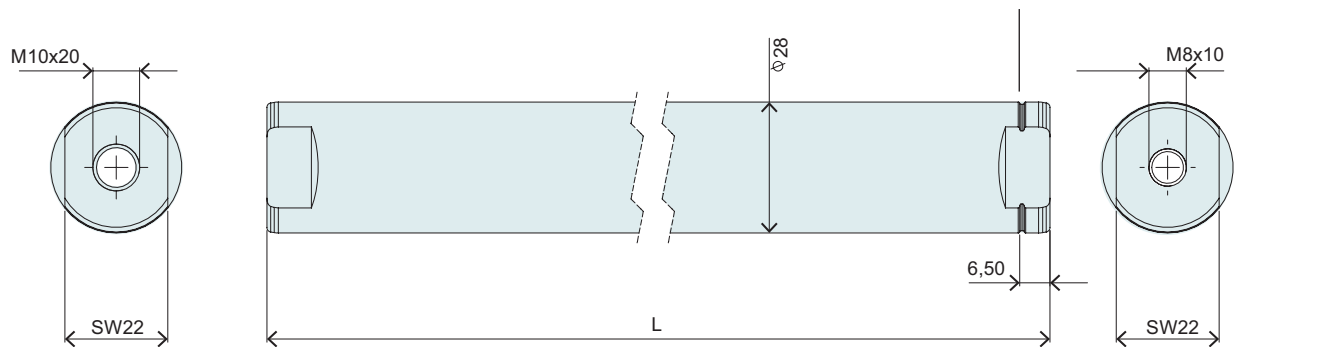
View: Motor connector, plug side



Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red (previously: black 1)
PE	2	yellow-green
Phase W	3	green (previously: black 3)
Phase V	4	blue (previously: black 2)
KTY +	A	purple (previously: black 5)
KTY -	B	grey (previously: black 6)
n. c.	C	yellow (previously: black 7)
n. c.	D	brown (previously: black 8)

SLIDER

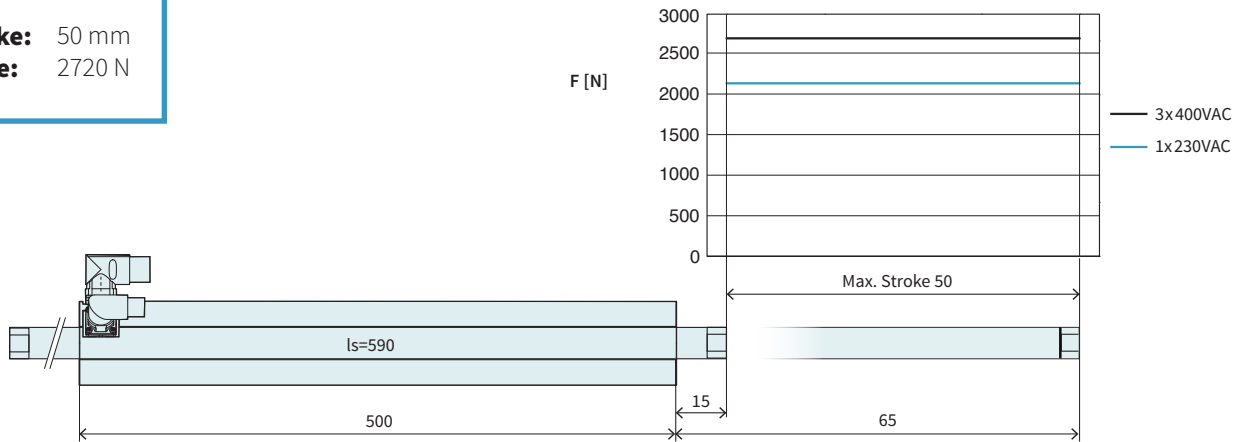
Slider Standard



Slider Standard			
Item	Description	Max. Stroke [mm]	Item-No.
PL10-28x590/540	Slider for P10-70 'standard'	50	0150-2196
PL10-28x690/640	Slider for P10-70 'standard'	150	0150-2197
PL10-28x790/740	Slider for P10-70 'standard'	250	0150-2198
PL10-28x890/840	Slider for P10-70 'standard'	350	0150-2199
PL10-28x990/940	Slider for P10-70 'standard'	450	0150-2203
PL10-28x1190/1140	Slider for P10-70 'standard'	650	0150-2204
PL10-28x1390/1340	Slider for P10-70 'standard'	850	0150-2205
PL10-28x1590/1540	Slider for P10-70 'standard'	1050	0150-2206
PL10-28x1790/1740	Slider for P10-70 'standard'	1250	0150-2207
PL10-28x1990/1940	Slider for P10-70 'standard'	1450	0150-2208

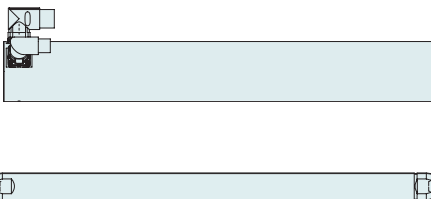
P10-70x400U/50-BL-QJ

Max. Stroke: 50 mm
Peak Force: 2720 N



Dimensions in mm

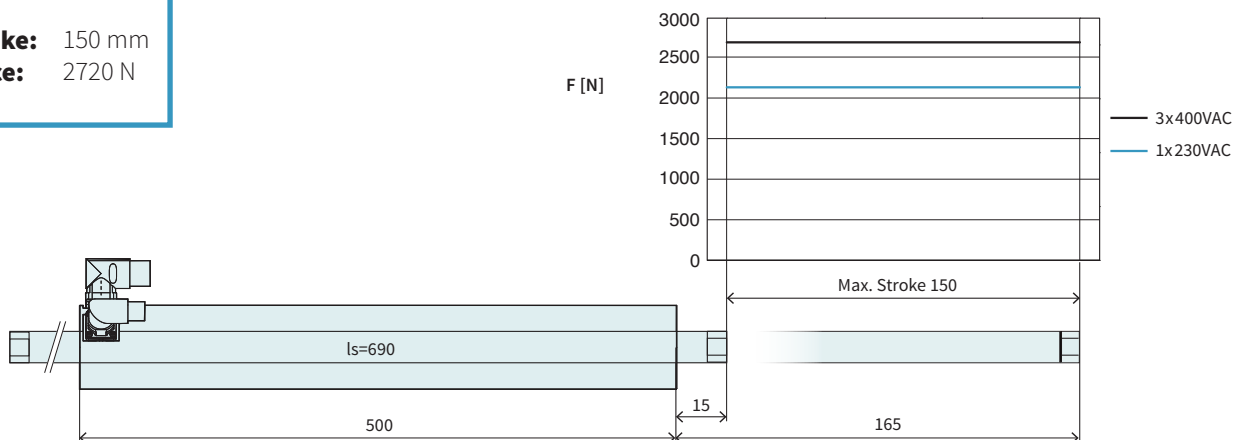
Technical Data P10-70x400U/50				
Stroke				
Max. Stroke	mm (in)		50	(1.96)
Force				
Max. Force @ 1x230VAC	N (lbf)		2150	(483)
Max. Force @ 3x400VAC	N (lbf)		2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})		80	(18)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		113	(25.4)
Velocity				
Max. Velocity @ 1x230VAC	m/s (in/s)		2.2	(89.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		3.9	(3.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 1.1	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.52 / 0.22 / 0.068	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100	
Mechanical Data				
Slider Length	mm (in)		590	(23)
Slider Mass	g (lb)		2770	(6.09)



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PL10-28x590/540	Slider for P10-70 'standard'	0150-2196

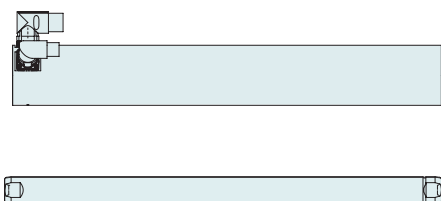
P10-70x400U/150-BL-QJ

Max. Stroke: 150 mm
Peak Force: 2720 N



Dimensions in mm

Technical Data P10-70x400U/150				
Stroke				
Max. Stroke	mm	(in)	150	(5.91)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	80	(18)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	113	(25.4)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.2	(89.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	3.9	(3.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.45	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.52 / 0.22 / 0.068	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100	
Mechanical Data				
Slider Length	mm	(in)	690	(27)
Slider Mass	g	(lb)	3240	(7.13)

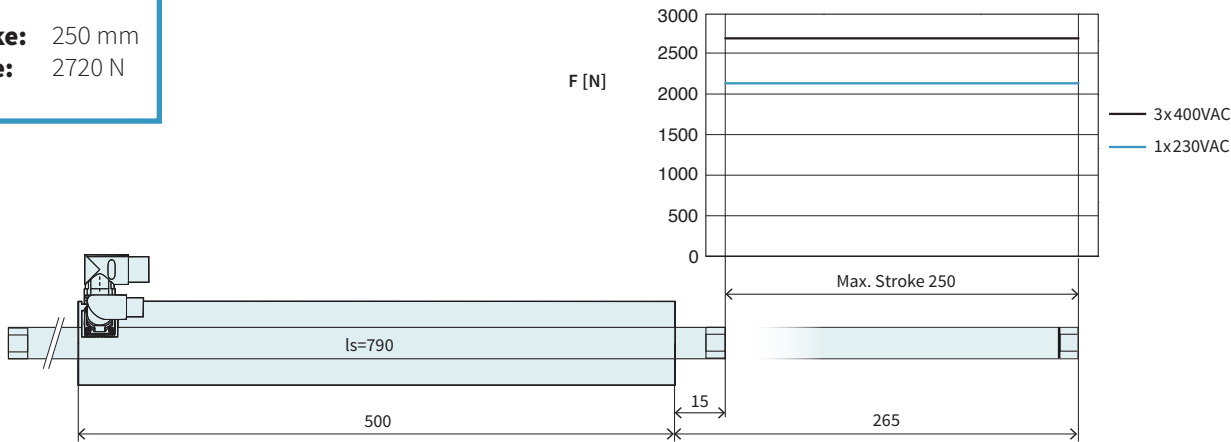


Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PL10-28x590/540	Slider for P10-70 'standard'	0150-2196

P10-70x400U/250-BL-QJ

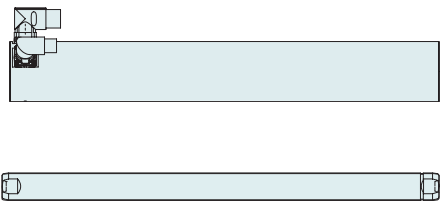
4

Max. Stroke: 250 mm
Peak Force: 2720 N



Dimensions in mm

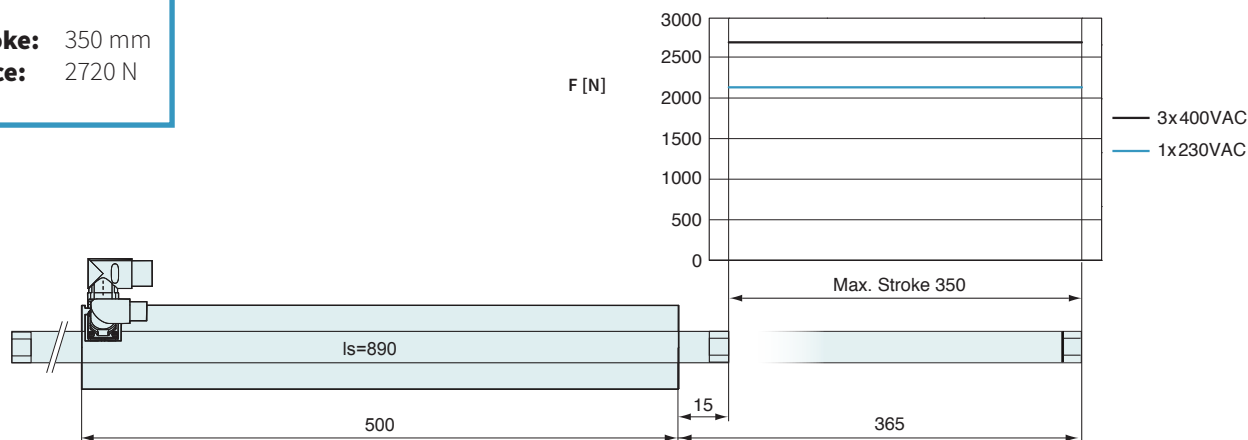
Technical Data P10-70x400U/250				
Stroke				
Max. Stroke	mm	(in)	250	(9.83)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	80	(18)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	113	(25.4)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.2	(89.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	3.9	(3.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.52 / 0.22 / 0.068	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100	
Mechanical Data				
Slider Length	mm	(in)	790	(31)
Slider Mass	g	(lb)	3710	(8.16)



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PL10-28x790/740	Slider for P10-70 'standard'	0150-2198

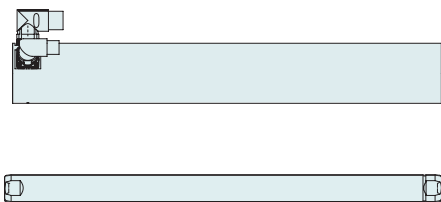
P10-70x400U/350-BL-QJ

Max. Stroke: 350 mm
Peak Force: 2720 N



Dimensions in mm

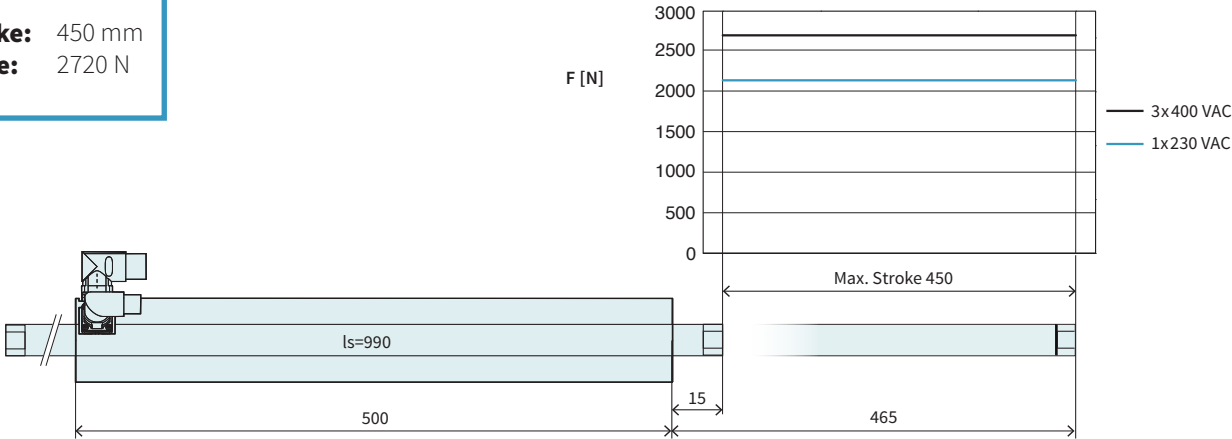
Technical Data P10-70x400U/350				
Stroke				
Max. Stroke	mm	(in)	350	(13.8)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	80	(18)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	113	(25.4)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.2	(89.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	3.9	(3.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.52 / 0.22 / 0.068	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100	
Mechanical Data				
Slider Length	mm	(in)	890	(35)
Slider Mass	g	(lb)	4180	(9.2)



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PL10-28x890/840	Slider for P10-70 'standard'	0150-2199

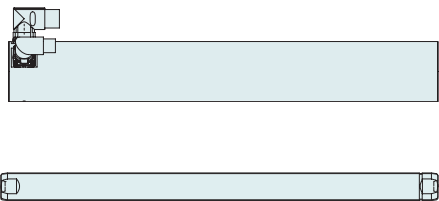
P10-70x400U/450-BL-QJ

Max. Stroke: 450 mm
Peak Force: 2720 N



Dimensions in mm

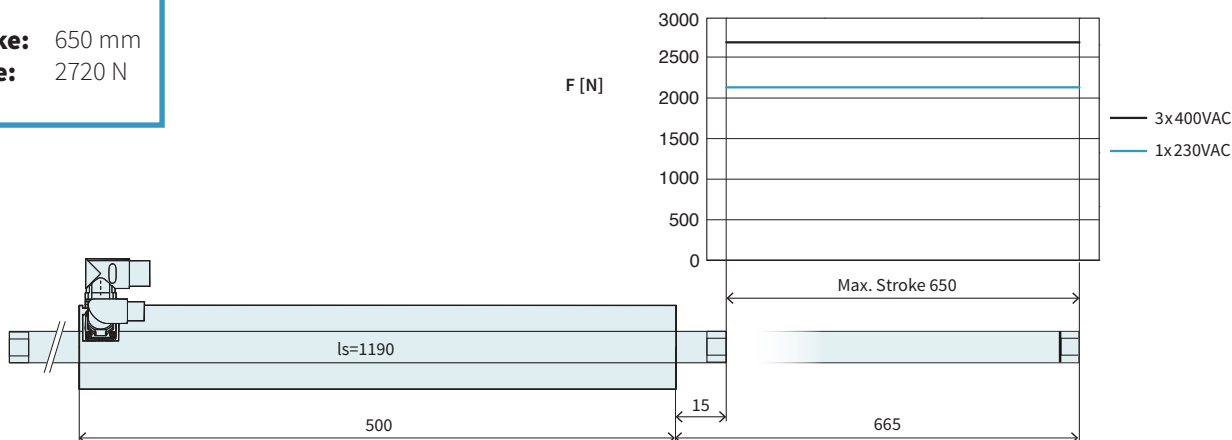
Technical Data P10-70x400U/450				
Stroke				
Max. Stroke	mm	(in)	450	(17.69)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	80	(18)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	113	(25.4)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.2	(89.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	3.9	(3.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.52 / 0.22 / 0.068	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100	
Mechanical Data				
Slider Length	mm	(in)	990	(39)
Slider Mass	g	(lb)	4650	(10.23)



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PL10-28x990/940	Slider for P10-70 'standard'	0150-2203

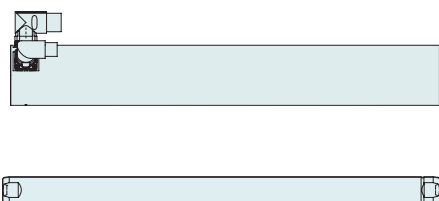
P10-70x400U/650-BL-QJ

Max. Stroke: 650 mm
Peak Force: 2720 N



Dimensions in mm

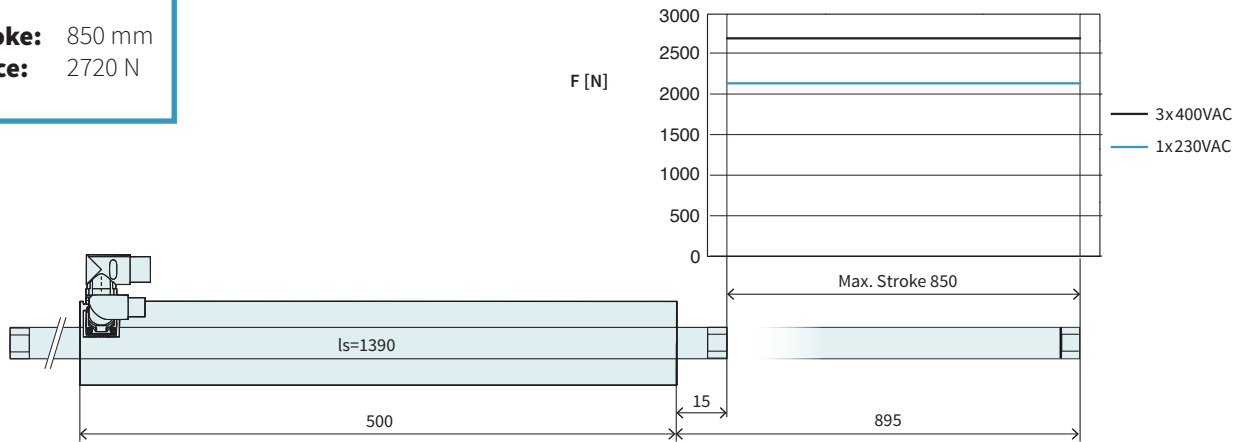
Technical Data P10-70x400U/650				
Stroke				
Max. Stroke	mm	(in)	650	(25.6)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	80	(18)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	113	(25.4)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.2	(89.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	3.9	(3.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.52 / 0.22 / 0.068	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100	
Mechanical Data				
Slider Length	mm	(in)	1190	(47)
Slider Mass	g	(lb)	5590	(12.3)



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PL10-28x1190/1140	Slider for P10-70 'standard'	0150-2204

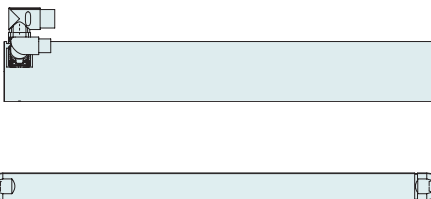
P10-70x400U/850-BL-QJ

Max. Stroke: 850 mm
Peak Force: 2720 N



Technical Data P10-70x400U/850

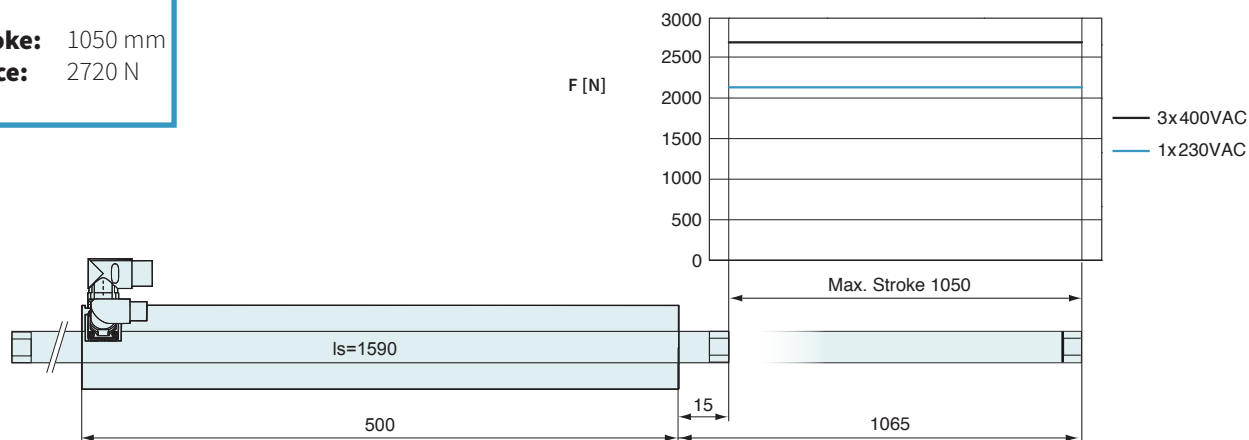
Stroke				
Max. Stroke	mm	(in)	850	(33.49)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	80	(18)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	113	(25.4)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.2	(89.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	3.9	(3.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.52 / 0.22 / 0.068	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100	
Mechanical Data				
Slider Length	mm	(in)	1390	(55)
Slider Mass	g	(lb)	6530	(14.37)



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PL10-28x1390/1340	Slider for P10-70 'standard'	0150-2205

P10-70x400U/1050-BL-QJ

Max. Stroke: 1050 mm
Peak Force: 2720 N



Dimensions in mm

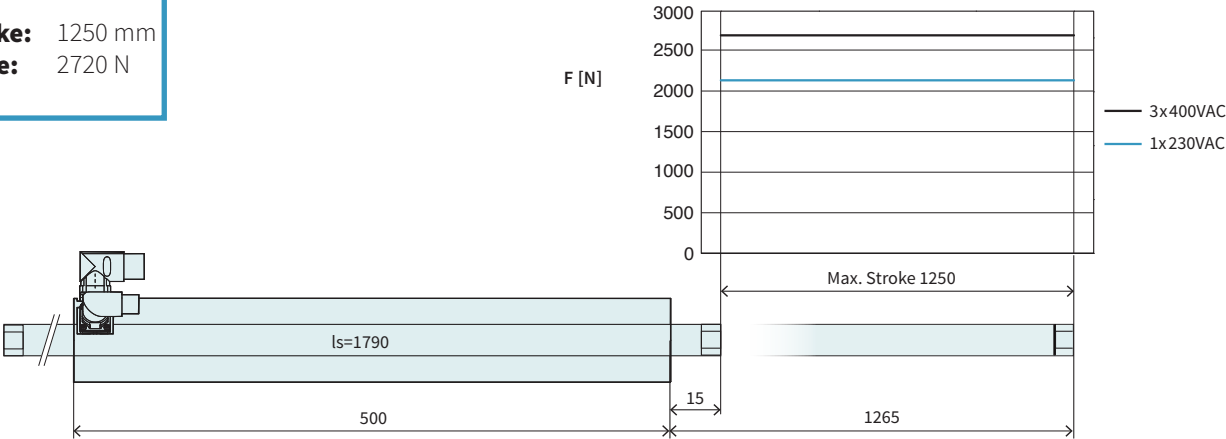
Technical Data P10-70x400U/1050				
Stroke				
Max. Stroke	mm	(in)	1050	(41.29)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	80	(18)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	113	(25.4)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.2	(89.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	3.9	(3.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.52 / 0.22 / 0.068	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100	
Mechanical Data				
Slider Length	mm	(in)	1590	(63)
Slider Mass	g	(lb)	7470	(16.43)



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PL10-28x1590/1540	Slider for P10-70 'standard'	0150-2206

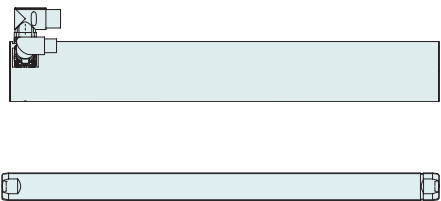
P10-70x400U/1250-BL-QJ

Max. Stroke: 1250 mm
Peak Force: 2720 N



Dimensions in mm

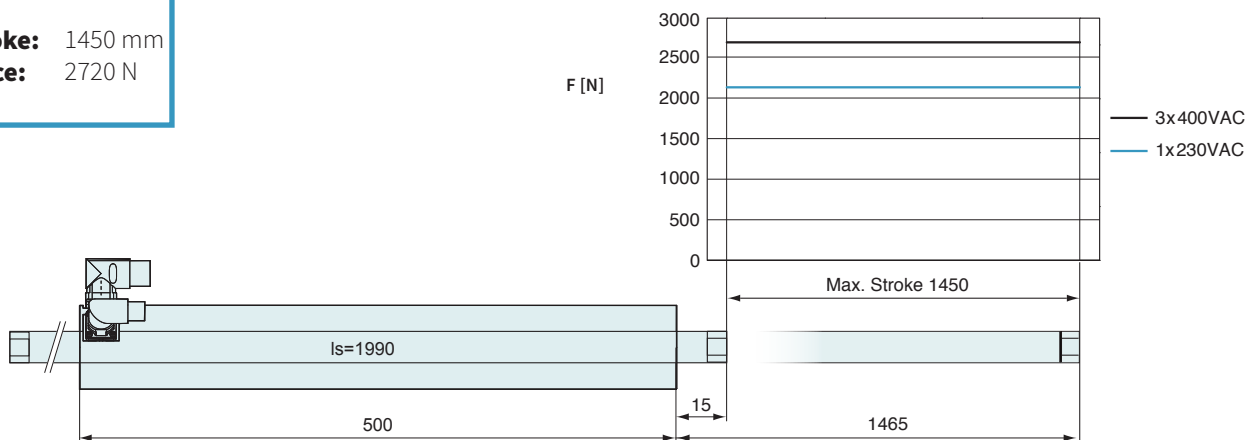
Technical Data P10-70x400U/1250				
Stroke				
Max. Stroke	mm	(in)	1250	(49.2)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	80	(18)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	113	(25.4)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.2	(89.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	3.9	(3.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.52 / 0.22 / 0.068	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100	
Mechanical Data				
Slider Length	mm	(in)	1790	(70)
Slider Mass	g	(lb)	8413	(18.51)



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PL10-28x1790/1740	Slider for P10-70 'standard'	0150-2207

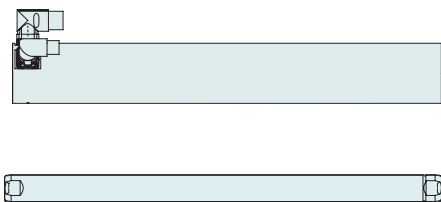
P10-70x400U/1450-BL-QJ

Max. Stroke: 1450 mm
Peak Force: 2720 N



Dimensions in mm

Technical Data P10-70x400U/1450				
Stroke				
Max. Stroke	mm	(in)	1450	(57.1)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	80	(18)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	113	(25.4)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.2	(89.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	3.9	(3.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.52 / 0.22 / 0.068	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100	
Mechanical Data				
Slider Length	mm	(in)	1990	(78)
Slider Mass	g	(lb)	9350	(20.57)



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PL10-28x1990/1940	Slider for P10-70 'standard'	0150-2208

Linear Guides H10

4



HM10-70x400/50		Linear Module 70x400 with 50 mm Stroke			
	→	H-Guide	H10-70x400/50	H-Guide for P10-70x400, Stroke max. 50 mm	0150-5419
	→	Stator	PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
			PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
			PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
			PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
	→	Slider	PL10-28x590/540	Slider for P10-70 'standard'	0150-2196

HM10-70x400/150		Linear Module 70x400 with 150 mm Stroke			
	→	H-Guide	H10-70x400/150	H-Guide for P10-70x400, Stroke max. 150 mm	0150-5420
	→	Stator	PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
			PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
			PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
			PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
	→	Slider	PL10-28x690/640	Slider for P10-70 'standard'	0150-2197

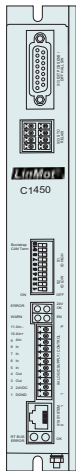
HM10-70x400/250		Linear Module 70x400 with 250 mm Stroke			
	→	H-Guide	H10-70x400/250	H-Guide for P10-70x400, Stroke max. 250 mm	0150-5421
	→	Stator	PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
			PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
			PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
			PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
	→	Slider	PL10-28x790/740	Slider for P10-70 'standard'	0150-2198

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

HM10-70x400/350		Linear Module 70x400 with 350 mm Stroke		
	H-Guide	H10-70x400/350	H-Guide for P10-70x400, Stroke max. 350 mm	0150-5422
	Stator	PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
		PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
		PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
		PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
	Slider	PL10-28x890/840	Slider for P10-70 'standard'	0150-2199
HM10-70x400/450		Linear Module 70x400 with 450 mm Stroke		
	H-Guide	H10-70x400/450	H-Guide for P10-70x400, Stroke max. 450 mm	0150-5423
	Stator	PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
		PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
		PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
		PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
	Slider	PL10-28x990/940	Slider for P10-70 'standard'	0150-2203
Accessories				
	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

Motor Cable

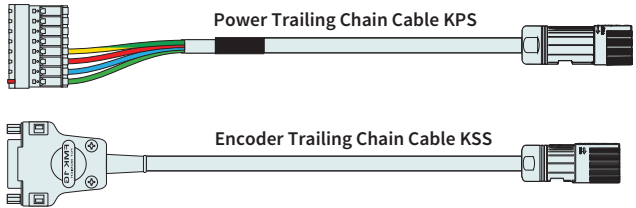
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C1400

B Connector MC10-B/m

Q Connector MC10-Q/f



P10-70x400U

D15 Connector MC01-D15/f

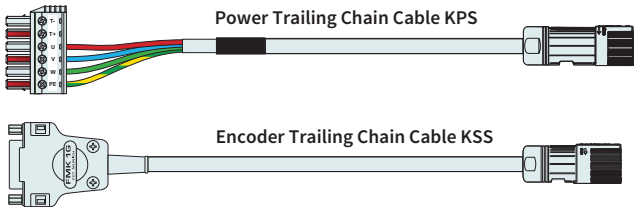
J Connector MC10-J/f



E1400

L Connector MC10-L/m

Q Connector MC10-Q/f



P10-70x400U

D15 Connector MC01-D15/f

J Connector MC10-J/f

ORDERING INFORMATION

TRAILING CHAIN CABLE FOR LINMOT DRIVES		
Item	Description	Item-No.
KPS15-04-L/Q-3	Power Trailing Chain Cable E1400/P10-70, 3 m	0150-2266
KPS15-04-L/Q-5	Power Trailing Chain Cable E1400/P10-70, 5 m	0150-2261
KPS15-04-L/Q-8	Power Trailing Chain Cable E1400/P10-70, 8 m	0150-2267
KPS15-04-L/Q-12	Power Trailing Chain Cable E1400/P10-70, 12 m	0150-2268
KPS15-04-L/Q-	Power Trailing Chain Cable L/Q-, Custom length	0150-3388
KPS15-04-B/Q-3	Power Trailing Chain Cable C1400/P10-70, 3 m	0150-3660
KPS15-04-B/Q-5	Power Trailing Chain Cable C1400/P10-70, 5 m	0150-3661
KPS15-04-B/Q-8	Power Trailing Chain Cable C1400/P10-70, 8 m	0150-3662
KPS15-04-B/Q-12	Power Trailing Chain Cable C1400/P10-70, 12 m	0150-3663
KPS15-04-B/Q-	Power Trailing Chain Cable B/Q-, Custom length	0150-3608

TRAILING CHAIN CABLE FOR LINMOT DRIVES

Item	Description	Item-No.
KSS 05-02/08-D15/J-3	Encoder Trailing Chain Cable D15/J, 3 m	0150-2263
KSS 05-02/08-D15/J-5	Encoder Trailing Chain Cable D15/J, 5 m	0150-2262
KSS 05-02/08-D15/J-8	Encoder Trailing Chain Cable D15/J, 8 m	0150-2264
KSS 05-02/08-D15/J-12	Encoder Trailing Chain Cable D15/J, 12 m	0150-2265
KSS 05-02/08-D15(f)-45°/J-	Encoder Trailing Chain Cable D15/J-, Custom length	0150-3389

TRAILING CHAIN CABLE FOR STATOR SERIES D03

Item	Description	Item-No.
KPS15-04/04..../Q-10	Power Trailing Chain Cable .../Q, 10 m for D03	0150-3654
KPS15-04/04-./Q-	Power Trailing Chain Cable .../Q, for D03, Custom length	0150-3579
KSS05-02/06-./J-10	Encoder Trailing Chain Cable ./J, 10 m for D03	0150-3655
KSS05-02/06-./J-	Encoder Trailing Chain Cable ./J, for D03, Custom length	0150-3611
KPS15-04/04	Power Trailing Chain Cable P10-...-Dx3 (per m)	0150-2269
KSS05-02/06	Trailing Chain Cable Encoder P10-...-Dx3 (per m)	0150-2490

CONNECTOR

Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
MC01-D15/f	Motor Connector D15 (f)	0150-3136
MC10-Q/f	Connector Power PS10-70	0150-2268
MC10-J/f	Connector Encoder PS10-70	0150-2269

MOTOR FLANGES



Item	Description	Item-No.
PF10-70x430	Flange for PS10-70x400	0150-2276



Item	Description	Item-No.
PF10-70x430-FC	Flange for PS10-70x400 fluid cooling	0150-2295

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-28	Fixed Bearing Set for 27/28 mm sliders	0150-3087
PLF01-28-SS	Fixed Bearing Set for 27/28 mm sliders, stainless steel	0150-3297
PLL01-28	Floating Bearing for 28 mm sliders	0150-3094
PLM01-28-MK	Mounting Kit for 28 mm sliders	0150-3095

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



Item	Description	Item-No.
PB10-70x400-L	Bearing Kit for PS10-70x400	0150-3435

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LUBRICANT RESERVOIR



Item	Description	Item-No.
PA10-70/28	Lubricant reservoir for PS10-70 with lubricating nipple	0150-3543

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS

4



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D15/D-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS STAINLESS STEEL

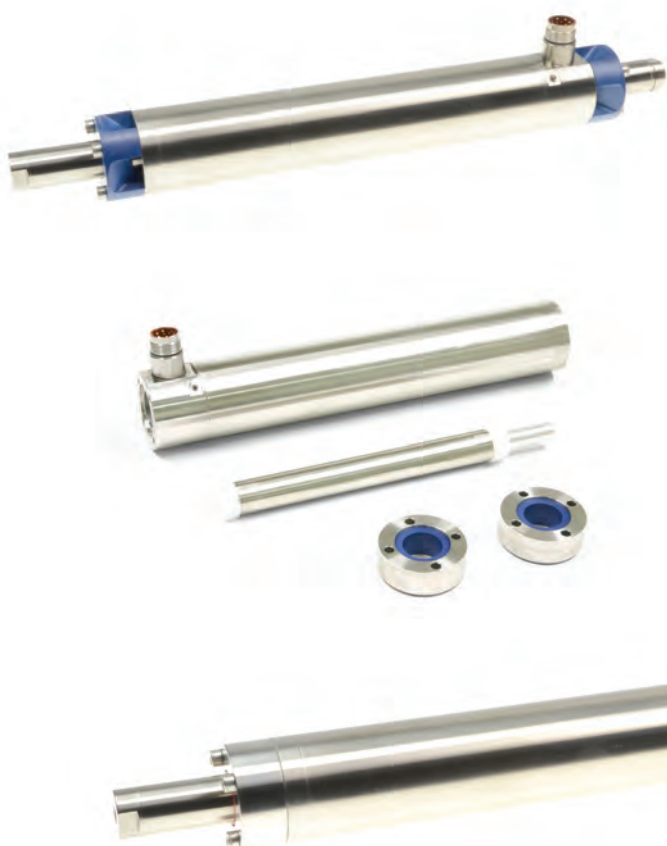


Stainless steel motors from LinMot meet the highest level of hygiene.

Product Description

Developed for a challenging environment, these compact linear motors are designed entirely of EN 1.4404/AISI 316L stainless steel. The motor is designed with hygiene as its primary goal. In order to avoid buildup of contaminants, the motor is designed without unnecessary edges, corners, holes, and threads. In addition, all joints are welded, so no seals are required.

The stainless steel family of motors consists of three sizes and has a range of strokes up to 980 mm. These drives can be used in machines and systems for processing food products or in pharmaceutical industry operations. They are capable of handling extremely rough or corrosive environments without a problem and can be cleaned with any typical industrial cleaning products.



Special Wash-Down Bearings

For optimal cleaning of the linear motors, LinMot offers stainless steel motors with specially developed wash-down bearings. They are conceived so that any contaminants can be cleaned off under high pressure without leaving any residue. The material used, just like the bearing material indicated above, has been specially certified for food product processing.

External Guide Bearings

The linear motors are equipped with external sliding bearings that guide the slider precisely over the entire stroke length. This means that the motion inside the stator occurs with no contact whatsoever. The bearing material is specially designed for use with food products and medical applications and is certified to FDA standards.

IP69K PROTECTION RATING

The windings in the LinMot motor are completely encapsulated in epoxy resin, which protects both the copper filling and the stator package against condensation and corrosion.

Thanks to this complete encapsulation, the motors are also protected against penetration by dust and water (allowing high-pressure and steam-jet cleaning). This leak tightness means that they meet protection class IP69K according to DIN EN 60529.

INTEGRATED WATER COOLING

The Stainless steel linear motors can optionally be supplied with integrated water cooling. The stator is enclosed by the cooling system along its entire length. The heat losses generated in the motor are dissipated through the liquid cooling system. This increases the rated power of the motor several times over in comparison with the self-cooled version. The lower surface temperature of the motor also greatly reduces microbe growth.

HIGH AND CONTROLLED DYNAMICS

Max. acceleration values over 400 m/s² and travel speeds over 3 m/s allow cyclical motion sequences of several Hertz.

For handling applications with sensitive products, such as transporting wafers in semiconductor production, very gentle, smooth motions with suitable accelerations can be obtained.

FREELY POSITIONABLE

LinMot linear motors can be freely positioned. With absolute or relative movement commands, they can move to any desired position in the stroke range. Since the LinMot linear drive is a closed-loop system, not only the end positions are monitored, but also deviations in position during travel. This allows, among other things, precise specification of travel speeds, acceleration and braking ramps, and travel through curved paths.

PROCESS STABILITY

For temperature monitoring all linear motors are equipped with sensors that transfer the data to the drive. The data can be analyzed in the superordinate control so that the motor, depending on the processing (for example, foods such as fish) can be kept in a constant temperature range.

Since not only the temperature, but also speed and acceleration are controlled and monitored, motions that are programmed once are carried out the same way over the entire life of the machine.

SYNCHRONIZATION

For synchronous machines, the linear motor can be synchronized to the main shaft. By replacing mechanical cam discs with LinMot linear motors, for example, great variations can be achieved, with format changeovers at the push of a button.

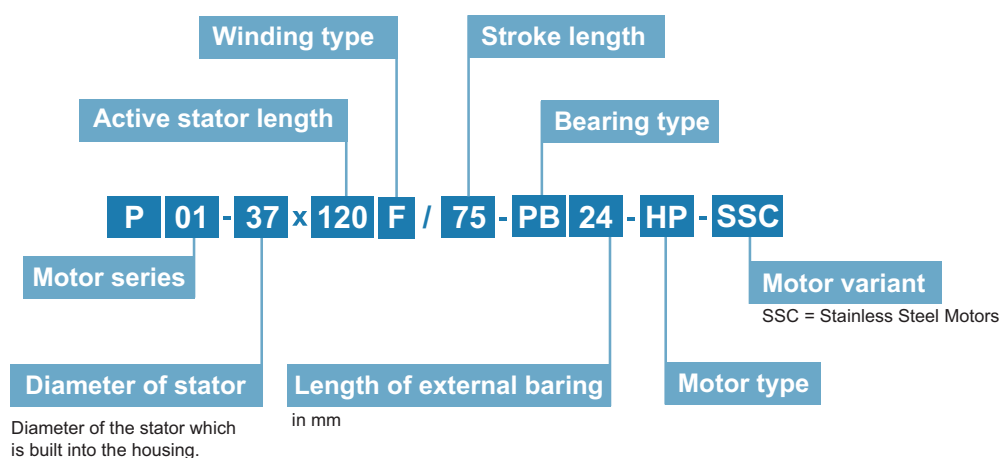
OVERLOAD PROTECTION

There are no mechanical components for force transfer that could be damaged in a crash or stall condition in a linear motor. Complex, expensive designs to protect gearboxes, gears, and shafts are thus eliminated. If the linear motor stalls, it acts like a pneumatic cylinder and tries to reach the target position with maximum force. The following error monitor in the drive can, however, immediately recognize a stall condition. Temperature sensors integrated in the stator prevent the drive from overloading in any case.

LONG LIFESPAN

Since the linear motion is generated purely magnetically, and no mechanical force transmission takes place, even extremely dynamic applications can be implemented with a long lifespan.

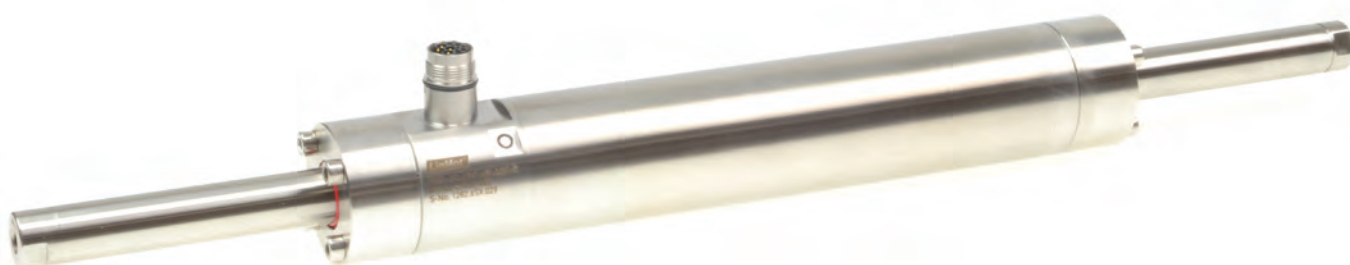
Type Code



For explanations of the terms, please refer to the section "Glossary"

Handwriting practice area with 20 horizontal dotted lines.

LINEAR MOTORS P01-37x120F-HP-SSC



- ✓ Stainless steel housing EN 1.4404 / AISI / SAE 316L
- ✓ Hygienic design
- ✓ Welded connections
- ✓ Completely encapsulated
- ✓ IP Code IP69K
- ✓ Optional integrated water cooling
- ✓ For use in the food or in the pharmaceutical sector

LINEAR MOTORS P01-37x120F-HP-SSC

Technical Data	625
Motor Specifications	
P01-37x120F/75-HP-PB24-SSC	628
P01-37x120F/180-HP-PB24-SSC	629
P01-37x120F/280-HP-PB24-SSC	630
P01-37x120F/380-HP-PB24-SSC	631
P01-37x120F/480-HP-PB24-SSC	632
P01-37x120F/580-HP-PB24-SSC	633
P01-37x120F/680-HP-PB24-SSC	634
Linear Guides	635
Accessories	636



MOTOR FAMILY P01-37x120F-HP-SSC

Technical Data				
Stroke				
Max. Stroke	mm	(in)	680	(26.8)
Force				
Max. Force @ 48VDC	N	(lbf)	210	(47.1)
Max. Force @ 72VDC	N	(lbf)	210	(47.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	23 / - / 63	(5.3 / - / 14)
Max. Border Force relative	%		≤ 100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	14	(3.14)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	3.2	(119.9)
Max. Velocity @ 72VDC	m/s	(in/s)	4.6	(189.9)
Position Detection				
Position Resolution	mm	(in)	0.005	(0.0002)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.7 / - / 4.5	
Terminal Resistance 25 °C / 120 °C	Ohm		2.4 / 3.5	
Terminal Inductivity	mH		1.6	
Magnetic Period	mm	(in)	40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		8.3 / - / 1.1	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		3300 / - / 450	
Mechanical Data				
Stator Diameter	mm	(in)	48	(1.9)
Stator Length [Connector type / Cable type]	mm	(in)	296	(12)
Stator Mass	g	(lb)	2250	(4.95)
Slider Diameter	mm	(in)	19	(0.75)
Slider Length	mm	(in)	240 - 1000	(9.4 - 39)
Slider Mass	g	(lb)	415 - 1800	(0.91 - 3.96)
IP Code			IP 69k	

5



CONNECTOR

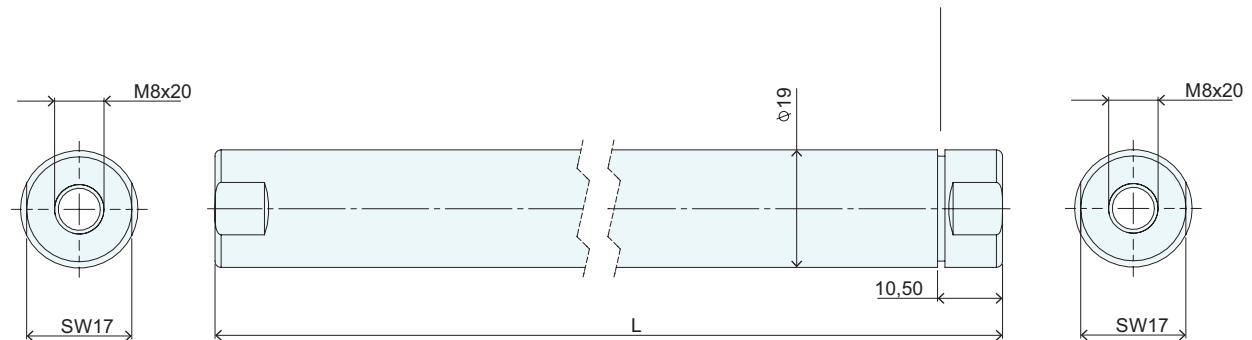
R-Connector



SLIDER

Slider High Clearance

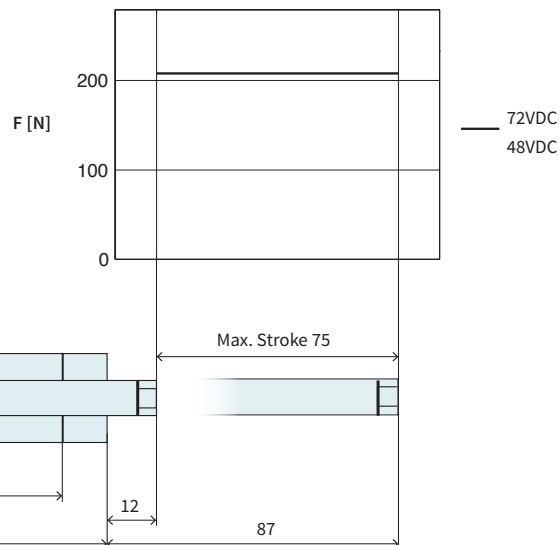
Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.



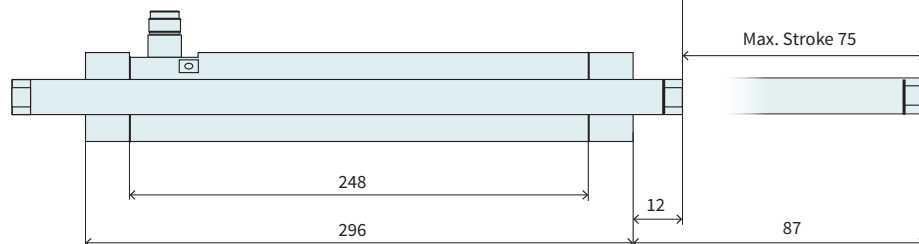
Slider High Clearance			
Item	Description	Max. Stroke [mm]	Item-No.
PL01-19x395/320	Slider 'High Clearance'	75	0150-1452
PL01-19x500/420	Slider 'High Clearance'	180	0150-1455
PL01-19x600/520	Slider 'High Clearance'	280	0150-1456
PL01-19x700/620	Slider 'High Clearance'	380	0150-1457
PL01-19x800/720	Slider 'High Clearance'	480	0150-1458
PL01-19x900/820	Slider 'High Clearance'	580	0150-1459
PL01-19x1000/920	Slider 'High Clearance'	680	0150-1460

P01-37x120F/75-PB24-HP-SSC

Max. Stroke: 75 mm
Peak Force: 210 N

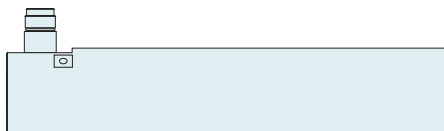


Dimensions in mm



Technical Data P01-37x120F/75-HP-PB24-SSC

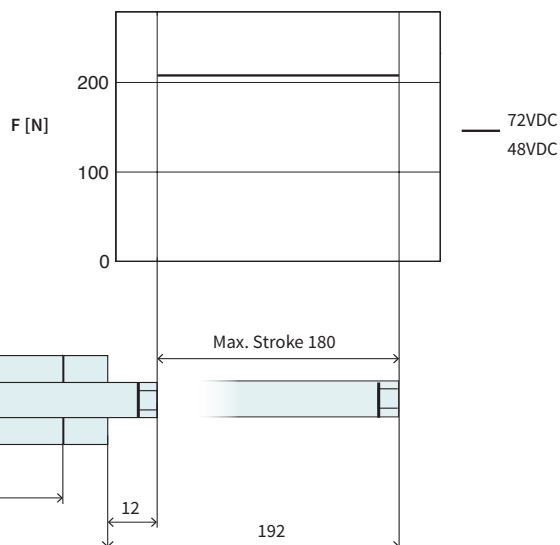
Stroke			
Max. Stroke	mm (in)	75	(2.95)
Force			
Max. Force @ 48VDC	N (lbf)	210	(47.1)
Max. Force @ 72VDC	N (lbf)	210	(47.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	23 / - / 63	(5.3 / - / 14)
Max. Border Force relative	%	100	
Force Constant	N/A _{pk} (lbf/A _{pk})	14	(3.14)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3.2	(119.9)
Max. Velocity @ 72VDC	m/s (in/s)	4.6	(189.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.75	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	14.9	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.7 / - / 4.5	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	8.3 / - / 1.1	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	3300 / - / 450	
Mechanical Data			
Slider Length	mm (in)	395	(16)
Slider Mass	g (lb)	748	(1.65)



Item	Description	Item-No.
PS01-37x120F-HP-SSC-R	Stator Stainless Steel IP69K	0150-1282
PS01-37x120F-HP-SSC-R-FC	Stator stainless steel IP69K, FC	0150-1283
PL01-19x395/320	Slider 'High Clearance'	0150-1452

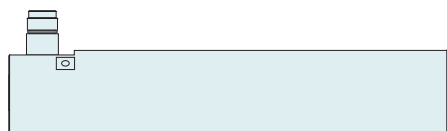
P01-37x120F/180-PB24-HP-SSC

Max. Stroke: 180 mm
Peak Force: 210 N



Technical Data P01-37x120F/180-HP-PB24-SSC

Stroke				
Max. Stroke	mm	(in)	180	(7.08)
Force				
Max. Force @ 48VDC	N	(lbf)	210	(47.1)
Max. Force @ 72VDC	N	(lbf)	210	(47.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	23 / - / 63	(5.3 / - / 14)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	14	(3.14)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	3.2	(119.9)
Max. Velocity @ 72VDC	m/s	(in/s)	4.6	(189.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.4	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.7 / - / 4.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		8.3 / - / 1.1	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		3300 / - / 450	
Mechanical Data				
Slider Length	mm	(in)	500	(20)
Slider Mass	g	(lb)	960	(2.11)

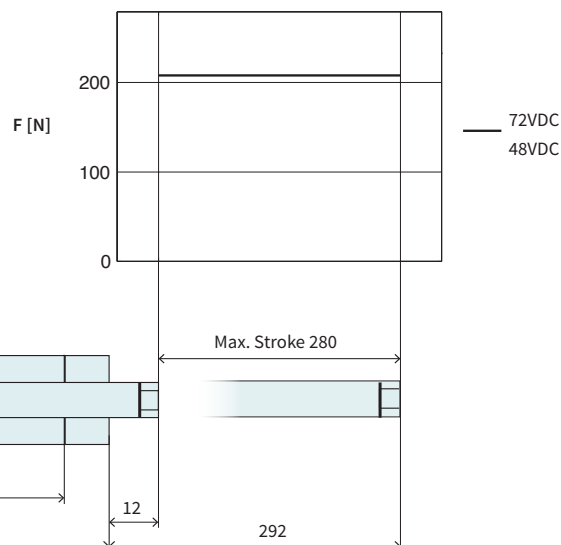


Item	Description	Item-No.
PS01-37x120F-HP-SSC-R	Stator Stainless Steel IP69K	0150-1282
PS01-37x120F-HP-SSC-R-FC	Stator stainless steel IP69K, FC	0150-1283

PL01-19x500/420	Slider 'High Clearance'	0150-1455
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P01-37x120F/280-PB24-HP-SSC

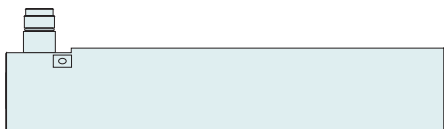
Max. Stroke: 280 mm
Peak Force: 210 N



Dimensions in mm

Technical Data P01-37x120F/280-HP-PB24-SSC

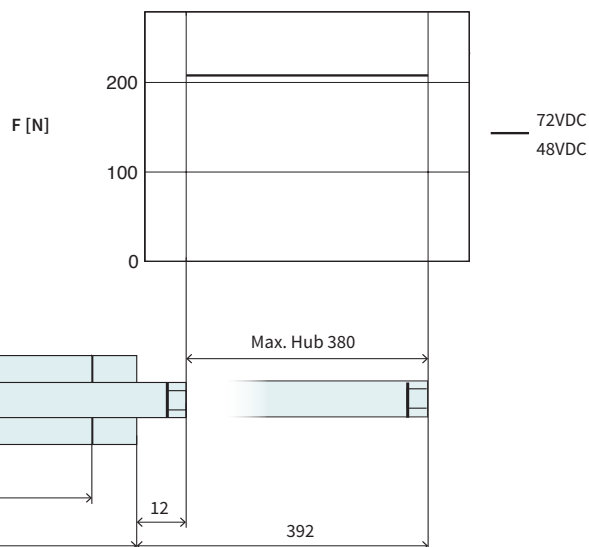
Stroke			
Max. Stroke	mm (in)	280	(10.99)
Force			
Max. Force @ 48VDC	N (lbf)	210	(47.1)
Max. Force @ 72VDC	N (lbf)	210	(47.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	23 / - / 63	(5.3 / - / 14)
Max. Border Force relative	%	100	
Force Constant	N/A _{pk} (lbf/A _{pk})	14	(3.14)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3.2	(119.9)
Max. Velocity @ 72VDC	m/s (in/s)	4.6	(189.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.3	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	14.9	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.7 / - / 4.5	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	8.3 / - / 1.1	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	3300 / - / 450	
Mechanical Data			
Slider Length	mm (in)	600	(24)
Slider Mass	g (lb)	1171	(2.58)



Item	Description	Item-No.
PS01-37x120F-HP-SSC-R	Stator Stainless Steel IP69K	0150-1282
PS01-37x120F-HP-SSC-R-FC	Stator stainless steel IP69K, FC	0150-1283
PL01-19x600/520	Slider 'High Clearance'	0150-1456

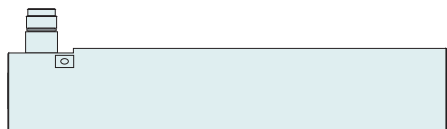
P01-37x120F/380-PB24-HP-SSC

Max. Stroke: 380 mm
Peak Force: 210 N



Dimensions in mm

Technical Data P01-37x120F/380-HP-PB24-SSC				
Stroke				
Max. Stroke	mm	(in)	380	(14.99)
Force				
Max. Force @ 48VDC	N	(lbf)	210	(47.1)
Max. Force @ 72VDC	N	(lbf)	210	(47.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	23 / - / 63	(5.3 / - / 14)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	14	(3.14)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	3.2	(119.9)
Max. Velocity @ 72VDC	m/s	(in/s)	4.6	(189.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.7 / - / 4.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		8.3 / - / 1.1	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		3300 / - / 450	
Mechanical Data				
Slider Length	mm	(in)	700	(28)
Slider Mass	g	(lb)	1380	(3.04)

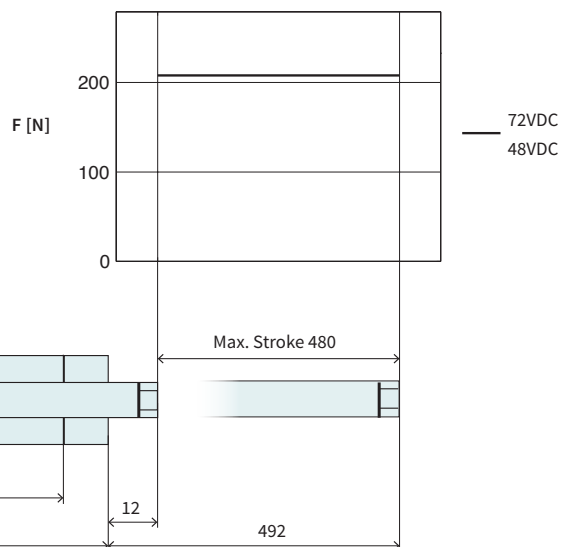


Item	Description	Item-No.
PS01-37x120F-HP-SSC-R	Stator Stainless Steel IP69K	0150-1282
PS01-37x120F-HP-SSC-R-FC	Stator stainless steel IP69K, FC	0150-1283

PL01-19x700/620	Slider 'High Clearance'	0150-1457
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P01-37x120F/480-PB24-HP-SSC

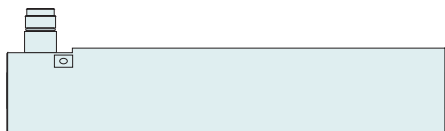
Max. Stroke: 480 mm
Peak Force: 210 N



Dimensions in mm

Technical Data P01-37x120F/480-HP-PB24-SSC

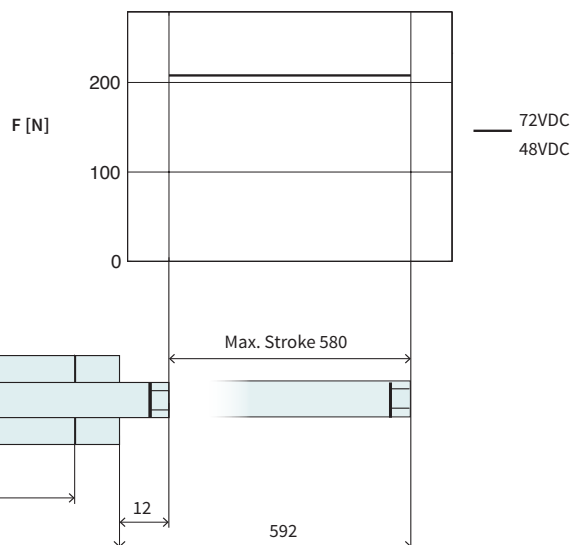
Stroke			
Max. Stroke	mm (in)	480	(18.89)
Force			
Max. Force @ 48VDC	N (lbf)	210	(47.1)
Max. Force @ 72VDC	N (lbf)	210	(47.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	23 / - / 63	(5.3 / - / 14)
Max. Border Force relative	%	100	
Force Constant	N/A _{pk} (lbf/A _{pk})	14	(3.14)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3.2	(119.9)
Max. Velocity @ 72VDC	m/s (in/s)	4.6	(189.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	14.9	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.7 / - / 4.5	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	8.3 / - / 1.1	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	3300 / - / 450	
Mechanical Data			
Slider Length	mm (in)	800	(31)
Slider Mass	g (lb)	1590	(3.5)



Item	Description	Item-No.
PS01-37x120F-HP-SSC-R	Stator Stainless Steel IP69K	0150-1282
PS01-37x120F-HP-SSC-R-FC	Stator stainless steel IP69K, FC	0150-1283
PL01-19x800/720	Slider 'High Clearance'	0150-1458

P01-37x120F/580-PB24-HP-SSC

Max. Stroke: 580 mm
Peak Force: 210 N



Dimensions in mm

Technical Data P01-37x120F/580-HP-PB24-SSC				
Stroke				
Max. Stroke	mm	(in)	580	(22.8)
Force				
Max. Force @ 48VDC	N	(lbf)	210	(47.1)
Max. Force @ 72VDC	N	(lbf)	210	(47.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	23 / - / 63	(5.3 / - / 14)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	14	(3.14)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	3.2	(119.9)
Max. Velocity @ 72VDC	m/s	(in/s)	4.6	(189.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.7 / - / 4.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		8.3 / - / 1.1	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		3300 / - / 450	
Mechanical Data				
Slider Length	mm	(in)	900	(35)
Slider Mass	g	(lb)	1590	(3.5)

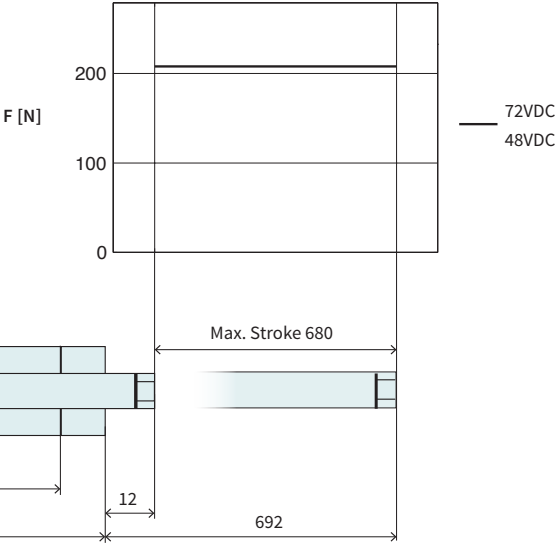


Item	Description	Item-No.
PS01-37x120F-HP-SSC-R	Stator Stainless Steel IP69K	0150-1282
PS01-37x120F-HP-SSC-R-FC	Stator stainless steel IP69K, FC	0150-1283

PL01-19x900/820	Slider 'High Clearance'	0150-1459
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P01-37x120F/680-PB24-HP-SSC

Max. Stroke: 680 mm
Peak Force: 210 N



Dimensions in mm

Technical Data P01-37x120F/680-HP-PB24-SSC				
Stroke				
Max. Stroke	mm	(in)	680	(26.8)
Force				
Max. Force @ 48VDC	N	(lbf)	210	(47.1)
Max. Force @ 72VDC	N	(lbf)	210	(47.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	23 / - / 63	(5.3 / - / 14)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	14	(3.14)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	3.2	(119.9)
Max. Velocity @ 72VDC	m/s	(in/s)	4.6	(189.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.7 / - / 4.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		8.3 / - / 1.1	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		3300 / - / 450	
Mechanical Data				
Slider Length	mm	(in)	1000	(39)
Slider Mass	g	(lb)	1800	(3.96)



Item	Description	Item-No.
PS01-37x120F-HP-SSC-R	Stator Stainless Steel IP69K	0150-1282
PS01-37x120F-HP-SSC-R-FC	Stator stainless steel IP69K, FC	0150-1283

PL01-19x1000/920	Slider 'High Clearance'	0150-1460
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Linear Guides H01-SSC

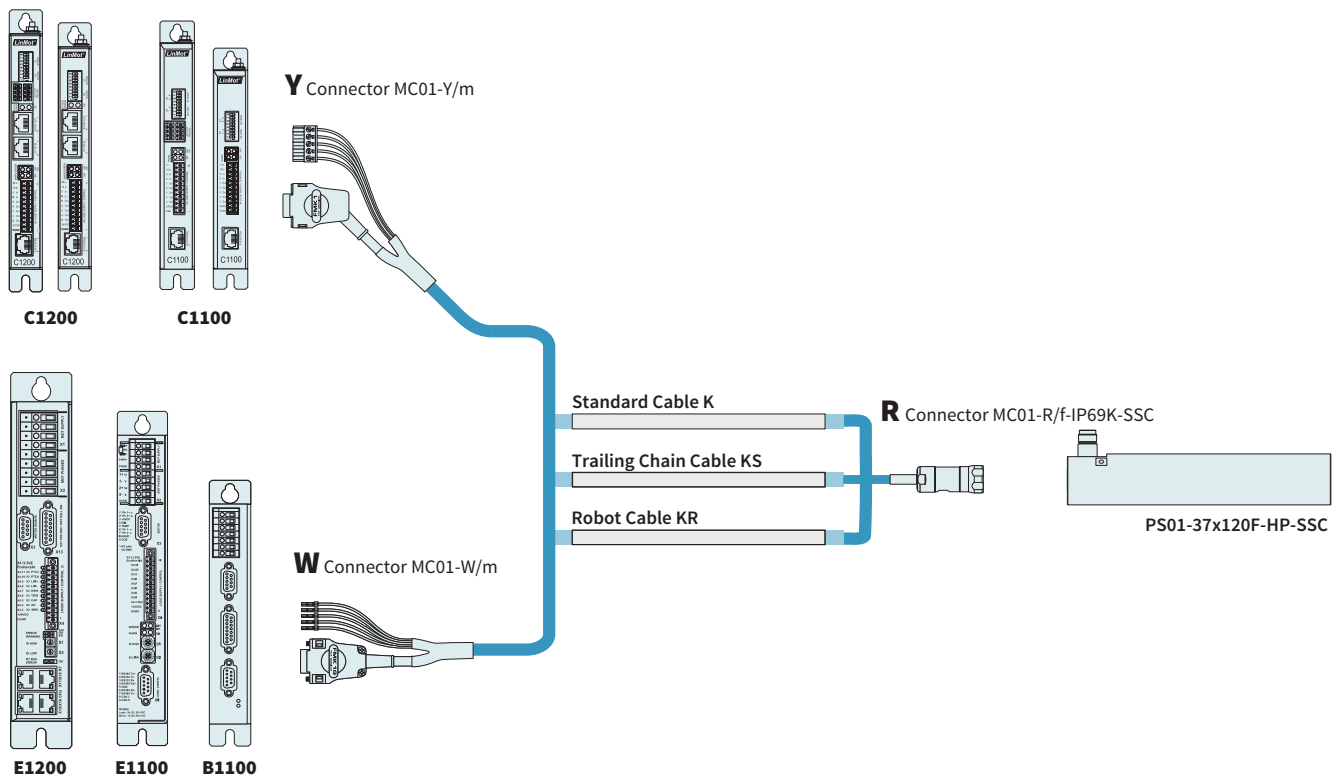


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HM01-37x120/85-SSC		Linear module SSC 37x120 with 85 mm Stroke			
→	H-Guide	H01-37x304/85-SSC	H-Guide for PS01-37x120F-HP-SSC, Stroke max.85 mm		0150-5271
	Stator	PS01-37x120F-HP-SSC-R	Stator Stainless Steel IP69K		0150-1282
		PS01-37x120F-HP-SSC-R-FC	Stator stainless steel IP69K, FC		0150-1283
→	Slider	PL01-19x395/320	Slider 'High Clearance'		0150-1452
HM01-37x120/190-SSC		Linear module SSC 37x120 with 190 mm Stroke			
→	H-Guide	H01-37x304/190-SSC	H-Guide for PS01-37x120F-HP-SSC, Stroke max.190 mm		0150-5272
	Stator	PS01-37x120F-HP-SSC-R	Stator Stainless Steel IP69K		0150-1282
		PS01-37x120F-HP-SSC-R-FC	Stator stainless steel IP69K, FC		0150-1283
→	Slider	PL01-19x500/420	Slider 'High Clearance'		0150-1455
HM01-37x120/290-SSC		Linear module SSC 37x120 with 290 mm Stroke			
→	H-Guide	H01-37x304/290-SSC	H-Guide for PS01-37x120F-HP-SSC, Stroke max.290 mm		0150-5273
	Stator	PS01-37x120F-HP-SSC-R	Stator Stainless Steel IP69K		0150-1282
		PS01-37x120F-HP-SSC-R-FC	Stator stainless steel IP69K, FC		0150-1283
→	Slider	PL01-19x600/520	Slider 'High Clearance'		0150-1456
HM01-37x120/390-SSC		Linear module SSC 37x120 with 390 mm Stroke			
→	H-Guide	H01-37x304/390-SSC	H-Guide for PS01-37x120F-HP-SSC, Stroke max.390 mm		0150-5274
	Stator	PS01-37x120F-HP-SSC-R	Stator Stainless Steel IP69K		0150-1282
		PS01-37x120F-HP-SSC-R-FC	Stator stainless steel IP69K, FC		0150-1283
→	Slider	PL01-19x700/620	Slider 'High Clearance'		0150-1457

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

Motor Cable



ORDERING INFORMATION

TRAILING CHAIN CABLE		
Item	Description	Item-No.
KS05-W/R-SSC-2	Trailing Chain Cable W/R-SSC, 2 m	0150-2683
KS05-W/R-SSC-4	Trailing Chain Cable W/R-SSC, 4 m	0150-2684
KS05-W/R-SSC-6	Trailing Chain Cable W/R-SSC, 6 m	0150-2685
KS05-W/R-SSC-8	Trailing Chain Cable W/R-SSC, 8 m	0150-2686
KS05-W/R-SSC-	Trailing Chain Cable W/R-SSC, Custom length	0150-3583
KS05-Y/R-SSC-2	Trailing Chain Cable Y/R-SSC, 2 m	0150-2687
KS05-Y/R-SSC-4	Trailing Chain Cable Y/R-SSC, 4 m	0150-2688
KS05-Y/R-SSC-6	Trailing Chain Cable Y/R-SSC, 6 m	0150-2689
KS05-Y/R-SSC-8	Trailing Chain Cable Y/R-SSC, 8 m	0150-2690
KS05-Y-Fe/R-SSC-	Trailing Chain Cable Y-Fe/R-SSC, Custom length	0150-3646
ROBOT CABLE		
Item	Description	Item-No.
KR05-W/R-SSC-	Robot Cable KR05-W/R-SSC-, Custom length	0150-3587
CONNECTOR & CABLE (INDIVIDUAL)		
Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-R/f-IP69K-SSC	Motor Connector R/f, IP69k, SSC	0150-3347
K05-04/05	Motor Cable per m	0150-1920
KS05-04/05	Trailing Chain Cable per m	0150-1938
KR05-04/05	Robot Cable per m	0150-1846

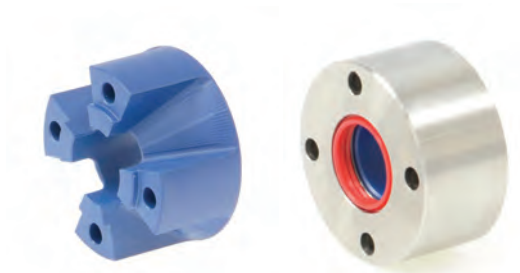
SLIDER MOUNTING



Item	Description	Item-No.
PLF01-20-SS	Fixed Bearing Set for 19/20 mm sliders, stainless steel	0150-3296
PLL01-19	Floating support for PL01-19 sliders, Material 1.4305 / AISI 303	0150-3335

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KITS



Item	Description	Item-No.
PB02-37x24-P-WD	Bearing for PS01-37x...-SSC (Plastic)	0150-3299
PB01-37x24-P-SSC	Bearing for PS01-37x...-SSC, stainless steel	0150-3290

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D-Encoder	Special cable KS025-D15/D-Encoder-	0150-3166
KS025-D/D15-Encoder	Special cable KS025-D15/D-Encoder-	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straigth	0150-3616
KSS01-12-D15/ABS-ENC	For MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P01-48x240F-SSC



- ✓ Stainless steel housing EN 1.4404 / AISI / SAE 316L
- ✓ Hygienic design
- ✓ Welded connections, no gaskets
- ✓ Completely encapsulated (IP69K)
- ✓ Protection class IP69K
- ✓ Optional integrated water cooling
- ✓ For use in the food or in the pharmaceutical sector

LINEAR MOTORS P01-48x240F-SSC

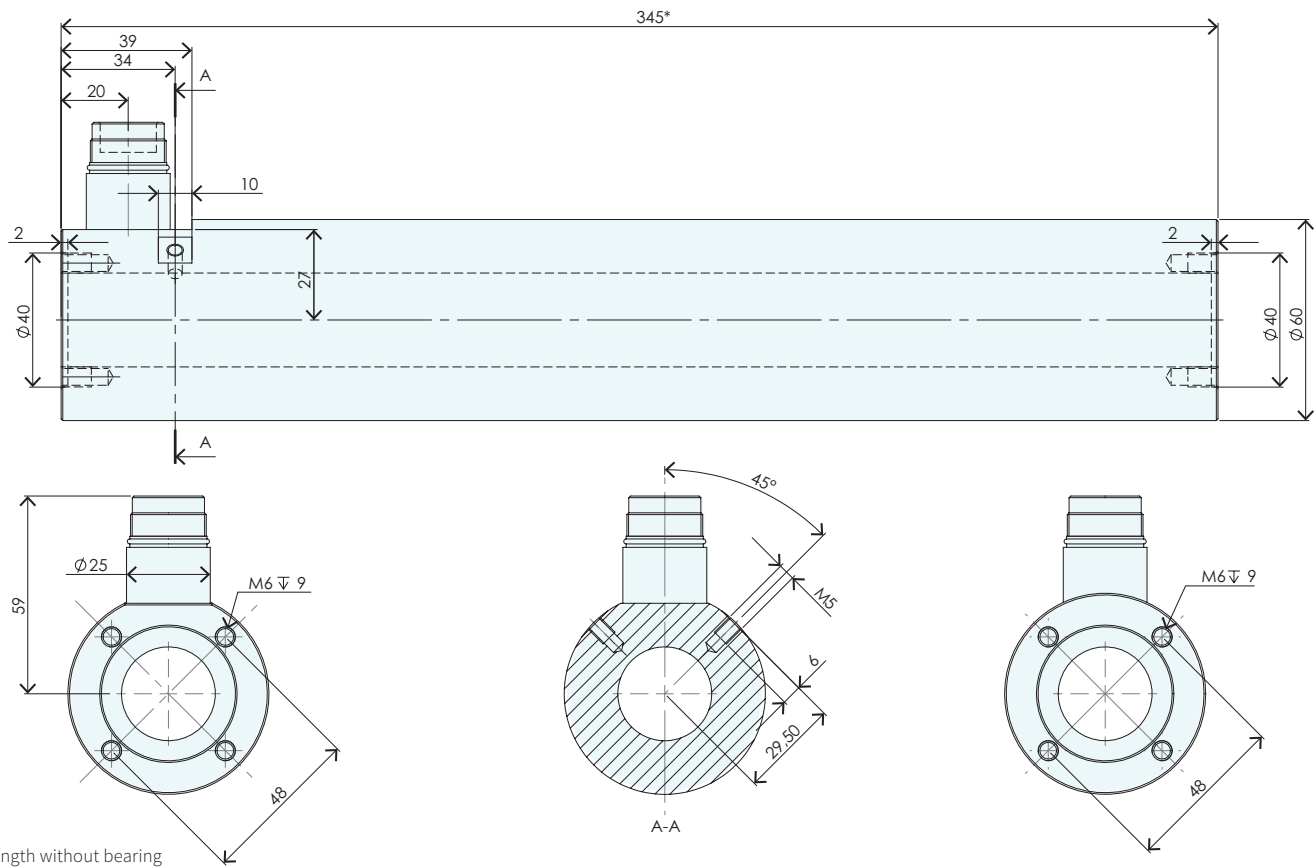
Technical Data	641
Motor Specifications	
P01-48x240F/80-PB25-SSC	644
P01-48x240F/200-PB25-SSC	645
P01-48x240F/290-PB25-SSC	646
P01-48x240F/380-PB25-SSC	647
P01-48x240F/500-PB25-SSC	648
P01-48x240F/590-PB25-SSC	649
P01-48x240F/800-PB25-SSC	650
P01-48x240F/980-PB25-SSC	651
Linear Guides	652
Accessories	653



MOTOR FAMILY P01-48x240F-SSC

Technical Data				
Stroke				
Max. Stroke	mm	(in)	980	(38.6)
Force				
Max. Force @ 48VDC	N	(lbf)	496	(111)
Max. Force @ 72VDC	N	(lbf)	496	(111)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / - / 240	(19 / - / 53)
Max. Border Force relative	%		≤ 100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	19.1	(4.29)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(90.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.4	(139.9)
Position Detection				
Position Resolution	mm	(in)	0.007	(0.0003)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.4 / - / 12	
Terminal Resistance 25 °C / 120 °C	Ohm		0.97 / 1.3	
Terminal Inductivity	mH		1.1	
Magnetic Period	mm	(in)	60	(2.35)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	*K/W		2 / - / 0.26	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / - / 260	
Mechanical Data				
Stator Diameter	mm	(in)	60	(2.4)
Stator Length [Connector type / Cable type]	mm	(in)	395	(16)
Stator Mass	g	(lb)	4270	(9.4)
Slider Diameter	mm	(in)	27	(1.1)
Slider Length	mm	(in)	350 - 1400	(14 - 55)
Slider Mass	g	(lb)	1360 - 5910	(3 - 13)
IP Code			IP 69k	

STATOR

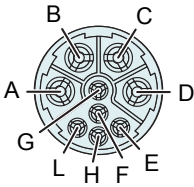


Item	Description	Item-No.
PS01-48x240F-SSC-C	Stator Stainless Steel IP69K	0150-1267
PS01-48x240F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1268

CONNECTOR

Motor Connector Wiring	PS01-48x240F-SSC-C PS01-48x240F-SSC-C-FC	Wire Color Motor Cable
	C-Connector	
Ph 1+	A	red
Ph 1-	B	pink
Ph 2+	C	blue
Ph 2-	D	grey
+5VDC	E	white
GND	F	inner Shield
Sinus	G	yellow
Cosinus	H	green
Temp.	L	black
Shield	Case	outer Shield

C-Connector

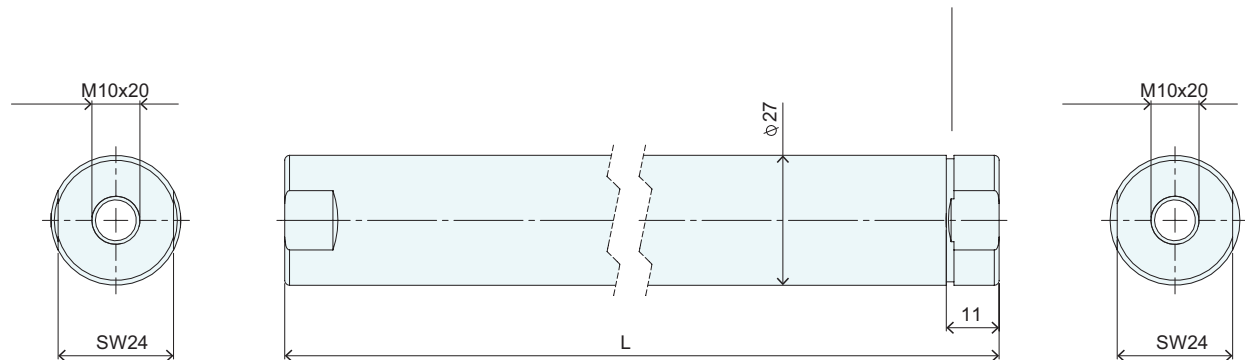


View: Motor connector, plug side

SLIDER

Slider High Clearance

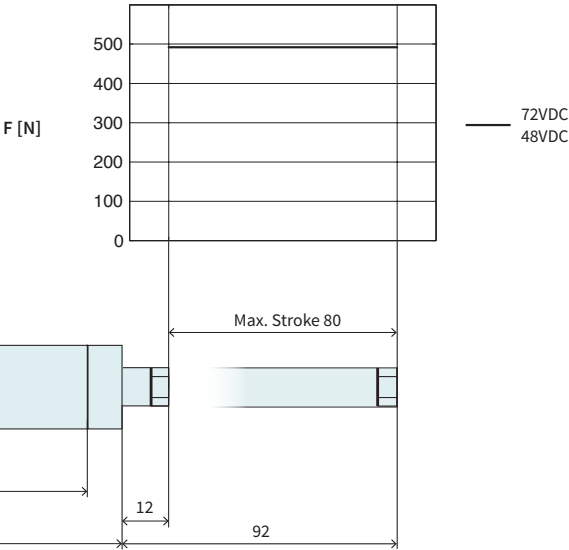
Number of grooves determines the slider type (see chapter 2 / slider) and marks the front end.



Slider High Clearance			
Item	Description	Max. Stroke [mm]	Item-No.
PL01-27x500/420	Slider 'High Clearance'	80	0150-1469
PL01-27x620/540	Slider 'High Clearance'	200	0150-1470
PL01-27x710/630	Slider 'High Clearance'	290	0150-1471
PL01-27x800/720	Slider 'High Clearance'	380	0150-1472
PL01-27x920/840	Slider 'High Clearance'	500	0150-1447
PL01-27x1010/930	Slider 'High Clearance'	590	0150-1473
PL01-27x1220/1140	Slider 'High Clearance'	800	0150-1587
PL01-27x1400/1320	Slider 'High Clearance'	980	0150-1588

P01-48x240F/80-PB25-SSC

Max. Stroke: 80 mm
Peak Force: 496 N



Dimensions in mm

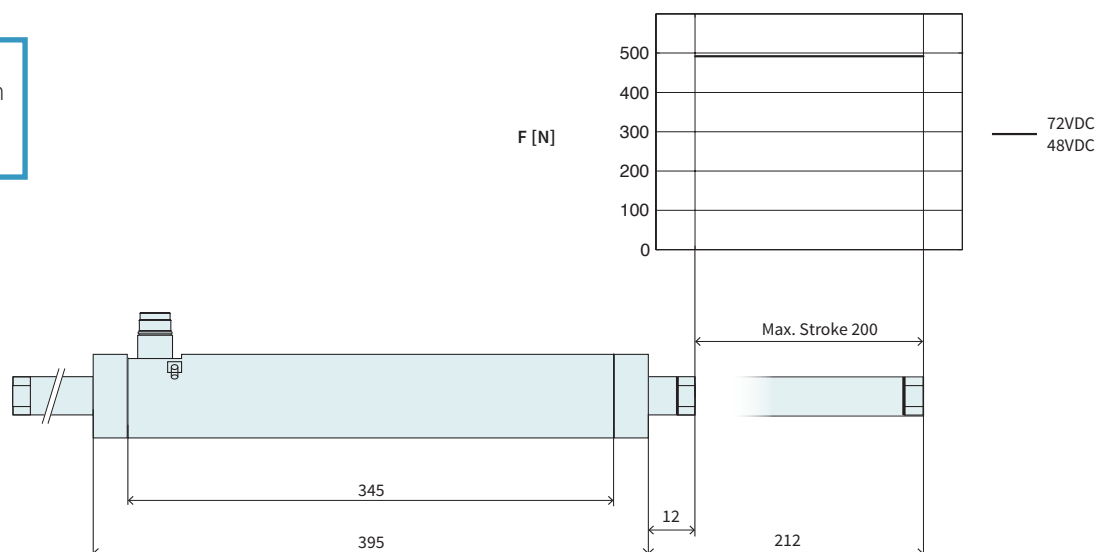
Technical Data P01-48x240F/80-PB25-SSC				
Stroke				
Max. Stroke	mm	(in)	80	(3.14)
Force				
Max. Force @ 48VDC	N	(lbf)	496	(111)
Max. Force @ 72VDC	N	(lbf)	496	(111)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / - / 240	(19 / - / 53)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	19.1	(4.29)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(90.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.4	(139.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 1.05	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.4 / - / 12	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2 / - / 0.26	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / - / 260	
Mechanical Data				
Slider Length	mm	(in)	500	(20)
Slider Mass	g	(lb)	2010	(4.42)



Item	Description	Item-No.
PS01-48x240F-SSC-C	Stator Stainless Steel IP69K	0150-1267
PS01-48x240F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1268
PL01-27x500/420	Slider 'High Clearance'	0150-1469

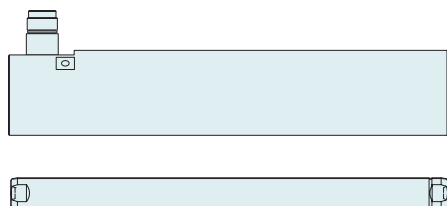
P01-48x240F/200-PB25-SSC

Max. Stroke: 200 mm
Peak Force: 496 N



Dimensions in mm

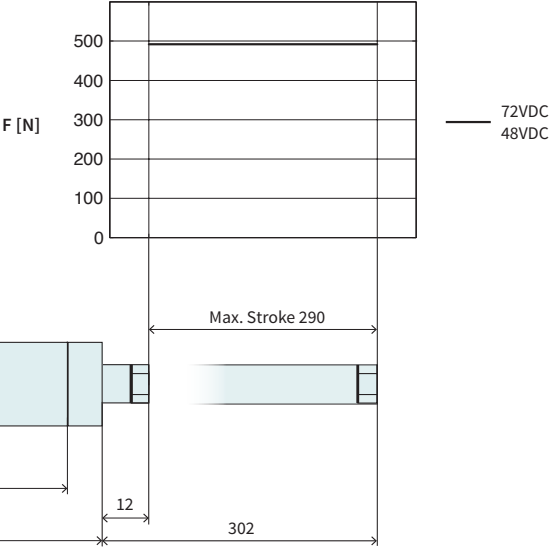
Technical Data P01-48x240F/200-PB25-SSC				
Stroke				
Max. Stroke	mm	(in)	200	(7.86)
Force				
Max. Force @ 48VDC	N	(lbf)	496	(111)
Max. Force @ 72VDC	N	(lbf)	496	(111)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / - / 240	(19 / - / 53)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	19.1	(4.29)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(90.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.4	(139.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.5	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.4 / - / 12	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2 / - / 0.26	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / - / 260	
Mechanical Data				
Slider Length	mm	(in)	620	(24)
Slider Mass	g	(lb)	2530	(5.57)



Item	Description	Item-No.
PS01-48x240F-SSC-C	Stator Stainless Steel IP69K	0150-1267
PS01-48x240F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1268
PL01-27x620/540	Slider 'High Clearance'	0150-1470

P01-48x240F/290-PB25-SSC

Max. Stroke: 290 mm
Peak Force: 496 N



Dimensions in mm

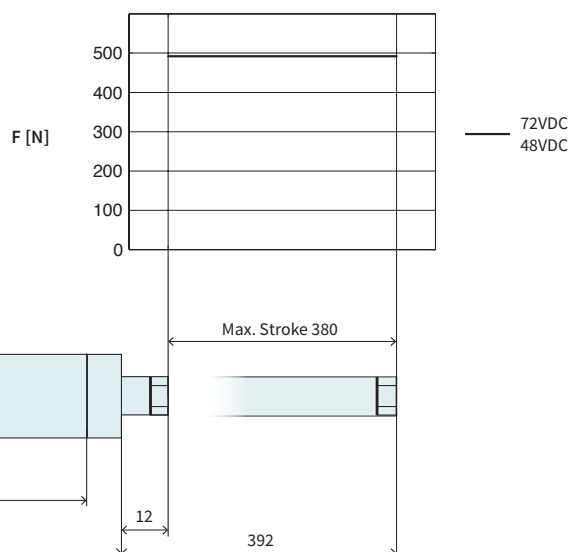
Technical Data P01-48x240F/290-PB25-SSC				
Stroke				
Max. Stroke	mm	(in)	290	(11.4)
Force				
Max. Force @ 48VDC	N	(lbf)	496	(111)
Max. Force @ 72VDC	N	(lbf)	496	(111)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / - / 240	(19 / - / 53)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	19.1	(4.29)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(90.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.4	(139.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.35	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.4 / - / 12	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2 / - / 0.26	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / - / 260	
Mechanical Data				
Slider Length	mm	(in)	710	(28)
Slider Mass	g	(lb)	2920	(6.42)



Item	Description	Item-No.
PS01-48x240F-SSC-C	Stator Stainless Steel IP69K	0150-1267
PS01-48x240F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1268
PL01-27x710/630	Slider 'High Clearance'	0150-1471

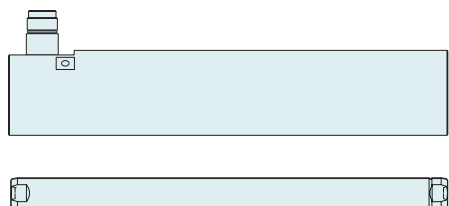
P01-48x240F/380-PB25-SSC

Max. Stroke: 380 mm
Peak Force: 496 N



Technical Data P01-48x240F/380-PB25-SSC

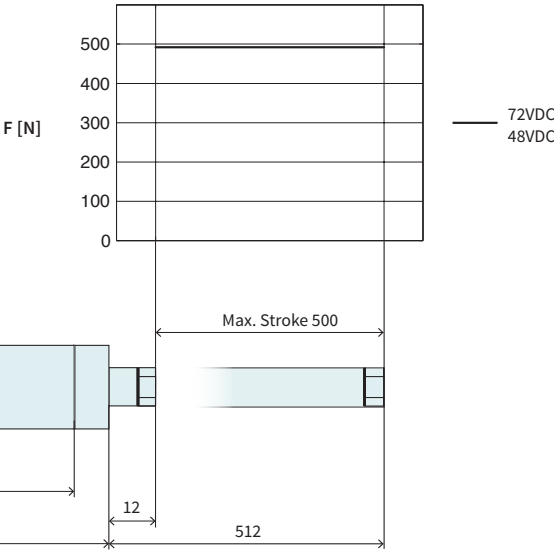
Stroke				
Max. Stroke	mm	(in)	380	(14.99)
Force				
Max. Force @ 48VDC	N	(lbf)	496	(111)
Max. Force @ 72VDC	N	(lbf)	496	(111)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / - / 240	(19 / - / 53)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	19.1	(4.29)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(90.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.4	(139.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.4 / - / 12	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2 / - / 0.26	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / - / 260	
Mechanical Data				
Slider Length	mm	(in)	800	(31)
Slider Mass	g	(lb)	3310	(7.28)



Item	Description	Item-No.
PS01-48x240F-SSC-C	Stator Stainless Steel IP69K	0150-1267
PS01-48x240F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1268
PL01-27x800/720	Slider 'High Clearance'	0150-1472

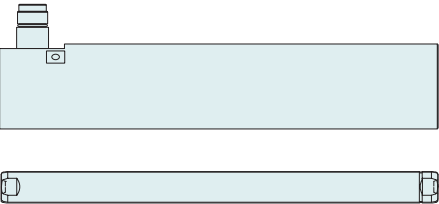
P01-48x240F/500-PB25-SSC

Max. Stroke: 500 mm
Peak Force: 496 N



Dimensions in mm

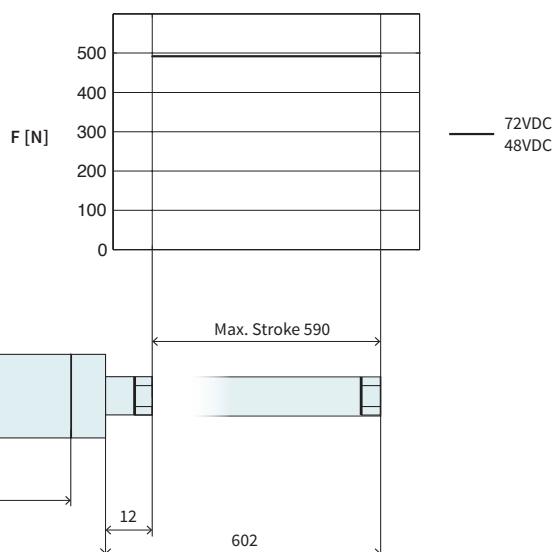
Technical Data P01-48x240F/500-PB25-SSC				
Stroke				
Max. Stroke	mm	(in)	500	(19.69)
Force				
Max. Force @ 48VDC	N	(lbf)	496	(111)
Max. Force @ 72VDC	N	(lbf)	496	(111)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / - / 240	(19 / - / 53)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	19.1	(4.29)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(90.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.4	(139.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.4 / - / 12	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2 / - / 0.26	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / - / 260	
Mechanical Data				
Slider Length	mm	(in)	920	(36)
Slider Mass	g	(lb)	3830	(8.43)



Item	Description	Item-No.
PS01-48x240F-SSC-C	Stator Stainless Steel IP69K	0150-1267
PS01-48x240F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1268
PL01-27x920/840	Slider 'High Clearance'	0150-1447

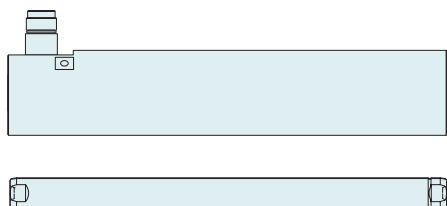
P01-48x240F/590-PB25-SSC

Max. Stroke: 590 mm
Peak Force: 496 N



Technical Data P01-48x240F/590-PB25-SSC

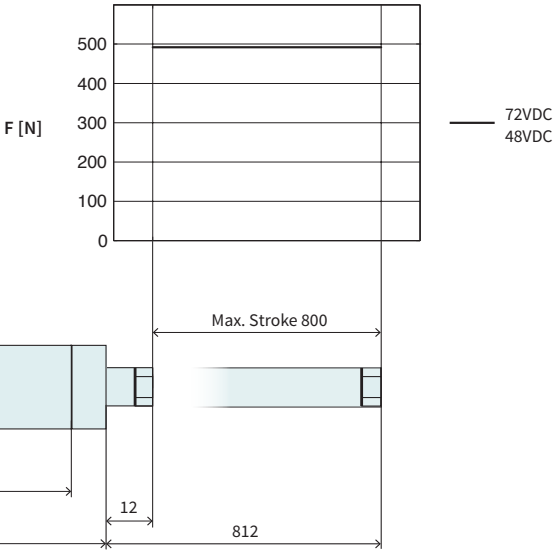
Stroke				
Max. Stroke	mm	(in)	590	(23.19)
Force				
Max. Force @ 48VDC	N	(lbf)	496	(111)
Max. Force @ 72VDC	N	(lbf)	496	(111)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / - / 240	(19 / - / 53)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	19.1	(4.29)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(90.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.4	(139.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.4 / - / 12	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2 / - / 0.26	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / - / 260	
Mechanical Data				
Slider Length	mm	(in)	1010	(40)
Slider Mass	g	(lb)	4220	(9.28)



Item	Description	Item-No.
PS01-48x240F-SSC-C	Stator Stainless Steel IP69K	0150-1267
PS01-48x240F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1268
PL01-27x1010/930	Slider 'High Clearance'	0150-1473

P01-48x240F/800-PB25-SSC

Max. Stroke: 800 mm
Peak Force: 496 N



Dimensions in mm

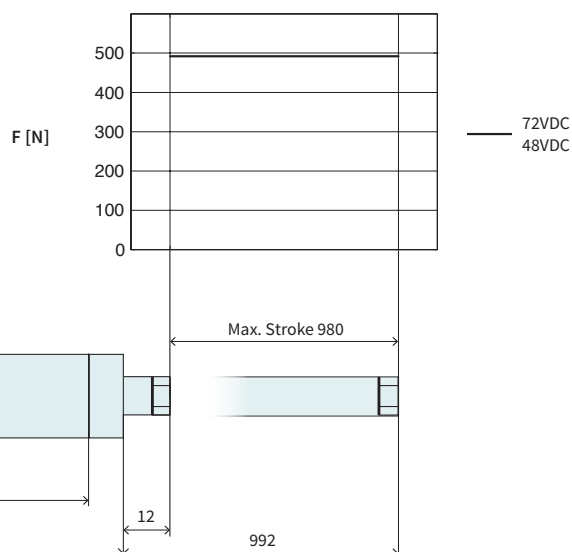
Technical Data P01-48x240F/800-PB25-SSC				
Stroke				
Max. Stroke	mm	(in)	800	(31.49)
Force				
Max. Force @ 48VDC	N	(lbf)	496	(111)
Max. Force @ 72VDC	N	(lbf)	496	(111)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / - / 240	(19 / - / 53)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	19.1	(4.29)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(90.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.4	(139.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.4 / - / 12	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2 / - / 0.26	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / - / 260	
Mechanical Data				
Slider Length	mm	(in)	1220	(48)
Slider Mass	g	(lb)	5130	(11.29)



Item	Description	Item-No.
PS01-48x240F-SSC-C	Stator Stainless Steel IP69K	0150-1267
PS01-48x240F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1268
PL01-27x1220/1140	Slider 'High Clearance'	0150-1587

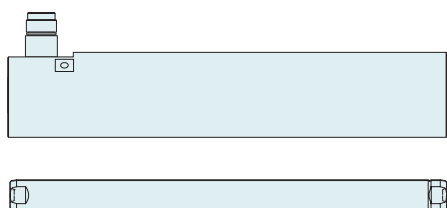
P01-48x240F/980-PB25-SSC

Max. Stroke: 980 mm
Peak Force: 496 N



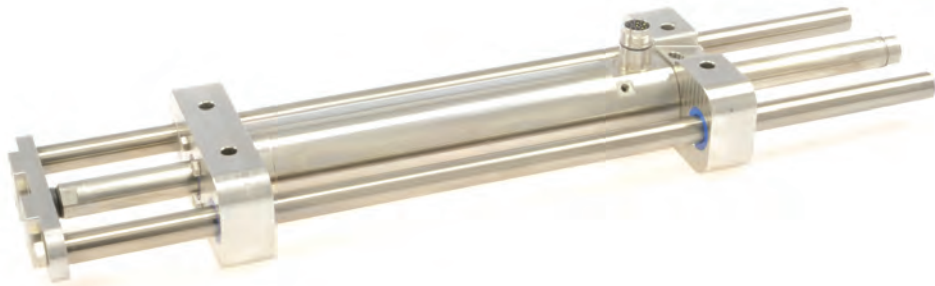
Technical Data P01-48x240F/980-PB25-SSC

Stroke				
Max. Stroke	mm	(in)	980	(38.6)
Force				
Max. Force @ 48VDC	N	(lbf)	496	(111)
Max. Force @ 72VDC	N	(lbf)	496	(111)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / - / 240	(19 / - / 53)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	19.1	(4.29)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(90.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.4	(139.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.4 / - / 12	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2 / - / 0.26	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / - / 260	
Mechanical Data				
Slider Length	mm	(in)	1400	(55)
Slider Mass	g	(lb)	5910	(13)



Item	Description	Item-No.
PS01-48x240F-SSC-C	Stator Stainless Steel IP69K	0150-1267
PS01-48x240F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1268
PL01-27x1400/1320	Slider 'High Clearance'	0150-1588

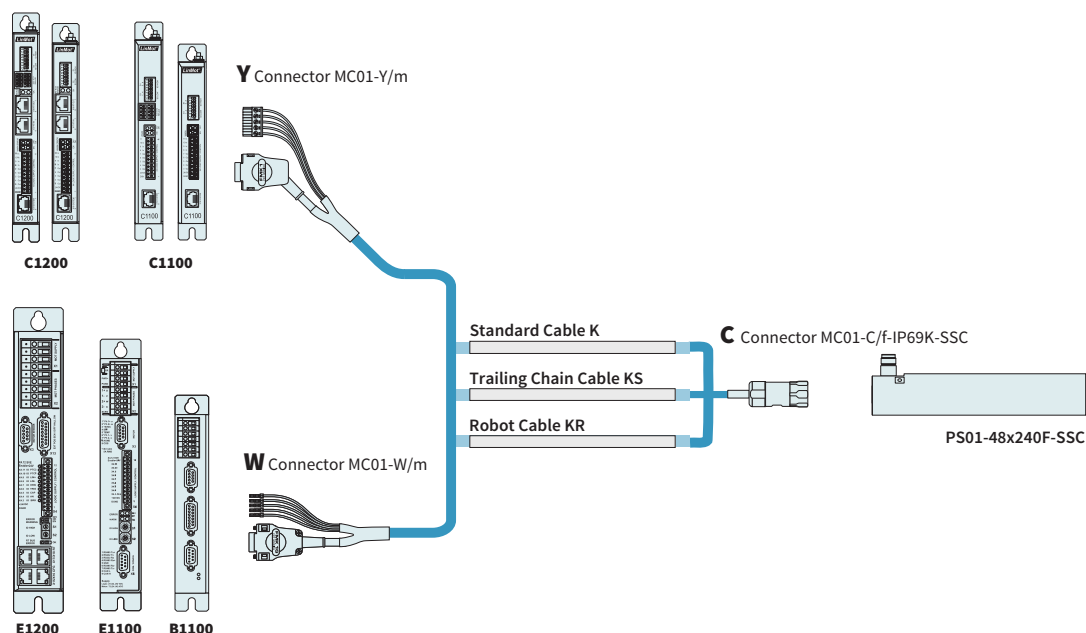
Linear Guides H01-SSC



HM01-48x240/210-SSC	Linear module SSC 48x240 with 210 mm Stroke			
→	H-Guide	H01-48x401/210-SSC	H-Guide for PS01-48x240F-HP-SSC, Stroke max.210 mm	0150-5280
→	Stator	PS01-48x240F-SSC-C	Stator Stainless Steel IP69K	0150-1267
		PS01-48x240F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1268
→	Slider	PL01-27x620/540	Slider 'High Clearance'	0150-1470
HM01-48x240/300-SSC	Linear module SSC 48x240 with 300 mm Stroke			
→	H-Guide	H01-48x401/300-SSC	H-Guide for PS01-48x240F-HP-SSC, Stroke max.300 mm	0150-5281
→	Stator	PS01-48x240F-SSC-C	Stator Stainless Steel IP69K	0150-1267
		PS01-48x240F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1268
→	Slider	PL01-27x710/630	Slider 'High Clearance'	0150-1471
HM01-48x240/390-SSC	Linear module SSC 48x240 with 390 mm Stroke			
→	H-Guide	H01-48x401/390-SSC	H-Guide for PS01-48x240F-HP-SSC, Stroke max.390 mm	0150-5282
→	Stator	PS01-48x240F-SSC-C	Stator Stainless Steel IP69K	0150-1267
		PS01-48x240F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1268
→	Slider	PL01-27x800/720	Slider 'High Clearance'	0150-1472
HM01-48x240/510-SSC	Linear module SSC 48x240 with 510 mm Stroke			
→	H-Guide	H01-48x401/510-SSC	H-Guide for PS01-48x240F-HP-SSC, Stroke max.510 mm	0150-5283
→	Stator	PS01-48x240F-SSC-C	Stator Stainless Steel IP69K	0150-1267
		PS01-48x240F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1268
→	Slider	PL01-27x920/840	Slider 'High Clearance'	0150-1447

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

Motor Cable



ORDERING INFORMATION

STANDARD CABLE		
Item	Description	Item-No.
K15-W/C-SSC	Motor Cable W/C-SSC, Custom length	0150-3539
K15-Y-Fe/C-SSC-	Motor Cable Y-Fe/C-SSC, Custom length	0150-3630

TRAILING CHAIN CABLE		
Item	Description	Item-No.
KS10-W/C-SSC-2	Trailing Chain Cable W/C-SSC, 2 m	0150-2675
KS10-W/C-SSC-4	Trailing Chain Cable W/C-SSC, 4 m	0150-2676
KS10-W/C-SSC-6	Trailing Chain Cable W/C-SSC, 6 m	0150-2677
KS10-W/C-SSC-8	Trailing Chain Cable W/C-SSC, 8 m	0150-2678
KS10-W/C-SSC-	Trailing Chain Cable W/C-SSC, Custom length	0150-3358

KS10-Y/C-SSC-2	Trailing Chain Cable Y/C-SSC, 2 m	0150-2679
KS10-Y/C-SSC-4	Trailing Chain Cable Y/C-SSC, 4 m	0150-2680
KS10-Y/C-SSC-6	Trailing Chain Cable Y/C-SSC, 6 m	0150-2681
KS10-Y/C-SSC-8	Trailing Chain Cable Y/C-SSC, 8 m	0150-2682
KS10-Y-Fe/C-SSC-	Trailing Chain Cable Y/C-SSC, Custom length	0150-3574

ROBOT CABLE		
Item	Description	Item-No.
KR10-W/C-SSC-	Robot Cable KR05-W/C-SSC-, Custom length	0150-3536

CONNECTOR & CABLE (INDIVIDUAL)		
Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-C/f-IP69K-SSC	Motor Connector C/f, IP69K, SSC	0150-3306
K15-04/05	Motor Cable per m	0150-1978
KS10-04/05	Trailing Chain Cable per m	0150-1977
KR10-04/05	Robot Cable per m	0150-1830

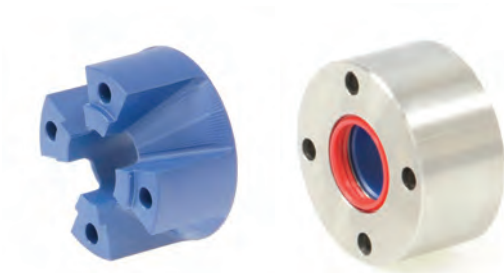
SLIDER MOUNTING



Item	Description	Item-No.
PLF01-28-SS	Fixed Bearing Set for 27 mm and 28 mm Slider, Stainless steel	0150-3297
PLL01-27	Floating support for PL01-27 sliders	0150-3294

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KITS



Item	Description	Item-No.
PB02-48x25-P-WD	Bearing for PS01-48x...-SSC (Plastic)	0150-3271
PB01-48x25-P-SSC	Bearing for PS01-48x...-SSC, stainless steel	0150-3281

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D-Encoder	Special cable KS025-D/D-Encoder- (Length in m)	0150-3166
KS025-D/D15-Encoder	Special cable KS025-D15/D-Encoder- (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



5

Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	For MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

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LINEAR MOTORS P01-48x360F-SSC



- ✓ Stainless steel housing EN 1.4404 / AISI / SAE 316L
- ✓ Hygienic design
- ✓ Welded connections, no gaskets
- ✓ Completely encapsulated
- ✓ Protection class IP69K
- ✓ Optional integrated water cooling
- ✓ For use in the food or in the pharmaceutical sector

LINEAR MOTORS P01-48x360F-SSC

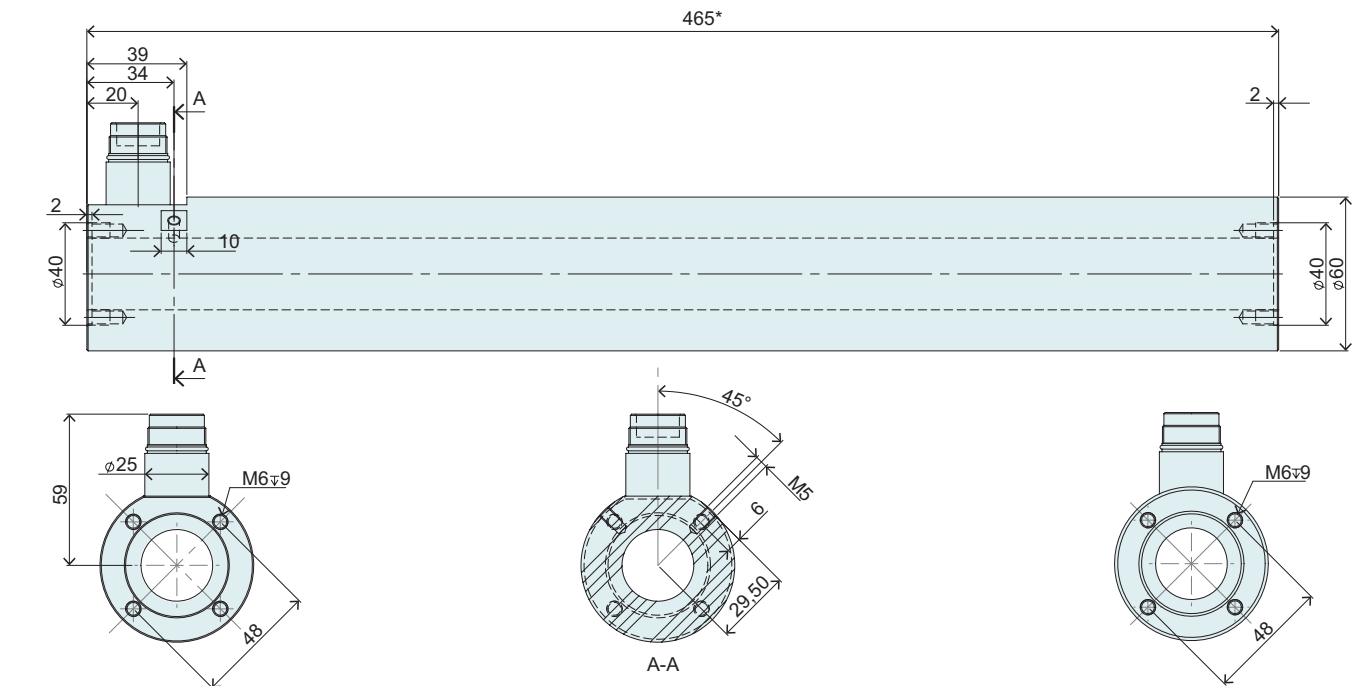
Technical Data	659
Motor Specifications	
P01-48x360F/80-PB25-SSC	662
P01-48x360F/170-PB25-SSC	663
P01-48x360F/260-PB25-SSC	664
P01-48x360F/380-PB25-SSC	665
P01-48x360F/470-PB25-SSC	666
P01-48x360F/680-PB25-SSC	667
P01-48x360F/860-PB25-SSC	668
Accessories	669



MOTOR FAMILY P01-48x360F-SSC

Technical Data				
Stroke				
Max. Stroke	mm	(in)	860	(33.9)
Force				
Max. Force @ 48VDC	N	(lbf)	721	(162)
Max. Force @ 72VDC	N	(lbf)	721	(162)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / - / 350	(29 / - / 80)
Max. Border Force relative	%		≤ 100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	27.7	(6.24)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.6	(62.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.3	(93.9)
Position Detection				
Position Resolution	mm	(in)	0.007	(0.0003)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.6 / - / 13	
Terminal Resistance 25 °C / 120 °C	Ohm		1.4 / 1.9	
Terminal Inductivity	mH		1.6	
Magnetic Period	mm	(in)	60	(2.35)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / - / 0.17	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1900 / - / 240	
Mechanical Data				
Stator Diameter	mm	(in)	60	(2.4)
Stator Length [Connector type / Cable type]	mm	(in)	515	(20)
Stator Mass	g	(lb)	5560	(12.23)
Slider Diameter	mm	(in)	27	(1.1)
Slider Length	mm	(in)	500 - 1400	(20 - 55)
Slider Mass	g	(lb)	2010 - 5910	(4.42 - 13)
IP Code			IP 69k	

STATOR



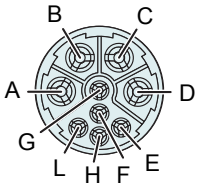
* Length without bearing

Item	Description	Item-No.
PS01-48x360F-SSC-C	Stator Stainless Steel IP69K	0150-1270
PS01-48x360F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1271

CONNECTOR

Motor Connector Wiring	PS01-48x360F-SSC-C PS01-48x360F-SSC-C-FC	Wire Color Motor Cable
	C-Connector	
Ph 1+	A	red
Ph 1-	B	pink
Ph 2+	C	blue
Ph 2-	D	grey
+5VDC	E	white
GND	F	inner Shield
Sinus	G	yellow
Cosinus	H	green
Temp.	L	black
Shield	Case	outer Shield

C-Connector

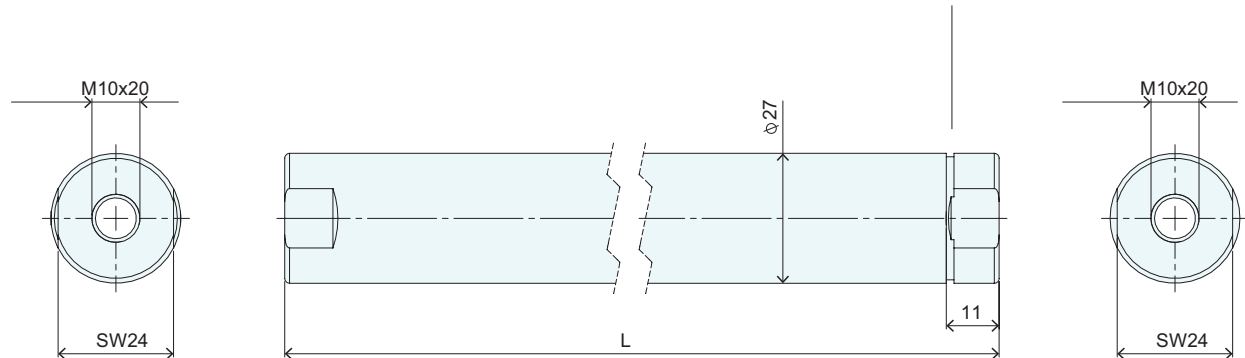


View: Motor connector, plug side

SLIDER

Slider High Clearance

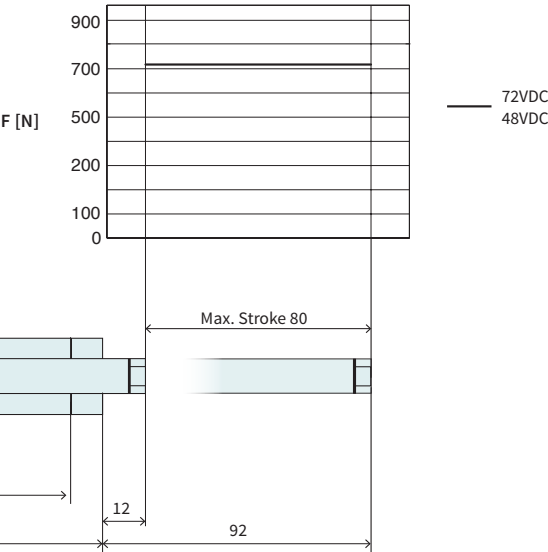
Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.



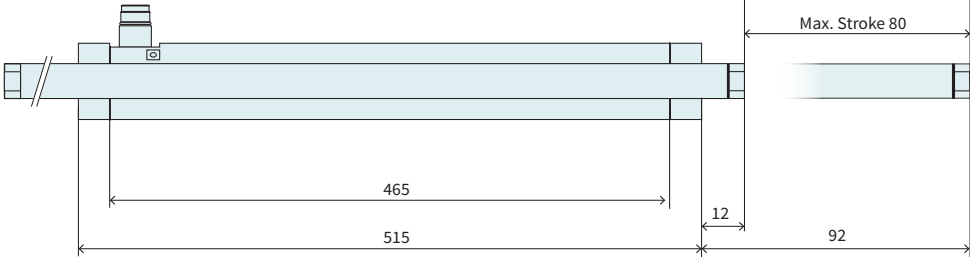
Slider High Clearance			
Item	Description	Max. Stroke [mm]	Item-No.
PL01-27x620/540	Slider 'High Clearance'	80	0150-1470
PL01-27x710/630	Slider 'High Clearance'	170	0150-1471
PL01-27x800/720	Slider 'High Clearance'	260	0150-1472
PL01-27x920/840	Slider 'High Clearance'	380	0150-1447
PL01-27x1010/930	Slider 'High Clearance'	470	0150-1473
PL01-27x1220/1140	Slider 'High Clearance'	680	0150-1587
PL01-27x1400/1320	Slider 'High Clearance'	860	0150-1588

P01-48x360F/80-PB25-SSC

Max. Stroke: 80 mm
Peak Force: 721 N



Dimensions in mm



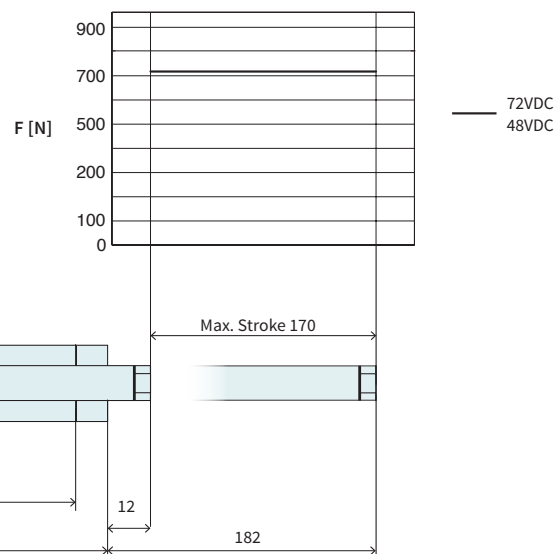
Technical Data P01-48x360F/80-PB25-SSC				
Stroke				
Max. Stroke	mm	(in)	80	(3.14)
Force				
Max. Force @ 48VDC	N	(lbf)	721	(162)
Max. Force @ 72VDC	N	(lbf)	721	(162)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / - / 350	(29 / - / 80)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	27.7	(6.24)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.6	(62.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.3	(93.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 1.05	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.6 / - / 13	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / - / 0.17	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1900 / - / 240	
Mechanical Data				
Slider Length	mm	(in)	620	(24)
Slider Mass	g	(lb)	2530	(5.57)



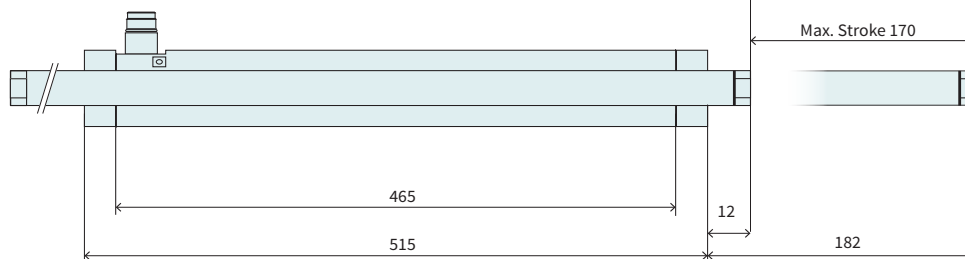
Item	Description	Item-No.
PS01-48x360F-SSC-C	Stator Stainless Steel IP69K	0150-1270
PS01-48x360F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1271
PL01-27x620/540	Slider 'High Clearance'	0150-1470

P01-48x360F/170-PB25-SSC

Max. Stroke: 170 mm
Peak Force: 721 N

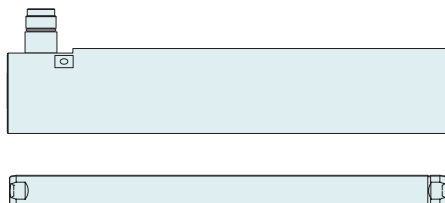


Dimensions in mm



Technical Data P01-48x360F/170-PB25-SSC

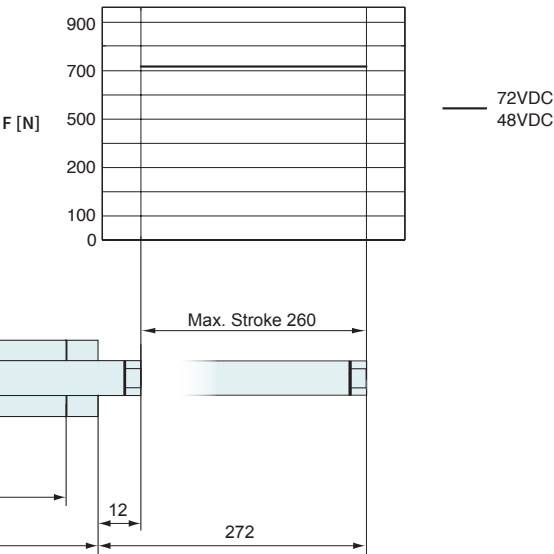
Stroke				
Max. Stroke	mm	(in)	170	(6.69)
Force				
Max. Force @ 48VDC	N	(lbf)	721	(162)
Max. Force @ 72VDC	N	(lbf)	721	(162)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / - / 350	(29 / - / 80)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	27.7	(6.24)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.6	(62.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.3	(93.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.55	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.6 / - / 13	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / - / 0.17	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1900 / - / 240	
Mechanical Data				
Slider Length	mm	(in)	710	(28)
Slider Mass	g	(lb)	2920	(6.42)



Item	Description	Item-No.
PS01-48x360F-SSC-C	Stator Stainless Steel IP69K	0150-1270
PS01-48x360F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1271
PL01-27x710/630	Slider 'High Clearance'	0150-1471

P01-48x360F/260-PB25-SSC

Max. Stroke: 260 mm
Peak Force: 721 N



Technical Data P01-48x360F/260-PB25-SSC

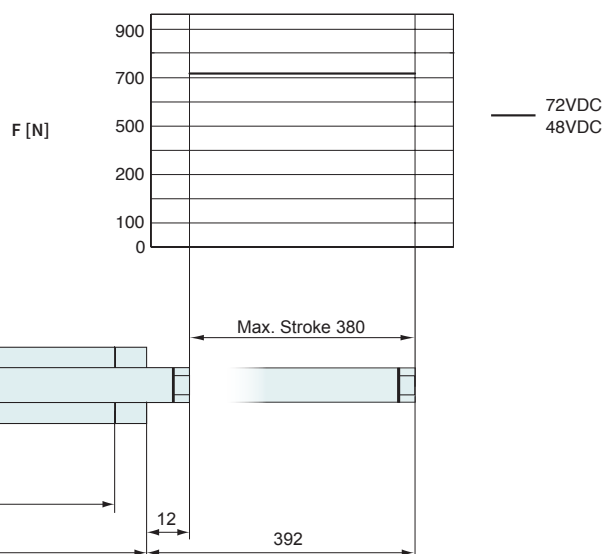
Stroke				
Max. Stroke	mm	(in)	260	(10.19)
Force				
Max. Force @ 48VDC	N	(lbf)	721	(162)
Max. Force @ 72VDC	N	(lbf)	721	(162)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / - / 350	(29 / - / 80)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	27.7	(6.24)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.6	(62.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.3	(93.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.4	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.6 / - / 13	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / - / 0.17	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1900 / - / 240	
Mechanical Data				
Slider Length	mm	(in)	800	(31)
Slider Mass	g	(lb)	3310	(7.28)



Item	Description	Item-No.
PS01-48x360F-SSC-C	Stator Stainless Steel IP69K	0150-1270
PS01-48x360F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1271
PL01-27x800/720	Slider 'High Clearance'	0150-1472

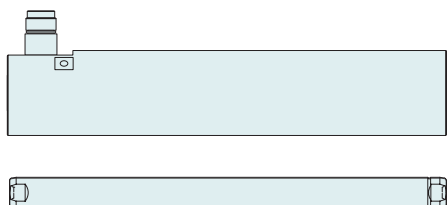
P01-48x360F/380-PB25-SSC

Max. Stroke: 380 mm
Peak Force: 721 N



Technical Data P01-48x360F/380-PB25-SSC

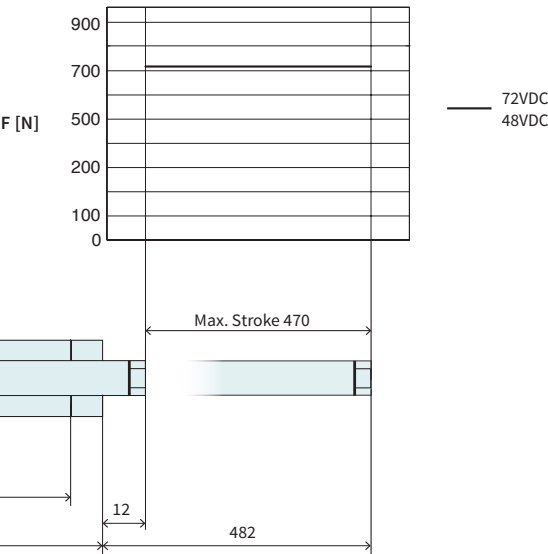
Stroke				
Max. Stroke	mm	(in)	380	(14.99)
Force				
Max. Force @ 48VDC	N	(lbf)	721	(162)
Max. Force @ 72VDC	N	(lbf)	721	(162)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / - / 350	(29 / - / 80)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	27.7	(6.24)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.6	(62.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.3	(93.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.6 / - / 13	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / - / 0.17	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1900 / - / 240	
Mechanical Data				
Slider Length	mm	(in)	920	(36)
Slider Mass	g	(lb)	3830	(8.43)



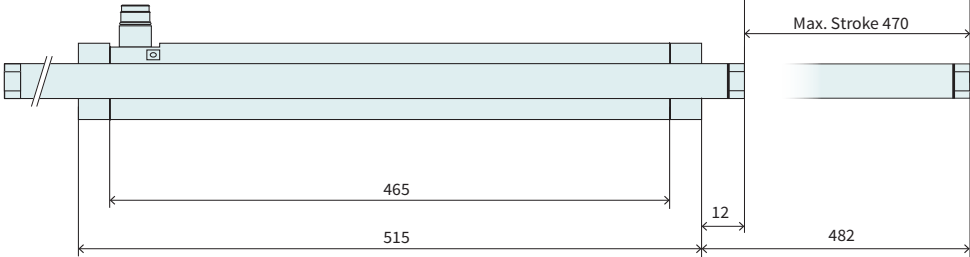
Item	Description	Item-No.
PS01-48x360F-SSC-C	Stator Stainless Steel IP69K	0150-1270
PS01-48x360F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1271
PL01-27x920/840	Slider 'High Clearance'	0150-1447

P01-48x360F/470-PB25-SSC

Max. Stroke: 470 mm
Peak Force: 721 N



Dimensions in mm



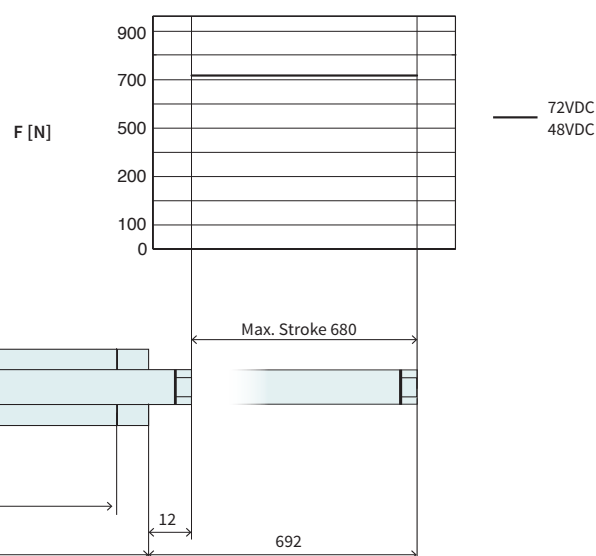
Technische Daten P01-48x360F/470-PB25-SSC				
Stroke				
Max. Stroke	mm	(in)	470	(18.49)
Force				
Max. Force @ 48VDC	N	(lbf)	721	(162)
Max. Force @ 72VDC	N	(lbf)	721	(162)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / - / 350	(29 / - / 80)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	27.7	(6.24)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.6	(62.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.3	(93.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.6 / - / 13	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / - / 0.17	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1900 / - / 240	
Mechanical Data				
Slider Length	mm	(in)	1010	(40)
Slider Mass	g	(lb)	4220	(9.28)



Item	Description	Item-No.
PS01-48x360F-SSC-C	Stator Stainless Steel IP69K	0150-1270
PS01-48x360F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1271
PL01-27x1010/930	Slider 'High Clearance'	0150-1473

P01-48x360F/680-PB25-SSC

Max. Stroke: 680 mm
Peak Force: 721 N



Dimensions in mm

Technical Data P01-48x360F/680-PB25-SSC

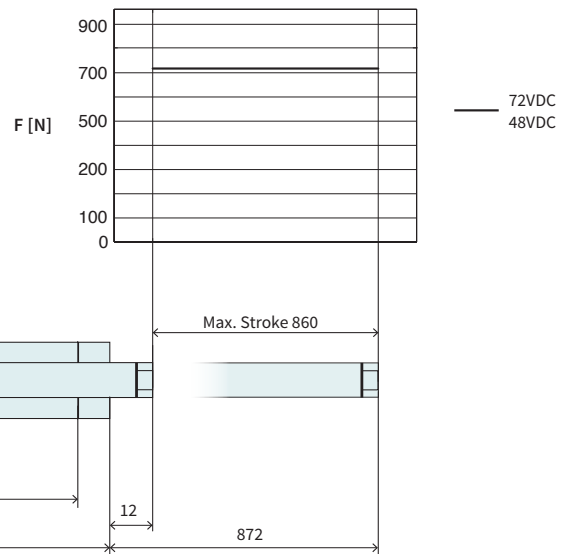
Stroke				
Max. Stroke	mm	(in)	680	(26.8)
Force				
Max. Force @ 48VDC	N	(lbf)	721	(162)
Max. Force @ 72VDC	N	(lbf)	721	(162)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / - / 350	(29 / - / 80)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	27.7	(6.24)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.6	(62.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.3	(93.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.6 / - / 13	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / - / 0.17	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1900 / - / 240	
Mechanical Data				
Slider Length	mm	(in)	1220	(48)
Slider Mass	g	(lb)	5130	(11.29)



Item	Description	Item-No.
PS01-48x360F-SSC-C	Stator Stainless Steel IP69K	0150-1270
PS01-48x360F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1271
PL01-27x1220/1140	Slider 'High Clearance'	0150-1587

P01-48x360F/860-PB25-SSC

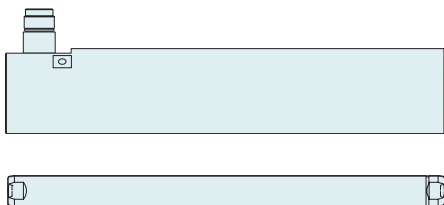
Max. Stroke: 860 mm
Peak Force: 721 N



Dimensions in mm

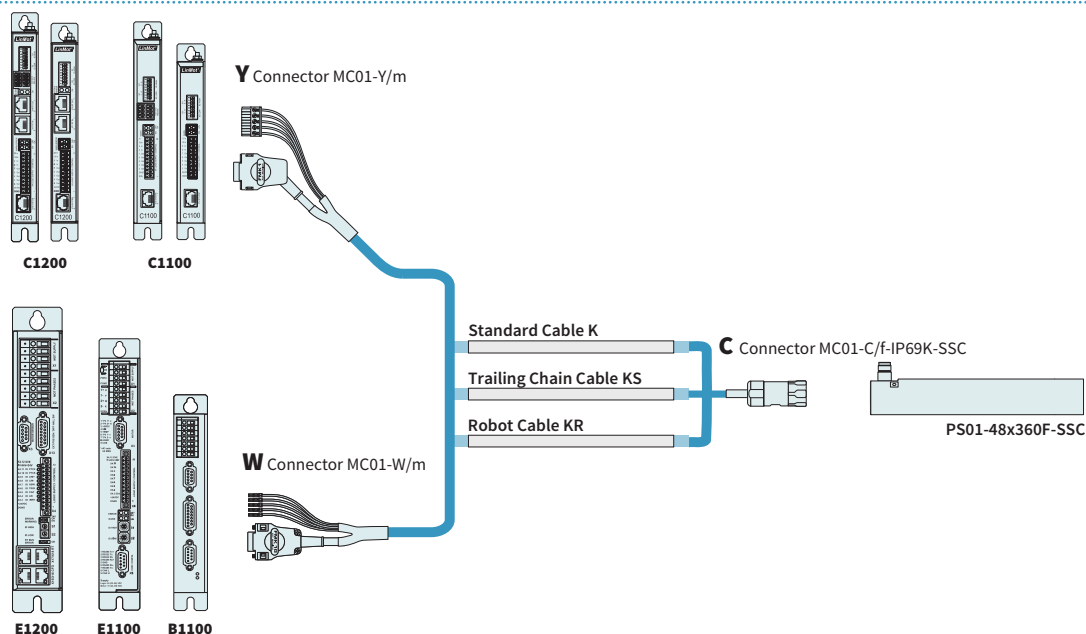
Technical Data P01-48x360F/860-PB25-SSC

Stroke			
Max. Stroke	mm (in)	860	(33.89)
Force			
Max. Force @ 48VDC	N (lbf)	721	(162)
Max. Force @ 72VDC	N (lbf)	721	(162)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	130 / - / 350	(29 / - / 80)
Max. Border Force relative	%	100	
Force Constant	N/A _{pk} (lbf/A _{pk})	27.7	(6.24)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.6	(62.9)
Max. Velocity @ 72VDC	m/s (in/s)	2.3	(93.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	25.9	
Max. Current @ 72VDC	A _{pk}	25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	4.6 / - / 13	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.3 / - / 0.17	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1900 / - / 240	
Mechanical Data			
Slider Length	mm (in)	1400	(55)
Slider Mass	g (lb)	5910	(13)



Item	Description	Item-No.
PS01-48x360F-SSC-C	Stator Stainless Steel IP69K	0150-1270
PS01-48x360F-SSC-C-FC	Stator stainless steel IP69K, FC	0150-1271
PL01-27x1400/1320	Slider 'High Clearance'	0150-1588

Motor Cable



ORDERING INFORMATION

STANDARD CABLE		
Item	Description	Item-No.
K15-W/C-SSC	Motor Cable W/C-SSC, Custom length	0150-3539
K15-Y-Fe/C-SSC-	Motor Cable Y-Fe/C-SSC, Custom length	0150-3630
TRAILING CHAIN CABLE		
Item	Description	Item-No.
KS10-W/C-SSC-2	Trailing Chain Cable W/C-SSC, 2 m	0150-2675
KS10-W/C-SSC-4	Trailing Chain Cable W/C-SSC, 4 m	0150-2676
KS10-W/C-SSC-6	Trailing Chain Cable W/C-SSC, 6 m	0150-2677
KS10-W/C-SSC-8	Trailing Chain Cable W/C-SSC, 8 m	0150-2678
KS10-W/C-SSC-	Trailing Chain Cable W/C-SSC, Custom length	0150-3358
KS10-Y/C-SSC-2	Trailing Chain Cable Y/C-SSC, 2 m	0150-2679
KS10-Y/C-SSC-4	Trailing Chain Cable Y/C-SSC, 4 m	0150-2680
KS10-Y/C-SSC-6	Trailing Chain Cable Y/C-SSC, 6 m	0150-2681
KS10-Y/C-SSC-8	Trailing Chain Cable Y/C-SSC, 8 m	0150-2682
KS10-Y-Fe/C-SSC-	Trailing Chain Cable Y/C-SSC, Custom length	0150-3574
ROBOT CABLE		
Item	Description	Item-No.
KR10-W/C-SSC-	Robot Cable KR05-W/C-SSC-, Custom length	0150-3536
CONNECTOR & CABLE (INDIVIDUAL)		
Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-C/f-IP69K-SSC	Motor Connector C/f, IP69K, SSC	0150-3306
K15-04/05	Motor Cable per m	0150-1978
KS10-04/05	Trailing Chain Cable per m	0150-1977
KR10-04/05	Robot Cable per m	0150-1830

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-28-SS	Fixed Bearing Set for 27 mm and 28 mm Slider, Stainless steel	0150-3297
PLL01-27	Floating support for PL01-27 sliders	0150-3294

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KITS



Item	Description	Item-No.
PB01-48x25-80-P-SSC	Bearing for PS01-48x360-SSC, (stainless steel)	0150-3413

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D-Encoder	Special cable KS025-D/D-Encoder- (Length in m)	0150-3166
KS025-D/D15-Encoder	Special cable KS025-D15/D-Encoder- (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



5

Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	For MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

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LINEAR MOTORS ATEX



**Linear motors with ATEX
and IECEx certification.**

Product Description

Wherever explosive gases or vapors are mixed with air, or flammable dust can occur, drives with enhanced protective mechanisms are required.

For this purpose, LinMot series P01–48 linear motors have been developed and certified as EX protected motors in accordance with directive 94/9/EC. Device classifications 2G and 2D mean that the devices can be used in an explosive atmosphere consisting of gases, vapors, mist, or dust in zones 1/21 and 2/22.

The drives are thus optimally designed for use in printing machines, painting lines, plastic-processing machines, or in the chemical or pharmaceutical field.

The ATEX family of motors consists of two sizes for which a wide range of slider lengths is available. The stroke length ranges up to 980 mm, along which a peak force of 720 N can be achieved.



Safely protected in ATEX environments

The ATEX motors are completely encapsulated in stainless steel and do not require seals. All joint connections are welded. To completely seal off the motor, the windings and other internal components of the stator are potted in epoxy resin. This guarantees optimal protection of the motor and eliminates the risk of electrical arcing. The motors have been designed to be very compact and have no unnecessary edges, corners, holes, or threaded connections, so there is no place where explosive material could collect. This eliminates additional potential sources of ignition and the risk of non-uniform heating is greatly minimized. Even in environments with a low ignition temperature ($> 85^{\circ}\text{C}$), LinMot ATEX motors are permitted to be used.

ADDITIONAL TEMPERATURE MONITORING

In addition to sensors for monitoring the winding temperature in the stator of the ATEX motor, additional temperature sensors are installed under the motor housing.

This allows 2-channel temperature monitoring of the motor. If the motor should overheat due to an error, the drive feed is interrupted by the higher-level channel. The technical safety concept of the LinMot ATEX motors is such that no further certified elements are required in the explosion hazard zone other than the motor and the feed cable.

INTEGRATED WATER COOLING

LinMot's ATEX linear motors can optionally be supplied with integrated water cooling. The stator is enclosed by the cooling system along its entire length.

The heat losses generated in the motor are dissipated through the liquid cooling system. This increases the rated power of the motor several times over in comparison with the self-cooled version. Due to the lower surface temperature of the motor, it can also be used in an explosive atmosphere with a lower ignition temperature.

HIGH AND CONTROLLED DYNAMICS

Max. acceleration values over 400 m/s^2 and travel speeds over 3 m/s allow cyclical motion sequences of several Hertz.

For handling applications with sensitive products, such as transporting wafers in semiconductor production, very gentle, smooth motions with suitable accelerations can be obtained.

FREELY POSITIONABLE

LinMot linear motors can be freely positioned. With absolute or relative movement commands, they can move to any desired position in the stroke range. Since the LinMot linear drive is a closed-loop system, not only the end positions are monitored, but also deviations in position during travel. This allows, among other things, precise specification of travel speeds, acceleration and braking ramps, and travel through curved paths.

PROCESS STABILITY

Since not only the end position, but also speed and acceleration are controlled and monitored, motions that are programmed once are carried out the same way over the entire life of the machine.

MOTOR CONNECTOR

For the purpose of complete encapsulation, the plug is welded to the housing of the motor. The plug is made of stainless steel and is tightened with a coupling nut. At the same time the protection class IP 66/67 is fulfilled. To protect an outgoing spark, the motor plug and the cable plug are securely screwed together.

6

SYNCHRONIZATION

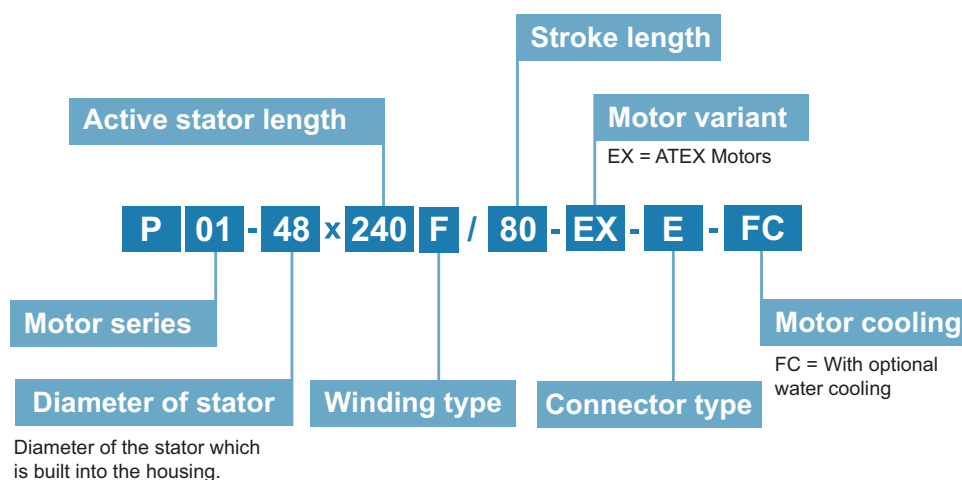
For synchronous machines, the linear motor can be synchronized to the main shaft. By replacing mechanical cam discs with LinMot linear motors, for example, great variations can be achieved, with format changeovers at the push of a button.

OVERLOAD PROTECTION

There are no mechanical components for force transfer that could be damaged in a crash or stall condition in a linear motor. Complex, expensive designs to protect gearboxes, gears, and shafts are thus eliminated. If the linear motor stalls, it acts like a pneumatic cylinder and tries to reach the target position with a defined force. The following error monitor in the drive can, however, immediately recognize a stall condition. Temperature sensors integrated in the stator prevent the drive from overloading in any case.

LONG LIFESPAN

Since the linear motion is generated purely magnetically, and no mechanical force transmission takes place, even extremely dynamic applications can be implemented with a long lifespan.

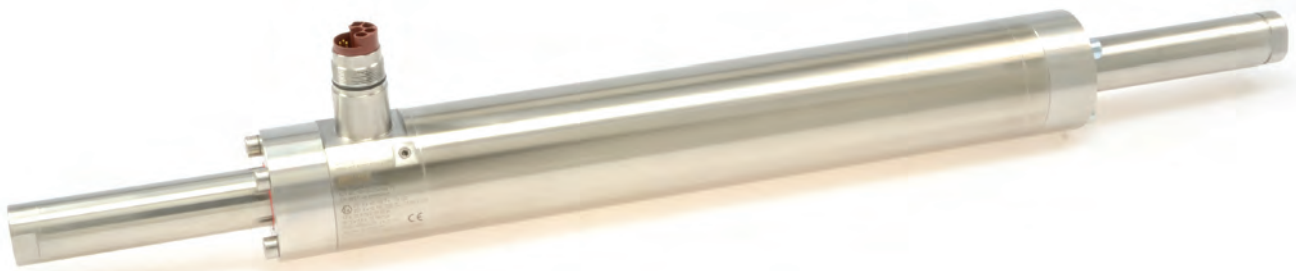
Type Code

For explanations of the terms, please refer to the section "Glossary"

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LINEAR MOTORS P01-48x240F-EX

6



- ✓ For use in an explosive atmosphere consisting of gases, vapors, mist, or dust
- ✓ Welded connections
- ✓ Completely encapsulated
- ✓ Optional integrated water cooling

LINEAR MOTORS P01-48x240F-EX

Technical Data **679**

Motor Specifications

 P01-48x240F/80x80-EX-E **682**

 P01-48x240F/200x200-EX-E **683**

 P01-48x240F/290x290-EX-E **684**

 P01-48x240F/380x380-EX-E **685**

 P01-48x240F/500x500-EX-E **686**

 P01-48x240F/590x590-EX-E **687**

 P01-48x240F/800x800-EX-E **688**

 P01-48x240F/980x980-EX-E **689**

Linear Guides **690**

Accessories **691**



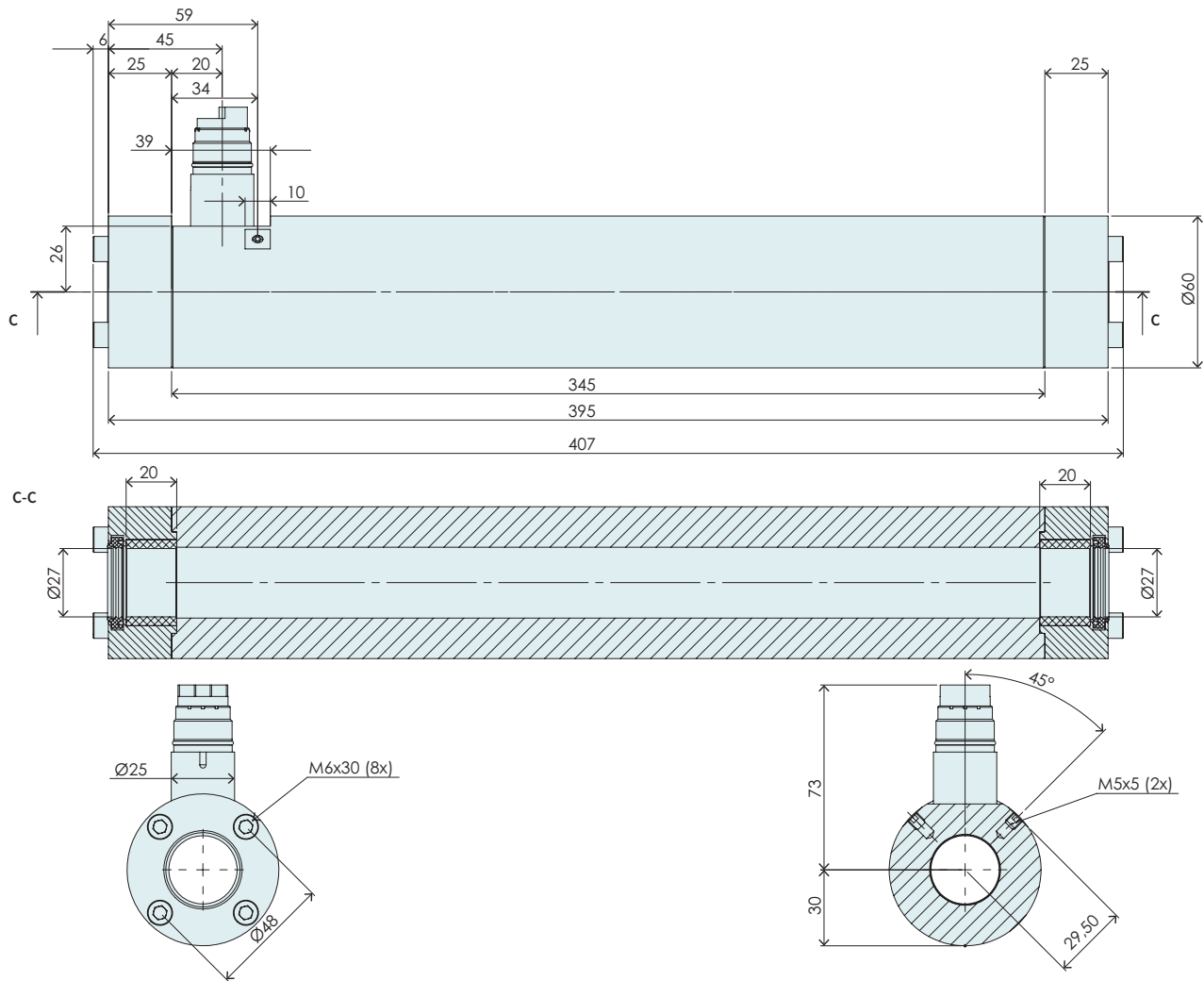
MOTOR FAMILY P01-48x240F-EX

Technical Data				
Stroke				
Max. Stroke	mm	(in)	980	(38.6)
Force				
Max. Force @ 48VDC	N	(lbf)	496	(111)
Max. Force @ 72VDC	N	(lbf)	496	(111)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / - / 240	(19 / - / 53)
Max. Border Force relative	%		≤ 100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	19.1	(4.29)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(90.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.4	(139.9)
Position Detection				
Position Resolution	mm	(in)	0.007	(0.0003)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.4 / - / 12	
Terminal Resistance 25 °C / 120 °C	Ohm		0.97 / 1.3	
Terminal Inductivity	mH		1.1	
Magnetic Period	mm	(in)	60	(2.35)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2 / - / 0.26	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / - / 260	
Mechanical Data				
Stator Diameter	mm	(in)	60	(2.4)
Stator Length	mm	(in)	395	(16)
Stator Mass	g	(lb)	4270	(9.4)
Slider Diameter	mm	(in)	27	(1.1)
Slider Length	mm	(in)	350 - 1400	(14 - 55)
Slider Mass	g	(lb)	1360 - 5910	(3 - 13)
IP Code			IP 69k	

CE 1258 Ex 2G Ex eb IIC T6... T4 Gb

CE 1258 Ex 2D Ex tb IIC T85°C... T135°C Db

STATOR

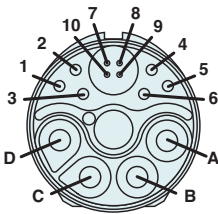


Item	Description	Item-No.
PS01-48x240F-EX-E	Stator EX, IP67	0150-2544
PS01-48x240F-EX-E-FC	Stator EX, IP67, FC	0150-1299

CONNECTOR

Motor Connector Wiring	PS01-48x240F-EX-E PS01-48x240F-EX-E-FC	Wire Color Motor Cable
	E6k-Connector	
Ph 1+	A	red
Ph 1-	B	pink
Ph 2+	C	blue
Ph 2-	D	grey
PE	Protective Earth	green-yellow
+5VDC	1	white
GND	2	Inner Shield
Sinus	3	yellow
Cosinus	4	green
Temp.	5	black
n. c.	6	-
Kty 1+	7	orange
Kty 1-	8	brown
Kty 2+	9	purple
Kty 2-	10	beige

E6k-Connector

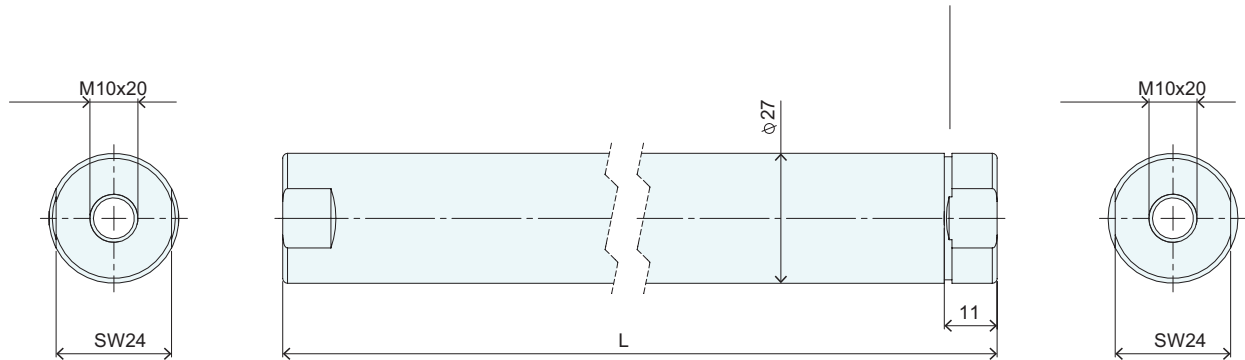


View: Motor connector, plug side

SLIDER

Slider High Clearance

Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.

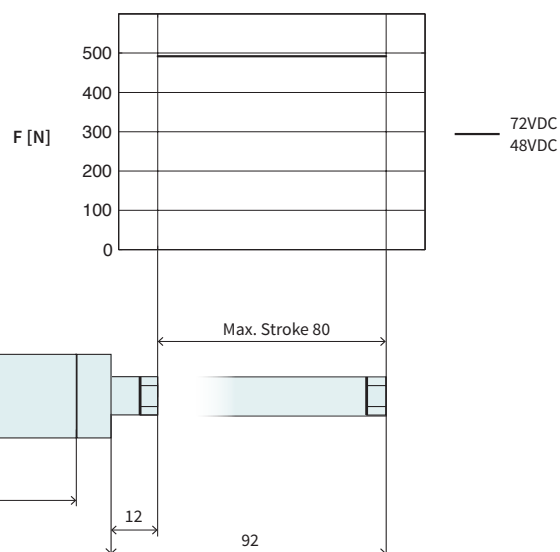


6

Slider High Clearance			
Item	Description	Max. Stroke [mm]	Item-No.
PL01-27x500/420	Slider 'High Clearance'	80	0150-1469
PL01-27x620/540	Slider 'High Clearance'	200	0150-1470
PL01-27x710/630	Slider 'High Clearance'	290	0150-1471
PL01-27x800/720	Slider 'High Clearance'	380	0150-1472
PL01-27x920/840	Slider 'High Clearance'	500	0150-1447
PL01-27x1010/930	Slider 'High Clearance'	590	0150-1473
PL01-27x1220/1140	Slider 'High Clearance'	800	0150-1587
PL01-27x1400/1320	Slider 'High Clearance'	980	0150-1588

P01-48x240F/80x80-EX-E

Max. Stroke: 80 mm
Peak Force: 496 N



Dimensions in mm

Technical Data P01-48x240F/80x80-EX-E

Stroke				
Max. Stroke	mm	(in)	80	(3.14)
Force				
Max. Force @ 48VDC	N	(lbf)	496	(111)
Max. Force @ 72VDC	N	(lbf)	496	(111)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / - / 240	(19 / - / 53)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	19.1	(4.29)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(90.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.4	(139.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 1.05	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.4 / - / 12	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2 / - / 0.26	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / - / 260	
Mechanical Data				
Slider Length	mm	(in)	500	(20)
Slider Mass	g	(lb)	2010	(4.42)



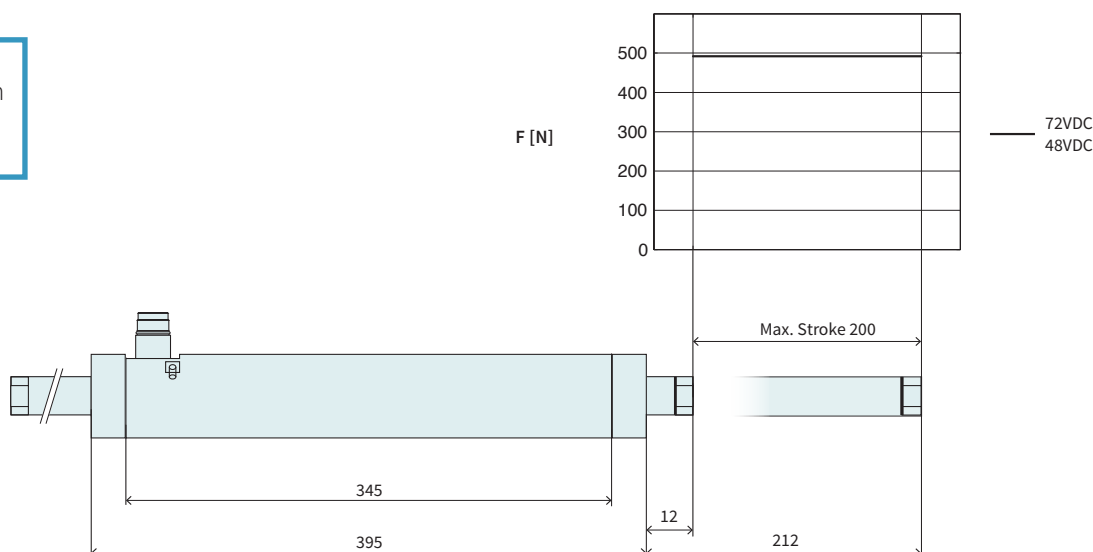
Item	Description	Item-No.
PS01-48x240F-EX-E	Stator EX, IP67	0150-2544
PS01-48x240F-EX-E-FC	Stator EX, IP67, FC	0150-1299
PB01-48x25-P-SSC*	Bearing for PS01-48x240-SSC (Stainless)	0150-3281
PL01-27x500/420	Slider 'High Clearance'	0150-1469

* 2 Bearing kits must be ordered separately.

P01-48x240F/200x200-EX-E

Max. Stroke: 200 mm
Peak Force: 496 N

Dimensions in mm



Technical Data P01-48x240F/200x200-EX-E				
Stroke				
Max. Stroke	mm	(in)	200	(7.86)
Force				
Max. Force @ 48VDC	N	(lbf)	496	(111)
Max. Force @ 72VDC	N	(lbf)	496	(111)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / - / 240	(19 / - / 53)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	19.1	(4.29)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(90.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.4	(139.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.5	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.4 / - / 12	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2 / - / 0.26	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / - / 260	
Mechanical Data				
Slider Length	mm	(in)	620	(24)
Slider Mass	g	(lb)	2530	(5.57)

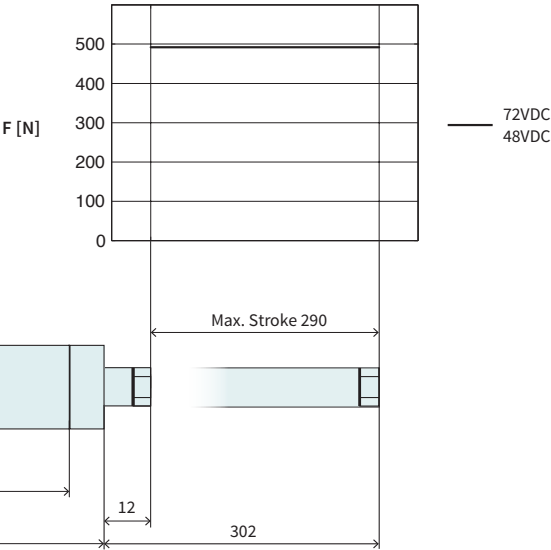


Item	Description	Item-No.
PS01-48x240F-EX-E	Stator EX, IP67	0150-2544
PS01-48x240F-EX-E-FC	Stator EX, IP67, FC	0150-1299
PB01-48x25-P-SSC*	Bearing for PS01-48x240-SSC (Stainless)	0150-3281
PL01-27x620/540	Slider 'High Clearance'	0150-1470

* 2 Bearing kits must be ordered separately.

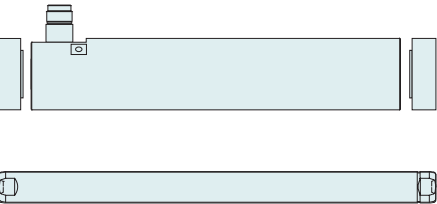
P01-48x240F/290x290-EX-E

Max. Stroke: 290 mm
Peak Force: 496 N



Dimensions in mm

Technical Data P01-48x240F/290x290-EX-E				
Stroke				
Max. Stroke	mm	(in)	290	(11.4)
Force				
Max. Force @ 48VDC	N	(lbf)	496	(111)
Max. Force @ 72VDC	N	(lbf)	496	(111)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / - / 240	(19 / - / 53)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	19.1	(4.29)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(90.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.4	(139.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.35	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.4 / - / 12	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2 / - / 0.26	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / - / 260	
Mechanical Data				
Slider Length	mm	(in)	710	(28)
Slider Mass	g	(lb)	2920	(6.42)

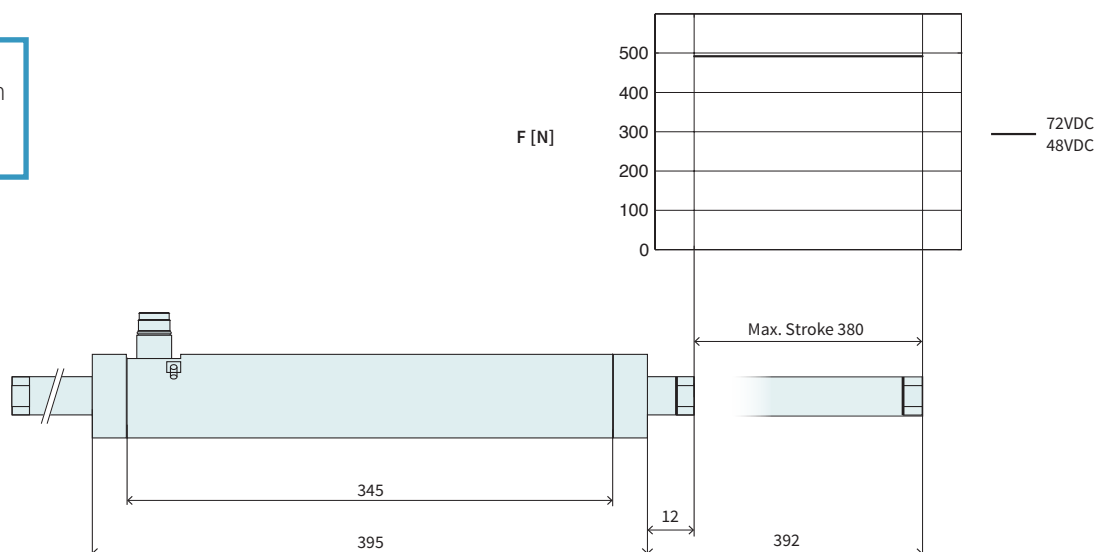


Item	Description	Item-No.
PS01-48x240F-EX-E	Stator EX, IP67	0150-2544
PS01-48x240F-EX-E-FC	Stator EX, IP67, FC	0150-1299
PB01-48x25-P-SSC*	Bearing for PS01-48x240-SSC (Stainless)	0150-3281
PL01-27x710/630	Slider 'High Clearance'	0150-1471

* 2 Bearing kits must be ordered separately.

P01-48x240F/380x380-EX-E

Max. Stroke: 380 mm
Peak Force: 496 N



Dimensions in mm

Technical Data P01-48x240F/380x380-EX-E				
Stroke				
Max. Stroke	mm	(in)	380	(14.99)
Force				
Max. Force @ 48VDC	N	(lbf)	496	(111)
Max. Force @ 72VDC	N	(lbf)	496	(111)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / - / 240	(19 / - / 53)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	19.1	(4.29)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(90.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.4	(139.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.4 / - / 12	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2 / - / 0.26	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / - / 260	
Mechanical Data				
Slider Length	mm	(in)	800	(31)
Slider Mass	g	(lb)	3310	(7.28)

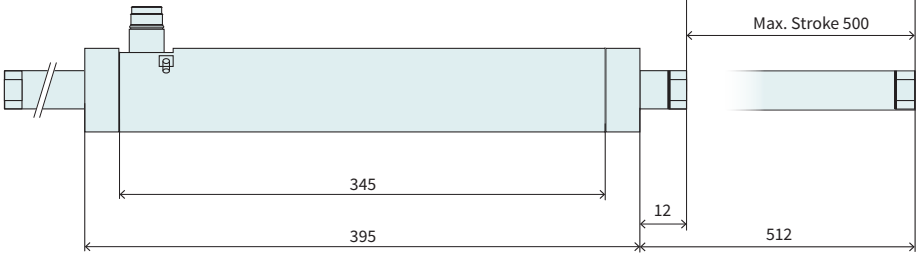
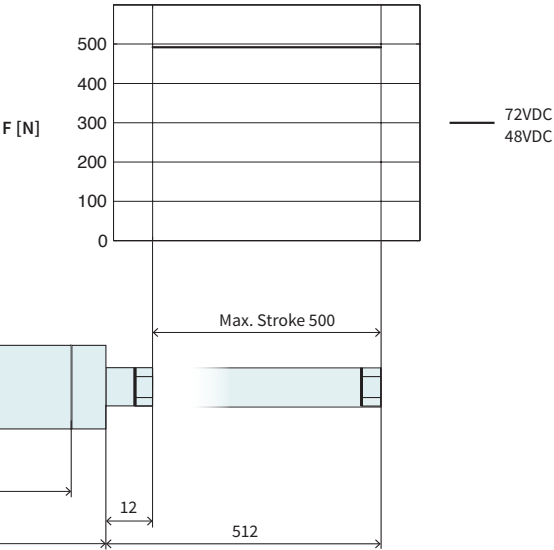


Item	Description	Item-No.
PS01-48x240F-EX-E	Stator EX, IP67	0150-2544
PS01-48x240F-EX-E-FC	Stator EX, IP67, FC	0150-1299
PB01-48x25-P-SSC*	Bearing for PS01-48x240-SSC (Stainless)	0150-3281
PL01-27x800/720	Slider 'High Clearance'	0150-1472

* 2 Bearing kits must be ordered separately.

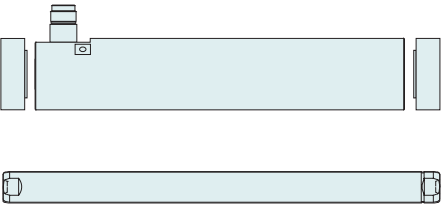
P01-48x240F/500x500-EX-E

Max. Stroke: 500 mm
Peak Force: 496 N



Dimensions in mm

Technical Data P01-48x240F/500x500-EX-E				
Stroke				
Max. Stroke	mm	(in)	500	(19.69)
Force				
Max. Force @ 48VDC	N	(lbf)	496	(111)
Max. Force @ 72VDC	N	(lbf)	496	(111)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / - / 240	(19 / - / 53)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	19.1	(4.29)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(90.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.4	(139.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.4 / - / 12	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2 / - / 0.26	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / - / 260	
Mechanical Data				
Slider Length	mm	(in)	920	(36)
Slider Mass	g	(lb)	3830	(8.43)

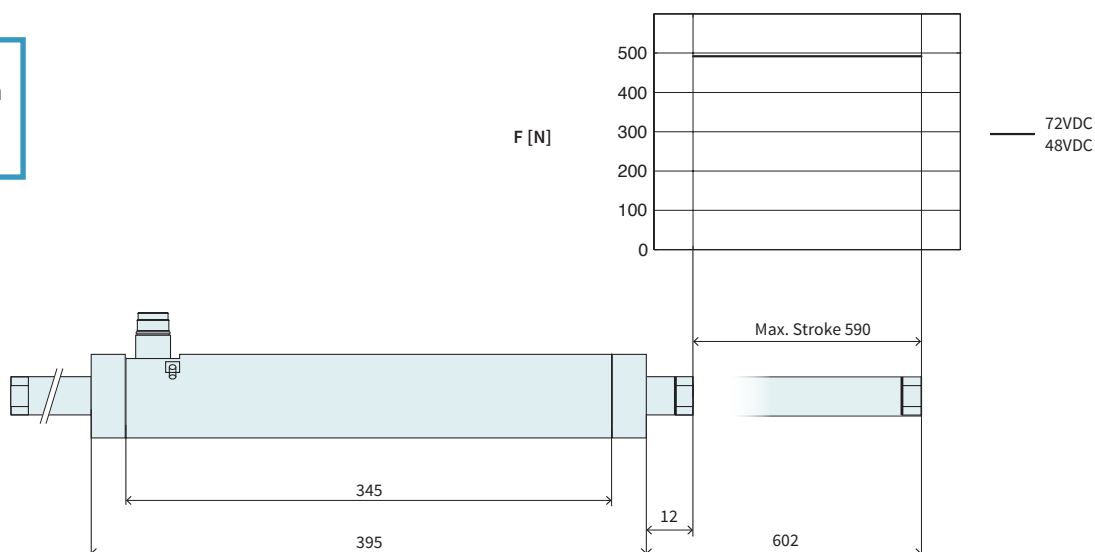


Item	Description	Item-No.
PS01-48x240F-EX-E	Stator EX, IP67	0150-2544
PS01-48x240F-EX-E-FC	Stator EX, IP67, FC	0150-1299
PB01-48x25-P-SSC*	Bearing for PS01-48x240-SSC (Stainless)	0150-3281
PL01-27x920/840	Slider 'High Clearance'	0150-1447

* 2 Bearing kits must be ordered separately.

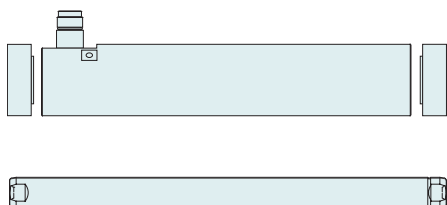
P01-48x240F/590x590-EX-E

Max. Stroke: 590 mm
Peak Force: 496 N



Technical Data P01-48x240F/590x590-EX-E

Stroke				
Max. Stroke	mm	(in)	590	(23.19)
Force				
Max. Force @ 48VDC	N	(lbf)	496	(111)
Max. Force @ 72VDC	N	(lbf)	496	(111)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / - / 240	(19 / - / 53)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	19.1	(4.29)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(90.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.4	(139.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.4 / - / 12	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2 / - / 0.26	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / - / 260	
Mechanical Data				
Slider Length	mm	(in)	1010	(40)
Slider Mass	g	(lb)	4220	(9.28)

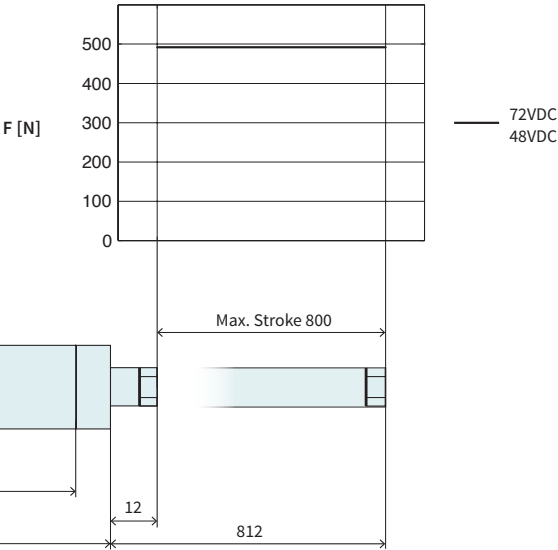


Item	Description	Item-No.
PS01-48x240F-EX-E	Stator EX, IP67	0150-2544
PS01-48x240F-EX-E-FC	Stator EX, IP67, FC	0150-1299
PB01-48x25-P-SSC*	Bearing for PS01-48x240-SSC (Stainless)	0150-3281
PL01-27x1010/930	Slider 'High Clearance'	0150-1473

* 2 Bearing kits must be ordered separately.

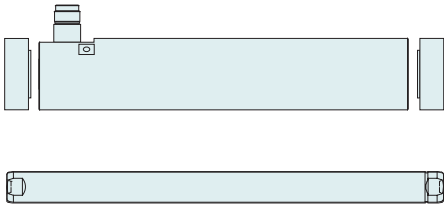
P01-48x240F/800x800-EX-E

Max. Stroke: 800 mm
Peak Force: 496 N



Dimensions in mm

Technical Data P01-48x240F/800x800-EX-E				
Stroke				
Max. Stroke	mm	(in)	800	(31.49)
Force				
Max. Force @ 48VDC	N	(lbf)	496	(111)
Max. Force @ 72VDC	N	(lbf)	496	(111)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	84 / - / 240	(19 / - / 53)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	19.1	(4.29)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(90.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.4	(139.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.4 / - / 12	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2 / - / 0.26	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / - / 260	
Mechanical Data				
Slider Length	mm	(in)	1220	(48)
Slider Mass	g	(lb)	5130	(11.29)

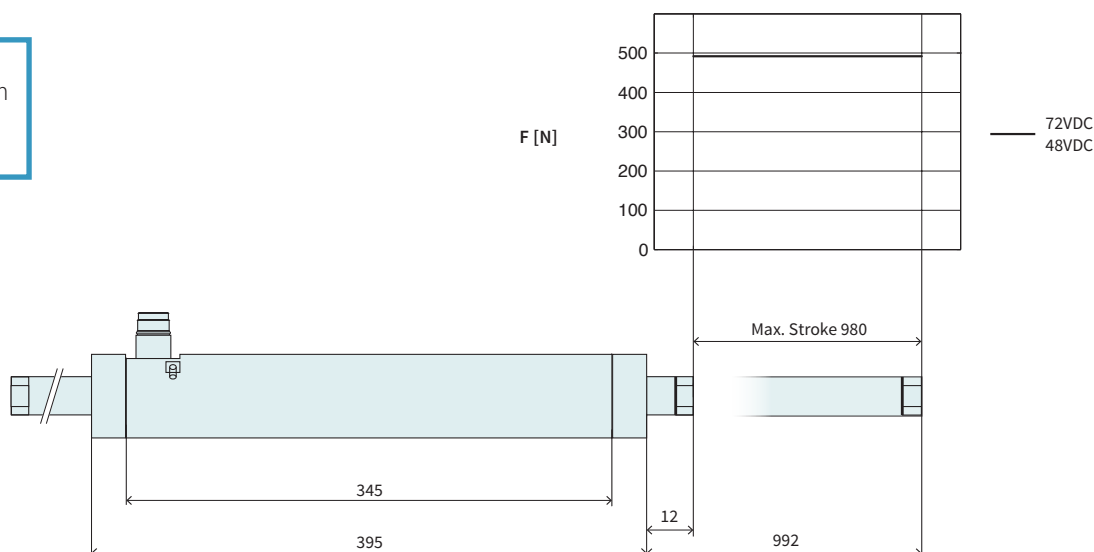


Item	Description	Item-No.
PS01-48x240F-EX-E	Stator EX, IP67	0150-2544
PS01-48x240F-EX-E-FC	Stator EX, IP67, FC	0150-1299
PB01-48x25-P-SSC*	Bearing for PS01-48x240-SSC (Stainless)	0150-3281
PL01-27x1220/1140	Slider 'High Clearance'	0150-1587

* 2 Bearing kits must be ordered separately.

P01-48x240F/980x980-EX-E

Max. Stroke: 980 mm
Peak Force: 496 N



Technical Data P01-48x240F/980x980-EX-E

Stroke			
Max. Stroke	mm (in)	980	(38.6)
Force			
Max. Force @ 48VDC	N (lbf)	496	(111)
Max. Force @ 72VDC	N (lbf)	496	(111)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	84 / - / 240	(19 / - / 53)
Max. Border Force relative	%	100	
Force Constant	N/A _{pk} (lbf/A _{pk})	19.1	(4.29)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.2	(90.9)
Max. Velocity @ 72VDC	m/s (in/s)	3.4	(139.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	25.9	
Max. Current @ 72VDC	A _{pk}	25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	4.4 / - / 12	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2 / - / 0.26	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / - / 260	
Mechanical Data			
Slider Length	mm (in)	1400	(55)
Slider Mass	g (lb)	5910	(13)



Item	Description	Item-No.
PS01-48x240F-EX-E	Stator EX, IP67	0150-2544
PS01-48x240F-EX-E-FC	Stator EX, IP67, FC	0150-1299
PB01-48x25-P-SSC*	Bearing for PS01-48x240-SSC (Stainless)	0150-3281
PL01-27x1400/1320	Slider 'High Clearance'	0150-1588

* 2 Bearing kits must be ordered separately.

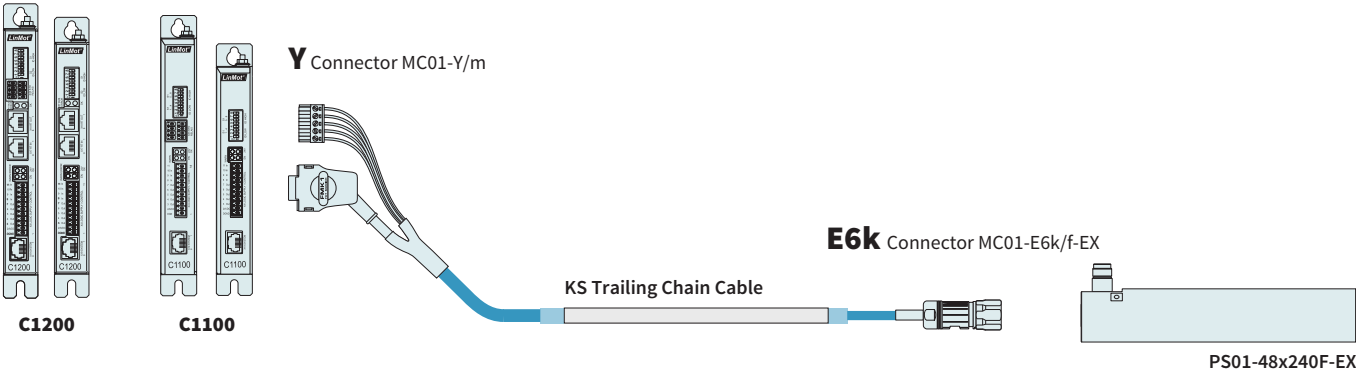
Linear Guides H01-SSC



HM01-48x240/210-SSC	Linear module SSC 48x240 with 210 mm Stroke			
→	H-Guide	H01-48x401/210-SSC	H-Guide for PS01-48x240F-HP-SSC, Stroke max. 210 mm	0150-5280
→	Stator	PS01-48x240F-EX-E	Stator EX, IP67	0150-2544
		PS01-48x240F-EX-E-FC	Stator EX, IP67, FC	0150-1299
→	Slider	PL01-27x620/540	Slider 'High Clearance'	0150-1470
HM01-48x240/300-SSC	Linear module SSC 48x240 with 300 mm Stroke			
→	H-Guide	H01-48x401/300-SSC	H-Guide for PS01-48x240F-HP-SSC, Stroke max. 300 mm	0150-5281
→	Stator	PS01-48x240F-EX-E	Stator EX, IP67	0150-2544
		PS01-48x240F-EX-E-FC	Stator EX, IP67, FC	0150-1299
→	Slider	PL01-27x710/630	Slider 'High Clearance'	0150-1471
HM01-48x240/390-SSC	Linear module SSC 48x240 with 390 mm Stroke			
→	H-Guide	H01-48x401/390-SSC	H-Guide for PS01-48x240F-HP-SSC, Stroke max. 390 mm	0150-5282
→	Stator	PS01-48x240F-EX-E	Stator EX, IP67	0150-2544
		PS01-48x240F-EX-E-FC	Stator EX, IP67, FC	0150-1299
→	Slider	PL01-27x800/720	Slider 'High Clearance'	0150-1472
HM01-48x240/510-SSC	Linear module SSC 48x240 with 510 mm Stroke			
→	H-Guide	H01-48x401/510-SSC	H-Guide for PS01-48x240F-HP-SSC, Stroke max. 510 mm	0150-5283
→	Stator	PS01-48x240F-EX-E	Stator EX, IP67	0150-2544
		PS01-48x240F-EX-E-FC	Stator EX, IP67, FC	0150-1299
→	Slider	PL01-27x920/840	Slider 'High Clearance'	0150-1447

FIND MORE PRODUCT DETAILS IN THE CHAPTER "LINEAR GUIDES".

Motor Cable



ORDERING INFORMATION

TRAILING CHAIN CABLE		
Item	Description	Item-No.
KS10-EX-Y-Fe/E6k-	Trailing Chain Cable KS10-EX-Y-Fe/E6k-, Custom length	0150-3642

CONNECTOR & CABLE (INDIVIDUAL)		
Item	Description	Item-No.
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-E6k/f-EX	Connerctor with hexagonal union nut	0150-3538
KS10-05/05/04-EX	Motor cable for EX applications per m	0150-9010

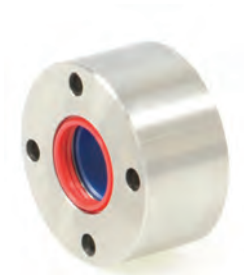
SLIDER MOUNTING



Item	Description	Item-No.
PLF01-28-SS	Fixed Bearing Set for 27/28 mm sliders, stainless steel	0150-3297
PLL01-27	Floating Bearing for 27 mm sliders	0150-3294

FIND MORE PRODUCT DETAILS IN THE CHAPTER „ACCESSORIES“.

BEARING KIT

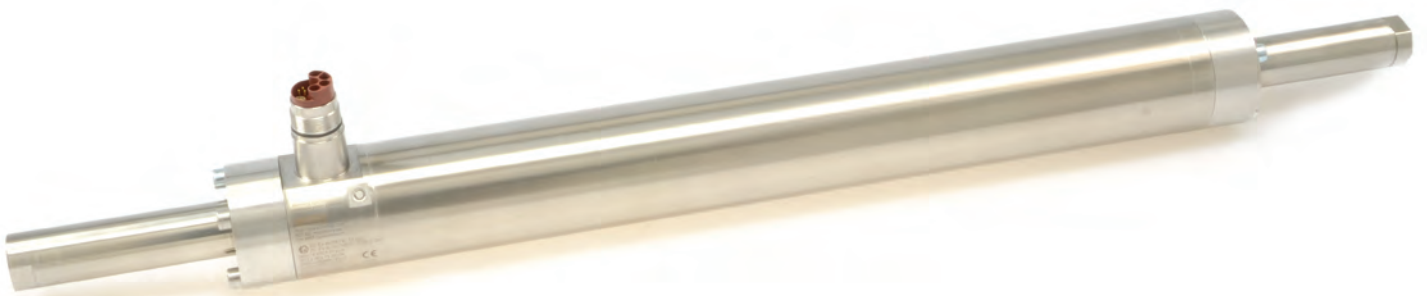


Item	Description	Item-No.
PB01-48x25-P-SSC	Bearing for PS01-48x240-SSC (Stainless)	0150-3281

FIND MORE PRODUCT DETAILS IN THE CHAPTER „ACCESSORIES“.

LINEAR MOTORS P01-48x360F-EX

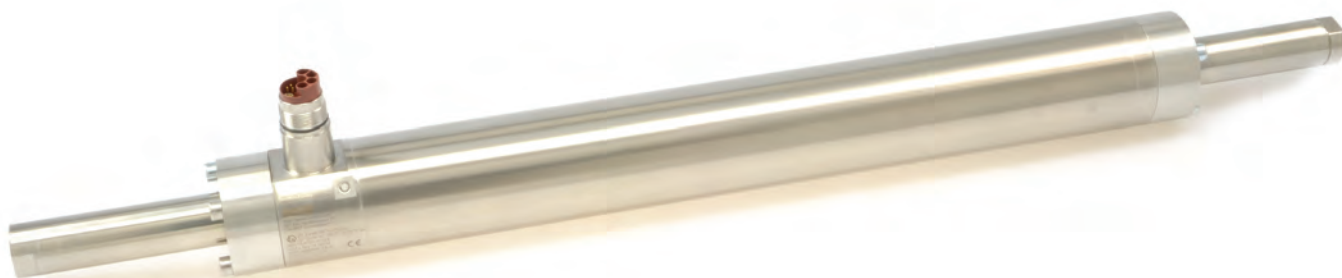
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- ✓ For use in an explosive atmosphere consisting of gases, vapors, mist, or dust
- ✓ Welded connections
- ✓ Completely encapsulated
- ✓ Optional integrated water cooling

LINEAR MOTORS P01-48x360F-EX

Technical Data	695
Motor Specifications	
P01-48x360F/80x80-EX-E	698
P01-48x360F/170x170-EX-E	699
P01-48x360F/260x260-EX-E	700
P01-48x360F/380x380-EX-E	701
P01-48x360F/470x470-EX-E	702
P01-48x360F/680x680-EX-E	703
P01-48x360F/860x860-EX-E	704
Accessories	705



MOTOR FAMILY P01-48X360F-EX

Technical Data				
Stroke				
Max. Stroke	mm	(in)	860	(33.9)
Force				
Max. Force @ 48VDC	N	(lbf)	721	(162)
Max. Force @ 72VDC	N	(lbf)	721	(162)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / - / 350	(29 / - / 80)
Max. Border Force relative	%		≤ 100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	27.7	(6.24)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.6	(62.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.3	(93.9)
Position Detection				
Position Resolution	mm	(in)	0.007	(0.0003)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.6 / - / 13	
Terminal Resistance 25 °C / 120 °C	Ohm		1.4 / 1.9	
Terminal Inductivity	mH		1.6	
Magnetic Period	mm	(in)	60	(2.35)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / - / 0.17	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1900 / - / 240	
Mechanical Data				
Stator Diameter	mm	(in)	60	(2.4)
Stator Length	mm	(in)	515	(20)
Stator Mass	g	(lb)	5560	(12.23)
Slider Diameter	mm	(in)	27	(1.1)
Slider Length	mm	(in)	500 - 1400	(20 - 55)
Slider Mass	g	(lb)	2010 - 5910	(4.42 - 13)
IP Code			IP 69k	

CE 1258 Ex 2G Ex eb IIC T6... T4 Gb

CE 1258 Ex 2D Ex tb IIIC T85°C... T135°C Db

6



Motor Connector Wiring	PS01-48x360F-EX-E PS01-48x360F-EX-E-FC	Wire Color Motor Cable
	E6k-Connector	
Ph 1+	A	red
Ph 1-	B	pink
Ph 2+	C	blue
Ph 2-	D	grey
PE	Protective Earth	green-yellow
+5VDC	1	white
GND	2	Inner Shield
Sinus	3	yellow
Cosinus	4	green
Temp.	5	black
n. c.	6	–
Kty 1+	7	orange
Kty 1-	8	brown
Kty 2+	9	purple
Kty 2-	10	beige

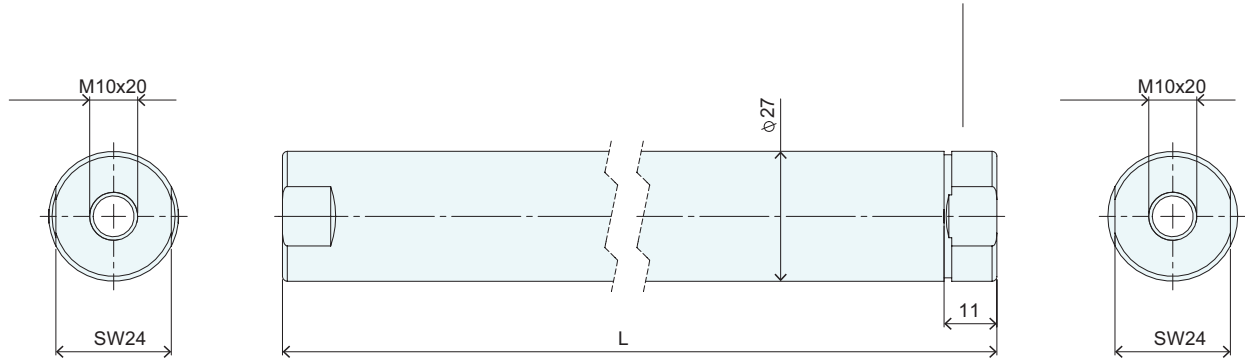
A detailed diagram of a flower's cross-section. The diagram is circular, representing the flower's profile. At the top, there are ten numbered labels (1-10) pointing to various parts. Label 1 points to a sepal, 2 to a petal, 3 to a stamen, 4 to a pistil, 5 to an ovary, 6 to a style, 7 to an anther, 8 to a pollen grain, 9 to a stigma, and 10 to the receptacle. Below the diagram, there are four lettered labels: A points to the ovary, B points to the style, C points to the stigma, and D points to the anther.

696 LINEAR MOTORS ATEX

SLIDER

Slider High Clearance

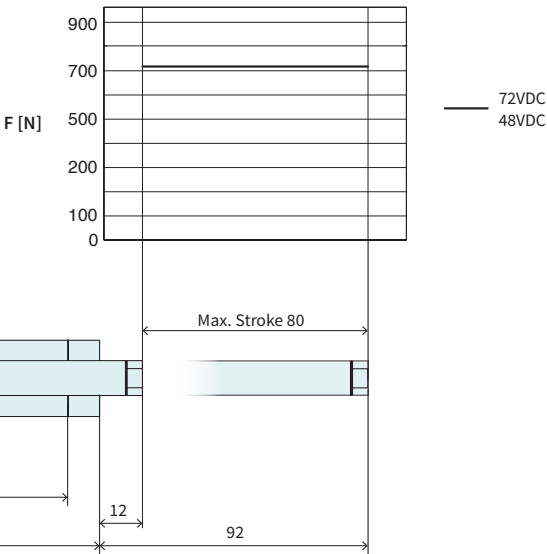
Number of grooves determines the slider type (see chapter 2 / slider) and marks the front end.



Slider High Clearance			
Item	Description	Max. Stroke [mm]	Item-No.
PL01-27x620/540	Slider 'High Clearance'	80	0150-1470
PL01-27x710/630	Slider 'High Clearance'	170	0150-1471
PL01-27x800/720	Slider 'High Clearance'	260	0150-1472
PL01-27x920/840	Slider 'High Clearance'	380	0150-1447
PL01-27x1010/930	Slider 'High Clearance'	470	0150-1473
PL01-27x1220/1140	Slider 'High Clearance'	680	0150-1587
PL01-27x1400/1320	Slider 'High Clearance'	860	0150-1588

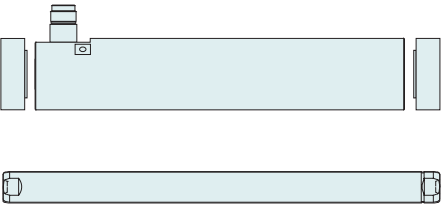
P01-48x360F/80x80-EX-E

Max. Stroke: 80 mm
Peak Force: 721 N



Dimensions in mm

Technical Data P01-48x360F/80x80-EX-E				
Stroke				
Max. Stroke	mm	(in)	80	(3.14)
Force				
Max. Force @ 48VDC	N	(lbf)	721	(162)
Max. Force @ 72VDC	N	(lbf)	721	(162)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / - / 350	(29 / - / 80)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	27.7	(6.24)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.6	(62.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.3	(93.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 1.05	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.6 / - / 13	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / - / 0.17	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1900 / - / 240	
Mechanical Data				
Slider Length	mm	(in)	620	(24)
Slider Mass	g	(lb)	2530	(5.57)

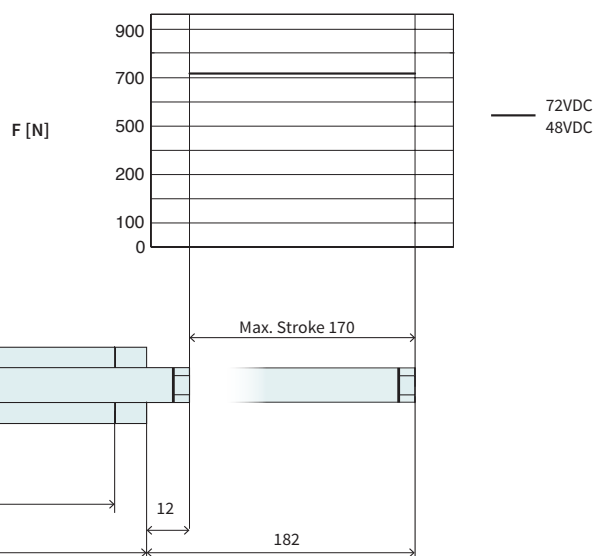


Item	Description	Item-No.
PS01-48x360F-EX-E	Stator EX, IP67	0150-2545
PS01-48x360F-EX-E-FC	Stator EX, IP67, FC	0150-1300
PB01-48x25-80-P-SSC*	Lager for PS01-48x360-SSC / EX	0150-3413
PL01-27x620/540	Slider 'High Clearance'	0150-1470

* 2 Bearing kits must be ordered separately.

P01-48x360F/170x170-EX-E

Max. Stroke: 170 mm
Peak Force: 721 N



Technical Data P01-48x360F/170x170-EX-E

Stroke				
Max. Stroke	mm	(in)	170	(6.69)
Force				
Max. Force @ 48VDC	N	(lbf)	721	(162)
Max. Force @ 72VDC	N	(lbf)	721	(162)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / - / 350	(29 / - / 80)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	27.7	(6.24)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.6	(62.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.3	(93.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.55	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.6 / - / 13	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / - / 0.17	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1900 / - / 240	
Mechanical Data				
Slider Length	mm	(in)	710	(28)
Slider Mass	g	(lb)	2920	(6.42)

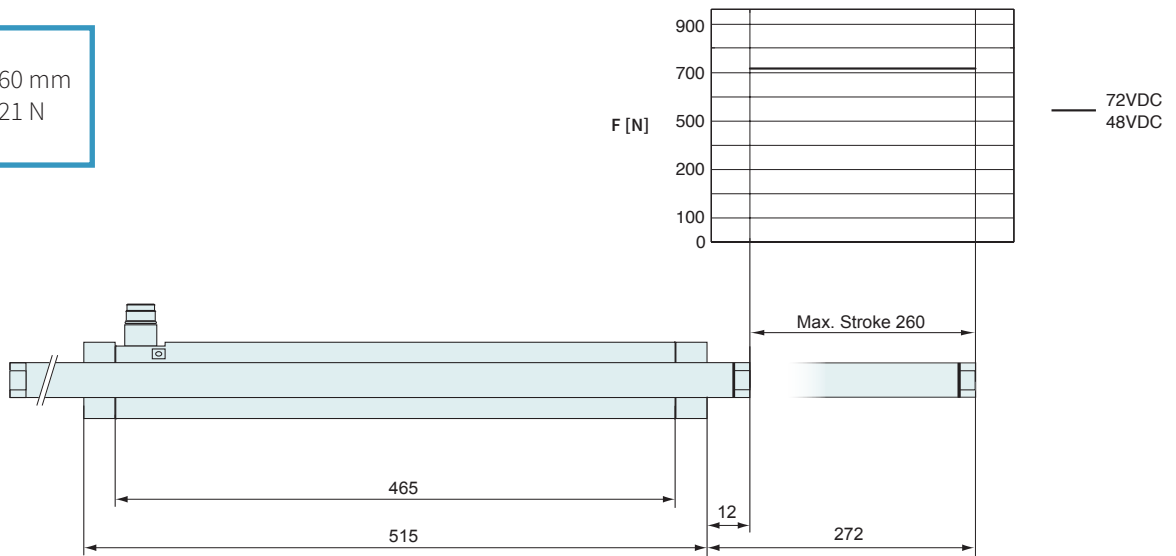


Item	Description	Item-No.
PS01-48x360F-EX-E	Stator EX, IP67	0150-2545
PS01-48x360F-EX-E-FC	Stator EX, IP67, FC	0150-1300
PB01-48x25-80-P-SSC*	Lager for PS01-48x360-SSC / EX	0150-3413
PL01-27x710/630	Slider 'High Clearance'	0150-1471

* 2 Bearing kits must be ordered separately.

P01-48x360F/260x260-EX-E

Max. Stroke: 260 mm
Peak Force: 721 N



Technical Data P01-48x360F/260x260-EX-E

Stroke				
Max. Stroke	mm	(in)	260	(10.19)
Force				
Max. Force @ 48VDC	N	(lbf)	721	(162)
Max. Force @ 72VDC	N	(lbf)	721	(162)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / - / 350	(29 / - / 80)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	27.7	(6.24)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.6	(62.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.3	(93.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.4	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.6 / - / 13	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / - / 0.17	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1900 / - / 240	
Mechanical Data				
Slider Length	mm	(in)	800	(31)
Slider Mass	g	(lb)	3310	(7.28)

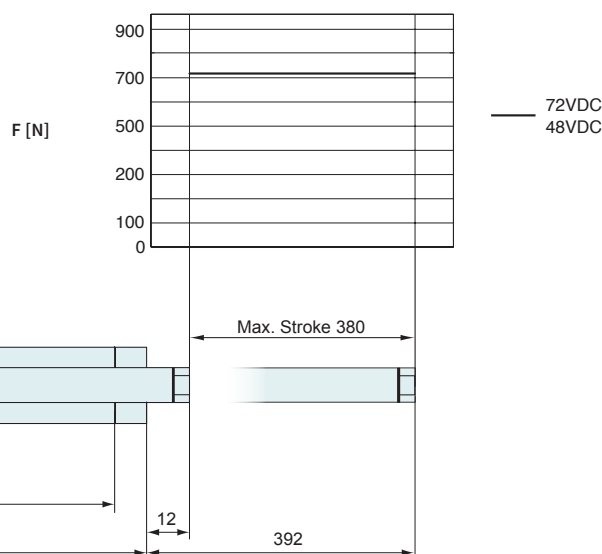


Item	Description	Item-No.
PS01-48x360F-EX-E	Stator EX, IP67	0150-2545
PS01-48x360F-EX-E-FC	Stator EX, IP67, FC	0150-1300
PB01-48x25-80-P-SSC*	Lager for PS01-48x360-SSC / EX	0150-3413
PL01-27x800/720	Slider 'High Clearance'	0150-1472

* 2 Bearing kits must be ordered separately.

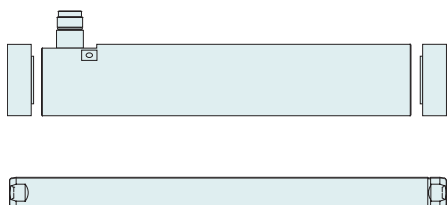
P01-48x360F/380x380-EX-E

Max. Stroke: 380 mm
Peak Force: 721 N



Dimensions in mm

Technical Data P01-48x360F/380x380-EX-E				
Stroke				
Max. Stroke	mm	(in)	380	(14.99)
Force				
Max. Force @ 48VDC	N	(lbf)	721	(162)
Max. Force @ 72VDC	N	(lbf)	721	(162)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / - / 350	(29 / - / 80)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	27.7	(6.24)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.6	(62.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.3	(93.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.6 / - / 13	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / - / 0.17	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1900 / - / 240	
Mechanical Data				
Slider Length	mm	(in)	920	(36)
Slider Mass	g	(lb)	3830	(8.43)

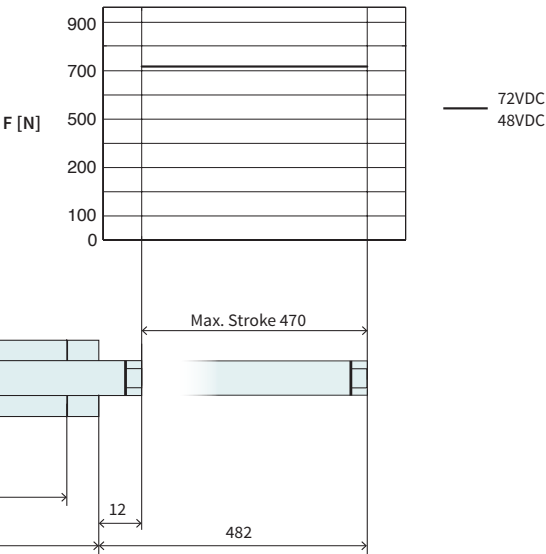


Item	Description	Item-No.
PS01-48x360F-EX-E	Stator EX, IP67	0150-2545
PS01-48x360F-EX-E-FC	Stator EX, IP67, FC	0150-1300
PB01-48x25-80-P-SSC*	Lager for PS01-48x360-SSC / EX	0150-3413
PL01-27x920/840	Slider 'High Clearance'	0150-1447

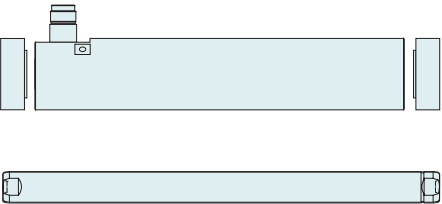
* 2 Bearing kits must be ordered separately.

P01-48x360F/470x470-EX-E

Max. Stroke: 470 mm
Peak Force: 721 N



Technical Data P01-48x360F/470x470-EX-E				
Stroke				
Max. Stroke	mm	(in)	470	(18.49)
Force				
Max. Force @ 48VDC	N	(lbf)	721	(162)
Max. Force @ 72VDC	N	(lbf)	721	(162)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / - / 350	(29 / - / 80)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	27.7	(6.24)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.6	(62.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.3	(93.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.6 / - / 13	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / - / 0.17	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1900 / - / 240	
Mechanical Data				
Slider Length	mm	(in)	1010	(40)
Slider Mass	g	(lb)	4220	(9.28)

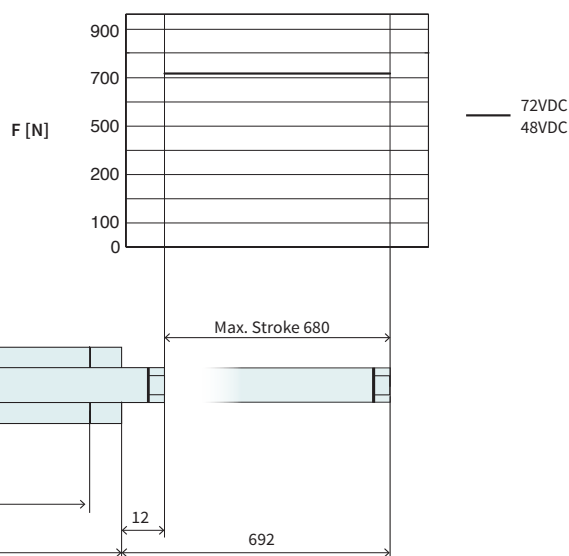


Item	Description	Item-No.
PS01-48x360F-EX-E	Stator EX, IP67	0150-2545
PS01-48x360F-EX-E-FC	Stator EX, IP67, FC	0150-1300
PB01-48x25-80-P-SSC*	Lager for PS01-48x360-SSC / EX	0150-3413
PL01-27x1010/930	Slider 'High Clearance'	0150-1473

* 2 Bearing kits must be ordered separately.

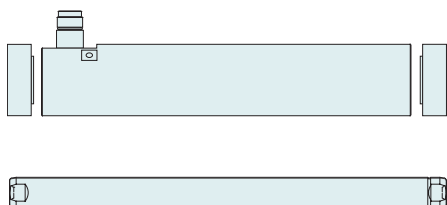
P01-48x360F/680x680-EX-E

Max. Stroke: 680 mm
Peak Force: 721 N



Technical Data P01-48x360F/680x680-EX-E

Stroke				
Max. Stroke	mm	(in)	680	(26.8)
Force				
Max. Force @ 48VDC	N	(lbf)	721	(162)
Max. Force @ 72VDC	N	(lbf)	721	(162)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / - / 350	(29 / - / 80)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	27.7	(6.24)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.6	(62.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.3	(93.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.6 / - / 13	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / - / 0.17	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1900 / - / 240	
Mechanical Data				
Slider Length	mm	(in)	1220	(48)
Slider Mass	g	(lb)	5130	(11.29)

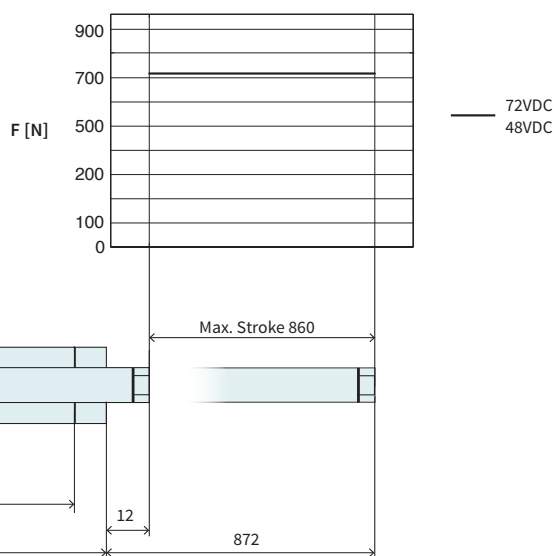


Item	Description	Item-No.
PS01-48x360F-EX-E	Stator EX, IP67	0150-2545
PS01-48x360F-EX-E-FC	Stator EX, IP67, FC	0150-1300
PB01-48x25-80-P-SSC*	Lager for PS01-48x360-SSC / EX	0150-3413
PL01-27x1220/1140	Slider 'High Clearance'	0150-1587

* 2 Bearing kits must be ordered separately.

P01-48x360F/860x860-EX-E

Max. Stroke: 860 mm
Peak Force: 721 N



Dimensions in mm

Technical Data P01-48x360F/860x860-EX-E

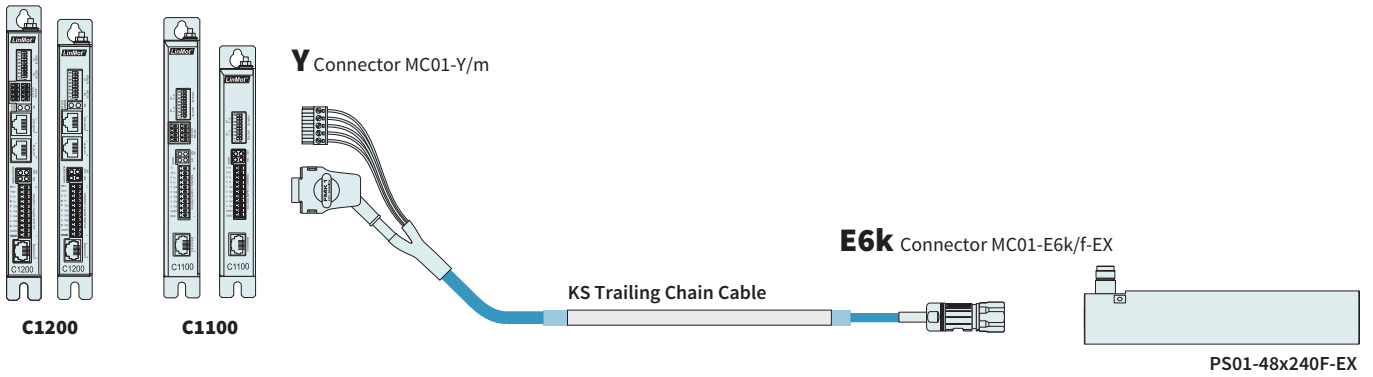
Stroke				
Max. Stroke	mm	(in)	860	(33.89)
Force				
Max. Force @ 48VDC	N	(lbf)	721	(162)
Max. Force @ 72VDC	N	(lbf)	721	(162)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / - / 350	(29 / - / 80)
Max. Border Force relative	%		100	
Force Constant	N/A _{pk}	(lbf/A _{pk})	27.7	(6.24)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.6	(62.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.3	(93.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		4.6 / - / 13	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / - / 0.17	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1900 / - / 240	
Mechanical Data				
Slider Length	mm	(in)	1400	(55)
Slider Mass	g	(lb)	5910	(13)



Item	Description	Item-No.
PS01-48x360F-EX-E	Stator EX, IP67	0150-2545
PS01-48x360F-EX-E-FC	Stator EX, IP67, FC	0150-1300
PB01-48x25-80-P-SSC*	Lager for PS01-48x360-SSC / EX	0150-3413
PL01-27x1400/1320	Slider 'High Clearance'	0150-1588

* 2 Bearing kits must be ordered separately.

Motor Cable



6

ORDERING INFORMATION

TRAILING CHAIN CABLE		
Item	Description	Item-No.
KS10-EX-Y-Fe/E6k-	Trailing Chain Cable KS10-EX-Y-Fe/E6k-, Custom length	0150-3642

CONNECTOR & CABLE (INDIVIDUAL)		
Item	Description	Item-No.
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-E6k/f-EX	Connerctor with hexagonal union nut	0150-3538
KS10-05/05/04-EX	Motor cable for EX applications per m	0150-9010

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-28-SS	Fixed Bearing Set for 27/28 mm sliders, stainless steel	0150-3297
PLL01-27	Floating Bearing for 27 mm sliders	0150-3294

FIND MORE PRODUCT DETAILS IN THE CHAPTER „ACCESSORIES“.

BEARING KIT



Item	Description	Item-No.
PB01-48x25-80-P-SSC	Lager for PS01-48x360-SSC (Edelstahl)	0150-3413

FIND MORE PRODUCT DETAILS IN THE CHAPTER „ACCESSORIES“.

LINEAR MOTORS PD03-37Sx120F-HP



- ✓ High-performance linear motor with integrated drive
- ✓ Compact form factor
- ✓ Highly dynamic
- ✓ Suitable for daisy-chain linkages
- ✓ Integrated mounting flange
- ✓ Low cabling effort

LINEAR MOTORS PD03-37Sx120F-HP

Technical Data **710**

Motor Specifications

PD03-37Sx120F/40-HP **713**

PD03-37Sx120F/100-HP **714**

PD03-37Sx120F/160-HP **715**

PD03-37Sx120F/200-HP **716**

PD03-37Sx120F/300-HP **717**

PD03-37Sx120F/400-HP **718**

Accessories **719**

Product Description

The PD03 drive unit consists of a compact linear motor and an integrated drive. This innovative concept will allow the controller to be eliminated from the electrical enclosure for linear direct drives, thus greatly reducing installation time and effort.

In addition, this opens up the possibility to efficiently couple several devices in a daisy chain linkage. This new generation of motors can be used to implement modular machine concepts easily.



TUBULAR LINEAR MOTOR

Inside the PD03 is a series 37Sx120F-HP linear motor. This short style motor can produce a peak force 255 N and peak speed of 3.8 m/s. Together with the high-resolution slider program, the stroke range is up to 1480 mm.

Like all LinMot motors, this model can also be positioned freely and has high process stability and long service life, with no wear components.



INTEGRATED DRIVE

The drive supplies the motor with a peak phase current of up to 25 A and has an industrial Ethernet interface. EtherCAT, ProfiNet, Ethernet IP, Sercos III, and Powerlink are available. Device profiles CoE, CiA402, SoE, and PROFIdrive are also supported. The RS232 configuration interface and the DIP switch are installed behind a protective cover, which guarantees that leak tightness requirements are met. The complete motor with integrated drive thus meets protection class IP 65 to prevent dust and water spray infiltration.

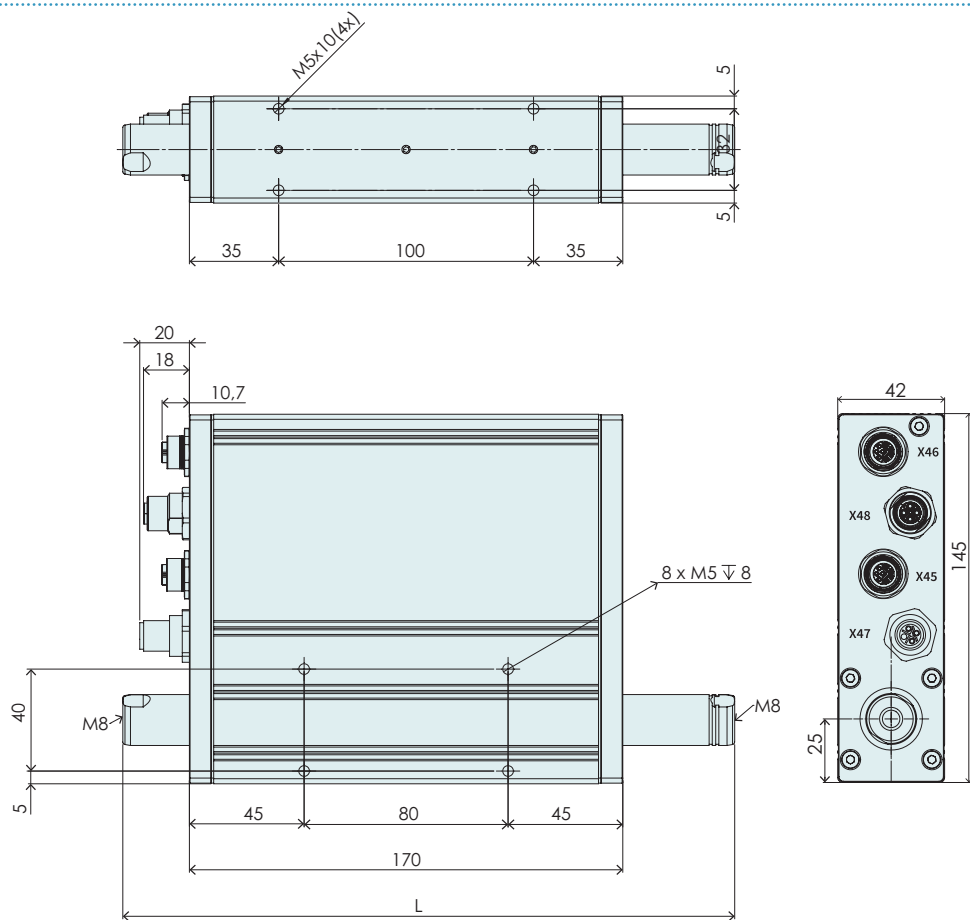


MOTOR FAMILY PD03-37Sx120F-HP

Technical Data

Stroke			
Max. Stroke	mm (in)	400 (15.75)	
Force			
Max. Force @ 48VDC	N (lbf)	255 (57.3)	
Max. Force @ 72VDC	N (lbf)	255 (57.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	48 / - / - (11 / - / -)	
Force Constant	N/A _{pk} (lbf/A _{pk})	17 (3.82)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)	3.8 (149.9)	
Position Detection			
Position Resolution	mm (in)	0.005 (0.0002)	
Repeatability	mm (in)	±0.05 (±0.002)	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	14.9	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2.8 / - / -	
Terminal Resistance 25 °C / 150 °C	Ohm	2.4 / 3.5	
Terminal Inductivity	mH	1.6	
Magnetic Period	mm (in)	40 (1.57)	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.9 / - / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1200 / - / -	
Mechanical Data			
Stator Width	mm (in)	42 (1.65)	
Stator Height	mm (in)	145 (5.71)	
Stator Length	mm (in)	170 (6.7)	
Stator Mass	g (lb)	1900 (4.18)	
Slider Diameter	mm (in)	20 (0.79)	
Slider Length	mm (in)	240 - 600 (9.4 - 24)	
Slider Mass	g (lb)	490 - 1330 (0.88 - 2.4)	
IP Code		IP 65	
Integrated Servo Drive			
Nominal Voltage Power	VDC	72 (24 - 85)	
Nominal Voltage Signal	VDC	24 (22 - 26)	
Nominal Current Signal	mA	150	
Internal Fuse Signal		Sicherung 3 A-T	
Field Bus		EtherCAT	
Configuration Interface		RS232	

STATOR

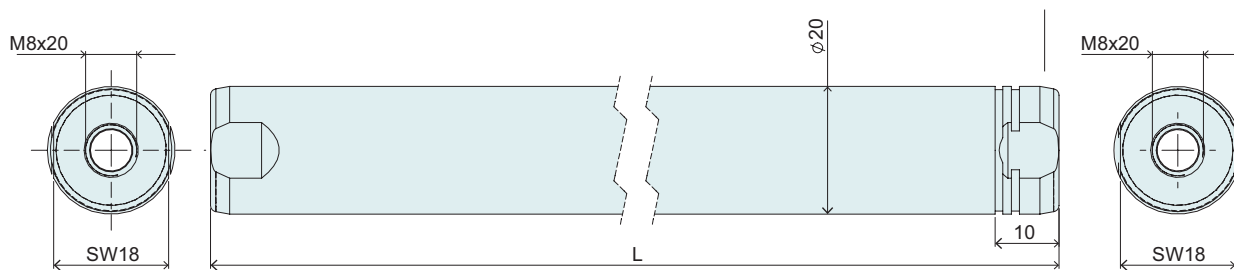


Item	Description	Item-No.
PSD03-37Sx120F-HP-I1150-EC-XC-0S-000	Stator with EtherCAT Drive (72V/15A)	0150-2806
PSD03-37Sx120F-HP-I1150-DS-XC-0S-000	Stator with EtherCAT CoE Drive (72V/15A)	0150-2807
PSD03-37Sx120F-HP-I1150-SE-XC-0S-000	Stator with EtherCAT SoE Drive (72V/15A)	0150-2808

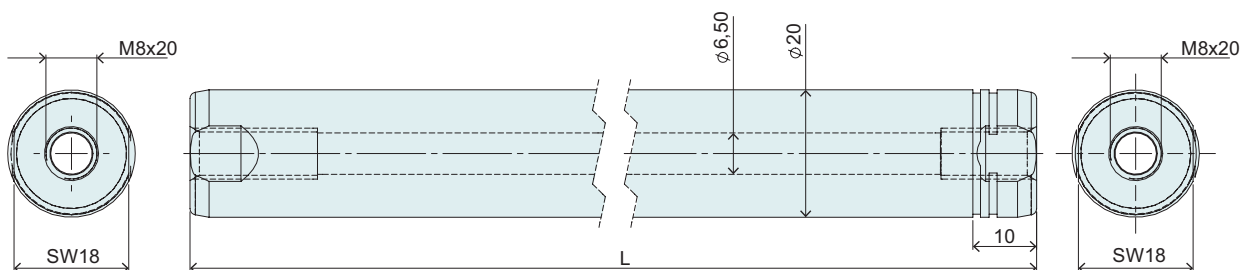
SLIDER

Slider HP / Heavy Duty HP

Number of grooves determines the slider type (see chapter 2 / slider) and marks the front end.



Hollow Slider HP



Slider High Performance			
Item	Description	Max. Stroke [mm]	Item-No.
PL01-20x240/180-HP	Slider 'High Performance'	40	0150-1505
PL01-20x300/240-HP	Slider 'High Performance'	100	0150-1506
PL01-20x360/300-HP	Slider 'High Performance'	160	0150-1507
PL01-20x400/340-HP	Slider 'High Performance'	200	0150-1508
PL01-20x500/440-HP	Slider 'High Performance'	300	0150-1509
PL01-20x600/540-HP	Slider 'High Performance'	400	0150-1510

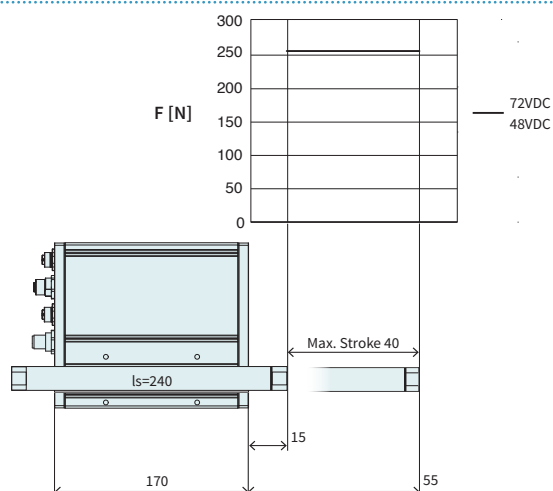
Slider Heavy Duty High Performance			
Item	Description	Max. Stroke [mm]	Item-No.
PL02-20x240/180-HP	Slider 'heavy duty' 'High Performance'	40	0150-2162
PL02-20x300/240-HP	Slider 'heavy duty' 'High Performance'	100	0150-2163
PL02-20x360/300-HP	Slider 'heavy duty' 'High Performance'	160	0150-2164
PL02-20x400/340-HP	Slider 'heavy duty' 'High Performance'	200	0150-2165
PL02-20x500/440-HP	Slider 'heavy duty' 'High Performance'	300	0150-2166
PL02-20x600/540-HP	Slider 'heavy duty' 'High Performance'	400	0150-2167

Hollow Slider High Performance			
Item	Description	Max. Stroke [mm]	Item-No.
PL01-20x240/180-HP-L	Slider 'High Performance L'	40	0150-2540
PL01-20x300/240-HP-L	Slider 'High Performance L'	100	0150-3696
PL01-20x360/300-HP-L	Slider 'High Performance L'	160	0150-1537
PL01-20x400/340-HP-L	Slider 'High Performance L'	200	0150-3697
PL01-20x500/440-HP-L	Slider 'High Performance L'	300	0150-3698
PL01-20x600/540-HP-L	Slider 'High Performance L'	400	0150-3699

PD03-37Sx120F/40-HP

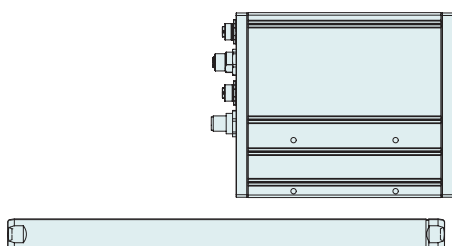
Max. Stroke: 40 mm
Peak Force: 255 N

Dimensions in mm



Technical Data PD03-37Sx120F/40-HP

Stroke			
Max. Stroke	mm (in)	40	(1.57)
Force			
Max. Force @ 48VDC	N (lbf)	255	(57.3)
Max. Force @ 72VDC	N (lbf)	255	(57.3)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	48 / - / -	(11 / - / -)
Force Constant	N/A _{pk} (lbf/A _{pk})	17	(3.82)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.5	(99.9)
Max. Velocity @ 72VDC	m/s (in/s)	3.8	(149.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.5	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	14.9	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2.8 / - / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.9 / - / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1200 / - / -	
Mechanical Data			
Slider Length	mm (in)	240	(9.4)
Slider Mass	g (lb)	490	(1.08)
Integrated Servo Drive			
Nominal Voltage Power	VDC	72 (24 -85)	
Nominal Voltage Signal	VDC	24 (22 -26)	
Nominal Current Signal	mA	150	
Internal Fuse Signal		Sicherung 3 A-T	
Field Bus		EtherCAT	
Configuration Interface		RS232	



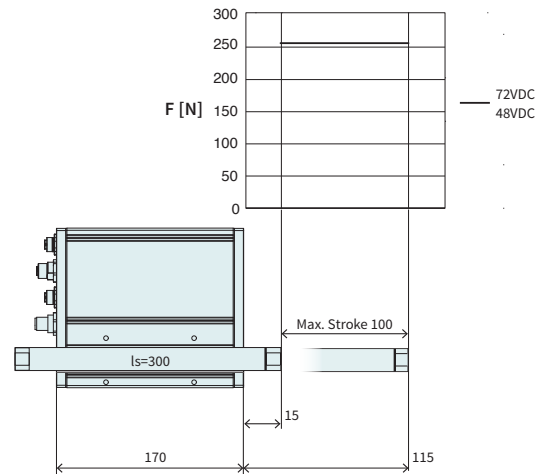
Item	Description	Item-No.
PSD03-37Sx120F-HP-I1150-EC-XC-0S-000	Stator with EtherCAT Drive (72V/15A)	0150-2806
PSD03-37Sx120F-HP-I1150-DS-XC-0S-000	Stator with EtherCAT CoE Drive (72V/15A)	0150-2807
PSD03-37Sx120F-HP-I1150-SE-XC-0S-000	Stator with EtherCAT SoE Drive (72V/15A)	0150-2808
PL01-20x240/180-HP	Slider 'High Performance'	0150-1505
PL02-20x240/180-HP	Slider 'heavy duty' 'High Performance'	0150-2162
PL01-20x240/180-HP-L*	Slider 'High Performance L'	0150-2540

*With this slider, the motor specifications above change.

PD03-37Sx120F/100-HP

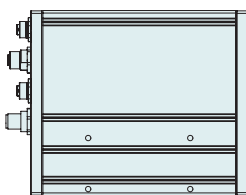
Max. Stroke: 100 mm
Peak Force: 255 N

Dimensions in mm



Technical Data PD03-37Sx120F/100-HP

Stroke			
Max. Stroke	mm (in)	100	(3.93)
Force			
Max. Force @ 48VDC	N (lbf)	255	(57.3)
Max. Force @ 72VDC	N (lbf)	255	(57.3)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	48 / - / -	(11 / - / -)
Force Constant	N/A _{pk} (lbf/A _{pk})	17	(3.82)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.5	(99.9)
Max. Velocity @ 72VDC	m/s (in/s)	3.8	(149.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.4	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	14.9	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2.8 / - / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.9 / - / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1200 / - / -	
Mechanical Data			
Slider Length	mm (in)	300	(12)
Slider Mass	g (lb)	630	(1.39)
Integrated Servo Drive			
Nominal Voltage Power	VDC	72 (24 -85)	
Nominal Voltage Signal	VDC	24 (22 -26)	
Nominal Current Signal	mA	150	
Internal Fuse Signal		Sicherung 3 A-T	
Field Bus		EtherCAT	
Configuration Interface		RS232	



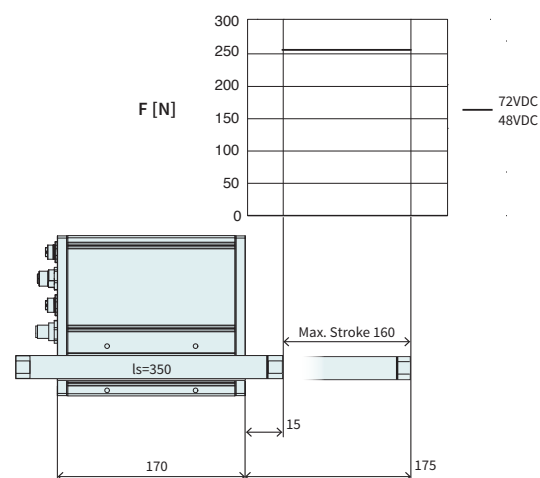
Item	Description	Item-No.
PSD03-37Sx120F-HP-I1150-EC-XC-0S-000	Stator with EtherCAT Drive (72V/15A)	0150-2806
PSD03-37Sx120F-HP-I1150-DS-XC-0S-000	Stator with EtherCAT CoE Drive (72V/15A)	0150-2807
PSD03-37Sx120F-HP-I1150-SE-XC-0S-000	Stator with EtherCAT SoE Drive (72V/15A)	0150-2808
PL01-20x300/240-HP	Slider 'High Performance'	0150-1506
PL02-20x300/240-HP	Slider 'heavy duty' 'High Performance'	0150-2163
PL01-20x300/240-HP-L*	Slider 'High Performance L'	0150-3696

* With this slider, the motor specifications above change.

PD03-37Sx120F/160-HP

Max. Stroke: 160 mm
Peak Force: 255 N

Dimensions in mm



Technical Data PD03-37Sx120F/160-HP

Stroke				
Max. Stroke	mm	(in)	160	(6.29)
Force				
Max. Force @ 48VDC	N	(lbf)	255	(57.3)
Max. Force @ 72VDC	N	(lbf)	255	(57.3)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	48 / - / -	(11 / - / -)
Force Constant	N/A _{pk}	(lbf/A _{pk})	17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.5	(99.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.8	(149.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.8 / - / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.9 / - / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / - / -	
Mechanical Data				
Slider Length	mm	(in)	360	(14)
Slider Mass	g	(lb)	760	(1.67)
Integrated Servo Drive				
Nominal Voltage Power	VDC		72 (24 -85)	
Nominal Voltage Signal	VDC		24 (22 -26)	
Nominal Current Signal	mA		150	
Internal Fuse Signal			Sicherung 3 A-T	
Field Bus			EtherCAT	
Configuration Interface			RS232	

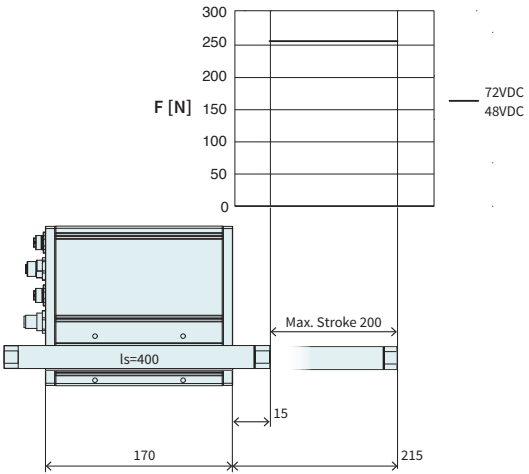


Item	Description	Item-No.
PSD03-37Sx120F-HP-I1150-EC-XC-0S-000	Stator with EtherCAT Drive (72V/15A)	0150-2806
PSD03-37Sx120F-HP-I1150-DS-XC-0S-000	Stator with EtherCAT CoE Drive (72V/15A)	0150-2807
PSD03-37Sx120F-HP-I1150-SE-XC-0S-000	Stator with EtherCAT SoE Drive (72V/15A)	0150-2808
PL01-20x360/300-HP	Slider 'High Performance'	0150-1507
PL02-20x360/300-HP	Slider 'heavy duty' 'High Performance'	0150-2164
PL01-20x360/300-HP-L*	Slider 'High Performance L'	0150-1537

* With this slider, the motor specifications above change.

PD03-37Sx120F/200-HP

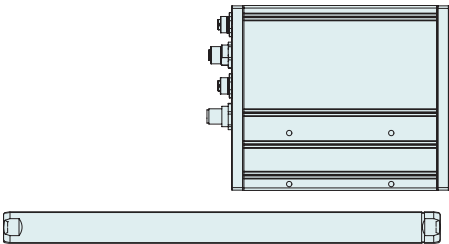
Max. Stroke: 200 mm
Peak Force: 255 N



Dimensions in mm

Technical Data PD03-37Sx120F/200-HP

Stroke				
Max. Stroke	mm	(in)	200	(7.86)
Force				
Max. Force @ 48VDC	N	(lbf)	255	(57.3)
Max. Force @ 72VDC	N	(lbf)	255	(57.3)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	48 / - / -	(11 / - / -)
Force Constant	N/A _{pk}	(lbf/A _{pk})	17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.5	(99.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.8	(149.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling /Fan / Fluid]	A _{pk}		2.8 / - / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.9 / - / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / - / -	
Mechanical Data				
Slider Length	mm	(in)	400	(16)
Slider Mass	g	(lb)	860	(1.9)
Integrated Servo Drive				
Nominal Voltage Power	VDC		72 (24 -85)	
Nominal Voltage Signal	VDC		24 (22 -26)	
Nominal Current Signal	mA		150	
Internal Fuse Signal			Sicherung 3 A-T	
Field Bus			EtherCAT	
Configuration Interface			RS232	



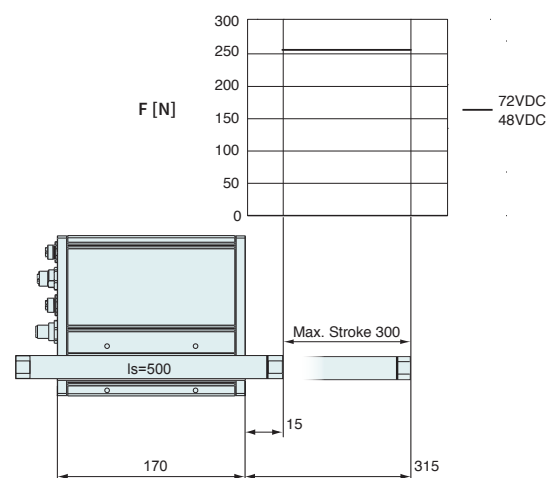
Item	Description	Item-No.
PSD03-37Sx120F-HP-I1150-EC-XC-0S-000	Stator with EtherCAT Drive (72V/15A)	0150-2806
PSD03-37Sx120F-HP-I1150-DS-XC-0S-000	Stator with EtherCAT CoE Drive (72V/15A)	0150-2807
PSD03-37Sx120F-HP-I1150-SE-XC-0S-000	Stator with EtherCAT SoE Drive (72V/15A)	0150-2808
PL01-20x400/340-HP	Slider 'High Performance'	0150-1508
PL02-20x400/340-HP	Slider 'heavy duty' 'High Performance'	0150-2165
PL01-20x400/340-HP-L*	Slider 'High Performance' L	0150-3697

* With this slider, the motor specifications above change.

PD03-37Sx120F/300-HP

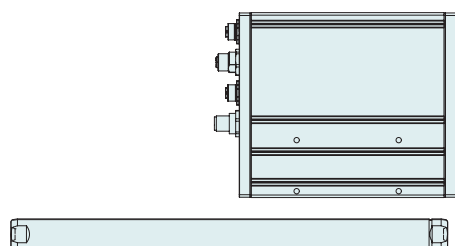
Max. Stroke: 300 mm
Peak Force: 255 N

Dimensions in mm



Technical Data PD03-37Sx120F/300-HP

Stroke				
Max. Stroke	mm	(in)	300	(11.8)
Force				
Max. Force @ 48VDC	N	(lbf)	255	(57.3)
Max. Force @ 72VDC	N	(lbf)	255	(57.3)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	48 / - / -	(11 / - / -)
Force Constant	N/A _{pk}	(lbf/A _{pk})	17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.5	(99.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.8	(149.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.8 / - / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.9 / - / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / - / -	
Mechanical Data				
Slider Length	mm	(in)	500	(20)
Slider Mass	g	(lb)	1090	(2.4)
Integrated Servo Drive				
Nominal Voltage Power	VDC		72 (24 -85)	
Nominal Voltage Signal	VDC		24 (22 -26)	
Nominal Current Signal	mA		150	
Internal Fuse Signal			Sicherung 3 A-T	
Field Bus			EtherCAT	
Configuration Interface			RS232	

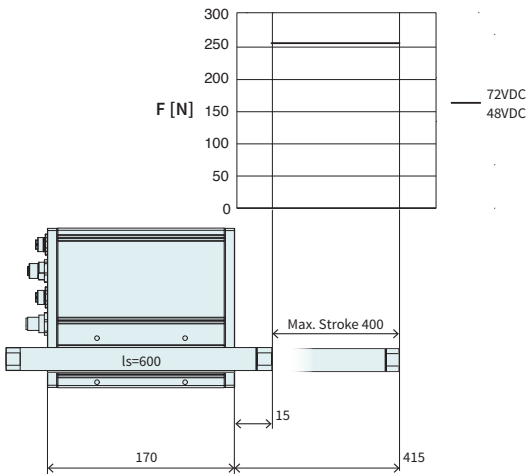


Item	Description	Item-No.
PSD03-37Sx120F-HP-I1150-EC-XC-0S-000	Stator with EtherCAT Drive (72V/15A)	0150-2806
PSD03-37Sx120F-HP-I1150-DS-XC-0S-000	Stator with EtherCAT CoE Drive (72V/15A)	0150-2807
PSD03-37Sx120F-HP-I1150-SE-XC-0S-000	Stator with EtherCAT SoE Drive (72V/15A)	0150-2808
PL01-20x500/440-HP	Slider 'High Performance'	0150-1509
PL02-20x500/440-HP	Slider 'heavy duty' 'High Performance'	0150-2166
PL01-20x500/440-HP-L*	Slider 'High Performance L'	0150-3698

* With this slider, the motor specifications above change.

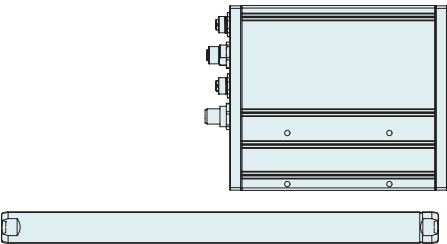
PD03-37Sx120F/400-HP

Max. Stroke: 400 mm
Peak Force: 255 N



Dimensions in mm

Technical Data PD03-37Sx120F/400-HP				
Stroke				
Max. Stroke	mm	(in)	400	(15.69)
Force				
Max. Force @ 48VDC	N	(lbf)	255	(57.3)
Max. Force @ 72VDC	N	(lbf)	255	(57.3)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	48 / - / -	(11 / - / -)
Force Constant	N/A _{pk}	(lbf/A _{pk})	17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.5	(99.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.8	(149.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.8 / - / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.9 / - / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / - / -	
Mechanical Data				
Slider Length	mm	(in)	600	(24)
Slider Mass	g	(lb)	1330	(2.93)
Integrated Servo Drive				
Nominal Voltage Power	VDC		72 (24 -85)	
Nominal Voltage Signal	VDC		24 (22 -26)	
Nominal Current Signal	mA		150	
Internal Fuse Signal			Sicherung 3 A-T	
Field Bus			EtherCAT	
Configuration Interface			RS232	



Item	Description	Item-No.
PSD03-37Sx120F-HP-I1150-EC-XC-0S-000	Stator with EtherCAT Drive (72V/15A)	0150-2806
PSD03-37Sx120F-HP-I1150-DS-XC-0S-000	Stator with EtherCAT CoE Drive (72V/15A)	0150-2807
PSD03-37Sx120F-HP-I1150-SE-XC-0S-000	Stator with EtherCAT SoE Drive (72V/15A)	0150-2808
PL01-20x600/540-HP	Slider 'High Performance'	0150-1510
PL02-20x600/540-HP	Slider 'heavy duty' 'High Performance'	0150-2167
PL01-20x600/540-HP-L*	Slider 'High Performance L'	0150-3699

* With this slider, the motor specifications above change.

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-20	Fixed Bearing Set for 19/20 mm sliders	0150-3297
PLF01-20-SS	Fixed Bearing Set for 19/20 mm sliders, stainless steel	0150-3297
PLL01-19	Floating Bearing for 19 mm sliders	0150-3297
PLL01-20	Floating Bearing for 20 mm sliders	0150-3297
PLM01-20-MK	Mounting Kit for 20 mm sliders	0150-3294

FIND MORE PRODUCT DETAILS IN THE CHAPTER „ACCESSORIES“.

LINEAR MOTORS P04



The motor to replace pneumatics.

Product Description

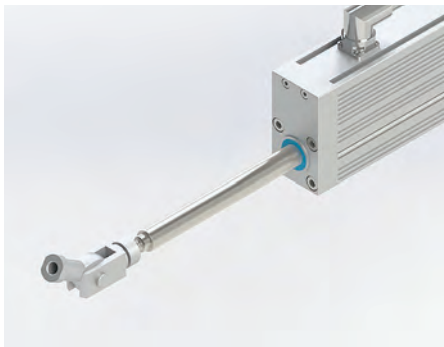
The P04 linear motor has all of the features of the tubular linear motors and has the additional advantage of an integrated guidance. Under the compact aluminum housing is a powerful LinMot PS01-37x120F or PS01-48x240F that drives the precision shaft on bearings. The shaft is guided by a linear ball bearing and has a maximum stroke of 150 mm. With the M10x1.25 thread on the front end, loads can be quickly and easily attached to the

shaft. Additional installation options are provided by the profile grooves and T-slots found on every side of the housing.

The ability to move to any position and accelerate up to 50 m/s^2 means that precision dynamic motions can be implemented for a broad range of applications.

Can be equipped with mechanical accessories for pneumatic systems

The P04 actuator can be equipped with familiar mechanical accessories for pneumatic systems. Several design details on the motor make this possible. The load end of rod has a thread that is identical to ISO 15552 pneumatic cylinders. All mounting elements for pneumatics can be used accordingly. This particularly includes swivel heads and clevis mounts. The PD04 linear motor itself can be mounted like a pneumatic cylinder or by using the T-slots in the housing. All known pivoting and stationary mounting flanges can be used.



HARDENED SHAFT FOR TRANSVERSE LOADS

The integrated bearing of the PD04 linear motor provides a substantial benefit. The transverse loads that are applied in special applications can be supported.

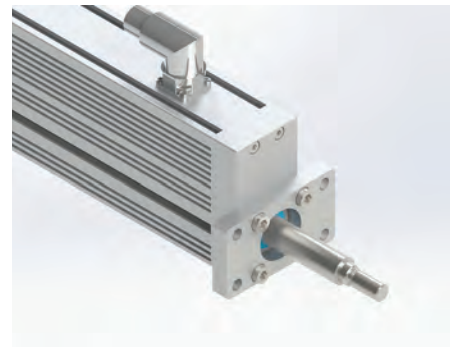
Simple applications such as ejectors can be implemented in the simplest manner without additional components.



HIGH AND CONTROLLED DYNAMICS

Max. acceleration values over 50 m/s^2 and travel speeds over 3 m/s allow cyclical motion sequences of several Hertz.

For handling applications with sensitive products, smooth motions with suitable accelerations can be obtained.



FREELY POSITIONABLE

LinMot linear motors can be freely positioned. With absolute or relative movement commands, they can move to any desired position in the stroke range. Since the LinMot linear drive is a closed-loop system, not only the end positions are monitored, but also deviations in position during travel. This allows, among other things, precise specification of travel speeds, acceleration and braking ramps, and travel through curved paths.

PROCESS STABILITY

For temperature monitoring, all linear motors are equipped with sensors, which transmit the data to the drive. The data can be evaluated in the higher-level control in such a way that the motor can be kept in a constant temperature range.

Since not only the end positions, but also speed and acceleration are controlled and monitored, motions that are programmed once are carried out the same way over the entire life of the machine.

SYNCHRONIZATION

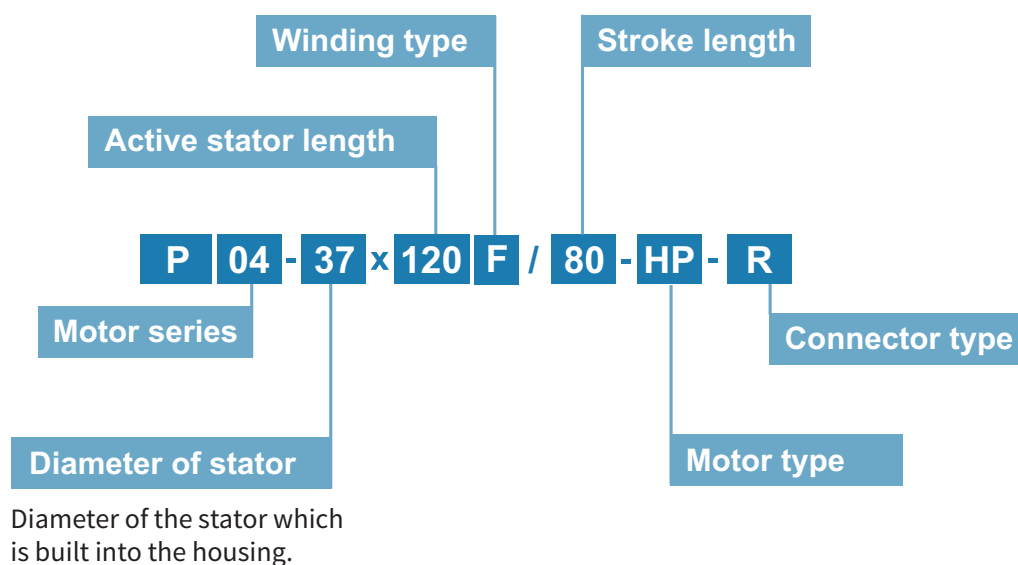
For synchronous machines, the linear motor can be synchronized to the main shaft. By replacing mechanical cam discs with LinMot linear motors, for example, great variations can be achieved, with format changeovers at the push of a button.

OVERLOAD PROTECTION

There are no mechanical components for force transfer that could be damaged in a crash or stall condition in a linear motor. Complex, expensive designs to protect gearboxes, gears, and shafts are thus eliminated. If the linear motor stalls, it acts like a pneumatic cylinder and tries to reach the target position with maximum force. The following error monitor in the drive can, however, immediately recognize a stall condition. Temperature sensors integrated in the stator prevent the drive from overloading in any case.

LONG LIFESPAN

Since the linear motion is generated purely magnetically, and no mechanical force transmission takes place, even extremely dynamic applications can be implemented with a long lifespan.

Type Code

For explanations of the terms, please refer to the section "Glossary"

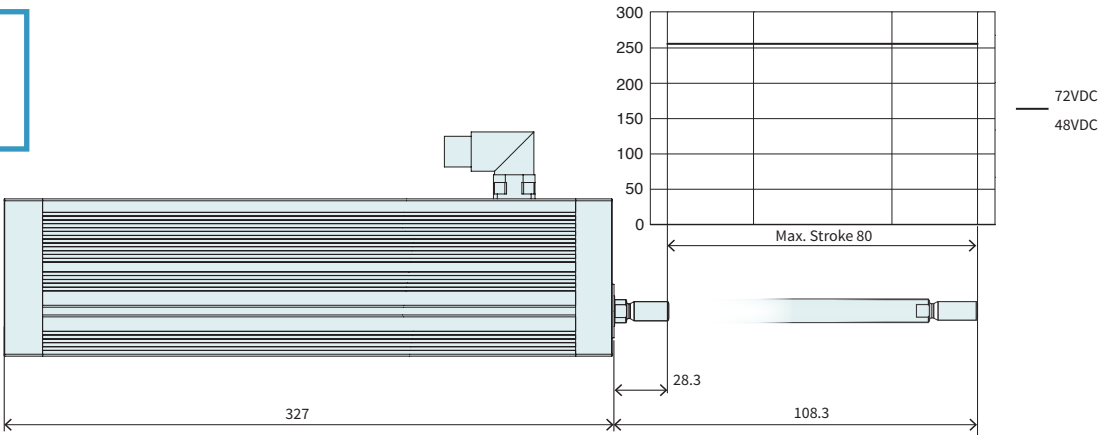
LINEAR MOTORS P04-37x120F-HP



- ✓ Peak Force bis for 255 N
- ✓ Stroke up to 135 mm
- ✓ Hardened rod capable to handle side load
- ✓ Mounting connection according to ISO pneumatic cylinder
- ✓ Stator encapsulated (IP65)
- ✓ Ideal for use in harsh environments

P04-37x120F/80-HP-R

Max. Stroke: 80 mm
Peak Force: 255 N

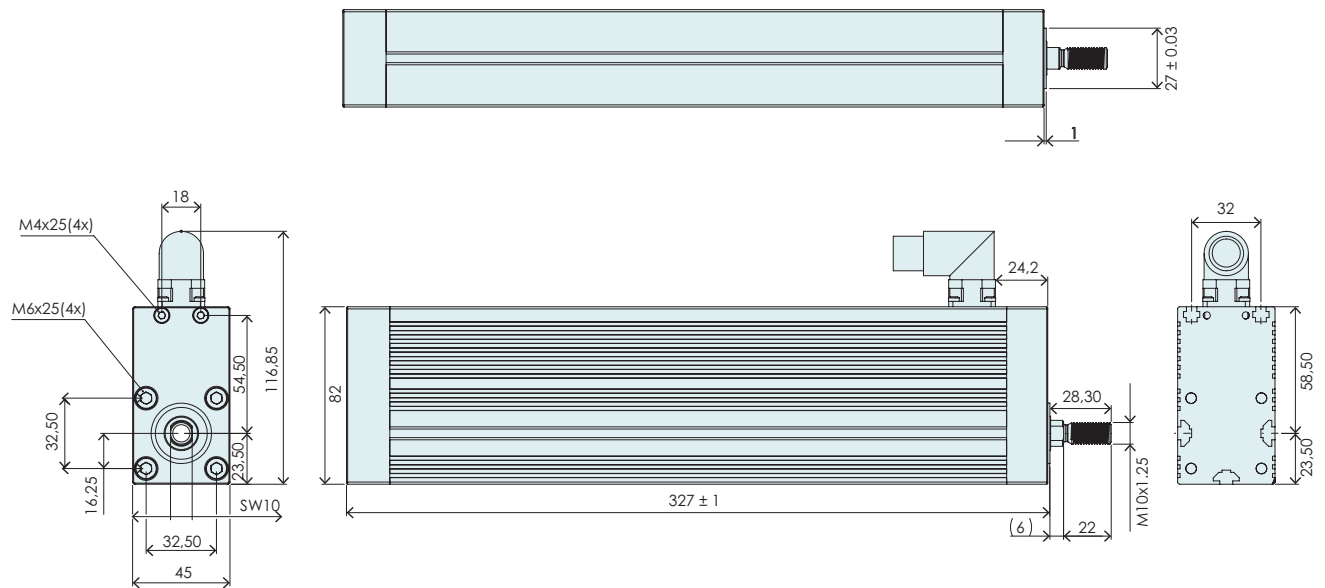


Dimensions in mm

Technical Data P04-37x120F/80-HP

Stroke			
Max. Stroke	mm (in)	80 (3.14)	
Force			
Max. Force @ 48VDC	N (lbf)	255 (57.3)	
Max. Force @ 72VDC	N (lbf)	255 (57.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	63 / 93 / - (14 / 21 / -)	
Force Constant	N/A _{pk} (lbf/A _{pk})	17 (3.82)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)	3.8 (149.9)	
Position Detection			
Position Resolution	mm (in)	0.005 (0.0002)	
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.4	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	14.9	
Max. Current @ 72VDC	A _{pk}	14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	3.7 / 5.5 / -	
Terminal Resistance 25 °C / 150 °C	Ohm	2.4 / 3.5	
Terminal Inductivity	mH	1.6	
Magnetic Period	mm (in)	40 (1.57)	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.7 / 0.78 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	680 / 310 / -	
Mechanical Data			
Stator Width	mm (in)	45 (1.77)	
Stator Height	mm (in)	82 (3.23)	
Stator Length	mm (in)	327 (12.88)	
Stator Mass	g (lb)	2365 (5.2)	
Rod Diameter	mm (in)	16 (0.63)	
Rod Mass	g (lb)	507 (1.12)	
Max. shear force to the rod	N (lbf)	60 (13.5)	
Max. torque to the rod	Nm (lbfin)	1 (8.93)	
IP Code		IP 65	

MOTOR

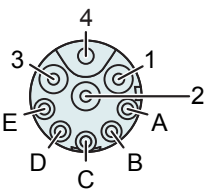


Item	Description	Item-No.
P04-37x120F/80-HP-R	Linear motor P04-37, 80 mm Stroke	0150-2756

CONNECTOR

Motor Connector Wiring	R-Connector	Wire Color Motor Cable
Ph 1+	1	red
Ph 1-	2	pink
Ph 2+	3	blue
Ph 2-	4	grey
+5VDC	A	white
GND	B	Inner Shield
Sinus	C	yellow
Cosinus	D	green
Temp.	E	black
Shield	Case	Outer Shield

R-Connector



View: Motor connector, plug on

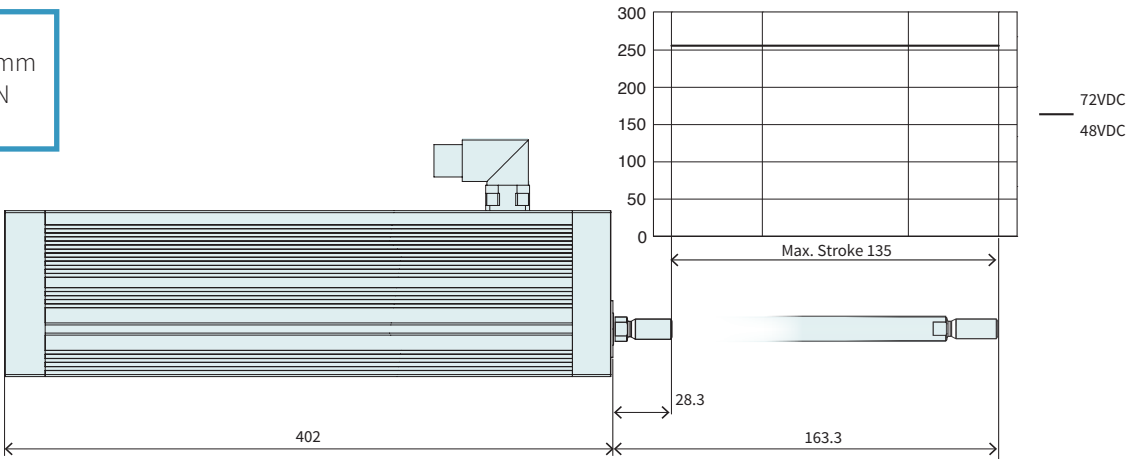
P04-37x120F/135-HP-R

Max. Stroke:

135 mm

Peak Force:

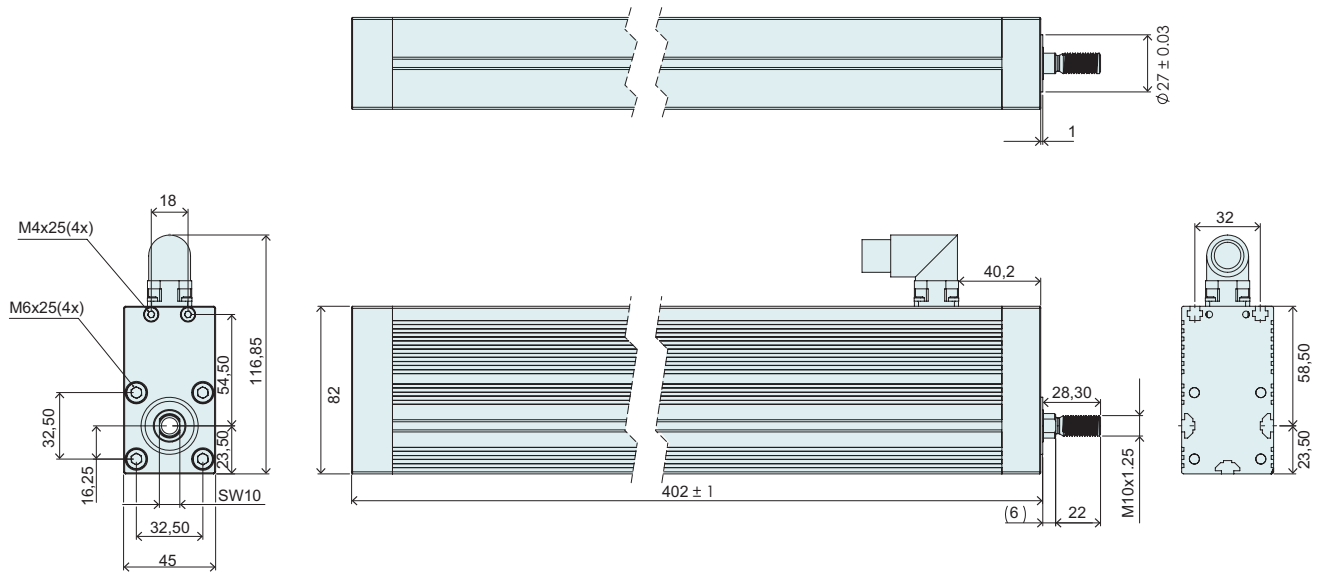
255 N



Dimensions in mm

Technical Data P04-37x120F/135-HP-R				
Stroke				
Max. Stroke	mm (in)		135 (5.3)	
Force				
Max. Force @ 48VDC	N (lbf)		255 (57.3)	
Max. Force @ 72VDC	N (lbf)		255 (57.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		63 / 93 / - (14 / 21 / -)	
Force Constant	N/A _{pk} (lbf/A _{pk})		17 (3.82)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)		3.8 (149.9)	
Position Detection				
Position Resolution	mm (in)		0.005 (0.0002)	
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.4	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		3.7 / 5.5 / -	
Terminal Resistance 25 °C / 150 °C	Ohm		2.4 / 3.5	
Terminal Inductivity	mH		1.6	
Magnetic Period	mm (in)	40		(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.7 / 0.78 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		680 / 310 / -	
Mechanical Data				
Stator Width	mm (in)		45 (1.77)	
Stator Height	mm (in)		82 (3.23)	
Stator Length	mm (in)		402 (15.83)	
Stator Mass	g (lb)		2675 (5.89)	
Rod Diameter	mm (in)		16 (0.63)	
Rod Mass	g (lb)		625 (1.38)	
Max. shear force to the rod	N (lbf)		60 (13.5)	
Max. torque to the rod	Nm (lbfin)		1 (8.93)	
IP Code			IP 65	

MOTOR

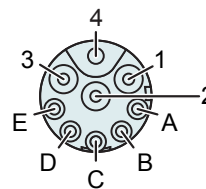


Item	Description	Item-No.
P04-37x120F/135-HP-R	Linear motor P04-37, 135 mm Stroke	0150-2738

CONNECTOR

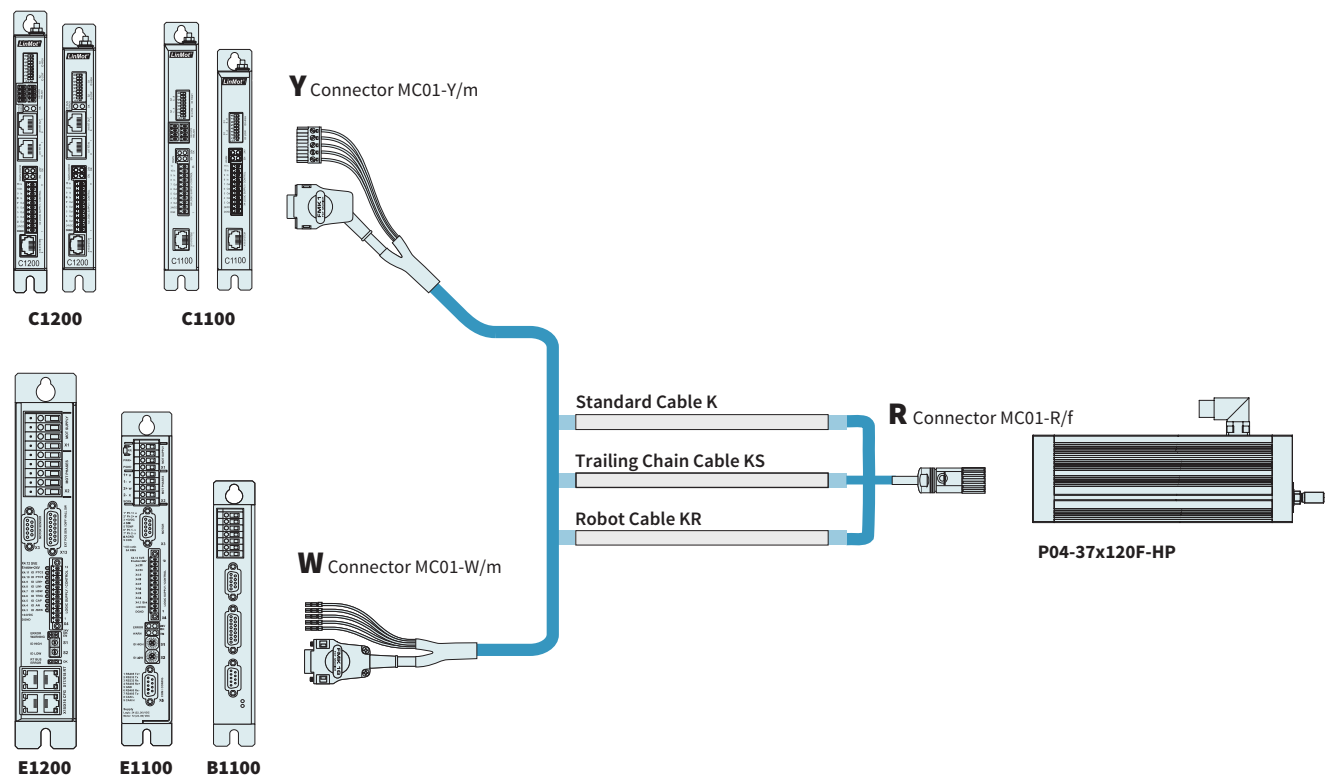
Motor Connector Wiring	R-Connector	
	R-Connector	Wire Color Motor Cable
Ph 1+	1	red
Ph 1-	2	pink
Ph 2+	3	blue
Ph 2-	4	grey
+5VDC	A	white
GND	B	Inner Shield
Sinus	C	yellow
Cosinus	D	green
Temp.	E	black
Shield	Case	Outer Shield

R-Connector



View: Motor connector, plug on

Motor Cable



ORDERING INFORMATION

STANDARDKABEL		
Item	Description	Item-No.
K05-W/R-2	Motor Cable W/R, 2 m	0150-2119
K05-W/R-4	Motor Cable W/R, 4 m	0150-2120
K05-W/R-6	Motor Cable W/R, 6 m	0150-2121
K05-W/R-8	Motor Cable W/R, 8 m	0150-2122
K05-W/R-	Motor Cable W/R, Custom length	0150-3262
K05-Y/R-2	Motor Cable Y/R, 2 m	0150-2421
K05-Y/R-4	Motor Cable Y/R, 4 m	0150-2422
K05-Y/R-6	Motor Cable Y/R, 6 m	0150-2423
K05-Y/R-8	Motor Cable Y/R, 8 m	0150-2424
K05-Y-Fe/R-	Motor Cable Y/R, Custom length	0150-3501
TRAILING CHAIN CABLE		
Item	Description	Item-No.
KS05-W/R-4	Trailing Chain Cable W/R, 4 m	0150-2106
KS05-W/R-6	Trailing Chain Cable W/R, 6 m	0150-2131
KS05-W/R-8	Trailing Chain Cable W/R, 8 m	0150-2107
KS05-W/R-	Trailing Chain Cable W/R, Custom length	0150-3256
KS05-Y/R-4	Trailing Chain Cable Y/R, 4 m	0150-2433
KS05-Y/R-6	Trailing Chain Cable Y/R, 6 m	0150-2434
KS05-Y/R-8	Trailing Chain Cable Y/R, 8 m	0150-2435
KS05-Y/R-	Trailing Chain Cable Y/R, Custom length	0150-3507

ROBOT CABLE		
Item	Description	Item-No.
KR05-W/R-	Robot Cable KR05-W/R, Custom length	0150-3336
KR05-Y-Fe/R-	Robot Cable KR05-Y-Fe/R, Custom length	0150-3512

CONNECTOR & CABLE (INDIVIDUAL)		
Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-R/f	Motor Connector R/f	0150-3129
K05-04/05	Motor Cable per m	0150-1920
KS05-04/05	Trailing Chain Cable per m	0150-1938
KR05-04/05	Robot Cable per m	0150-1846

Handwriting practice area with horizontal dotted lines.

LINEAR MOTORS P04-48x240F

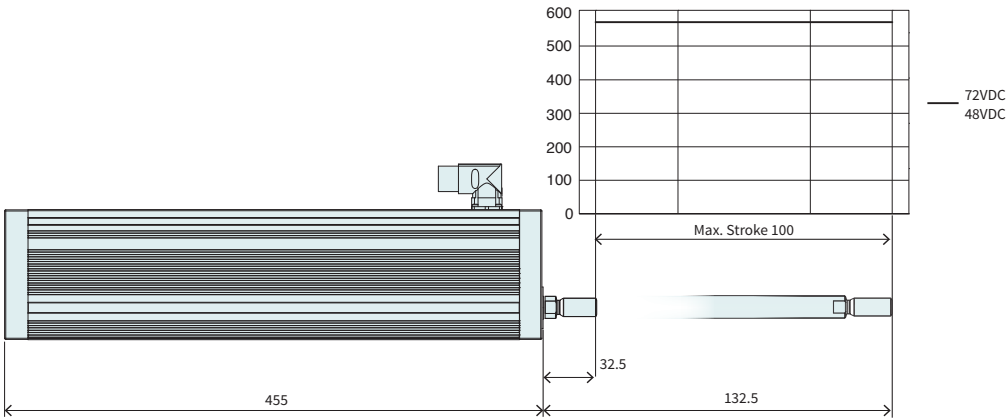


8

- ✓ Peak force up to 570 N
- ✓ Stroke up to 150 mm
- ✓ Hardened rod capable to handle side load
- ✓ Mounting connection according to ISO pneumatic cylinder
- ✓ Stator encapsulated (IP65)
- ✓ Ideal for use in harsh environments

P04-48x240F/100-C

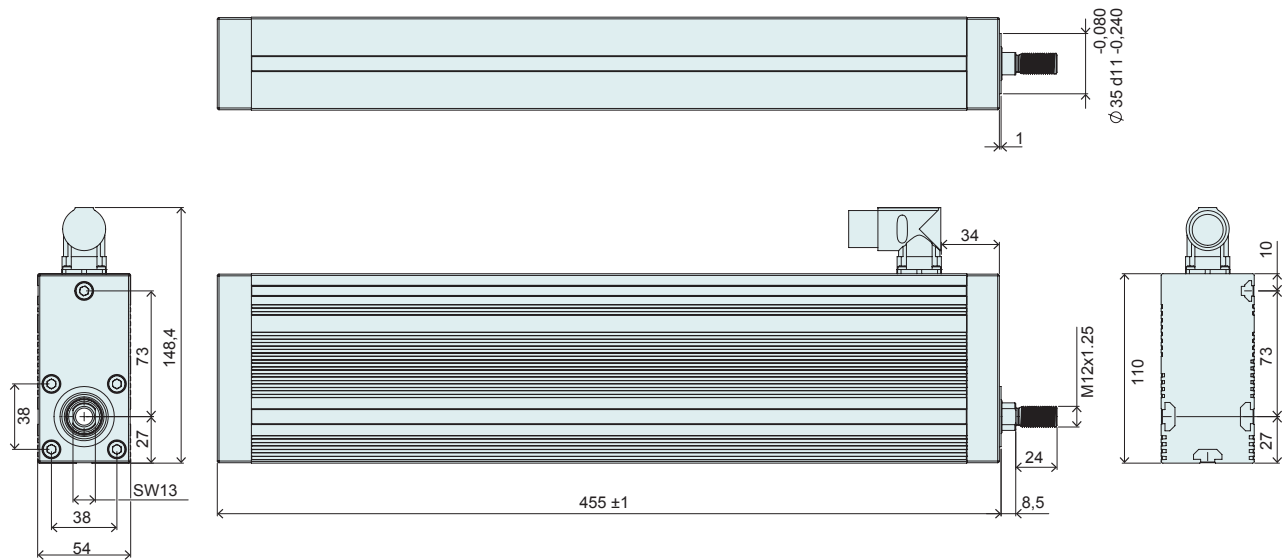
Max. Stroke: 100 mm
Peak Force: 572 N



Technical Data P04-48x240F/100

Stroke				
Max. Stroke	mm	(in)	100	(3.93)
Force				
Max. Force @ 48VDC	N	(lbf)	572	(129)
Max. Force @ 72VDC	N	(lbf)	572	(129)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 250 / -	(42 / 56 / -)
Force Constant	N/A _{pk}	(lbf/A _{pk})	22	(4.95)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.9	(78.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.9	(119.9)
Position Detection				
Position Resolution	mm	(in)	0.007	(0.0003)
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.4	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		8.6 / 11 / -	
Terminal Resistance 25 °C / 120 °C	Ohm		0.97 / 1.3	
Terminal Inductivity	mH		1.1	
Magnetic Period	mm	(in)	60	(2.35)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.54 / 0.31 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		550 / 320 / -	
Mechanical Data				
Stator Width	mm	(in)	54	(2.13)
Stator Height	mm	(in)	110	(4.33)
Stator Length	mm	(in)	455	(17.92)
Stator Mass	g	(lb)	3555	(7.82)
Rod Diameter	mm	(in)	20	(0.79)
Rod Mass	g	(lb)	1109	(2.45)
Max. shear force to the rod	N	(lbf)	90	(20.25)
Max. torque to the rod	Nm	(lbf·in)	2.5	(22.32)
IP Code			IP 65	

MOTOR

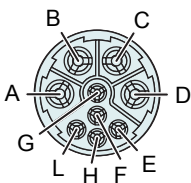


Item	Description	Item-No.
P04-48x240F/100-C	Linear motor P04-48, 100 mm Stroke	0150-2757

CONNECTOR

Motor Connector Wiring	C-Connector	
	C-Connector	Wire Color Motor Cable
Ph 1+	A	red
Ph 1-	B	pink
Ph 2+	C	blue
Ph 2-	D	grey
+5VDC	E	white
GND	F	Inner Shield
Sinus	G	yellow
Cosinus	H	green
Temp.	L	black
Shield	Gehäuse	Outer Shield

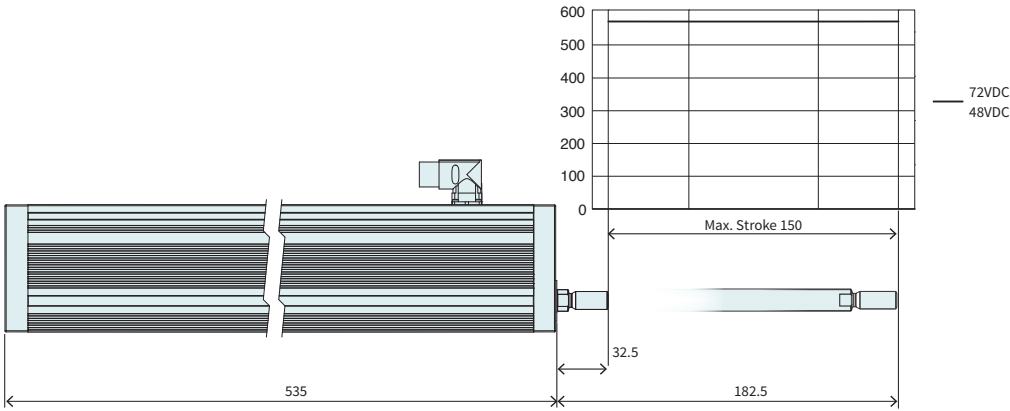
C-Connector



View: Motor connector, plug on

P04-48x240F/150-C

Max. Stroke: 150 mm
Peak Force: 572 N

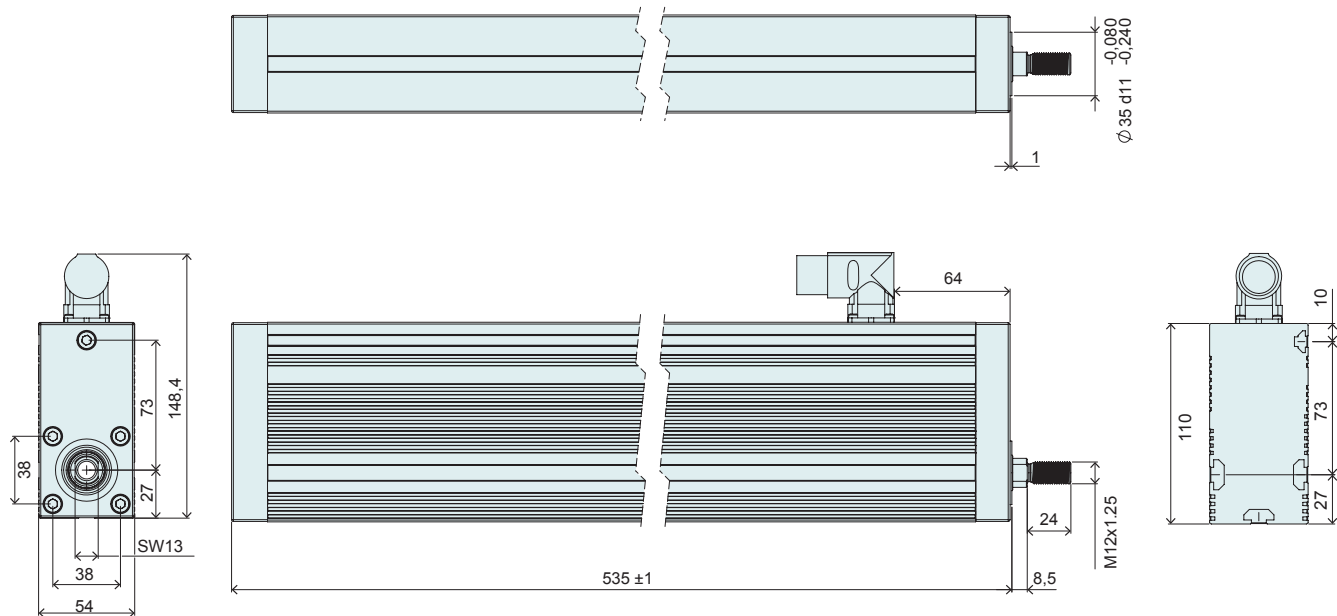


Dimensions in mm

Technical Data P04-48x240F/150

Stroke				
Max. Stroke	mm	(in)	150	(5.91)
Force				
Max. Force @ 48VDC	N	(lbf)	572	(129)
Max. Force @ 72VDC	N	(lbf)	572	(129)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	190 / 250 / -	(42 / 56 / -)
Force Constant	N/A _{pk}	(lbf/A _{pk})	22	(4.95)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.9	(78.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.9	(119.9)
Position Detection				
Position Resolution	mm	(in)	0.007	(0.0003)
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.4	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		8.6 / 11 / -	
Terminal Resistance 25 °C / 120 °C	Ohm		0.97 / 1.3	
Terminal Inductivity	mH		1.1	
Magnetic Period	mm	(in)	60	(2.35)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.54 / 0.31 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		550 / 320 / -	
Mechanical Data				
Stator Width	mm	(in)		
Stator Height	mm	(in)		
Stator Length	mm	(in)		
Stator Mass	g	(lb)	3865	(6.9)
Rod Diameter	mm	(in)		
Rod Mass	g	(lb)		
Max. shear force to the rod	N	(lbf)		
Max. torque to the rod	Nm	(lbfin)		
IP Code			IP 65	

MOTOR

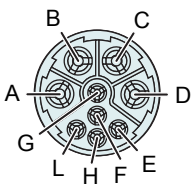


Item	Description	Item-No.
P04-48x240F/150-C	Linear motor P04-48, 150 mm Stroke	0150-2745

CONNECTOR

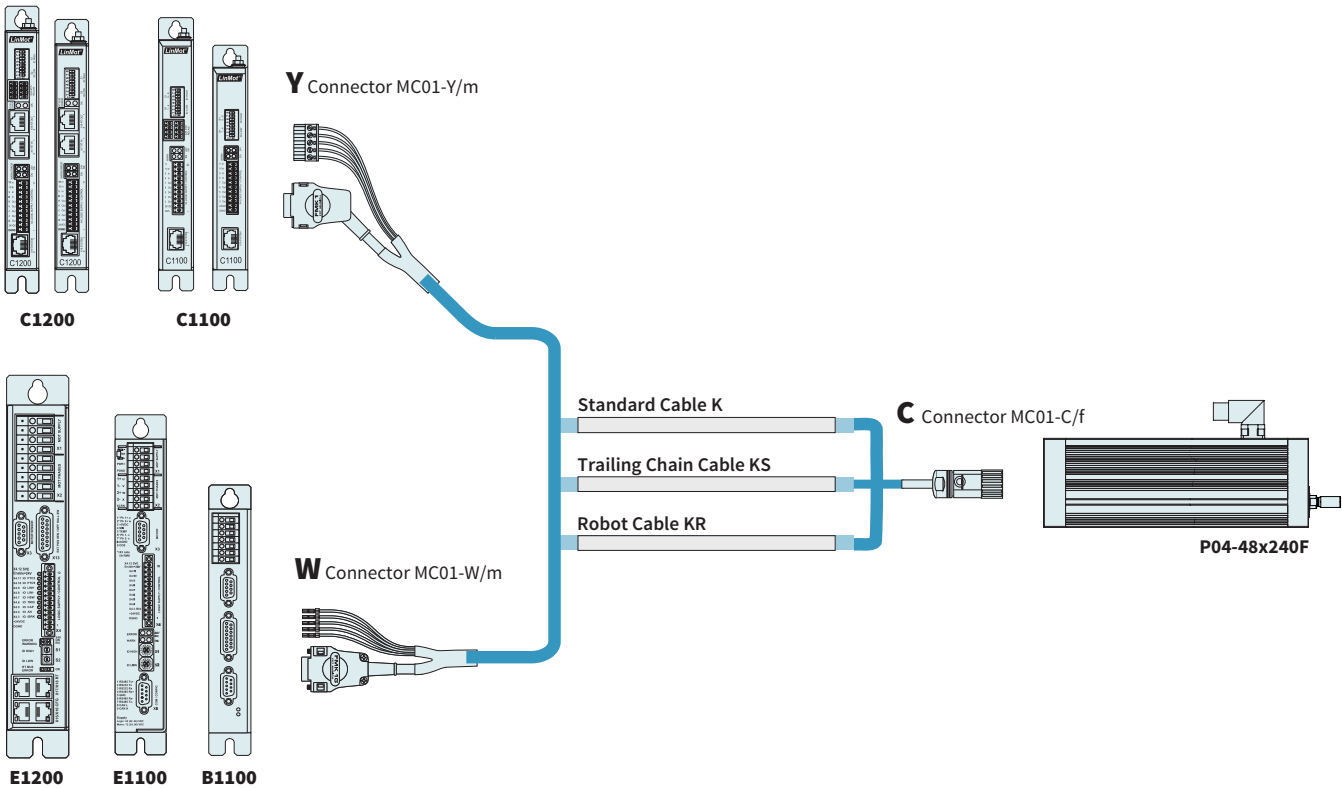
Motor Connector Wiring	C-Connector	Wire Color Motor Cable
Ph 1+	A	red
Ph 1-	B	pink
Ph 2+	C	blue
Ph 2-	D	grey
+5VDC	E	white
GND	F	Inner Shield
Sinus	G	yellow
Cosinus	H	green
Temp.	L	black
Shield	Gehäuse	Outer Shield

C-Connector



View: Motor connector, plug on

Motor Cable



ORDERING INFORMATION

STANDARDKABEL		
Item	Description	Item-No.
K15-W/C-2	Motor Cable W/C, 2 m	0150-1811
K15-W/C-4	Motor Cable W/C, 4 m	0150-1801
K15-W/C-6	Motor Cable W/C, 6 m	0150-1802
K15-W/C-8	Motor Cable W/C, 8 m	0150-1803
K15-W/C-	Motor Cable W/C, Custom length	0150-3131
K15-Y/C-2	Motor Cable Y/C, 2 m	0150-2429
K15-Y/C-4	Motor Cable Y/C, 4 m	0150-2430
K15-Y/C-6	Motor Cable Y/C, 6 m	0150-2431
K15-Y/C-8	Motor Cable Y/C, 8 m	0150-2432
K15-Y/C-	Motor Cable Y/C, Custom length	0150-3506

TRAILING CHAIN CABLE		
Item	Description	Item-No.
KS10-W/C-4	Trailing Chain Cable W/C, 4 m	0150-1807
KS10-W/C-6	Trailing Chain Cable W/C, 6 m	0150-1858
KS10-W/C-8	Trailing Chain Cable W/C, 8 m	0150-1808
KS10-W/C-	Trailing Chain Cable W/C, Custom length	0150-3139
KS10-Y/C-4	Trailing Chain Cable Y/C, 4 m	0150-2439
KS10-Y/C-6	Trailing Chain Cable Y/C, 6 m	0150-2440
KS10-Y/C-8	Trailing Chain Cable Y/C, 8 m	0150-2441
KS10-Y/C-	Trailing Chain Cable Y/C, Custom length	0150-3511

ROBOT CABLE		
Item	Description	Item-No.
KR10-W/C-	Robot Cable KR10-W/C, Custom length	0150-3199
KR10-Y-Fe/C-	Robot Cable KR10-Y-Fe/C, Custom length	0150-3515

CONNECTOR & CABLE (INDIVIDUAL)		
Item	Description	Item-No.
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
MC01-C/f	Motor Connector C/f	0150-3080
K15-04/05	Motor Cable per m	0150-1978
KS10-04/05	Trailing Chain Cable per m	0150-1977
KR10-04/05	Robot Cable per m	0150-1830

Handwriting practice area with horizontal dotted lines.

LINEAR MOTORS PD04



9

The motor to replace pneumatics.

Product Description

The P04 linear motor has all of the features of the tubular linear motors and has the additional advantage of an integrated guidance. Under the compact aluminum housing is a powerful LinMot PS01-37x120F or PS01-48x240F that drives the precision shaft on bearings. The shaft is guided by a linear ball bearing and has a maximum stroke of 150 mm. With the M10x1.25 thread on the front end, loads can be quickly and easily attached to the

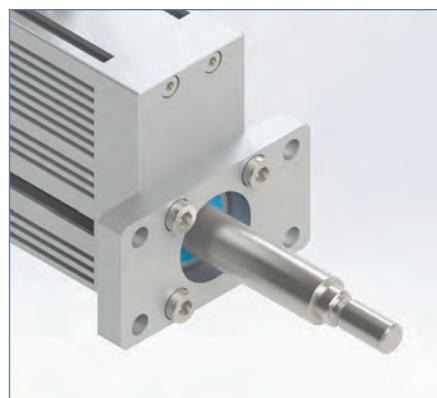
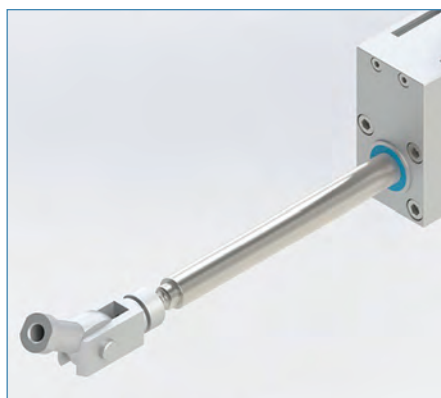
shaft. Additional installation options are provided by the profile grooves and T-slots found on every side of the housing.

The ability to move to any position and accelerate up to 50 m/s^2 means that precision dynamic motions can be implemented for a broad range of applications.



Programmable without a PC

The PD04 linear drive is very easy to use. It can be used to replace pneumatic cylinders and configured with no software or PC required. Motion data and force data can be set from a display directly on the drive in real time. The user can set up four positions easily. There is no need for a reference run, as the drive uses an absolute sensor system. The motor is ready to go as soon as it is connected and starts positioning immediately.



Can be equipped with mechanical accessories for pneumatic systems

The P04 actuator can be equipped with familiar mechanical accessories for pneumatic systems. Several design details on the motor make this possible. The load end of rod has a thread that is identical to ISO 15552 pneumatic cylinders. All mounting

elements for pneumatics can be used accordingly. This particularly includes swivel heads and clevis mounts. The PD04 linear motor itself can be mounted like a pneumatic cylinder or by using the T-slots in the housing. All known pivoting and stationary mounting flanges can be used.

HARDENED SHAFT FOR TRANSVERSE LOADS

The integrated bearing of the PD04 linear motor provides a substantial benefit. The transverse loads that are applied in special applications can be supported.

Simple applications such as ejectors can be implemented in the simplest manner without additional components.

HIGH AND CONTROLLED DYNAMICS

Max. acceleration values over 50 m/s² and travel speeds over 3 m/s allow cyclical motion sequences of several Hertz.

For handling applications with sensitive products, smooth motions with suitable accelerations can be obtained.

FREELY POSITIONABLE

LinMot linear motors can be freely positioned. With absolute or relative movement commands, they can move to any desired position in the stroke range. Since the LinMot linear drive system is a closed-loop system, not only the end positions are monitored, but also deviations in position during travel. This allows, among other things, precise specification of travel speeds, acceleration and braking ramps, and travel through curved paths.

PROCESS STABILITY

For temperature monitoring, all linear motors are equipped with sensors, which transmit the data to the drive. The data can be evaluated in the higher-level control in such a way that the motor can be kept in a constant temperature range.

Since not only the end positions, but also speed and acceleration are controlled and monitored, motions that are programmed once are carried out the same way over the entire life of the machine.

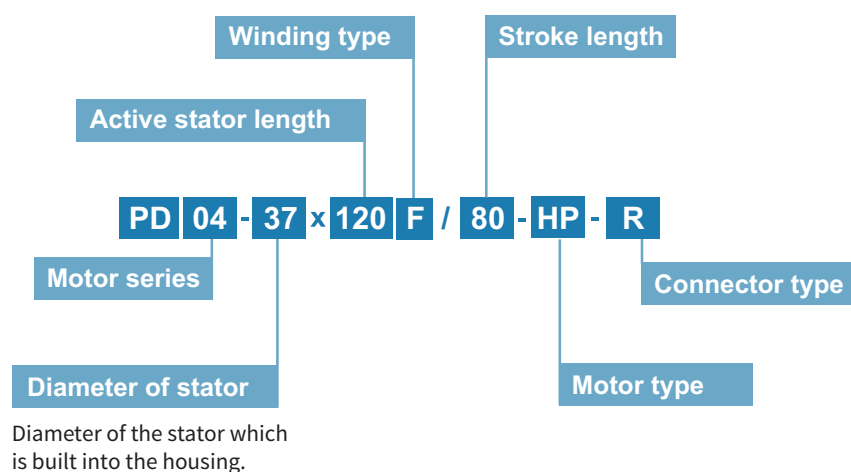
OVERLOAD PROTECTION

There are no mechanical components for force transfer that could be damaged in a crash or stall condition in a linear motor. Complex, expensive designs to protect gearboxes, gears, and shafts are thus eliminated. If the linear motor stalls, it acts like a pneumatic cylinder and tries to reach the target position with defined maximum force. The following error monitor in the drive can, however, immediately recognize a stall condition. Temperature sensors integrated in the stator prevent the drive from overloading in any case.

LONG LIFESPAN

Since the linear motion is generated purely magnetically, and no mechanical force transmission takes place, even extremely dynamic applications can be implemented with a long lifespan.

Type Code



For explanations of the terms, please refer to the section "Glossary"

Handwriting practice area with horizontal dotted lines.

LINEAR MOTORS PD04-37x120F-HP



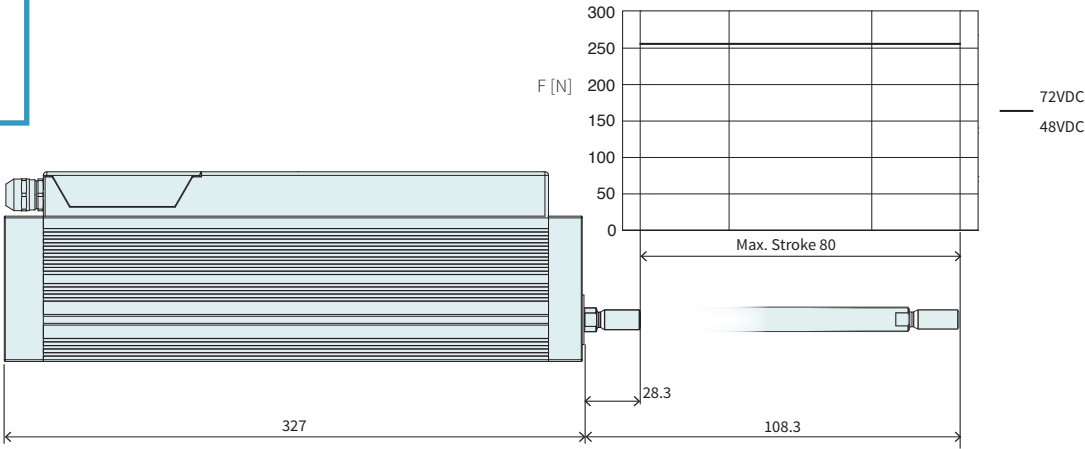
9

- ✓ Linear Motor with integrated Drive
- ✓ Integrated linear guide
- ✓ Quick and easy commissioning
- ✓ Stand alone configuration of the motor
- ✓ Highly dynamic
- ✓ Absolute sensor, no homing required
- ✓ Freely programmable positions
- ✓ "In position" signal for each position

PD04-37x120F/80-HP-R

Max. Stroke: 80 mm
Peak Force: 255 N

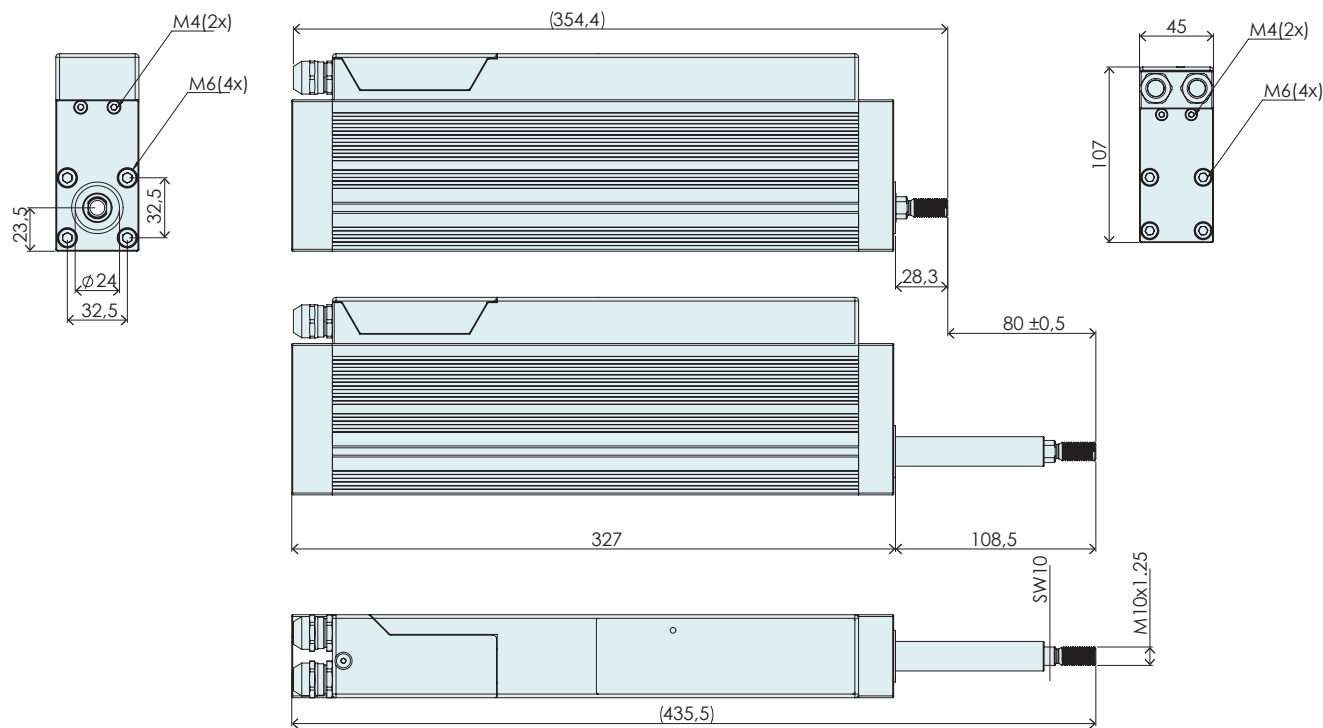
Dimensions in mm



Technical Data PD04-37x120F/80-HP-R

Stroke				
Max. Stroke	mm	(in)	80	(3.14)
Force				
Max. Force @ 48VDC	N	(lbf)	255	(57.3)
Max. Force @ 72VDC	N	(lbf)	255	(57.3)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	63 / 93 / -	(14 / 21 / -)
Force Constant	N/A _{pk}	(lbf/A _{pk})	17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.5	(99.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.8	(149.9)
Position Detection				
Position Resolution	mm	(in)	0.005	(0.0002)
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.4	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		3.7 / 5.5 / -	
Terminal Resistance 25 °C / 150 °C	Ohm		2.4 / 3.5	
Terminal Inductivity	mH		1.6	
Magnetic Period	mm	(in)	40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.7 / 0.78 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		680 / 310 / -	
Mechanical Data				
Stator Width	mm	(in)	45	(1.77)
Stator Height	mm	(in)	82	(3.23)
Stator Length	mm	(in)	327	(12.88)
Stator Mass	g	(lb)	2365	(5.2)
Rod Diameter	mm	(in)	16	(0.63)
Rod Mass	g	(lb)	507	(1.12)
Max. shear force to the rod	N	(lbf)	60	(13.5)
Max. torque to the rod	Nm	(lbf·in)	1	(8.93)
IP Code			IP 65	

MOTOR

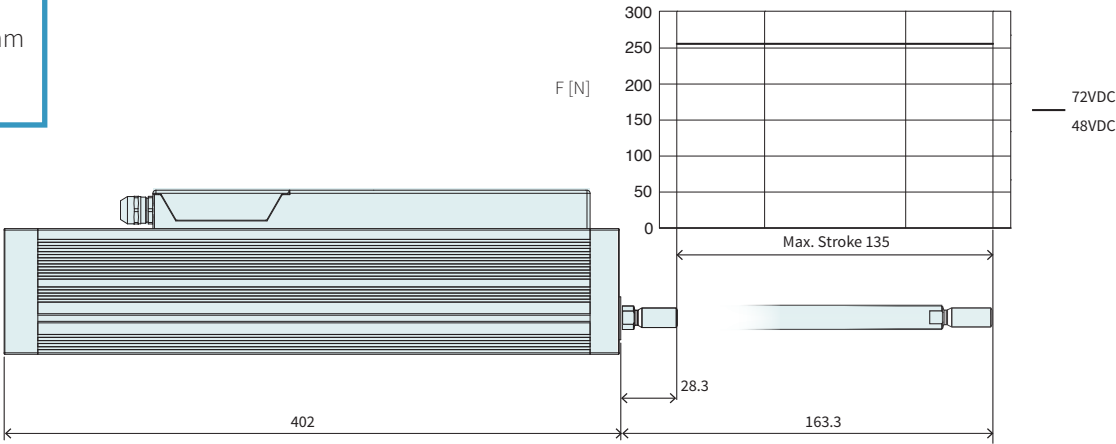


Item	Description	Item-No.
PD04-37x120F/80-HP	Linear motor PD04-37, 80 mm Stroke	0150-2792

PD04-37x120F/135-HP-R

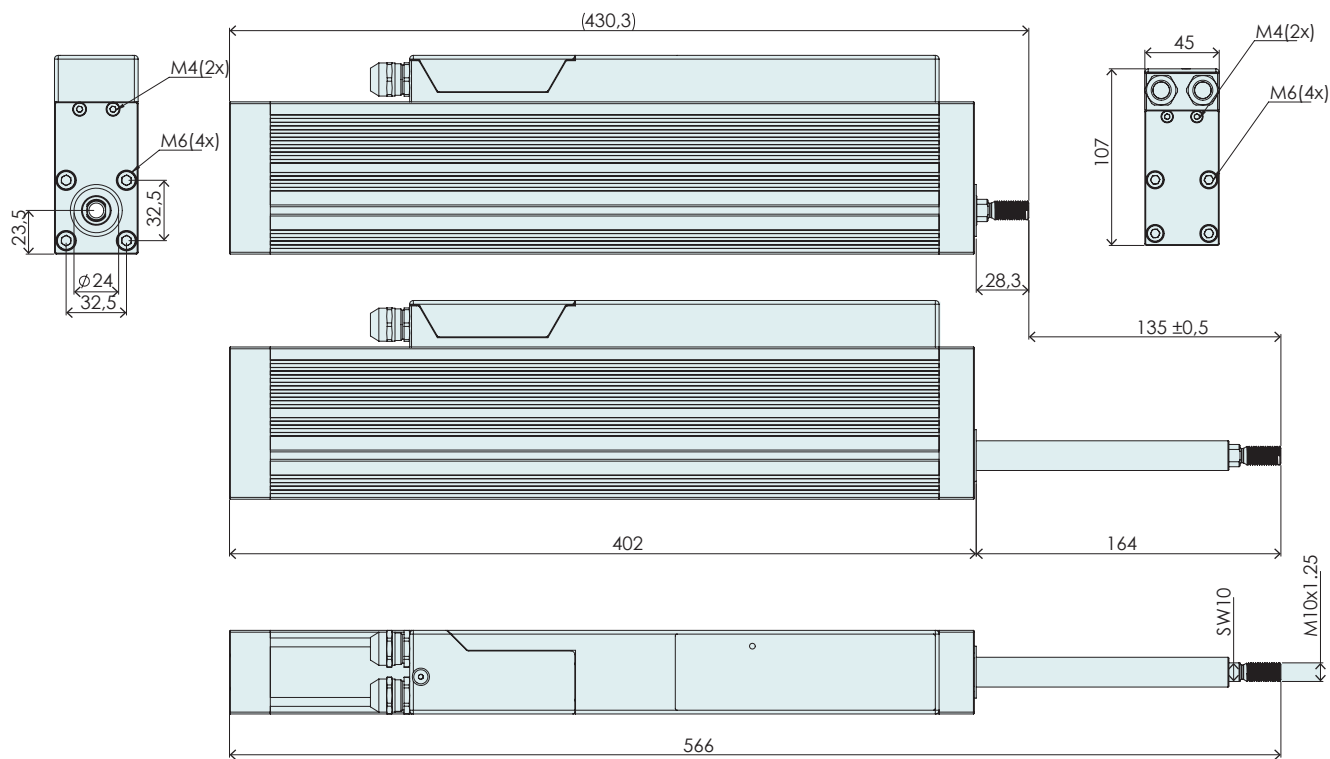
Max. Stroke: 135 mm
Peak Force: 255 N

Dimensions in mm



Technical Data PD04-37x120F/135-HP-R				
Stroke				
Max. Stroke	mm	(in)	135	(5.3)
Force				
Max. Force @ 48VDC	N	(lbf)	255	(57.3)
Max. Force @ 72VDC	N	(lbf)	255	(57.3)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	63 / 93 / -	(14 / 21 / -)
Force Constant	N/A _{pk}	(lbf/A _{pk})	17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.5	(99.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.8	(149.9)
Position Detection				
Position Resolution	mm	(in)	0.005	(0.0002)
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.4	
Electrical Data				
Max. Current @ 48VDC	A _{pk} / A _{rms}		14.9	
Max. Current @ 72VDC	A _{pk} / A _{rms}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		3.7 / 5.5 / -	
Terminal Resistance 25 °C / 150 °C	Ohm		2.4 / 3.5	
Terminal Inductivity	mH		1.6	
Magnetic Period	mm	(in)	40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.7 / 0.78 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		680 / 310 / -	
Mechanical Data				
Stator Width	mm	(in)	45	(1.77)
Stator Height	mm	(in)	82	(3.23)
Stator Length	mm	(in)	402	(15.83)
Stator Mass	g	(lb)	2675	(5.89)
Rod Diameter	mm	(in)	16	(0.63)
Rod Mass	g	(lb)	625	(1.38)
Max. shear force to the rod	N	(lbf)	60	(13.5)
Max. torque to the rod	Nm	(lbfin)	1	(8.93)
IP Code			IP 65	

MOTOR



Item	Description	Item-No.
PD04-37x120F/135-HP	Linear motor PD04-37, 135 mm Stroke	0150-2793

Handwriting practice area with horizontal dotted lines.

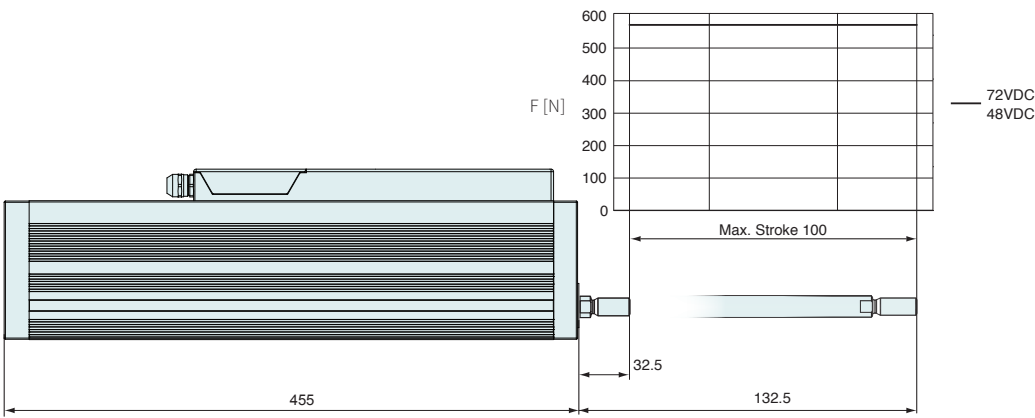
LINEAR MOTORS PD04-48x240F



- ✓ Linear Motor with integrated Drive
- ✓ Integrated linear guide
- ✓ Quick and easy commissioning
- ✓ Stand alone configuration of the motor
- ✓ Highly dynamic
- ✓ Absolute sensor, no homing required
- ✓ Freely programmable positions
- ✓ "In position" signal for each position

PD04-48x240F/100-C

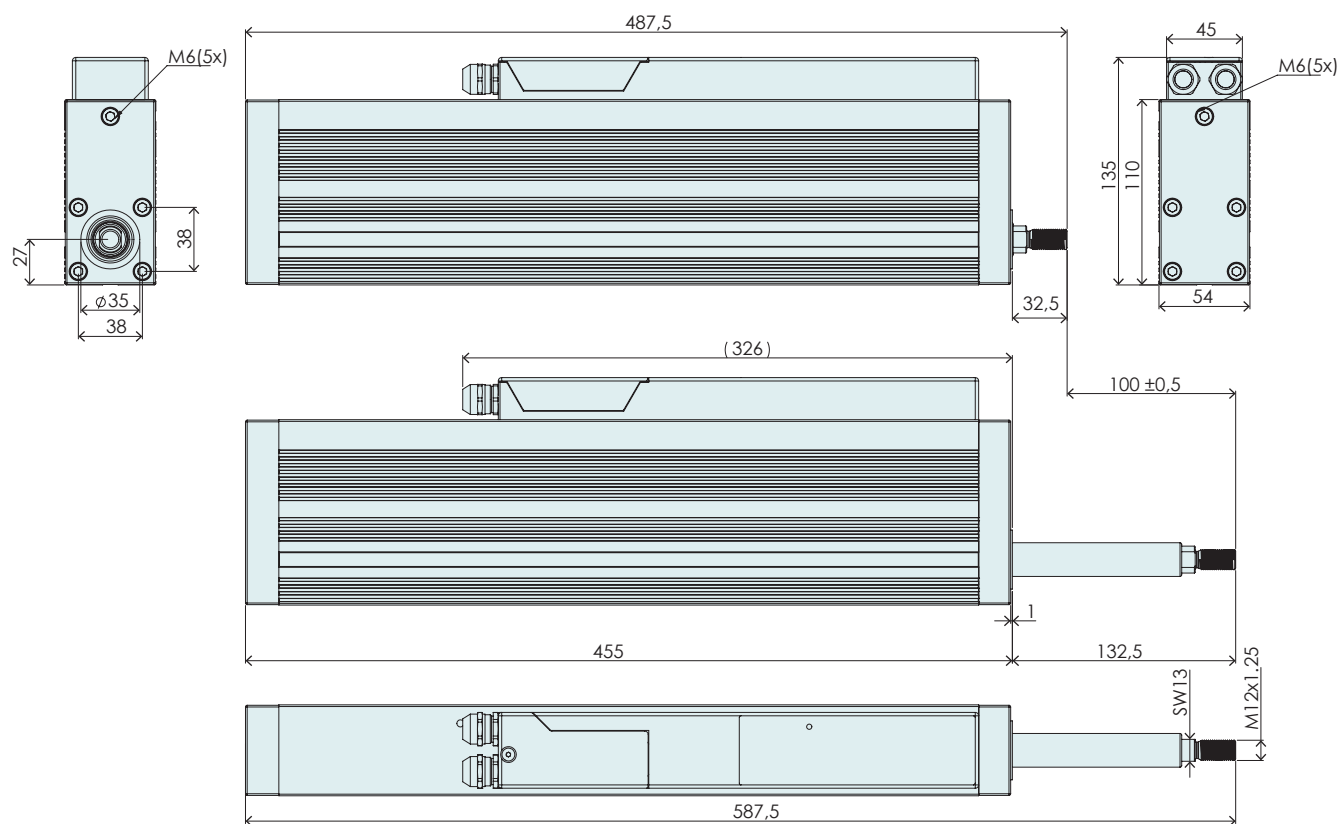
Max. Stroke: 100 mm
Peak Force: 572 N



Dimensions in mm

Technical Data PD04-48x240F/100-C				
Stroke				
Max. Stroke	mm	(in)	100	(3.93)
Force				
Max. Force @ 48VDC	N	(lbf)	572	(129)
Max. Force @ 72VDC	N	(lbf)	572	(129)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 250 / -	(42 / 56 / -)
Force Constant	N/A _{pk}	(lbf/A _{pk})	22	(4.95)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.9	(78.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.9	(119.9)
Position Detection				
Position Resolution	mm	(in)	0.007	(0.0003)
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.4	
Electrical Data				
Max. Current @ 48VDC	A _{pk} / A _{rms}		25.9	
Max. Current @ 72VDC	A _{pk} / A _{rms}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		8.6 / 11 / -	
Terminal Resistance 25 °C / 120 °C	Ohm		0.97 / 1.3	
Terminal Inductivity	mH		1.1	
Magnetic Period	mm	(in)	60	(2.35)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.54 / 0.31 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		550 / 320 / -	
Mechanical Data				
Stator Width	mm	(in)	54	(2.13)
Stator Height	mm	(in)	110	(4.33)
Stator Length	mm	(in)	455	(17.92)
Stator Mass	g	(lb)	3555	(7.82)
Rod Diameter	mm	(in)	20	(0.79)
Rod Mass	g	(lb)	1109	(2.45)
Max. shear force to the rod	N	(lbf)	90	(20.25)
Max. torque to the rod	Nm	(lbfin)	2.5	(22.32)
IP Code			IP 65	

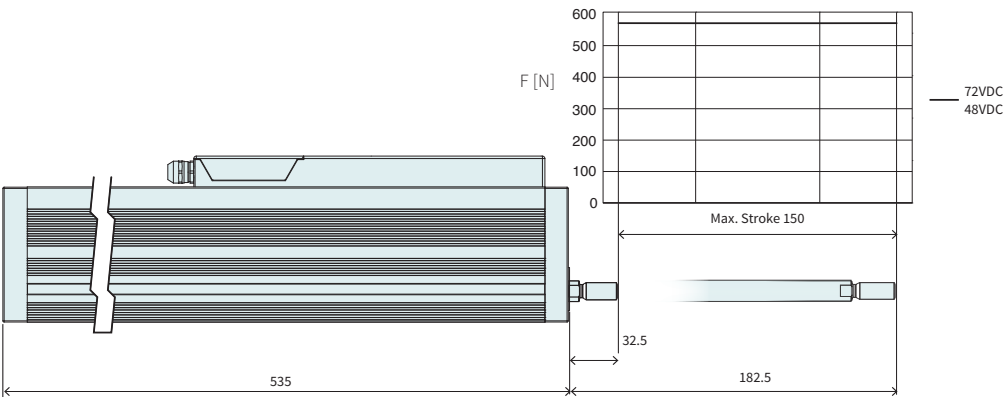
MOTOR



Item	Description	Item-No.
PD04-48x240F/100	Linear motor PD04-48, 100 mm Stroke	0150-2794

PD04-48x240F/150-C

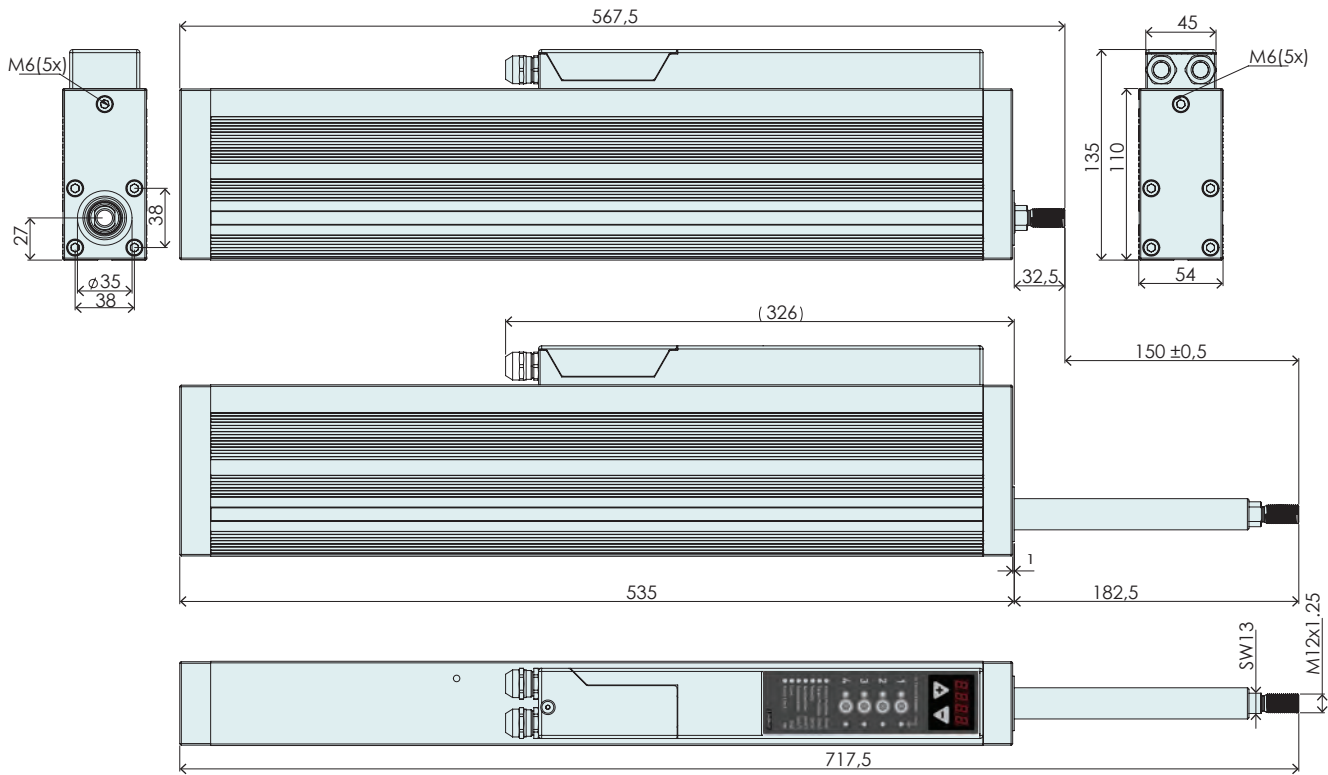
Max. Stroke: 150 mm
Peak Force: 572 N



Dimensions in mm

Technical Data PD04-48x240F/150-C				
Stroke				
Max. Stroke	mm	(in)	150	(5.91)
Force				
Max. Force @ 48VDC	N	(lbf)	572	(129)
Max. Force @ 72VDC	N	(lbf)	572	(129)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 250 / -	(42 / 56 / -)
Force Constant	N/A _{pk}	(lbf/A _{pk})	22	(4.95)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	1.9	(78.9)
Max. Velocity @ 72VDC	m/s	(in/s)	2.9	(119.9)
Position Detection				
Position Resolution	mm	(in)	0.007	(0.0003)
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.4	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		8.6 / 11 / -	
Terminal Resistance 25 °C / 120 °C	Ohm		0.97 / 1.3	
Terminal Inductivity	mH		1.1	
Magnetic Period	mm	(in)	60	(2.35)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.54 / 0.31 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		550 / 320 / -	
Mechanical Data				
Stator Width	mm	(in)	54	(2.13)
Stator Height	mm	(in)	110	(4.33)
Stator Length	mm	(in)	535	(21.07)
Stator Mass	g	(lb)	3865	(8.5)
Rod Diameter	mm	(in)	20	(0.79)
Rod Mass	g	(lb)	1305	(2.88)
Max. shear force to the rod	N	(lbf)	90	(20.25)
Max. torque to the rod	Nm	(lbfin)	2.5	(22.32)
IP Code			IP 65	

MOTOR



Item	Description	Item-No.
PD04-48x240F/150	Linear motor PD04-48, 150 mm Stroke	0150-2795

Handwriting practice area with horizontal dotted lines.

LINEAR ROTARY MOTORS



10

Series PR01 LinMot Linear Rotary motors can be used to implement any combination of linear and rotary motions. As an innovative design element, the linear-rotary motors can be used to perform

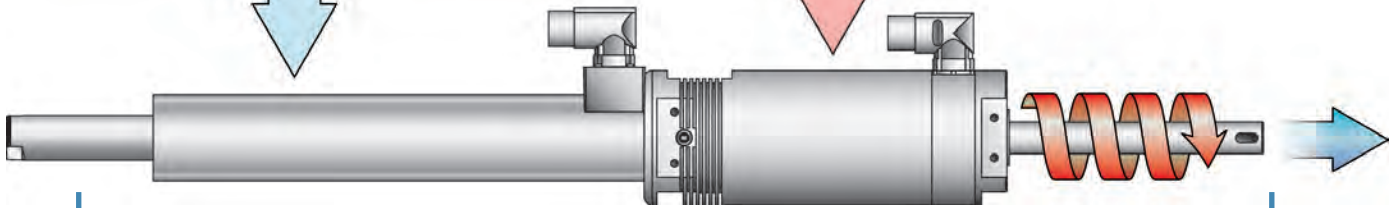
complex tasks, such as threading in, closure, transferring, stacking, aligning, and many others with just a single component.

Functionality and Construction

Linear Unit



Rotary Unit



**Slider
(moves linear)**

**Rotary Axis
(moves linear and rotary)**

The LinMot Linear Rotary Motor is an actuator featuring two axes of movement in a single, compact housing. These axes can be controlled by two servo drives individually and independent of each other. Highly dynamic, freely programmable linear-rotary motion sequences, that can be either synchronous or com-

pletely independent of each other, can be implemented through upper-level controller. Both the linear force (for example press force) or tightening torque can be specified arbitrarily and independently of each other at the same time.

Characteristics

INDEPENDENT LINEAR AND ROTATIVE MOTION

The Linear Rotary Motors are electromagnetic drive units providing decisive flexibility for demanding assignments of tasks. With Linear Rotary Motors is usual manufacturing, requiring linear-rotary motions such as cam plates, gear wheels or more complex mechanics, simplified. This movements are no longer linked through a cam-shaft but can be independently programmed.

HIGH DYNAMIC

Movement speeds up to 3.9 m/s and rotation speeds up to 1500 rpm allows cyclic motion sequences with high dynamic. For handling applications with sensitive products can be realized soft and jerk-free movements with adjusted, freely programmable acceleration.

PROGRAMMABLE PRESS FORCE AND TORQUE

Since the Linear Rotary Motor is based on a continuous electrical drive concept, it is possible to adjust the press force, speed and torque at any moment. Operator has therefore full flexibility, for example, when different capping applications are coordinated with different products. Torque closure, angle closure, pressing or snap-on closure can be realized easily. The parameters of complex tasks can be monitored or changed continuously during the work process, or from product to product.

SIMPLEST REALIZATION OF CAPPING APPLICATIONS

Product can be easily changed with a mouse click. Furthermore, the cap position at the end of the capping process can be read out in order to detect misaligned seating. Operator continually receives all important parameter feedbacks to reduce the proportion of disruption related downtimes.

PROCESS STABILITY

Da nicht nur die Endpositionen sondern auch Geschwindigkeit und Beschleunigung geregelt und überwacht sind, werden die einmal programmierten Bewegungsabläufe und Prozesse über die gesamte Lebensdauer der Anlage immer identisch gleich ausgeführt. Abweichungen werden sofort erkannt, so dass eine Produktion in gleichbleibender Qualität garantiert werden kann.

Product Family

Series PR01 LinMot Linear Rotary Motors are available in various sizes, that differs in the peak torque of the rotary motors and the forces and stroke lengths of the linear motors. In addition to the standard version, the product family extends to include variants with hollow shafts (eg for pneumatic implementation or an ejector) as well as with stainless steel front

flange and the rotary axis. A further extension of the family are the Linear Rotary Motors with gearbox, available with planetary gear units in three selectable gear ratios enabling higher torque requirements or movements for heavy weights or loads with high moment of inertia.



Linear Rotary Motors Family PR01-52

Compact motor types with a maximal torque of 255 N and a peak torque of 2.2 Nm.



Linear Rotary Motors Family PR01-84

Highest performance class of the Linear Rotary Motors. Linear part reaches a maximum 1024 N thrust force and strong rotary motor generates torques up to 8.9 Nm.



Linear Rotary Motors Stainless Steel Family PR01-84

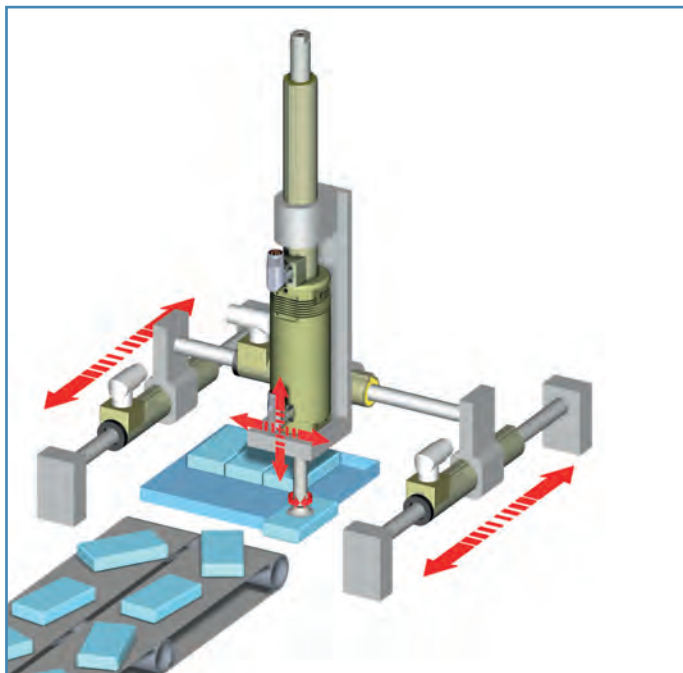
The front area of the high-performance INOX motors consists of a stainless steel flange and a stainless steel shaft. The remaining part of the unit can be shielded by a dividing plate and sealed by the integrated O-ring. Thus there is the possibility to clean the motor during operation. The material is characterized by its resistance against detergents. The stainless steel version of the PR01 motors can be optimally used in the food and chemical sector.



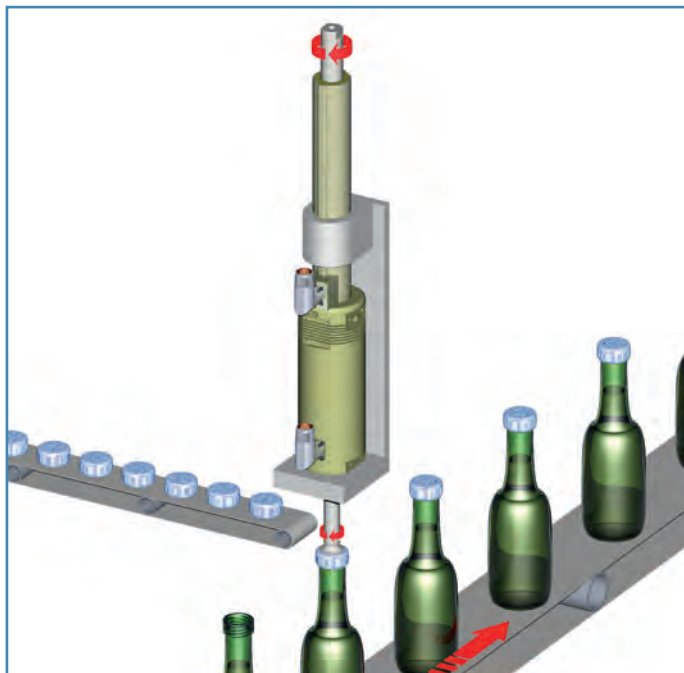
Linear Rotary Motors Gearbox Family PR01-84

Linear Rotary Motors for applications with increased torque requirements up to 89 Nm. The gearbox also allows precise and dynamic positioning, even for loads with high moment of inertia.

Application Examples

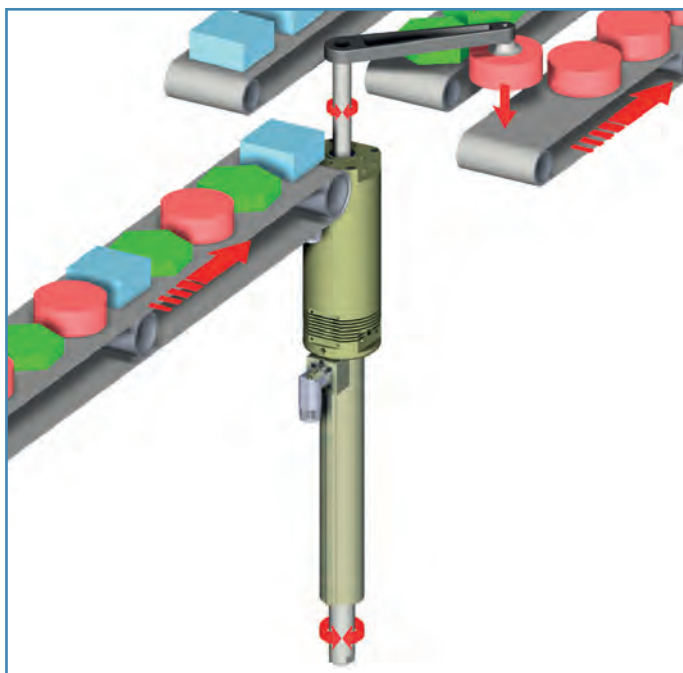


Handling

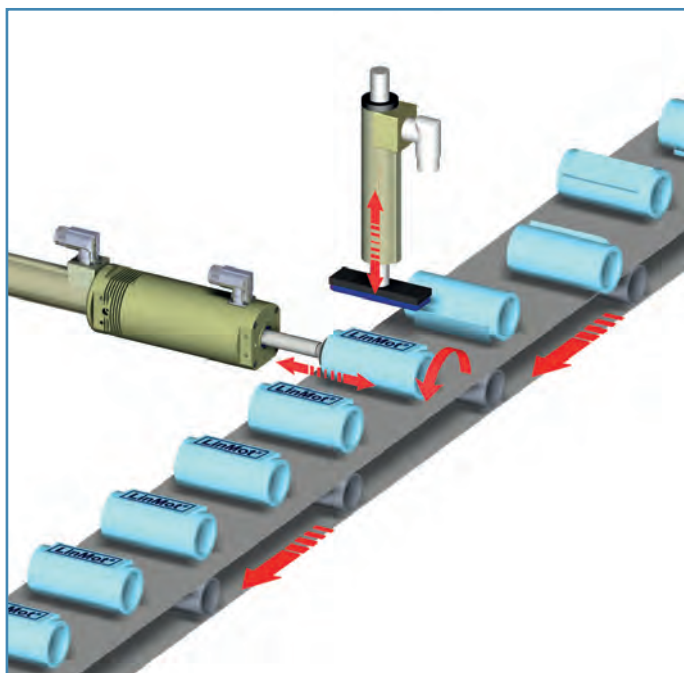


Capping

10

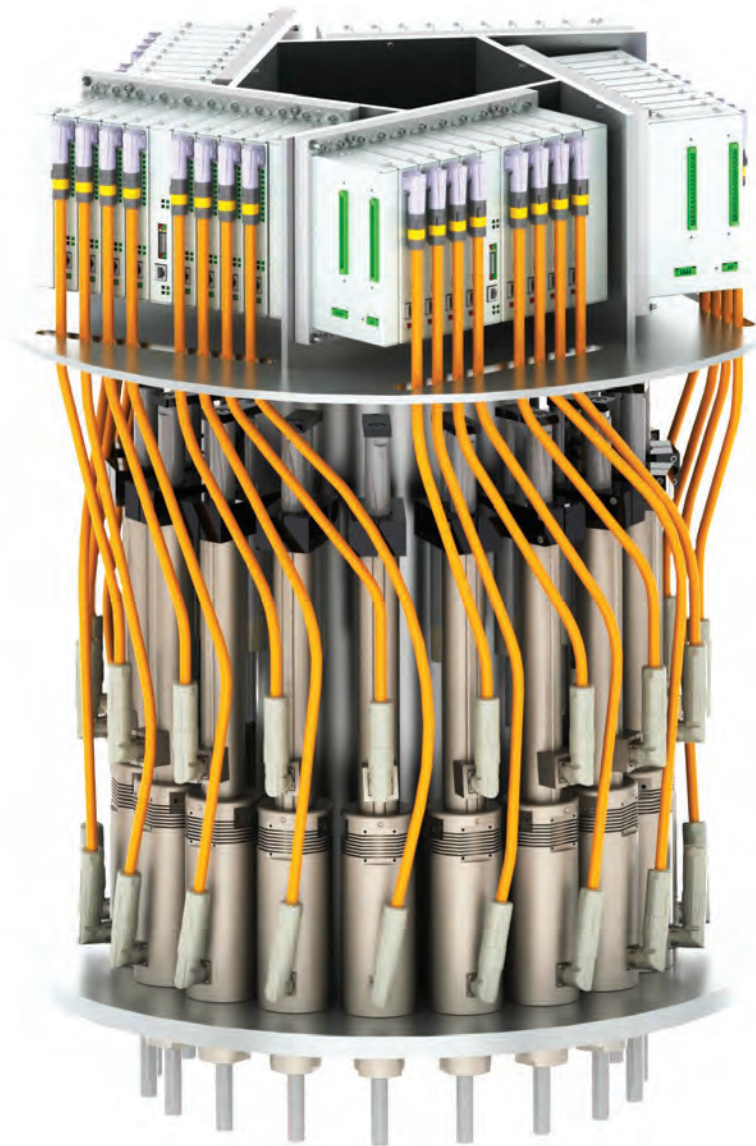


Pick & Place



Printing

Application Examples



Carousel Multi-Axis Closure System

LinMot Linear Rotary Motors can now be implemented into compact and effective multi-axis carousel closure system. Motion profiles, speeds, turns, and press forces or tightening torques can be specified arbitrarily and independently of each other.

The motor cables are fixed in position and won't be moved. The reliability and stability of the process is thereby increased significantly. Mechanical closure solutions are being replaced by purely electrical concepts primarily in the packaging and beverage industry.

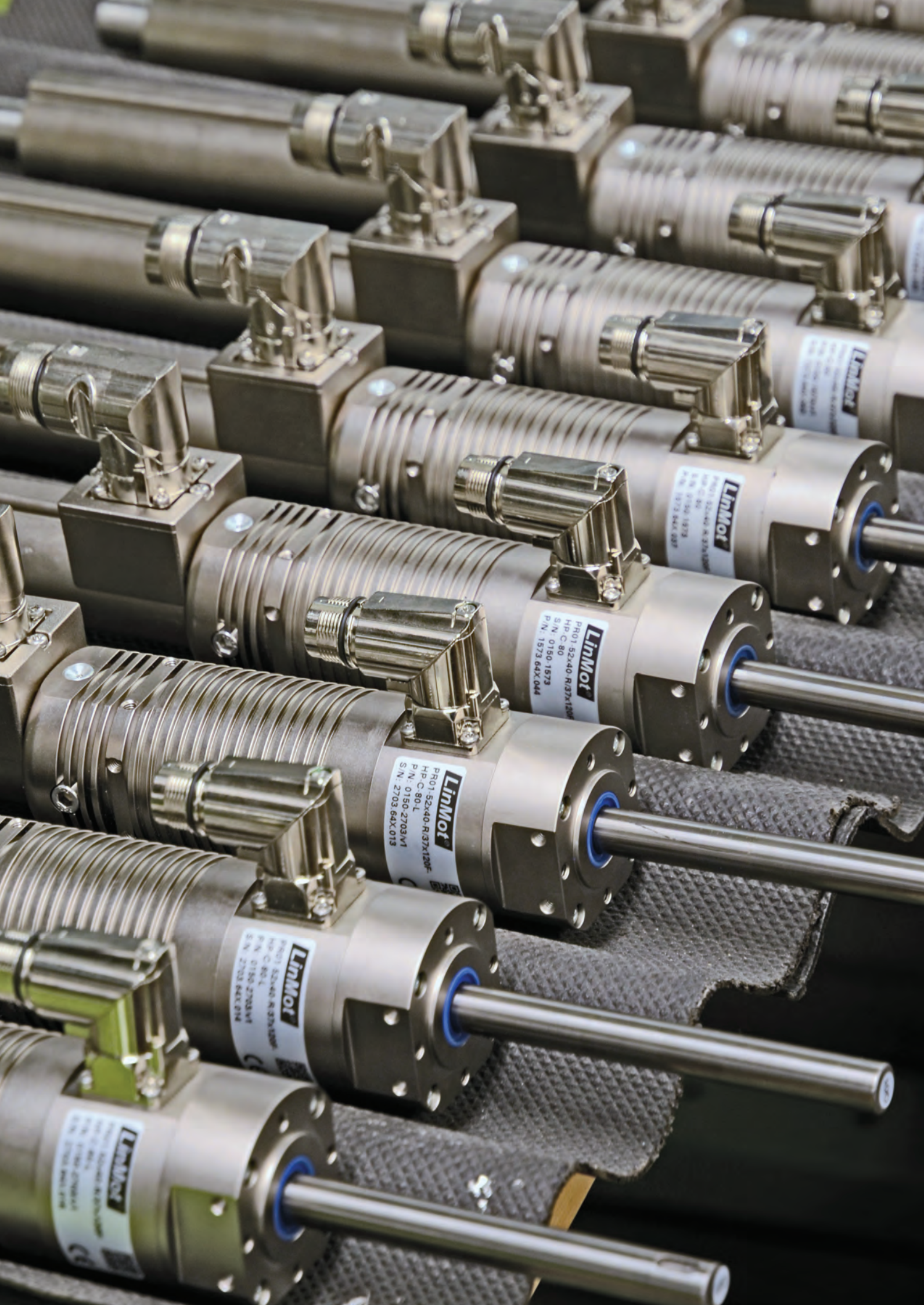
LINEAR ROTARY MOTORS

PR01-52



10

- ✓ Direct linear drive
- ✓ Direct rotary drive
- ✓ Independent linear and rotary motions
- ✓ Integrated position sensors
- ✓ Integrated temperature monitoring
- ✓ Programmable motion and position profiles
- ✓ Programmable press force
- ✓ Programmable torque



LinMot
PRO1 52x40 R/37x120F
HP-C 80
S/N: 0150-1573
P/N: 1573 64X044

LinMot
PRO1 52x40 R/37x120F
HP-C 80 L
S/N: 0150-2703 V1
P/N: 2703 64X013

LinMot
PRO1 52x40 R/37x120F
HP-C 80 L
S/N: 0150-2703 V1
P/N: 2703 64X014

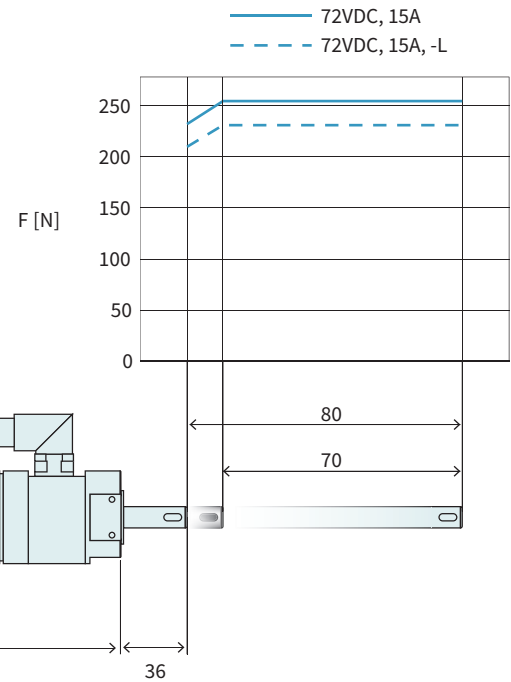
LinMot
PRO1 52x40 R/37x120F
HP-C 80 L
S/N: 0150-2703 V1
P/N: 2703 64X014

LINEAR ROTARY MOTORS PR01-52

PR01-52x40-R/37x120F-HP-C-80-(L)	766
PR01-52x60-R/37x120F-HP-C-100-(L)	768
PR01-52x60-R/37x120F-HP-C-150-(L)	770
Accessories	772

PR01-52x40-R/37x120F-HP-C-80 (-L)

Max. Stroke: 80 mm
Peak Force: 255 N
Peak Torque: 1.53 Nm



Dimensions in mm

Motor Specifications

PR01-52x40-R/37x120F-HP-C-80 (-L)

Linear Motion

Extended Stroke ES	mm (in)	80 (3.15)	
Standard Stroke SS	mm (in)	70 (2.76)	
Peak Force E12x0 - UC	N (lbf)	255 (-L 229) (57.3 (-L 51.5))	(-L: hollow Shaft version reduced forces)
Constant Force	N (lbf)	51 (-L 45) (11.5 (-L 10.1))	
Constant Force Fan cooling	N (lbf)	92 (-L 82) (20.7 (-L 18.4))	
Force Constant	N/A _{pk} (lbf/A _{pk})	17 (3.8)	
Max. Current @ 72VDC	A _{pk}	15	
Max. Velocity @ 72VDC	m/s (in/s)	3.9 (154)	
Position Repeatability	mm (in)	±0.05 (±0.0020)	
Linearity	%	±0.10	

Rotary Motion

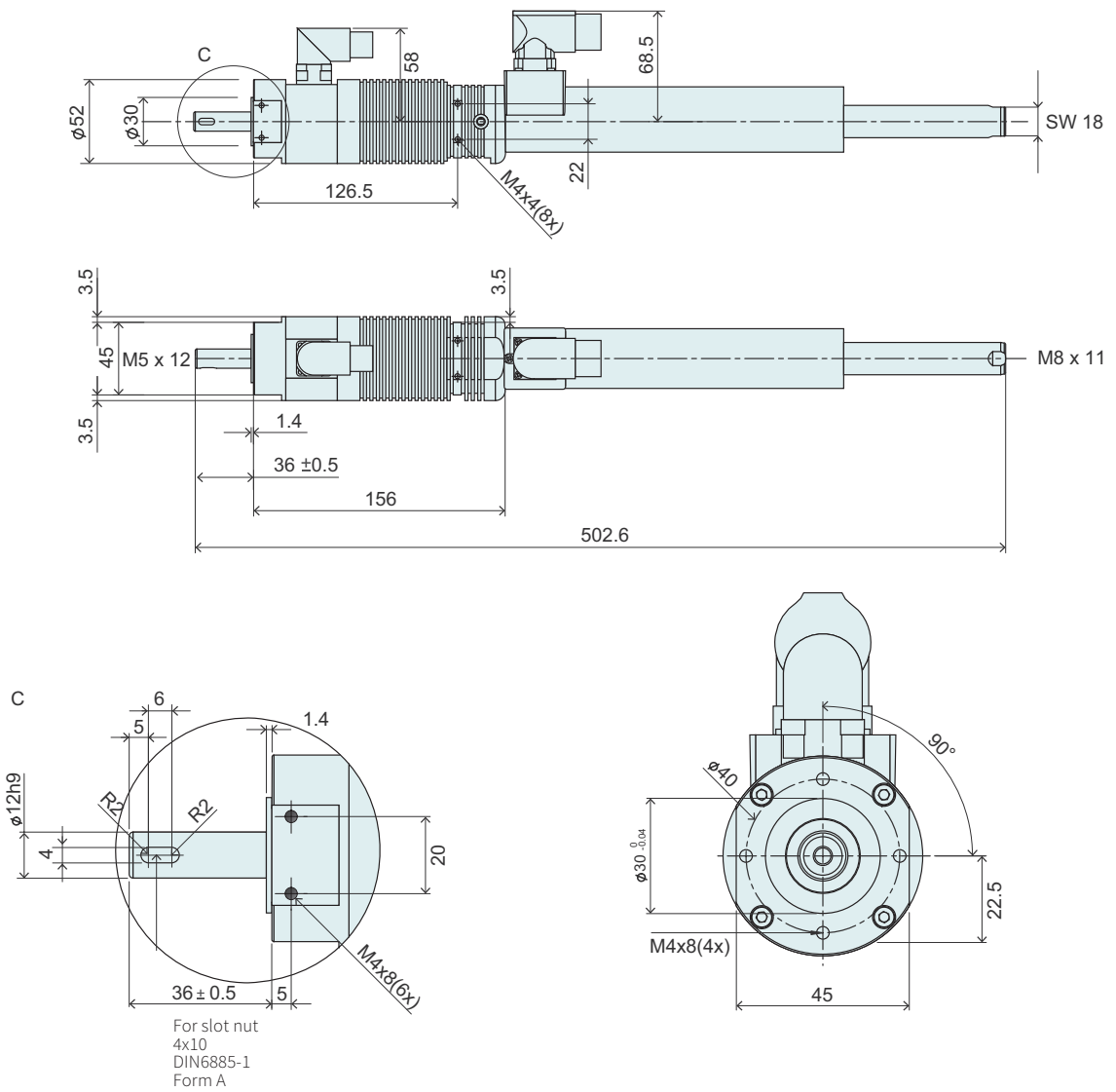
Peak Torque	Nm (lbf·in)	1.53 (13.54)	
Constant Torque (Halt)	Nm (lbf·in)	0.32 (2.83)	
Max. Number of revolutions	rpm	1500	
Torque Constant 1	Nm/A _{pk} (lbf·in/A _{pk})	0.19 (1.68)	
Torque Constant 2	Nm/A _{rms} (lbf·in/A _{rms})	0.27 (2.39)	
Max. Current @ 72VDC	A _{pk} / A _{rms}	8 / 5.7	
Position Repeatability	°	±0.1	

Mechanical Data

Overall length	mm (in)	503 (22.48)	
Diameter Linear Unit	mm (in)	37 (1.46)	
Diameter Rotary Unit	mm (in)	52 (2.05)	
Mass	g (lb)	2680 (5.91)	
Linear Moving mass	g (lb)	790 (1.74)	
Rotary Torque of Inertia	kgcm ² (lbf ²)	0.22 (0.00052)	
Axle Diameter	mm (in)	12h9 (0.47)	
Through bore-hole		-L Option	Hole diameter 2.5 mm Connection (front) M5, connection (back) 1/8" x 5
Protection Class			IP64

Note: hollow Shaft variants have 10% reduced forces

DIMENSIONS

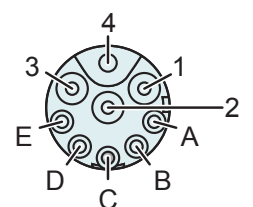
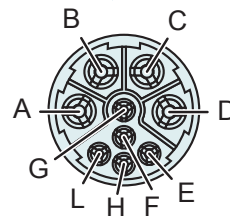


Dimensions in mm

CONNECTORS

Motor Connector Wiring	Linear Unit: C-Connector	Rotary Unit: R-Connector	Wire Color Motor Cable
Ph 1+	A	1	red
Ph 1-	B	2	pink
Ph 2+	C	3	blue
Ph 2-	D	4	grey
+5VDC	E	A	white
GND	F	B	inner shield
Sin	G	C	yellow
Cos	H	D	green
Temp.	L	E	black
Shield	Housing	Housing	outer Shield

C-Connector



R-Connector

View: Motor connector, plug on

Item	Description	Item-No.
PR01-52x40-R/37x120F-HP-C-80	Linear Rotary Motor	0150-1573
PR01-52x40-R/37x120F-HP-C-80-L	Linear Rotary Motor with hollow Shaft	0150-2703

PR01-52x60-R/37x120F-HP-C-100 (-L)

Max. Stroke:

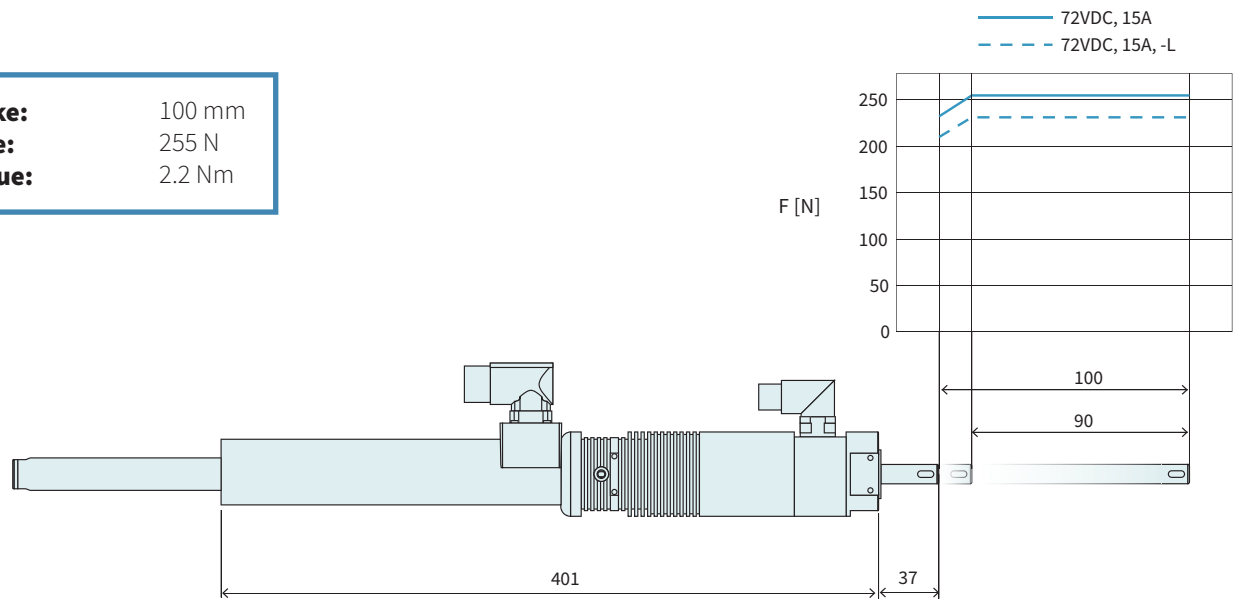
Peak Force:

Peak Torque:

100 mm

255 N

2.2 Nm

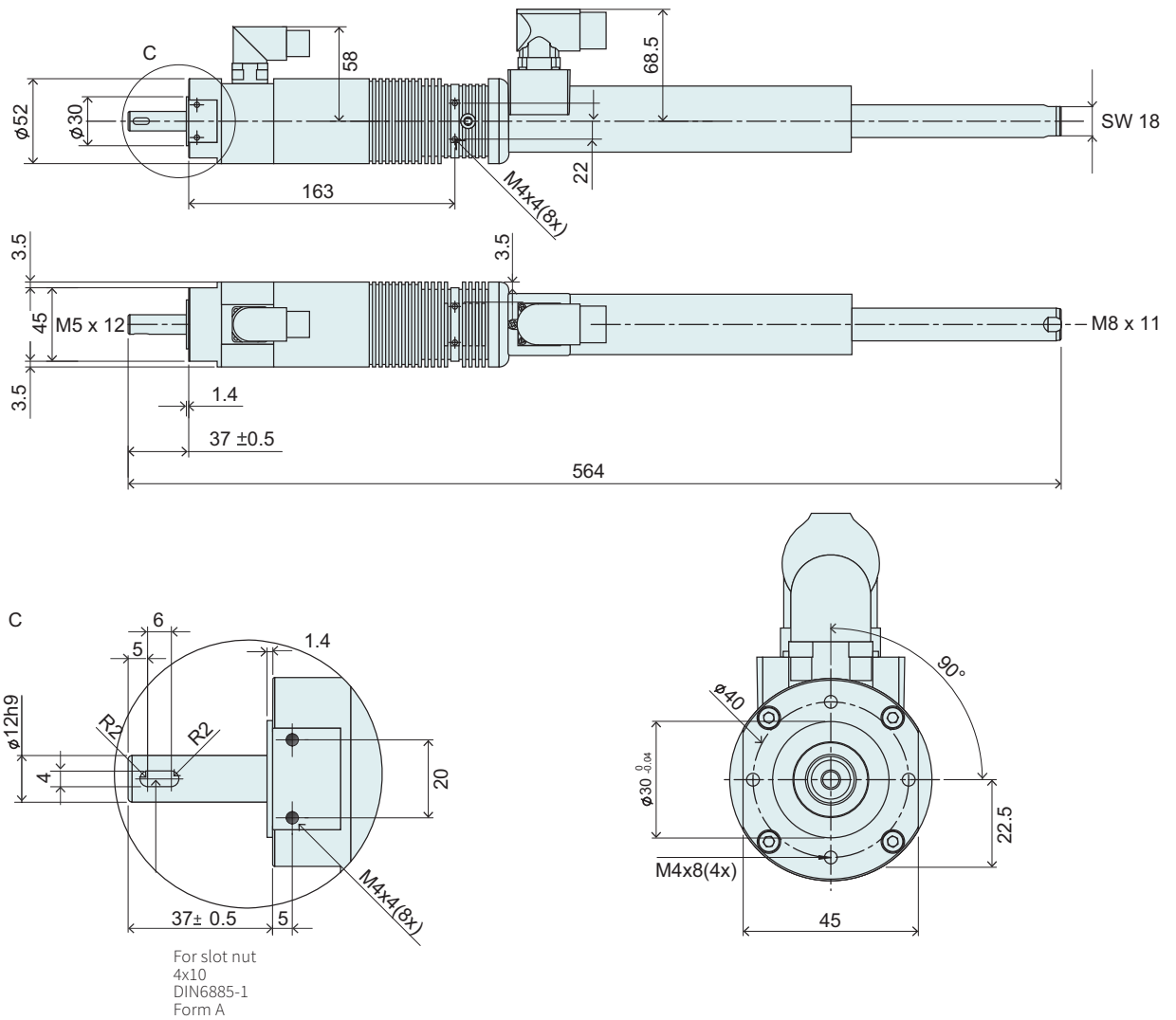


Dimensions in mm

Motor Specifications				
		PR01-52x60-R/37x120F-HP-C-100 (-L)		
Linear Motion				
Extended Stroke ES	mm (in)	100	(3.94)	
Standard Stroke SS	mm (in)	90	(3.54)	
Peak Forc E12x0 - UC	N (lbf)	255 (-L 229)	(57.3 (-L 51.5))	(-L: hollow Shaft version reduced forces)
Constant Force	N (lbf)	51 (-L 45)	(11.5 (-L 10.1))	
Constant Force Fan cooling	N (lbf)	92 (-L 82)	(20.7(-L 18.4))	
Force Constant	N/A _{pk} (lbf/A _{pk})	17	(3.8)	
Max. Current @ 72VDC	A _{pk}	15		
Max. Velocity @ 72VDC	m/s (in/s)	3.9	(154)	
Position Repeatability	mm (in)	±0.05	(±0.0020)	
Linearity	%	±0.10		
Rotary Motion				
Peak Torque	Nm (lbfin)	2.2	(19.5)	
Constant Torque (Halt)	Nm (lbfin)	0.47	(4.2)	
Max. Number of revolutions	rpm	1500		
Torque Constant 1	Nm/A _{rpk} (lbfin/A _{rpk})	0.16	(1.42)	
Torque Constant 2	Nm/A _{rms} (lbfin/A _{rms})	0.23	(2.04)	
Max. Current @ 72VDC	A _{pk} / A _{rms}	13.5 / 9.55		
Position Repeatability	°	±0.1		
Mechanical Data				
Overall length	mm (in)	565	(22.24)	
Diameter Linear Unit	mm (in)	37	(1.46)	
Diameter Rotary Unit	mm (in)	52	(2.05)	
Mass	g (lb)	3120	(6.88)	
Linear Moving mass	g (lb)	860	(1.9)	
Rotary Torque of Inertia	kgcm² (lbf²)	0.26	(0.00062)	
Axle Diameter	mm (in)	12h9	(0.47)	
Through bore-hole		-L Option	Hole diameter 2.5 mm Connection (front) M5, connection (back) 1/8" x 5	
Protection Class			IP64	

Note: hollow Shaft variants have 10% reduced forces

DIMENSIONS

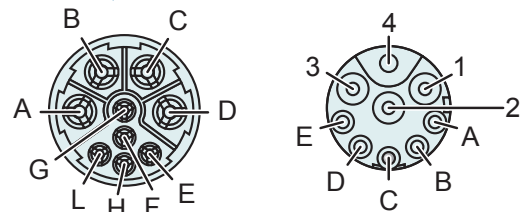


Dimensions in mm

CONNECTORS

Motor Connector Wiring	Linear Unit: C-Connector	Rotary Unit: R-Connector	Wire Color Motor Cable
Ph 1+	A	1	red
Ph 1-	B	2	pink
Ph 2+	C	3	blue
Ph 2-	D	4	grey
+5VDC	E	A	white
GND	F	B	inner shield
Sin	G	C	yellow
Cos	H	D	green
Temp.	L	E	black
Shield	Housing	Housing	outer Shield

C-Connector



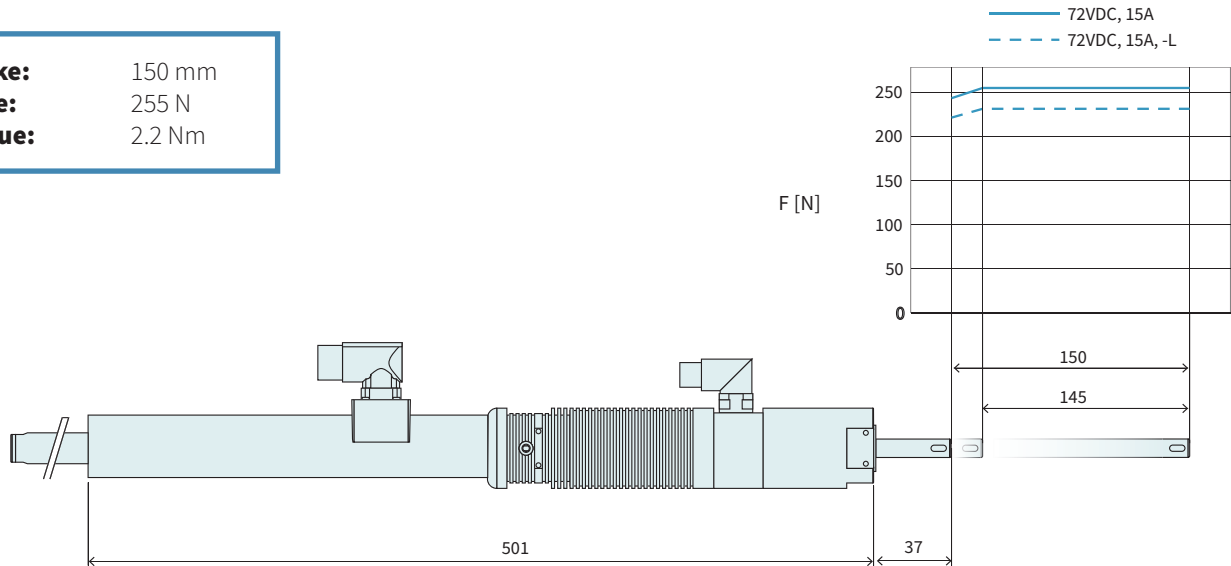
View: Motor connector, plug on

R-Connector

Item	Description	Item-No.
PR01-52x60-R/37x120F-HP-C-100	Linear Rotary Motor	0150-1197
PR01-52x60-R/37x120F-HP-C-100-L	Linear Rotary Motor with hollow Shaft	0150-2704

PR01-52x60-R/37x120F-HP-C-150 (-L)

Max. Stroke: 150 mm
Peak Force: 255 N
Peak Torque: 2.2 Nm



Dimensions in mm

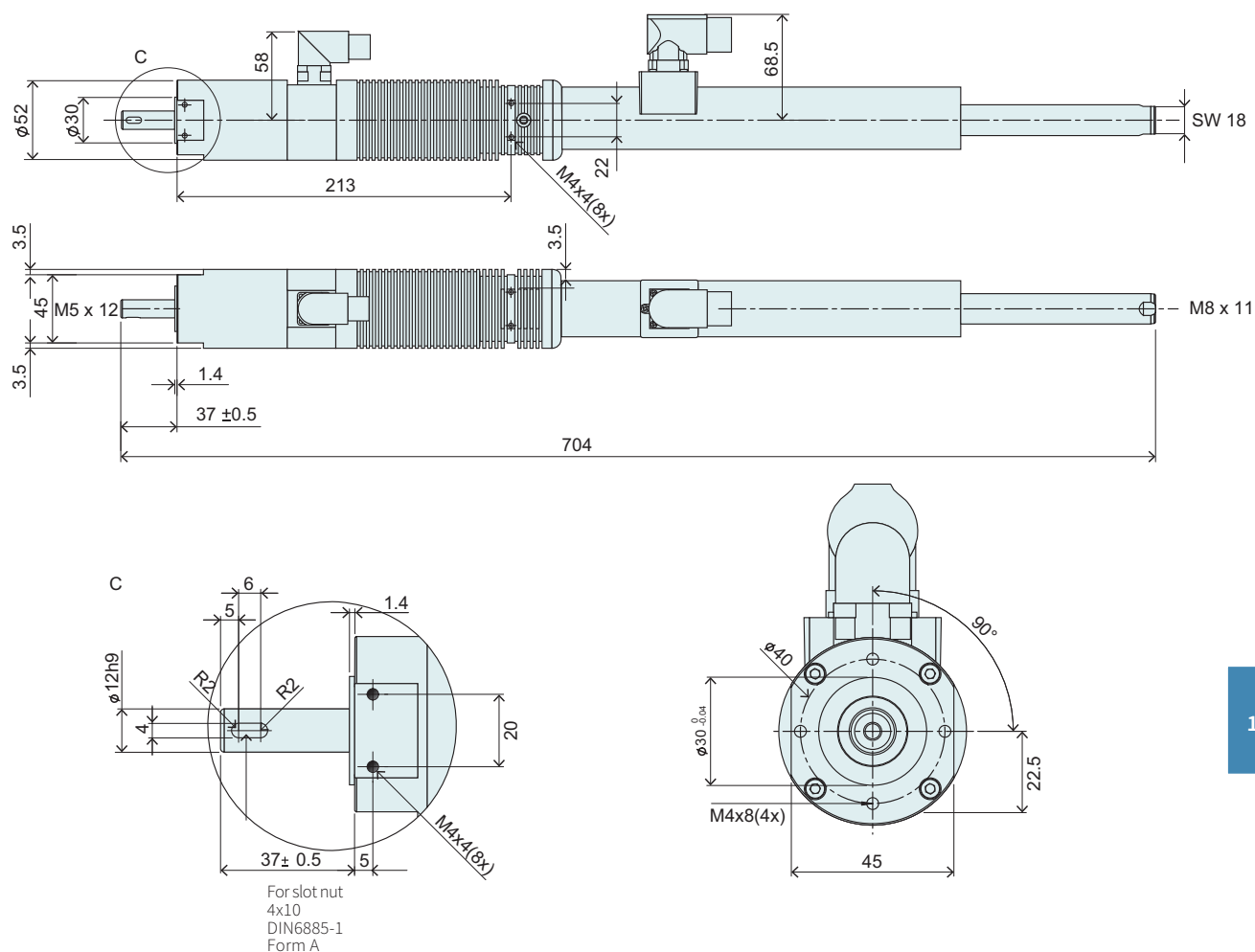
Motor Specifications

PR01-52x60-R/37x120F-HP-C-150 (-L)

Linear Motion				(-L: hollow Shaft version reduced forces)
Extended Stroke ES	mm (in)	150	(5.91)	
Standard Stroke SS	mm (in)	145	(5.71)	
Peak Forc E12x0 - UC	N (lbf)	255 (-L 229)	(57.3 (-L 51.5))	
Constant Force	N (lbf)	51 (-L 45)	(11.5 (-L 10.1))	
Constant Force Fan cooling	N (lbf)	92 (-L 82)	(20.7(-L 18.4))	
Force Constant	N/A _{pk} (lbf/A _{pk})	17	(3.8)	
Max. Current @ 72VDC	A _{pk}	15		
Max. Velocity @ 72VDC	m/s (in/s)	3.9	(154)	
Position Repeatability	mm (in)	±0.05	(±0.0020)	
Linearity	%	±0.10		
Rotary Motion				
Peak Torque	Nm (lbf·in)	2.2	(19.5)	
Constant Torque (Halt)	Nm (lbf·in)	0.47	(4.2)	
Max. Number of revolutions	rpm	1500		
Torque Constant 1	Nm/A _{pk} (lbf·in/A _{pk})	0.16	(1.42)	
Torque Constant 2	Nm/A _{rms} (lbf·in/A _{rms})	0.23	(2.04)	
Max. Current @ 72VDC	A _{pk} / A _{rms}	13.5 / 9.55		
Position Repeatability	°	±0.1		
Mechanical Data				
Overall length	mm (in)	704	(27.72)	
Diameter Linear Unit	mm (in)	37	(1.46)	
Diameter Rotary Unit	mm (in)	52	(2.05)	
Mass	g (lb)	3700	(8.16)	
Linear Moving mass	g (lb)	950	(2.09)	
Rotary Torque of Inertia	kgcm ² (lbF ²)	0.31	(0.00074)	
Axle Diameter	mm (in)	12h9	(0.47)	
Through bore-hole		-L Option	Hole diameter 2.5 mm Connection (front) M5, connection (back) 1/8" x 5	
Protection Class			IP64	

Note: hollow Shaft variants have 10% reduced forces

DIMENSIONS

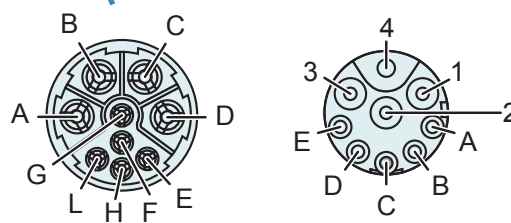


Dimensions in mm

CONNECTORS

Motor Connector Wiring	Linear Unit: C-Connector	Rotary Unit: R-Connector	Wire Color Motor Cable
Ph 1+	A	1	red
Ph 1-	B	2	pink
Ph 2+	C	3	blue
Ph 2-	D	4	grey
+5VDC	E	A	white
GND	F	B	inner shield
Sin	G	C	yellow
Cos	H	D	green
Temp.	L	E	black
Shield	Housing	Housing	outer Shield

C-Connector



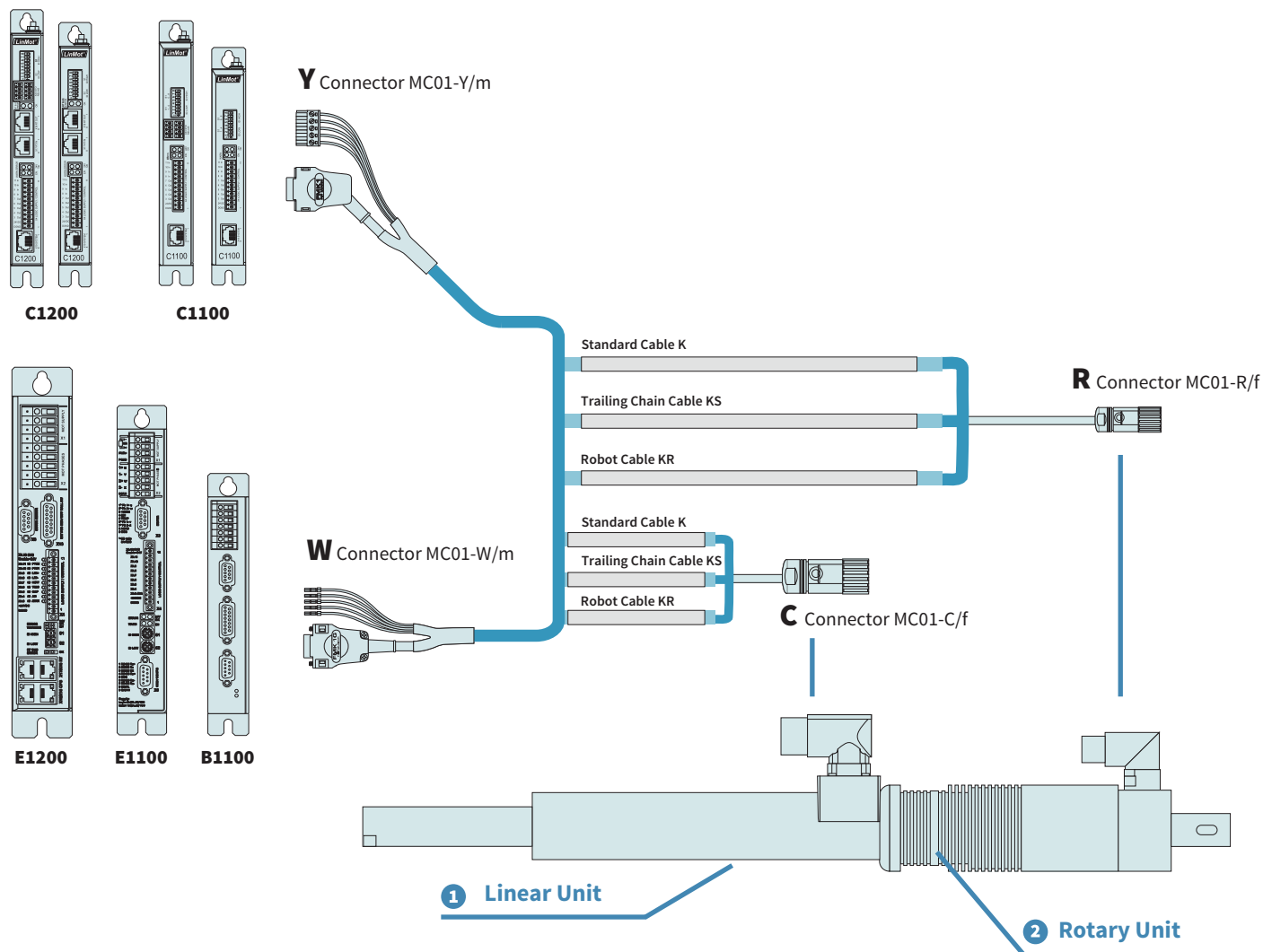
R-Connector

View: Motor connector, plug on

Item	Description	Item-No.
PR01-52x60-R/37x120F-HP-C-150	Linear Rotary Motor	0150-2705
PR01-52x60-R/37x120F-HP-C-150-L	Linear Rotary Motor with hollow Shaft	0150-2706

Accessories

MOTOR CABLE



ORDERING INFORMATION

1 Linear Unit

Standard Cable		
Item	Description	Item-No.
K05-W/C-2	Motor Cable W/C, 2 m	0150-2123
K05-W/C-4	Motor Cable W/C, 4 m	0150-2124
K05-W/C-6	Motor Cable W/C, 6 m	0150-2125
K05-W/C-8	Motor Cable W/C, 8 m	0150-2126
K05-W/C-	Motor Cable W/C, Custom length	0150-3263

K05-Y/C-2	Motor Cable Y/C, 2 m	0150-2425
K05-Y/C-4	Motor Cable Y/C, 4 m	0150-2426
K05-Y/C-6	Motor Cable Y/C, 6 m	0150-2427
K05-Y/C-8	Motor Cable Y/C, 8 m	0150-2428
K05-Y-Fe/C-	Motor Cable Y-Fe/C, Custom length	0150-3502

Robot Cable		
Item	Description	Item-No.
KR05-Y-Fe/C-	Robot Cable KR05-Y-Fe/C-, Custom length	0150-3513

Trailing Chain Cable		
Item	Description	Item-No.
KS05-W/C-4	Trailing Chain Cable W/C, 4 m	0150-2127
KS05-W/C-6	Trailing Chain Cable W/C, 6 m	0150-2128
KS05-W/C-8	Trailing Chain Cable W/C, 8 m	0150-2129
KS05-W/C-	Trailing Chain Cable W/C, Custom length	0150-3204

KS05-Y/C-4	Trailing Chain Cable Y/C, 4 m	0150-2436
KS05-Y/C-6	Trailing Chain Cable Y/C, 6 m	0150-2437
KS05-Y/C-8	Trailing Chain Cable Y/C, 8 m	0150-2438
KS05-Y-Fe/C-	Trailing Chain Cable Y/C, Custom length	0150-3508

Connector & Cable (individual)		
Item	Description	Item-No.
MC01-C/f	Motor connector C/f	0150-3080
MC01-W/m	Motor connector W/m	0150-3140
MC01-Y-Fe/m	Motor connector Y-Fe/m	0150-3289
K05-04/05	Motor Cable per m	0150-1920
KS05-04/05	Trailing Chain Cable per m	0150-1938
KR05-04/05	Robot Cable per m	0150-1846

2 Rotary Unit

Standard Cable		
Item	Description	Item-No.
K05-W/R-2	Motor Cable W/R, 2 m	0150-2119
K05-W/R-4	Motor Cable W/R, 4 m	0150-2120
K05-W/R-6	Motor Cable W/R, 6 m	0150-2121
K05-W/R-8	Motor Cable W/R, 8 m	0150-2122
K05-W/R-	Motor Cable K05-W/R, Custom length	0150-3262

K05-Y/R-2	Motor Cable Y/R, 2 m	0150-2421
K05-Y/R-4	Motor Cable Y/R, 4 m	0150-2422
K05-Y/R-6	Motor Cable Y/R, 6 m	0150-2423
K05-Y/R-8	Motor Cable Y/R, 8 m	0150-2424
K05-Y-Fe/R-	Motor Cable K05-Y-Fe/R, Custom length	0150-3501

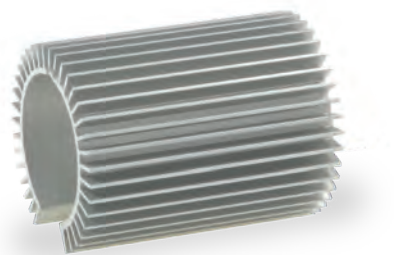
Robot Cable		
Item	Description	Item-No.
KR05-W/R-	Robot Cable KR05-W/R, Custom length	0150-3336
KR05-Y-Fe/R-	Robot Cable KR05-Y-Fe/R, Custom length	0150-3512

Trailing Chain Cable		
Item	Description	Item-No.
KS05-W/R-4	Trailing Chain Cable W/R, 4 m	0150-2106
KS05-W/R-6	Trailing Chain Cable W/R, 6 m	0150-2131
KS05-W/R-8	Trailing Chain Cable W/R, 8 m	0150-2107
KS05-W/R-	Trailing Chain Cable KS05-W/R, Overall length	0150-3256

KS05-Y/R-4	Trailing Chain Cable Y/R, 4 m	0150-2433
KS05-Y/R-6	Trailing Chain Cable Y/R, 6 m	0150-2434
KS05-Y/R-8	Trailing Chain Cable Y/R, 8 m	0150-2435
KS05-Y-Fe/R-	Trailing Chain Cable KS05-Y-Fe/R, Custom length	0150-3507

Connector & Cable (individual)		
Item	Description	Item-No.
MC01-R/f	Motor cable R/f	0150-3129
MC01-W/m	Motor cable W/m	0150-3140
MC01-Y-Fe/m	Motor cable Y-Fe/m	0150-3289
K05-04/05	Motor Cable per m	0150-1920
KS05-04/05	Trailing Chain Cable per m	0150-1938
KR05-04/05	Robot Cable per m	0150-1846

COOLING PROFILE



Item	Description	Item-No.
PC01-37x68	Cooling profile for PS01-37 Linear Motor	0160-2131

FLANGE



Item	Description	Item-No.
PF02-37x100	Flange 37x100 mm	0150-1998
PF02-37x140	Flange 37x140 mm	0150-2105

FAN COOLING FOR LINEAR UNIT



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

FAN COOLING FOR ROTARY UNIT



Item	Description	Item-No.
RS01-VA52-Kit	Fan Kit for RS01-52 Linear Rotary Motor	0150-1599

10

MOUNTING FLANGE



Item	Description	Item-No.
MF01-PR01-52x40-20	Mounting Flange MS01-20-140	0250-2322
MF01-PR01-52x40-37	Mounting Flange MS01-37-155	0250-2319

MAGSPRING ADAPTER



Item	Description	Item-No.
MA01-PR01-52-37/20	MagSpring Adapter for Linear Rotary Motors	0250-0128

BRAKE KIT



Item	Description	Item-No.
MF01-BK52	Brake Kit for PR01-52 Linear Rotary Motor	0250-2344

SHAFT-HUB CLAMPING



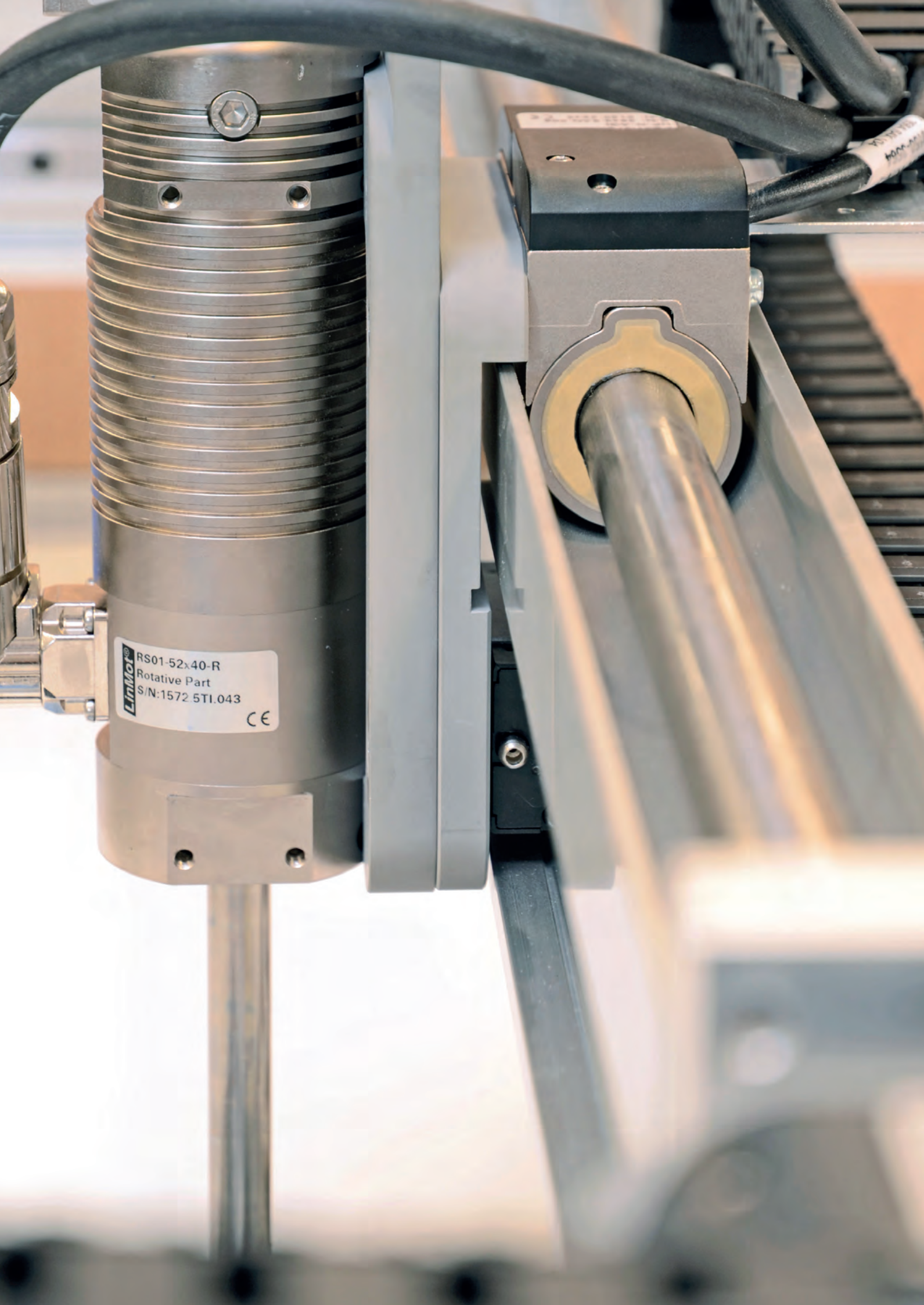
Item	Description	Item-No.
RS01-SS12x22	Shaft-hub clamping for 12 mm shaft	0230-0101

LINEAR ROTARY MOTORS

PR01-84



- ✓ Direct linear drive
- ✓ Direct rotary drive
- ✓ Independent linear and rotary motions
- ✓ Integrated position sensors
- ✓ Integrated temperature monitoring
- ✓ Programmable motion a position profiles
- ✓ Programmable press force
- ✓ Programmable torque



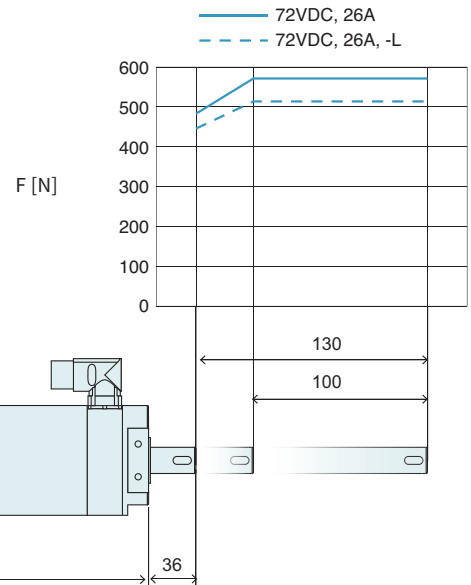
LinMot® RS01-52x40-R
Rotative Part
S/N:1572 5TI.043
CE

LINEAR ROTARY MOTORS PR01-84

PR01-84x80-C/48x240F-C-100-(L)	780
PR01-84x80-C/48x240F-C-150-(L)	782
PR01-84x80-C/48x360F-C-100-(L)	784
PR01-84x80-C/48x360F-C-150-(L)	786
PR01-84x80-C/48x240F-C-300-(L)	788
Accessories	790

PR01-84x80-C/48x240F-C-100 (-L)

Max. Stroke: 130 mm
Peak Force: 572 N
Peak Torque: 8.9 Nm



Dimensions in mm

Motor Specifications

PR01-84x80-C/48x240F-C-100 (-L)

Linear Motion

Extended Stroke ES	mm (in)	130 (5.12)	
Standard Stroke SS	mm (in)	100 (3.94)	
Peak Force E12x0 - UC	N (lbf)	572 (-L 514)	(128.6 (-L 115.6))
Constant Force	N (lbf)	145 (-L 130)	(74.2 (-L 29.2))
Constant Force Fan cooling	N (lbf)	255 (-L 230)	(58.0 (-L 51.7))
Force Constant	N/A _{pk} (lbf/A _{pk})	22	(5.0)
Max. Current @ 72VDC	A _{pk}	26	
Max. Velocity @ 72VDC	m/s (in/s)	3	(118)
Position Repeatability	mm (in)	±0.05	(±0.0020)
Linearity	%	±0.15	

(-L: hollow Shaft version reduced forces)

Rotary Motion

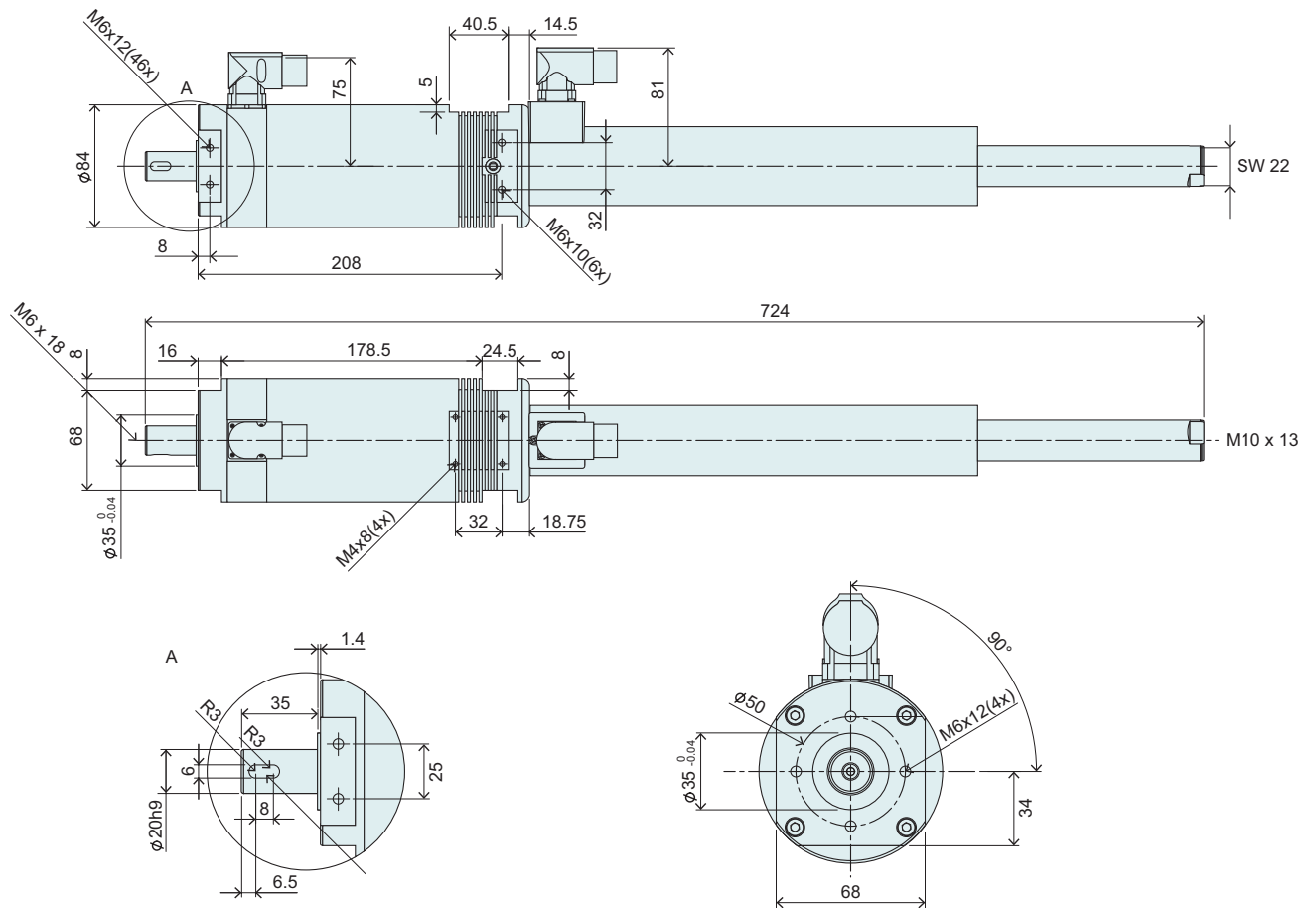
Peak Torque	Nm (lbf·in)	8.9	(78.8)
Constant Torque (Halt)	Nm (lbf·in)	1.9	(16.8)
Max. Number of revolutions	rpm	1000	
Torque Constant 1	Nm/A _{pk} (lbf·in/A _{pk})	0.36	(3.19)
Torque Constant 2	Nm/A _{rms} (lbf·in/A _{rms})	0.5035	(4.46)
Max. Current @ 72VDC	A _{pk} / A _{rms}	25 / 17.68	
Position Repeatability	°	±0.05	

Mechanical Data

Overall length	mm (in)	724	(28.52)
Diameter Linear Unit	mm (in)	48	(1.89)
Diameter Rotary Unit	mm (in)	84	(3.31)
Mass	g (lb)	8850	(19.51)
Linear Moving mass	g (lb)	2450	(5.4)
Rotary Torque of Inertia	kgcm ² (lbf ²)	2	(0.0047)
Axle Diameter	mm (in)	20h9	(0.79)
Through bore-hole		-L Option	Hole diameter 4 mm, connection (front) 1/8" x 7, connection (back) 1/4" x 8
Protection Class			IP64

Note: hollow Shaft variants have 10% reduced forces

DIMENSIONS

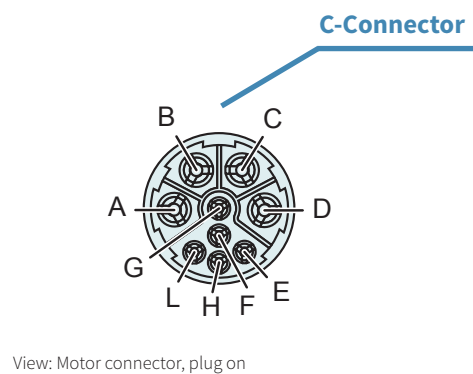


For fit-in key 6x14
DIN6885 -1 Form A

Dimensions in mm

CONNECTORS

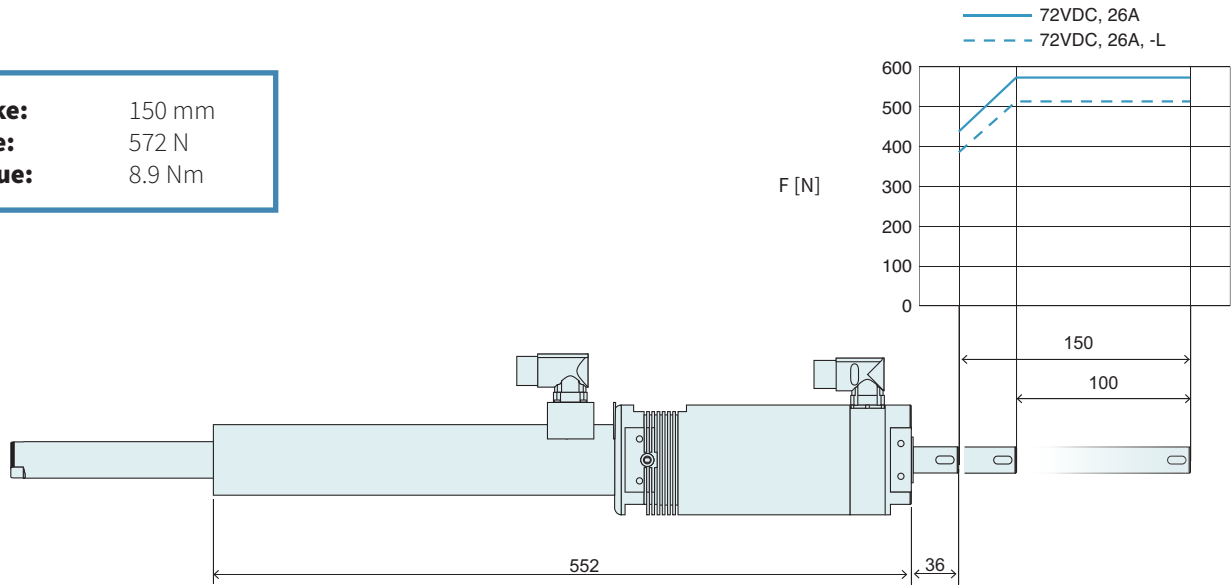
Motor Connector Wiring	Linear Unit: C-Connector	Rotary Unit: C-Connector	Wire Color Motor Cable
Ph 1+	A	A	red
Ph 1-	B	B	pink
Ph 2+	C	C	blue
Ph 2-	D	D	grey
+5VDC	E	E	white
GND	F	F	inner shield
Sin	G	G	yellow
Cos	H	H	green
Temp.	L	L	black
Shield	Housing	Housing	outer Shield



Item	Description	Item-No.
PR01-84x80-C/48x240F-C-100	Linear Rotary Motor	0150-1194
PR01-84x80-C/48x240F-C-100-L	Linear Rotary Motor with hollow Shaft	0150-1196

PR01-84x80-C/48x240F-C-150 (-L)

Max. Stroke: 150 mm
Peak Force: 572 N
Peak Torque: 8.9 Nm



Dimensions in mm

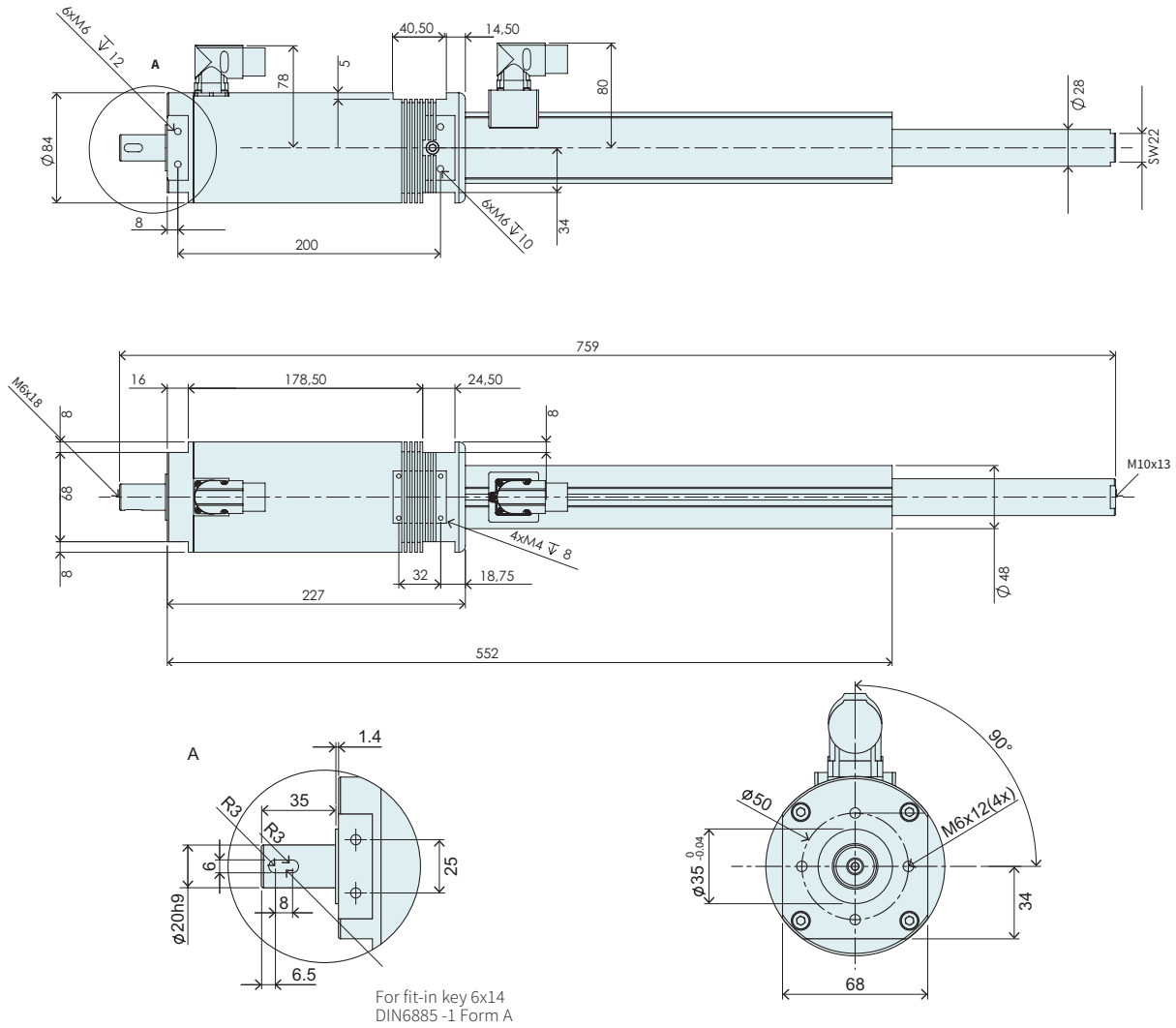
Motor Specifications

PR01-84x80-C/48x240F-C-150 (-L)

Linear Motion			
Extended Stroke ES	mm (in)	150	(5.91)
Standard Stroke SS	mm (in)	100	(3.94)
Peak Force	N (lbf)	572	(128.6)
Constant Force	N (lbf)	145	(74.2)
Constant Force Fan cooling	N (lbf)	255	(57.3)
Force Constant	N/A _{pk} (lbf/A _{pk})	22	(5.0)
Max. Current @ 72VDC	A _{pk}	26	
Max. Velocity @ 72VDC	m/s (in/s)	3.0	(118)
Position Repeatability	mm (in)	±0.05	(±0.0020)
Linearity	%	±0.15	
Rotary Motion			
Peak Torque	Nm (lbfin)	8.9	(78.8)
Constant Torque (Halt)	Nm (lbfin)	1.9	(16.8)
Max. Number of revolutions	rpm	1000	
Torque Constant 1	Nm/A _{pk} (lbfin/A _{pk})	0.36	(3.19)
Torque Constant 2	Nm/A _{rms} (lbfin/A _{rms})	0.5035	(4.46)
Max. Current @ 72VDC	A _{pk} / A _{rms}	25 / 17.68	
Position Repeatability	°	±0.05	
Mechanical Data			
Overall length	mm (in)	759	(29.89)
Diameter Linear Unit	mm (in)	48	(1.89)
Diameter Rotary Unit	mm (in)	84	(3.31)
Mass	g (lb)	9000	(19.88)
Linear Moving mass	g (lb)	2600	(5.74)
Rotary Torque of Inertia	kgcm ² (lbf ²)	2.3	(0.0054)
Axle Diameter	mm (in)	20h9	(0.79)
Through bore-hole		-L Option	Hole diameter 4 mm, connection (front) 1/8" x 7, connection (back) 1/4" x 8
Protection Class		IP64	

Note: hollow Shaft variants have 10% reduced forces

DIMENSIONS

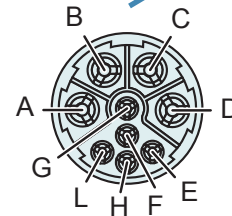


Dimensions in mm

CONNECTORS

Motor Connector Wiring	Linear Unit: C-Connector	Rotary Unit: C-Connector	Wire Color Motor Cable
Ph 1+	A	A	red
Ph 1-	B	B	pink
Ph 2+	C	C	blue
Ph 2-	D	D	grey
+5VDC	E	E	white
GND	F	F	inner shield
Sin	G	G	yellow
Cos	H	H	green
Temp.	L	L	black
Shield	Housing	Housing	outer Shield

C-Connector

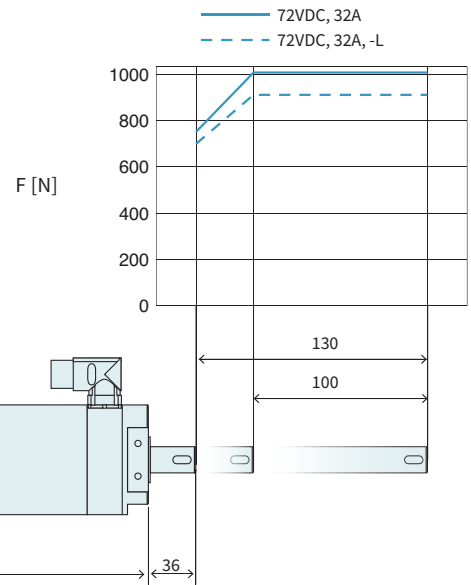


View: Motor connector, plug on

Item	Description	Item-No.
PR01-84x80-C/48x240F-C-150	Linear Rotary Motor	0150-1187
PR01-84x80-C/48x240F-C-150-L	Linear Rotary Motor with hollow Shaft	0150-1188

PR01-84x80-C/48x360F-C-100 (-L)

Max. Stroke: 130 mm
Peak Force: 1024 N
Peak Torque: 8.9 Nm



Dimensions in mm

Motor Specifications

PR01-84x80-C/48x360F-C-100 (-L)

Linear Motion

Extended Stroke ES	mm (in)	130 (5.12)	
Standard Stroke SS	mm (in)	100 (3.94)	
Peak Force E12x0 - UC	N (lbf)	1024 (-L 921) (230.2 (-L 207.0))	(-L: hollow Shaft version reduced forces)
Constant Force	N (lbf)	203 (-L 182) (45.6 (-L 40.9))	
Constant Force Fan cooling	N (lbf)	354 (-L 319) (79.6 (-L 71.1))	
Force Constant	N/A _{pk} (lbf/A _{pk})	32 (7.2)	
Max. Current @ 72VDC	A _{pk}	32	
Max. Velocity @ 72VDC	m/s (in/s)	2.1 (83)	
Position Repeatability	mm (in)	±0.05 (±0.0020)	
Linearity	%	±0.15	

Rotary Motion

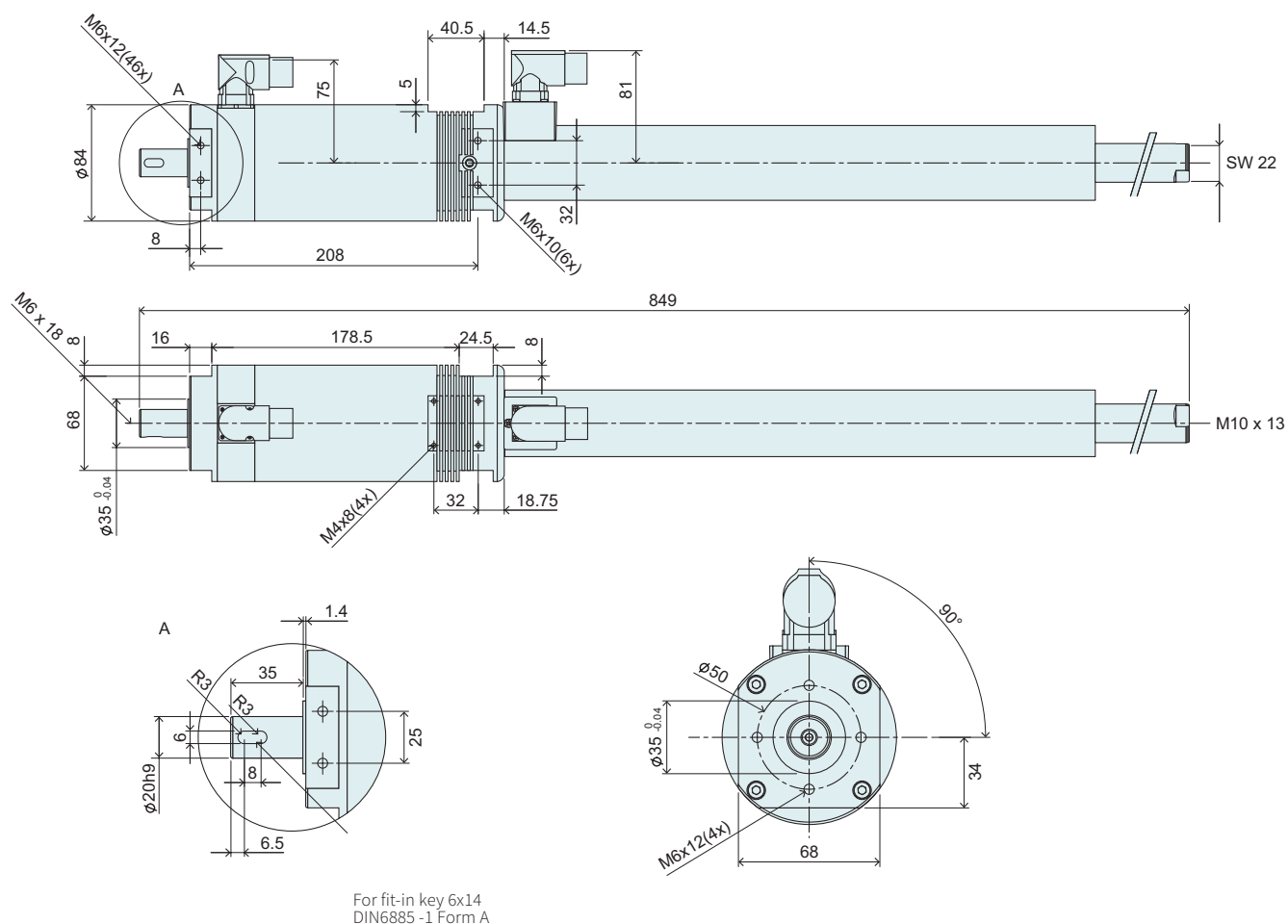
Peak Torque	Nm (lbf·in)	8.9 (78.8)	
Constant Torque (Halt)	Nm (lbf·in)	1.9 (16.8)	
Max. Number of revolutions	rpm	1000	
Torque Constant 1	Nm/A _{pk} (lbf·in/A _{pk})	0.36 (3.19)	
Torque Constant 2	Nm/A _{rms} (lbf·in/A _{rms})	0.5035 (4.46)	
Max. Current @ 72VDC	A _{pk} / A _{rms}	25 / 17.68	
Position Repeatability	°	±0.05	

Mechanical Data

Overall length	mm (in)	849 (33.44)	
Diameter Linear Unit	mm (in)	48 (1.89)	
Diameter Rotary Unit	mm (in)	84 (3.31)	
Mass	g (lb)	10480 (23.1)	
Linear Moving mass	g (lb)	2900 (6.39)	
Rotary Torque of Inertia	kgcm ² (lbF ²)	2 (0.0047)	
Axle Diameter	mm (in)	20h9 (0.79)	
Through bore-hole		-L Option	Hole diameter 4 mm, connection (front) 1/8" x 7, connection (back) 1/4" x 8
Protection Class			IP64

Note: hollow Shaft variants have 10% reduced forces

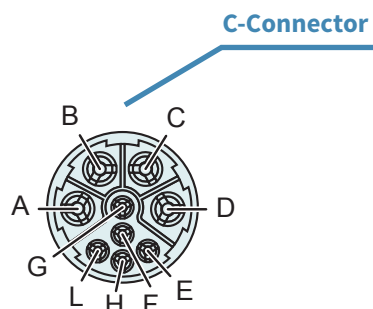
DIMENSIONS



Dimensions in mm

CONNECTORS

Motor Connector Wiring	Linear Unit: C-Connector	Rotary Unit: C-Connector	Wire Color Motor Cable
Ph 1+ / A	A	A	red
Ph 1- / B	B	B	pink
Ph 2+ / C	C	C	blue
Ph 2- / NC	D	D	grey
+5VDC	E	E	white
GND	F	F	inner shield
Sin	G	G	yellow
Cos	H	H	green
Temp.	L	L	black
Shield	Housing	Housing	outer Shield

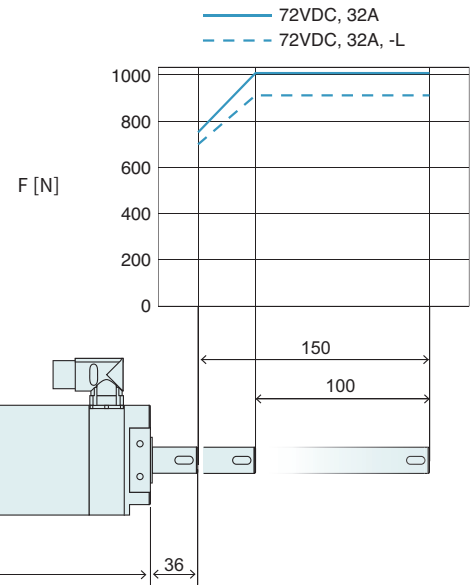


View: Motor connector, plug on

Item	Description	Item-No.
PR01-84x80-C/48x360F-C-100	Linear Rotary Motor	0150-1199
PR01-84x80-C/48x360F-C-100-L	Linear Rotary Motor with hollow Shaft	0150-1200

PR01-84x80-C/48x360F-C-150 (-L)

Max. Stroke: 150 mm
Peak Force: 1024 N
Peak Torque: 8.9 Nm



Dimensions in mm

Motor Specifications

PR01-84x80-C/48x360F-C-150 (-L)

Linear Motion

Extended Stroke ES	mm (in)	150 (5.91)
Standard Stroke SS	mm (in)	100 (3.94)
Peak Force	N (lbf)	1024 (230.1)
Constant Force	N (lbf)	203 (45.6)
Constant Force Fan cooling	N (lbf)	354 (79.6)
Force Constant	N/A _{pk} (lbf/A _{pk})	32 (7.3)
Max. Current @ 72VDC	A _{pk}	32
Max. Velocity @ 72VDC	m/s (in/s)	2.1 (84)
Position Repeatability	mm (in)	±0.05 (±0.0020)
Linearity	%	±0.15

Rotary Motion

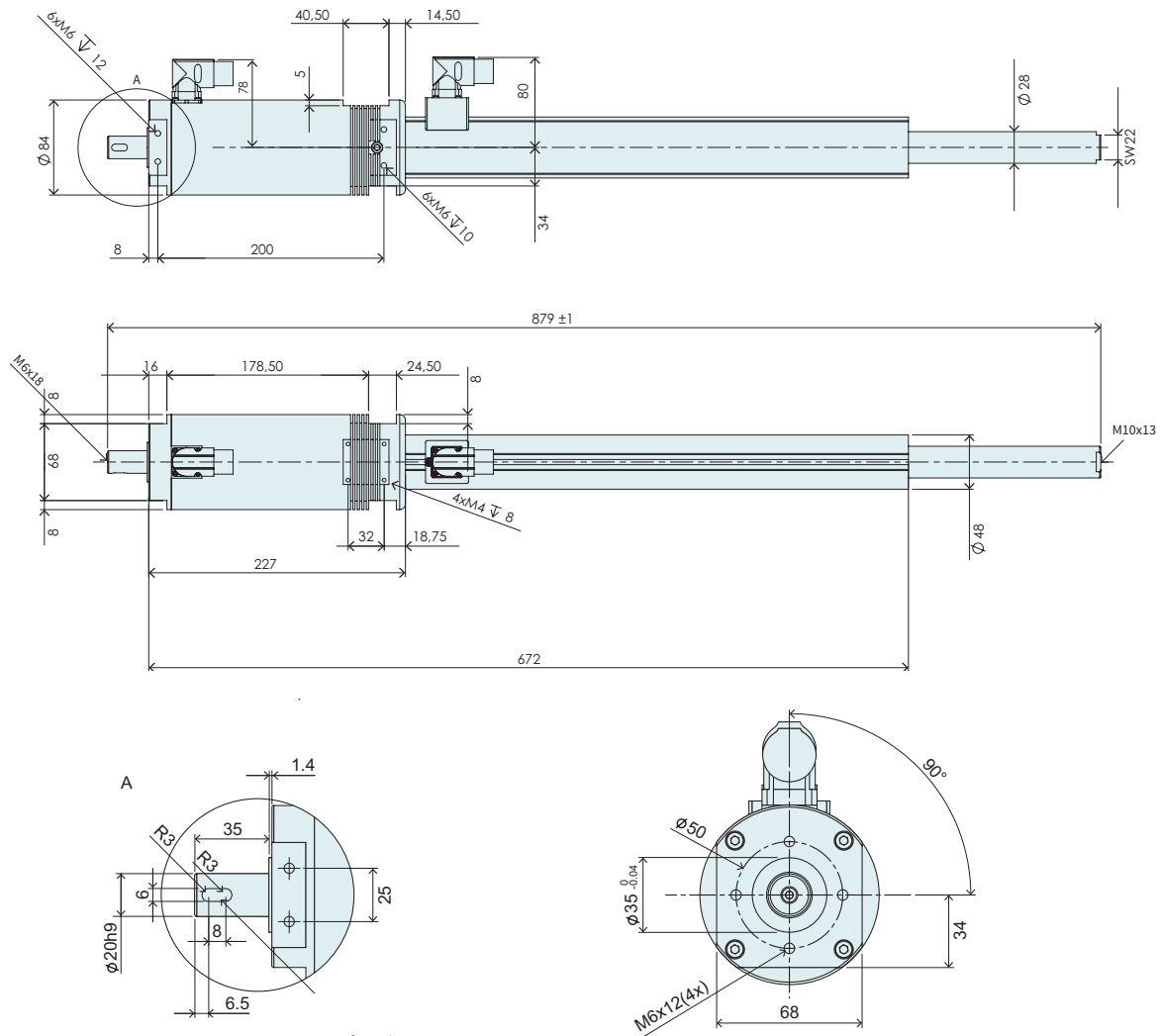
Peak Torque	Nm (lbf·in)	8.9 (78.8)
Constant Torque (Halt)	Nm (lbf·in)	1.9 (16.8)
Max. Number of revolutions	rpm	1000
Torque Constant 1	Nm/A _{pk} (lbf·in/A _{pk})	0.36 (3.19)
Torque Constant 2	Nm/A _{rms} (lbf·in/A _{rms})	0.5035 (4.46)
Max. Current @ 72VDC	A _{pk} / A _{rms}	25 / 17.68
Position Repeatability	°	±0.05

Mechanical Data

Overall length	mm (in)	879 (34.62)
Diameter Linear Unit	mm (in)	48 (1.89)
Diameter Rotary Unit	mm (in)	84 (3.31)
Mass	g (lb)	11860 (26.2)
Linear Moving mass	g (lb)	2900 (6.4)
Rotary Torque of Inertia	kgcm ² (lbF ²)	2.3 (0.0054)
Axle Diameter	mm (in)	20h9 (0.79)
Through bore-hole		-L Option: Hole diameter 4 mm, connection (front) 1/8" x 7, connection (back) 1/4" x 8
Protection Class		IP64

Note: hollow Shaft variants have 10% reduced forces

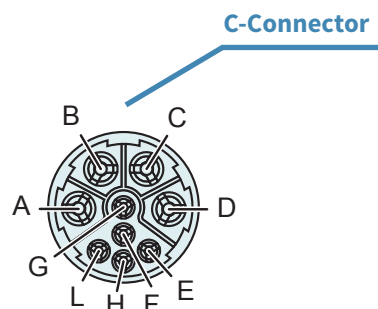
DIMENSIONS



Dimensions in mm

CONNECTORS

Motor Connector Wiring	Linear Unit: C-Connector	Rotary Unit: C-Connector	Wire Color Motor Cable
Ph 1+ / A	A	A	red
Ph 1- / B	B	B	pink
Ph 2+ / C	C	C	blue
Ph 2- / NC	D	D	grey
+5VDC	E	E	white
GND	F	F	inner shield
Sin	G	G	yellow
Cos	H	H	green
Temp.	L	L	black
Shield	Housing	Housing	outer Shield

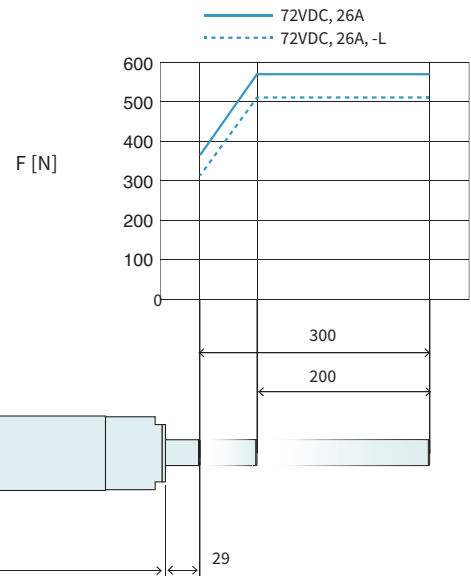


View: Motor connector, plug on

Item	Description	Item-No.
PR01-84x80-C/48x360F-C-150	Linear Rotary Motor	0150-1168
PR01-84x80-C/48x360F-C-150-L	Linear Rotary Motor with hollow Shaft	0150-1166

PR01-84x80-C/48x240F-C-300 (-L)

Max. Stroke: 300 mm
Peak Force: 572 N
Peak Torque: 8.9 Nm



Motor Specifications

PR01-84x80-C/48x240F-C-300(-L)

Linear Motion

Extended Stroke ES	mm (in)	300 (11.81)	
Standard Stroke SS	mm (in)	200 (7.88)	
Peak Force E12x0 - UC	N (lbf)	572 (-L 514)	(128.6 (-L 115.6))
Constant Force	N (lbf)	145 (-L 130)	(74.2 (-L 29.2))
Constant Force Fan cooling	N (lbf)	255 (-L 230)	(58.0 (-L 51.7))
Force Constant	N/A _{pk} (lbf/A _{pk})	22	(5.0)
Max. Current @ 72VDC	A _{pk}	26	
Max. Velocity @ 72VDC	m/s (in/s)	3	(118)
Position Repeatability	mm (in)	±0.05	(±0.0020)
Linearity	%	±0.15	

Rotary Motion

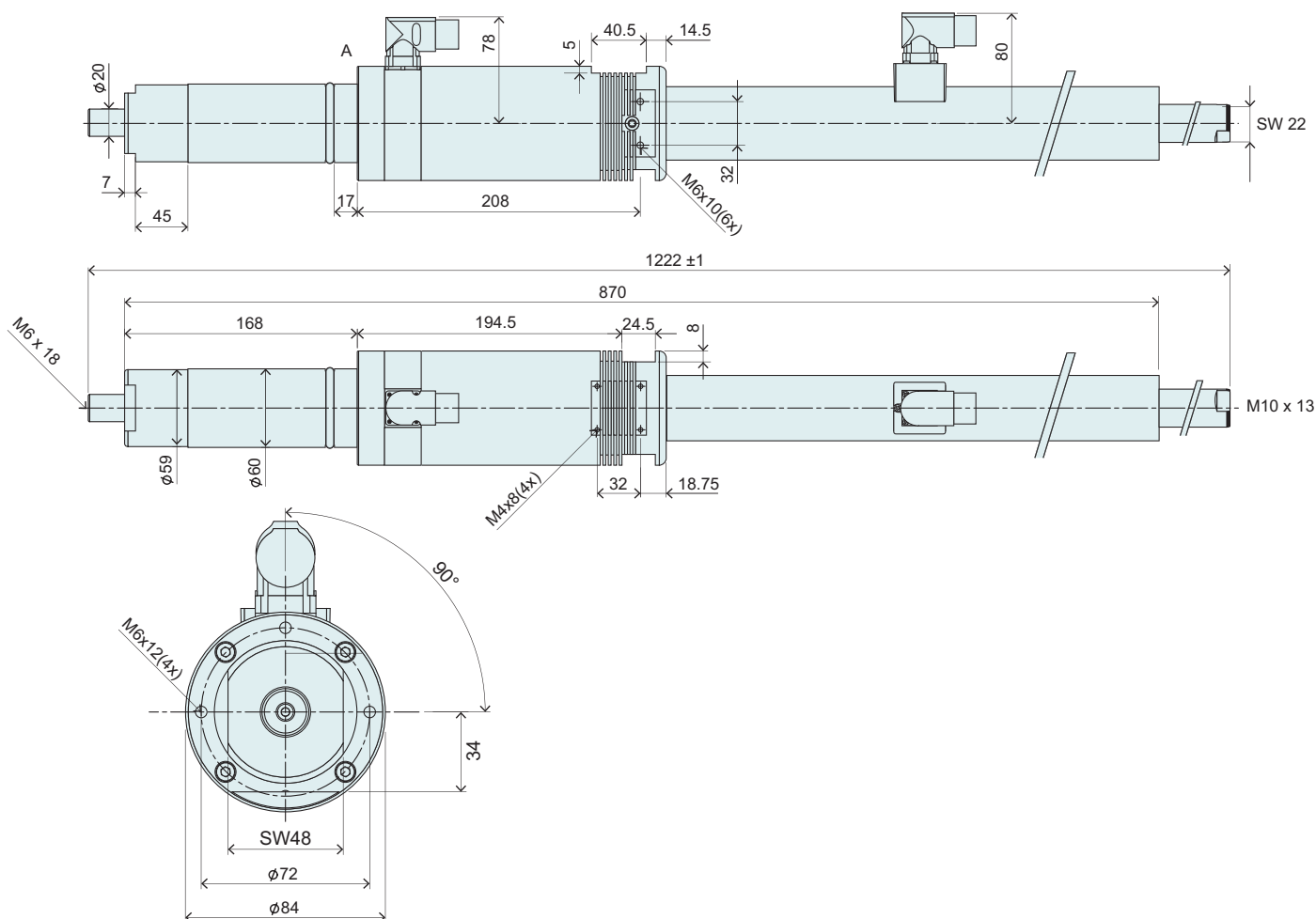
Peak Torque	Nm (lbf·in)	8.9	78
Constant Torque (Halt)	Nm (lbf·in)	1.9	17
Max. Number of revolutions	rpm	1000	
Torque Constant 1	Nm/A _{pk} (lbf·in/A _{pk})	0.36	(3.19)
Torque Constant 2	Nm/A _{rms} (lbf·in/A _{rms})	0.5035	4.46
Max. Current @ 72VDC	A _{pk} / A _{rms}	25 / 17.68	
Position Repeatability	°	+/- 0.05° (*-3°)	

Mechanical Data

Overall length	mm (in)	1222	(48.11)
Diameter Linear Unit	mm (in)	48	(1.89)
Diameter Rotary Unit	mm (in)	84	(3.31)
Mass	g (lb)	12500	(27.56)
Linear Moving mass	g (lb)	3600	(7.94)
Rotary Torque of Inertia	kgcm ² (lbf ²)	2.4	(0.0057)
Axle Diameter	mm (in)	20h9	(0.79)
Through bore-hole		-L Option	Hole diameter 4 mm, Connection (front) 1/8" x 7, connection (back) 1/4" x 8
Protection Class			IP64

Note: hollow Shaft variants have 10% reduced forces

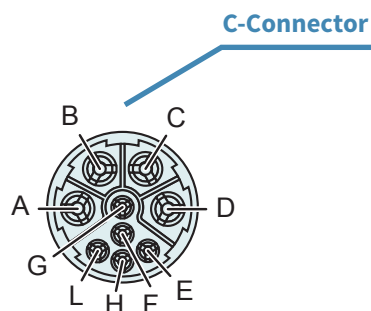
DIMENSIONS



Dimensions in mm

CONNECTORS

Motor Connector Wiring	Linear Unit: C-Connector	Rotary Unit: C-Connector	Wire Color Motor Cable
Ph 1+	A	A	red
Ph 1-	B	B	pink
Ph 2+	C	C	blue
Ph 2-	D	D	grey
+5VDC	E	E	white
GND	F	F	inner shield
Sin	G	G	yellow
Cos	H	H	green
Temp.	L	L	black
Shield	Housing	Housing	outer Shield

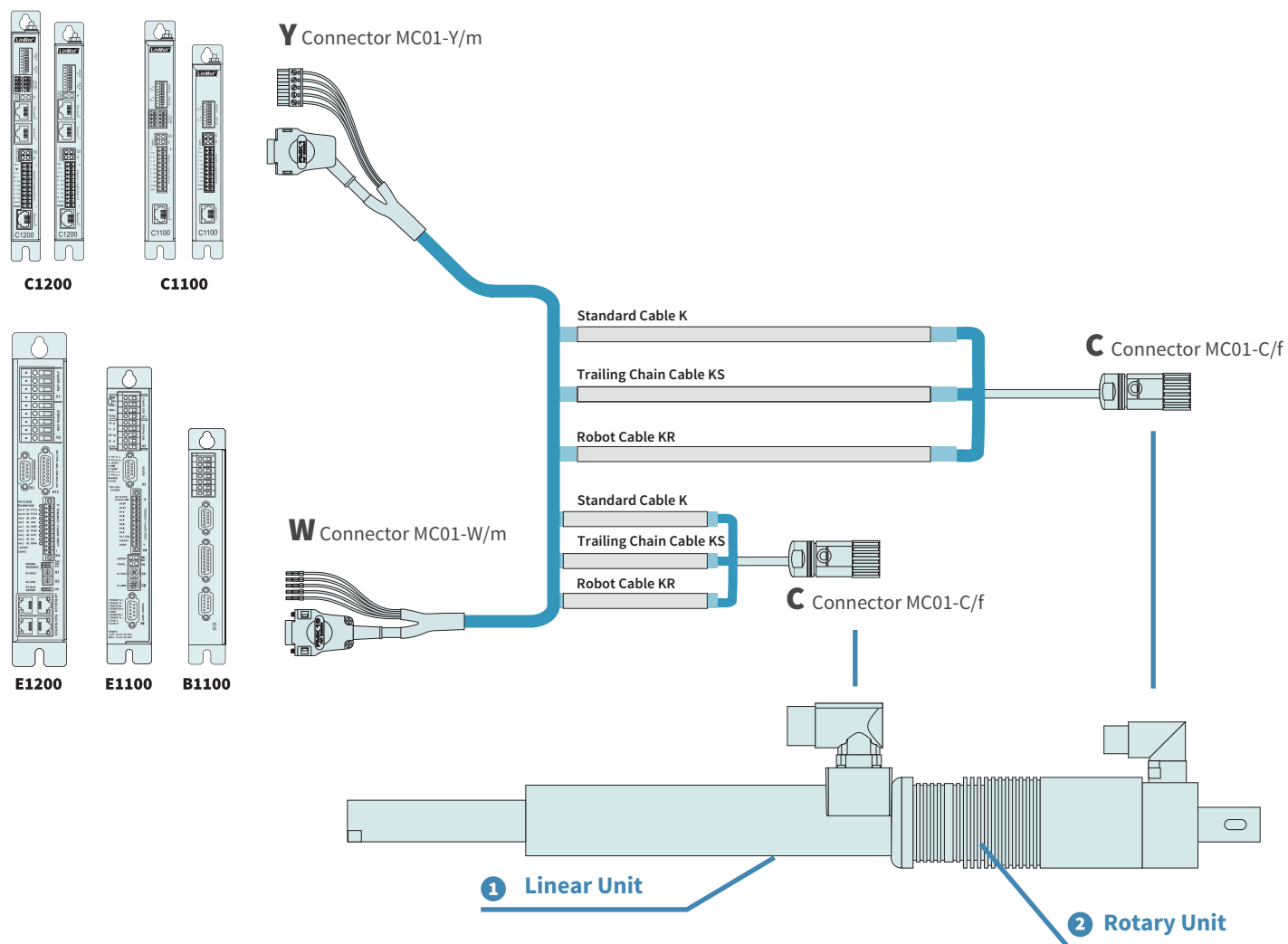


View: Motor connector, plug on

Item	Description	Item-No.
PR01-84x80-C/48x240F-C-300	Linear Rotary Motor	0150-1580
PR01-84x80-C/48x240F-C-300-L	Linear Rotary Motor with hollow Shaft	0150-2554

Accessories

MOTOR CABLE



ORDERING INFORMATION

1 2 Linear Unit / Rotary Unit

Standard Cable		
Item	Description	Item-No.
K15-W/C-2	Motor Cable W/C, 2 m	0150-1811
K15-W/C-4	Motor Cable W/C, 4 m	0150-1801
K15-W/C-6	Motor Cable W/C, 6 m	0150-1802
K15-W/C-8	Motor Cable W/C, 8 m	0150-1803
K15-W/C-	Motor Cable K15-W/C, Custom length	0150-3131

K15-Y/C-2	Motor Cable Y/C, 2 m	0150-2429
K15-Y/C-4	Motor Cable Y/C, 4 m	0150-2430
K15-Y/C-6	Motor Cable Y/C, 6 m	0150-2431
K15-Y/C-8	Motor Cable Y/C, 8 m	0150-2432
K15-Y-Fe/C-	Motor Cable K15-Y-Fe/C, Custom length	0150-3506

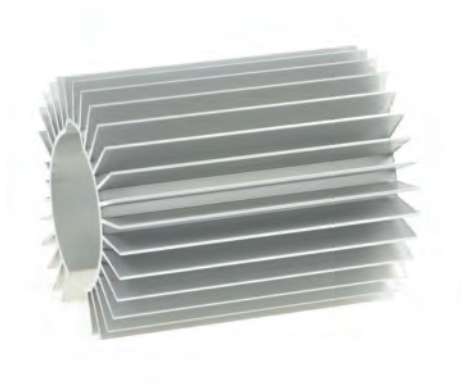
Robot Cable		
Item	Description	Item-No.
KR10-W/C-	Robot Cable KR10-W/C, Custom length	0150-3199
KR10-Y-Fe/C-	Robot Cable KR10-Y-Fe/C, Custom length	0150-3515

Trailing Chain Cable		
Item	Description	Item-No.
KS10-W/C-4	Trailing Chain Cable W/C, 4 m	0150-1807
KS10-W/C-6	Trailing Chain Cable W/C, 6 m	0150-1858
KS10-W/C-8	Trailing Chain Cable W/C, 8 m	0150-1808
KS10-W/C-	Trailing Chain Cable KS10-W/C, Custom length	0150-3139

KS10-Y/C-4	Trailing Chain Cable Y/C, 4 m	0150-2439
KS10-Y/C-6	Trailing Chain Cable Y/C, 6 m	0150-2440
KS10-Y/C-8	Trailing Chain Cable Y/C, 8 m	0150-2441
KS10-Y-Fe/C-	Trailing Chain Cable KS10-Y-Fe/C, Custom length	0150-3511

Connector & Cable (individual)		
Item	Description	Item-No.
MC01-C/f	Motor Connector C/f	0150-3080
MC01-W/m	Motor Connector W/m	0150-3140
MC01-Y-Fe/m	Motor Connector Y-Fe/m	0150-3289
K15-04/05	Motor Cable per m	0150-1978
KS10-04/05	Trailing Chain Cable per m	0150-1977
KR10-04/05	Robot Cable per m	0150-1830

COOLING PROFILE



Item	Description	Item-No.
PC01-48x100	Cooling profile for PS01-48 Linear Motor	0160-2145
PC01-48x117	Cooling profile for PS01-48 Linear Motor	0160-2138

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FLANGE



Item	Description	Item-No.
PF01-48x120	Flange 48x120 mm	0150-1976
PF01-48x226	Flange 48x226 mm	0150-2108

FAN COOLING FOR LINEAR UNIT



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37/48 & PF01-48	0150-5051

FAN COOLING FOR ROTARY UNIT



Item	Description	Item-No.
RS01-VA84-Kit	Fan Kit for RS01-84 Rotary Motors	0150-1600

MOUNTING FLANGE



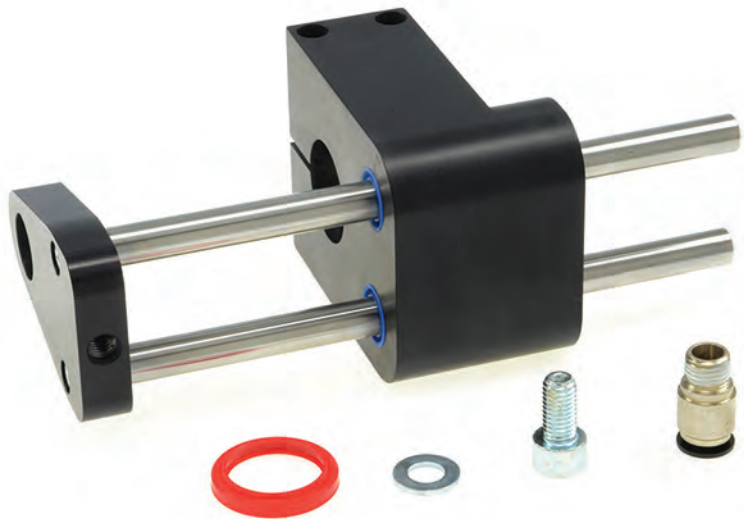
Item	Description	Item-No.
MF01-PR01-84x80-37-1	MagSpring Mounting Flange for Linear Rotary Motors UNO	0250-2337
MF01-PR01-84x80-37-2	MagSpring Mounting Flange for Linear Rotary Motors DUO	0250-2338

MAGSPRING ADAPTER



Item	Description	Item-No.
MA01-PR01-84x80-37-1	MagSpring Adapter for Linear Rotary Motors UNO	0250-2341
MA01-PR01-84x80-37-2	MagSpring Adapter for Linear Rotary Motors DUO	0250-2340

CAM KIT



Item	Description	Item-No.
MF01-PK84	Motor Cam Kit for Linear Rotary Motor	0250-2324

SHAFT-HUB CLAMPING



Item	Description	Item-No.
RS01-SS20x38	Shaft-hub clamping for 20 mm shaft	0230-0100

LINEAR ROTARY MOTORS PR01-84 STAINLESS STEEL



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- ✓ Rotating shaft and front flange made of EN 1.4404 / AISI / SAE 316L stainless steel
- ✓ Hygienic design
- ✓ Resistant to cleaning agents
- ✓ Optimal for use in the food industry
- ✓ Optimal for use in the pharmaceutical industry



LINEAR ROTARY MOTORS PR01-84 STAINLESS STEEL

PR01-84x80-SSC-C/48x240F-C-150-(L) _____	800
PR01-84x80-SSC-C/48x240F-C-300-L _____	802
PR01-84x80-SSC-C/48x360F-C-150-(L) _____	804
Accessories _____	806

PR01-84x80-SSC-C/48x240F-C-150 (-L)

Max. Stroke:

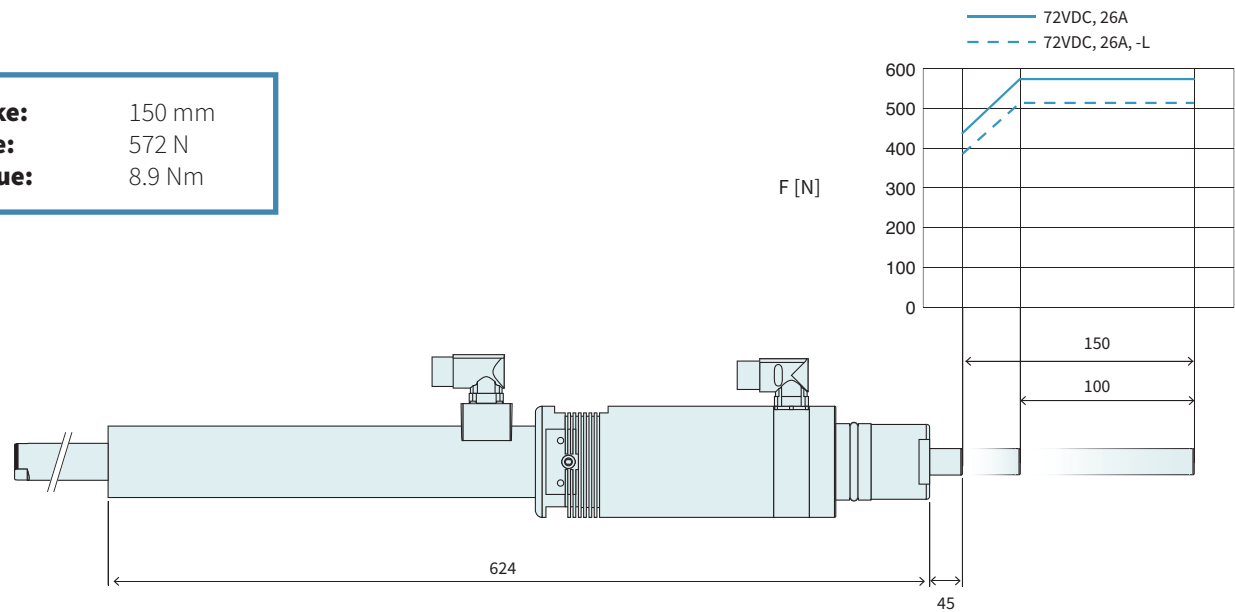
150 mm

Peak Force:

572 N

Peak Torque:

8.9 Nm

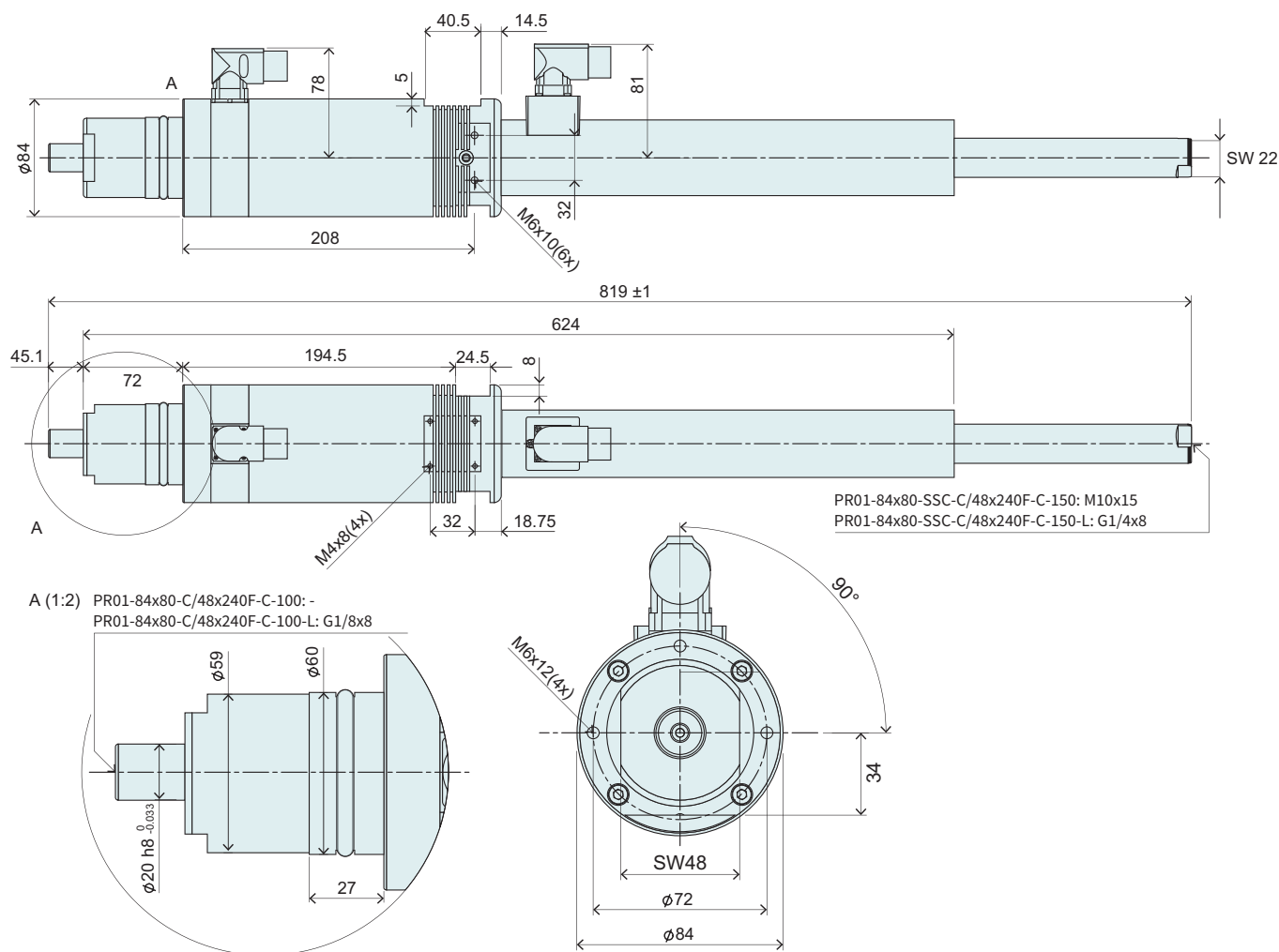


Dimensions in mm

Motor Specifications			
		PR01-84x80-SSC-C/48x240F-C-150 (-L)	
Linear Motion			
Extended Stroke ES	mm (in)	150	(5.91)
Standard Stroke SS	mm (in)	100	(3.94)
Peak Forc E12x0 - UC	N (lbf)	572 (-L 514)	(128.6 (-L 115.6))
Constant Force	N (lbf)	145 (-L 130)	(32.6 (-L 29.2))
Constant Force Fan cooling	N (lbf)	255 (-L 230)	(57.3 (-L 51.7))
Force Constant	N/A _{pk} (lbf/A _{pk})	22	(4.9)
Max. Current @ 72VDC	A _{pk}	26	
Max. Velocity @ 72VDC	m/s (in/s)	3	(118)
Position Repeatability	mm (in)	±0.05	(±0.0020)
Linearity	%	±0.15	
Rotary Motion			
Peak Torque	Nm (lbfin)	8.9	(78)
Constant Torque (Halt)	Nm (lbfin)	1.9	(17)
Max. Number of revolutions	rpm	1000	
Torque Constant 1	Nm/A _{pk} (lbfin/A _{pk})	0.36	(3.19)
Torque Constant 2	Nm/A _{rms} (lbfin/A _{rms})	0.5035	(4.46)
Max. Current @ 72VDC	A _{pk} / A _{rms}	25 / 17.68	
Position Repeatability	°	+/- 0.05°(* / -3°)	
Mechanical Data			
Overall length	mm (in)	819	(32.2)
Diameter Linear Unit	mm (in)	48	(1.89)
Diameter Rotary Unit	mm (in)	84	(3.31)
Mass	g (lb)	11000	(24.25)
Linear Moving mass	g (lb)	2600	(5.73)
Rotary Torque of Inertia	kgcm ² (lbft ²)	2.3	(0.0055)
Axle Diameter	mm (in)	20h9	(0.79)
Through bore-hole		-L Option	Hole diameter 4 mm, connection (front) 1/8" x 8, connection (back) 1/4" x 8
Protection Class		IP64 / IP67 (Front flange)	

Note: hollow Shaft variants have 10% reduced forces

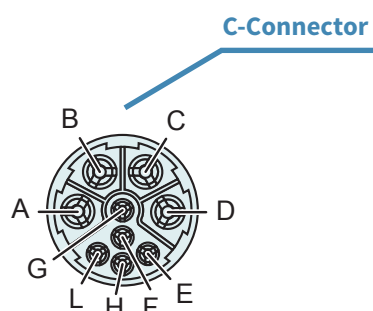
DIMENSIONS



Dimensions in mm

CONNECTORS

Motor Connector Wiring	Linear Unit: C-Connector	Rotary Unit: C-Connector	Wire Color Motor Cable
Ph 1+ / A	A	A	red
Ph 1- / B	B	B	pink
Ph 2+ / C	C	C	blue
Ph 2- / NC	D	D	grey
+5VDC	E	E	white
GND	F	F	inner shield
Sin	G	G	yellow
Cos	H	H	green
Temp.	L	L	black
Shield	Housing	Housing	outer Shield



View: Motor connector, plug on

Item	Description	Item-No.
PR01-84x80-SSC-C/48x240F-C-150	Linear Rotary Motor, Stainless Steel	0150-1581
PR01-84x80-SSC-C/48x240F-C-150-L	Linear Rotary Motor, Stainless Steel with hollow Shaft	0150-1582

PR01-84x80-SSC-C/48x240F-C-300-L

Max. Stroke:

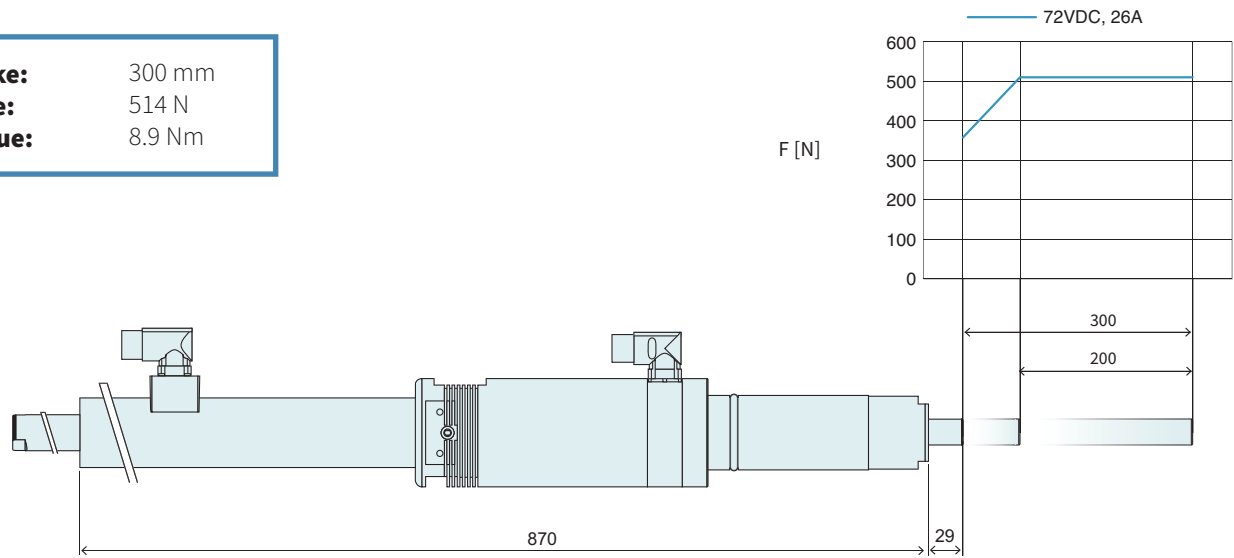
300 mm

Peak Force:

514 N

Peak Torque:

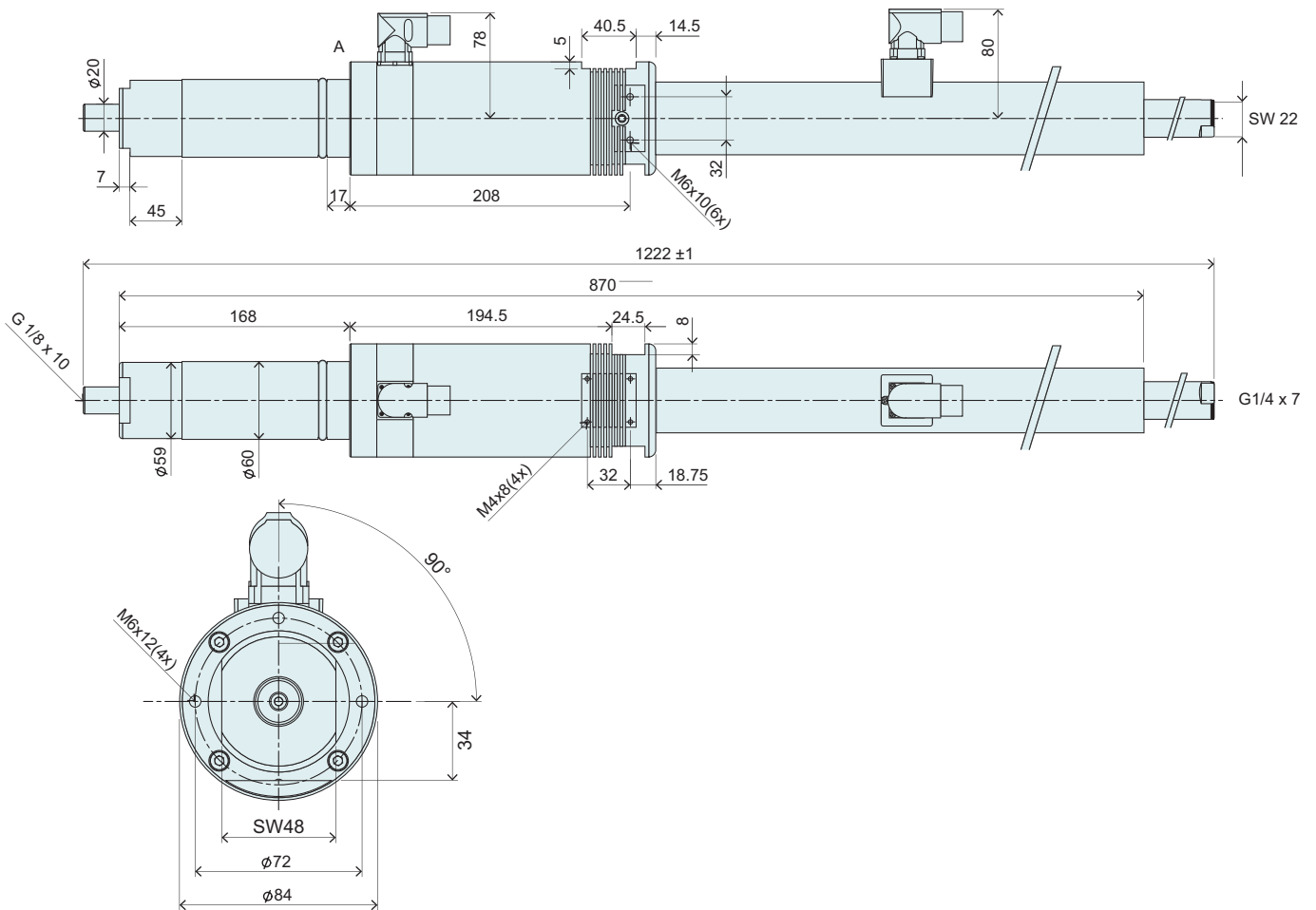
8.9 Nm



Dimensions in mm

Motor Specifications			
		PR01-84x80-SSC-C/48x240F-C-300-L	
Linear Motion			
Extended Stroke ES	mm (in)	300	(11.81)
Standard Stroke SS	mm (in)	200	(7.88)
Peak Forc E12x0 - UC	N (lbf)	514	(115.6)
Constant Force	N (lbf)	145	(29.2)
Constant Force Fan cooling	N (lbf)	255	(57.3)
Force Constant	N/A _{pk} (lbf/A _{pk})	22	(5.0)
Max. Current @ 72VDC	A _{pk}	26	
Max. Velocity @ 72VDC	m/s (in/s)	3.0	(118)
Position Repeatability	mm (in)	±0.05	(±0.0020)
Linearity	%	±0.15	
Rotary Motion			
Peak Torque	Nm (lbf·in)	8.9	78
Constant Torque (Halt)	Nm (lbf·in)	1.9	17
Max. Number of revolutions	rpm	1000	
Torque Constant 1	Nm/A _{pk} (lbf·in/A _{pk})	0.36	(3.19)
Torque Constant 2	Nm/A _{rms} (lbf·in/A _{rms})	0.5035	4.46
Max. Current @ 72VDC	A _{pk} / A _{rms}	25 / 17.68	
Position Repeatability	°	+/- 0.05°(*/-3°)	
Mechanical Data			
Overall length	mm (in)	1222	(48.11)
Diameter Linear Unit	mm (in)	48	(1.89)
Diameter Rotary Unit	mm (in)	84	(3.31)
Mass	g (lb)	12500	(27.56)
Linear Moving mass	g (lb)	3600	(7.94)
Rotary Torque of Inertia	kgcm² (lbf²)	2.4	(0.0057)
Axle Diameter	mm (in)	20h9	(0.79)
Through bore-hole		Hole diameter 4 mm, Connection (front) 1/8" x 8, connection (back) 1/4" x 8	
Protection Class		IP64 / IP67 (Front flange)	

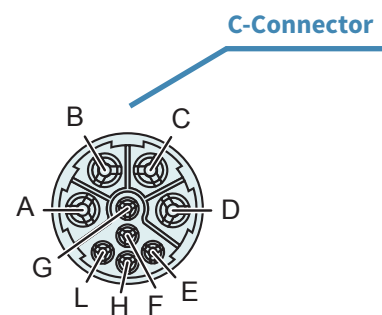
DIMENSIONS



Dimensions in mm

CONNECTORS

Motor Connector Wiring	Linear Unit: C-Connector	Rotary Unit: C-Connector	Wire Color Motor Cable
Ph 1+	A	A	red
Ph 1-	B	B	pink
Ph 2+	C	C	blue
Ph 2-	D	D	grey
+5VDC	E	E	white
GND	F	F	inner shield
Sin	G	G	yellow
Cos	H	H	green
Temp.	L	L	black
Shield	Housing	Housing	outer Shield

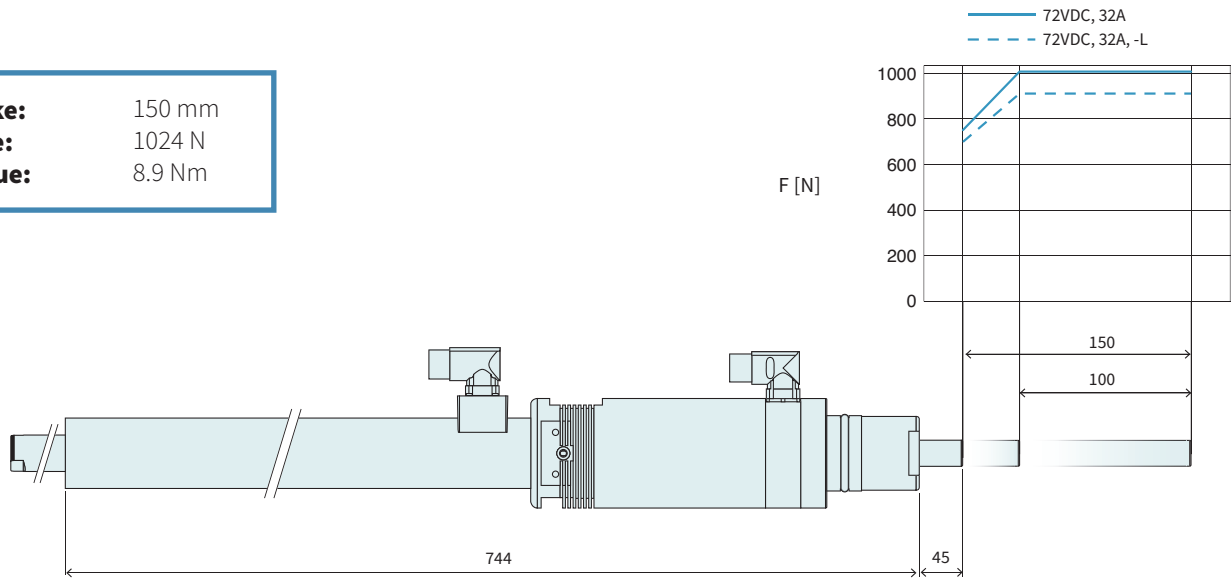


View: Motor connector, plug on

Item	Description	Item-No.
PR01-84x80-SSC-C/48x240F-C-300-L	Linear Rotary Motor, Stainless Steel with hollow Shaft	0150-2555

PR01-84x80-SSC-C/48x360F-C-150 (-L)

Max. Stroke: 150 mm
Peak Force: 1024 N
Peak Torque: 8.9 Nm



Dimensions in mm

Motor Specifications

PR01-84x80-SSC-C/48x360F-C-150 (-L)

Linear Motion

Extended Stroke ES	mm (in)	150 (5.91)	
Standard Stroke SS	mm (in)	100 (3.94)	
Peak Force E12x0 - UC	N (lbf)	1024 (-L 921) (230.2 (-L 207.0))	(-L: hollow Shaft version reduced forces)
Constant Force	N (lbf)	203 (-L 182) (45.6 (-L 40.9))	
Constant Force Fan cooling	N (lbf)	354 (-L 319) (79.6 (-L 71.1))	
Force Constant	N/A _{pk} (lbf/A _{pk})	32 (7.2)	
Max. Current @ 72VDC	A _{pk}	32	
Max. Velocity @ 72VDC	m/s (in/s)	2.1 (83)	
Position Repeatability	mm (in)	±0.05 (±0.0020)	
Linearity	%	±0.15	

Rotary Motion

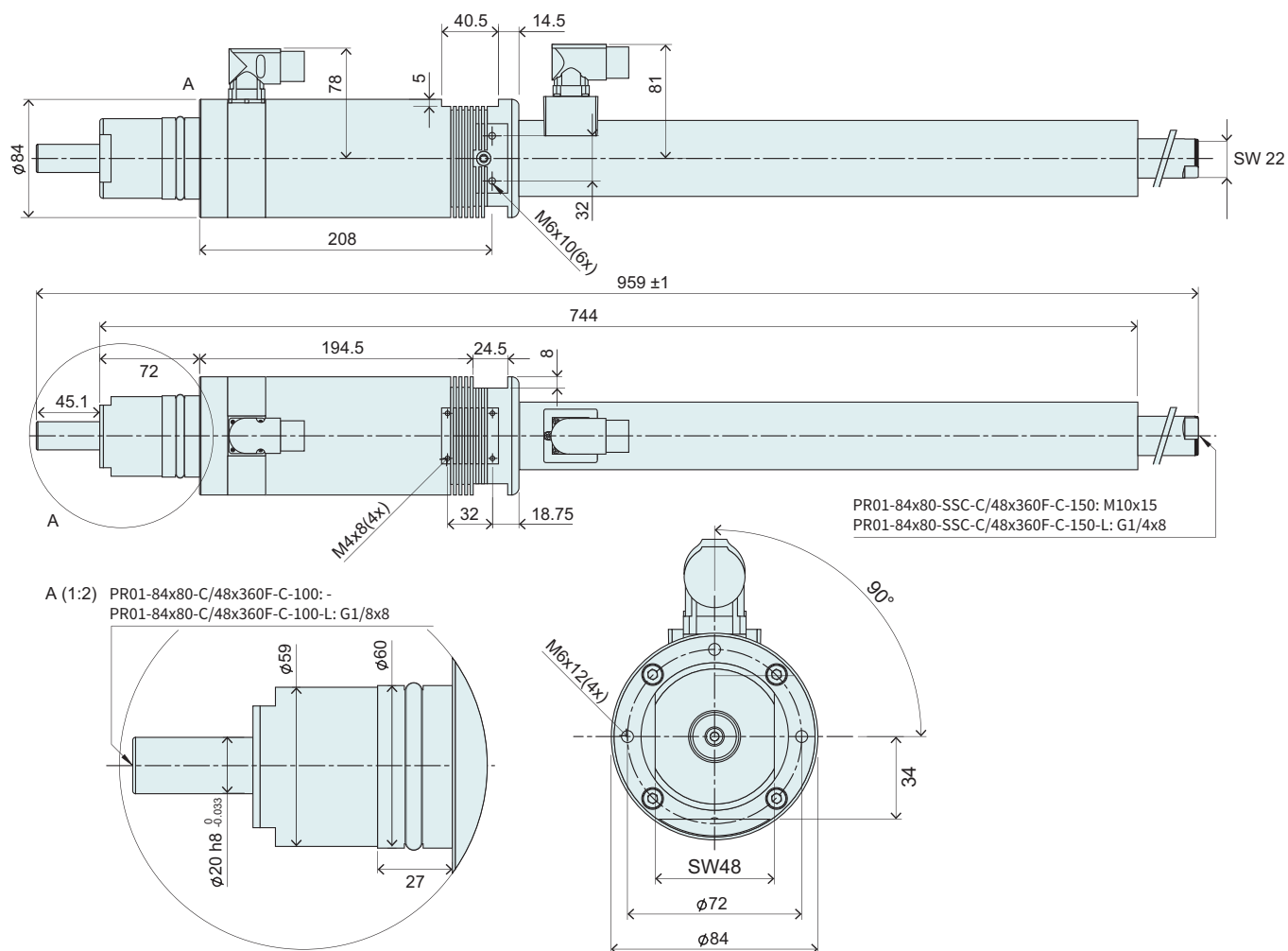
Peak Torque	Nm (lbfin)	8.9 78	
Constant Torque (Halt)	Nm (lbfin)	1.9 17	
Max. Number of revolutions	rpm	1000	
Torque Constant 1	Nm/A _{pk} (lbfin/A _{pk})	0.36 (3.19)	
Torque Constant 2	Nm/A _{rms} (lbfin/A _{rms})	0.5035 4.46	
Max. Current @ 72VDC	A _{pk} / A _{rms}	25 / 17.68	
Position Repeatability	°	+/- 0.05° (*/-3°)	

Mechanical Data

Overall length	mm (in)	959 (37.8)	
Diameter Linear Unit	mm (in)	48 (1.89)	
Diameter Rotary Unit	mm (in)	84 (3.31)	
Mass	g (lb)	12400 (27.34)	
Linear Moving mass	g (lb)	3200 (7.05)	
Rotary Torque of Inertia	kgcm ² (lbf ²)	2.3 (0.0055)	
Axle Diameter	mm (in)	20h9 (0.79)	
Through bore-hole		-L Option	Hole diameter 4 mm, connection (front) 1/8" x 8, connection (back) 1/4" x 8
Protection Class		IP64 / IP67 (Front flange)	

Note: hollow Shaft variants have 10% reduced forces

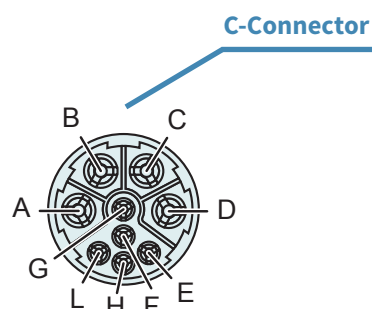
DIMENSIONS



Dimensions in mm

CONNECTORS

Motor Connector Wiring	Linear Unit: C-Connector	Rotary Unit: C-Connector	Wire Color Motor Cable
Ph 1+ / A	A	A	red
Ph 1- / B	B	B	pink
Ph 2+ / C	C	C	blue
Ph 2- / NC	D	D	grey
+5VDC	E	E	white
GND	F	F	inner shield
Sin	G	G	yellow
Cos	H	H	green
Temp.	L	L	black
Shield	Housing	Housing	outer Shield

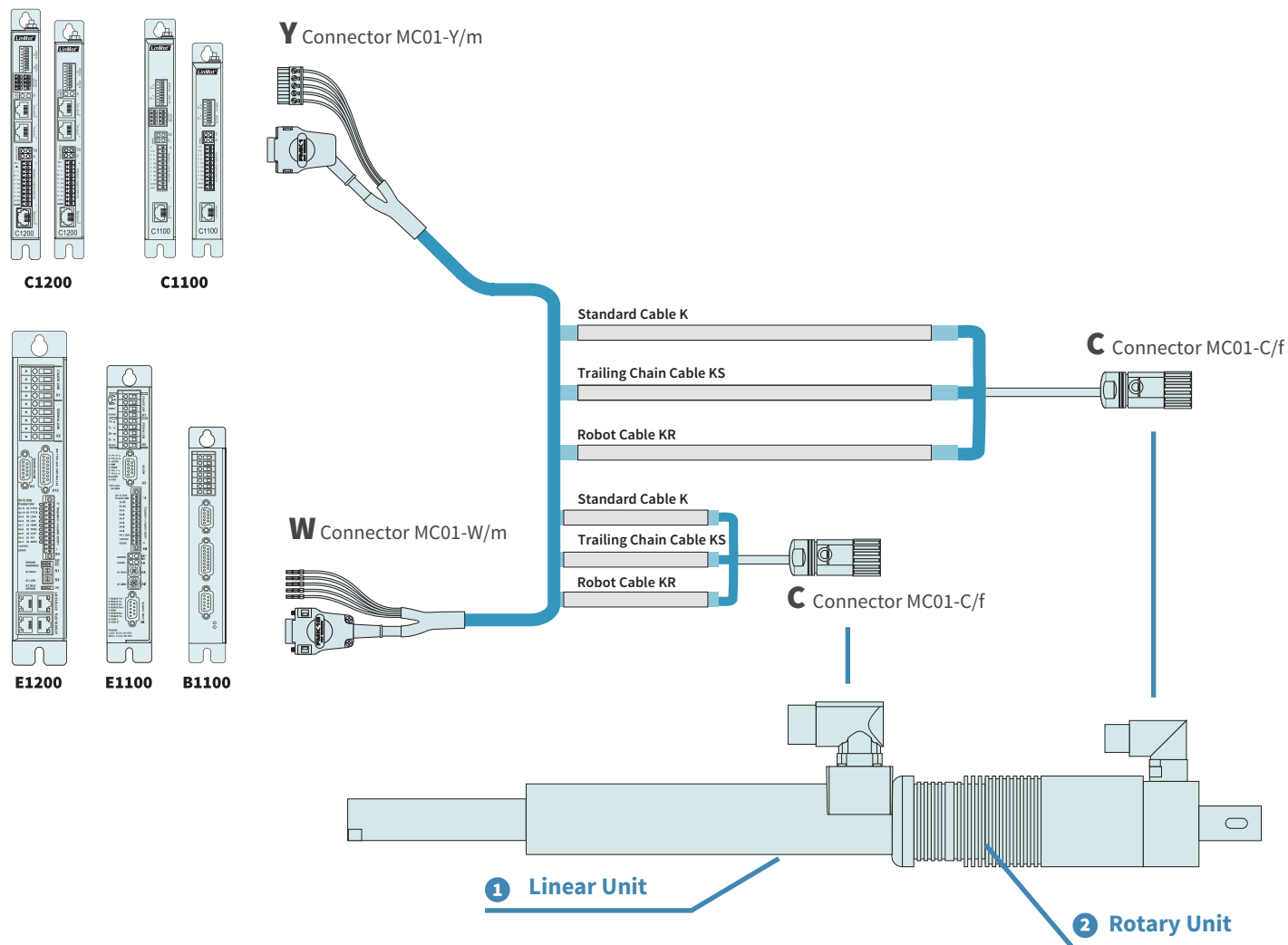


View: Motor connector, plug on

Item	Description	Item-No.
PR01-84x80-SSC-C/48x360F-C-150	Linear Rotary Motor, Stainless Steel	0150-1579
PR01-84x80-SSC-C/48x360F-C-150-L	Linear Rotary Motor, Stainless Steel with hollow Shaft	0150-1583

Accessories

MOTOR CABLE



ORDERING INFORMATION

1 2 Linear Unit / Rotary Unit

Standard Cable		
Item	Description	Item-No.
K15-W/C-2	Motor Cable W/C, 2 m	0150-1811
K15-W/C-4	Motor Cable W/C, 4 m	0150-1801
K15-W/C-6	Motor Cable W/C, 6 m	0150-1802
K15-W/C-8	Motor Cable W/C, 8 m	0150-1803
K15-W/C-	Motor Cable K15-W/C, Custom length	0150-3131

K15-Y/C-2	Motor Cable Y/C, 2 m	0150-2429
K15-Y/C-4	Motor Cable Y/C, 4 m	0150-2430
K15-Y/C-6	Motor Cable Y/C, 6 m	0150-2431
K15-Y/C-8	Motor Cable Y/C, 8 m	0150-2432
K15-Y-Fe/C-	Motor Cable K15-Y-Fe/C, Custom length	0150-3506

Robot Cable		
Item	Description	Item-No.
KR10-W/C-	Robot Cable KR10-W/C, Custom length	0150-3199
KR10-Y-Fe/C-	Robot Cable KR10-Y-Fe/C, Custom length	0150-3515

Trailing Chain Cable		
Item	Description	Item-No.
KS10-W/C-4	Trailing Chain Cable W/C, 4 m	0150-1807
KS10-W/C-6	Trailing Chain Cable W/C, 6 m	0150-1858
KS10-W/C-8	Trailing Chain Cable W/C, 8 m	0150-1808
KS10-W/C-	Trailing Chain Cable KS10-W/C, Custom length	0150-3139

KS10-Y/C-4	Trailing Chain Cable Y/C, 4 m	0150-2439
KS10-Y/C-6	Trailing Chain Cable Y/C, 6 m	0150-2440
KS10-Y/C-8	Trailing Chain Cable Y/C, 8 m	0150-2441
KS10-Y-Fe/C-	Trailing Chain Cable KS10-Y-Fe/C, Custom length	0150-3511

Connector & Cable (individual)		
Item	Description	Item-No.
MC01-C/f	Motor connector C/f	0150-3080
MC01-W/m	Motor connector W/m	0150-3140
MC01-Y-Fe/m	Motor connector Y-Fe/m	0150-3289
K15-04/05	Motor Cable per m	0150-1978
KS10-04/05	Trailing Chain Cable per m	0150-1977
KR10-04/05	Robot Cable per m	0150-1830

COOLING PROFILE



Item	Description	Item-No.
PC01-48x100	Cooling profile for PS01-48 Linear Motor	0160-2145
PC01-48x117	Cooling profile for PS01-48 Linear Motor	0160-2138

FLANGE



Item	Description	Item-No.
PF01-48x120	Flange 48x120 mm	0150-1976
PF01-48x226	Flange 48x226 mm	0150-2108

FAN COOLING FOR LINEAR UNIT



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37/48 & PF01-48	0150-5051

FAN COOLING FOR ROTARY UNIT



Item	Description	Item-No.
RS01-VA84-Kit	Fan Kit for RS01-84 Rotary Motors	0150-1600

MOUNTING FLANGE



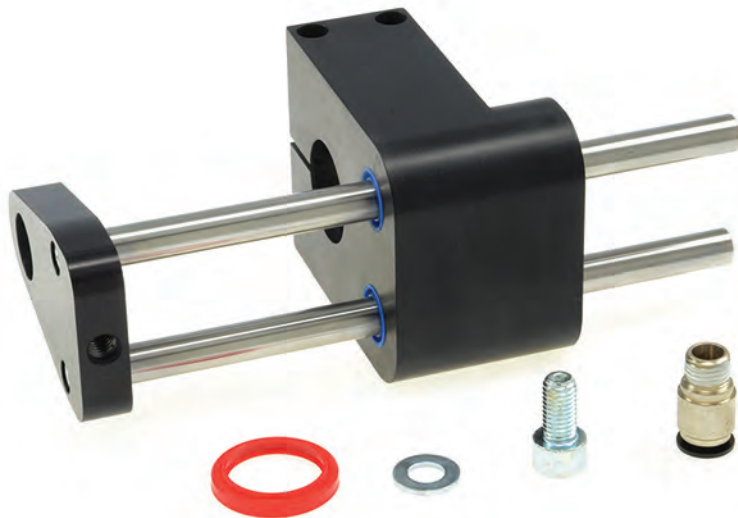
Item	Description	Item-No.
MF01-PR01-84x80-37-1	MagSpring Mounting Flange for Linear Rotary Motors UNO	0250-2337
MF01-PR01-84x80-37-2	MagSpring Mounting Flange for Linear Rotary Motors DUO	0250-2338

MAGSPRING ADAPTER



Item	Description	Item-No.
MA01-PR01-84x80-37-1	MagSpring Adapter for Linear Rotary Motors UNO	0250-2341
MA01-PR01-84x80-37-2	MagSpring Adapter for Linear Rotary Motors DUO	0250-2340

CAM KIT



Item	Description	Item-No.
MF01-PK84	Motor Cam Kit for Linear Rotary Motor	0250-2324

MAGSPRING COVER



Item	Description	Item-No.
ML01-AS300	MagSpring Cover kit for sliders with 300 mm stroke	0250-2345

SHAFT-HUB CLAMPING



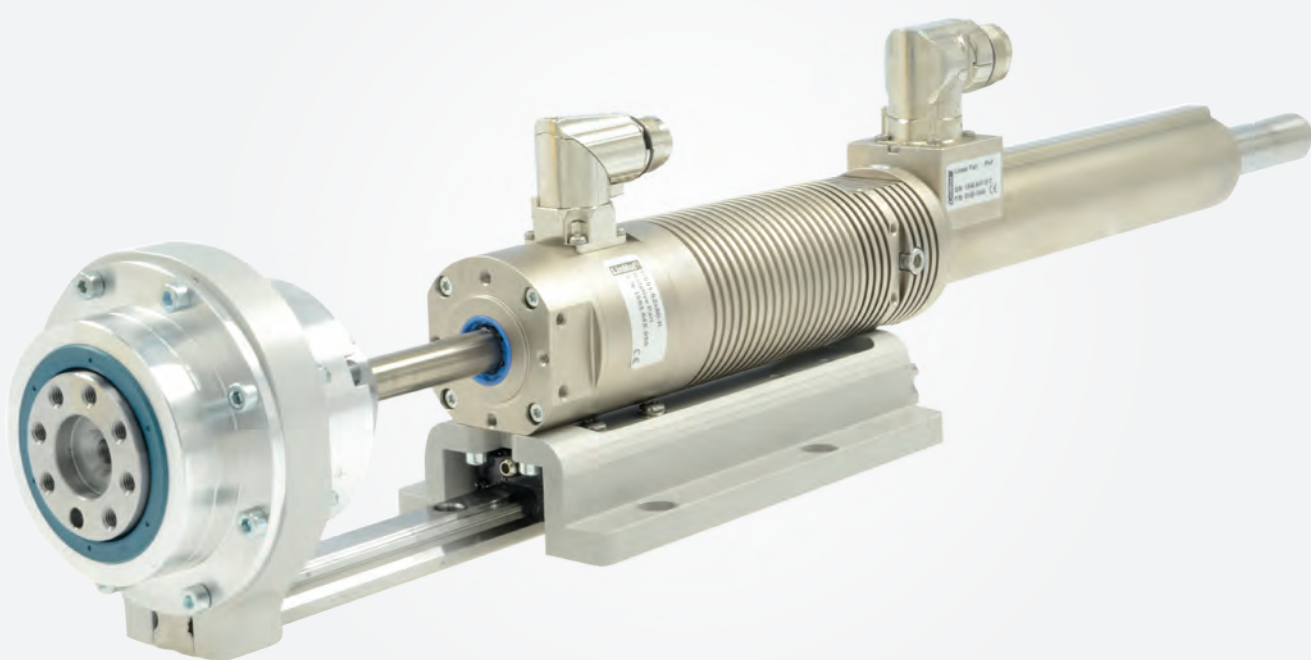
Item	Description	Item-No.
RS01-SS20x38	Shaft-hub clamping for 20 mm shaft	0230-0100

LINEAR ROTARY MOTORS PR01 GEARBOX



10

- ✓ Independent linear and rotary motions
- ✓ For motions with high loads
- ✓ For applications with high torque
- ✓ Three gearbox ratios available
- ✓ With guide rails to bear transverse loads



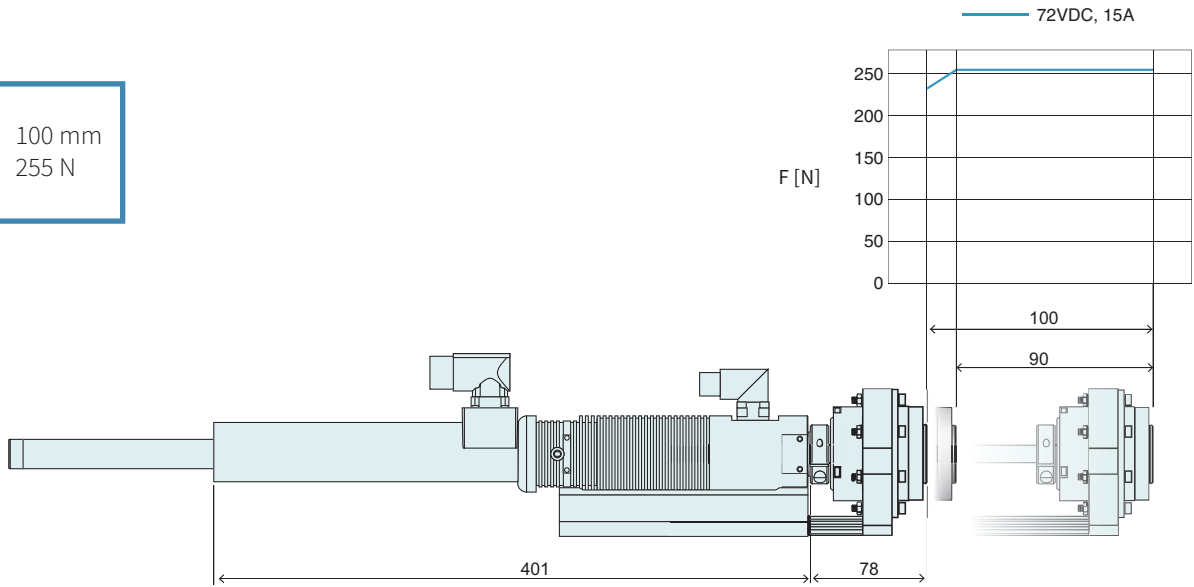
LINEAR ROTARY MOTORS PR01 GEARBOX

PR01-52x60-R/37x120F-HP-C-100-G	816
Technical Data	817
Accessories	818
PR01-84x80-C/48x240F-C-150-G	824
PR01-84x80-C/48x360F-C-150-G	826
Accessories	828

PR01-52x60-R/37x120F-HP-C-100-G...

Max. Stroke: 100 mm
Peak Force: 255 N

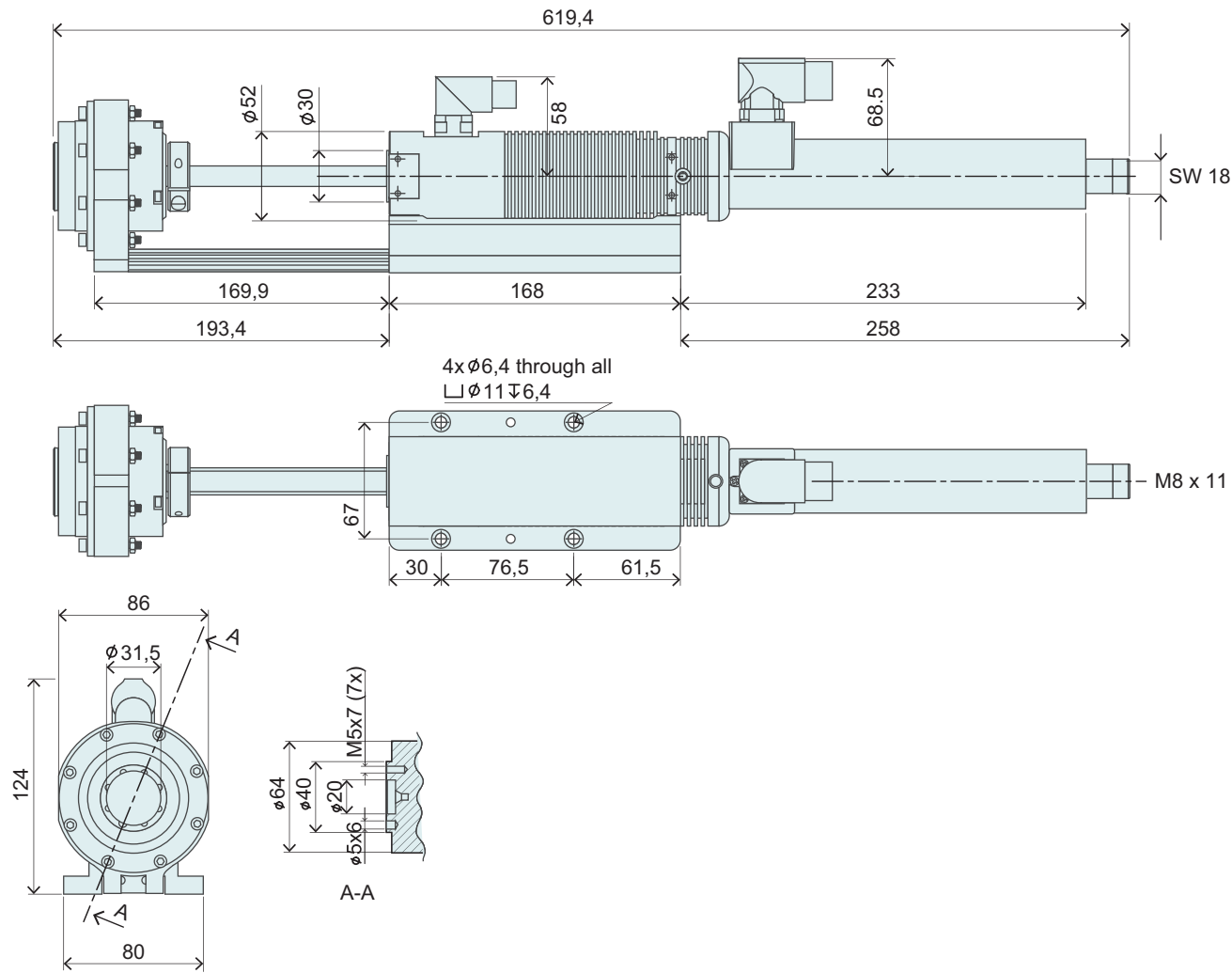
Dimensions in mm



Motor Specifications

		PR01-52x60-R/37x120F-HP-C-100-G05	PR01-52x60-R/37x120F-HP-C-100-G10
Linear Motion			
Extended Stroke ES	mm (in)	100 (3.94)	
Standard Stroke SS	mm (in)	90 (3.54)	
Peak Force E12x0 - UC	N (lbf)	255 (57.3)	
Constant Force	N (lbf)	51 (11.5)	
Constant Force Fan cooling	N (lbf)	92 (20.7)	
Force Constant	N/A _{pk} (lbf/A _{pk})	17 (3.8)	
Max. Current @ 72VDC	A _{pk}	15	
Max. Velocity @ 72VDC	m/s (in/s)	3.9 (154)	
Position Repeatability	mm (in)	±0.05 (±0.0020)	
Linearity	%	±0.10	
Rotary Motion			
Peak Torque	Nm (lbf·in)	2.2 (19.5)	
Constant Torque (Halt)	Nm (lbf·in)	0.47 (4.2)	
Max. Number of revolutions	rpm	1500	
Torque Constant 1	Nm/A _{pk} (lbf·in/A _{pk})	0.16 (1.42)	
Torque Constant 2	Nm/A _{rms} (lbf·in/A _{rms})	0.23 (2.04)	
Gear Ratio	i	5	10
Max. Revolution (gearbox output)	U/min	300	150
Peak Torque (gearbox output)	Nm (lbf·in)	10 (89)	20 (177)
Continuous Torque (gearbox output)	Nm (lbf·in)	2 (18)	4 (35)
Max. Current @ 72VDC	A _{pk} / A _{rms}	13.5 / 9.55	
Position Repeatability	°	±0.1	
Mechanical Data			
Overall length	mm (in)	620 (24.41)	
Diameter Linear Unit	mm (in)	37 (1.46)	
Diameter Rotary Unit	mm (in)	52 (2.05)	
Mass	g (lb)	5150 (11.35)	
Linear Moving mass	g (lb)	860 (5.29)	
Rotary Torque of Inertia	kgcm ² (lbf·in ²)	2 (0.0047)	
Axle Diameter	mm (in)	12h9 (0.47)	
Protection Class		IP54	

DIMENSIONS

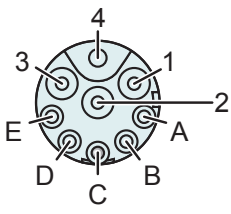
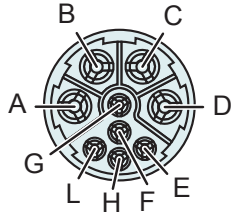


Dimensions in mm

CONNECTORS

Motor Connector Wiring	Linear Unit: C-Connector	Rotary Unit: R-Connector	Wire Color Motor Cable
Ph 1+	A	1	red
Ph 1-	B	2	pink
Ph 2+	C	3	blue
Ph 2-	D	4	grey
+5VDC	E	A	white
GND	F	B	inner shield
Sin	G	C	yellow
Cos	H	D	green
Temp.	L	E	black
Shield	Housing	Housing	outer Shield

C-Connector



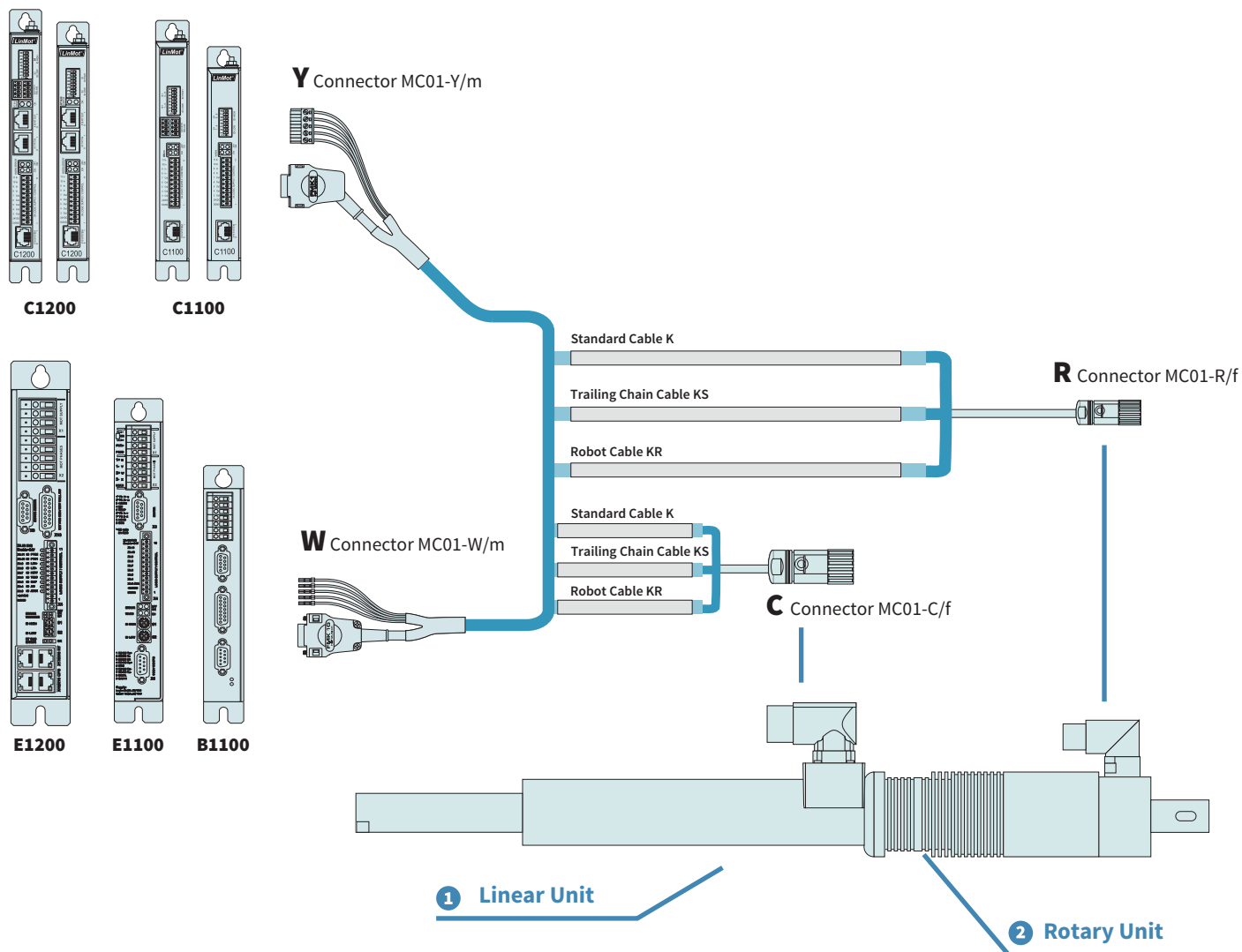
R-Connector

View: Motor connector, plug on

Item	Description	Item-No.
PR01-52x60-R/37x120F-HP-C-100-G05	Linear Rotary Motor with Gearbox 5:1	0150-2648
PR01-52x60-R/37x120F-HP-C-100-G10	Linear Rotary Motor with Gearbox 10:1	0150-2647

Accessories

MOTOR CABLE



ORDERING INFORMATION

1 Linear Unit

Standard Cable		
Item	Description	Item-No.
K05-W/C-2	Motor Cable W/C, 2 m	0150-2123
K05-W/C-4	Motor Cable W/C, 4 m	0150-2124
K05-W/C-6	Motor Cable W/C, 6 m	0150-2125
K05-W/C-8	Motor Cable W/C, 8 m	0150-2126
K05-W/C-	Motor Cable W/C, Custom length	0150-3263
K05-Y/C-2	Motor Cable Y/C, 2 m	0150-2425
K05-Y/C-4	Motor Cable Y/C, 4 m	0150-2426
K05-Y/C-6	Motor Cable Y/C, 6 m	0150-2427
K05-Y/C-8	Motor Cable Y/C, 8 m	0150-2428
K05-Y-Fe/C-	Motor Cable Y-Fe/C, Custom length	0150-3502

Robot Cable		
Item	Description	Item-No.
KR05-Y-Fe/C-	Robot Cable KR05-Y-Fe/C-, Custom length	0150-3513

Trailing Chain Cable		
Item	Description	Item-No.
KS05-W/C-4	Trailing Chain Cable W/C, 4 m	0150-2127
KS05-W/C-6	Trailing Chain Cable W/C, 6 m	0150-2128
KS05-W/C-8	Trailing Chain Cable W/C, 8 m	0150-2129
KS05-W/C-	Trailing Chain Cable W/C, Custom length	0150-3204
KS05-Y/C-4	Trailing Chain Cable Y/C, 4 m	0150-2436
KS05-Y/C-6	Trailing Chain Cable Y/C, 6 m	0150-2437
KS05-Y/C-8	Trailing Chain Cable Y/C, 8 m	0150-2438
KS05-Y-Fe/C-	Trailing Chain Cable Y/C, Custom length	0150-3508

Connector & Cable (individual)		
Item	Description	Item-No.
MC01-C/f	Motor connector C/f	0150-3080
MC01-W/m	Motor connector W/m	0150-3140
MC01-Y-Fe/m	Motor connector Y-Fe/m	0150-3289
K05-04/05	Motor Cable per m	0150-1920
KS05-04/05	Trailing Chain Cable per m	0150-1938
KR05-04/05	Robot Cable per m	0150-1846

2 Rotary Unit

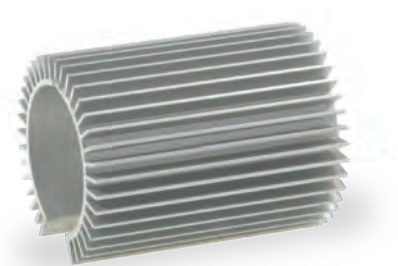
Standard Cable		
Item	Description	Item-No.
K05-W/R-2	Motor Cable W/R, 2 m	0150-2119
K05-W/R-4	Motor Cable W/R, 4 m	0150-2120
K05-W/R-6	Motor Cable W/R, 6 m	0150-2121
K05-W/R-8	Motor Cable W/R, 8 m	0150-2122
K05-W/R-	Motor Cable K05-W/R, Custom length	0150-3262
K05-Y/R-2	Motor Cable Y/R, 2 m	0150-2421
K05-Y/R-4	Motor Cable Y/R, 4 m	0150-2422
K05-Y/R-6	Motor Cable Y/R, 6 m	0150-2423
K05-Y/R-8	Motor Cable Y/R, 8 m	0150-2424
K05-Y-Fe/R-	Motor Cable K05-Y-Fe/R, Custom length	0150-3501

Robot Cable		
Item	Description	Item-No.
KR05-W/R-	Robot Cable KR05-W/R, Custom length	0150-3336
KR05-Y-Fe/R-	Robot Cable KR05-Y-Fe/R, Custom length	0150-3512

Trailing Chain Cable		
Item	Description	Item-No.
KS05-W/R-4	Trailing Chain Cable W/R, 4 m	0150-2106
KS05-W/R-6	Trailing Chain Cable W/R, 6 m	0150-2131
KS05-W/R-8	Trailing Chain Cable W/R, 8 m	0150-2107
KS05-W/R-	Trailing Chain Cable KS05-W/R, Custom length	0150-3256
KS05-Y/R-4	Trailing Chain Cable Y/R, 4 m	0150-2433
KS05-Y/R-6	Trailing Chain Cable Y/R, 6 m	0150-2434
KS05-Y/R-8	Trailing Chain Cable Y/R, 8 m	0150-2435
KS05-Y-Fe/R-	Trailing Chain Cable KS05-Y-Fe/R, Custom length	0150-3507

Connector & Cable (individual)		
Item	Description	Item-No.
MC01-R/f	Motor cable R/f	0150-3129
MC01-W/m	Motor cable W/m	0150-3140
MC01-Y-Fe/m	Motor cable Y-Fe/m	0150-3289
K05-04/05	Motor Cable per m	0150-1920
KS05-04/05	Trailing Chain Cable per m	0150-1938
KR05-04/05	Robot Cable per m	0150-1846

COOLING PROFILE



Item	Description	Item-No.
PC01-37x68	Cooling profile for PS01-37 Linear Motor	0160-2131

FLANGE



Item	Description	Item-No.
PF02-37x100	Flange 37x100 mm	0150-1998
PF02-37x140	Flange 37x140 mm	0150-2105

FAN COOLING FOR LINEAR UNIT



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

FAN COOLING FOR ROTARY UNIT



Item	Description	Item-No.
RS01-VA52-Kit	Fan Kit for RS01-52 Linear Rotary Motor	0150-1599

MOUNTING FLANGE



Item	Description	Item-No.
MF01-PR01-52x40-20	Mounting Flange MS01-20-140	0250-2322
MF01-PR01-52x40-37	Mounting Flange MS01-37-155	0250-2319

MAGSPRING ADAPTER



Item	Description	Item-No.
MA01-PR01-52-37/20	MagSpring Adapter for Linear Rotary Motors	0250-0128

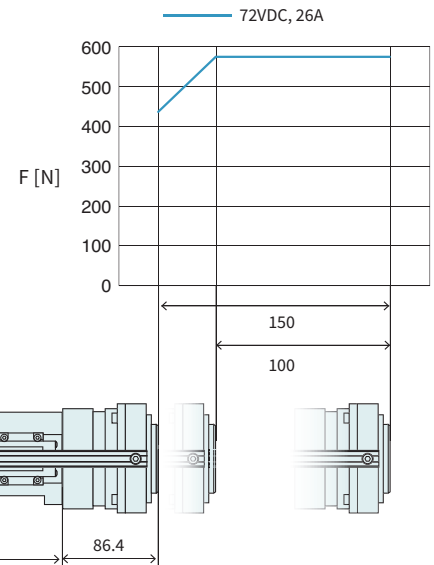
BRAKE KIT



Item	Description	Item-No.
MF01-BK52	Brake Kit for PR01-52 Linear Rotary Motor	0250-2344

PR01-84x80-C/48x240F-C-150-G...

Max. Stroke: 150 mm
Peak Force: 572 N

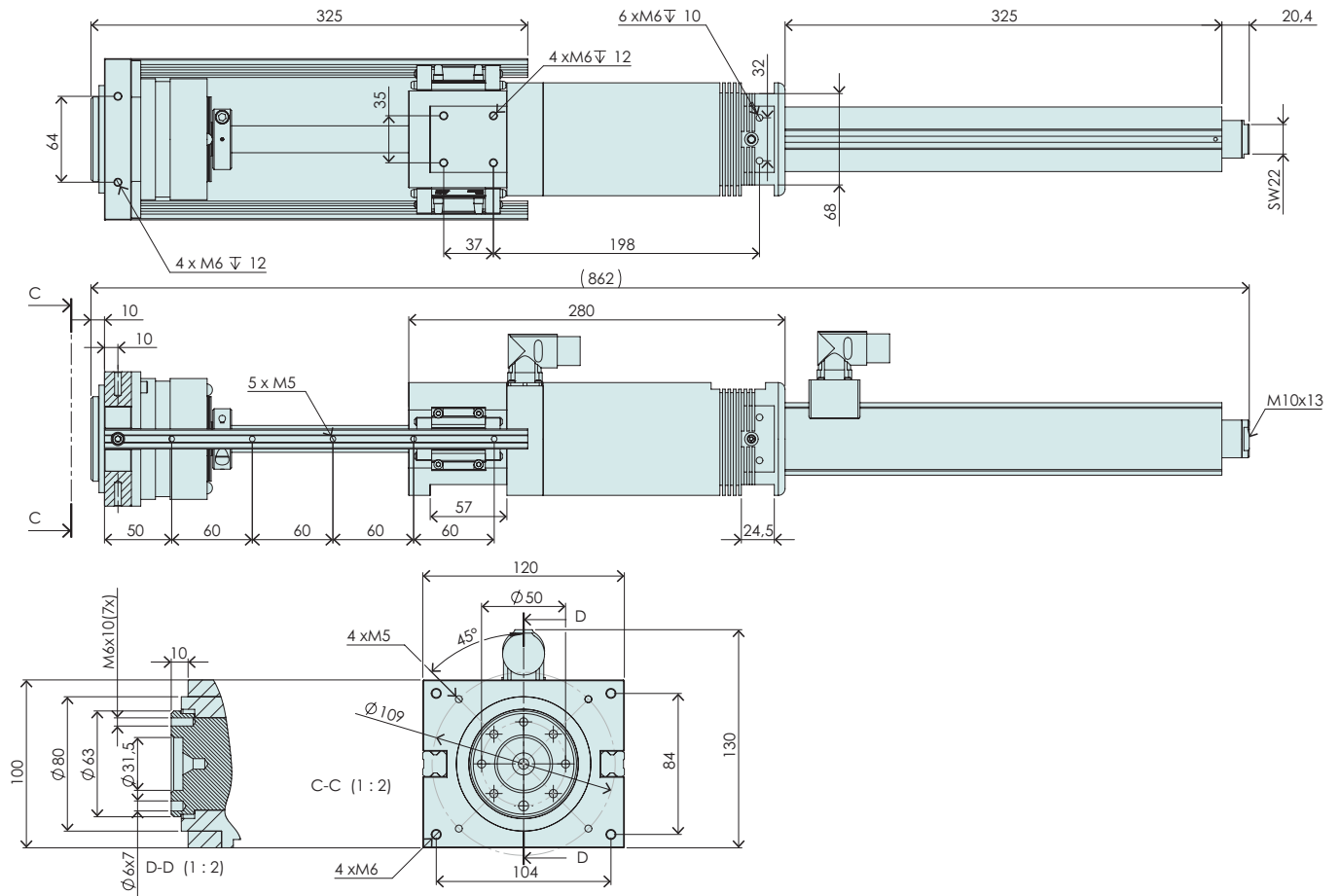


Dimensions in mm

Motor Specifications							
		PR01-84x80-C/ 48x240F-C-150-G05		PR01-84x80-C/ 48x240F-C-150-G07		PR01-84x80-C/ 48x240F-C-150-G10	
Linear Motion							
Extended Stroke ES	mm (in)	150 (5.91)					
Standard Stroke SS	mm (in)	100 (3.94)					
Peak Forc E12x0 - UC	N (lbf)	572 (128.6)					
Constant Force	N (lbf)	145 (32.6)					
Constant Force Fan cooling	N (lbf)	255 (57.3)					
Force Constant	N/A _{pk} (lbf/A _{pk})	22 (4.9)					
Max. Current @ 72VDC	A _{pk}	26					
Max. Velocity @ 72VDC	m/s (in/s)	3 (118)					
Position Repeatability	mm (in)	+/- 0.05 (-0.002)					
Linearity	%	+/- 0.15					
Rotary Motion							
Peak Torque	Nm (lbfin)	8.9 (78)					
Constant Torque (Halt)	Nm (lbfin)	1.9 (17)					
Max. Number of revolutions	rpm	1000					
Torque Constant 1	Nm/A _{pk} (lbfin/A _{pk})	0.36 (3.19)					
Torque Constant 2	Nm/A _{rms} (lbfin/A _{rms})	0.5035 (4.46)					
Gear Ratio	i	5	7	10			
Max. Revolution (gearbox output)	U/min	200	142	100			
Peak Torque (gearbox output)	Nm (lbfin)	40 (354)	56 (496)	75 (664)			
Continuous Torque (gearbox output)	Nm (lbfin)	8.5 (75)	12 (106)	17 (150)			
Max. Current @ 72VDC	A _{pk} / A _{rms}		25 / 17.68				
Position Repeatability	°	+/- 0.05°(* /-3°)					
Mechanical Data							
Overall length	mm (in)	862 (33.94)					
Diameter Linear Unit	mm (in)	48 (1.89)					
Diameter Rotary Unit	mm (in)	84 (3.31)					
Mass	g (lb)	13'000 (28.66)					
Linear Moving mass	g (lb)	6'730 (14.84)					
Rotary Torque of Inertia	kgcm² (lb²)	2.3 (20.34)					
Protection Class		IP54					

* mit Servo Drive E1250-UC

DIMENSIONS

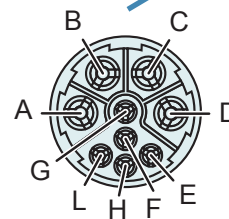


Dimensions in mm

CONNECTORS

Motor Connector Wiring	Linear Unit: C-Connector	Rotary Unit: C-Connector	Wire Color Motor Cable
Ph 1+	A	A	red
Ph 1-	B	B	pink
Ph 2+	C	C	blue
Ph 2-	D	D	grey
+5VDC	E	E	white
GND	F	F	inner shield
Sin	G	G	yellow
Cos	H	H	green
Temp.	L	L	black
Shield	Housing	Housing	outer Shield

C-Connector

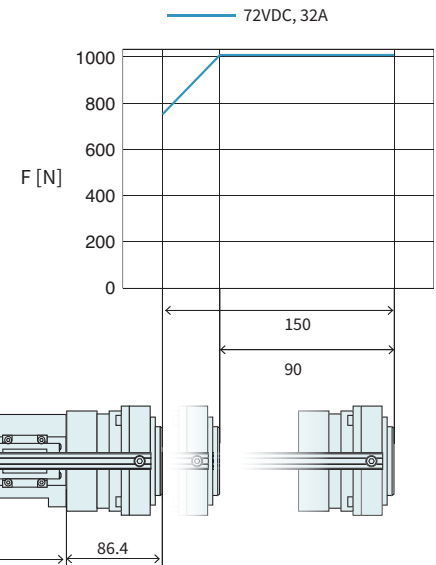


View: Motor connector, plug on

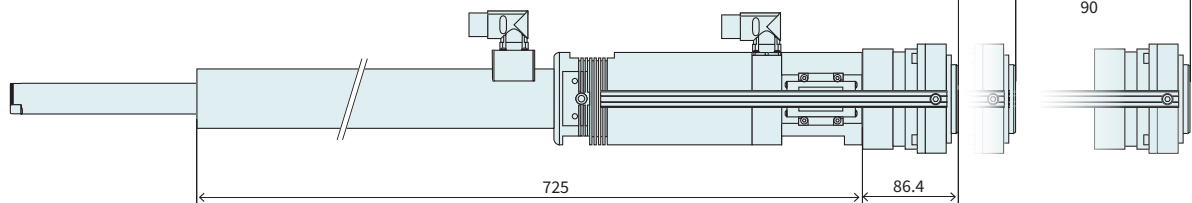
Item	Description	Item-No.
PR01-84x80-C-G/48x240F-C-150-G05	Linear Rotary Motor with Gearbox 5:1	0150-2531
PR01-84x80-C-G/48x240F-C-150-G07	Linear Rotary Motor mit Getriebe 7:1	0150-2532
PR01-84x80-C-G/48x240F-C-150-G10	Linear Rotary Motor with Gearbox 10:1	0150-2533

PR01-84x80-C/48x360F-C-150-G...

Max. Stroke: 150 mm
Peak Force: 1024 N



Dimensions in mm

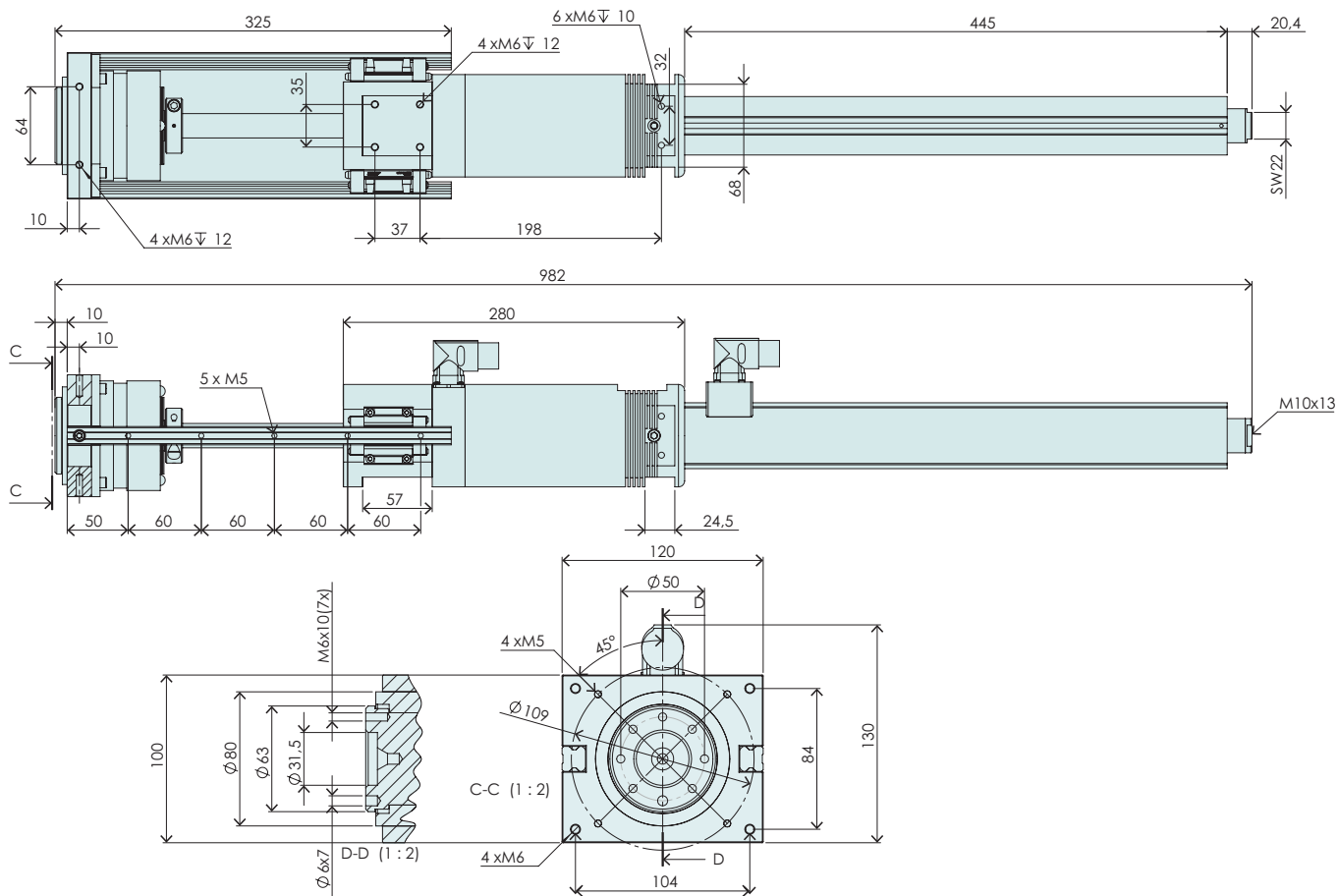


Motor Specifications

		PR01-84x80-C/ 48x360F-C-150-G05	PR01-84x80-C/ 48x360F-C-150-G07	PR01-84x80-C/ 48x360F-C-150-G10
Linear Motion				
Extended Stroke ES	mm (in)		150 (5.91)	
Standard Stroke SS	mm (in)		100 (3.94)	
Peak Force E12x0 - UC	N (lbf)		1024 (230.2)	
Constant Force	N (lbf)		203 (45.6)	
Constant Force Fan cooling	N (lbf)		354 (79.6)	
Force Constant	N/A _{pk} (lbf/A _{pk})		32 (7.2)	
Max. Current @ 72VDC	A _{pk}		32	
Max. Velocity @ 72VDC	m/s (in/s)		2.1 (82)	
Position Repeatability	mm (in)		+/- 0.05 (0.002)	
Linearity	%		+/- 0.15	
Rotary Motion				
Peak Torque	Nm (lbf·in)		8.9 (78)	
Constant Torque (Halt)	Nm (lbf·in)		1.9 (17)	
Max. Number of revolutions	rpm		1000	
Torque Constant 1	Nm/A _{pk} (lbf·in/A _{pk})		0.36 (3.19)	
Torque Constant 2	Nm/A _{rms} (lbf·in/A _{rms})		0.5035 (4.46)	
Gear Ratio	i	5	7	10
Max. Revolution (gearbox output)	U/min	200	142	100
Peak Torque (gearbox output)	Nm (lbf·in)	40 (354)	56 (496)	75 (664)
Continuous Torque (gearbox output)	Nm (lbf·in)	8.5 (75)	12 (106)	17 (150)
Max. Current @ 72VDC	A _{pk} / A _{rms}		25 / 17.68	
Position Repeatability	°		+/- 0.05° (*/-3°)	
Mechanical Data				
Overall length	mm (in)		982 (33.94)	
Diameter Linear Unit	mm (in)		48 (1.89)	
Diameter Rotary Unit	mm (in)		84 (3.31)	
Mass	g (lb)		14'600 (32.19)	
Linear Moving mass	g (lb)		7'330 (16.16)	
Rotary Torque of Inertia	kgcm ² (lbft ²)		2.3 (20.34)	
Protection Class			IP54	

* mit Servo Drive E1250-UC

DIMENSIONS

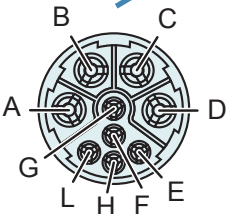


Dimensions in mm

CONNECTORS

Motor Connector Wiring	Linear Unit: C-Connector	Rotary Unit: C-Connector	Wire Color Motor Cable
Ph 1+	A	A	red
Ph 1-	B	B	pink
Ph 2+	C	C	blue
Ph 2-	D	D	grey
+5VDC	E	E	white
GND	F	F	inner shield
Sin	G	G	yellow
Cos	H	H	green
Temp.	L	L	black
Shield	Housing	Housing	outer Shield

C-Connector

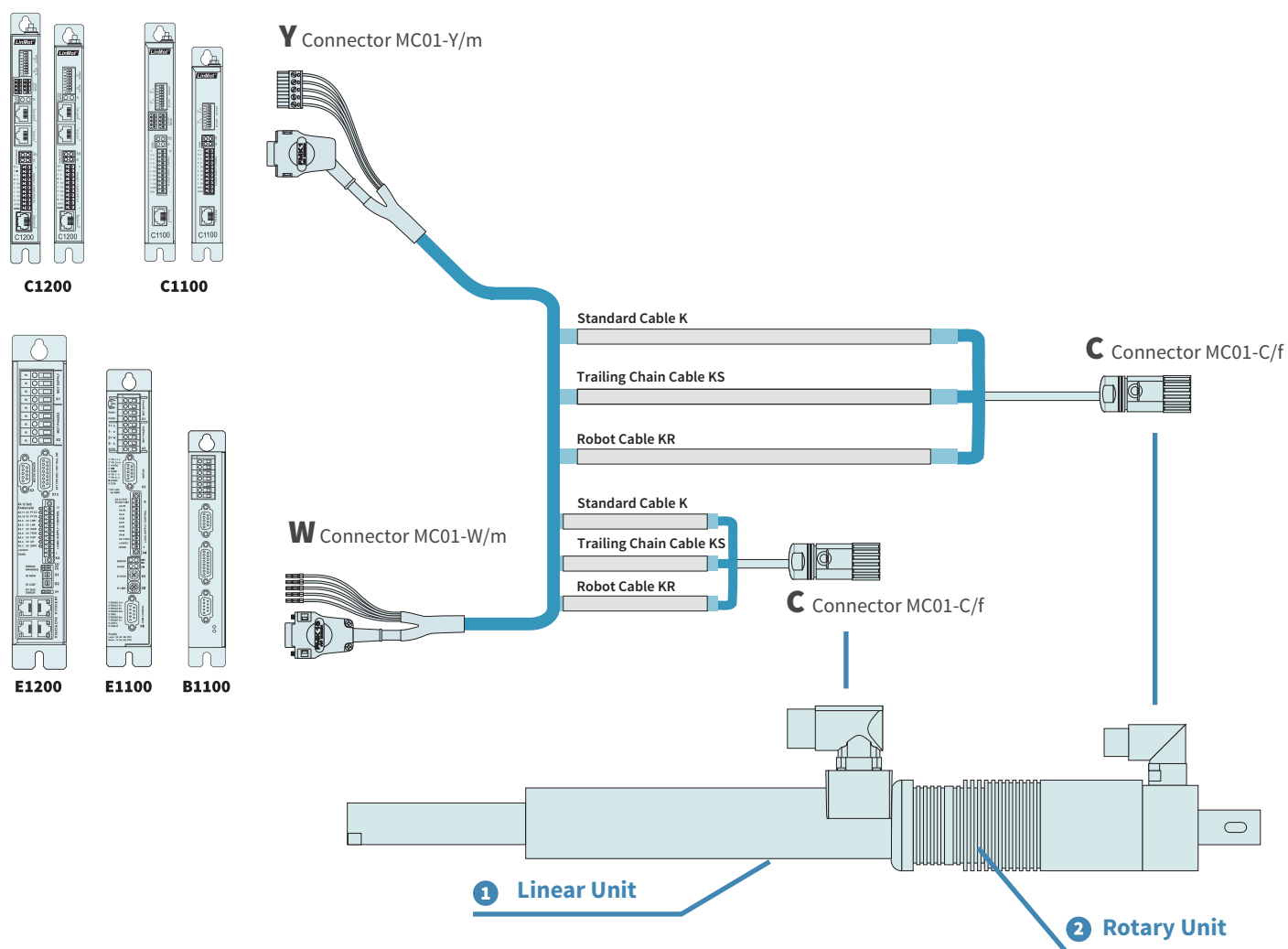


View: Motor connector, plug on

Item	Description	Item-No.
PR01-84x80-C-G/48x360F-C-150-G05	Linear Rotary Motor with Gearbox 5:1	0150-2535
PR01-84x80-C-G/48x360F-C-150-G07	Linear Rotary Motor with Gearbox 7:1	0150-2536
PR01-84x80-C-G/48x360F-C-150-G10	Linear Rotary Motor with Gearbox 10:1	0150-2537

Accessories

MOTOR CABLE



ORDERING INFORMATION

1 2 Linear Unit / Rotary Unit

Standard Cable		
Item	Description	Item-No.
K15-W/C-2	Motor Cable W/C, 2 m	0150-1811
K15-W/C-4	Motor Cable W/C, 4 m	0150-1801
K15-W/C-6	Motor Cable W/C, 6 m	0150-1802
K15-W/C-8	Motor Cable W/C, 8 m	0150-1803
K15-W/C-	Motor Cable K15-W/C, Custom length	0150-3131

K15-Y/C-2	Motor Cable Y/C, 2 m	0150-2429
K15-Y/C-4	Motor Cable Y/C, 4 m	0150-2430
K15-Y/C-6	Motor Cable Y/C, 6 m	0150-2431
K15-Y/C-8	Motor Cable Y/C, 8 m	0150-2432
K15-Y-Fe/C-	Motor Cable K15-Y-Fe/C, Custom length	0150-3506

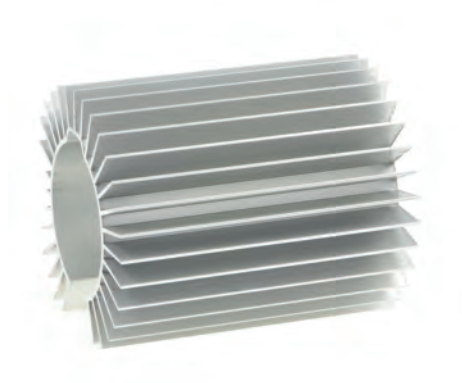
Robot Cable		
Item	Description	Item-No.
KR10-W/C-	Robot Cable KR10-W/C, Custom length	0150-3199
KR10-Y-Fe/C-	Robot Cable KR10-Y-Fe/C, Custom length	0150-3515

Trailing Chain Cable		
Item	Description	Item-No.
KS10-W/C-4	Trailing Chain Cable W/C, 4 m	0150-1807
KS10-W/C-6	Trailing Chain Cable W/C, 6 m	0150-1858
KS10-W/C-8	Trailing Chain Cable W/C, 8 m	0150-1808
KS10-W/C-	Trailing Chain Cable KS10-W/C, Custom length	0150-3139

KS10-Y/C-4	Trailing Chain Cable Y/C, 4 m	0150-2439
KS10-Y/C-6	Trailing Chain Cable Y/C, 6 m	0150-2440
KS10-Y/C-8	Trailing Chain Cable Y/C, 8 m	0150-2441
KS10-Y-Fe/C-	Trailing Chain Cable KS10-Y-Fe/C, Custom length	0150-3511

Connector & Cable (individual)		
Item	Description	Item-No.
MC01-C/f	Motor connector C/f	0150-3080
MC01-W/m	Motor connector W/m	0150-3140
MC01-Y-Fe/m	Motor connector Y-Fe/m	0150-3289
K15-04/05	Motor Cable per m	0150-1978
KS10-04/05	Trailing Chain Cable per m	0150-1977
KR10-04/05	Robot Cable per m	0150-1830

COOLING PROFILE



Item	Description	Item-No.
PC01-48x100	Cooling profile for PS01-48 Linear Motor	0160-2145
PC01-48x117	Cooling profile for PS01-48 Linear Motor	0160-2138

FLANGE



Item	Description	Item-No.
PF01-48x120	Flange 48x120 mm	0150-1976
PF01-48x226	Flange 48x226 mm	0150-2108

FAN COOLING FOR LINEAR UNIT



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37/48 & PF01-48	0150-5051

FAN COOLING FOR ROTARY UNIT



Item	Description	Item-No.
RS01-VA84-Kit	Fan Kit for RS01-84 Rotary Motors	0150-1600

MOUNTING FLANGE



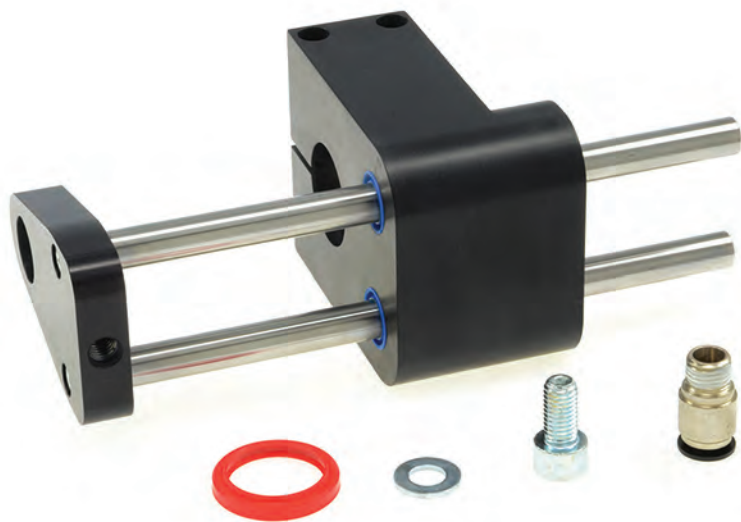
Item	Description	Item-No.
MF01-PR01-84x80-37-1	MagSpring Mounting Flange for Linear Rotary Motors UNO	0250-2337
MF01-PR01-84x80-37-2	MagSpring Mounting Flange for Linear Rotary Motors DUO	0250-2338

MAGSPRING ADAPTER



Item	Description	Item-No.
MA01-PR01-84x80-37-1	MagSpring Adapter for Linear Rotary Motors UNO	0250-2341
MA01-PR01-84x80-37-2	MagSpring Adapter for Linear Rotary Motors DUO	0250-2340

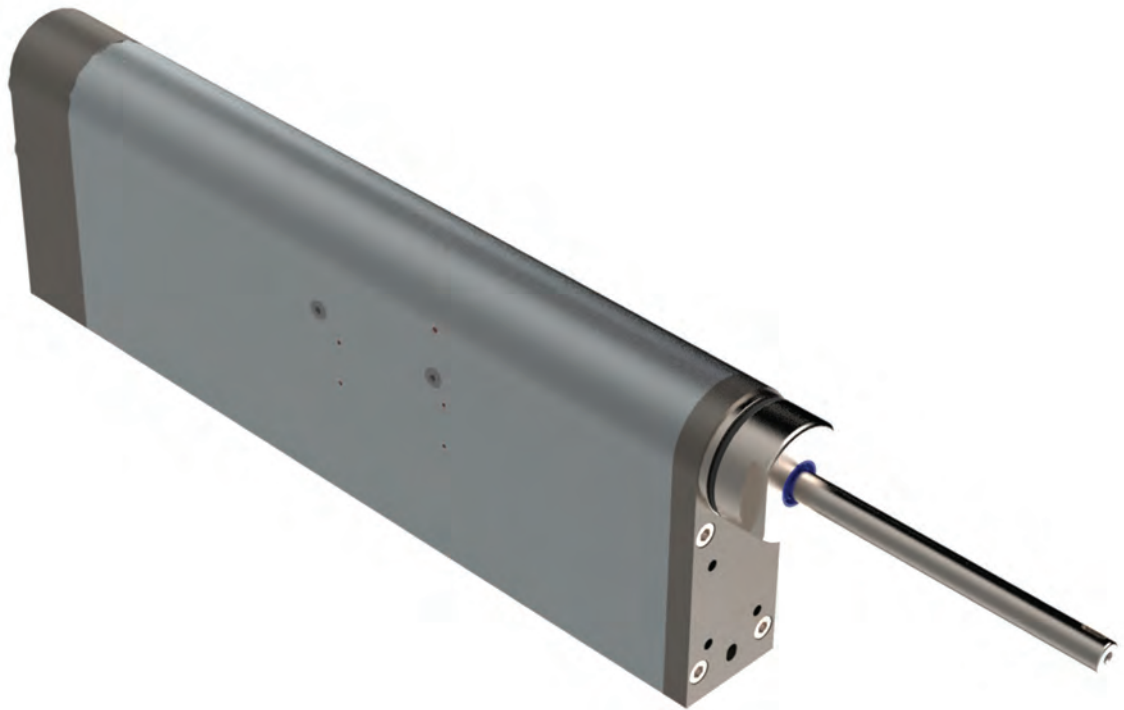
CAM KIT



Item	Description	Item-No.
MF01-PK84	Motor Cam Kit for Linear Rotary Motor	0250-2324

LINEAR ROTARY MOTORS

PR02-52



10

- ✓ New design principle with shorter installation length
- ✓ Linear Rotary Motor with integrated additional component "MagSpring"
- ✓ With magentic spring "MagSpring" optimal for vertical application
- ✓ Independent linear and rotary motions
- ✓ Max. Stroke up to 100 mm

Product description

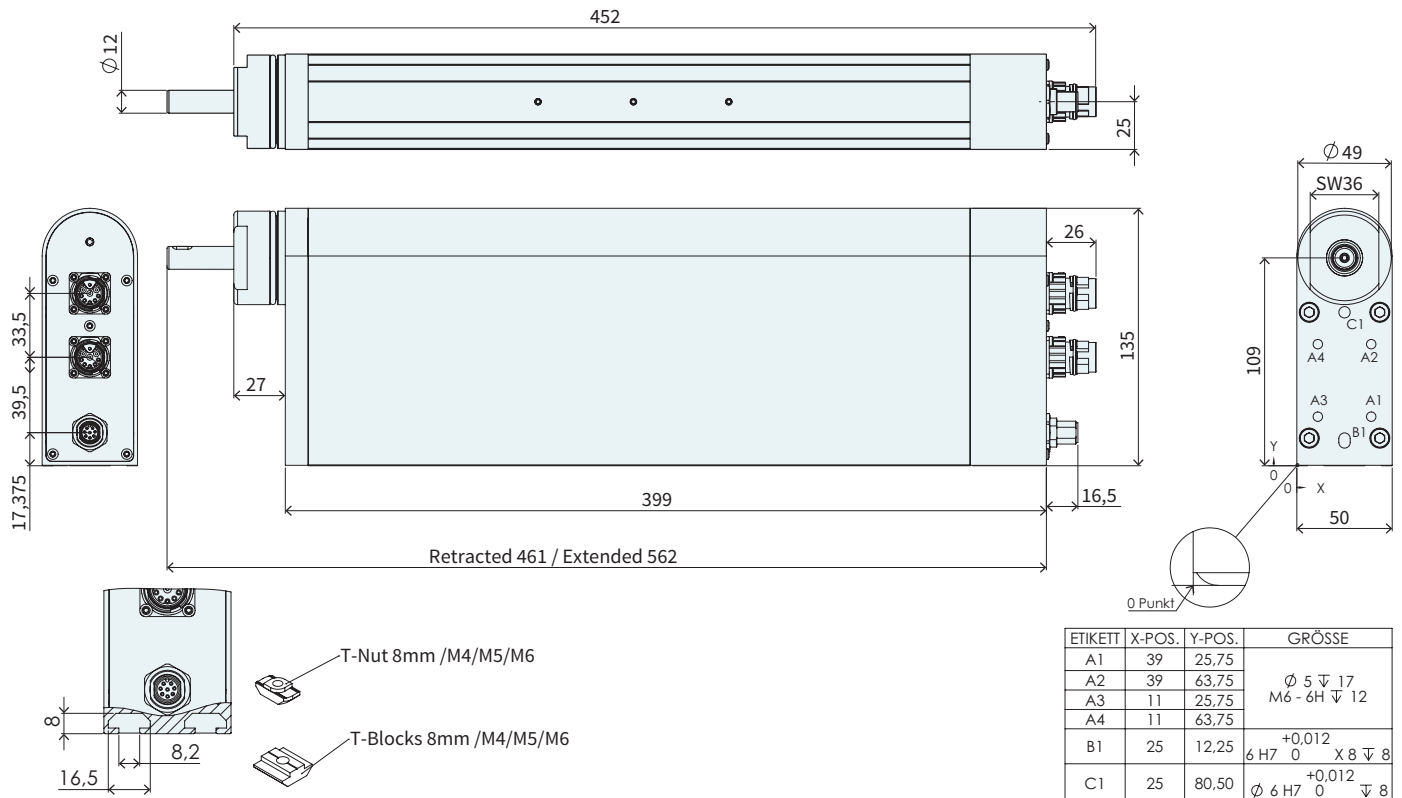
LinMot is expanding its product portfolio of Linear Rotary Motors by another type. The model PR02 is characterized by a new design principle, in which a further additional component in the motor. In a common housing is besides the Linear Motor and the Rotary motor as well a magnetic spring "MagSpring". The user thus benefiting on one hand from the shortened installation length of the total unit, on the other from the advantage of being able to perform vertical applications better. The MagSpring used ensures that the weight of the moving load is pas-

sively compensated. In the currentless state, the lowering of the axis is thus effectively prevented.

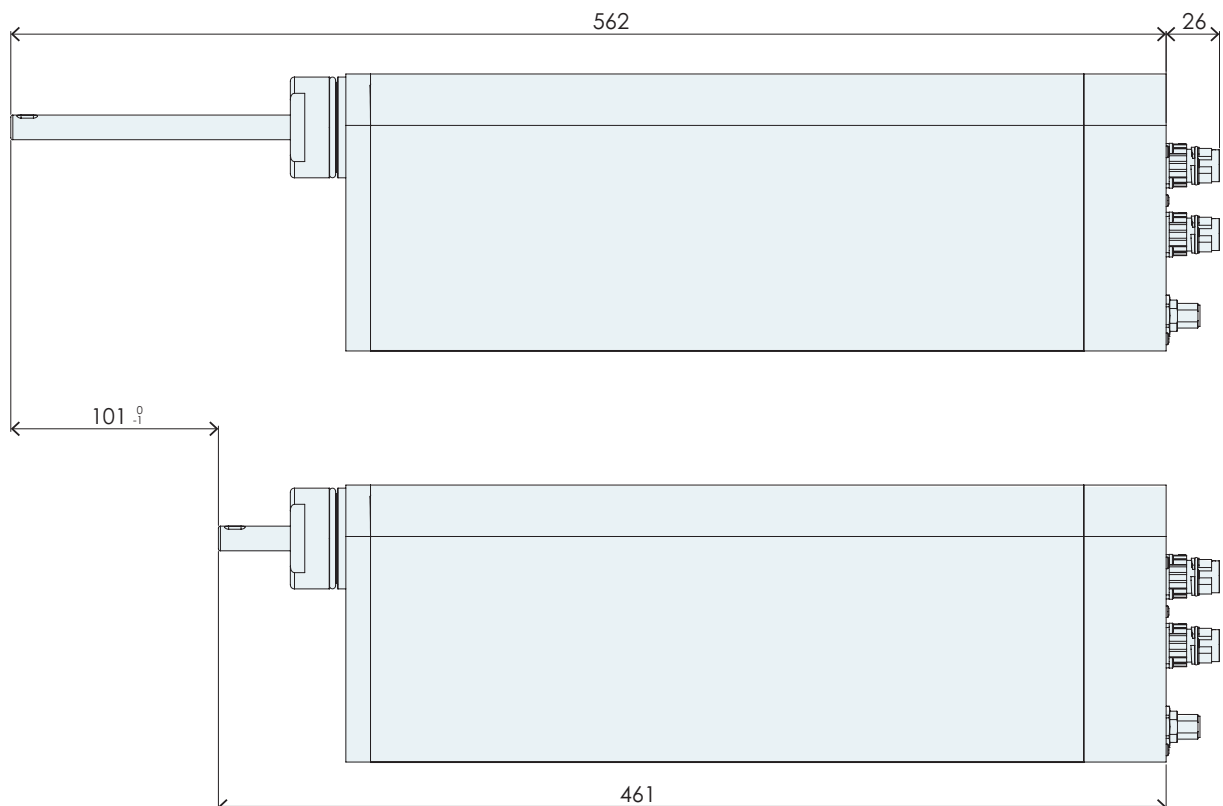
The performance data of the PR02-52 correspond to the long-established PR01-52x60-R / 37x120F-HP-C-100, which guarantees a maximum stroke of 100mm. In addition, the linear and rotary motor produce a maximum force of 255N and a maximum torque of 2.2Nm.



DIMENSIONS



MAX. STROKE



Handwriting practice area with horizontal dotted lines.

SERVO DRIVES



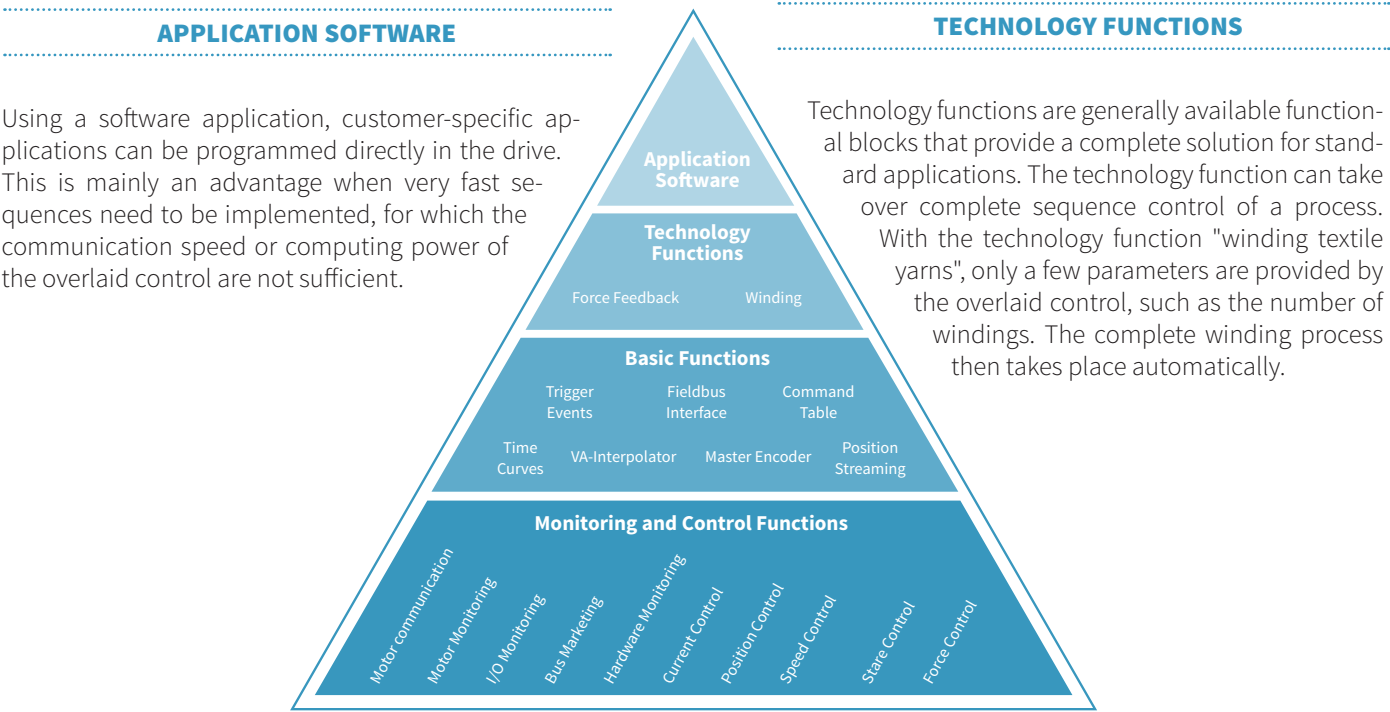
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The wide range of drive products allows rapid implementation of simple applications with two end positions, up to complex, high-precision multi-axis applications with synchronization to a main electronic shaft.

The servo drives cover a wide range in terms of performance. Controlling small actuators with low power as well as high-power servomotors with direct feed from the three-phase network can be realized.

LinMot Servo Drives

LinMot Servo Drives are highly integrated inverters with one or more power elements, for controlling the motors, and an intelligent control element with integrated position regulation. The control element performs all drive-related control and monitoring functions. It allows direct position set points, or travel along internally stored motion profiles from the overlaid control, using simple analog or digital signals. Additionally, using the technology functions or a customer-specific software application, complete sequences or functions can be implemented for customerspecific applications.



BASIC FUNCTIONS

The basic functions include communication with the overlaid control, generation of target values for speed and acceleration-limited point-to-point motions, travel along motion profiles, synchronization of drives to an electronic main or master shaft, and synchronization in multi-axis applications.

MONITORING AND CONTROL

The basic functions of the Servo Drive, such as position and current control; control and monitoring of the power element; and monitoring the motor temperature, power, and position are handled by the control, monitoring, and regulation element, which also controls the entire finite state machine of the drive.

SPS LIBRARIES AND PROGRAMMING EXAMPLES

LinMot Drives have all common fieldbus interfaces available for connection to a master controller. In order to realize simple control concept integration, extensive function blocks and programming examples are provided for the customer. These function blocks allow for direct and quick LinMot drive integration. The function blocks run standard functions as well as commands such as drive parameterization and configuration directly from the controller. The complete drive

configuration of the corresponding axis is thus stored on the controller. Maintenance or replacement can be easily realized via automatic drives detection and configuration over the communication bus. Thus manual and time-consuming configuration of the drives in case of failure is eliminated.

Characteristics

POINT-TO-POINT MOTIONS

Because of their high dynamic capabilities, long life, and ability to travel to several positions, LinMot linear motors are often used as a replacement for pneumatic cylinders.

Various end positions can be stored in the drive and are invoked via digital signals, just as with a pneumatic cylinder. Once the end position is reached, this is reported to the overlaid control via the In-position signal on a digital output. Speed and acceleration can be configured freely for each motion.

NC MOTION

Travel along paths from an overlaid NC drive can be implemented via the +/-10V interface, or in streaming mode (PVT, PV).

The predetermined points are calculated rapidly, so that even irregular and complex curves are realized dynamically.

HIGH-END APPLICATIONS

Complex applications with synchronization to a main or master shaft can be implemented without trouble using the integrated master encoder interface. All incoming signals from the main shaft are processed by the LinMot Drive and depend on the movement type of the linear motor.

Together with a high-resolution, external position sensor, even high-precision positioning tasks in µm range can be handled.

MULTI-AXIS OPERATION

In multi-axes or linked operation, the master encoder interface can control both individually and synchronous to a main or master shaft.

For complex designs, several axes can be synchronized in master-booster or master-gantry mode. This allows simple implementation of portal designs with two synchronized axes, which are controlled by the overlaid control as a single axis.

LINEAR AND ROTARY DRIVES

Using LinMot Servo Drives, rotary servomotors can be used as well as linear motors, or any 1/2/3-phase actuators.

Primarily in assembly automation and feeding applications, small, light brushless DC motors (EC motors) are often needed to rotate a gripper about the Z-axis. The flexibility of the Servo Drive allows such rotary motors to be integrated into the existing controls concept in the same simple manner as linear motors.

STANDARDIZED DEVICE PROFILES

To simplify the integration of different axes, the C Series Servo Drives are equipped with PROFIdrive, Sercos III, SoE (SercosOver-Ethercat) and CoE (CiA402). By using device profiles, the integration of „foreign“ Drives in the motion control is simplified. Further positive aspects are the automatic data exchange in real time and the increase of determinism in the system.

PLUG AND PLAY

LinMot motors with the plug and play functionality are automatically recognized by the A1100 / C1200 / C1100 / E1200 / E1400 servo drives and are immediately ready for use.

The servo drive reads these values when it boots up, and sets the parameters accordingly. This automatic device detection eliminates the selection of the required model parameters from an extensive library. Without having the configuration software to boot, first commands can be sent directly by the PLC control.

INTEGRATED SAFETY FUNCTION

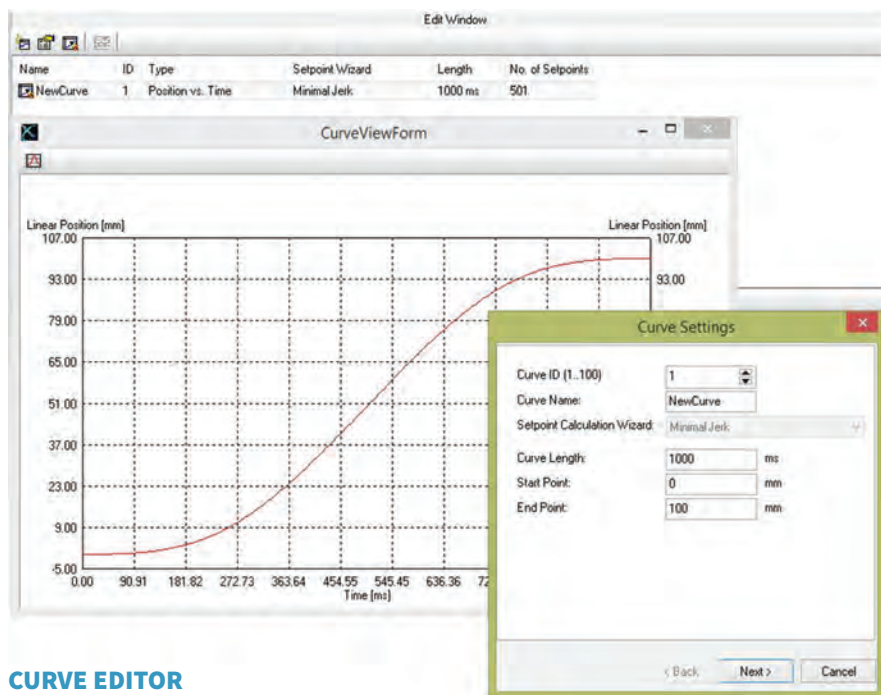
In order to prevent unintended startup, the model C1200 / C1100 / E1200 / E1400 drives have an STO function to safely shut off the output stage. The drive cannot produce any more force when shut off using the "Safe Torque Off" function. A functional safety is currently under preparation and can already be solved today with external components.

CERTIFICATION

The current LinMot Drives are marked with CE and approved as components according to the UL regulation for variable-frequency controllers. Thus they meet the requirements for the US and Canadian market.

Configuration with LinMot Talk

LinMot Talk configuration software is a Windows- based interface that supports the user during start-up and configuration of the LinMot Servo Drives. The software has a powerful, modular, graphical interface that covers all the tasks surrounding the LinMot Servo Drive. Using LinMot Talk PC interface, the engineer can configure LinMot servo drives. The motors are also monitored during operation and the current motion sequences are analysed (monitoring). The integrated control panel gives the user direct access to the control and status words, as well as all commands that are invoked by the upper-level controller.



CURVE EDITOR

PARAMETERIZATION

Using the "Parameter Inspector," the drives are parameterized in a simple manner. The user has a wide range of adjustments available for operating modes, error management, warning messages, and regulating parameters. Entire parameter sets can be stored, loaded, and printed out.

CURVE EDITOR

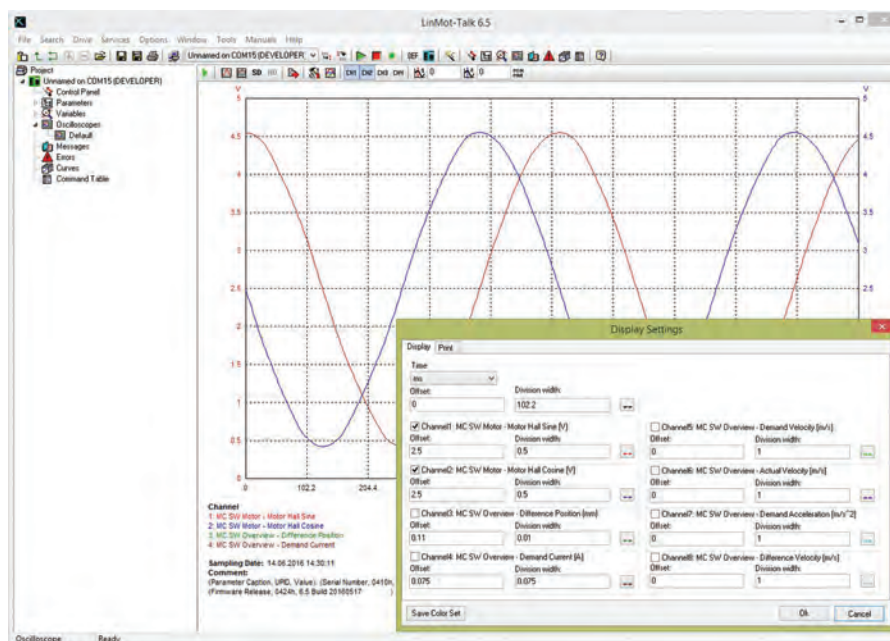
The "Curve Editor" allows creation of travel curves. In addition, existing curves can be loaded, stored, edited, combined, and printed out. Further, complex motion sequences can be generated as desired in MS Excel, and loaded into the drive.

OPTIMIZATION

The integrated oscilloscope helps the user during start-up and optimization of the Parameterization Optimization Monitoring drive system. Internal variables, such as the target and actual position, can be shown in real time on the screen, and then printed out. The displayed data can be stored in CSV format for further processing in MS Excel, or stored for documentation purposes.

MONITORING

Using the "Error Inspector," the user can read out stored errors, as well as the currently active warnings and error messages in the LinMot Servo Drive. A list of the last error messages are stored in non-volatile memory on the Servo Drive, together with the operating hours counter.



OSCILLOSCOPE

Overview Servo Drives



A1100

Space-saving servo drive for instrument engineering



C1100

Compact drive for an ideal use in point-to-point applications.



C1200

Servo Drive for demanding tasks with axis, NC synchronization and an industrial ETHERNET interface.



E1200

High-End Servo Drive with configuration via ETHERNET.



C1400

Servo Drive with direct power supply for simple motions as well as complex axis synchronization. Designed to control the P10 motor family.



E1400

Servo Drive for P10 motors with direct main supply and 3x400 VAC technology. Equipped with an ETHERNET Config. interface.

Technical Specifications

	A1100	C1100	C1200
Motor Supply			
	24...72VDC	24...72VDC	24...72VDC
Motor Current			
	8A _{pk}	25A _{pk}	25A _{pk}
Control of			
LinMot Motors P0x/ PR01	•	•	•
LinMot Motors P10			
Rotary Motors		•	•
EC02 Motors		•	•
AC Servo Motors			
3rd Party Motors		•	•
Functionality			
	Point-to-Point	Point-to-Point	Point-to-Point
	Command Table	Closed Loop Force Control	Limited jerk motion commands
	Motion Profiles	Command Table	NC Motion
		Motion Profiles	Closed Loop Force Control
			Command Table
			Motion Profiles
Ethernet & Fieldbuses			
	CANOpen	PROFINET	PROFINET
		EtherCAT (LinMot Profile)	PROFINET Profidrive
		EtherCAT (CiA402)	EtherNet/IP
		EtherCAT (SoE)	Sercos III
		CANOpen	Powerlink
			LinUDP
			EtherCAT
			EtherCAT (CiA402)
			EtherCAT (SoE)
Interfaces			
Analog Inputs 0..10V / +-10V	1 / 0	1/1	1/1
Number of digital Inputs / Outputs	6 / 2	4/2	4/2
Brake Output	(-)	24V/0.5A	24V/0.5A
External Encoder			
		A/B/Z (RS422)	A/B/Z (RS422)
		SSI	SSI
		BISS	BISS
			EnDat
Timings			
Min. Bus Cycle Time	250 µs	250 µs	125 µs
PWM Frequency	16 kHz	16 kHz	16 kHz
Trigger Commands	≥ 250 µs	≥ 250 µs	≥ 125 µs
Position Drive	250 µs	250 µs	125 µs
Configuration			
RS 232	•	•	•
ETHERNET			•
ETHERNET –Maintenance			

E1200	C1400	E1400
24...72VDC	1x200...240VAC	3x400...480VAC
32A _{pk}	15A _{pk}	28A _{pk}
•		
•	•	•
•	•	•
	•	•
•		
Point-to-Point	Point-to-Point	Point-to-Point
NC Motion	Limited jerk motion commands	Limited jerk motion commands
Master Encoder / CAM	NC Motion	NC Motion
Belt Synchronization	Master Encoder / CAM	Master Encoder / CAM
Master Booster (up to 4 slaves)	Belt Synchronization	Belt Synchronization
Master Gantry (up to 4 slaves)	Closed Loop Force Control	Master Booster (up to 4 slaves)
Winding Application	Command Table	Master Gantry (up to 4 slaves)
Closed Loop Force Control	Motion Profiles	Winding Application
Command Table		Closed Loop Force Control
Motion Profiles		Command Table
		Motion Profiles
PROFINET	PROFINET	PROFINET
PROFINET Profidrive	PROFINET Profidrive	PROFINET Profidrive
EtherNet/IP	EtherNet/IP	EtherNet/IP
Sercos III	Sercos III	Sercos III
Powerlink	Powerlink	Powerlink
LinUDP	LinUDP	LinUDP
Profibus DP	CANOpen	Profibus DP
CANOpen	EtherCAT	CANOpen
EtherCAT	EtherCAT (CiA402)	EtherCAT
EtherCAT (CiA402)	EtherCAT (SoE)	EtherCAT (CiA402)
EtherCAT (SoE)		EtherCAT (SoE)
LinRS		LinRS
2/1	1/1	2/1
8	4/2	8
24V/1.0A	24V/1.5A	24V/1.5A
A/B/Z (RS422)	A/B/Z (RS422)	A/B/Z (RS422)
Sin/Cos (1Vpp)	SSI	SSI
SSI (only position recovery)	BISS	BISS
	EnDat	EnDat
200 µs	250 µs	250 µs
20 kHz	8 kHz	8 kHz
≥ 100 µs	≥ 125 µs	≥ 125 µs
100 µs	125 µs	125 µs
•	•	•
•	•	•
•		•



LinMot®

LinMot®

LinMot®

S2 1 4 5 8
S1 1 2 3 4 5 6 7 8
CTS 206-8 T340
ID LOW ID HIGH

S2 1 4 5 8
S1 1 2 3 4 5 6 7 8
CTS 206-8 T340
ID LOW ID HIGH

S2 1 4 5 8
S1 1 2 3 4 5 6 7 8
CTS 206-8 T340
ID LOW ID HIGH

X33 STO
RELAYS

X33 STO
RELAYS

X33 STO
RELAYS

WARN ERROR
EN 24V OK

WARN ERROR
EN 24V OK

WARN ERROR
EN 24V OK

X4 LOGIC SUPPLY / CONTROL
11 AnIn-
10 AnIn+
9 AnIn
8 In
7 In
6 In
5 In
4 Out
3 Out
24VDC
DGND

X4 LOGIC SUPPLY / CONTROL
11 AnIn-
10 AnIn+
9 AnIn
8 In
7 In
6 In
5 In
4 Out
3 Out
24VDC
DGND

X4 LOGIC SUPPLY / CONTROL
11 AnIn-
10 AnIn+
9 AnIn
8 In
7 In
6 In
5 In
4 Out
3 Out
24VDC
DGND

X19 SYSTEM

X19 SYSTEM

X19 SYSTEM

C1100

C1100

SERIES A1100



11

- ✓ Absolute / relative positioning commands
- ✓ Limited jerk motion commands
- ✓ Time Curves
- ✓ PLC or Stand-Alone Solutions
- ✓ Digital IO's
- ✓ Supports Plug and Play
- ✓ CE / UL / CSA


Servo Drive A1100

Series A1100 drives are compact servo drives with 32-bit position resolution and integrated power stage, for linear motors.

The drives are suitable for simple and standard position tasks with point-to-point motions and have a plug and play function.



E316095
INT. CONT. EQ.
UL508C





CONNECTION TO MACHINE CONTROL

PROCESS AND SENSOR INTERFACES

LOGIC AND POWER SUPPLY

The Series A1100 Servo Drives can be actuated by machine controls from many manufacturers or brands, via digital inputs, outputs, serial interface, or by CAN-open interfaces.

Fast process interfaces for direct processing of sensor signals are available as freely programmable analog and digital inputs and fast trigger inputs.

The Servo Drives need two separate power supplies for the logic and power elements.

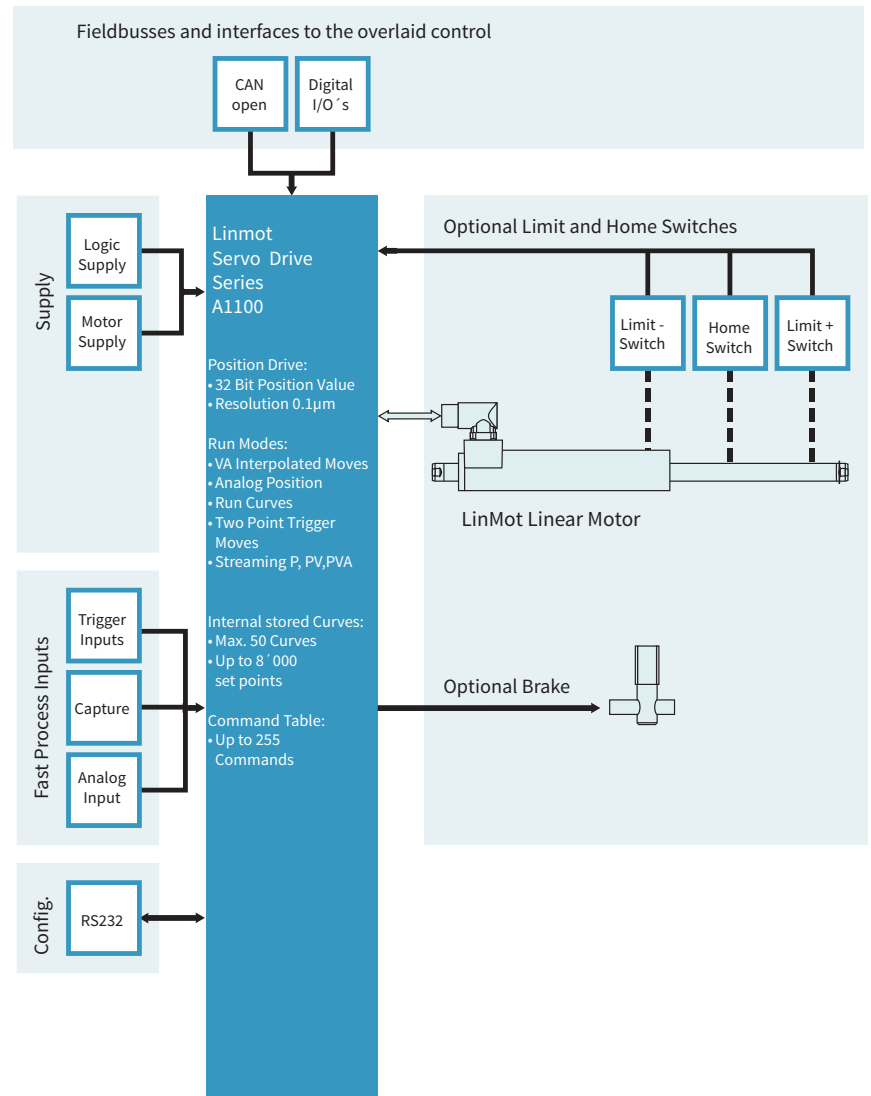
In an E-stop and safe stop of the drive, only the motor power supply is cut off from the drive. The logic supply and the drive continue to run.

System Integration

Series A1100 Servo Drives have analog inputs and digital inputs and outputs, serial interfaces, and Bus connections. The user is therefore not dependent on the selection of the higher level controller.

Additionally, the drives can be equipped with optional peripherals, such as reference and end stop switches.

With flexibility and a compact form factor, LinMot Series A1100 Servo Drives provide a complete solution for a flexible drive concept in single and multiple axes applications, with linear motors.



POSITION STREAMING

With a cyclical target value, or “position streaming,” the overarching NC or CNC drive communicates with the Servo Drive through CANopen.

The position and velocity calculated in the overarching drive is transmitted to the Servo Drive cyclically. The P, PV, or PVA mode is available for this transmission.

MOTOR INTERFACES

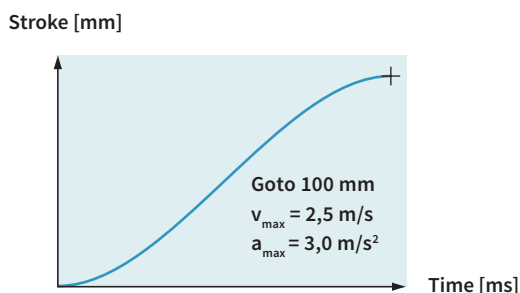
A1100 Servo Drives provide all necessary interfaces to operate linear motors with optional external peripherals, such as end position and reference switches.

CONFIGURATION

Parameterization and configuration of the Servo Drive is done via RS232.

LinMot Talk user-friendly PC software is available for configuration. In addition to online documentation, LinMot Talk provides extensive debugging tools, such as an oscilloscope and an error inspector, for simple and rapid start-up of the axes.

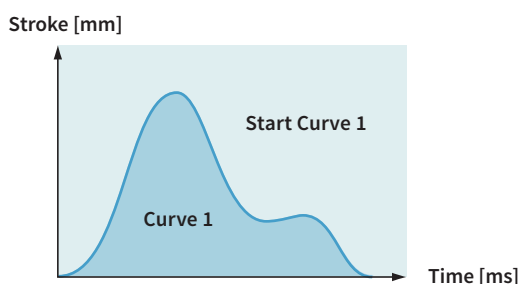
INTERPOLATED MOVES



For direct position targets, using absolute or relative positioning, the desired position is reached using acceleration and velocity-limited motion profiles or jerk optimized profiles (jerk limited and Bestehorn). Positioning commands can be invoked via the serial interface, CAN-open or a trigger input.

Stroke range:	±100 m
Position Resolution:	0.1 μm (32Bit)
Velocity Resolution:	1.0 $\mu\text{m/s}$ (32Bit)
Acceleration Resol.:	10.0 $\mu\text{m/s}^2$ (32Bit)

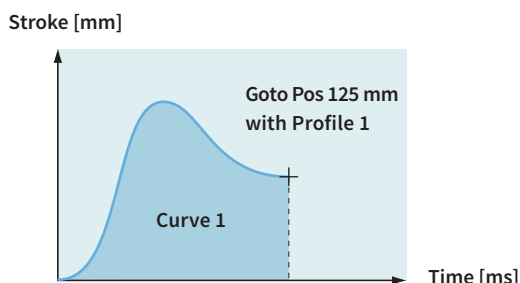
TIME CURVES



Up to 50 different time curves can be stored in Series A1100 drives, with up to 8,000 individual set points. The motor can thus travel along time curves of any complexity, such as those generated by CAD programs and stored in the drive (Excel CSV format). The time curves can be invoked via the serial interface, fieldbusses or the trigger input.

Stroke range:	±100m
Position Resolution:	0.1 μm (32Bit)
Motion profiles:	Max. 50 Time Curves
Curve points:	Max. 8'000 points

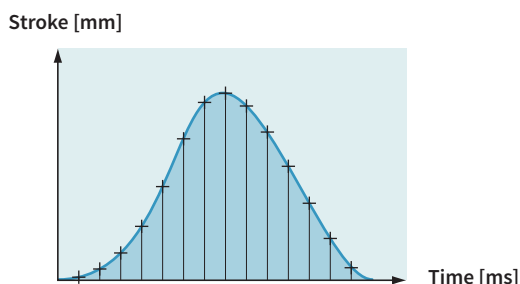
PROFIED MOVES



For travel to an absolute position, or shifting by a relative position, any desired motion rules can be stored besides the VA interpolator. They are stored in the drive as motion profiles (Excel CSV format). The positions can be approached, for example, with a sinusoidal motion to optimize power loss, or special reverse optimized motion profiles.

Stroke range:	±100m
Position Resolution:	0.1 μm (32Bit)
Motion profiles:	Max. 50 Time Curves
Curve points:	Max. 8'000 points

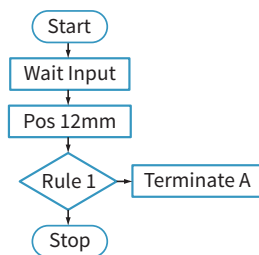
SETPOINT STREAMING



Overlaid NC drives with fieldbus or Ethernet interfaces communicate with the servo drives via "Position Streaming". The position and velocity calculated in the overlaid control is transmitted to the Servo Drive cyclically. The P, PV, or PVA mode is available for this transmission.

Position Resolution:	32 Bit
Velocity Resolution:	32 Bit
Interpolator:	4 kHz
Cycle times:	0.5 - 5 ms

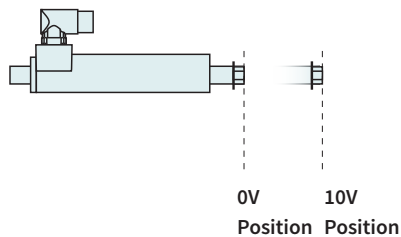
COMMAND TABLE



Entire motion sequences with up to 255 individual motion commands can be stored in the Command Table. This is primarily advantageous if complete motion sequences need to be executed very quickly, without dead time from the overlaid PLC. In the Command Table, the programmer has access to all motion commands, internal parameters, and digital inputs and outputs.

Commands:	max. 255
Cycle time:	250 µsec

ANALOG POSITION



For an analog position target, the linear motor travels to a position proportional to the input voltage. The position is either scanned continuously, or only after a rising edge of the trigger signal. In order to prevent uncontrolled jumps in position, the motor travels to the positions with a programmable maximum acceleration and velocity (VA interpolator).

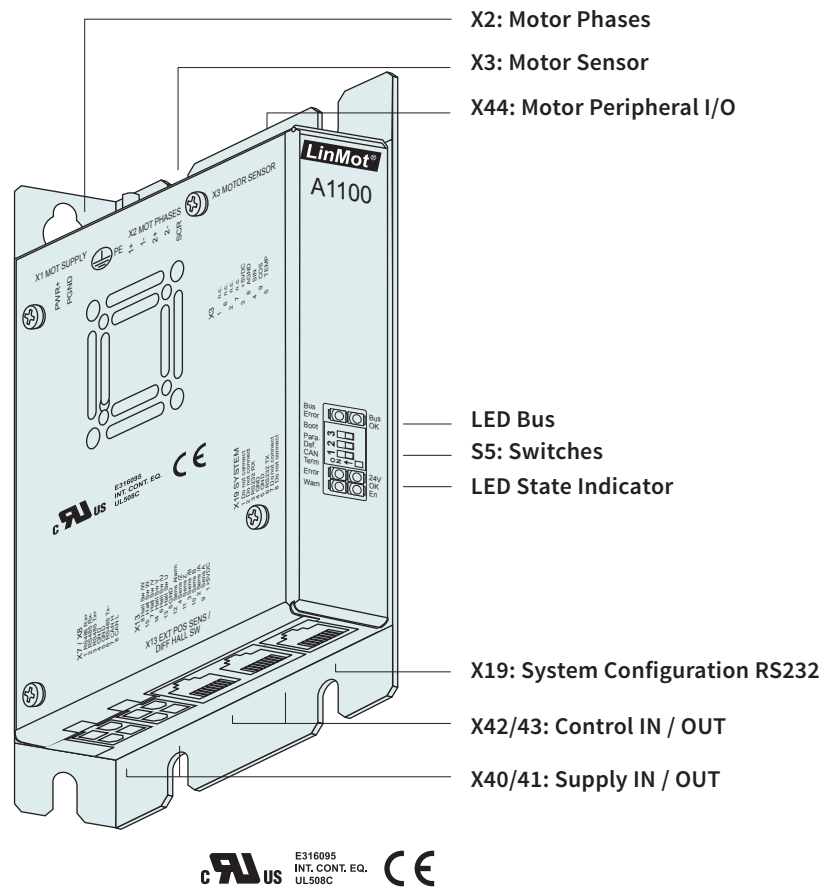
Inputs:	Analog Input X44
Voltage range:	0-10VDC
Resolution:	10 Bit
Scanning rate:	250 µsec

CANopen

Point to Point

A1100-GP

- » Absolute & Relative Positioning
- » Time based motion profiles
- » Internally stored Motion Sequences
- » Position Streaming
- » Analog Position Target
- » Customer-Specific Functions




 E316095
 INT. CONT. EQ.
 UL508C

CANOPEN

The LinMot A1100-GP drives support the CiA DS301 communications protocol. The following resources are available:
 4 T_PDO, 4 R_PDO, 1 T_SDO, 1 R_SDO

The following protocols are also supported by the drives:

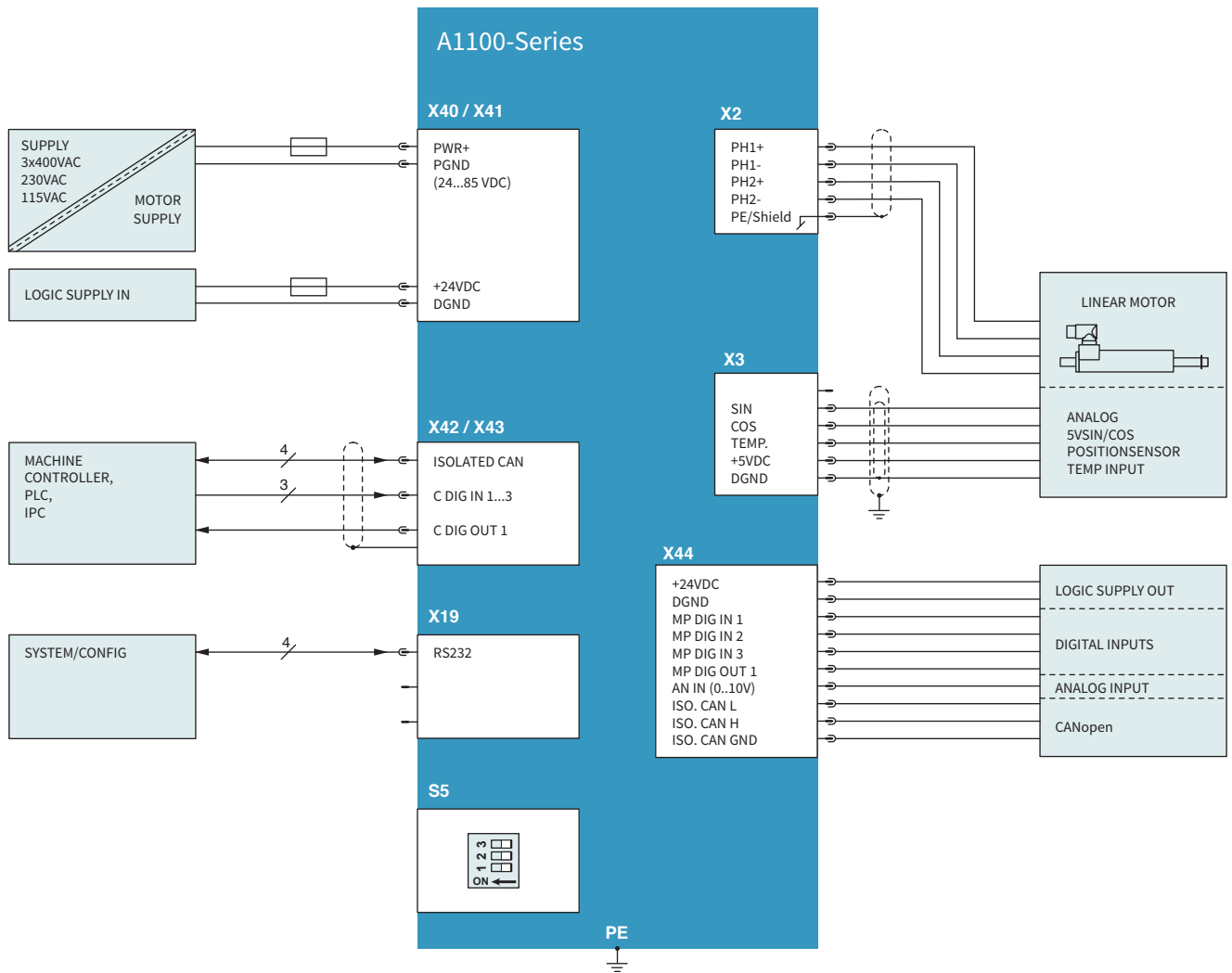
- » NMT Error Control (Nodeguarding Protocol or HeartBeat Protocol)
- » PDO (Transmission type 1 to 254)
- » SDO Upload and Download
- » NMT (Start, Stop, Enter PreOp, Reset Node, Reset Communication, Boot-Up Message)

REPLACING PNEUMATICS

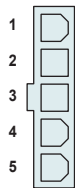
Due to their simple controls via digital inputs and outputs, A1100 drives make excellent substitutes for pneumatic cylinders.

Using digital inputs or CAN bus, the linear motor can move to programmable positions. As soon as the linear motor has reached the set position, the In-Position output is actuated.

The linear motor can thus be controlled like a programmable pneumatic cylinder with end position switches.



X2 MOTOR PHASES

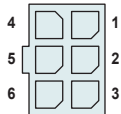


Molex
Mini-Fit Jr.™
Molex Art. Nr.:
50-36-1747

Nr	Designation	LinMot Linear Motor	Color
1	PH1+ /U	Motor Phase 1+	red
2	PH1- /V	Motor Phase 1-	pink
3	PH2+ /W	Motor Phase 2+	blue
4	PH2- /X	Motor Phase 2-	grey
5	SCRN	Shield	

- » Use 60/75°C copper conductors only
- » Cable length <30m
- » 13A max. current per circuit when header is mated to a receptacle loaded with a 45750 Mini-Fit® Plus HCS Crimp Terminal crimped to a 16 AWG wire

X3 MOTOR SENSOR



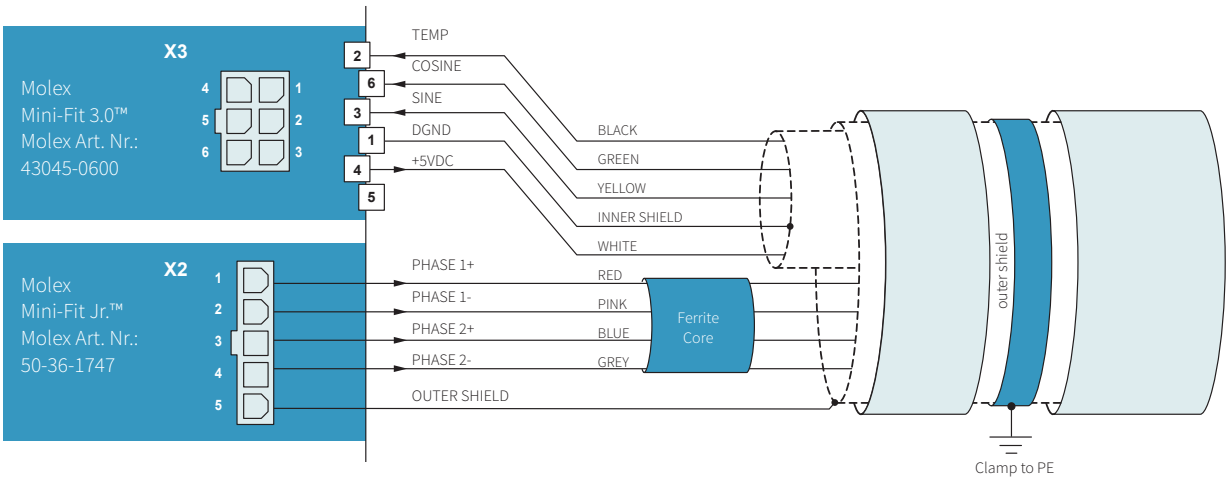
Molex
Mini-Fit 3.0™
Molex Art. Nr.:
43045-0600

Nr	LinMot Motor
1	DGND
2	Temp
3	Sensor Sine
4	+5VDC
5	(Do not connect)
6	Sensor Cosine

- » Use +5V (X3.4) and DGND (X3.1) only for motor internal hall sensor supply (max. 100 mA)
- » Cable length < 30m
- » Caution: Do NOT connect DGND (X3.1) to ground or earth!

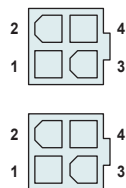
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MOTOR LINEAR MOTOR WIRING WITH LINMOT MOTOR CABLE (K-, KS- AND KR-TYPES)



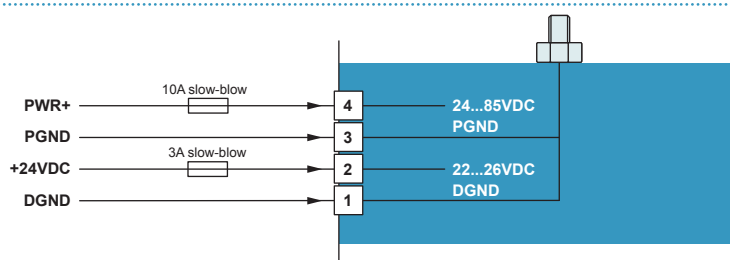
- » For the connection between the linear motor and servo drive, only the specially shielded LinMot cables of type K, KS or KR should be used.
- » The length of the cable can be up to 30 m between the linear motor and the servo drive.
- » Motor cables fabricated by the customer are to be tested with a test voltage of 1500VDC.
- » An improperly fabricated motor cable can damage both the linear motor and the servo drive.
- » The minimum bend radius is to be observed for stationary cables as well as for moving motor cables
- » The motor cable must not be plugged in or unplugged while voltage is still applied.
- » The outer shield of the motor cable has to be clamped to PE as close as possible to the drive.
- » A ferrite core (5mm, 144Ohm @ 100MHz, e.g. Würth Elektronik, Art.Nr.: 7427114) has to be mounted around the motor phases as close to the drive as possible.



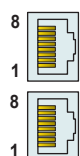
X40 / X41**SUPPLY IN / OUT**

Molex
Mini-Fit Jr.™

Molex Art. Nr.:
50-36-2306



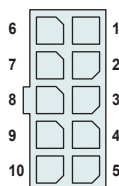
- » Motor Supply: 72VDC nominal, 24...85VDC
- » Absolute max. Rating: 72VDC +20%
- » External Fuse: Motor Supply = 10AT (10A slow blow) / min. 100VDC
Logic Supply = 3AT (3A slow blow) / min. 100VDC
- » If motor supply voltage exceeds 90VDC, the drive will go into error state
- » Use 60/75°C copper conductors only
- » 13A max. current per circuit when header is mated to a receptacle loaded with a 45750 Mini-Fit® Plus HCS Crimp Terminal crimped to a 16 AWG wire

X42 / X43**CONTROL IN / OUT**

RJ-45
shielded

Nr		
1	C Dig IN 1	Input high voltage: Vin > 16VDC, Input low voltage: Vin < 8VDC
2	C Dig IN 2	Input high voltage: Vin > 16VDC, Input low voltage: Vin < 8VDC
3	C Dig IN 3	Input high voltage: Vin > 16VDC, Input low voltage: Vin < 8VDC
4	CAN GND	
5	CAN GND	
6	C Dig OUT 1	Open Collector Output, 100k Pull-Up to +24VDC
7	Isolated CAN H	
8	Isolated CAN L	
Case	Shield	

- » Use twisted pair (1-2, 3-6, 4-5, 7-8) cable for wiring
- » X42 is internally connected to X43 (1:1 connection)
- » Cable length < 30m.
- » Galvanically isolated CAN transceiver meets the specifications of the ISO11898-2 standard
- » Note: A termination resistor of 120 Ohm can be connected drive internally with the switch S5.1.

X44**MOTOR PERIPHERAL I/O**

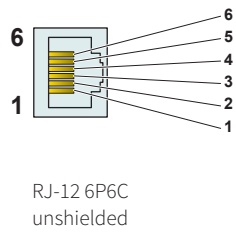
Molex
Mini-Fit 3.0™

Molex Art. Nr.:
43045-1000

Nr		
1	DGND	
2	MP Dig IN 1	Input high voltage: Vin > 16VDC, Input low voltage: Vin < 8VDC
3	MP Dig IN 2	Input high voltage: Vin > 16VDC, Input low voltage: Vin < 8VDC
4	CANGND	Use a separate shielded twisted pair cable for the CAN connection
5	Isolated CAN H	Use a separate shielded twisted pair cable for the CAN connection
6	+24VDC OUT	Max. Current: 2.5A
7	MP Dig OUT 1	Open Collector Output, No Pull-Up, Max. Current: 1.4A
8	MP Dig IN 3	Input high voltage: Vin > 16VDC, Input low voltage: Vin < 8VDC
9	AN IN (0...10V)	Analog Input 0V...10V
10	Isolated CAN L	Use a separate shielded twisted pair cable for the CAN connection

- » Galvanically isolated CAN transceiver meets the specifications of the ISO11898-2 standard
- » The CAN bus on X44 is the same one as on X42/43
- » Note: A termination resistor of 120 Ohm can be connected drive internally with the switch S5.1.
- » Use a separate shielded cable with a twisted pair for CAN L and CAN H when connecting the CAN bus to X44. Clamp the shielding of the cable as close as possible to the drive to PE.
- » Cable length < 30m

X19 SYSTEM



Nr	Description
1	RS232 Tx
2	GND
3	GND
4	RS232 Rx
5	(Do not connect)
6	(Do not connect)

BUS LEDS BUS STATE DISPLAY



BUS State Display	
Green	OK
Red	Error

The use of these LEDs depends on the type of fieldbus which is used.
Please see the corresponding manual for further information.

S5

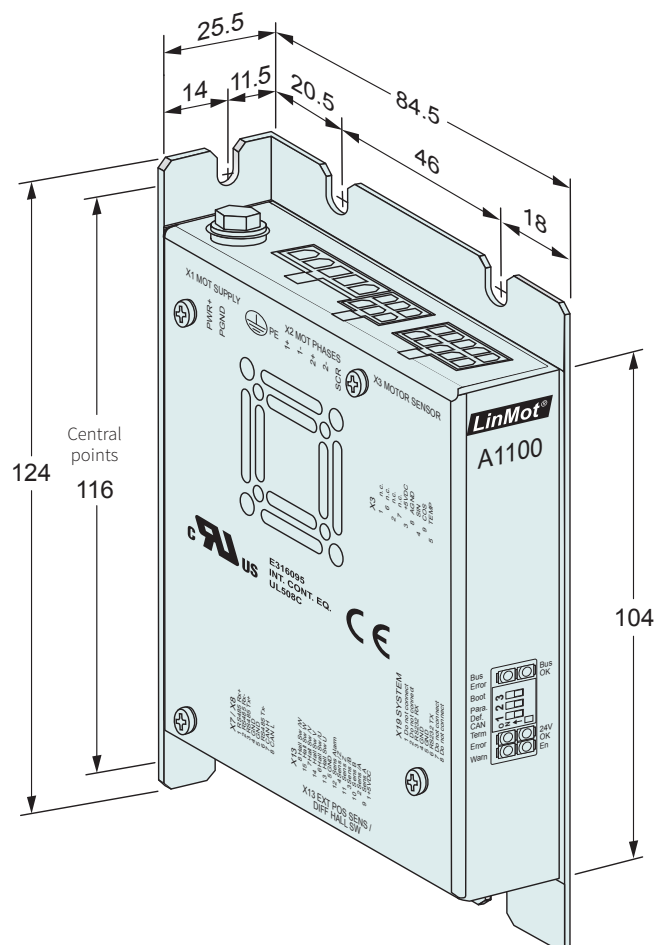


S5.3	Bootstrap (Default = off)
S5.2	Parameter Default (Default = off)
S5.1	CAN Termination (Default = on)

LEDS STATE DISPLAY



State Display	
Green	24V Logic Supply OK
Yellow	Motor Enabled / Error Code Low Nibble
Yellow	Warning / Error Code High Nibble
Red	Error



Dimensions in mm
Mounting points for M3 screws

A1100 Single axis drive				
Width	mm (in)	25.5	(1.0)	
Height	mm (in)	124	(4.9)	
Depth	mm (in)	84.5	(3.3)	
Weight	g (lb)	340	(0.75)	
Case	IP	20		
Storage temperature	°C	-25...40		
Transport temperature	°C	-25...70		
Operating temperature	°C	0...40 at rated data (UL) 40...50 with power derating		
Relative humidity	%	95 (non-condensing)		
Pollution	IEC/EN 60664-1	Pollution degree 2		
Max. case temperature	°C	70		
Max. power dissipation	W	30		
Min. distance between drives	mm (in)	20 (0.8) 50 (2)	horizontal vertical	

Servo Drive

Item	Description	Part Number
A1100-GP-LC-05-000	Mini CANopen Drive (72V/8A)	0150-2499

Accessories

Item	Description	Part Number
DC01-X44-4m	Cable IO 's for A1100/X44, 4 m flying leads	0150-3553
DC01-X40-4m	Cable Supply A1100/X40, 4 m flying leads	0150-3545
DC01-X40/41-0.15 m	Cable IO for A1100/X40-X41, 0.15 m daisy chain	0150-3552

SERIES C1100



- ✓ Absolute / relative positioning commands
- ✓ Limited jerk motion commands
- ✓ Time Curves
- ✓ PLC or Stand-Alone Solutions
- ✓ Digital and Analog IO's
- ✓ Safe Torque Off
- ✓ Interface for optional incremental or absolute sensor
- ✓ Supports Plug and Play
- ✓ CE / UL / CSA

Servo Drive C1100

Series C1100 servo drives are axis controllers, with 32-bit position resolution and an integrated power stage, for linear motors and rotary drives.

The controllers are suitable for simplest and standard positioning tasks with point to point motions.



CONNECTION TO MACHINE CONTROL

The C1100 servo drives can be actuated by machine controls from many manufacturers or brands, via digital inputs and outputs, over CAN Bus or Industrial Ethernet.

Bus-Interfaces:

- » Profinet
- » EtherCat, SoE, CoE
- » CANopen

Serial Interfaces RS422 / RS485:

- » LinRS

PROCESS AND SENSOR INTERFACES

Fast process interfaces for direct processing of sensor signals are available as freely programmable analog and digital inputs, a fast trigger input, and a capture input.

The safety IO's on Servo Drives with the -1S option with CAN or industrial ETH-ERNET allows safe torque off (STO) of the drives via control signals, without interrupting the power supply.

Drives with -0S option come without safety IO's and are easier to wire in applications without safety needs.

LOGIC AND POWER SUPPLY

The servo drives have two separate inputs for the logic supply and motor elements.

This has the advantage that the drive and linear motor do not need to be reinitialized when the machine is restarted, since all process data, including the actual position of the linear motor, is still up to date.

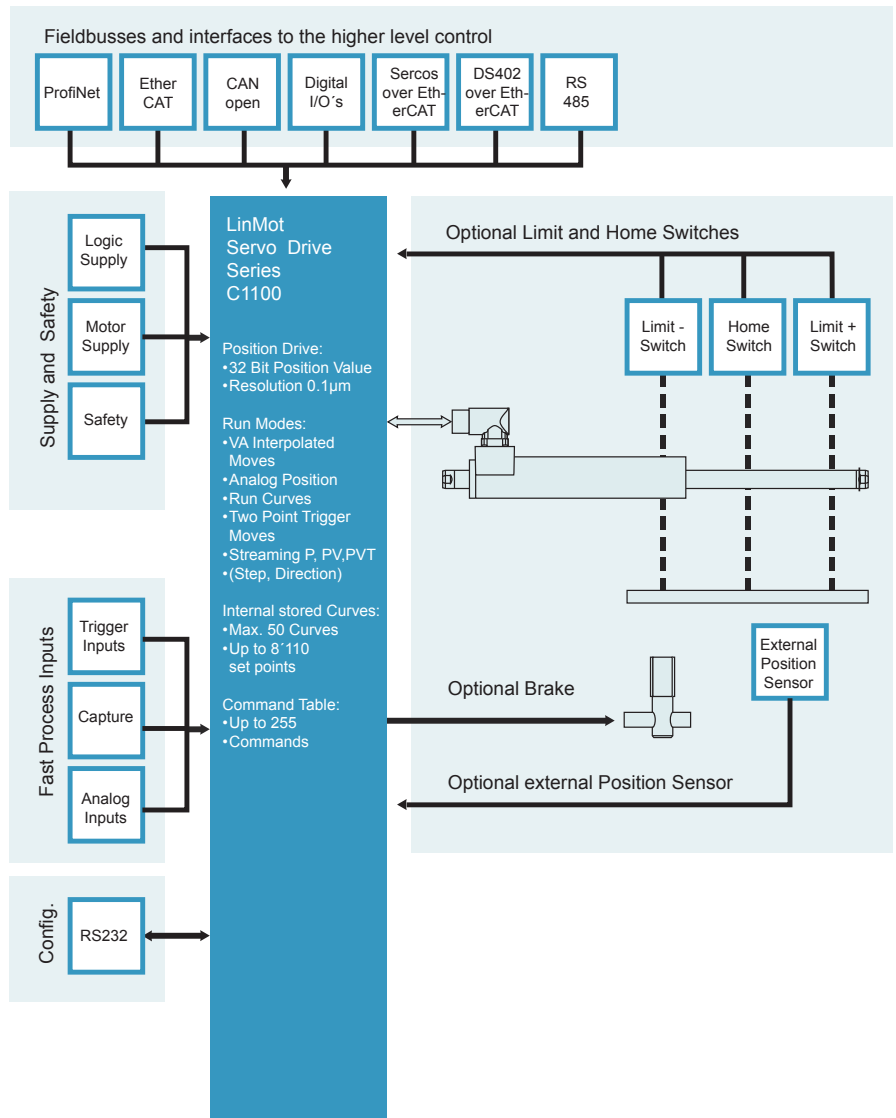
System Integration

Flexible hardware enables control of many 1/2/3-phase motors. Thus, low-power rotary servomotors, such as brushless DC motors, can be integrated in the same control concept.

Additionally, the drives can be equipped with optional peripherals, such as reference and end stop switches, high-precision external position sensors, or a mechanical holding brake.

Series C1100 servo drives have analog inputs and digital inputs and outputs, serial interfaces, CAN bus, and Ethernet. The user therefore is not dependent on the selection of the higher level controller. An appropriate interface is available, with associated protocols, for many PLC or IPC solution.

With flexibility and a compact form factor, LinMot Series C1100 servo drives provide a complete solution for a flexible drive concept in single and multiple axes applications, with linear motors and other actuators.



IDEAL FOR POINT TO POINT MOTIONS

Serial interfaces, CAN and industrial Ethernet guarantees flexible and fast communication.

The cost-optimized design of the C1100 series make it the ideal drive for point-to-point motions and replacement of pneumatic cylinders. The control is also characterized by higher speeds, longer service life and high flexibility.

MOTOR INTERFACES

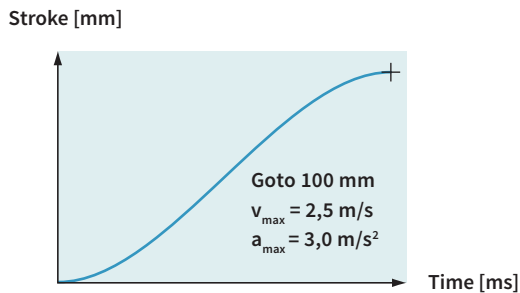
C1100 servo drives provide all necessary interfaces to operate linear or rotary motors with optional external peripherals, such as end position and reference switches, a mechanical brake, or a high-resolution external position sensor.

CONFIGURATION

LinMot Talk, a user-friendly PC software is available for configuration. In addition to online documentation, LinMot Talk provides extensive debugging tools, such as an oscilloscope and an error inspector, for simple and rapid start-up of the Axis.

Fieldbus and Ethernet drives can also be configured directly by the higher level control, by downloading the configuration parameters via Bus/Ethernet

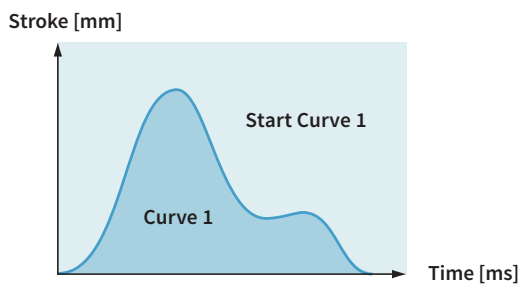
CONNECTION TO MACHINE DRIVE



For direct position targets, using absolute or relative positioning, the desired position is reached using acceleration and velocity-limited motion profiles, sine motion profiles or jerk optimized profiles (jerk limited Bestehorn). Positioning commands can be invoked via the serial interfaces, CANopen, Ethernet or a trigger input.

Stroke range:	±100 m
Position Resolution:	0.1 µm (32Bit)
Velocity Resolution:	1.0 µm/s (32Bit)
Acceleration Resol.:	10.0 µm/s² (32Bit)

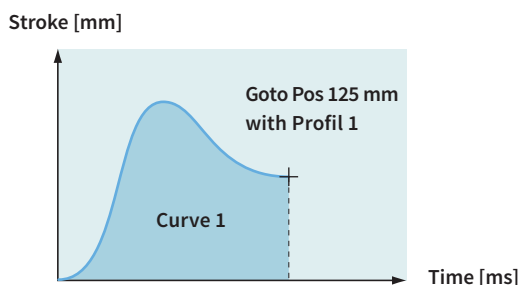
TIME CURVES



Up to 50 different time curves can be stored Series C1100 drives, with up to 8'110 individual waypoints. The motor can thus travel along time curves of any complexity, such as those generated by CAD programs and stored in the drive (Excel CSV format). The time curves can be invoked via the serial interface, fieldbusses, Ethernet, or the trigger input.

Stroke range:	±100m
Position Resolution:	0.1 µm (32Bit)
Motion profiles:	Max. 50 Time Curves
Curve points:	Max. 8'110 points

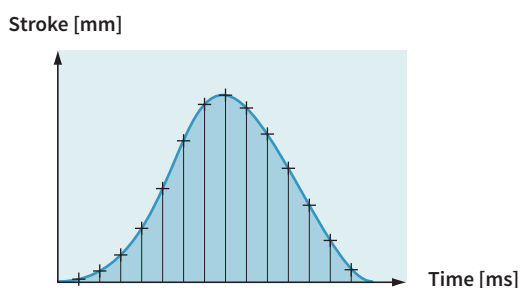
PROFIED MOVES



For travel to an absolute position, or shifting by a relative position, any desired motion rules can be stored besides the VA interpolator. They are stored in the drive as motion profiles (Excel CSV format). The positions can be approached, for example, with a sinusoidal motion to optimize power loss, or special reverse optimized motion profiles.

Stroke range:	±100m
Position Resolution:	0.1 µm (32Bit)
Motion profiles:	Max. 50 Time Curves
Curve points:	Max. 8'110 points

SETPOINT STREAMING



Higher level NC motion controllers with fieldbus or Ethernet interfaces communicate with the servo drives via "Position Streaming". The position and velocity calculated in the higher level control is transmitted to the Servo Drive cyclically. The P, PV, or PVT mode is available for this transmission.

Position Resolution:	32 Bit
Velocity Resolution:	32 Bit
Interpolator:	4 kHz
Cycle times:	0.5 - 5 ms

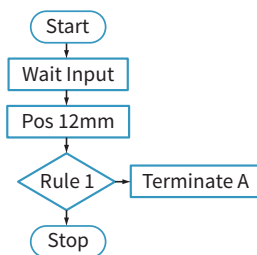
EASY STEPS

Input 1	Pos 125 mm
Input 2	Pos 250 mm
Input 3	Curve 1
Input 4	Pos -30 mm

With the Easy Steps function, up to 4 positions or independent travel commands can be stored on the drive, and addressed via 4 digital inputs or fieldbus interfaces/Ethernet.

Digital inputs:	4
Interface:	X4
Scanning rate:	250 µsec

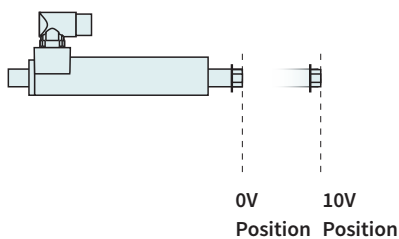
COMMAND TABLE



Entire motion sequences with up to 255 individual motion commands can be stored in the Command Table. This is primarily advantageous if complete motion sequences need to be executed very quickly, without dead time from the higher level drive. In the Command Table, the programmer has access to all motion commands, internal parameters, and digital inputs and outputs.

Commands:	max. 254
Cycle time:	250 µsec

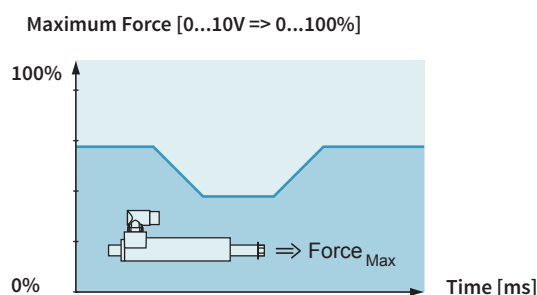
ANALOG POSITION



For an analog position target, the linear motor travels to a position proportional to the input voltage. The position is either scanned continuously, or only after a rising edge of the trigger signal. In order to prevent uncontrolled jumps in position, the motor travels to the positions with a programmable maximum acceleration and velocity (VA interpolator).

Inputs:	Analog Input X4
Voltage range:	0-10VDC or ±10V
Resolution:	10 Bit
Scanning rate:	≥250 µsec (adjustable)

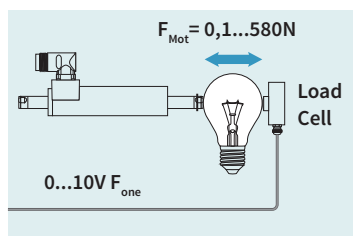
EASY STEPS PARAMETER SCALE



Easy Steps provide the ability to parameterize internal parameters using two analog inputs. If, for example, the maximum motor current is read at an analog input, then the maximum motor force can be provided as analog for freely programmable joining processes.

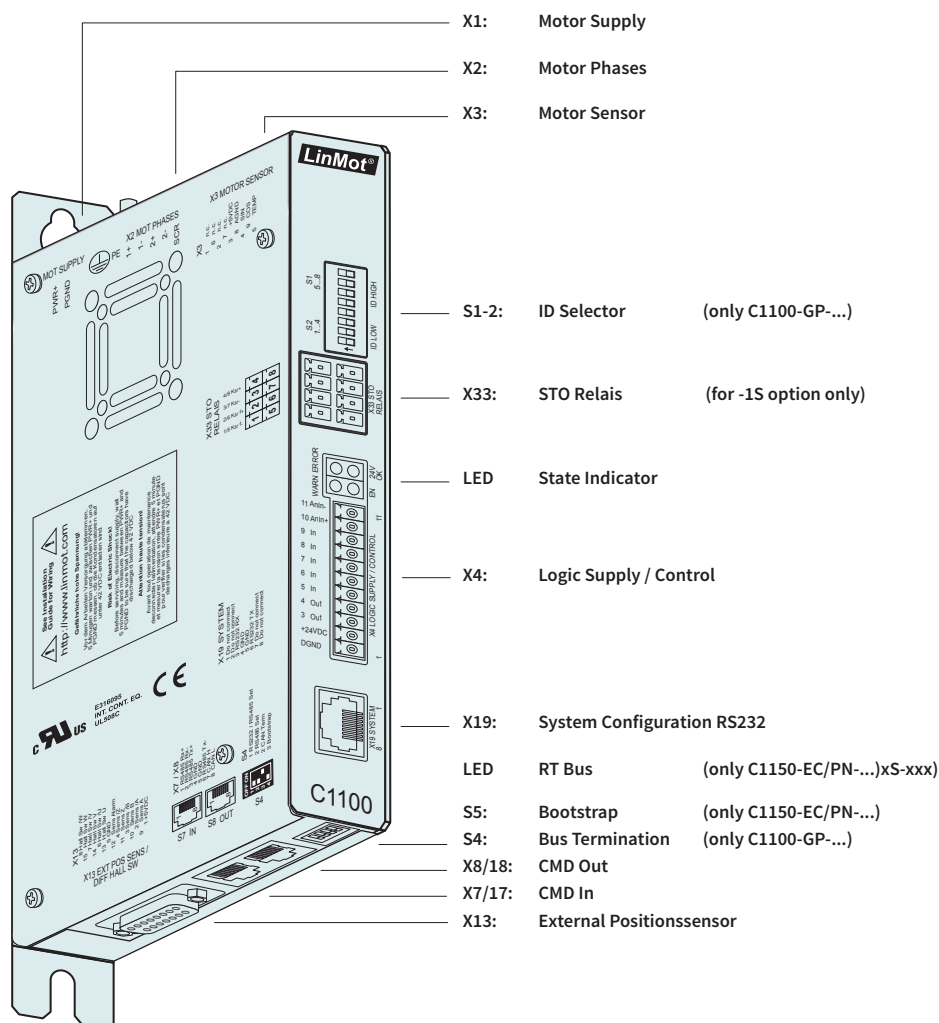
Inputs:	2 x Analog
Voltage range:	0-10VDC
Resolution:	10 Bit
Scanning rate:	250 µsec

CLOSED LOOP FORCE CONTROL



Using the force control technology function, precise joining processes can be implemented reliably and reproducibly with high-precision force control. For force control, the current motor force is measured with a load cell and controlled in the drive. Joining process or quality checks with high requirements for applied force can be implemented.

Analog input:	0-10V or $\pm 10V$
Resolution:	10 Bit
Min. Force Resolution:	0.1N

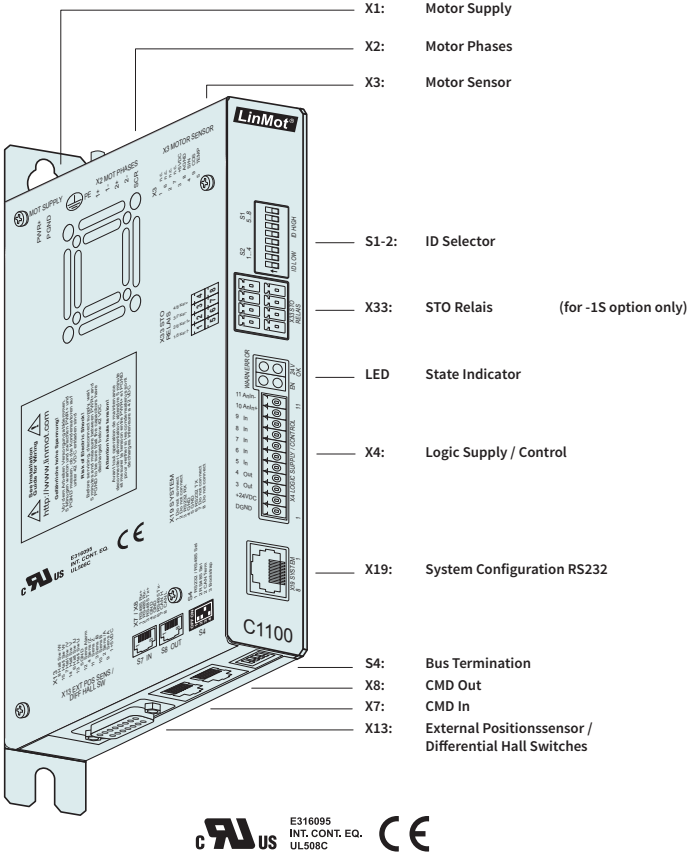


Interfaces	C1100-GP-XC	C1150-EC-XC	C1150-DS-XC	C1150-SE-XC	C1150-PN-XC
LinRS (RS485 / RS422)	•				
CANOpen	•				
ETHERCAT LinMot Profile		•			
ETHERCAT CiA402			•		
ETHERCAT SoEe				•	
PROFINET LinMot					•

C1100-GP-XC-0S
C1100-GP-XC-1S

- » Absolute & Relative Positioning
- » Time based motion profiles
- » Internally stored Motion Sequences
- » Position Streaming
- » Analog Position Target
- » Analog Parameter Scaling
- » Force Control Technology Function
- » Customer-Specific Functions

CANopen



CANOPEN

The LinMot C1100-GP drives support the CiA DS301 communications protocol. The following resources are available:

4 T_PDO, 4 R_PDO, 1 T_SDO, 1 R_SDO

The following protocols are supported by the CO drives:

- » NMT Error Control (Nodeguarding Protocol or HeartBeat Protocol)
- » PDO (Transmission type 1 to 254)
- » SDO Upload and Download
- » NMT (Start, Stop, Enter PreOp, Reset Node, Reset Communication, Boot-Up Message)

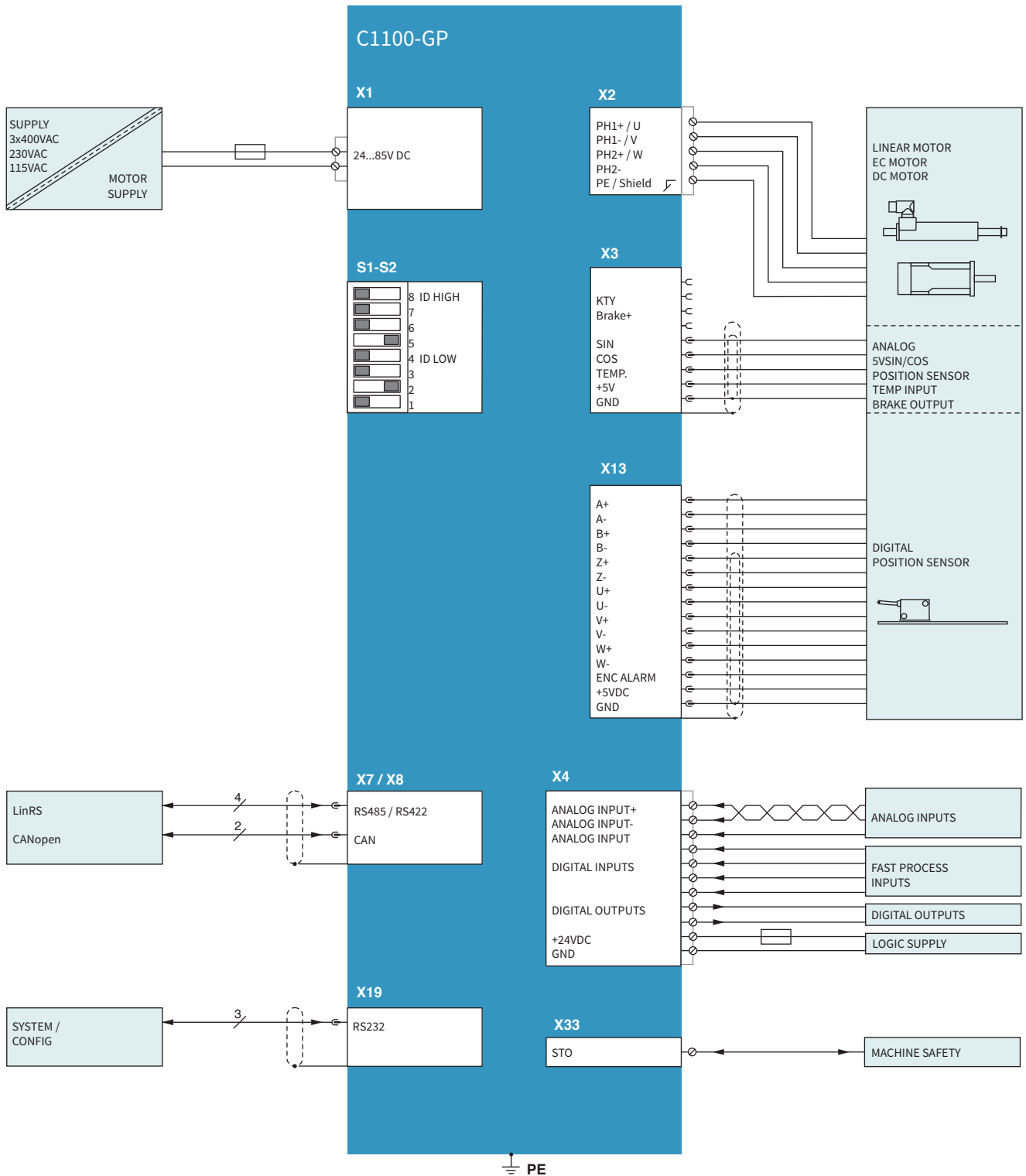
PROCESS AND SENSOR INTERFACES

C1100-GP servo drives support the following interfaces:

- » CANOpen
- » LinRS

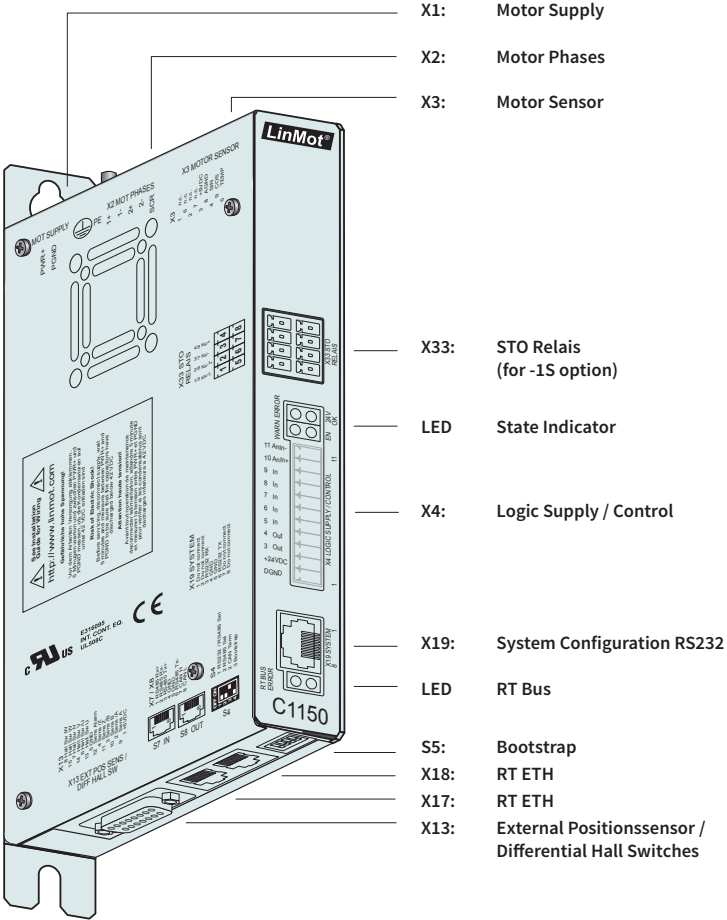
MINIMAL CYCLE TIMES

Min. Bus Cycle:	500 µs
IO update:	500 µs
Trigger Input:	250 µs
Position control loop:	250 µs
Current control loop:	125 µs



C1150-xx-XC-xS-xxx

- » Absolute & Relative Positioning
- » Time based motion profiles
- » Internally stored Motion Sequences
- » Position Streaming
- » Analog Position Target
- » Analog Parameter Scaling
- » Force Control Technology Function
- » Customer-Specific Functions



INDUSTRIAL ETHERNET

Series C1150-EC drives allow integration of LinMot linear motors in controls concepts with EtherCAT. The user can integrate Series C1100 drives regardless of the provider of the higher level control.

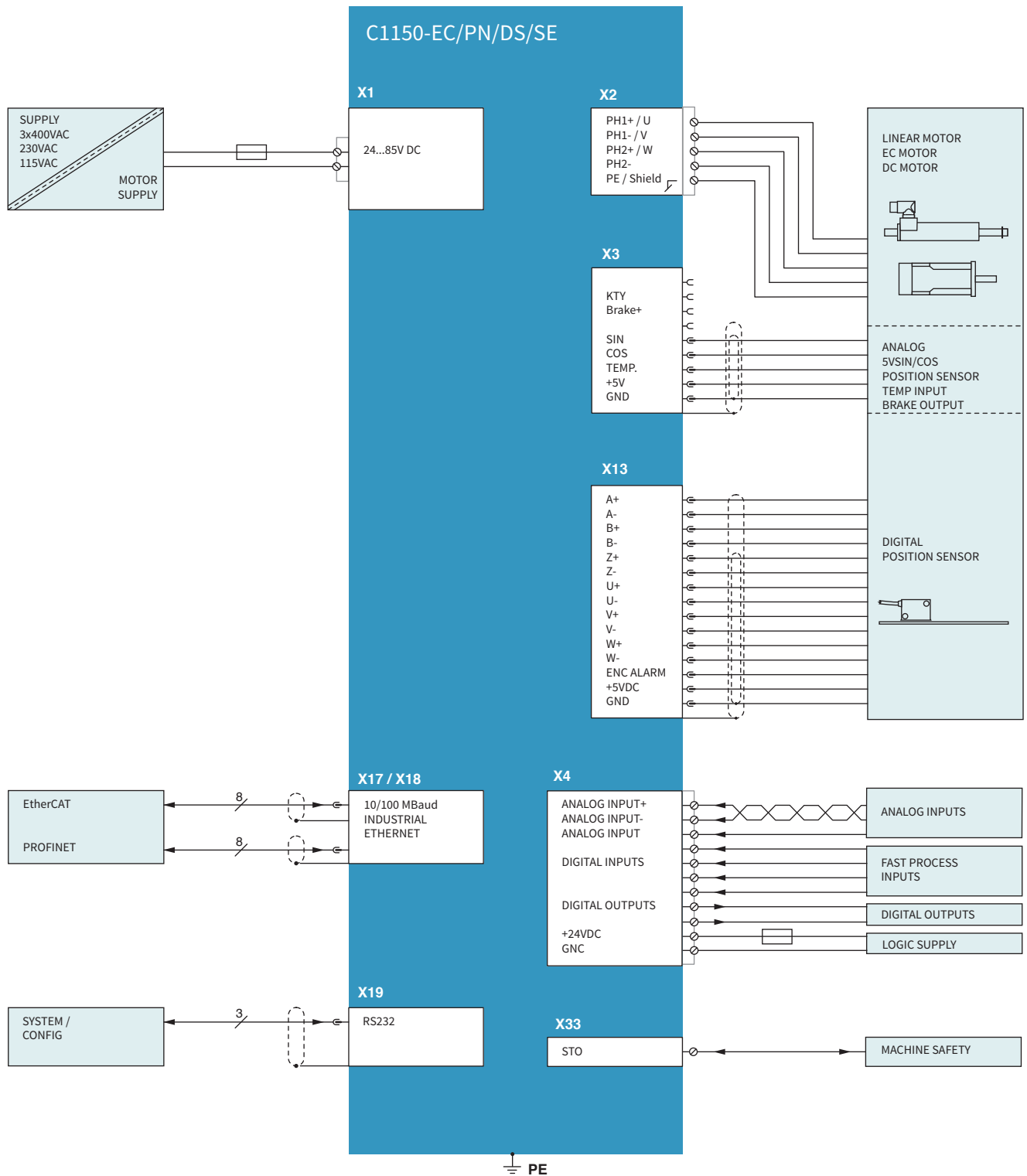
LinMot drives are available with common industrial Ethernet protocols. Since all Ethernet drives have the same motion command interface, and the control and status word are identical, software blocks that have been implemented once, can be transferred to other motion controllers without a problem.

TECHNICAL DATA

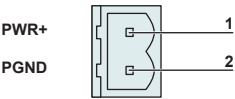
Type: Realtime Ethernet
Switch/Hub: Integrated 2-Port Switch
Transfer rate: 10/100Mbit/sec

MINIMAL CYCLE TIMES

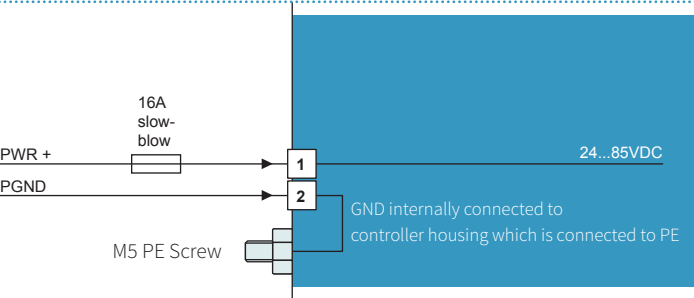
Bus cycle: 500 µs
IO update: 500 µs
Trigger Input: 250 µs
Position control loop: 250 µs
Current control loop: 125 µs



X1 MOTOR SUPPLY

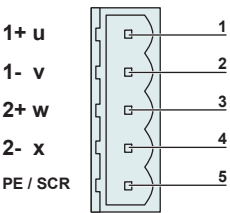


Connector has to be ordered separately



Motor Supply: 72VDC nominal, 24...85VDC
Absolute max. Rating: 72VDC +20%.
External Fuse: 16A slow-blow / min. 100VDC
If motor supply voltage exceeds 90VDC, the drive will go into error state.
» Use 60/75°C copper conductors only
» Conductor Cross-Section 2.5mm² (AWG14) max Length 3 m

X2 MOTOR PHASES

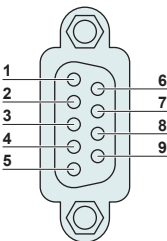


Connector has to be ordered separately

Nr	Designation	LinMot Linear Motor	Color	3-phase EC-Motor	Color
1	PH1+	Motor Phase 1+	red	Motor Phase U	red
2	PH1-	Motor Phase 1-	pink	Motor Phase V	pink
3	PH2+	Motor Phase 2+	blue	Motor Phase W	blue
4	PH2-	Motor Phase 2-	grey	RR-	grey
5	PE/SCRN	Shield		Shield	

» Use 60/75°C copper conductors only
» Conductor cross-section: 0.5 – 2.5mm² (depends on Motor current) / AWG 21 -14

X3 MOTOR SENSOR / BREMSE



DSUB-9

Nr		LinMot Motor	EC Motor
1		Do not connect	Do not connect
	6	Brake+	Brake+
2		Do not connect	Do not connect
	7	Do not connect	KTY
3		+5VDC	+5VDC
	8	AGND	AGND
4		Sensor Sine	Sensor Sine / Hall Switch U
	9	Sensor Cosine	Sensor Cosine / Hall Switch V
5		Temp In	Hall Switch W
	Case	Shield	Shield

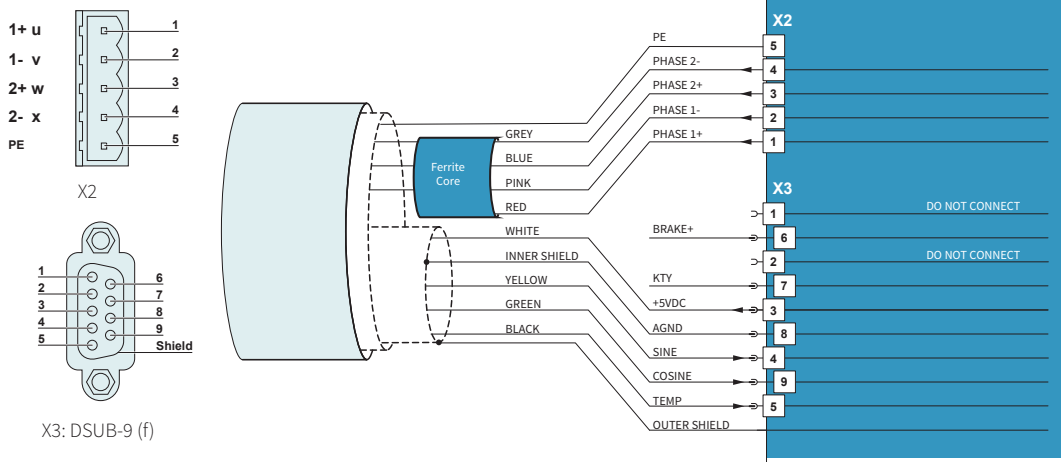
» Use +5V (X3.3) and AGND (X3.8) only for motor internal Hall Sensor supply (max. 100 mA)
» Cable length < 30 m
» Brake+: 24V 500mA, 1.4A_{peak}
» Caution: Do NOT connect AGND (X3.8) to ground or earth!



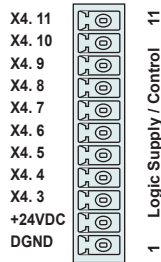
Use Y-style motor cables only (for example K15-Y/C)!

A W-style cable has a different shielding, so it cannot be modified to a Y-style cable!

Phase 2-could be used as RR-with 3 phase Motors the other side of regeneration resistor has to be wired to PWR



X4 LOGIC SUPPLY / IO CONNECTION



DSUB-9 (f)
Spring cage connector
(has to be ordered
separately)

Nr			
11	AnIn-	X4.11	Configurable Analog Input differential (with X4.10)
10	AnIn+	X4.10	Configurable Analog Input differential (with X4.11)
9	AnIn	X4.9	Configurable Analog Input single ended
8	In	X4.8	Configurable Input
7	In	X4.7	Configurable Input
6	In	X4.6	Configurable Input
5	In	X4.5	Configurable Input
4	Out	X4.4	Configurable Output
3	Out	X4.3	Configurable Output
2	+24VDC	Supply	Logic Supply 22-26 VDC
1	GND	Supply	Ground

Inputs: (X4.5...X4.8)

Outputs: (X4.3 & 4.4)

Analog inputs:

X4.9:

X4.10/X4.11:

Supply 24V:

24V / 5mA (Low Level: -0.5 to 5VDC, High Level: 15 to 30VDC)

24V / max. 500mA, Peak 1.4A (will shut down if exceeded)

10 bit A/D converted.

Single ended analog input to GND, 0..10V, Input Resistance: 51kΩ to GND

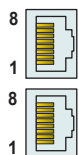
Differential analog input, +/- 10V. Common mode range: +/- 5VDC to GND.

Input Resistance: 11.4kΩ for each signal to GND

typically 200mA / max. 2.0A (if all outputs "on" with max. load.)

- » Use 60/75°C copper conductors only
- » Conductor cross-section max. 1.5 mm²
- » Stripping length: 10 mm
- » The 24VDC supply for the control circuit (X4.2) must be protected with an external fuse (3A slow blow)

X7 - X8 RS485 / CAN (ON GP DRIVES ONLY)



RJ-45

Nr		
1	RS485_Rx+	A
2	RS485_Rx-	B
3	RS485_Tx+	Y
4	NC	
5	GND (1k Ohm to GND)	
6	RS485_Tx-	Z
7	CAN_H	
8	CAN_L	
Case	Shield	

- » Use twisted pair (1-2, 3-6, 4-5, 7-8) cable for wiring.
- » The built in CAN and RS485 terminations can be activated by S4.2 and S4.3.
- » X7 is internally connected to X8 (1:1 connection)

S1 - S2 ADDRESS SELECTORS (ON GP DRIVES ONLY)



S1 (5...8)	Bus ID High (0 ... F). Bit 5 is the LSB, bit 8 the MSB.
S2 (1...4)	Bus ID Low (0 ... F). Bit 1 is the LSB, bit 4 the MSB

The use of these switches depends on the type of fieldbus which is used.
Please see the corresponding manual for further information.

RT BUS LEDS



RT BUS State Display	
Green	OK
Red	Error

The use of these LEDs depends on the type of fieldbus which is used.
Please see the corresponding manual for further information.

S4 BUS TERMINATION (ON GP DRIVES ONLY)



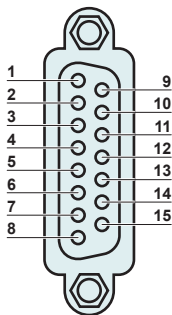
Switch 4	Bootstrap
Switch 3	Termination CAN on/off
Switch 2	Termination RS485 on/off
Switch 1	RS232 / RS485

Factory settings: Switch 3 “on”, all other switches “off”

S5 BOOTSTRAP (ON EC AND PN DRIVES ONLY)

S5	Bootstrap (Internal use only)
----	-------------------------------

X13 EXTERNAL POSITION SENSOR DIFFERENTIAL HALL SWITCHES



DSUB-15 (f)

Nr	ABZ with Hall Switches	SSI /Biss / EnDat
1	+5V DC	+5V DC
9	A+	A+
2	A-	A-
10	B+	B+
3	B-	B-
11	Z+	Data+
4	Z-	Data-
12	Encoder Alarm	Encoder Alarm
5	GND	GND
13	U+	nc
6	U-	nc
14	V+	nc
7	V-	nc
15	W+	Clk+
8	W-	Clk-
Case	Shield	Shield

Position Encoder Inputs (RS422):

Differential Hall Switch Inputs (RS422):

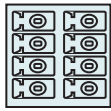
Enc. Alarm In:

Sensor Supply:

Max. counting frequency: 10 Mcounts/s with quadrature decoding, 100ns edge separation
Input Frequency: <1kHz
5V / 1mA
5VDC, max 100mA

X33 SAFETY RELAYS (ONLY FOR -1S)

X33. 4/8 Ksr+
X33. 3/7 Ksr-
X33. 2/6 Ksr f+
X33. 1/5 Ksr f-



X33 STO RELAYS

Spring cage connector
(has to be ordered
separately)

- » Use 60/75°C copper conductors only
- » Conductor cross-section max. 1.5 mm²
- » Stripping length: 10 mm
- » Never connect the safety relays to the logic supply of the drive!

Nr		
4 / 8	Ksr +	Safety Relay 1 / 2 Input positive
3 / 7	Ksr -	Safety Relay 1 / 2 Input negative
2 / 6	Ksr f+	Safety Relay 1 / 2 feedback positive
1 / 5	Ksr f-	Safety Relay 1 / 2 feedback negative

X17 - X18 REALTIME ETHERNET 10/100 MBIT/S (ON EC AND PN DRIVES ONLY)



X17



X18

RJ-45

Nr		
X17	RT ETH In	Specification depends on RT-Bus.
X18	RT ETH Out	Please refer to according documentation.

LEDS STATE DISPLAY

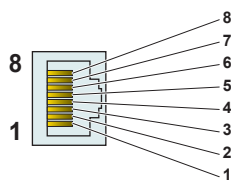
Error 24VOK
Warn EN



Green	24V Logic Supply OK
Yellow	Motor Enabled / Error Code Low Nibble
Yellow	Warning / Error Code High Nibble
Red	Error

11

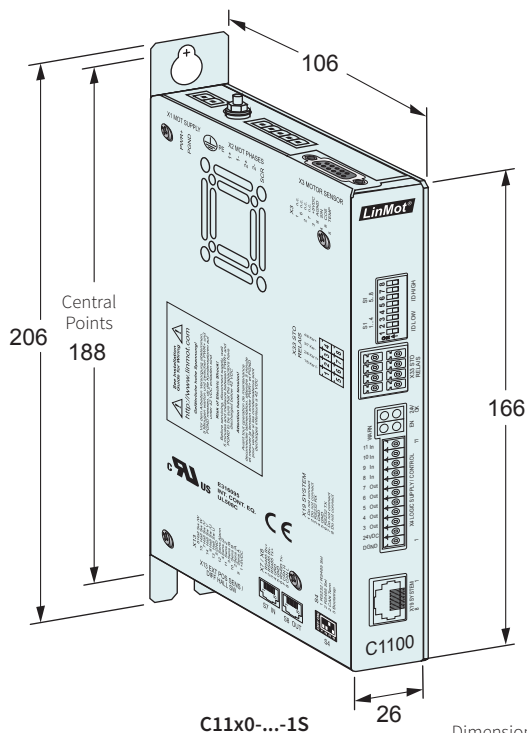
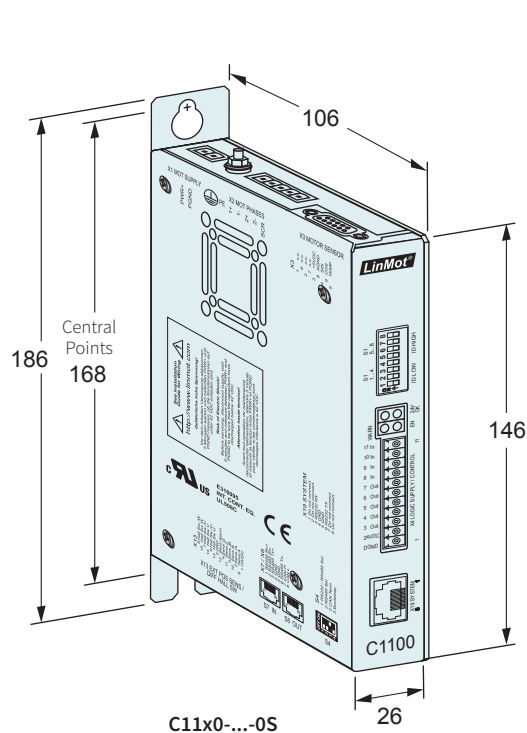
X19 SYSTEM



RJ-45

Nr	Description
1	(do not connect)
2	(do not connect)
3	RS232 RX
4	GND
5	GND
6	RS232 TX
7	(do not connect)
8	(do not connect)
case	Shield

Use isolated USB-RS232 converter (Art.-No. 0150-2473) for configuration over RS232



Dimensions in mm
Mounting points for M5 screws

Servo Drive Series		C11x0-...-0S	C11x0-...-1S
Width	mm (in)	106 (4.2)	106 (4.2)
Height	mm (in)	146 (5.8)	166 (6.5)
Height with fixings	mm (in)	186 (7.3)	206 (8.1)
Depth	mm (in)	26 (1.02)	26 (1.02)
Weight	kg (lb)	505 (1.21)	650 (1.43)
Mounting Screws		2 x M5	2 x M5
Mounting Distance	mm (in)	168 (6.61)	188 (7.4)
Case IP Code	IP	20	
Storage temperature	°C	-25...40	
Transport temperature	°C	-25...70	
Operating temperature	°C	0...40 at rated date 40...50 with power derating	
Relative humidity		95% (non-condensing)	
Pollution	IEC/EN 60664-1	Pollution degree 2	
Shock resistance (16 ms)	-1S option		3.5 g
Vibration resistance (10-200Hz)	-S option		1 g
Max. case temperature	°C	70	
Max. power dissipation	W	30	
Mounting place		in the control cabinet	
Mounting position		vertical	
Distance between Drives	mm (in)	Without Power Derating 20 (0.8) left/right / 50 (2) top/bottom With Power Derating: 5 (0.2) left/right / 20 (0.8) top/bottom	

Servo Drives		
Item	Description	Part Number
C1100-GP-XC-0S-000	General Purpose Drive (72VDC/25)	0150-2380
C1150-PN-XC-0S-000	ProfiNet Drive (72V/25A)	0150-2384
C1150-EC-XC-0S-000	EtherCAT Drive (72VDC/25A)	0150-2382
C1150-DS-XC-0S-000	EtherCAT CoE Drive (72VDC/25A)	0150-2417
C1150-SE-XC-0S-000	EtherCAT SoE Drive (72VDC/25A)	0150-2625
C1100-GP-XC-1S-000	General Purpose Drive (72VDC/25), STO	0150-2381
C1150-PN-XC-1S-000	ProfiNet Drive (72V/25A), STO	0150-2385
C1150-EC-XC-1S-000	EtherCAT Drive (72VDC/25A), STO	0150-2383
C1150-DS-XC-1S-000	EtherCAT CoE Drive (72VDC/25A), STO	0150-2418
C1150-SE-XC-1S-000	EtherCAT SoE Drive (72VDC/25A), STO	0150-2626

Accessories		
Item	Description	Part Number
DC01-C1X00-0S/X1/X4	Drive Connector Set for C1X00-0S	0150-3527
DC01-C1X00-1S/X1/X4/X33	Drive Connector Set for C1X00-1S	0150-3528
DC01-C1X00/X1	Drive Connector for PWR 72VDC Input	0150-3525
DC01-C1X00/X2	Drive Connector Motor Phases	0150-3526
DC01-Signal/X4	Drive Connector 24VDC & Logic	0150-3447
DC01-Safety/X33 yello	Drive Connector Safety	0150-3451

SERIES C1200



- ✓ Absolute / relative positioning commands
- ✓ Limited jerk motion commands
- ✓ Time Curves
- ✓ Real Time (Streaming)
- ✓ Synchronous control (Drive profiles)
- ✓ PLC or Stand-Alone Solutions
- ✓ Digital and Analog IO's
- ✓ Safe Torque Off
- ✓ Interface for optional incremental or absolute sensor
- ✓ Supports Plug and Play
- ✓ CE / UL / CSA

Servo Drive C1200

Series C1200 servo drives are axis controllers, with 32-bit position resolution and an integrated power stage, for linear and rotary motors. The controllers are suitable for standard and high-end positioning tasks with NC Synchronisation.



CONNECTION TO MACHINE CONTROL

The Series C1200 servo drives can be actuated by machine controls from many manufacturers or brands, via digital inputs and outputs over Industrial Ethernet.

Bus-Interfaces:

- » ProfiNet / ProfiDrive
- » EtherCat, SoE, CoE
- » Ethernet IP
- » PowerLink
- » Sercos III

PROCESS AND SENSOR INTERFACES

Fast process interfaces for direct processing of sensor signals are available as freely programmable analog and digital inputs, a fast trigger input, and a capture input.

The safety IO's on Servo Drives with the -1S option with industrial ETHERNET allows safe torque off (STO) of the drives via control signals, without interrupting the power supply.

Drives with -0S option comes without safety IO's and is easier to wire in applications without safety needs.

LOGIC AND POWER SUPPLY

The servo drives have two separate inputs for the logic and motor elements.

This has the advantage that the drive and linear motor do not need to be reinitialized when the machine is restarted, since all process data, including the actual position of the linear motor, is still up to date.

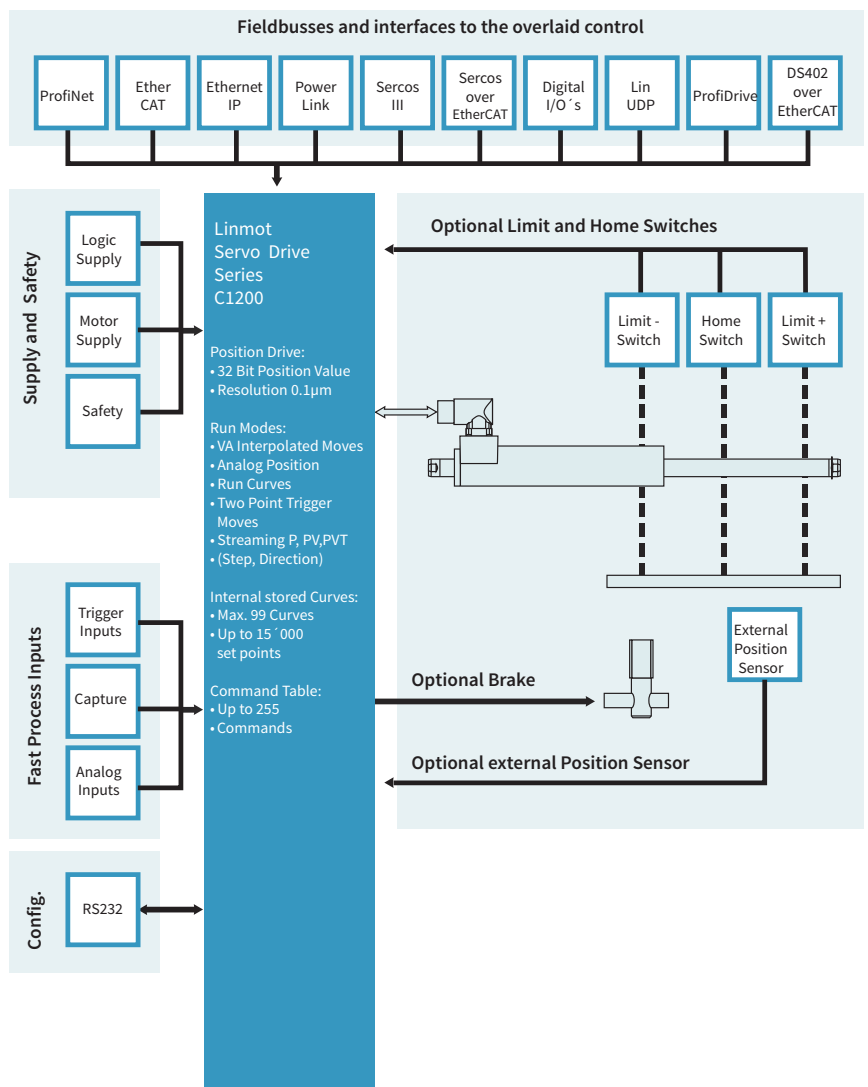
System Integration

Flexible hardware enables control of many 1/2/3-phase motors. Thus, low-power rotary servomotors, such as brushless DC motors, can be integrated in the same control concept.

Additionally, the drives can be equipped with optional peripherals, such as reference and end stop switches, high-precision external position sensors, or a mechanical holding brake.

Series C1200 servo drives have analog and digital inputs and outputs, serial interfaces, fieldbusses, and Ethernet. The user therefore is not dependent on the selection of the overlaid controller. An appropriate interface is available, with associated protocols, for many PLC or IPC solutions.

With flexibility and a compact form factor, LinMot Series C1200 servo drives provide a complete solution for a flexible drive concept in single and multiple axes applications, with linear motors and other actuators.



HIGH-END AND NC-MOTIONS

The ultra-fast control cycle together with the high resolution A/D converters of the C1200 series drives guarantee perfect motor control for demanding Positioning tasks.

The various drive profiles available on the series C1200 drives makes it easy to integrate these drives into systems with synchronized axes and overlaid NC-position controllers with industrial Ethernet communication.

MOTOR INTERFACES

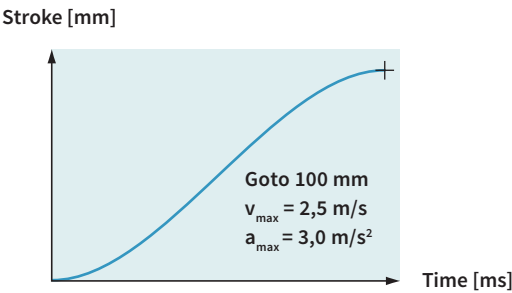
C1200 servo drives provide all necessary interfaces to operate linear or rotary motors with optional external peripherals, such as end position and reference switches, a mechanical brake, or a high-resolution external position sensor.

CONFIGURATION

LinMot Talk, a user-friendly PC software is available for configuration. In addition to online documentation, LinMot Talk provides extensive debugging tools, such as an oscilloscope and an error inspector, for simple and rapid start-up of the Axis.

Fieldbus and Ethernet drives can also be configured directly by the overlaid control, by downloading the configuration parameters via Bus/Ethernet

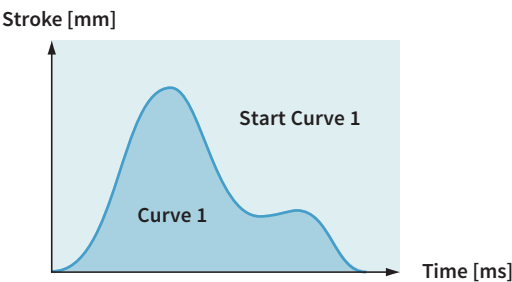
INTERPOLATED MOVES



For direct position targets, using absolute or relative positioning, the desired position is reached using acceleration and velocity-limited motion profiles or jerk optimized profiles (example: Bestehorn). Positioning commands can be invoked via serial Ethernet or a trigger input.

Stroke range:	±100 m
Position Resolution:	0.1 µm (32Bit)
Velocity Resolution:	1.0 µm/s (32Bit)
Acceleration Resol.:	10.0 µm/s² (32Bit)

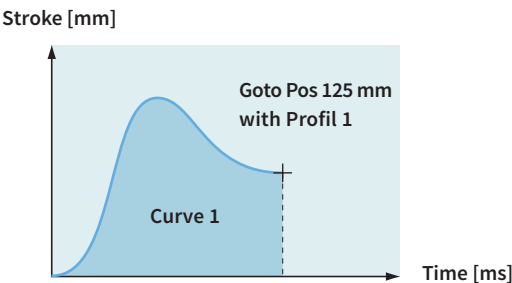
TIME CURVES



Up to 100 different time curves can be stored on Series C1200 drives, with up to 16,000 individual waypoints. The motor can thus travel along time curves of any complexity, such as those generated by CAD programs and stored in the drive (Excel CSV format). The time curves can be invoked via the serial interface, fieldbusses, Ethernet, or the trigger input.

Stroke range:	±100m
Position Resolution:	0.1 µm (32Bit)
Motion profiles:	Max. 100 Time Curves
Curve points:	Max. 16'000 points

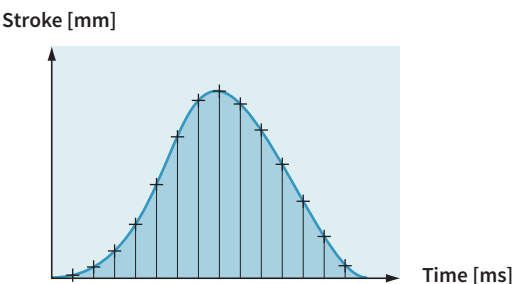
PROFILED MOVES



For travel to an absolute position, or shifting by a relative position, any desired motion rules can be stored besides the VA interpolator. They are stored in the drive as motion profiles (Excel CSV format). The positions can be approached, for example, with a sinusoidal motion to optimize power loss, or special reverse optimized motion profiles.

Stroke range:	±100m
Position Resolution:	0.1 µm (32Bit)
Motion profiles:	Max. 100 Time Curves
Curve points:	Max. 16'000 points

SETPOINT STREAMING



Overlaid NC drives with fieldbus or Ethernet interfaces communicate with the servo drives via “Position Streaming”. The position and velocity calculated in the overlaid control is transmitted to the Servo Drive cyclically. The P, PV, or PVA mode is available for this transmission.

Position Resolution:	32 Bit
Velocity Resolution:	32 Bit
Interpolator:	8 kHz
Cycle times:	0.25 - 5 ms

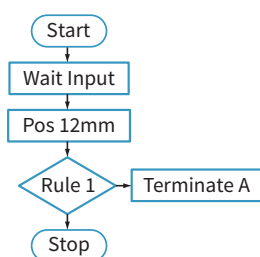
EASY STEPS

Input 1	Pos 125 mm
Input 2	Pos 250 mm
Input 3	Curve 1
Input 4	Pos -30 mm

With the Easy Steps function, up to 4 positions or independent travel commands can be stored on the drive, and addressed via 4 digital inputs or fieldbus interfaces/Ethernet.

Digital inputs:	4
Interface:	X4
Scanning rate:	250 µsec

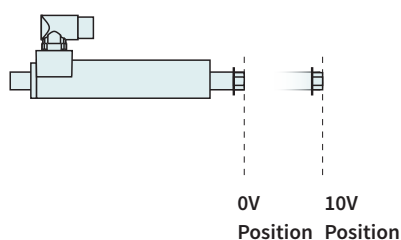
COMMAND TABLE



Entire motion sequences with up to 255 individual motion commands can be stored in the Command Table. This is primarily advantageous if complete motion sequences need to be executed very quickly, without dead time from the overlaid PLC. In the Command Table, the programmer has access to all motion commands, internal parameters, and digital inputs and outputs.

Commands:	max. 255
Cycle time:	125 µsec

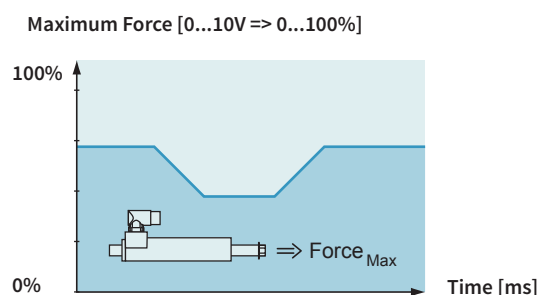
ANALOG POSITION



For an analog position target, the linear motor travels to a position proportional to the input voltage. The position is either scanned continuously, or only after a rising edge of the trigger signal. In order to prevent uncontrolled jumps in position, the motor travels to the positions with a programmable maximum acceleration and velocity (VA interpolator).

Inputs:	Analog Input X4
Voltage range:	0-10VDC or ±10V
Resolution:	12 Bit
Scanning rate:	≥125 µsec (adjustable)

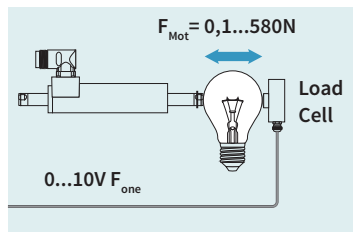
EASY STEPS PARAMETER SCALE



Easy Steps provide the ability to parameterize internal parameters using two analog inputs. If, for example, the maximum motor current is read at an analog input, then the maximum motor force can be provided as analog for freely programmable joining processes.

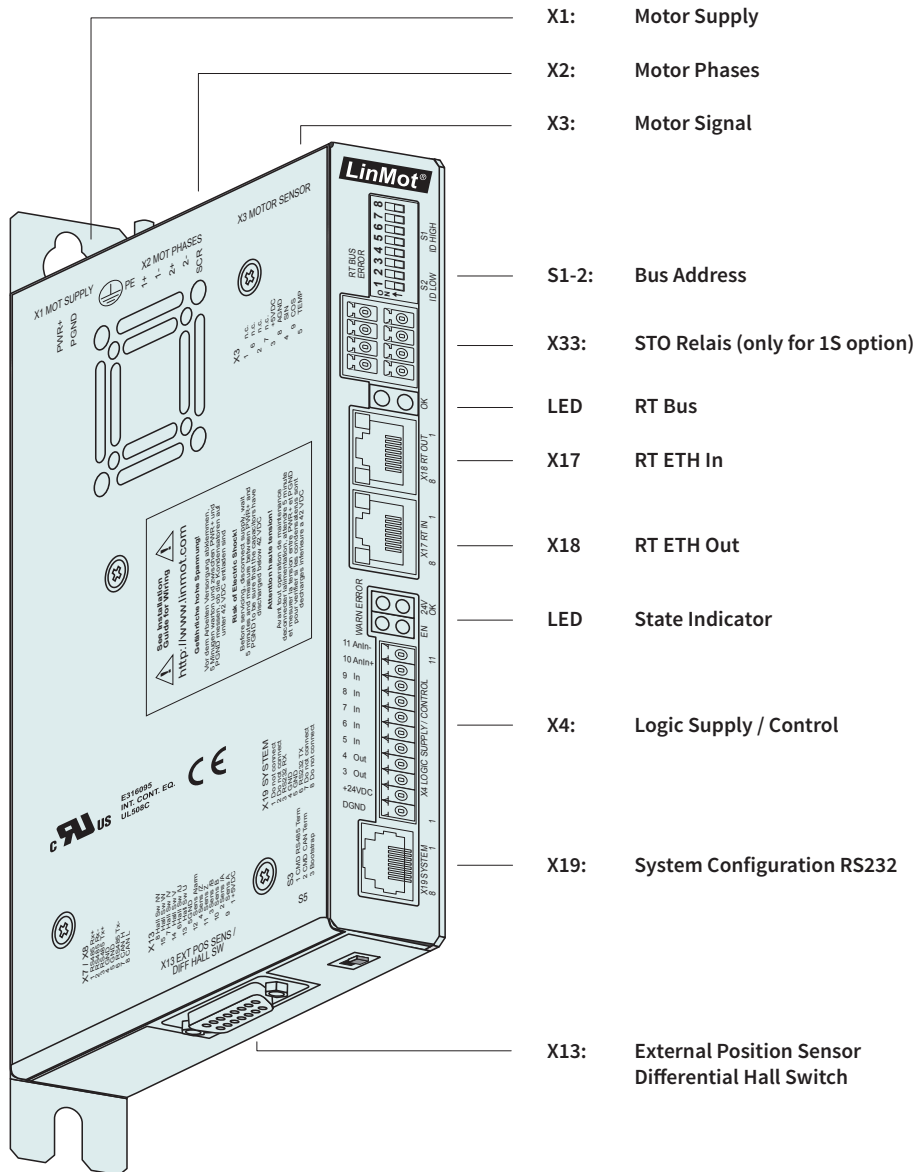
Inputs:	2 x Analog
Voltage range:	0-10VDC
Resolution:	12 Bit
Scanning rate:	250 µsec

CLOSED LOOP FORCE CONTROL



Using the force control technology function, precise joining processes can be implemented reliably and reproducibly with high-precision force control. For force control, the current motor force is measured with a load cell and controlled in the drive. Joining process or quality checks with high requirements for applied force can be implemented.

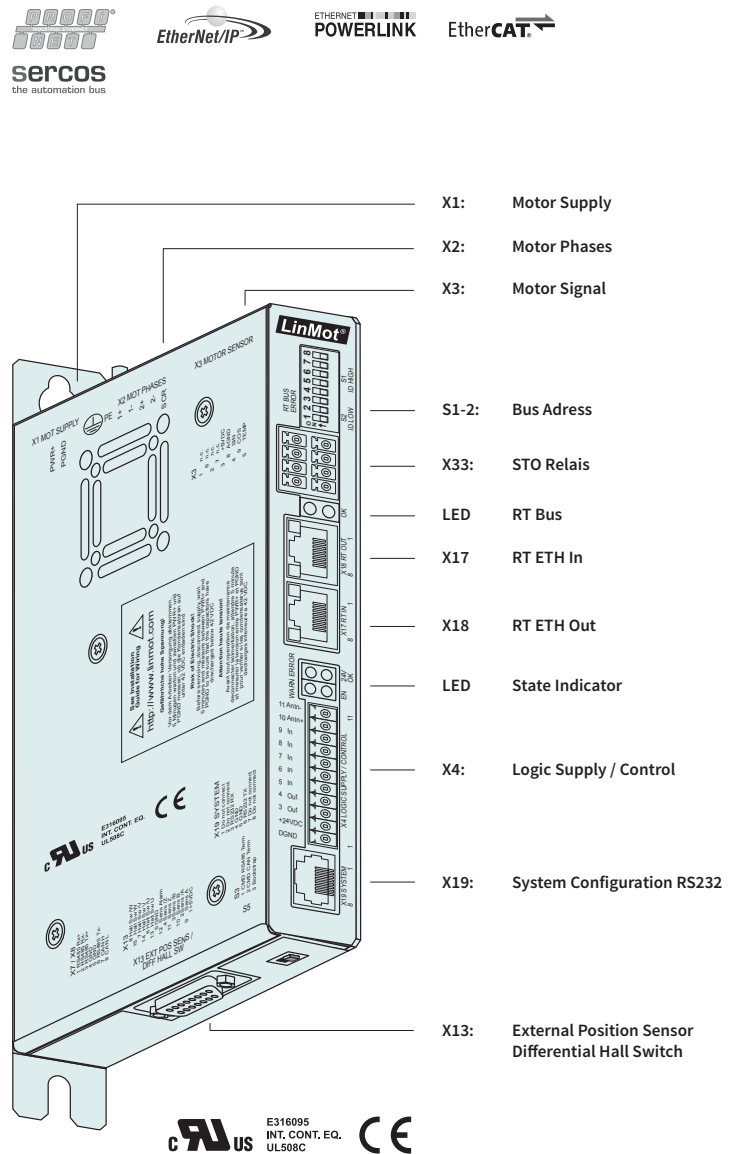
Analog input:	0-10V or $\pm 10V$
Resolution:	12 Bit
Min. Force Resolution:	0.1N



Interfaces	C1250-PN-XC	C1250-PD-XC	C1250-EC-XC	C1250-DS-XC	C1250-SE-XC	C1250-IP-XC	C1250-PL-XC	C1250-SC-XC	C1250-LU-XC
PROFINET	•								
PROFINET ProfiDrive		•							
ETHERCAT			•						
ETHERCAT CiA402				•					
ETHERCAT SoE					•				
ETHERNET IP						•			
POWERLINK							•		
SERCOS III								•	
LinUDP									•

C1250-PN-XC
C1250-EC-XC
C1250-IP-XC
C1250-PL-XC
C1250-SC-XC
C1250-SE-XC
C1250-PD-XC
C1250-DS-XC
C1250-LU-XC

- » Absolute & Relative Positioning
- » Time based motion profiles
- » Internally stored Motion Sequences
- » Position Streaming
- » Analog Position Target
- » Analog Parameter Scaling
- » Force Control Technology Function
- » Customer-Specific Functions



INDUSTRIAL ETHERNET

Series C1200 drives allow integration of LinMot linear motors in controls concepts with industrial Ethernet interfaces. The user can integrate Series C1200 drives regardless of the provider of the overlaid control.

LinMot drives are available with common industrial Ethernet protocols. Since all Ethernet drives have the same motion command interface, and the control and status word are identical, software blocks that have been implemented once can be transferred to other drives without a problem.

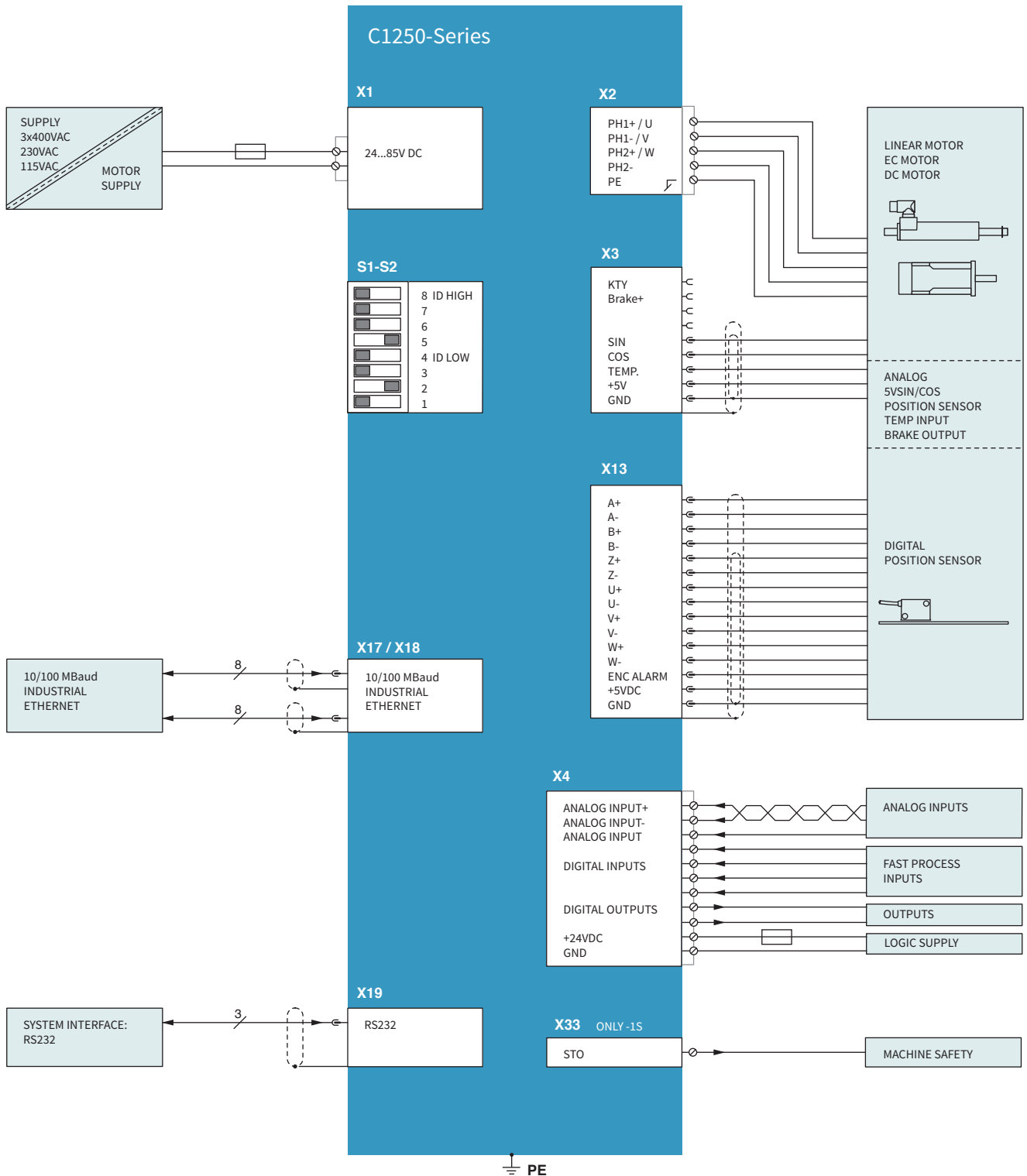
The series C1200 servo drives support the following industrial Ethernet protocols:

- » Profinet
- » EtherCAT
- » Ethernet IP
- » PowerLink
- » Sercos III
- » Sercos over EtherCAT
- » ProfiDrive
- » CiA 402
- » LinUDP

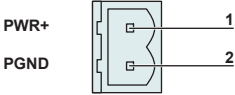
The appropriate drive is available for each protocol.

TECHNICAL DATA

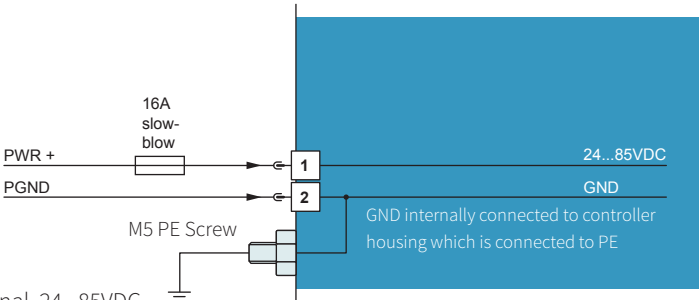
Type:	Realtime ETHERNET
Switch/Hub:	Integrated 2-Port Hub/Switch
Transfer rate:	10/100MBit/sec
Minimal cycle times:	
Bus cycle:	250 µs
IO update:	250 µs
Trigger Input:	125 µs
Position control loop:	125 µs
Current control loop:	62.5 µs



X1 + PE MOTOR SUPPLY / REGENERATION RESISTOR

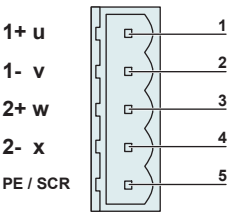


Connector has to be ordered separately



Motor Supply: 72VDC nominal, 24...85VDC
Absolute max. Rating: 72VDC +20%.
External Fuse: 16A slow-blow / min. 100VDC
If motor supply voltage exceeds 90VDC, the drive will go into error state.
» Use 60/75°C copper conductors only
» Conductor Cross-Section 2.5mm² (AWG14) max Length 3 m

X2 MOTOR PHASES

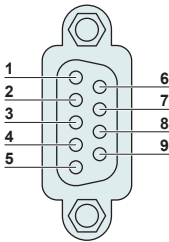


Connector has to be ordered separately

Nr	Designation	LinMot Linear Motor	Color	3-Phase EC-Motor	Color
1	PH1+	Motor Phase 1+	red	Motor Phase U	red
2	PH1-	Motor Phase 1-	pink	Motor Phase V	pink
3	PH2+	Motor Phase 2+	blue	Motor Phase W	blue
4	PH2-	Motor Phase 2-	grey	Motor Phase X	grey
5	PE/SCR	Shield		Shield	

- » Use 60/75°C copper conductors only
» Conductor cross-section: 0.5 – 2.5mm² (depends on Motor current) / AWG 21 -14

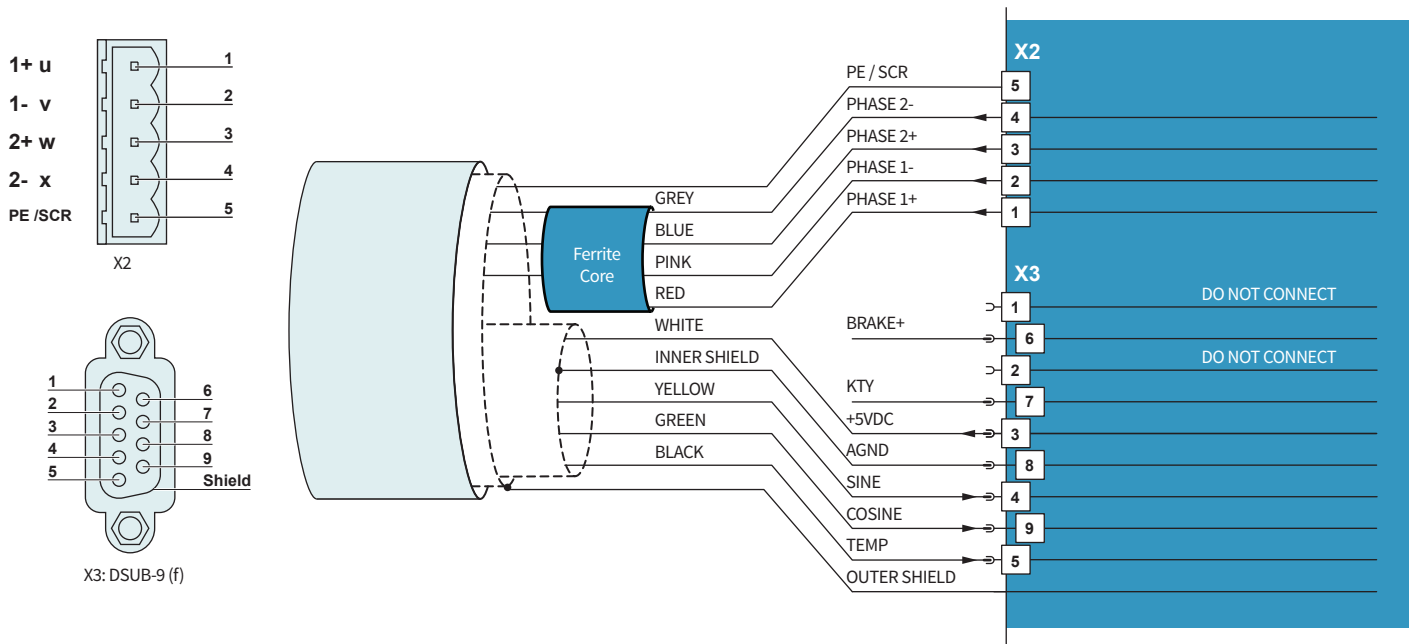
X3 MOTOR SENSOR / BRAKE



DSUB-9

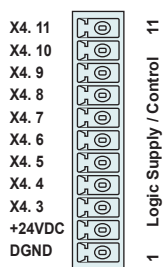
Nr		LinMot Motor	EC Motor
1		Do not connect	Do not connect
	6	Brake+	Brake+
2		Do not connect	Do not connect
	7	Do not connect	KTY
3		+5VDC	+5VDC
	8	AGND	AGND
4		Sensor Sine	Sensor Sine / Hall Switch U
	9	Sensor Cosine	Sensor Cosine / Hall Switch V
5		Temp In	Hall Switch W
	Case	Shield	Shield

- » Use +5V (X3.3) and AGND (X3.8) only for motor internal hall sensor supply (max. 100mA)
» Cable length < 30 m
» Brake+: 24V / max. 500mA, Peak 1.4mA (will shut down if exceeded)
» Caution: Do NOT connect AGND (X3.8) to ground or earth!



Use Y-style motor cables only (for example K15-Y/C)!
A W-style cable has a different shielding, so it cannot be modified to a Y-style cable!

X4 LOGIC SUPPLY / IO CONNECTION



DSUB-9 (f)
Spring cage connector
(has to be ordered separately)

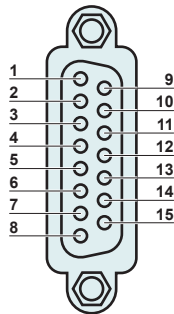
Nr			
11	AnIn-	X4.11	Configurable Analog Input differential (with X4.10)
10	AnIn+	X4.10	Configurable Analog Input differential (with X4.11)
9	AnIn	X4.9	Configurable Analog Input single ended
8	In	X4.8	Configurable Input
7	In	X4.7	Configurable Input
6	In	X4.6	Configurable Input
5	In	X4.5	Configurable Input
4	Out	X4.4	Configurable Output
3	Out	X4.3	Configurable Output
2	+24VDC	Supply	Logic Supply 22-26 VDC
1	GND	Supply	Ground

Inputs: (X4.5...X4.8)
Outputs: (X4.3 & 4.4)
Analog inputs:
X4.9:
X4.10/X4.11:

Supply 24V:

24V / 5mA (Low Level: -0.5 to 5VDC, High Level: 15 to 30VDC)
24V / max. 500mA, Peak 1.4mA (will shut down if exceeded)
12 bit A/D converted.
Single ended analog input to GND, 0..10V, Input Resistance: 51kΩ to GND
Differential analog input, +/- 10V. Common mode range: +/- 5VDC to GND.
Input Resistance: 11.4kΩ for each signal to GND
typically 500mA / max. 2.5A (if all outputs "on" with max. load.)
» Use 60/75°C copper conductors only
» Conductor cross-section max. 1.5 mm²
» Stripping length: 10 mm
» The 24VDC supply for the control circuit (X4.2) must be protected with an external fuse (3A slow blow)

X13 EXTERNAL POSITION SENSOR PIN CONFIGURATION



DSUB-15 (f)

Nr		ABZ with Hall Switches	SSI / BiSS / EnDat
1		+5V DC	+5V DC
	9	A+	A+
2		A-	A-
	10	B+	B+
3		B-	B-
	11	Z+	Data+
4		Z-	Data-
	12	Encoder Alarm	Encoder Alarm
5		GND	GND
	13	U+	nc
6		U-	nc
	14	V+	nc
7		V-	nc
	15	W+	Clk+
8		W-	Clk-
Case		Shield	Shield

Position Encoder Inputs (RS422):

Max. counting frequency: 25 M counts/s with quadrature decoding. A minimum of 40ns edge separation must be guaranteed by the encoder under any circumstances! The maximal frequency of each signal is 6.25 MHz.

Differential Hall Switch Inputs (RS422):

Input Frequency: <1kHz

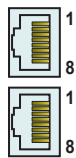
Enc. Alarm In:

5V / 1mA

Sensor Supply:

5VDC, max 100mA

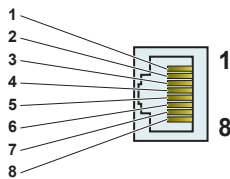
X17 - X18 REALTIME ETHERNET 10/100 MBIT/S



RJ-45

Nr		
X17	RT ETH In	Specification depends on RT-Bus Type. Please refer to interface documentation.
X18	RT ETH Out	

X19 SYSTEM



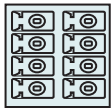
RJ-45

Nr	
1	(do not connect)
2	(do not connect)
3	RS232 RX
4	GND
5	GND
6	RS232 TX
7	(do not connect)
8	(do not connect)
case	Shield

Use isolated USB-RS232 converter (Art.-No. 0150-2473) for configuration over RS232

X33 SAFETY RELAYS (ONLY FOR -1S)

X33. 4/8 Ksr+
X33. 3/7 Ksr-
X33. 2/6 Ksr f+
X33. 1/5 Ksr f-



X33 STO RELAYS

Spring cage
connector

Nr		
4 / 8	Ksr +	Safety Relay 1 / 2 Input positive
3 / 7	Ksr -	Safety Relay 1 / 2 Input negative
2 / 6	Ksr f+	Safety Relay 1 / 2 feedback positive
1 / 5	Ksr f-	Safety Relay 1 / 2 feedback negative



- » Use 60/75°C copper conductors only
- » Conductor cross-section max. 1.5 mm²
- » Stripping length: 10 mm
- » Never connect the safety relays to the logic supply of the drive!

S1 - S2 ADDRESS SELECTORS



S1 (5...8)	Bus ID High (0 ... F). Bit 5 is the LSB, bit 8 the MSB.
S2 (1...4)	Bus ID Low (0 ... F). Bit 1 is the LSB, bit 4 the MSB

Setting the ID high & low to FF resets the drive to manufacturer settings!

The use of these switches depends on the type of fieldbus which is used.
Please see the corresponding manual for further information.

S5 BUS TERMINATION



Default position
View: X13 Connector is left
next to S5 switch.

S5	Bootstrap (Internal use only)
----	-------------------------------

LEDs STATE DISPLAY

Error  24VOK
Warn  EN

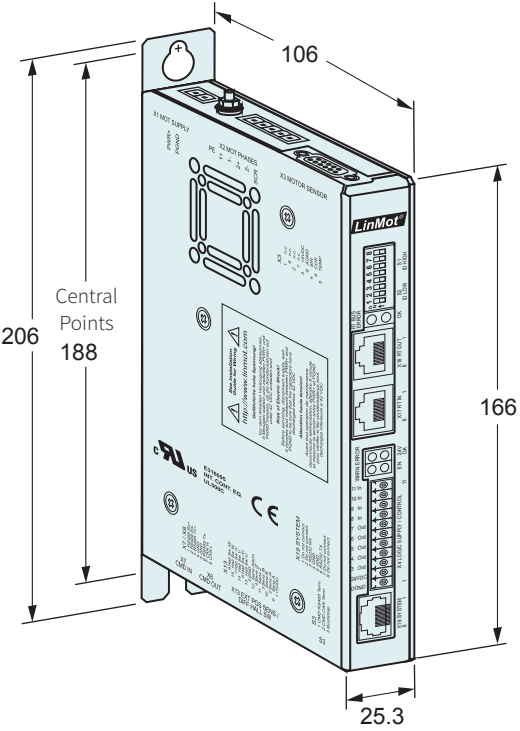
24VOK	Green	24V Logic Supply OK
En	Yellow	Motor Enabled / Error Code Low Nibble
Warn	Yellow	Warning / Error Code High Nibble
Error	Red	Error

RT BUS LEDs

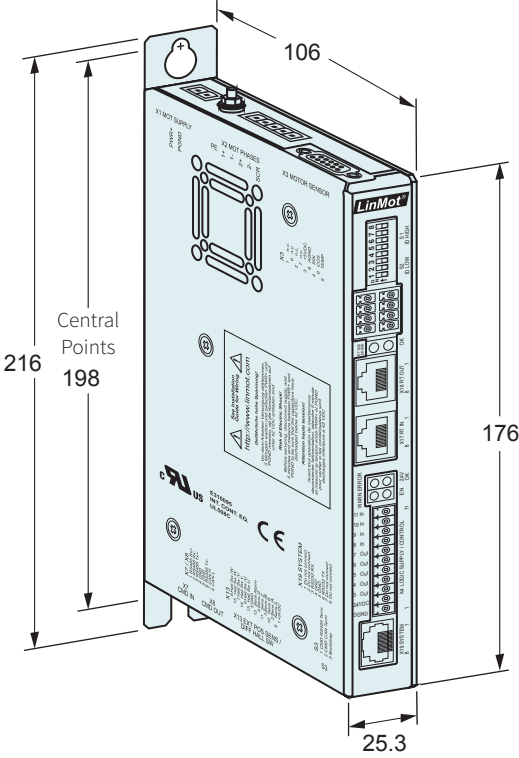
BUS  BUS
Error  OK

BUS OK	Green	OK
BUS Error	Red	Error

The use of these LEDs depends on the type of fieldbus which is used.
Please see the corresponding manual for further information.



C1250-...-0S



C1250-...-1S

Dimensions in mm
Mounting points for M5 screws

Servo Drive Series		C1250-...-0S	C1250-...-1S
Width	mm (in)	106 (4.2)	106 (4.2)
Height	mm (in)	166 (6.5)	176 (6.9)
Height with fixings	mm (in)	206 (8.1)	216 (8.5)
Depth	mm (in)	25.3 (1.0)	25.3 (1.0)
Weight	g (lb)	630 (1.4)	700 (1.54)
Mounting Screws		2 x M5	2 x M5
Mounting Distance between screw holes	mm (in)	168 (6.61)	188 (7.4)
Case IP Code	IP	20	
Storage temperature	°C	-25...40	
Transport temperature	°C	-25...70	
Operating temperature	°C	0...40 at rated date 40...50 with power derating	
Relative humidity		95% (non-condensing)	
Pollution	IEC/EN 60664-1	Pollution degree 2	
Shock resistance (16 ms)	-1S option		3.5g
Vibration resistance (10-200Hz)	-1S option		1g
Max. case temperature	°C	70	
Max. power dissipation	W	30	
Mounting place		in the control cabinet	
Mounting position		vertical	
Distance between Drives	mm (in)	Without Power Derating: 20 (0.8) left/right / 50 (2) top/bottom With Power Derating: 5 (0.2) left/right / 20 (0.8) top/bottom	

Servo Drives		
Item	Description	Part Number
C1250-PN-XC-0S-000	ProfiNet Drive (72V/25A)	0150-1888
C1250-PD-XC-0S-000	ProfiNet ProfiDrive (72V/25A)	0150-2618
C1250-EC-XC-0S-000	EtherCAT Drive (72V/25A)	0150-1884
C1250-DS-XC-0S-000	EtherCAT CoE Drive (72V/25A)	0150-2415
C1250-SE-XC-0S-000	EtherCAT SoE Drive (72V/25A)	0150-1897
C1250-IP-XC-0S-000	Ethernet/IP Drive (72V/25A)	0150-1886
C1250-PL-XC-0S-000	Powerlink Drive (72V/25A)	0150-1885
C1250-SC-XC-0S-000	Sercos III Drive (72V/25A)	0150-1887
C1250-LU-XC-0S-000	ETHERNET LinUDP Drive (72V/25A)	0150-2491
C1250-PN-XC-1S-000	Profinet Drive (72V/25A), STO	0150-2348
C1250-PD-XC-1S-000	ProfiNet ProfiDrive (72V/25A), STO	0150-2619
C1250-EC-XC-1S-000	EtherCAT Drive (72V/25A), STO	0150-2345
C1250-DS-XC-1S-000	EtherCAT CoE Drive (72V/25A), STO	0150-2416
C1250-SE-XC-1S-000	EtherCAT SoE Drive (72V/25A), STO	0150-2350
C1250-IP-XC-1S-000	Ethernet/IP Drive (72V/25A), STO	0150-2346
C1250-PL-XC-1S-000	Powerlink Drive (72V/25A), STO	0150-2347
C1250-SC-XC-1S-000	Sercos III Drive (72V/25A), STO	0150-2349
C1250-LU-XC-1S-000	ETHERNET LinUDP Drive (72V/25A), STO	0150-2492

Accessories		
Item	Description	Part Number
DC01-CX000-0S/X1/X4	Connector set C1250-...-0S (X1, X4)	0150-3527
DC01-CX000-1S/X1/X4/X33	Connector set C1250-...-1S (X1, X4, X33)	0150-3528
DC01-C1X00/X1	Drive Connector for PWR 72DC Input	0150-3525
DC01-CX000-X2	Motor connector (X2)	0150-3526
DC01-Signal/X4	Drive Connector 24VDC & Logic	0150-3447
DC01-Safety/X33	Drive Connector Safety	0150-3451

SERIES E1200



- ✓ Absolute / relative positioning commands
- ✓ Limited jerk motion commands
- ✓ Time Curves
- ✓ Real Time (Streaming)
- ✓ Synchronous control (Drive profiles)
- ✓ Master Encoder Synchronization (In/Out)
- ✓ PLC or Stand-Alone Solutions
- ✓ Industrial Ethernet Configuration / Remote Access Ethernet
- ✓ Digital and Analog IO's
- ✓ Interface for optional incremental and absolute sensor
- ✓ Position Encoder Simulation (RS 422)
- ✓ Master / Slave Solutions
- ✓ ± 10 VDC Force / Speed Control
- ✓ Supports Plug and Play
- ✓ CE

Servo Drive E1200

Series E1200 Servo Drives are modular axis drives, with 32-bit position resolution and an integrated power stage, for linear and rotary motors.

The drives are suitable for simplest, standard, and high-end positioning tasks, across the entire force range of the LinMot product range.



CONNECTION TO MACHINE DRIVE

The Series E1200 Servo Drives can be actuated by machine controls from many manufacturers or brands, via digital inputs and outputs, RS232 or RS485 serial interface, CanBus CANopen and DeviceNet interfaces, Profibus DP, or industrial ETHERNET.

PROCESS AND SAFETY INTERFACES

Fast process interfaces for direct processing of sensor signals are available as freely programmable analog and digital inputs, a fast trigger input, and a capture input.

The safe pulse inhibitor on Servo Drive with fieldbus interfaces or industrial ETHERNET allows safe stop of the drives via control signals, per EN 954-1, without interrupting the power supply.

LOGIC AND POWER SUPPLY

The Servo Drives have two separate power supply inputs for the logic and power elements.

In an E-stop and safe stop of the drive, only the power element supply is cut off from the drive. The logic supply and the drive continue to run.

This has the advantage that the drive and linear motor do not need to be reinitialized when the machine is restarted, since all process data, including the current position of the linear motor, are still up to date.

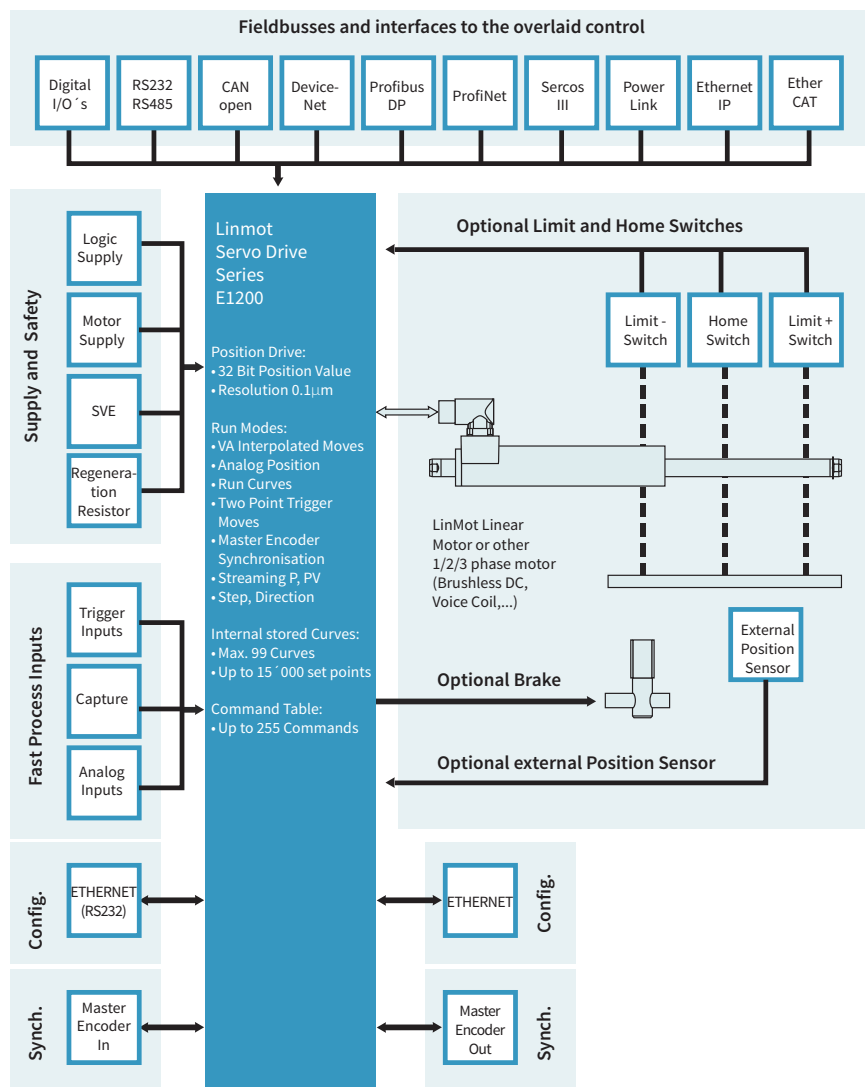
System Integration

Flexible hardware enables control of many 1/2/3- phase motors. Thus, low-power rotary servomotors, such as brushless DC motors, can be integrated in the same controls concept.

Additionally, the drives can be equipped with optional peripherals, such as reference and end stop switches, high-precision external position sensors, or a mechanical holding brake.

Series E1200 Servo Drives have analog and digital inputs and outputs, serial interfaces, fieldbusses, and ETHERNET connections. The user is therefore not dependent on the selection of the overlaid drive. An appropriate interface is available, with associated protocols, for any PLC or IPC solution.

With flexibility and a compact form factor, LinMot Series E1200 Servo Drives provide a complete solution for a flexible drive concept in single and multiple axes applications, with linear motors and other actuators.



MASTER ENCODER

For synchronization to a mechanical master shaft, or a rotating main drive, the Axis (linear motors and rotary motors) can be coupled to an electronic main shaft via the Master Encoder Interface.

The encoder signal from the main shaft can be passed through by the Master Encoder Interface, so that any number of linear motors can be synchronized to the main shaft.

MOTOR INTERFACES

E1200 Servo Drives provide all necessary interfaces to operate linear or rotary motors with optional external peripherals, such as end position and reference switches, a mechanical brake, or a high-resolution external position sensor.

In special applications, two drives can be synchronized with each other using the synchronization interface in master booster mode.

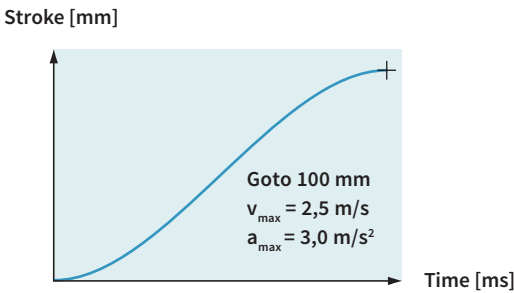
CONFIGURATION

Parameterization and configuration of the Servo Drive is done via the Ethernet interface on the front side for simultaneous configuration of several drives.

LinMot Talk user-friendly PC software is available for configuration. In addition to online documentation, LinMot Talk provides extensive debugging tools, such as an oscilloscope and an error inspector, for simple and rapid start-up of the Axis.

Fieldbus and ETHERNET drives can also be configured directly by the overlaid control.

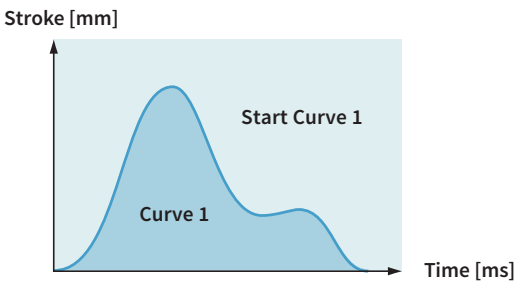
INTERPOLATED MOVES



For direct position targets, using absolute or relative positioning, the desired position is reached using acceleration and velocity-limited motion profiles or jerk optimized profiles (jerk limited and Bestehorn). Positioning commands can be invoked via the serial interfaces, CANopen, DeviceNet, Profibus, Ethernet or a trigger input.

Stroke range:	±100 m
Position Resolution:	0.1 µm (32Bit)
Velocity Resolution:	1.0 µm/s (32Bit)
Acceleration Resol.:	10.0 µm/s² (32Bit)

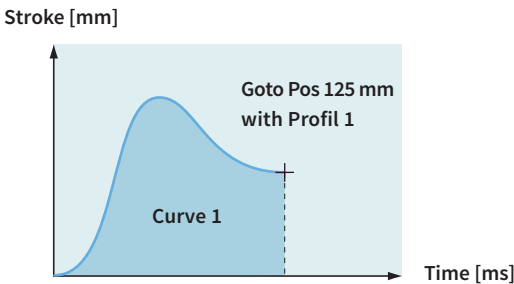
TIME CURVES



Up to 100 different time curves can be stored Series E1200 drives, with up to 16,000 individual waypoints. The motor can thus travel along time curves of any complexity, such as those generated by CAD programs and stored in the drive (Excel CSV format). The time curves can be invoked via the serial interface, fieldbusses, ETHERNET, or the trigger input.

Stroke range:	±100m
Position Resolution:	0.1 µm (32Bit)
Motion profiles:	Max. 100 Time Curves
Curve points:	Max. 16'000 points

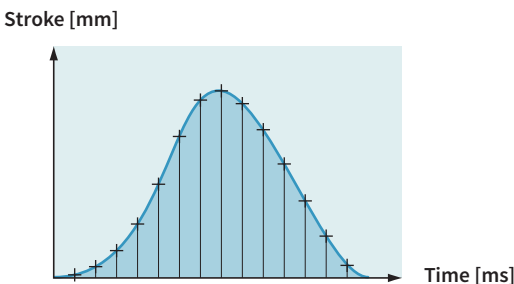
PROFIED MOVES



For travel to an absolute position, or shifting by a relative position, any desired motion rules can be stored besides the VA interpolator. They are stored in the drive as motion profiles (Excel CSV format). The positions can be approached, for example, with a sinusoidal motion to optimize power loss, or special reverse optimized motion profiles.

Stroke range:	±100m
Position Resolution:	0.1 µm (32Bit)
Motion profiles:	Max. 100 Time Curves
Curve points:	Max. 16'000 points

SETPOINT STREAMING



Overlaid NC drives with fieldbus or ETHERNET interfaces communicate with the Servo Drives via "Position Streaming". The position and velocity calculated in the overlaid control is transmitted to the Servo Drive cyclically. The P, PV, or PVT mode is available for this transmission.

Position Resolution:	32 Bit
Velocity Resolution:	32 Bit
Interpolator:	10 kHz
Cycle times:	0.4 - 5 ms

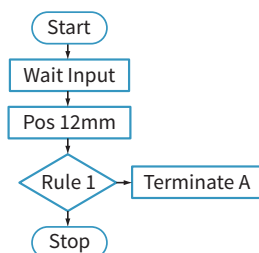
EASY STEPS

Input 1	Pos 125 mm
Input 2	Pos 250 mm
Input 3	Curve 1
Input 4	Pos -30 mm
Input 5	Pos +12,5 mm
Input 6	Curve 2
Input 7	Pos 2 mm
Input 8	Pos -12,5 mm

With the Easy Steps function, up to 8 positions or independent travel commands can be stored on the drive, and addressed via 8 digital inputs or fieldbus interfaces/ETHERNET.

Digital inputs:	max. 8
Interface:	X4
Scanning rate:	200 µsec

COMMAND TABLE

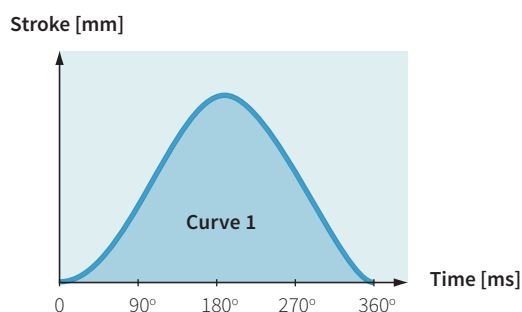


Entire motion sequences with up to 255 individual motion commands can be stored in the Command Table. This is primarily advantageous if complete motion sequences need to be executed very quickly, without dead time from the overlaid drive. In the Command Table, the programmer has access to all motion commands, internal parameters, and digital inputs and outputs.

Commands:	max. 255
Cycle time:	100 µsec

MASTER ENCODER SYNCHRONIZATION (MT)

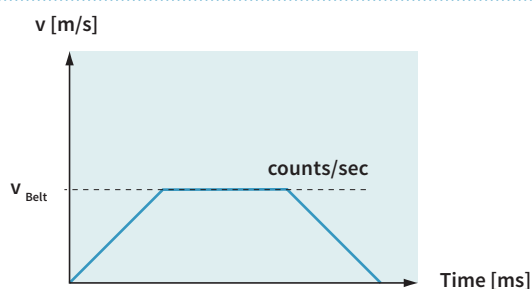
11



For synchronization to an external main or master shaft, the linear motor travels along the motion profiles stored in the drive, at the machine speed (machine angle 0...360°). Using this function, mechanical cam discs can be replaced with highly dynamic linear motors. The motion profiles can be freely defined, and the correct motion profile can be invoked during product changeover with no changeover time.

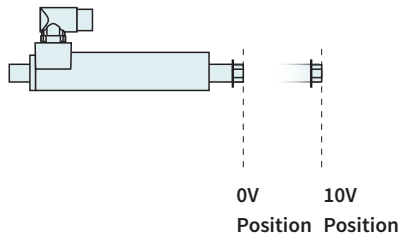
Motion profiles:	Max. 100 curve profiles
Curve points:	Max. 16'000 points
Encoder Counter:	32 Bit
Encoder Input:	A/B/Z (RS422)
Max. counting frequency	Max. 4.5 MHz

BELT SYNCHRONIZATION



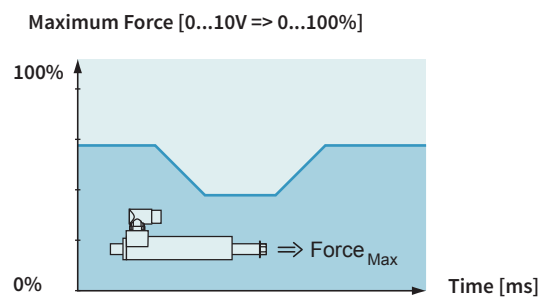
Synchronization to a belt speed can be done using the Master Encoder Interface or Step/Direction/ Zero interface. Applications such as the "flying saw", synchronous loading or unloading, synchronous filling or labeling of bottles or containers on a conveyor belt, and many other applications can be implemented in this way.

Encoder Counter:	32 Bit
Encoder Input:	A/B/Z (RS422), max. 5 MHz
Max. counting frequency	STEP/DIR/ZERO Max. 4.5 MHz

ANALOG POSITION

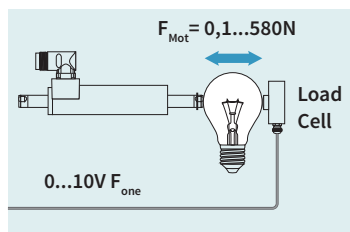
For an analog position target, the linear motor travels to a position proportional to the input voltage. The position is either scanned continuously, or only after a rising edge of the trigger signal. In order to prevent uncontrolled jumps in position, the motor travels to the positions with a programmable maximum acceleration and velocity (VA interpolator).

Inputs:	Analog Input X4 or X20
Voltage range:	0-10VDC or $\pm 10V$
Resolution:	12 Bit
Scanning rate:	$\geq 100 \mu\text{sec}$ (adjustable)

EASY STEPS PARAMETER SCALE

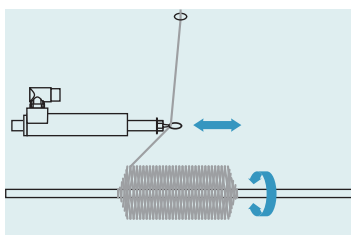
Easy Steps provide the ability to parameterize internal parameters using two analog inputs. If, for example, the maximum motor current is read at an analog input, then the maximum motor force can be provided as analog for freely programmable joining processes.

Inputs:	2 x Analog (X4.4, X4.7)
Voltage range:	0-10VDC
Resolution:	12 Bit
Scanning rate:	200 μsec

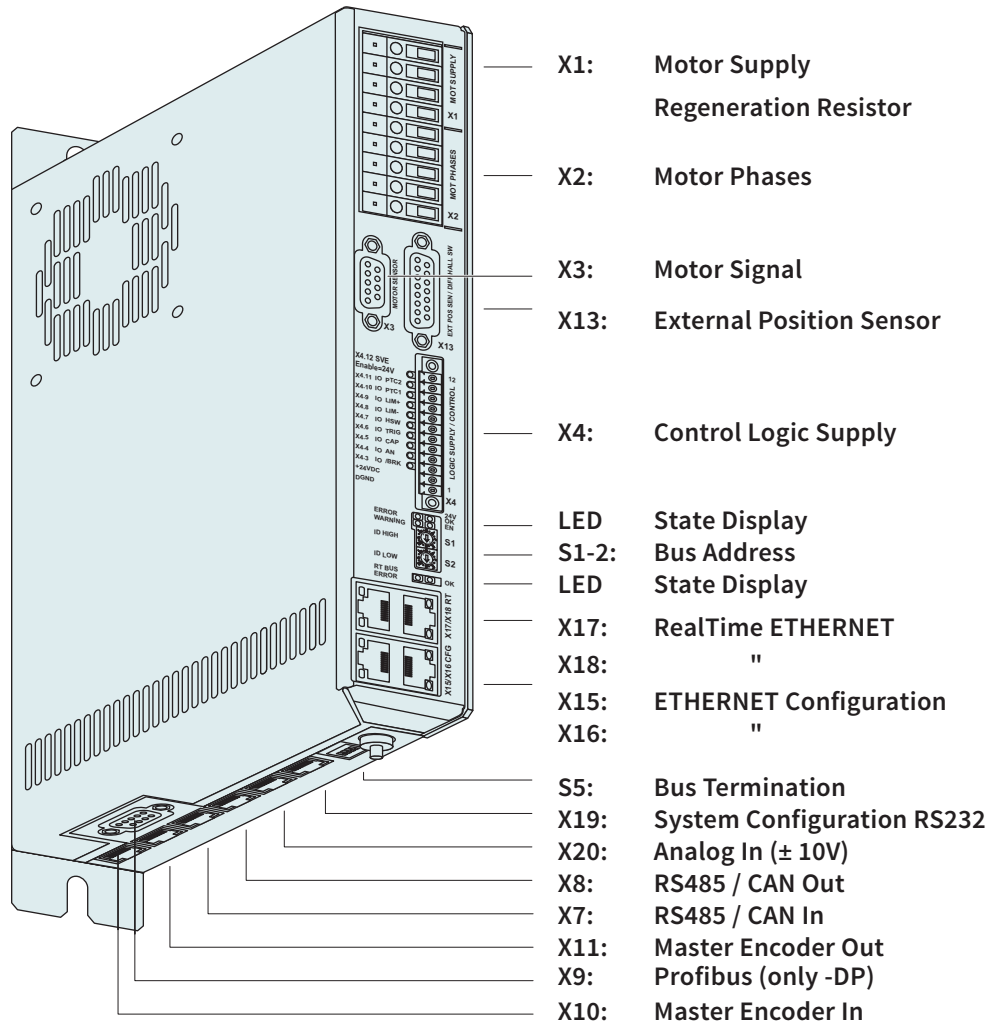
CLOSED LOOP FORCE CONTROL

Using the force control technology function, precise joining processes can be implemented reliably and reproducibly with high-precision force control. For force control, the current motor force is measured with a load cell and controlled in the drive. Joining process or quality checks with high requirements for applied force can be implemented.

Analog Input:	0-10V or $\pm 10V$
Resolution:	12 Bit
Min. Force Resolution:	0.1N

WINDING APPLICATION

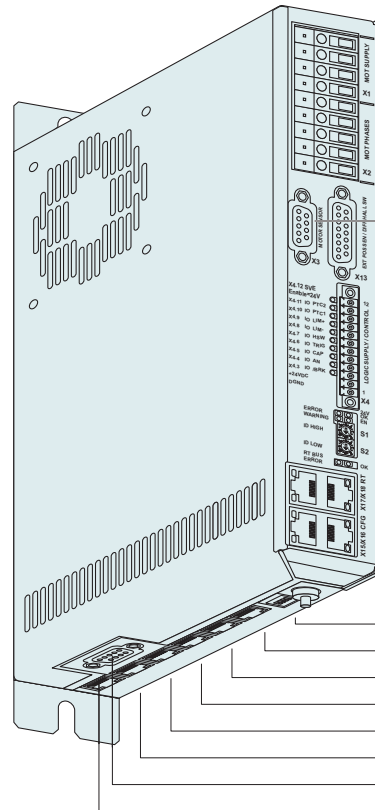
For winding textile yarns, glass fiber optics, or wires, a complete functional block is available that controls the entire sequence of a complete winding process.



Interfaces	E1250-PL-UC	E1250-PN-UC	E1250-SC-UC	E1250-IP-UC	E1250-LU-UC	E1250-EC-UC	E1250-SE-UC	E1250-DS-UC	E1230-DP-UC	E1200-GP-UC
CANopen										•
LinRS										•
POWERLINK	•									
PROFINET		•								
sercos			•							
sercos over EtherCAT							•			
ETHERNET IP				•						
LinUDP					•					
EtherCAT						•				
ETHERCAT CiA402								•		
PROFIBUS-DP									•	

E1250-PL-UC
E1250-PN-UC
E1250-PD-UC
E1250-SC-UC
E1250-IP-UC
E1250-LU-UC
E1250-EC-UC
E1250-SE-UC
E1250-DS-UC
E1200-GP-UC

- » Absolute & Relative Positioning
- » Travel Along Time Curves
- » Positioning using Motion Profiles
- » Internally stored Motion Commands
- » Internally stored Motion Sequences
- » Master Encoder Synchronization
- » Synchronization to Belt Speed
- » Position Streaming
- » Analog Position Target
- » Analog Parameter Scaling
- » Winding Function Block
- » Force Control Technology Function
- » Customer-Specific Functions



- X1: Motor Supply
Regeneration Resistor
- X2: Motor Phases
- X3: Motor Signal
- X13: External Position Sensor
- X4: Control Logic Supply
- LED S1-2: State Display
Bus Address
State Display
- X17: RealTime ETHERNET
- X18: "
- X15: ETHERNET Configuration
- X16: "
- S5: Bus Termination
- X19: System Configuration RS232
- X20: Analog In ($\pm 10V$)
- X8: RS485 / CAN Out
- X7: RS485 / CAN In
- X11: Master Encoder Out
- X9: Profibus (only -DP)
- X10: Master Encoder In

INDUSTRIAL ETHERNET

Series E1200 drives allow integration of LinMot linear motors in controls concepts with industrial ETHERNET interfaces. The user can integrate Series E1200 drives regardless of the provider of the overlaid control.

LinMot drives are available with common industrial ETHERNET protocols. Since all ETHERNET drives have the same motion command interface, and the control and status word are identical, software blocks that have been implemented once can be transferred to other drives without a problem.

TECHNICAL DATA

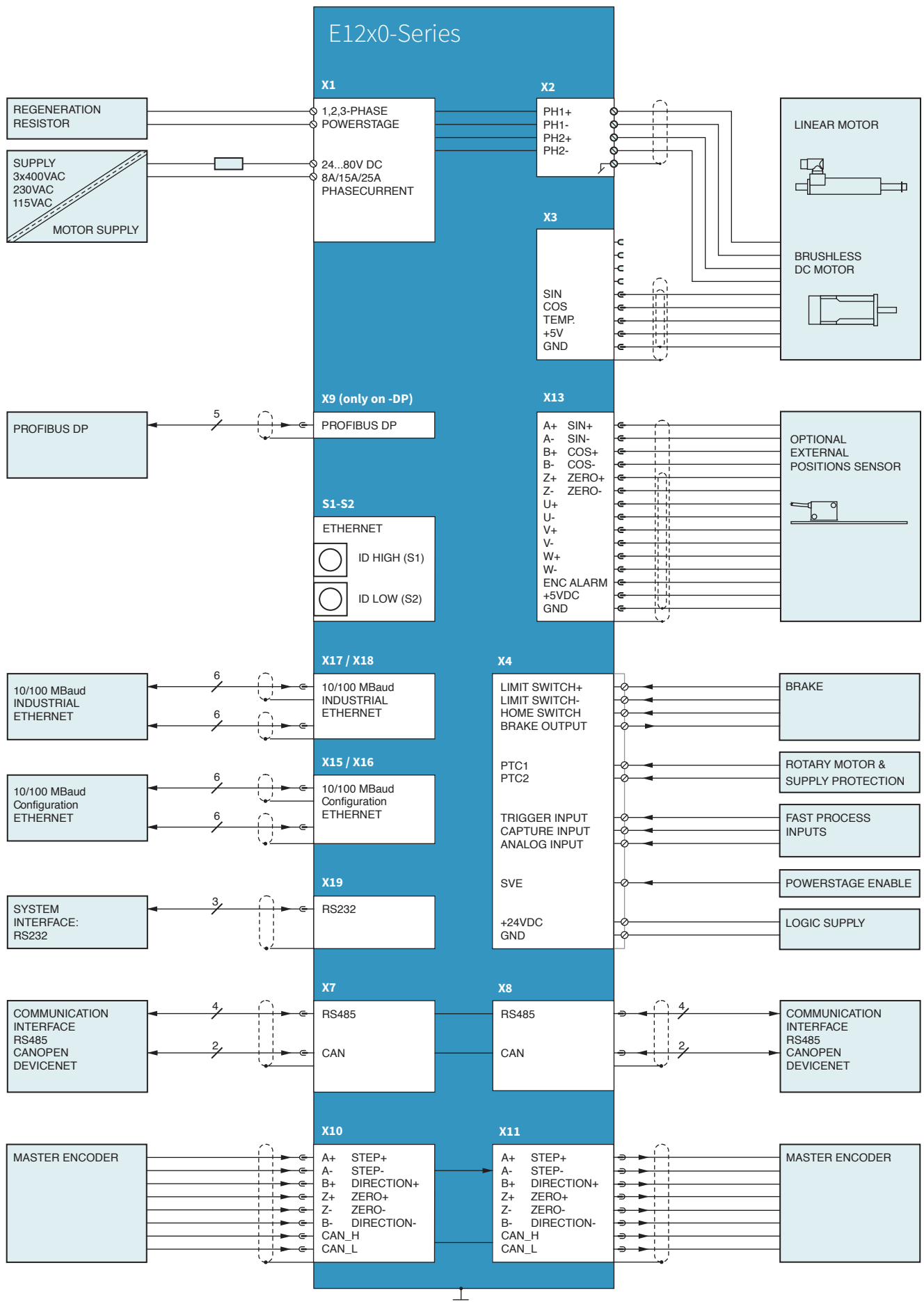
Series E1200 Servo Drives support the following industrial ETHERNET protocols:

- » Profinet
- » ETHERNET IP
- » PowerLink
- » EtherCat
- » Sercos III

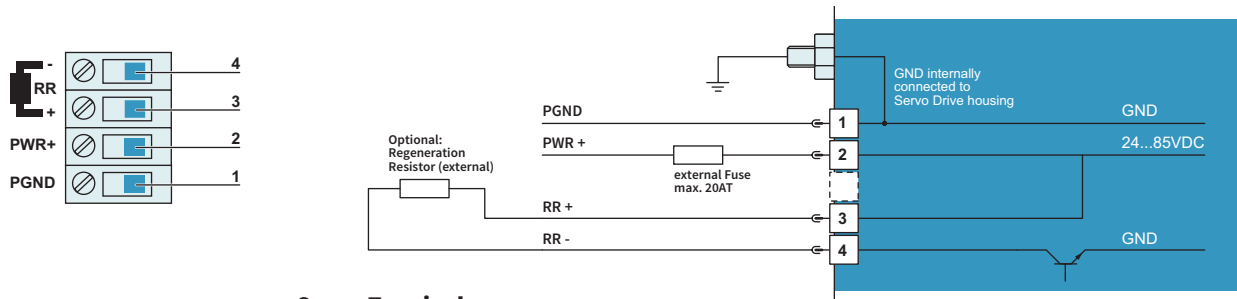
The appropriate drive is available for each protocol.

TECHNICAL DATA

Type: Realtime ETHERNET
Switch/Hub: Integrated 2-Port
Hub/Switch
Transfer rate: 10/100MBit/sec



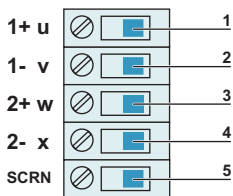
X1 MOTOR SUPPLY / REGENERATION RESISTOR



Screw Terminals:
External Regeneration Resistor (RR01-10/60, Art. Nr. 0150-3088)
External Fuse: max. 20AT
Supply nominal 72VDC (24...85VDC)
(See chapter Power Supply Requirements for compatible power supplies.)
Absolute max. Rating 72VDC +20%.

- If motor supply voltage is exceeds 90VDC, the drive will go into error state.
- » Tightening torque: 0.5 - 0.6 Nm (4.4 – 5.3 lbin)
 - » Screw thread: M2.5
 - » Use 60/75°C copper conductors only
 - » Conductor cross-section: use only 2.5 mm² / AWG 14
 - » Stripping length: 13-15 mm
 - » Max. length: 4 m

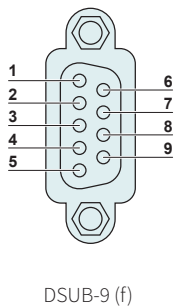
X2 MOTOR PHASES



Nr	Designation	LinMot Linear Motor	Color	3-Phase-Motor
1	PH1+ /U	Motor Phase 1+	red	Motor Phase U
2	PH1- /V	Motor Phase 1-	pink	Motor Phase V
3	PH2+ /W	Motor Phase 2+	blue	Motor Phase W
4	PH2- /X	Motor Phase 2-	grey	Motor Phase X
5	SCR N	Shield		

- Screw Terminals:**
- » Tightening torque: 0.5 - 0.6 Nm (4.4 – 5.3 lbin)
 - » Screw thread: M2.5
 - » Use 60/75°C copper conductors only
 - » Conductor cross-section: 0.5 – 2.5 mm² (depends on Motor current) / AWG 21 -14
 - » Stripping length 13-15 mm

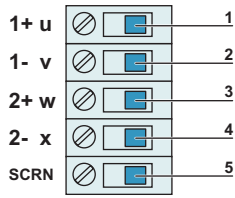
X3 MOTOR ENCODER



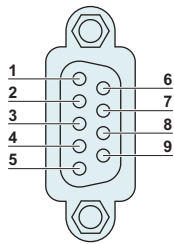
Nr	LinMot Linear Motor	3-Phase-Motor
1		
2		
3	+5VDC	+5VDC (Hall Supply)
4	Sensor Sine	Hall 1
5	Temperature In	Hall 3
6		
7		
8	AGND	AGND (Hall Supply)
9	Sensor Cosine	Hall 2
Case	Shield	



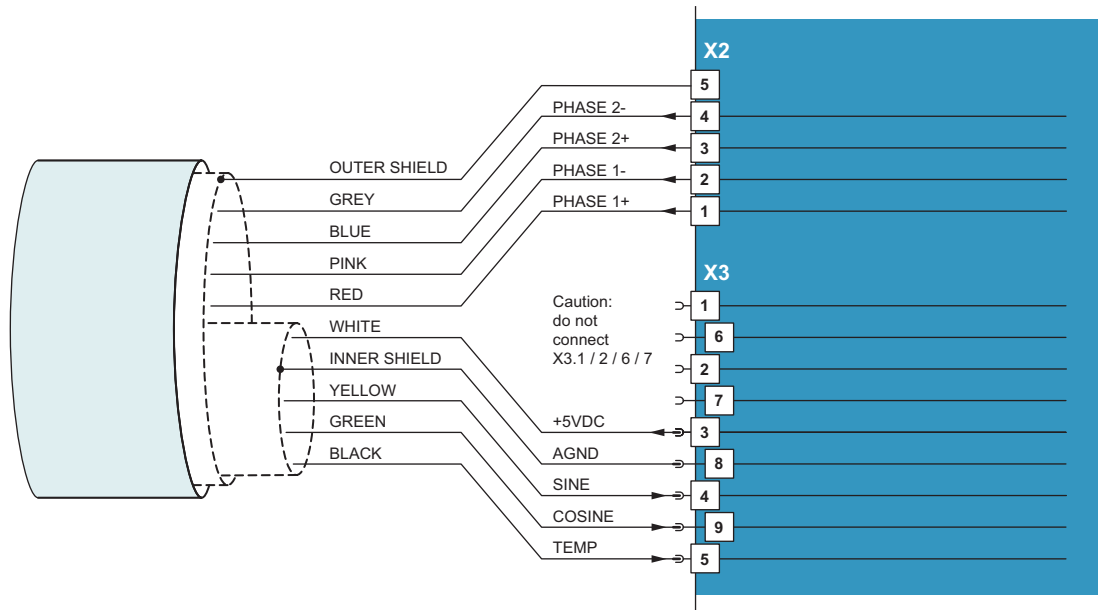
Use +5VDC (X3.3) and AGND (X3.8) only for motor internal hall sensor supply (max. 100mA).
Caution :
Do NOT connect AGND (X3.8) to ground or earth!



X2: Screw Terminals

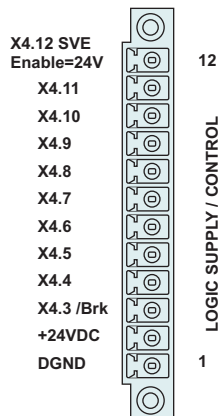


X3: DSUB-9 (f)

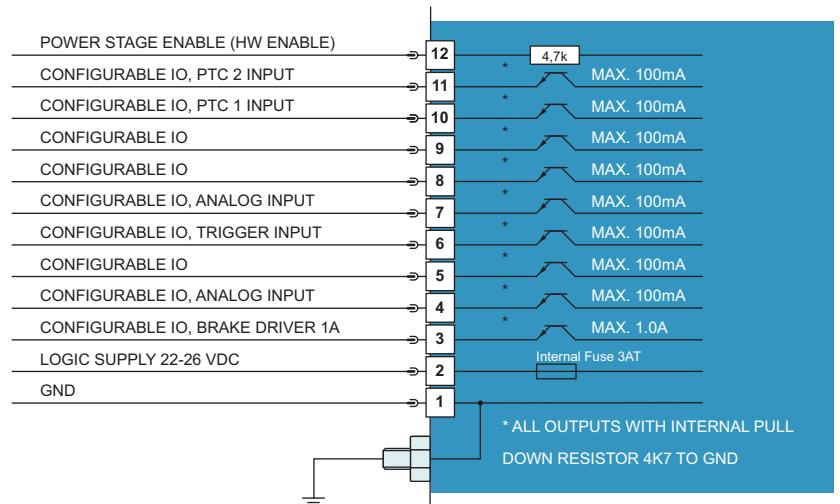


X4: 12PIN

LOGIC CONTROL / SUPPLY



Phoenix MC1,5/12-STF-3,5
(delivered with drive)



Inputs (X4.3 .. X4.12):

24V / 5mA (Low Level: -0.5 to 5VDC, High Level: 15 to 30VDC)

Outputs (X4.4 .. X4.11):

24V / max.100mA, Peak 370mA (will shut down if exceeded)

Brake Output (X4.3):

24V / max.1.0A

Input X4.12: SVE (PowerStage Enable) must be high for enabling the power stage). If it goes low for more than 0.5ms the PWM generation of the power stage is disabled by hardware.

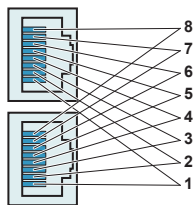
Supply 24V / typ. 1.1A / max. 2.1A (if all outputs "on" with max. load and brake.)

- » Tightening torque: min 0.22Nm
- » Screw thread: M2
- » Use 60/75°C copper conductors only
- » Conductor cross-section: max. 1.5mm²
- » Internal Fuse (F2):3AT (slow blow, Schurter OMT125, 3404.0118.xx, UL File Number: E41599)



CAUTION: For continued protection against risk of fire, replace only with same type and rating of fuse.

X7 - X8 RS485/CAN

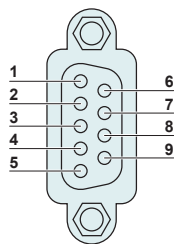


RJ-45

Nr		
1	RS485_Rx+	A
2	RS485_Rx-	B
3	RS485_Tx+	Y
4	GND	
5	GND	
6	RS485_Tx-	Z
7	CAN_H	
8	CAN_L	
Case	Shield	

- » Use twisted pair (1-2, 3-6, 4-5, 7-8) cable for wiring.
- » The built in CAN and RS485 terminations can be activated by S5.2 and S5.3.
- » X7 is internally connected to X8 (1:1 connection)

X9 PROFIBUS DP (ONLY AVAILABLE ON E1230-DP-UC)

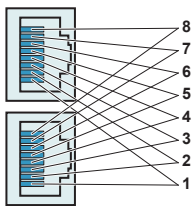


DSUB-9 (f)

Nr		
1	-	
2	-	
3	RxD/TxD-P	
4	CNTR-P	
5	GND	(isolated)
6	+5V	(isolated)
7	-	
8	RxD/TxD-N	
9	-	
Case	Shield	

Max. Baud rate: 12 Mbaud

X10-X11 MASTER ENCODER IN (X10) / MASTER ENCODER OUT (X11)



RJ-45

Nr	Incremental	Step/Direction	EIA/TIA 568A colors
1	A+	Step+	Green/White
2	A-	Step-	Green
3	B+	Direction+	Orange/White
4	Z+	Zero+	Blue
5	Z-	Zero-	Blue/White
6	B-	Direction-	Orange
7	CAN_H	CAN_H	Brown/White
8	CAN_L	CAN_L	Brown
Case	Shield	Shield	

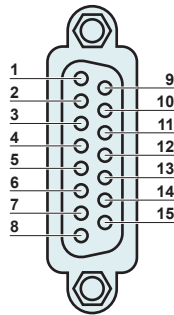
Use twisted pair (1-2, 3-6, 4-5, 7-8) cable for wiring.

Master Encoder Inputs: Diff. RS422, max. counting frequency 25 Mcounts/s, quadrature evaluation, 40ns edge separation

Master Encoder Outputs: Amplified RS422 differential signals from Master Encoder IN (X10)
The CAN bus can be terminated with S5.4.
All devices, which are connected to X10/X11 must be referenced to the same ground.

X13

EXTERNAL POSITION SENSOR DIFFERENTIAL HALL SWITCHES / SSI



DSUB-15 (f)

Nr		ABZ with Hall Switches	Sin / Cos 1 Vpp	SSI (only position recovery)
1		+5V DC	+5V DC	+5VDC
	9	A+	Sin+	
2		A-	Sin-	
	10	B+	Cos+	
3		B-	Cos-	
	11	Z+		Data+
4		Z-		Data-
	12	Encoder Alarm	Encoder Alarm	
5		GND	GND	GND
	13	U+		
6		U-		
	14	V+		
7		V-		
	15	W+		Clock+
8		W-		Clock-
Case		Shield	Shield	Shield

Position Encoder Inputs (RS422):

Encoder Simulation Outputs (RS422):

Differential Hall Switch Inputs (RS422):

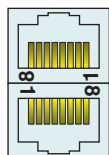
Enc. Alarm In:

Sensor Supply:

Max. counting frequency: 25 Mcounts/s with quadrature decoding, 40ns edge separation
 Max Output Frequency: 2.5MHz, 5 M counts/s with quadrature decoding, 200ns edge separation
 Input Frequency: <1kHz
 5V / 1mA
 5VDC max 100mA

X15-X16

ETHERNET CONFIGURATION 10/100MBIT/S

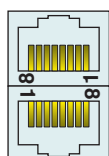


RJ-45

X15	Internal 2-Port 10BASE-T and 100BASE-TX Ethernet Switch with Auto MDIX. LEDs on the lower side of the device indicate "Link/Activity" per port, the upper ones are not used.
X16	

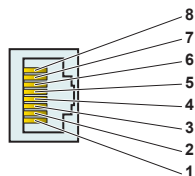
X17-X18

REALTIME ETHERNET 10/100 MBIT/S



RJ-45

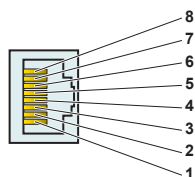
X17 RT ETH In	Specification depends on RT-Bus Type. Please refer to according documentation.
X18 RT ETH Out	

X19 RS232 CONFIGURATION

RJ-45

Nr	Description
1	Do not connect
2	Do not connect
3	RS232 RX
4	GND
5	GND
6	RS232 TX
7	Do not connect
8	Do not connect
case	Shield

Use isolated USB-RS232 converter (Art.-No. 0150-2473) for configuration over RS232.

X20 ANALOG IN (+-10V DIFFERENTIAL ANALOG INPUT)

RJ-45

Nr	Description
1	Do not connect
2	Do not connect
3	Analog In-
4	GND
5	GND
6	Analog In+
7	Do not connect
8	Do not connect
case	Shield

S5 BUS TERMINATION / ANIN2 PULL DOWN

S5

Switch	E1200
S5	Switch 1: AnIn2 Pulldown (4k7 Pulldown on X4.4). Set to ON, if X4.4 is used as digital Output. Switch 2: Termination Resistor for RS485 on CMD (120R between pin 1 and 2 on X7/X8) on/off Switch 3: CAN Termination on CMD (120R between pin 7 and 8 on X7/X8) on/off Switch 4: CAN Termination on ME (120R between pin 7 and 8 on X10/X11) on/off Factory settings: all switches "off"

LEDS STATE DISPLAY

24VOK	Green	24V Logic Supply OK
EN	Yellow	Motor Enabled / Error Code Low Nibble
Warn	Yellow	Warning / Error Code High Nibble
Error	Red	Error

RT BUS LEDS

BUS OK	Green	OK
BUS Error	Red	Error

The use of these LEDs depends on the type of fieldbus which is used.
Please see the corresponding manual for further information.

S1-2 ADDRESS SELECTORS / BUS TERMINATION

E12x0 V1



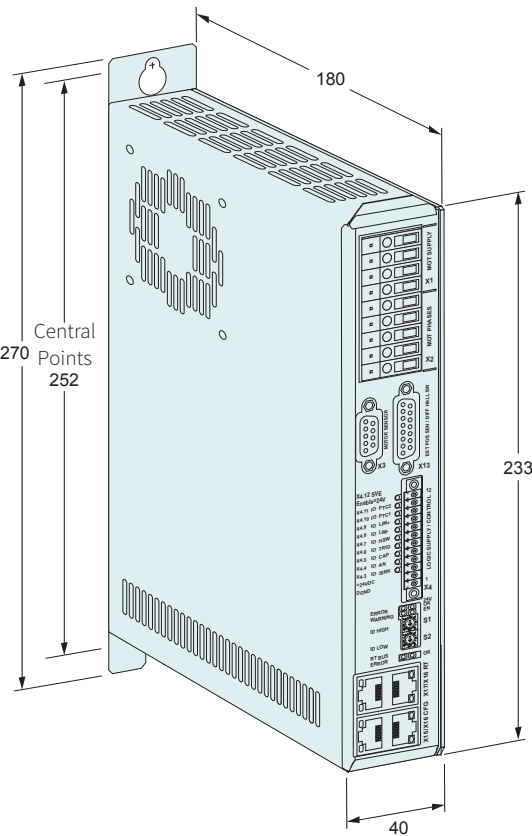
S1



S2

Switch	
S1	Bus ID High (0...F). Bit 5 is LSB, bit 8 MSB
S2	Bus ID Low(0...F). Bit 1 is LSB, bit 4 MSB

The use of these switches depends on the type of fieldbus which is used.
Please see the corresponding manual for further information.



Dimensions in mm

Servo Drive Series		E1200
Width	mm (in)	40 (1.6)
Height	mm (in)	270 (10.6)
Height without fixings	mm (in)	233 (9.2)
Depth	mm (in)	180 (7.1)
Weight	kg (lb)	1.5 (3.3)
Case IP Code	IP	20
Mounting screws	mm (in)	2 x M5
Mounting distance	mm (in)	252 (9.92)
Storage temperature	°C	-25...40
Transport temperature	°C	-25...70
Operating temperature	°C	0...40 at rated date 40...50 with power derating
Relative humidity		95% (non-condensing)
Max. case temperature	°C	65
Max. power dissipation	W	30
Distance between Drives	mm (in)	20 (0.8) left/right 50 (2) top/bottom

Servo Drives		
Item	Description	Part Number
E1250-PL-UC	POWERLINK Servo Drive 72VDC/32A	0150-1760
E1250-PN-UC	PROFINET Servo Drive 72VDC/32A	0150-1762
E1250-PD-UC	ProfiDrive Servo Drive 72VDC/32A	0150-2620
E1250-EC-UC	EtherCAT Servo Drive 72VDC/32A	0150-1763
E1250-SE-UC	sercos over EtherCAT Servo Drive 72VDC/32A	0150-1898
E1250-DS-UC	EtherCAT CoE Servo Drive 72VDC/32A	0150-2410
E1250-SC-UC	sercos Servo Drive 72VDC/32A	0150-1764
E1250-IP-UC	ETHERNET IP Servo Drive 72VDC/32A	0150-1761
E1250-LU-UC	LinUDP Servo Drive 72VDC/32A	0150-2493
E1230-DP-UC	PROFIBUS-DP Servo Drive 72VDC/32A	0150-1766
E1200-GP-UC	GENERAL PURPOSE Servo Drive 72VDC/32A	0150-1771

Accessories		
Item	Description	Part Number
Connector for X4	Connector MC 1,5/12-STF-3,5, delivered with drive	0150-3300

SERIES C1400



- ✓ Input voltage 230VAC
- ✓ 15A rms peak phase current
- ✓ Integrated Line Filter
- ✓ For LinMot P10 Linearmotors & AC servomotors
- ✓ Integrated Cooling Fan
- ✓ 100 programmable motion profiles
- ✓ 255 storable motion commands
- ✓ Interface for incremental or absolute sensors

Servo Drive Series C1400

Series C1400 Servo Drives are modular axis drives, with 32-bit position resolution and an integrated power stage 1x240VAC, for linear motors and rotary motors.

The drives are suitable for simplest, standard, and high-end positioning tasks.



CONNECTION TO MACHINE DRIVE

The Series C1400 Servo Drives can be actuated by machine controls from many manufacturers or brands, via digital inputs and outputs, or industrial ETHERNET.

PROCESS AND SAFETY INTERFACES

Fast process interfaces for direct processing of sensor signals are available as freely programmable analog and digital inputs, a fast trigger input, and a capture input.

The safety IO's on Servo Drives with the -1S option with industrial ETHERNET allows safe torque off (STO) of the drives via control signals, without interrupting the power supply.

LOGIC AND POWER SUPPLY

In an E-stop and safe stop of the drive, only the motor power supply is cut off from the drive. The logic supply and the drive continue to run.

This has the advantage that the drive and linear motor do not need to be reinitialized when the machine is restarted, since all process data, including the position of the linear motor are still up to date (as long as the logic supply is not turned off).

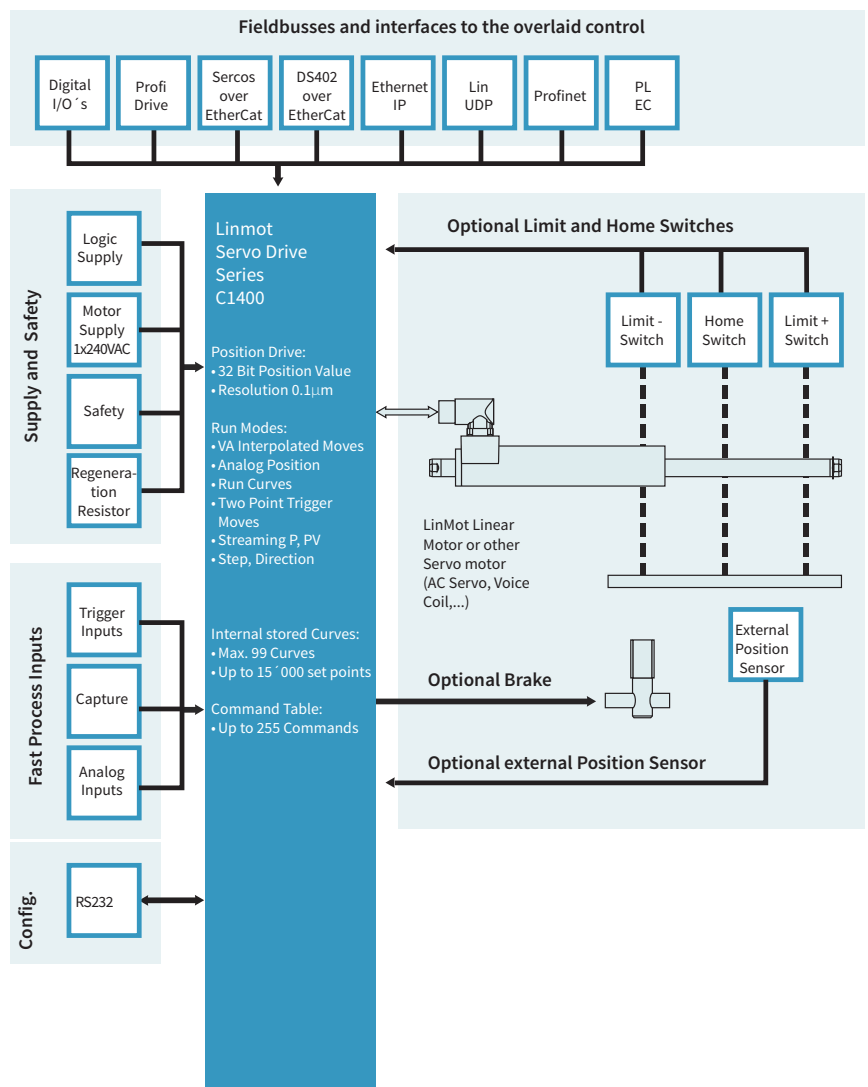
System Integration

Flexible hardware enables control of any 1/2/3- phase motors. Thus, low-power rotary servomotors, such as brushless DC motors, can be integrated in the same controls concept.

Additionally, the drives can be equipped with optional peripherals, such as reference and end stop switches, high-precision external position sensors, or a mechanical holding brake.

Series C1400 Servo Drives have analog and digital inputs and outputs and ETHERNET connections. The user is therefore not dependent on the selection of the overlaid drive. An appropriate interface is available, with associated protocols, for many PLC or IPC solutions.

With flexibility and a compact form factor, LinMot Series C1400 Servo Drives provide a complete solution for a flexible drive concept in single and multiple axes applications, with linear motors and other actuators.



MOTOR INTERFACES

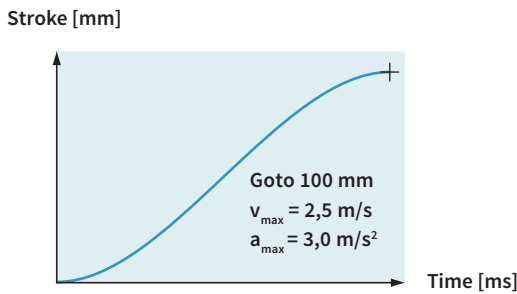
C1400 Servo Drives provide all necessary interfaces to operate linear or rotary motors with optional external peripherals, such as end position and reference switches, a mechanical brake, or a high-resolution external position sensor.

CONFIGURATION

LinMot Talk user-friendly PC software is available for configuration. In addition to online documentation, LinMot Talk provides extensive debugging tools, such as an oscilloscope and an error inspector, for simple and rapid start-up of the Axis.

Fieldbus and ETHERNET drives can also be configured directly by the overlaid control.

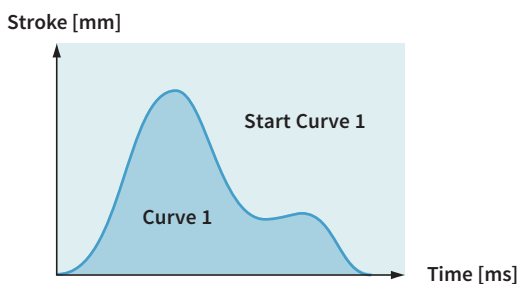
INTERPOLATED MOVES



For direct position targets, using absolute or relative positioning, the desired position is reached using acceleration and velocity-limited motion profiles or jerk optimized profiles (jerk limited and Bestehorn). Positioning commands can be invoked via the serial interfaces, CANopen, DeviceNet, Profibus, Ethernet or a trigger input.

Stroke range:	±100 m
Position Resolution:	0.1 µm (32Bit)
Velocity Resolution:	1.0 µm/s (32Bit)
Acceleration Resol.:	10.0 µm/s ² (32Bit)

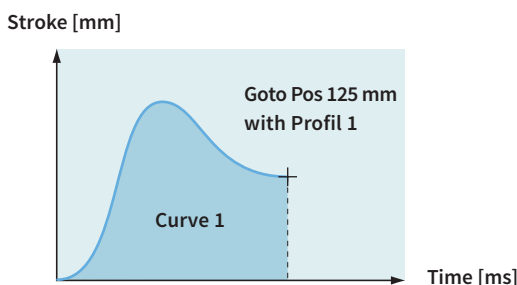
TIME CURVES



Up to 100 different time curves can be stored Series C1200 drives, with up to 16,000 individual waypoints. The motor can thus travel along time curves of any complexity, such as those generated by CAD programs and stored in the drive (Excel CSV format). The time curves can be invoked via the serial interface, fieldbuses, Ethernet, or the trigger input.

Stroke range:	±100m
Position Resolution:	0.1 µm (32Bit)
Motion profiles:	Max. 100 Time Curves
Curve points:	Max. 16'000 points

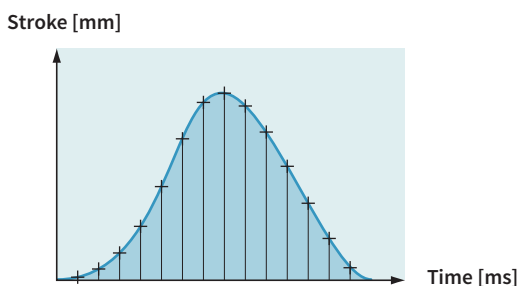
PROFILED MOVES



For travel to an absolute position, or shifting by a relative position, any desired motion rules can be stored besides the VA interpolator. They are stored in the drive as motion profiles (Excel CSV format). The positions can be approached, for example, with a sinusoidal motion to optimize power loss, or special reverse optimized motion profiles.

Stroke range:	±100m
Position Resolution:	0.1 µm (32Bit)
Motion profiles:	Max. 100 Time Curves
Curve points:	Max. 16'000 points

SETPOINT STREAMING



Overlaid NC drives with fieldbus or Ethernet interfaces communicate with the servo drives via "Position Streaming". The position and velocity calculated in the overlaid control is transmitted to the Servo Drive cyclically. The P, PV, or PVT mode is available for this transmission.

Position Resolution:	32 Bit
Velocity Resolution:	32 Bit
Interpolator:	8 kHz
Cycle times:	0.25 - 5 ms

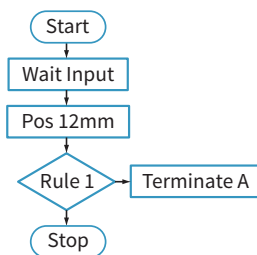
EASY STEPS

Input 1	Pos 125 mm
Input 2	Pos 250 mm
Input 3	Curve 1
Input 4	Pos -30 mm

With the Easy Steps function, up to 4 positions or independent travel commands can be stored on the drive, and addressed via 4 digital inputs or fieldbus interfaces/Ethernet.

Digital inputs:	max. 4
Interface:	X4
Scanning rate:	250 µsec

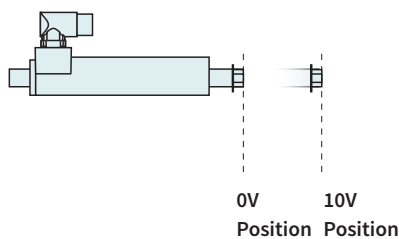
COMMAND TABLE



Entire motion sequences with up to 255 individual motion commands can be stored in the Command Table. This is primarily advantageous if complete motion sequences need to be executed very quickly, without dead time from the overlaid drive. In the Command Table, the programmer has access to all motion commands, internal parameters, and digital inputs and outputs.

Commands:	max. 254
Cycle time:	125 µsec

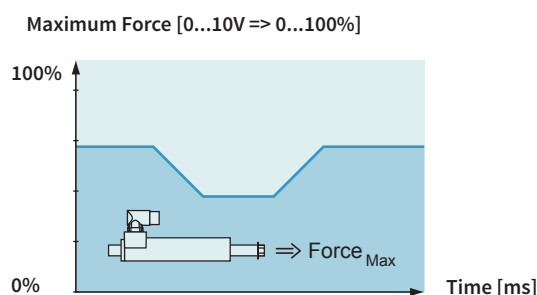
ANALOG POSITION



For an analog position target, the linear motor travels to a position proportional to the input voltage. The position is either scanned continuously, or only after a rising edge of the trigger signal. In order to prevent uncontrolled jumps in position, the motor travels to the positions with a programmable maximum acceleration and velocity (VA interpolator).

Inputs:	Analog Input X4
Voltage range:	0-10VDC or ±10V
Resolution:	12 Bit
Scanning rate:	≥125 µsec (adjustable)

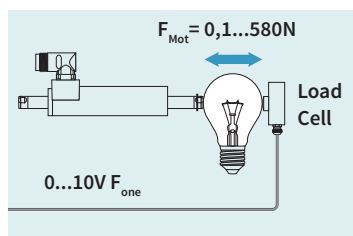
EASY STEPS PARAMETER SCALE



Easy Steps provide the ability to parameterize internal parameters using two analog inputs. If, for example, the maximum motor current is read at an analog input, then the maximum motor force can be provided as analog for freely programmable joining processes.

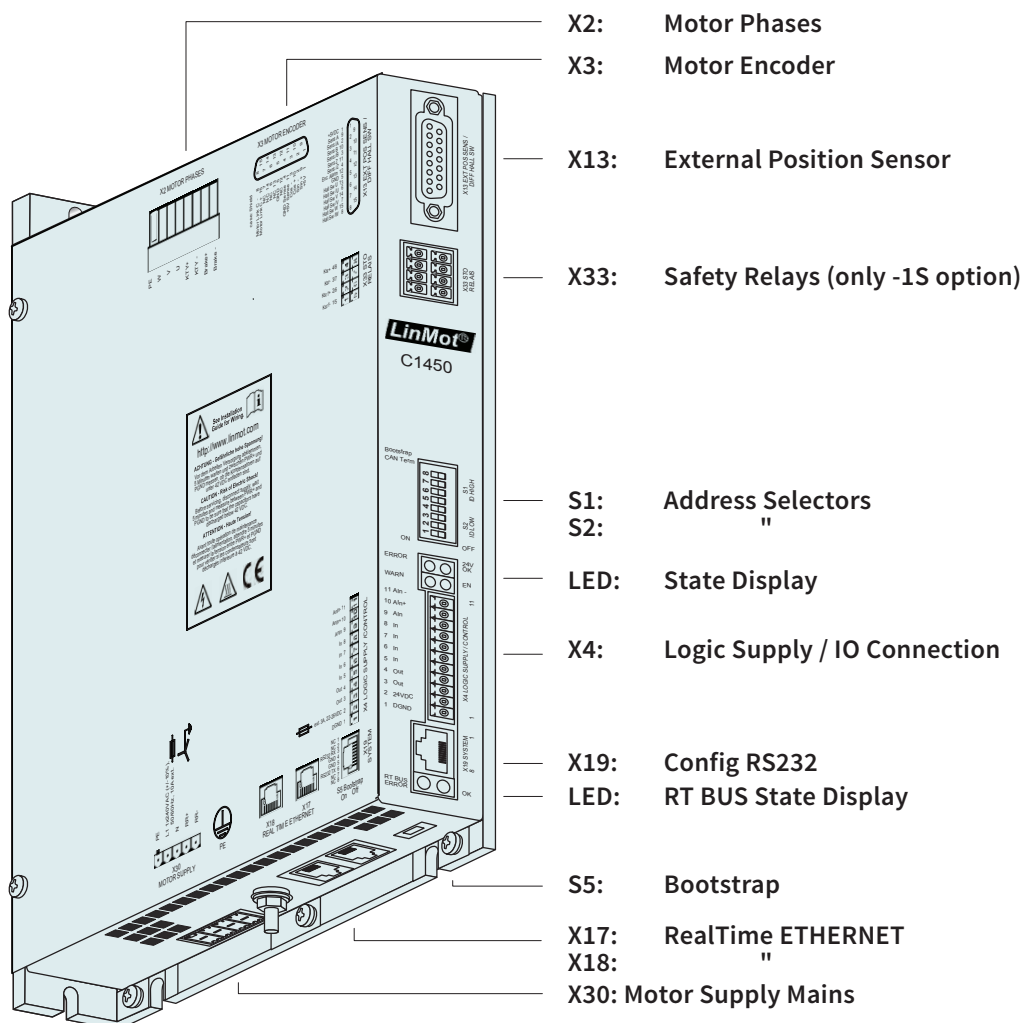
Inputs:	2 x Analog
Voltage range:	0-10VDC
Resolution:	12 Bit
Scanning rate:	250 µsec

CLOSED LOOP FORCE CONTROL



Using the force control technology function, precise joining processes can be implemented reliably and reproducibly with high-precision force control. For force control, the current motor force is measured with a load cell and controlled in the drive. Joining process or quality checks with high requirements for applied force can be implemented.

Analog input:	0-10V or $\pm 10V$
Resolution:	12 Bit
Min. Force Resolution:	0.1N

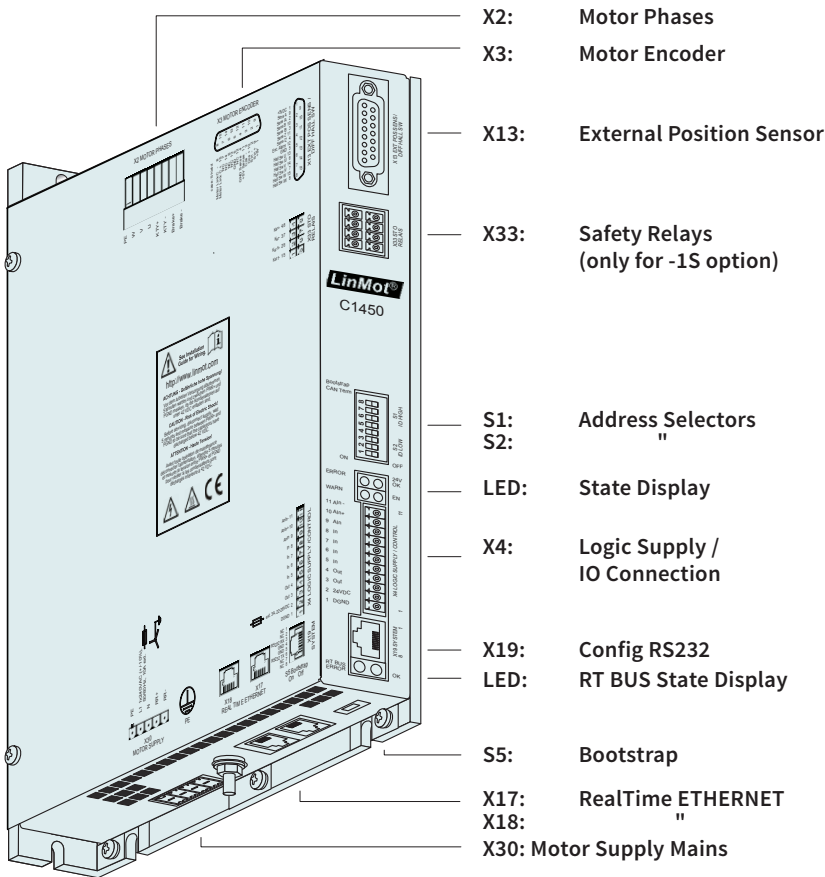


Interfaces	C1450-PN-VS-1S	C1450-PD-VS-1S	C1450-SC-VS-1S	C1450-IP-VS-1S	C1450-LU-VS-1S	C1450-EC-VS-1S	C1450-DS-VS-1S	C1450-SE-VS-1S	C1450-PL-QN-1S
PROFINET	•								
PROFINET Profidrive		•							
SERCOS III			•						
ETHERNET IP				•					
LinUDP					•				
ETHERCAT						•			
ETHERCAT CiA402							•		
ETHERCAT SoE								•	
POWERLINK									•



- C1450-PN-VS -1S
- C1450-PD-VS -1S
- C1450-SC-VS -1S
- C1450-IP-VS -1S
- C1450-LU-VS -1S
- C1450-EC-VS -1S
- C1450-DS-VS -1S
- C1450-SE-VS -1S
- C1450-PL-QN -1S

- » Absolute & Relative Positioning
- » Time based motion profiles
- » Internally stored Motion Sequences
- » Position Streaming
- » Analog Position Target
- » Analog Parameter Scaling
- » Winding Function Block
- » Force Control Technology Function
- » Customer-Specific Functions



INDUSTRIAL ETHERNET

Series C1400 drives allow integration of LinMot linear motors in controls concepts with industrial Ethernet interfaces. The user can integrate Series C1400 drives regardless of the provider of the overlaid control.

LinMot drives are available with common industrial Ethernet protocols. Since all Ethernet drives have the same motion command interface, and the control and status word are identical, software blocks that have been implemented once can be transferred to other drives without a problem.

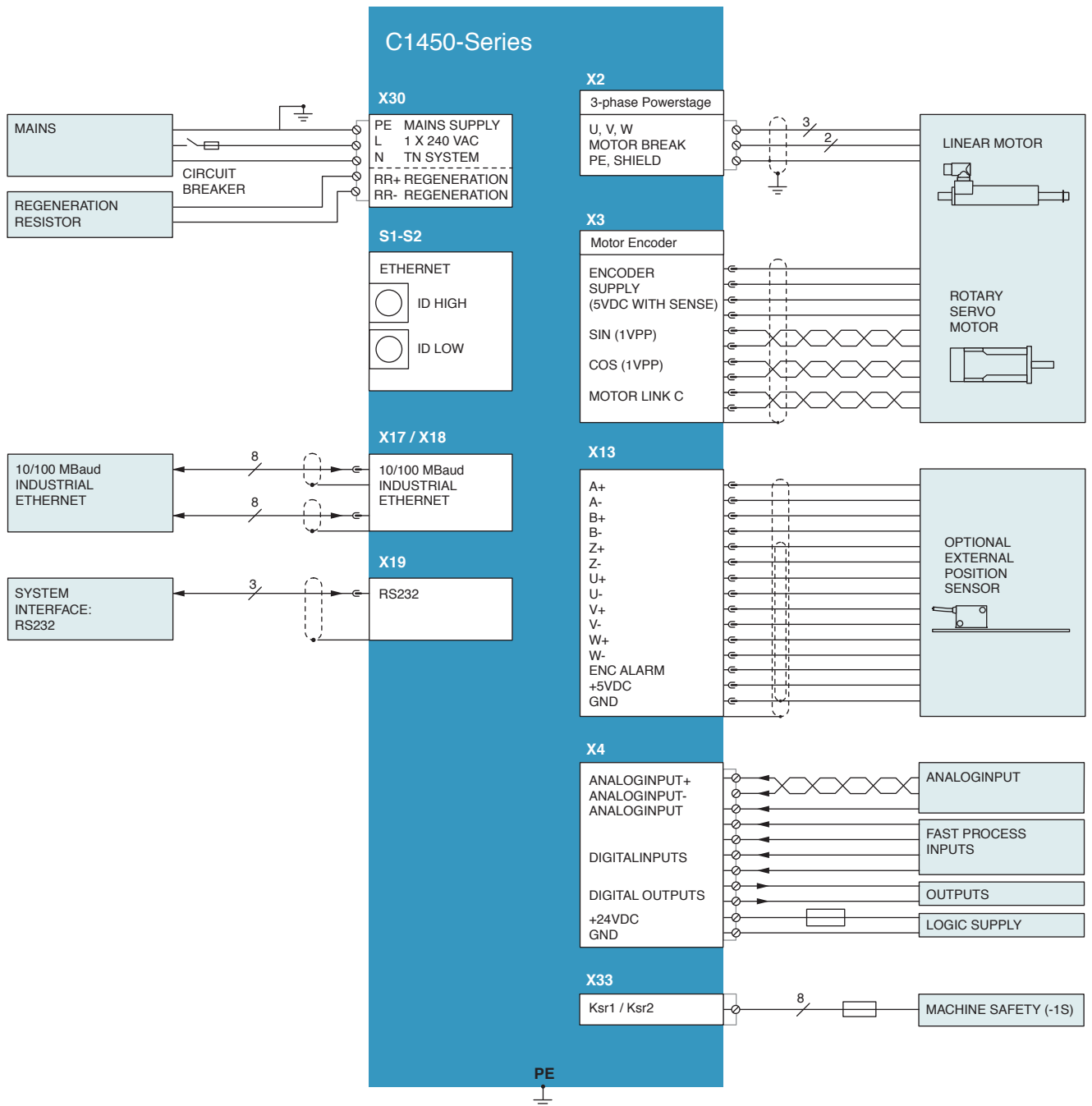
Series C1400 servo drives support the following industrial Ethernet protocols:

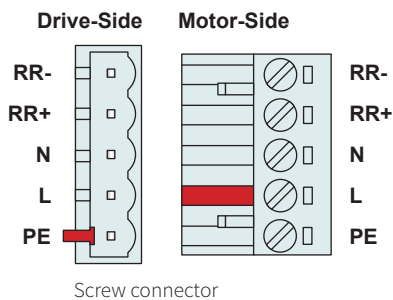
- » Profinet
- » EtherCAT
- » Ethernet IP
- » PowerLink
- » Sercos III
- » Sercos over EtherCAT

The appropriate drive is available for each protocol.

TECHNICAL DATA

Type:	Realtime ETHERNET
Switch/Hub:	Integrated 2-Port Hub/Switch
Transfer rate:	10/100MBit/sec
Minimal cycle times:	
Bus cycle:	250 µs
IO update:	250 µs
Trigger Input:	125 µs
Position control loop:	125 µs
Current control loop:	125 µs



X30 MOTOR SUPPLY MAINS / REGENERATION RESISTOR

	Designation
RR-	Regeneration Resistor
RR+	Regeneration Resistor
N	Neutral (TN system with grounded Neutral)
L	Line 1 (1x240VAC (+/-10%) 50/60Hz external fuse: max.10A)
PE	Protective Earth

Line filter is integrated into the drive.

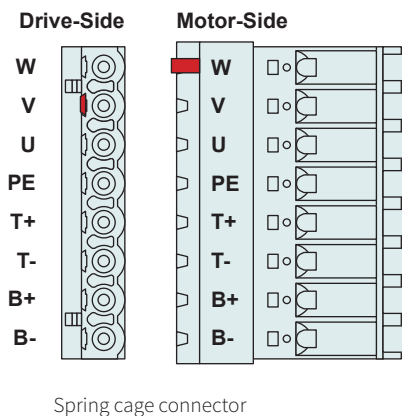
Screw Terminals:

- » Tightening torque: 0.5 - 0.6 Nm
- » Screws: M3
- » Use 60/75°C copper conductors only
- » Conductor cross-section: 2.5 mm² (AWG 12)
- » Stripping length 7 mm



LinMot Article Number:
0150-3607 (DC01-C1400/X30)

Operating of the drive is only allowed with the above article! No other type of connector shall be used!

X2 MOTOR PHASES

Nr	Designation
W	Motor Phase W
v	Motor Phase V
U	Motor Phase U
PE	Protective Earth
T+	Temperature Sensor KTY+
T-	Temperature Sensor KTY-
B+	Motor Brake+
B-	Motor Brake-



The Shield of the motor cable has to be mounted with a surface as large as possible (low ohm, low impedance). Use an EMC shield clamp for fixing.

Attention: An isolated thermistor is necessary! Especially LinMot D01 and D02 Motors can not be connected!

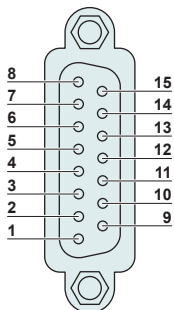
Screw Terminals:

- » Spring-cage connector
- » Use 60/75°C copper conductors only
- » Conductor cross-section: 0.2–2.5 mm² (depends on Motor current)/AWG 24-12
- » Stripping length 10 mm



LinMot Article Number:
0150-3605

Operating of the drive is only allowed with the above article! No other type of connector shall be used!

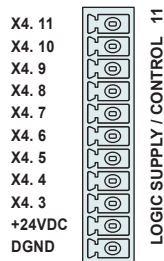
X3 MOTOR ENCODER (MOTOR LINK C) / NOT AVAILABLE ON -CO DRIVES!

Nr	Description
8	Motor Link C-
15	Motor Link C+
7	do not connect
14	do not connect
6	do not connect
13	do not connect
5	GND
12	do not connect
4	GND Sense
11	+5V Sense
3	Cos-
10	Cos+
2	Sin-
9	Sin+
1	+5V-
Case	Shield

Motor Link C is a high speed serial communication protocol to the motor encoder

X4

LOGIC SUPPLY / IO CONNECTION



Spring cage connector

LinMot Article Number:
0150-3447 (DC01-Signal/X4)



Operating of the drive is only allowed with the above article! No other type of connector shall be used!

Nr	Description		
11	AnIn-	X4.11	Configurable Analog Input deifferentiell (with X4.10)
10	AnIn+	X4.10	Configurable Analog Input deifferentiell (with X4.11)
9	AnIn	X4.9	Configurable Analog Input single ended
8	In	X4.8	Configurable Input
7	In	X4.7	Configurable Input
6	In	X4.6	Configurable Input
5	In	X4.5	Configurable Input
4	Out	X4.4	Configurable Output
3	Out	X4.3	Configurable Output
2	+24VDC	Supply	Logic Supply 22-26 VDC
1	GND	Supply	Ground

Inputs (X4.5 .. X4.8):
Outputs (X4.3 .. X4.4):

24V / 5mA (Low Level: -0.5 to 5VDC, High Level: 15 to 30VDC)
24V / max.100mA, Peak 370mA (will shut down if exceeded)

Analog Inputs:

12 bit A/D converted

X4.9:

Single ended analog input to GND, 0..10V, Input Resistance 51kΩhm to GND

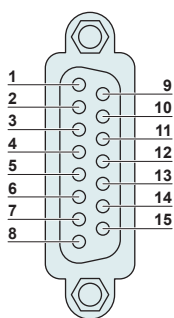
X4.10/X4.11:

Differential analog input, +/-10V, Common mode range +/-5VDC to GND
Input resistance 11.4kΩhm for each signal to GND.

- » Use 60/75°C copper conductors only
- » Conductor cross-section max. 1.5 mm²
- » Stripping length: 10 mm
- » The 24VDC supply for the control circuit (X4.2) must be protected with an external fuse (3A slow blow)

X13

EXTERNAL POSITION SENSOR DIFFERENTIAL HALL SWITCHES



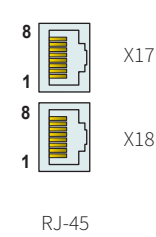
DSUB-15 (f)

Nr	SSI / BiSS / EnDat	
1	+5V DC	
2	9	A+
3	10	B+
4	11	Z+
5	12	Encoder Alarm
6	13	U+
7	14	V+
8	15	W+
9		
10		
11		
12		
13		
14		
15		
Case		Shield

Position Encoder Inputs (RS422):**Encoder Simulation Outputs (RS422):****Differential Hall Switch Inputs (RS422):****Enc. Alarm In:****Sensor Supply:**

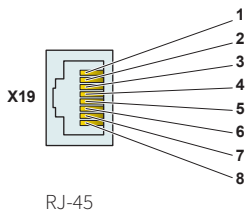
Max Input Frequency: 25 M counts/s with quadrature decoding, 40ns edge separation
Max Output Frequency: 4 M counts/s with quadrature decoding, 250ns edge separation
Input Frequency: <1kHz
5V / 1mA
5VDC max. 100mA / 9VDC 100mA (SW selectable)

X17 - X18 REALTIME ETHERNET 10/100 MBIT/S (NOT AVAILABLE ON -CO DRIVES)



Nr		
X17	RT ETH In	Specification depends on RT-Bus. Please refer to interface documentation.
X18	RT ETH Out -	

X19 SYSTEM



Nr	Description
1	Do not connect
2	Do not connect
3	RS232 Rx
4	GND
5	GND
6	RS232 Tx
7	Do not connect
8	Do not connect

Use isolated USB-RS232 converter (Art.-No. 0150-2473) for configuration over RS232.

LEDS

STATE DISPLAY



24VOK	Green	24V Logic Supply OK
EN	Yellow	Motor Enabled / Error Code Low Nibble
Warn	Yellow	Warning / Error Code High Nibble
Error	Red	Error

RT BUS LEDS



BUS OK	Green	OK
BUS Error	Red	Error

The use of these LEDs depends on the type of fieldbus which is used. Please see the corresponding manual for further information.

S1 -S2

ADDRESS SELECTORS



Switch

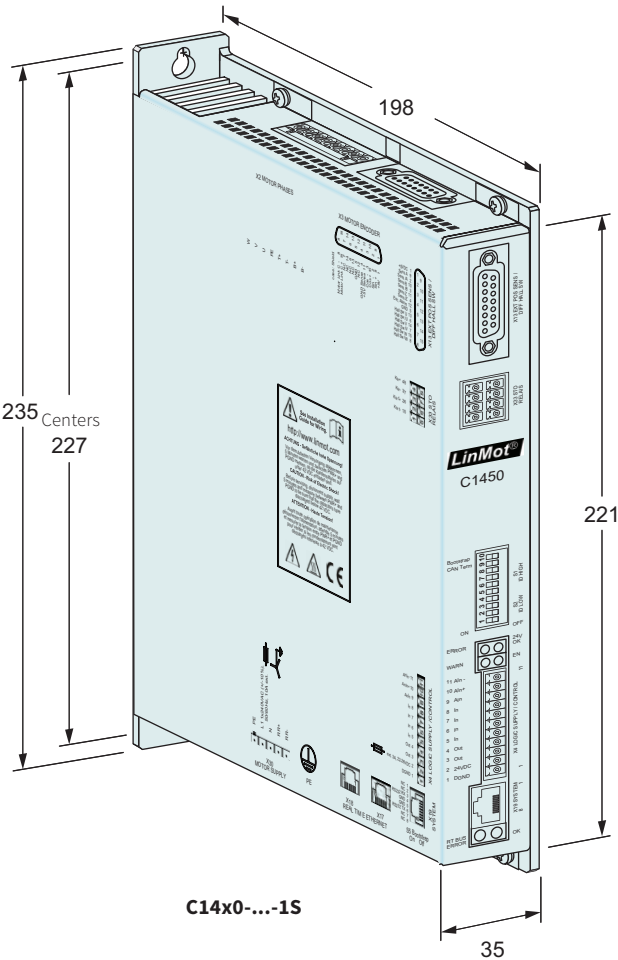
S1 (5..8)	Bus ID High (0 ... F). Bit 5 is the LSB, bit 8 the MSB.
S2 (1..4)	Bus ID Low (0 ... F). Bit 1 is the LSB, bit 4 the MSB.

The use of these switches depends on the type of fieldbus which is used. Please see the corresponding manual for further information.

S5

BOOTSTRAP

The switch is used for initial programming. Make sure the switch is in position "off". Otherwise the drive will not start up.



Dimensions in mm

Servo Drive Series		C14x0-...-1S
Width	mm (in)	43.5 (1.71)
Height	mm (in)	235 (9.25)
Depth	mm (in)	193 (7.60)
Weight	kg (lb)	
Mounting		Backside 2 x M4 Bottom Side 4 x M4
Case IP Code	IP	20
Storage temperature	°C	-25...40
Transport temperature	°C	-25...70
Operating temperature	°C	0...40
Relative humidity		95% (non-condensing)
Pollution	IEC/EN 60664-1	Pollution degree 2
Shock resistance (16 ms)	-1S option	2 g
Vibration resistance (10-200 Hz)	-1S option	1 g
Max. Case Temperature	°C	90
Max. Power Dissipation	W	100
Mounting place		In the control cabinet
Mounting position		vertical
Distance between drives	mm (in)	≥ 200 (8) top /bottom Drives with fans can be mounted vertically side by side

Servo Drives		
Item	Description	Part Number
C1450-SE-VS-1S-000	EtherCAT SoE Drive (1x240V/20A), STO	0150-2660
C1450-SC-VS-1S-000	Sercos III Drive (1x240V/20A), STO	0150-2659
C1450-PN-VS-1S-000	ProfiNet Drive (1x240V/20A), STO	0150-2658
C1450-PL-VS-1S-000	POWERLINK Drive (1x240V/20A), STO	0150-2656
C1450-PD-VS-1S-000	PROFIdrive Drive (1x240V/20A), STO	0150-2664
C1450-IP-VS-1S-000	Ethernet/IP Drive (1x240V/20A), STO	0150-2666
C1450-EC-VS-1S-000	EtherCAT Drive (1x240V/20A), STO	0150-2657
C1450-DS-VS-1S-000	EtherCAT CoE Drive (1x240V/20A), STO	0150-2665
C1400-LU-VS-1S-000	LinUDP Drive (1x240V/20A), STO	0150-2667

SERIES E1400



- ✓ 3x400...480VAC
- ✓ Controls LinMot motors / AC servomotors
- ✓ Time Curves
- ✓ Real Time (Streaming)
- ✓ Synchronous control (Drive profiles)
- ✓ Master Encoder Synchronization (In/Out)
- ✓ PLC or Stand-Alone Solutions
- ✓ Industrial Ethernet Configuration / Remote Access Ethernet
- ✓ Safe Torque Off
- ✓ Safe Limited Speed Ready
- ✓ Interface for optional incremental and absolute sensor
- ✓ Position Encoder Simulation (RS 422)
- ✓ Master / Slave Solutions
- ✓ ± 10 VDC Force / Speed Control
- ✓ Supports Plug and Play

Servo Drive Series E1400

Series E1400 Servo Drives are modular axis drives, with 32-bit position resolution and an integrated power stage 3x400VAC, for linear motors and rotary motors.

The drives are suitable for simplest, standard and high-end positioning tasks across the entire force range of the LinMot product range.



CONNECTION TO MACHINE DRIVE

The Series E1400 Servo Drives can be actuated by machine controls from many manufacturers or brands, via digital inputs and outputs, RS232 or RS485 serial interface, CanBus CANopen and DeviceNet interfaces, Profibus DP, or industrial ETHERNET.

PROCESS AND SAFETY INTERFACES

Fast process interfaces for direct processing of sensor signals are available as freely programmable analog and digital inputs, a fast trigger input, and a capture input.

The safety interface on Servo Drive with fieldbus interfaces or industrial ETHERNET allows safe stop of the drives via control signals, per EN 954-1, without interrupting the power supply.

LOGIC AND POWER SUPPLY

The Servo Drives have two separate power supply inputs for the logic and power elements.

In an E-stop and safe stop of the drive, only the power element supply is cut off from the drive. The logic supply and the drive continue to run.

This has the advantage that the drive and linear motor do not need to be reinitialized when the machine is restarted, since all process data, including the current position of the linear motor, are still up to date.

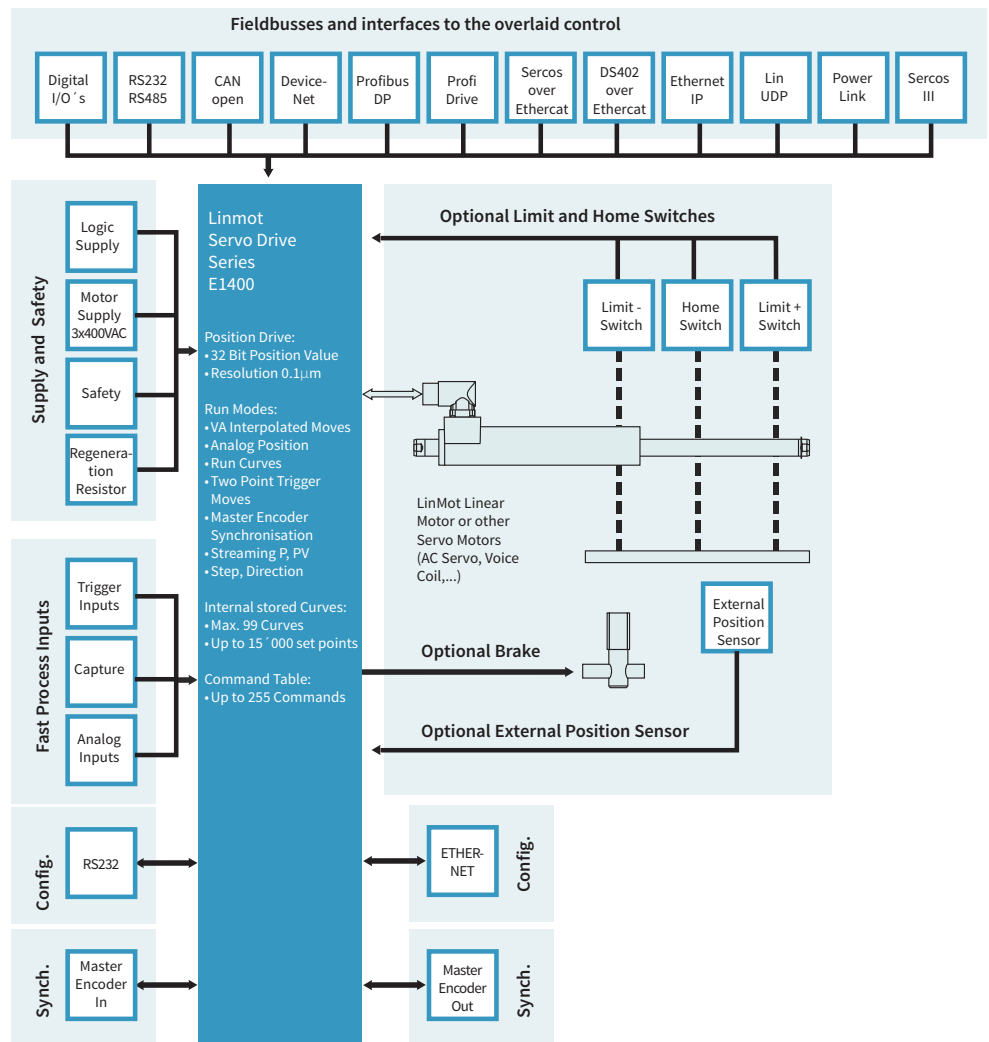
System Integration

Flexible hardware enables control of any 1/2/3- phase motors. Thus, low-power rotary servo-motors, such as brushless DC motors, can be integrated in the same control concept.

Additionally, the drives can be equipped with optional peripherals, such as reference and end stop switches, high-precision external position sensors, or a mechanical holding brake.

Series E1400 Servo Drives have analog and digital inputs and outputs, serial interfaces, fieldbusses, and ETHERNET connections. The user is therefore not dependent on the selection of the overlaid drive. An appropriate interface is available, with associated protocols, for any PLC or IPC solution.

With flexibility and a compact form factor, LinMot Series E1400 Servo Drives provide a complete solution for a flexible drive concept in single and multiple axes applications, with linear motors and other actuators.



MASTER ENCODER

For synchronization to a mechanical master shaft, or a rotating main drive, the Axis (linear motors and rotary motors) can be coupled to an electronic main shaft via the Master Encoder Interface.

The encoder signal from the main shaft can be passed through by the Master Encoder Interface, so that any number of linear motors can be synchronized to the main shaft.

MOTOR INTERFACES

E1400 Servo Drives provide all necessary interfaces to operate linear or rotary motors with optional external peripherals, such as end position and reference switches, a mechanical brake, or a high-resolution external position sensor.

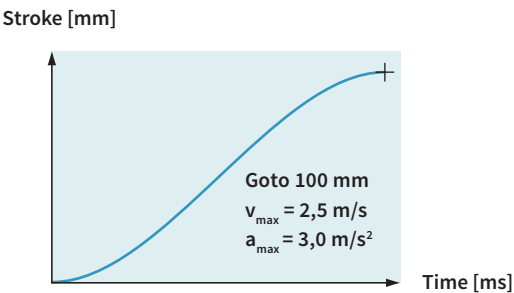
CONFIGURATION

Parameterization and configuration of the Servo Drive is done via the Ethernet interface on the front side for simultaneous configuration of several drives.

LinMot Talk user-friendly PC software is available for configuration. In addition to online documentation, LinMot Talk provides extensive debugging tools, such as an oscilloscope and an error inspector, for simple and rapid start-up of the Axis.

Fieldbus and ETHERNET drives can also be configured directly by the overlaid control.

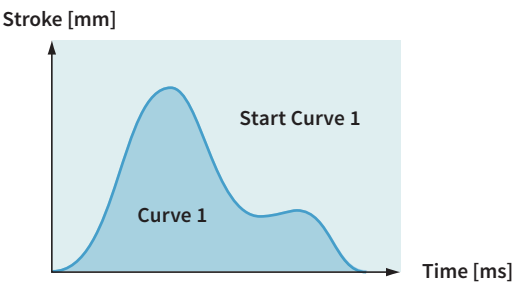
INTERPOLATED MOVES



For direct position targets, using absolute or relative positioning, the desired position is reached using acceleration and velocity-limited motion profiles or jerk optimized profiles (jerk limited and Bestehorn). Positioning commands can be invoked via the serial interfaces, CANopen, DeviceNet, Profibus, Ethernet or a trigger input.

Stroke range:	±100 m
Position Resolution:	0.1 µm (32Bit)
Velocity Resolution:	1.0 µm/s (32Bit)
Acceleration Resol.:	10.0 µm/s² (32Bit)

TIME CURVES

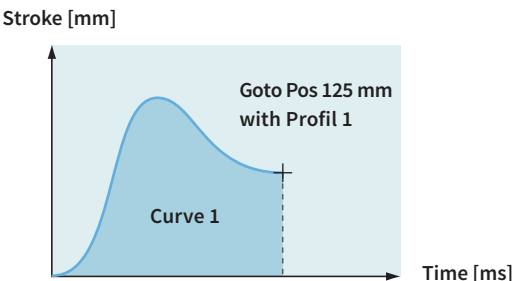


Up to 100 different time curves can be stored on Series E1400 drives, with up to 16`000 individual waypoints. The motor can thus travel along time curves of any complexity, such as those generated by CAD programs and stored in the drive (Excel CSV format). The time curves can be invoked via the serial interface, fieldbusses, ETHERNET, or the trigger input.

Stroke range:	±100m
Position Resolution:	0.1 µm (32Bit)
Motion profiles:	Max. 100 Time Curves
Curve points:	Max. 16'000 points

11

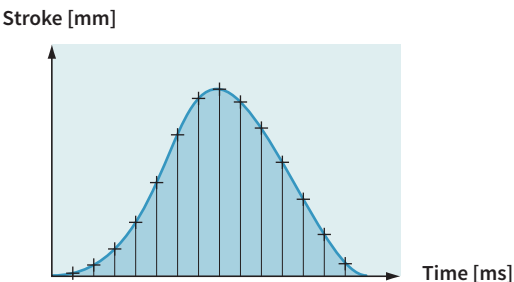
PROFILED MOVES



For travel to an absolute position, or shifting by a relative position, any desired motion rules can be stored besides the VA interpolator. They are stored in the drive as motion profiles (Excel CSV format). The positions can be approached, for example, with a sinusoidal motion to optimize power loss, or special reverse optimized motion profiles.

Stroke range:	±100m
Position Resolution:	0.1 µm (32Bit)
Motion profiles:	Max. 100 Time Curves
Curve points:	Max. 16'000 points

SETPOINT STREAMING



Overlaid NC drives with fieldbus or ETHERNET interfaces communicate with the Servo Drives via "Position Streaming". The position and velocity calculated in the overlaid control is transmitted to the Servo Drive cyclically. The P, PV, or PVT mode is available for this transmission.

Position Resolution:	32 Bit
Velocity Resolution:	32 Bit
Interpolator:	8 kHz
Cycle times:	0.25 - 5 ms

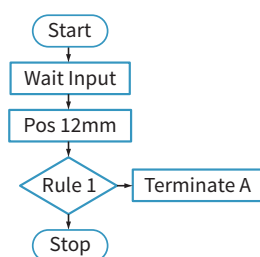
EASY STEPS

Input 1	Pos 125 mm
Input 2	Pos 250 mm
Input 3	Curve 1
Input 4	Pos -30 mm
Input 5	Pos +12,5 mm
Input 6	Curve 2
Input 7	Pos 2 mm
Input 8	Pos -12,5 mm

With the Easy Steps function, up to 8 positions or independent travel commands can be stored on the drive, and addressed via 8 digital inputs or fieldbus interfaces/ETHERNET.

Digital inputs:	max. 8
Interface:	X4
Scanning rate:	200 µsec

COMMAND TABLE

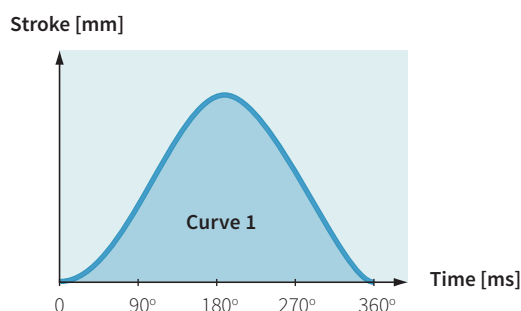


Entire motion sequences with up to 255 individual motion commands can be stored in the Command Table. This is primarily advantageous if complete motion sequences need to be executed very quickly, without dead time from the overlaid drive. In the Command Table, the programmer has access to all motion commands, internal parameters, and digital inputs and outputs.

Commands:	max. 255
Cycle time:	100 µsec

MASTER ENCODER SYNCHRONIZATION (MT)

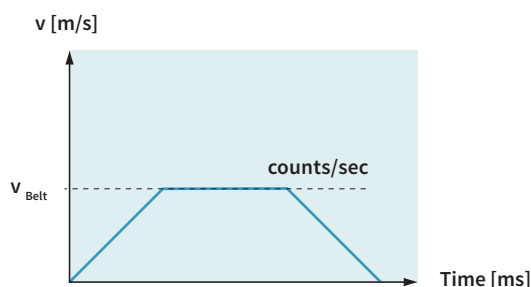
11



For synchronization to an external main or master shaft, the linear motor travels along the motion profiles stored in the drive, at the machine speed (machine angle 0...360°). Using this function, mechanical cam discs can be replaced with highly dynamic linear motors. The motion profiles can be freely defined, and the correct motion profile can be invoked during product changeover with no changeover time.

Motion profiles:	Max. 100 curve profiles
Curve points:	Max. 16'000 points
Encoder counter:	32 Bit
Encoder input:	A/B/Z (RS422)
Max. counting frequency	Max. 4.5 MHz

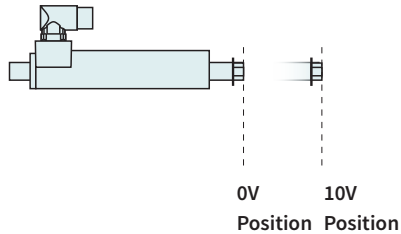
BELT SYNCHRONIZATION



Synchronization to a belt speed can be done using the Master Encoder Interface or Step/Direction/ Zero interface. Applications such as the "flying saw", synchronous loading or unloading, synchronous filling or labeling of bottles or containers on a conveyor belt, and many other applications can be implemented in this way.

Encoder Counter:	32 Bit
Encoder Input:	A/B/Z (RS422), max. 5 MHz
Max. counting frequency	STEP/DIR/ZERO Max. 4.5 MHz

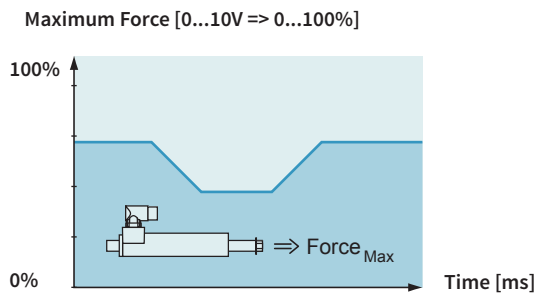
ANALOG POSITION



For an analog position target, the linear motor travels to a position proportional to the input voltage. The position is either scanned continuously, or only after a rising edge of the trigger signal. In order to prevent uncontrolled jumps in position, the motor travels to the positions with a programmable maximum acceleration and velocity (VA interpolator).

Inputs:	Analog Input X4 or X20
Voltage range:	0-10VDC or $\pm 10V$
Resolution:	12 Bit
Scanning rate:	$\geq 100 \mu\text{sec}$ (adjustable)

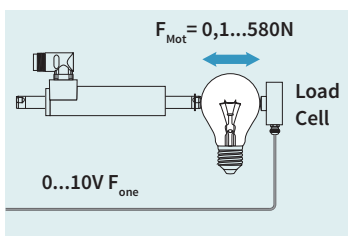
EASY STEPS PARAMETER SCALE



Easy Steps provide the ability to parameterize internal parameters using two analog inputs. If, for example, the maximum motor current is read at an analog input, then the maximum motor force can be provided as analog for freely programmable joining processes.

Inputs:	2 x Analog (X4.4, X4.7)
Voltage range:	0-10VDC
Resolution:	12 Bit
Scanning rate:	200 μsec

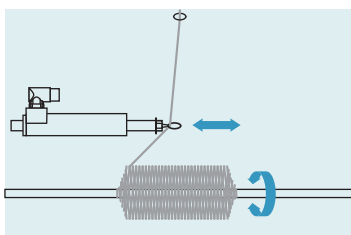
CLOSED LOOP FORCE CONTROL



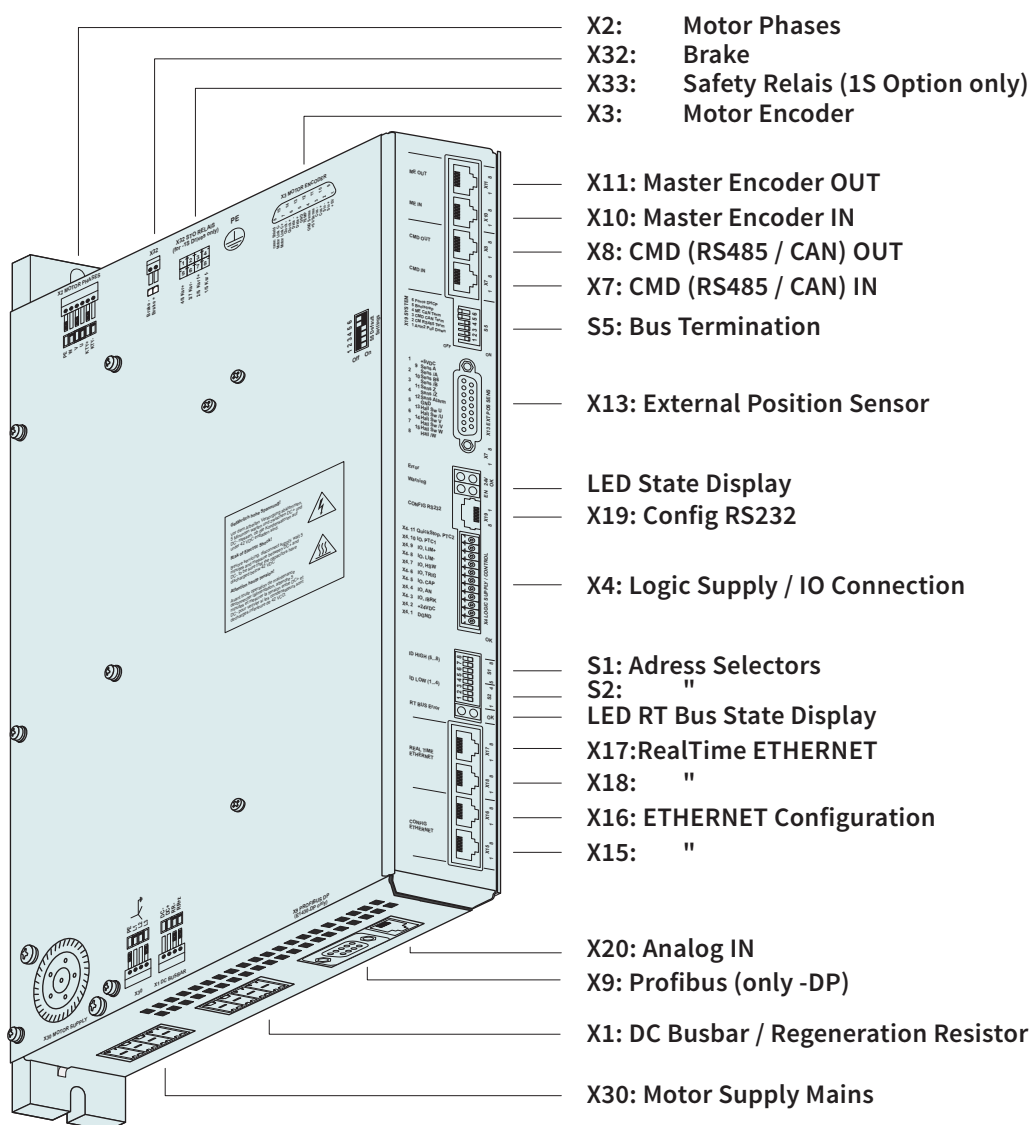
Using the force control technology function, precise joining processes can be implemented reliably and reproducibly with high-precision force control. For force control, the current motor force is measured with a load cell and controlled in the drive. Joining process or quality checks with high requirements for applied force can be implemented.

Analog Input:	0-10V or $\pm 10V$
Resolution:	12 Bit
Min. force resolution:	0.1N

WINDING APPLICATION



For winding textile yarns, glass fiber optics, or wires, a complete functional block is available that controls the entire sequence of a complete winding process.



Interfaces	E1450-PL-QN	E1430-PN-QN	E1450-PD-QN	E1450-SC-QN	E1450-IP-QN	E1450-LU-QN	E1450-EC-QN	E1450-DS-QN	E1450-SE-QN	E1430-DP-QN	E1400-GP-QN
CANopen											•
LinRS											•
POWERLINK	•										
PROFINET		•									
PROFINET Profidrive			•								
SERCOS III				•							
ETHERNET IP					•						
LinUDP						•					
ETHERCAT							•				
ETHERCAT CiA402								•			
ETHERCAT SoE									•		
PROFIBUS DP										•	



E1450-PL-QN

E1450-PN-QN

E1450-PD-QN

E1450-SC-QN

E1450-IP-QN

E1450-LU-QN

E1450-EC-QN

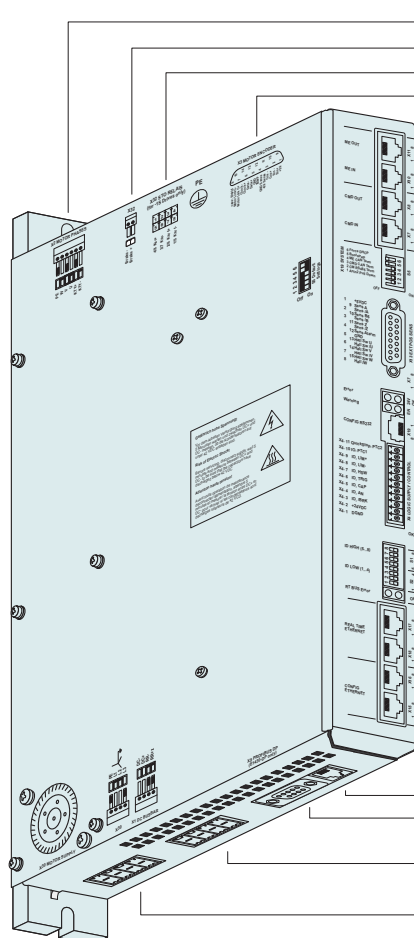
E1450-DS-QN

E1450-SE-QN

E1430-DP-ON

E1400-GP-ON

- » Absolute & Relative Positioning
- » Travel Along Time Curves
- » Positioning using Motion Profiles
- » Internally stored Motion Commands
- » Internally stored Motion Sequences
- » Master Encoder Synchronization
- » Synchronization to Belt Speed
- » Position Streaming
- » Analog Position Target
- » Analog Parameter Scaling
- » Winding Function Block
- » Force Control Technology Function
- » Customer-Specific Functions



X2: Motor Phases
X32: Brake
X33: Safety Relais (1S Option only)
X3: Motor Encoder

X11: Master Encoder OUT
X10: Master Encoder IN
X8: CMD (RS485 / CAN) OUT
X7: CMD (RS485 / CAN) IN
S5: Bus Termination

X13: External Position Sensor

LED State Display
X19: Config RS232

X4: Logic Supply / IO Connection

S1: Address Selectors
S2: "

LED RT Bus State Display

X17: RealTime ETHERNET

X18: "

X16: ETHERNET Configuration

X15: "

X20: Analog IN

X9: Profibus (only -DP)

X1: DC Busbar / Regeneration Resistor

X30: Motor Supply Mains

INDUSTRIAL ETHERNET

Series E1400 drives allow integration of Lin-Mot linear motors in control concepts with industrial ETHERNET interfaces. The user can integrate Series E1400 drives regardless of the provider of the overlaid control.

LinMot drives are available with common industrial ETHERNET protocols. Since all ETHERNET drives have the same motion command interface and the control and status word are identical, software blocks that have been implemented once can be transferred to other drives without any problem.

Series E1400 Servo Drives support the following industrial ETHERNET protocols:

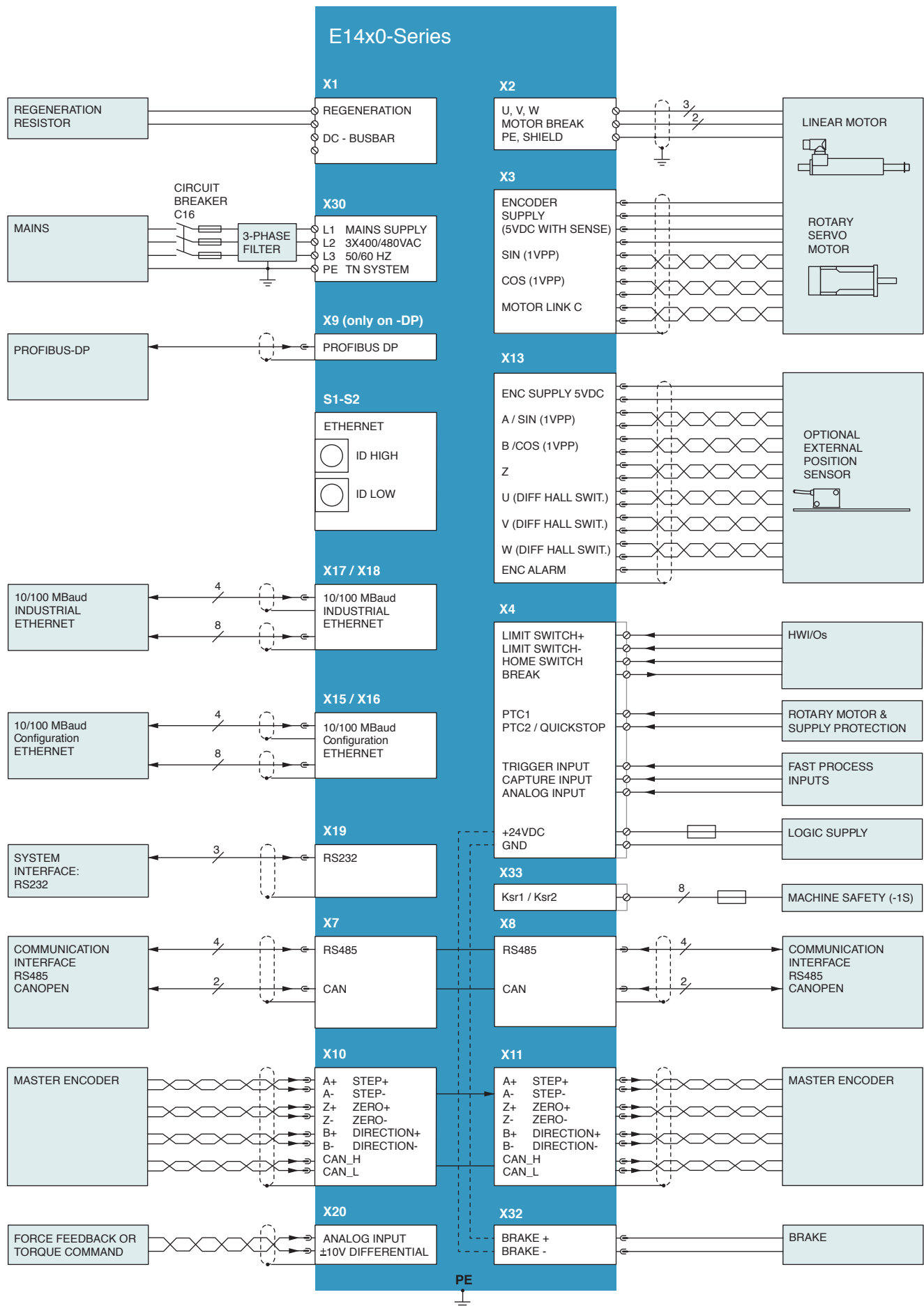
- » Profinet
- » ETHERNET IP
- » PowerLink
- » EtherCat
- » Sercos III
- » Profibus

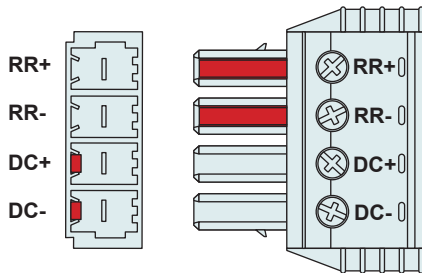
The appropriate drive is available for each protocol.

TECHNICAL DATA

Type:	Realtime ETHERNET
Switch/Hub:	Integrated 2-Port Hub/Switch
Transfer rate:	10/100MBit/sec

Minimal cycle times:	
Bus cycle:	250 μ s
IO update:	250 μ s
Trigger Input:	125 μ s
Position control loop:	125 μ s
Current control loop:	125 μ s



X1 DC BUSBAR / REGENERATION RESISTOR

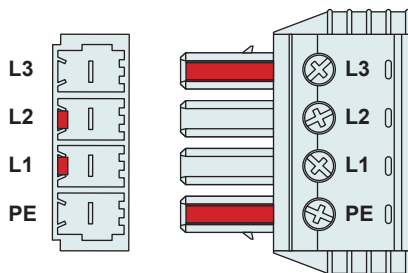
It's not allowed to power the drives through DC+ and DC-!

Nr	Designation
RR+	Positive connection for Regeneration Resistor
RR-	Negative connection for Regeneration Resistor
DC+	DC busbar +
DC-	DC busbar -

For coupling the DC busbar of different drives, contact support@linmot.com for additional information.

Screw Terminals:

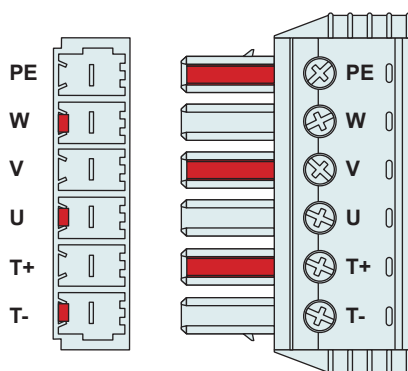
- » Tightening torque: 0.7 - 0.8 Nm (6.2 – 7.0 lbin)
- » Use a cross-head screw driver (PH1)
- » Use 60/75°C copper conductors only
- » Conductor cross-section: 0.25–4 mm² (depends on Motor current)/AWG 24-12
- » Stripping length 10 mm

X30 MOTOR SUPPLY MAINS

Nr	Designation
L1 - L3	3 x 400/480VAC 50/60 Hz
PE	Protective Earth

Screw Terminals:

- » Tightening torque: 0.7 - 0.8 Nm (6.2 – 7.0 lbin)
- » Use a cross-head screw driver (PH1)
- » Use 60/75°C copper conductors only
- » Conductor cross-section: 2.5–4 mm² (depends on Motor current) / AWG 24 -12
- » Stripping length 10 mm

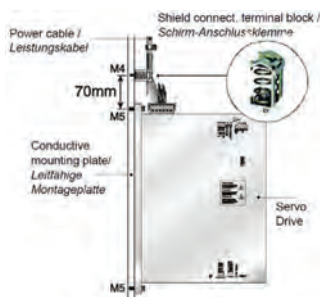
X2 MOTOR PHASES

Nr	Designation
PE	Protective Earth
W	Motor Phase W
V	Motor Phase V
U	Motor Phase U
T+	Temperature Sensor KTY+ (on DC- voltage level!)
T-	Temperature Sensor KTY- (on DC- voltage level!)

The Shield of the motor cable has to be mounted with a surface as large as possible (low ohm, low impedance). Use an EMC shield clamp for fixing.

**Attention:**

An isolated thermistor is necessary! Especially LinMot D01 and D02 Motors can not be connected!

**Screw Terminals:**

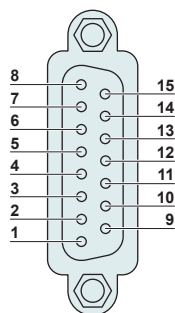
- » Tightening torque: 0.7 - 0.8 Nm (6.2 – 7.0 lbin)
- » Use a cross-head screw driver (PH1)
- » Use 60/75°C copper conductors only
- » Conductor cross-section: 0.25–4 mm² (depends on Motor current)/AWG 24 -12
- » Stripping length 10 mm

X32 MOTOR BRAKE

Brake -

Brake +

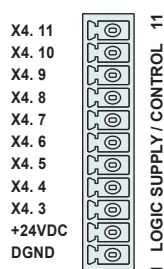
The brake is powered internally by 24VDC from X4!
It's suitable for driving inductive loads up to 1.5A (preliminary).
The V1 Drives had a separate connector for the brake supply (X31).

X3 MOTOR ENCODER (MOTOR LINK C)

DSUB-15 (m)

Nr	Description
8	Motor Link C-
15	Motor Link C+
7	do not connect
14	do not connect
6	do not connect
13	do not connect
5	GND
12	do not connect
4	GND Sense
11	+5V Sense
3	Cos-
10	Cos+
2	Sin-
9	Sin+
1	+5V
Case	Shield

Motor Link C is a high speed serial communication protocol to the motor encoder

X4 LOGIC SUPPLY / IO CONNECTION

Spring cage connector

Nr	Description	
11	Input	Quickstop
10	I/O	X4.10
9	I/O	X4.9
8	I/O	X4.8
7	I/O	X4.7
6	I/O	X4.6
5	I/O	X4.5
4	I/O	X4.4
3	I/O	X4.3
2	+24VDC	Supply
1	GND	Supply

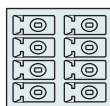
Inputs (X4.3 .. X4.11): shortcut 24V / 5mA (Low Level: -0.5 to 5VDC, High Level: 15 to 30VDC)
Outputs (X4.3 .. X4.10): 24V / max.100mA, Peak 370mA (will shut down if exceeded)

Supply 24V / type. 1A / max. 2.5A (if all outputs "on" with max. load.)

- » Use 60/75°C copper conductors only
- » Conductor cross-section max. 1.5 mm²
- » Stripping length: 10 mm

X33 SAFETY RELAYS (ONLY WITH THE -1S OPTION)

X33. 4/8 Ksr+
X33. 3/7 Ksr-
X33. 2/6 Ksr f+
X33. 1/5 Ksr f-



Spring cage connector

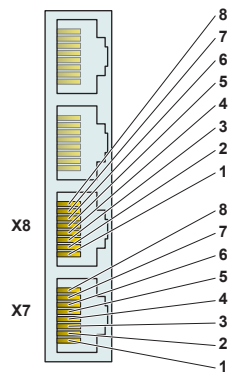
X33 STO RELAYS

Nr	Description	
4/8	Ksr +	Safety Relay 1 / 2 Input positive
3/7	Ksr -	Safety Relay 1 / 2 Input negative
2/6	Ksr f+	Safety Relay 1 / 2 feedback positive
1/5	Ksr f-	Safety Relay 1 / 2 feedback negative



- » Use 60/75°C copper conductors only
- » Conductor cross-section max. 1.5mm² (AWG 16)
- » Stripping length: 10 mm
- » Never connect the safety relays to the logic supply of the drive!

X7-X8 CMD (RS485/CAN)

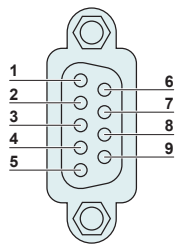


RJ-45

Nr	Description	
1	RS485_Rx+	A
2	RS485_Rx-	B
3	RS485_Tx+	Y
4	GND	
5	GND	
6	RS485_Tx-	Z
7	CAN_H	
8	CAN_L	
Case	Shield	

Use twisted pair (1-2, 3-6, 4-5, 7-8) cable for wiring.
The built in RS485 and CAN terminations can be activated by S5.2 and S5.3. X7 is internally connected to X8 (1:1 connection)

X9 PROFIBUS DP (ONLY AVAILABLE ON E1430-DP-QN)

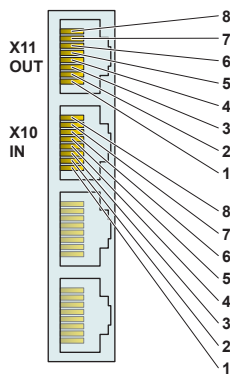


DSUB-9 (f)

Nr	Description	
1	Not connected	
6	+5V	(isolated)
2	Not connected	
7	Not connected	
3	RxD/TxD-P	
8	RxD/TxD-N	
4	CNTR-P	
9	Not connected	
5	GND	(isolated)
Case	Shield	

Max. Baud rate: 12 Mbaud

X10-X11 MASTER ENCODER IN (X10) / MASTER ENCODER OUT (X11)



RJ-45

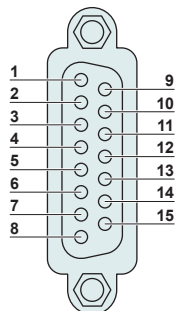
Nr	Incremental	Step/Direction	EIA/TIA 568A colors
1	A+	Step+	Green/White
2	A-	Step-	Green
3	B+	Direction+	Orange/White
4	Z+	Zero+	Blue
5	Z-	Zero-	Blue/White
6	B-	Direction-	Orange
7	CAN_H	CAN_H	Brown/White
8	CAN_L	CAN_L	Brown
Case	Shield	Shield	

Use twisted pair (1-2, 3-6, 4-5, 7-8) cable for wiring.

Master Encoder Inputs: Differential RS422, max. 25 M counts/s, 40ns edge separation
Master Encoder Outputs: Amplified RS422 differential signals from Master Encoder IN (X10)

The CAN bus can be terminated with S5.4.
All devices, which are connected to X10/X11 must be referenced to the same ground.

X13 EXTERNAL POSITION SENSOR DIFFERENTIAL HALL SWITCHES



DSUB-15 (f)

Nr	Description		SSI / BiSS / EnDat	
1	+5V DC		+5V DC	
2	9	A+	A+	A+
3	10	B+	B+	B+
4	11	Z+	Data+	Data+
5	12	Encoder Alarm	Encoder Alarm	Encoder Alarm
6	13	U+	nc	nc
7	14	V+	nc	nc
8	15	W+	Clk+	Clk+
Case	Shield		Shield	

Position Encoder Inputs (RS422):

Encoder Simulation Outputs (RS422):

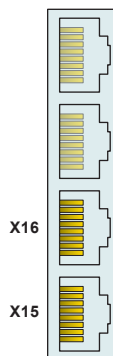
Differential Hall Switch Inputs (RS422):

Enc. Alarm In:

Sensor Supply:

Max Input Frequency: 25 M counts/s with quadrature decoding, 40ns edge separation
 Max Output Frequency: 4 M counts/s with quadrature decoding, 250ns edge separation
 Input Frequency: <1kHz
 5V / 1mA
 5VDC max. 100mA / 9VDC 100mA (SW selectable)

X15-X16 ETHERNET CONFIGURATION 10/100 MBIT/S

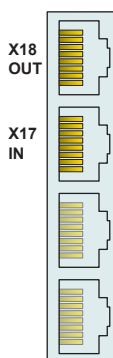


RJ-45

Nr	Description
X16	Internal 2-Port 10BASE-T and 100BASE-TX Ethernet Switch with Auto MDIX.
X15	

11

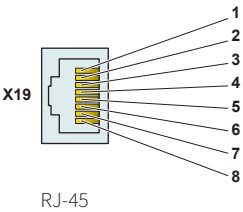
X17 - X18 REALTIME ETHERNET 10/100 MBIT/S



RJ-45

Nr	Description	
X18	RT ETH Out	Specification depends on RT-Bus Type. Please refer to according documentation.
X17	RT ETH In	

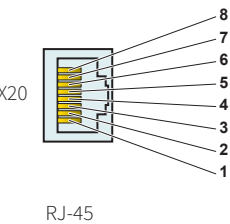
X19 SYSTEM



Nr	Description
1	Do not connect
2	Do not connect
3	RS232 Rx
4	GND
5	GND
6	RS232 Tx
7	Do not connect
8	Do not connect
case	Shield

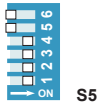
Use isolated USB-RS232 converter (Art.-No. 0150-2473) for configuration over RS232.

X20 ANALOG IN (+-10V DIFFERENTIAL ANALOG INPUT)



Nr	Description
1	Do not connect
2	Do not connect
3	Analog In-
4	GND
5	GND
6	Analog In+
7	Do not connect
8	Do not connect
case	Shield

S5 BUS TERMINATION / ANIN2 PULL DOWN



Switch	E1400
S5	Switch 6: Override Configuration Ethernet to DHCP
	Switch 5: Bootstrap: Must be off for normal operation
	Switch 4: CAN termination on ME (120R between pin 7 and 8 on X10/X11) on/off
	Switch 3: CAN termination on CMD (120R between pin 7 and 8 on X7/X8) on/off
	Switch 2: Termination resistor for RS485 on CMD (120R between pin 1 and 2 on X7/X8) on/off
	Switch 1: AnIn2 pull down (4k7 Pull down on X4.4). Set to ON, if X4.4 is used as digital output.

Factory setting: all switches “on” except S5.5 (Bootstrap) and S5.6 (Override to DHCP)

LEDS STATE DISPLAY



24VOK	Green	24V Logic Supply OK
EN	Yellow	Motor Enabled / Error Code Low Nibble
Warn	Yellow	Warning / Error Code High Nibble
Error	Red	Error

LEDS RT BUS LED



BUS OK	Green	OK
BUS Error	Red	Error

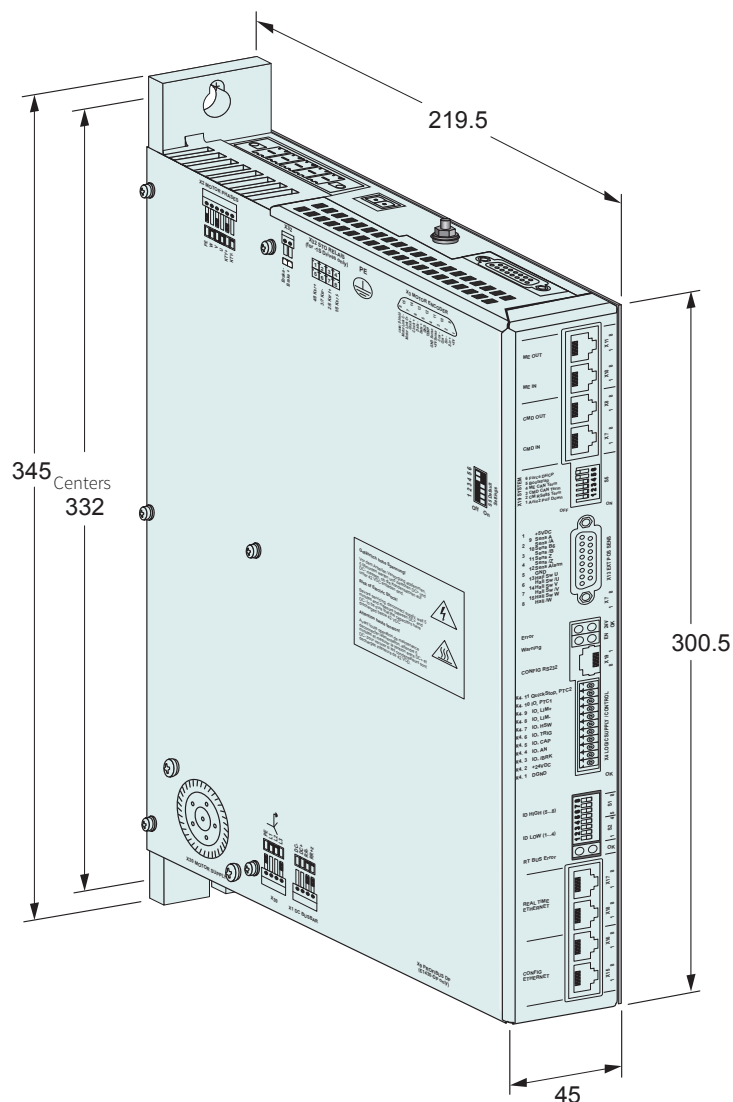
The use of these LEDs depends on the type of fieldbus which is used.
Please see the corresponding manual for further information.

S1 - S2 ADDRESS SELECTORS



Switch	
S1 (5...8)	Bus ID High (0...F) Bit 5 is the LSB, bit 8 the MSB
S2 (1...4)	Bus ID Low (0...F) Bit 1 is the LSB, bit 4 the MSB

The use of these switches depends on the type of fieldbus which is used.
Please see the corresponding manual for further information.



Dimensions in mm

E1400		
Width	mm (in)	45 (1.8)
Height	mm (in)	300 (11.8)
Height with fixings	mm (in)	345 (13.6)
Depth	mm (in)	219.5 (8.7)
Weight	kg (lb)	3.7 (8.2)
Mounting	mm (in)	2 x M5, Distance 332 (13.07)
Case IP Code	IP	20
Storage temperature	°C	-25...40
Transport temperature	°C	-25...70
Operating temperature	°C	0...40 at rated data 40...50 with power derating
Relative humidity		95% (non-condensing)
Pollution	IEC/EN 60664-1	Pollution degree 2
Shock resistance (16 ms)	-1S option	3.5g
Vibration resistance (10-200Hz)	-1S option	1g
Max. case temperature	°C	90
Max. power dissipation	W	100
Mounting place		In the control cabinet
Mounting position		vertical
Distance between Drives (fan cooling is integrated on V2 Drives)	mm (in)	≥ 15 (0.6) left and right ≥ 200 (8) top / bottom

Servo Drives		
Item	Description	Part Number
E1400-GP-QN-0S	GENERAL PURPOSE Drive (3x400/480VAC/ 28A / 50/60Hz)	0150-1779
E1430-DP-QN-0S	PROFIBUS-DP Drive (3x400/480VAC/ 28A / 50/60Hz)	0150-1786
E1450-DS-QN-0S	ETHERCAT CoE (3x400/480VAC/ 28A / 50/60Hz)	0150-2411
E1450-EC-QN-0S	ETHERCAT Drive (3x400/480VAC/ 28A / 50/60Hz)	0150-1784
E1450-IP-QN-0S	ETHERNET IP Drive (3x400/480VAC/ 28A / 50/60Hz)	0150-1782
E1450-LU-QN-0S	LinUDP Drive (3x400/480VAC/ 28A / 50/60Hz)	0150-2494
E1450-PD-QN-0S	PROFIdrive Drive (3x400/480VAC/ 28A / 50/60Hz)	0150-2621
E1450-PL-QN-0S	POWERLINK Drive (3x400/480VAC/ 28A / 50/60Hz)	0150-1791
E1450-PN-QN-0S	PROFINET Drive (3x400/480VAC/ 28A / 50/60Hz)	0150-1783
E1450-SC-QN-0S	SERCOS III Drive (3x400/480VAC/ 28A / 50/60Hz)	0150-1785
E1450-SE-QN-0S	SERCOS over ETHERCAT Drive (3x400/480VAC/ 28A / 50/60Hz)	0150-1899
E1400-GP-QN-1S	GENERAL PURPOSE Drive (3x400/480VAC/ 28A / 50/60Hz / STO)	0150-2351
E1430-DP-QN-1S	PROFIBUS-DP Drive (3x400/480VAC/ 28A / 50/60Hz / STO)	0150-2352
E1450-DS-QN-1S	ETHERCAT CoE (3x400/480VAC/ 28A / 50/60Hz / STO)	0150-2412
E1450-EC-QN-1S	ETHERCAT Drive (3x400/480VAC/ 28A / 50/60Hz / STO)	0150-2353
E1450-IP-QN-1S	ETHERNET IP Drive (3x400/480VAC/ 28A / 50/60Hz / STO)	0150-2354
E1450-LU-QN-1S	LinUDP Drive (3x400/480VAC/ 28A / 50/60Hz / STO)	0150-2495
E1450-PD-QN-1S	PROFIdrive Drive (3x400/480VAC/ 28A / 50/60Hz / STO)	0150-2622
E1450-PL-QN-1S	POWERLINK Drive (3x400/480VAC/ 28A / 50/60Hz / STO)	0150-2355
E1450-PN-QN-1S	PROFINET Drive (3x400/480VAC/ 28A / 50/60Hz / STO)	0150-2356
E1450-SC-QN-1S	SERCOS III Drive (3x400/480VAC/ 28A / 50/60Hz / STO)	0150-2357
E1450-SE-QN-1S	SERCOS over ETHERCAT Drive (3x400/480VAC/ 28A / 50/60Hz / STO)	0150-2358
Accessories		
Item	Description	Part Number
DC01-E1400/X4/X30	Drive Connector Set for E1400-0S	0150-3452
DC01-E1400/X4/X30/X33	Drive Connector Set for E1400-1S	0150-3453
DC01-E1400/X1	Drive Connector Regeneration / Busbar	0150-3445
DC01-E1400/X30	Drive Connector 3x400VAC Supply	0150-3449
DC01-E1400/X32	Drive Connector Brake	0150-3450

MagSpring



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MagSpring products can best be described as "magnetic springs." The term "spring", however, is to be understood to mean that MagSpring components generate a constant force over their entire working range, while the characteristic curve for a typical mechanical spring shows an

increase in force with increasing displacement. The generation of force that is independent of the stroke makes MagSprings preferable for balancing weight forces in vertical drive applications.

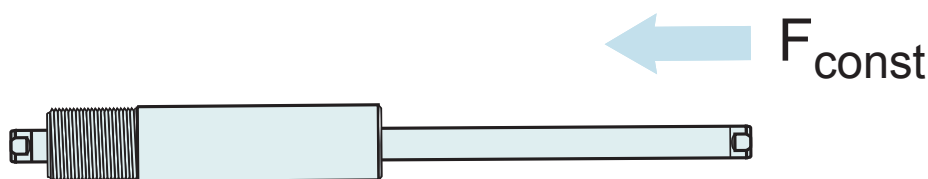
Mode of operation

The mode of operation is based on the attractive force of permanent magnets. Accordingly, no energy source (electricity, compressed air, etc.) is needed. The special design of the flow-guiding components and the magnets translates the strongly non-linear relationship between force and displacement in magnet-iron arrangements into a constant force curve. Depending on the strength class of the MagSpring, the permanent magnets are either in the stator, in the slider, or in both components. The slider is guided by an integrated plain bearing, so that MagSprings can be used comparably to gas pressure springs in a design.

WEIGHT LOAD COMPENSATION

Linear motors and other direct drives must provide a constant force in vertical orientations, in order to oppose the weight load. Using a MagSpring installed in parallel with the linear motor, this weight load can be passively balanced. The linear motor is then only used for the actual positioning operation and dynamic forces, and can therefore be correspondingly smaller in design.

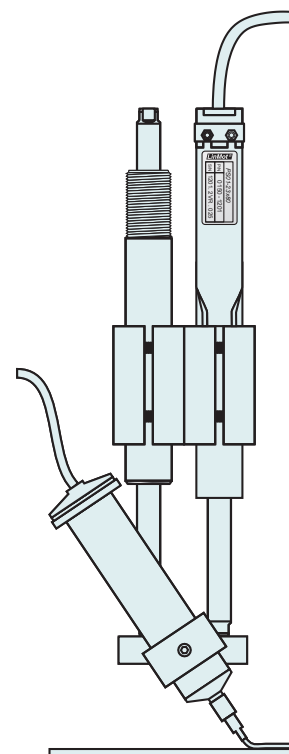
APPLICATION OF CONSTANT FORCE



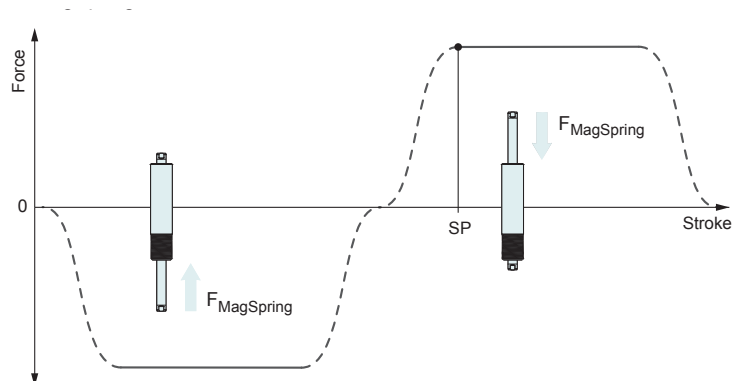
HOLDING FUNCTION (POWER OFF)

Since MagSprings are purely passive elements, a defined function or position of a device can be ensured in a power-off condition. For example, a gripper or press head on a vertical mount can be held up, or a slider can be pushed in or pulled out with a constant force.

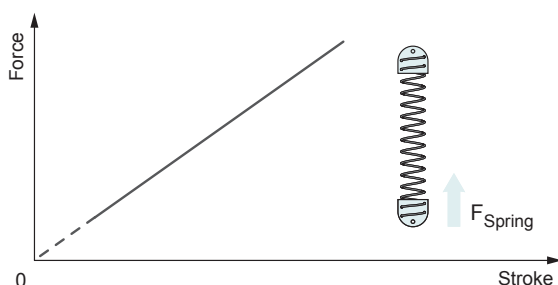
Thanks to the constant force-displacement curve, many other applications are possible, such as the generation of a constant press force, regardless of position; application of a constant holding force across a large stroke range; or single-sided force support in drive applications. The effective force is in the range of +/- 10% of the nominal force, due to material and manufacturing tolerances.



MagSpring ©



Mechanical Spring



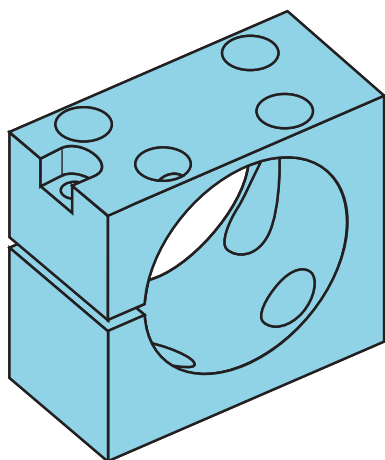
Working Range

In the relaxed state, the slider is approximately centered in the stator, while the working end of the slider extends somewhat out of the end of the stator. Fundamentally, however, both ends of the slider can be used to mount loads. From this rest position, the slider can be pulled or pushed out of the stator in both directions. The force increases from zero to the nominal force within a short stroke length. The working stroke then continues with a constant force. The start position (SP) describes the distance between the working end of the slider and the end of the stator at the beginning of the constant force range.



MOUNTING

The stators can be mounted via the screw thread, or with a clamp, as desired. There are appropriate mounting flanges for both sizes. When attaching the slider to the load mass, care should be taken that any parallelism errors are compensated for with a flexible coupler.



COMBINATION WITH H-GUIDES

The illustration on the page before shows a vertical arrangement of an H01 linear guide together with a MagSpring. The MagSpring presses upward with a constant force. The weight load is balanced by the MagSpring, and the linear motor thus bears less load. If the electrical power supply is interrupted, the MagSpring supports the load, or moves it into a safe waiting position.

MATERIALS

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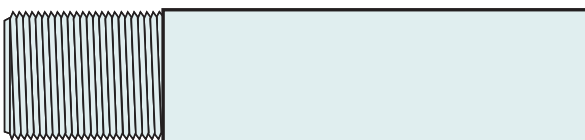
Slider:

Chromium-Nickel Steel 1.4301



Stator:

Iron, electroless nickel plated



Bearing:

POM based

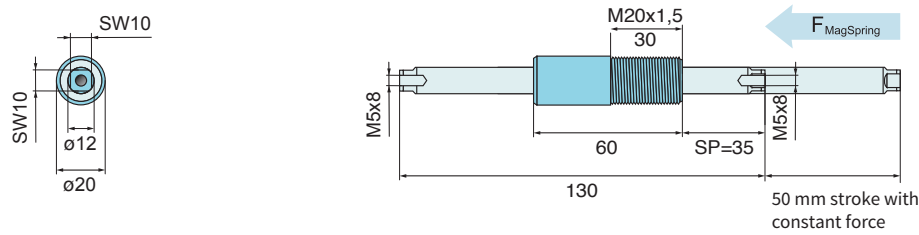


MagSpring M01-20



- ✓ Constant force along the entire stroke
- ✓ Stroke up to 290 mm
- ✓ Force up to 22 N
- ✓ Purely passive, no electricity needed nor compressed air
- ✓ Ideal for compensating the gravitational force
- ✓ Also suitable for dynamic movements
- ✓ Compatible with H-guides

M01-20x60/50: FORCE 11-22N / STROKE 50 mm

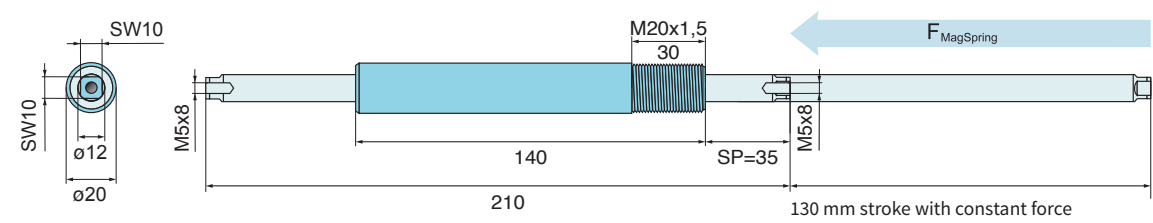


Dimensions in mm

The MagSpring has a constant force, as soon as the slider has been pulled out or pushed by the distance SP.
The distance SP is measured between the unmarked slider end and the end of the stator (threaded end).

MagSpring	Constant force [N]	Stator mass [g (lb)]	Slider mass [g (lb)]
M01-20x60/50-11	11	75 (0.16)	75 (0.16)
M01-20x60/50-17	17	75 (0.16)	75 (0.16)
M01-20x60/50-22	22	75 (0.16)	75 (0.16)

M01-20x140/130: FORCE 11-22N / STROKE 130 mm

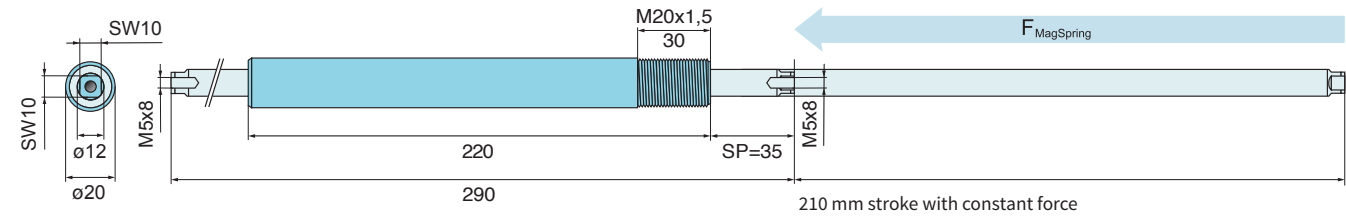


Dimensions in mm

The MagSpring has a constant force, as soon as the slider has been pulled out or pushed by the distance SP.
The distance SP is measured between the unmarked slider end and the end of the stator (threaded end).

MagSpring	Constant force [N]	Stator mass [g (lb)]	Slider mass [g (lb)]
M01-20x140/130-11	11	180 (0.39)	155 (0.34)
M01-20x140/130-17	17	180 (0.39)	155 (0.34)
M01-20x140/130-22	22	180 (0.39)	155 (0.34)

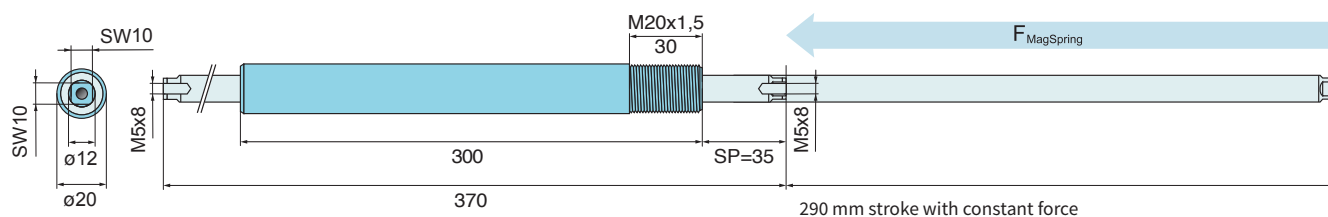
M01-20x220/210: FORCE 11-22N / STROKE 210 mm



Dimensions in mm

The MagSpring has a constant force, as soon as the slider has been pulled out or pushed by the distance SP.
The distance SP is measured between the unmarked slider end and the end of the stator (threaded end).

MagSpring	Constant force [N]	Stator mass [g (lb)]	Slider mass [g (lb)]
M01-20x220/210-11	11	285 (0.62)	220 (0.49)
M01-20x220/210-17	17	285 (0.62)	220 (0.49)
M01-20x220/210-22	22	285 (0.62)	220 (0.49)

M01-20x300/290: FORCE 11-22N / STROKE 290 mm

The MagSpring has a constant force, as soon as the slider has been pulled out or pushed by the distance SP.
The distance SP is measured between the unmarked slider end and the end of the stator (threaded end).

Dimensions in mm

MagSpring	Constant force [N]	Stator mass [g (lb)]	Slider mass [g (lb)]
M01-20x300/290-11	11	388 (0.86)	280 (0.61)
M01-20x300/290-17	17	388 (0.86)	280 (0.61)
M01-20x300/290-22	22	388 (0.86)	280 (0.61)

**ORDERING INFORMATION**

M01-20x60/50		MagSpring M01-20 with 50 mm stroke			
	Stator	MS01-20x60	MagSpring Stator 20x60 mm		0250-2200
	Slider	ML01-12x130/80-10	Slider for MagSpring M01-20x60/50, Force 11N		0250-2300
		ML01-12x130/80-15	Slider for MagSpring M01-20x60/50, Force 17N		0250-2308
		ML01-12x130/80-20	Slider for MagSpring M01-20x60/50, Force 22N		0250-2301
M01-20x140/130		MagSpring M01-20 with 130 mm stroke			
	Stator	MS01-20x140	MagSpring Stator 20x140 mm		0250-2201
	Slider	ML01-12x210/160-10	Slider for MagSpring M01-20x140/130, Force 11N		0250-2302
		ML01-12x210/160-15	Slider for MagSpring M01-20x140/130, Force 17N		0250-2309
		ML01-12x210/160-20	Slider for MagSpring M01-20x140/130, Force 22N		0250-2303
M01-20x220/210		MagSpring M01-20 with 210 mm stroke			
	Stator	MS01-20x220	MagSpring Stator 20x220 mm		0250-2202
	Slider	ML01-12x290/240-10	Slider for MagSpring M01-20x220/210, Force 11N		0250-2304
		ML01-12x290/240-15	Slider for MagSpring M01-20x220/210, Force 17N		0250-2310
		ML01-12x290/240-20	Slider for MagSpring M01-20x220/210, Force 22N		0250-2305
M01-20x300/290		MagSpring M01-20 with 290 mm stroke			
	Stator	MS01-20x300	MagSpring Stator 20x300 mm		0250-2207
	Slider	ML01-12x370/320-10	Slider for MagSpring M01-20x300/290, Force 11N		0250-2311
		ML01-12x370/320-15	Slider for MagSpring M01-20x300/290, Force 17N		0250-2312
		ML01-12x370/320-20	Slider for MagSpring M01-20x300/290, Force 22N		0250-2313

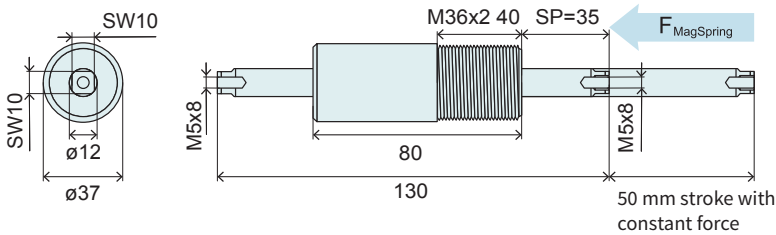
MagSpring M01-37



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- ✓ Constant force along the entire stroke
- ✓ Stroke up to 350 mm
- ✓ Force up to 60 N
- ✓ Purely passive, no electricity needed nor compressed air
- ✓ Ideal for compensating the gravitational force
- ✓ Also suitable for dynamic movements
- ✓ Compatible with H-guides

M01-37x80/50: FORCE 40-60N / STROKE 50 mm

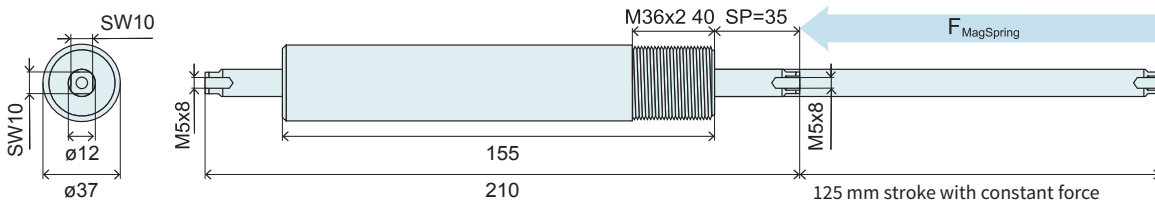


The MagSpring has a constant force, as soon as the slider has been pulled out or pushed by the distance SP.
The distance SP is measured between the unmarked slider end and the end of the stator (threaded end).

Dimensions in mm

MagSpring	Constant force [N]	Stator mass [g (lb)]	Slider mass [g (lb)]
M01-37x80/50-40	40	440 (0.90)	75 (0.16)
M01-37x80/50-50	50	440 (0.90)	75 (0.16)
M01-37x80/50-60	60	440 (0.90)	75 (0.16)

M01-37x155/125: FORCE 40-60N / STROKE 125 mm



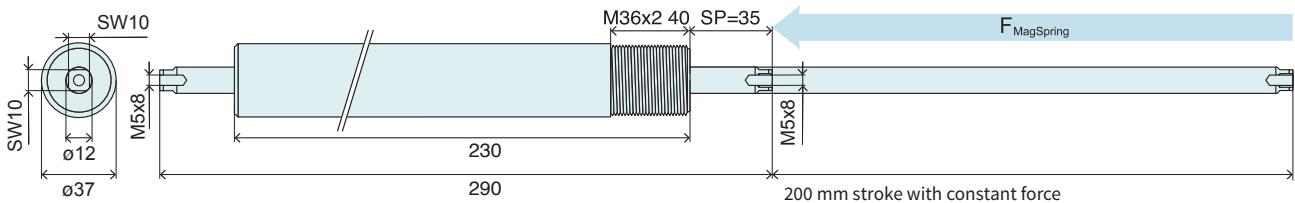
The MagSpring has a constant force, as soon as the slider has been pulled out or pushed by the distance SP.
The distance SP is measured between the unmarked slider end and the end of the stator (threaded end).

Dimensions in mm

MagSpring	Constant force [N]	Stator mass [g (lb)]	Slider mass [g (lb)]
M01-37x155/125-40	40	880 (1.80)	155 (0.34)
M01-37x155/125-50	50	880 (1.80)	155 (0.34)
M01-37x155/125-60	60	880 (1.80)	155 (0.34)

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M01-37x230/200: FORCE 40-60N / STROKE 200 mm

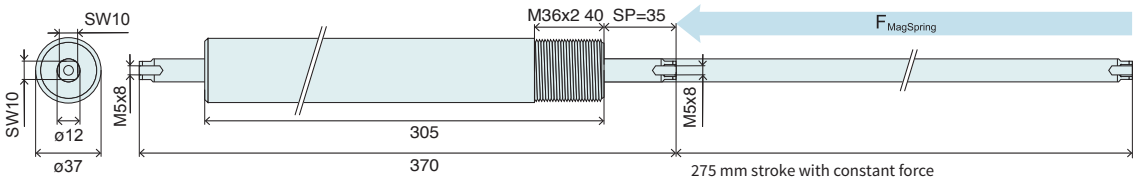


The MagSpring has a constant force, as soon as the slider has been pulled out or pushed by the distance SP.
The distance SP is measured between the unmarked slider end and the end of the stator (threaded end).

Dimensions in mm

MagSpring	Constant force [N]	Stator mass [g (lb)]	Slider mass [g (lb)]
M01-37x230/200-40	40	1320 (2.70)	220 (0.49)
M01-37x230/200-50	50	1320 (2.70)	220 (0.49)
M01-37x230/200-60	60	1320 (2.70)	220 (0.49)

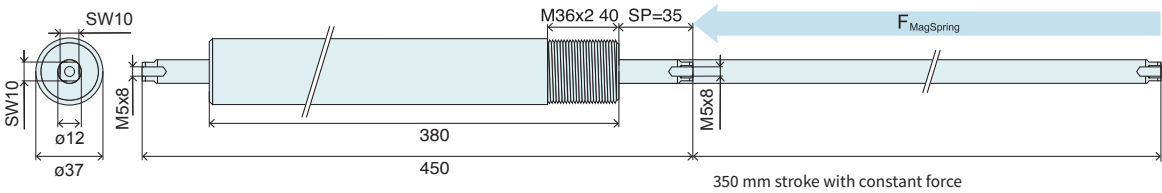
M01-37x305/275: FORCE 40-60N / STROKE 275 mm



The MagSpring has a constant force, as soon as the slider has been pulled out or pushed by the distance SP. Dimensions in mm
The distance SP is measured between the unmarked slider end and the end of the stator (threaded end).

MagSpring	Constant force [N]	Stator mass [g (lb)]	Slider mass [g (lb)]
M01-37x305/275-40	40	1800 (3.90)	280 (0.61)
M01-37x305/275-50	50	1800 (3.90)	280 (0.61)
M01-37x305/275-60	60	1800 (3.90)	280 (0.61)

M01-37x380/350: FORCE 60N / STROKE 350 mm



The MagSpring has a constant force, as soon as the slider has been pulled out or pushed by the distance SP. Dimensions in mm
The distance SP is measured between the unmarked slider end and the end of the stator (threaded end).

MagSpring	Constant force [N]	Stator mass [g (lb)]	Slider mass [g (lb)]
M01-37x380/350-60	60	2200 (4.85)	420 (0.93)

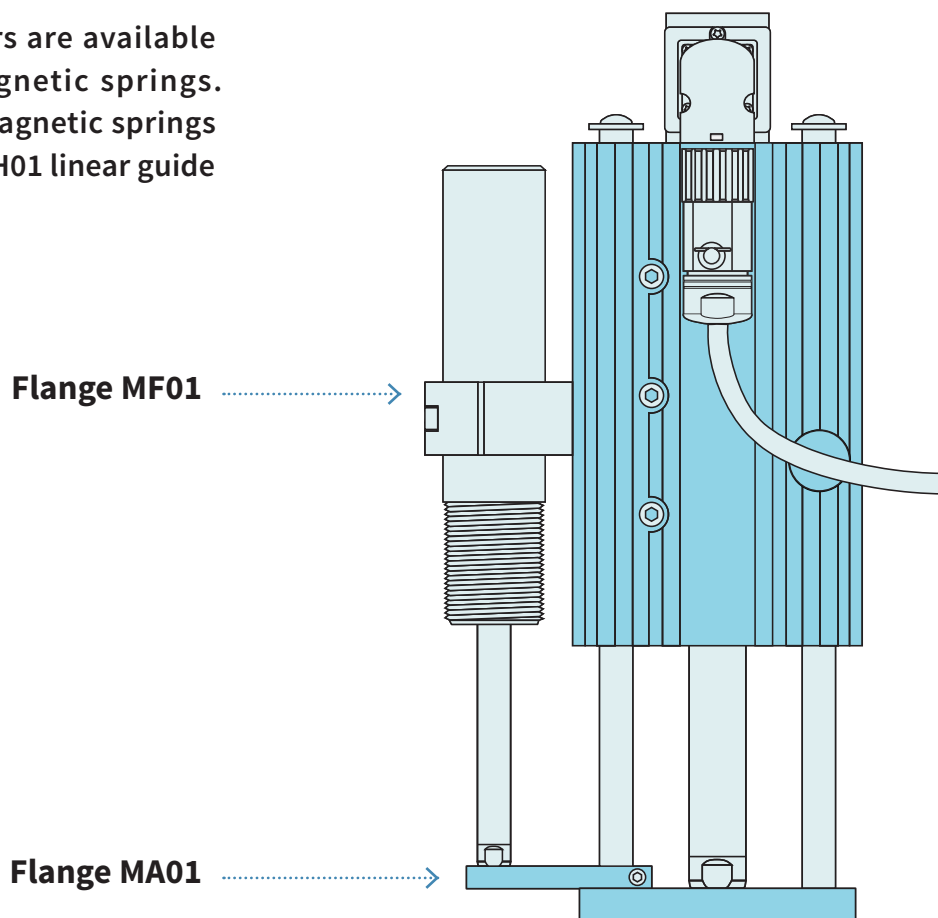


ORDERING INFORMATION

M01-37x80/50		MagSpring M01-37 with 50 mm stroke			
	→ Stator	MS01-37x80	MagSpring Stator 37x80mm		0250-2203
	→ Slider	ML01-12x130/80-10	Slider for MagSpring M01-37x80/50, Force 40N		0250-2300
		ML01-12x130/80-15	Slider for MagSpring M01-37x80/50, Force 50N		0250-2308
		ML01-12x130/80-20	Slider for MagSpring M01-37x80/50, Force 60N		0250-2301
M01-37x155/125		MagSpring M01-37 with 125 mm stroke			
	→ Stator	MS01-37x155	MagSpring Stator 37x155mm		0250-2204
	→ Slider	ML01-12x210/160-10	Slider for MagSpring M01-37x155/125, Force 40N		0250-2302
		ML01-12x210/160-15	Slider for MagSpring M01-37x155/125, Force 50N		0250-2309
		ML01-12x210/160-20	Slider for MagSpring M01-37x155/125, Force 60N		0250-2303
M01-37x230/200		MagSprings M01-37 with 200 mm stroke			
	→ Stator	MS01-37x230	MagSpring Stator 37x230mm		0250-2205
	→ Slider	ML01-12x290/240-10	Slider for MagSpring M01-37x230/200, Force 40N		0250-2304
		ML01-12x290/240-15	Slider for MagSpring M01-37x230/200, Force 50N		0250-2310
		ML01-12x290/240-20	Slider for MagSpring M01-37x230/200, Force 60N		0250-2305
M01-37x305/275		MagSprings M01-37 with 275 mm stroke			
	→ Stator	MS01-37x305	MagSpring Stator 37x305mm		0250-2206
	→ Slider	ML01-12x370/320-10	Slider for MagSpring M01-37x305/275, Force 40N		0250-2311
		ML01-12x370/320-15	Slider for MagSpring M01-37x305/275, Force 50N		0250-2312
		ML01-12x370/320-20	Slider for MagSpring M01-37x305/275, Force 60N		0250-2313
M01-37x380/350		MagSpring M01-37 with stroke 350 mm			
	→ Stator	MS01-37x380	MagSpring Stator 37x380mm		0250-2209
	→ Slider	ML01-12x450/400-20	Slider for MagSpring M01-37x380/350, Force 60N		0250-2332

Accessories

Mounting flanges and adaptors are available for mounting MagSpring magnetic springs. Using these accessories, the magnetic springs can be mounted directly on an H01 linear guide or a B01 bridge guide.



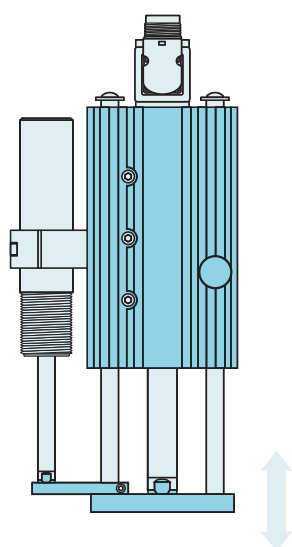
MOUNTING

The flange for mounting the MagSpring stators is secured with T-nuts in the T-slot provided for this purpose on the linear or bridge guide.

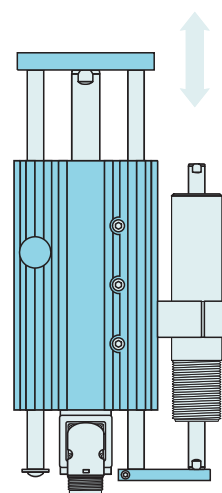
For weight balancing in vertical installations, the lower slider end of the MagSpring is attached to the guide shaft of the guide using the Adaptor.

Depending on the installation orientation of the guide, the Adaptor is attached to the guide shaft at the front mounting plate (motor on top) or the rear end of the guide shaft (motor on the bottom).

MOTOR ON THE TOP



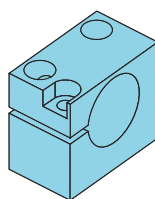
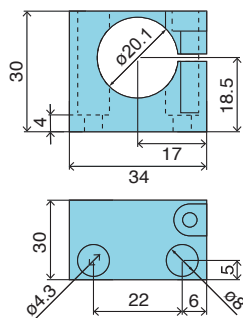
MOTOR ON THE BOTTOM



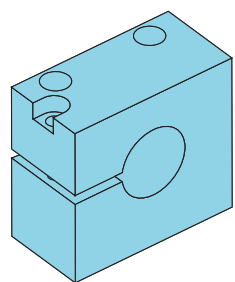
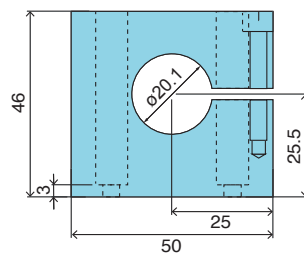
FLANGE AND ADAPTOR FOR MAGSPRING



FLANGES FOR MAGSPRING M01-20



MF01-20/H23



MF01-20/H37

Material: Aluminum (AlMgSi), black anodized

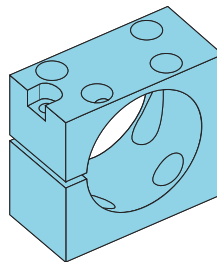
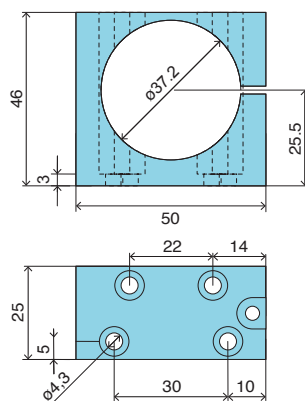
Mass: MF01-20/H23 approx. 30g (0.066lb)

MF01-20/H37 approx. 125g (0.276lb)

Dimensions in mm

Item	Description	Item No.
MF01-20/H23	Flange MagSpring M01-20 - fits guides H01-23	0250-2306
MF01-20/H37	Flange MagSpring M01-20 - fits guides H01-37	0250-2315

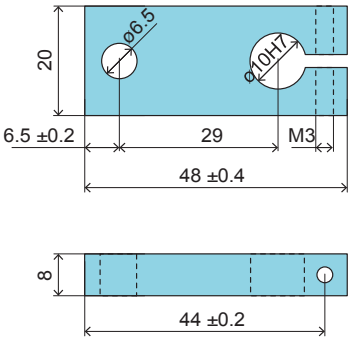
FLANSCH UND ADAPTER FÜR MAGSPRING



Dimensions in mm

Item	Description	Item No.
MF01-37/H37	Flange MagSpring M01-37 - fits guides H01-37 und B01-37 - fits guides H01-48 und B01-48	0250-2307

ADAPTOR FOR MAGSPRING M01-20 AND GUIDES H01-23

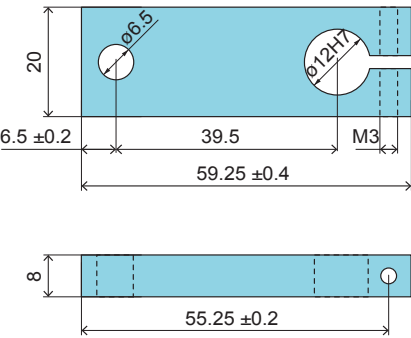


Material: Aluminum (AlMgSi), black anodized
Mass: approx. 18g (0.066lb)

Dimensions in mm

Item	Description	Item No.
MA01-20/H23	Adaptor MagSpring M01-20 / Guides H01-23	0250-0116

ADAPTOR FOR MAGSPRING M01-37 AND GUIDES H01-37 / B01-37

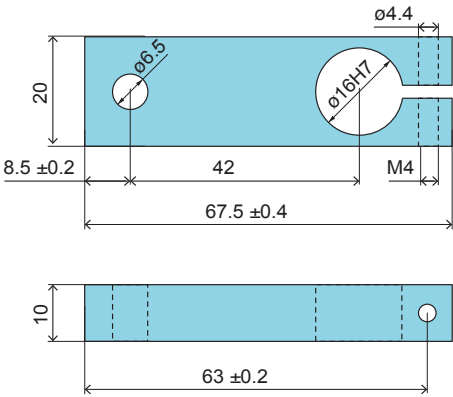


Material: Aluminum (AlMgSi), black anodize
Mass: approx. 18g (0.066lb)

Dimensions in mm

Item	Description	Item No.
MA01-37/H37	Adaptor MagSpring M01-37 / Guides H01-37 und B01-37	0250-0117

ADAPTOR FOR MAGSPRING M01-37 AND GUIDES H01-48 / B01-48



Material: Aluminum (AlMgSi), black anodize
Mass: approx. 32g (0.034lb)

Dimensions in mm

Item	Description	Item No.
MA01-37/H48	Adaptor MagSpring M01-37 / Guides H01-48 und B01-48	0250-0118

LINEAR GUIDES



LinMot linear guides are compact guide units with integrated ball bushings or bearings for the LinMot linear motors. The guides use load bearings to support external forces, torques, and bending moments. Additionally the linear guides act as an anti-twist device. These products offer high guidance accuracy and facilitate dynamic and precise positioning of the load.

The load is connected directly to the front panel of the linear guide. The mechanical dimensions and mounting options are compatible with many pneumatic guides. The modular design allows an easy mounting of accessories, such as a mechanical brake or MagSpring (magnetic spring) for load balancing in a vertical installation position.

LinMot offers two guide types, H-guides and bridge guides B, which differ in construction and in use.

LinMot Linear Guides



H01 Guide

Compact guide for linear motor series P01. Equipped with ball bushes or plain bearings.



H01 Guide Stainless Steel

Compact guide unit made of stainless steel for the use in difficult environmental conditions.

H10 Guide

Compact guide for linear motor series P10. Equipped with integrated profile guides with 4 ball rows.



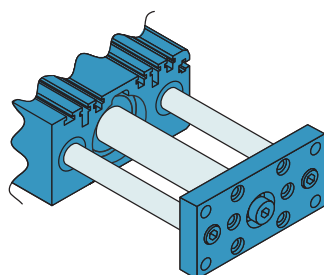
B01 Bridge Guides

Compact guide units with integrated ball bearings or plain bushings for the operation of LinMot linear motors P01 together with high clearance sliders. The rear end plate gives the bridge guide an increased mechanical stiffness.



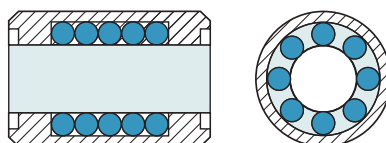
Characteristics

MECHANICAL COMPATIBILITY



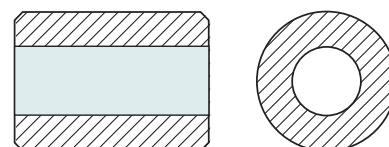
LinMot H01 guides are mechanically compatible with pneumatic H-guides. This allows simple replacement with a new drive technology, if more flexibility or higher dynamics are required.

BALL BEARINGS



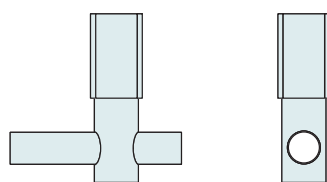
Use of linear guides with ball bearings is recommended for standard applications under normal environmental conditions. Linear guides with ball bearings have very good running characteristics, and ensure nearly frictionless operation.

SINTERED BUSHINGS



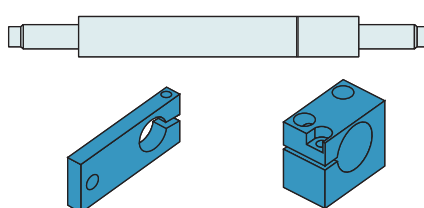
For applications in very dirty, damp, or wet environments, the use of linear guides with plain bushings and stainless steel shafts is recommended. For highly dynamic applications with accelerations over 50 m/s^2 , the use of linear modules with plain bushings is also recommended.

BRAKE OPTION



As an option, H01-37 and H01-48 guides can have a mechanical brake attached. The pneumatic brake is controlled by the Servo Drive. The brake acts on the guide shafts of the linear guide, and is released under air pressure (4-6 bar). With no air pressure, the brake is on.

MAGSPRING OPTION



In vertical applications, a MagSpring can be used as a weight balancer. The MagSpring also prevents the linear motor from falling to the lower end stop if the linear motor is turned off or the power is lost. Appropriate accessories are available for mounting the magnetic spring.

FAN OPTION



With an additional fan, the holding force of the linear motor can be nearly doubled. If needed, the optional fan can be mounted directly on the guide.



Yellow reservoir with red cap.

PS01-23x80-R
S.N: 1233.5H3.034
P.N: 0160-1233 CE

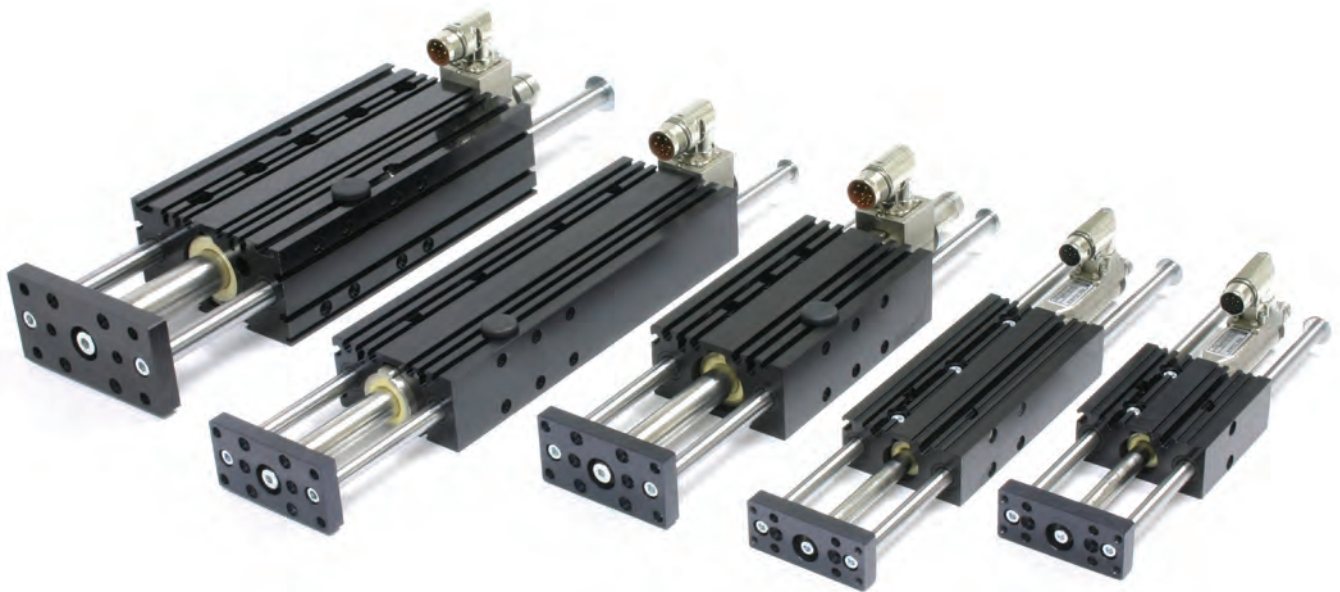
PS01-23x80-R
S.N: 1233.5H3.034
P.N: 0160-1233 CE

Spring 0250-0116
No 0116 4HS 107

S.N: 1233.5H3.034
Art N: 0160-1233

THIS SIDE UP

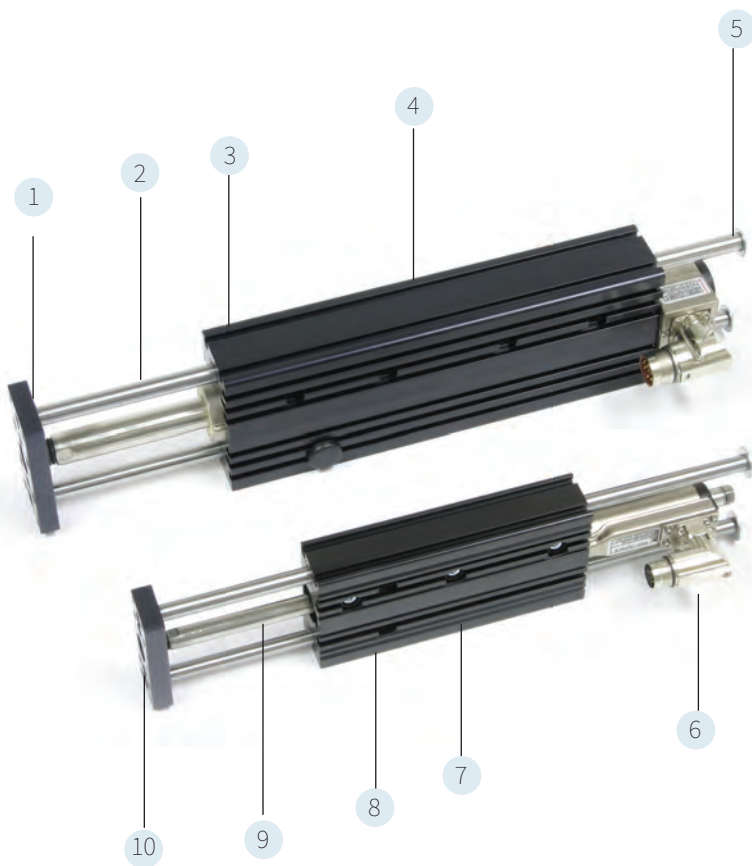
LINEAR GUIDES H01



- ✓ Bearing external forces, torque and bending moments
- ✓ Turning resistance
- ✓ Compatible with pneumatic guides
- ✓ Integrated Linear ball bearings or sintered bearings
- ✓ The load can be connected directly to the front plate

LINEAR GUIDES H01

H01-23x86	966
H01-23x166	968
H01-37x166	970
H01-37x286	972
H01-48x250	974
H01-48x370	976
Technical Data	978
Parts List	979



1. Mounting plate with counter bore for precise load mounting
2. Hardened or stainless steel shafts for precise positioning and quiet operation
3. Ball bearings or sintered bushings, for high load masses and long life
4. Guide block with counter bores for uncomplicated, precise mounting of the Linear Module
5. Mechanical end stop (rear)
6. Linear motor stator with integrated bearings, temperature and position sensors. Available with IP67 connector or cable exit.
7. Clamping cylinder to secure the stator in the guide block.
8. T-slots in the guide block allow simple mounting of accessories.
9. Linear motor slider, guarantees maximum force and precise positioning.
10. Integrated linear coupling for simple mounting of the slider.



Linear Module HM01

Complete HM01 linear modules, consisting of a H01 guide and P01 linear motor, are highly dynamic design components. Compact construction and free positioning have significant advantages, especially in textile and packaging machines, assembly and feeding technology, laboratory automation, and special machines and systems.

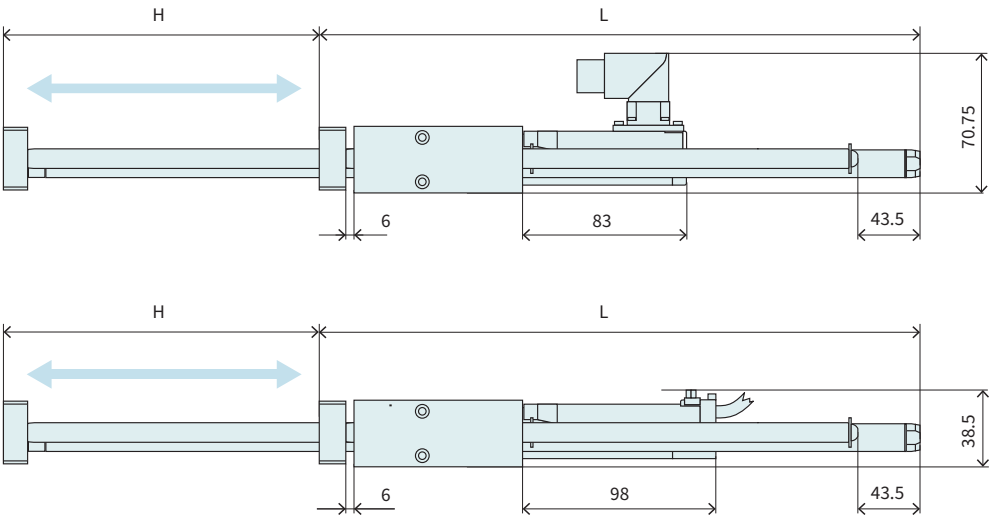
Designation Linear Guide H01

H01	-	23	x	86	/	60	-	GF	Bearing type
									Stroke
									Length guide block
									Stator diameter
									H-Guide

Designation Linear Module HM01

HM01	-	23	x	80	/	60	-	R	Connector
									Stroke
									Active stator length
									Stator diameter
									Module type

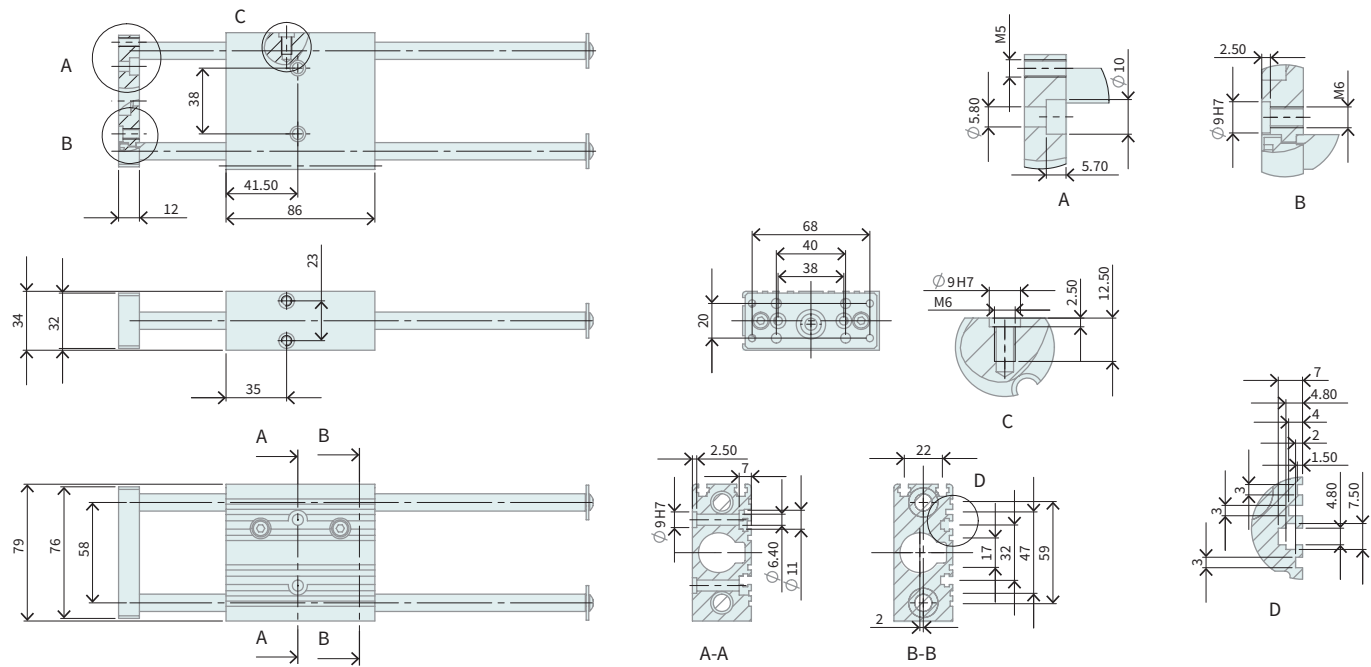
LINEAR MODULE HM01-23x80



Linear Module	Bearing type	Stroke H [mm (inch)]	Moving Parts L [mm (inch)]	Moving Mass ¹ [g (lb)]	Total Weight [g (lb)]
HM01-23x80/60	Ball bearings	60 (2.36)	205.5 (8.09)	405 (0.89)	1100 (2.43)
HM01-23x80/160	Ball bearings	160 (6.30)	305.5 (12.03)	610 (1.34)	1310 (2.88)
HM01-23x80/260	Ball bearings	260 (10.24)	435.5 (17.15)	860 (1.90)	1560 (2.43)
HM01-23x80/60-GF	Plain Bushings	60 (2.36)	205.5 (8.07)	405 (0.89)	1100 (2.43)
HM01-23x80/160-GF	Plain Bushings	160 (6.30)	305.5 (12.03)	610 (1.34)	1310 (2.88)
HM01-23x80/260-GF	Plain Bushings	260 (10.24)	435.5 (17.15)	860 (1.90)	1560 (2.43)

¹ Mass with moving slider

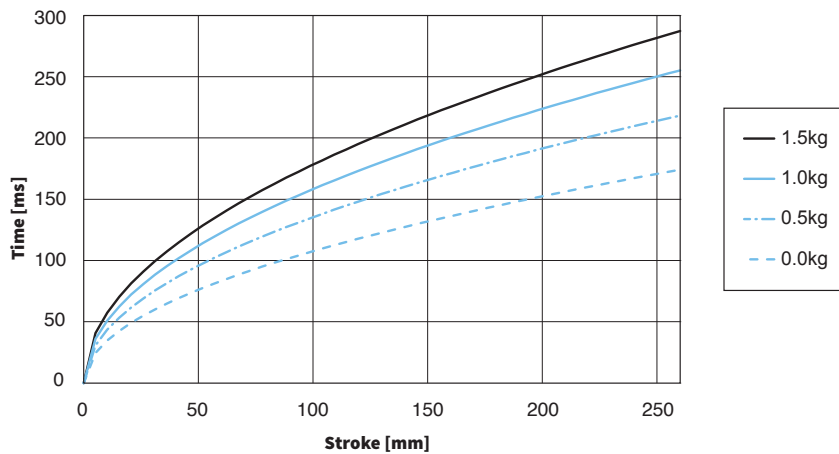
LINEAR GUIDES H01-23x86



Dimensions in mm

Materials	Guide Block & Front Plate	Guide Shaft	Bearing	Wipers
H01-23x86/... Ball Bearings	Anodized Aluminum	Hardened Steel	Steel	Nitrile Rubber
H01-23x86/...-GF Plain Bushings	Anodized Aluminum	Stainless Steel 1.4104	Sintered Bronze	Nitrile Rubber

POSITIONING TIMES WITH HM01-23x80



Minimum positioning times for horizontal motions with different load masses, controlled by an E1100-HC Servo Drive.

ORDERING INFORMATION

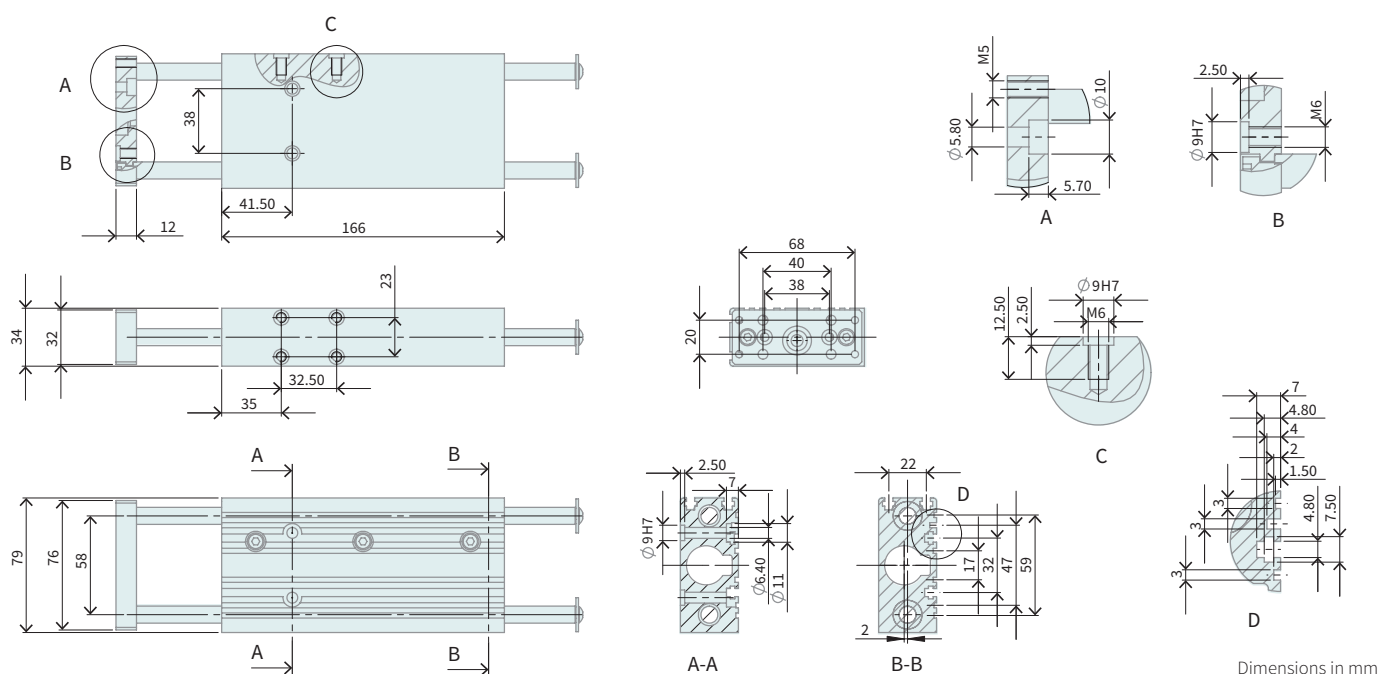
HM01-23x80/60		Linear Module 23x80 with 60 mm Stroke			
	→ Linear Guide	H01-23x86/60	H01 for P01-23x80, 60 mm Stroke, Ball Bearings		0150-5014
		H01-23x86/60-GF	H01 for P01-23x80, 60 mm Stroke, Plain Bushings		0150-5074
	→ Stator	PS01-23x80-R	Linear motor Stator, connector R - IP67		0150-1233
		PS01-23x80-R20	Linear motor Stator, 0.2 m Cable, connector R - IP67		0150-1241
		PS01-23x80	Linear motor Stator, 1.0 m Cable, connector D		0150-1201
		PS01-23x80F-HP-R	Stator HP with IP67 connector M17/9(m)		0150-1259
		PS01-23x80F-HP-R20	Stator HP, 0.2 m cable, IP67 con. M17/9(m)		0150-1260
	→ Slider	PL01-12x190/150-LC	Slider 'standard LC'		0150-2582
		PL01-12x200/160-HP	Slider 'High Performance'		0150-1518
	HM01-23x80/160		Linear Module 23x80 with 160 mm Stroke		
	→ Linear Guide	H01-23x86/160	H01 for P01-23x80, 160 mm Stroke, Ball Bearings		0150-5015
		H01-23x86/160-GF	H01 for P01-23x80, 160 mm Stroke, Plain Bushings		0150-5075
	→ Stator	PS01-23x80-R	Linear motor Stator, connector R - IP67		0150-1233
		PS01-23x80-R20	Linear motor Stator, 0.2 m Cable, connector R - IP67		0150-1241
		PS01-23x80	Linear motor Stator, 1.0 m Cable, connector D		0150-1201
		PS01-23x80F-HP-R	Stator HP with IP67 connector M17/9(m)		0150-1259
		PS01-23x80F-HP-R20	Stator HP, 0.2 m cable, IP67 con. M17/9(m)		0150-1260
	→ Slider	PL01-12x290/250-LC	Slider 'standard LC'		0150-2583
		PL01-12x290/250-HP	Slider 'High Performance'		0150-1521
	HM01-23x80/260		Linear Module 23x80 with 260 mm Stroke		
	→ Linear Guide	H01-23x86/260	H01 for P01-23x80, 260 mm Stroke, Ball Bearings		0150-5016
		H01-23x86/260-GF	H01 for P01-23x80, 260 mm Stroke, Plain Bushings		0150-5076
	→ Stator	PS01-23x80-R	Linear motor Stator, connector R - IP67		0150-1233
		PS01-23x80-R20	Linear motor Stator, 0.2 m Cable, connector R - IP67		0150-1241
		PS01-23x80	Linear motor Stator, 1.0 m Cable, connector D		0150-1201
		PS01-23x80F-HP-R	Stator HP with IP67 connector M17/9(m)		0150-1259
		PS01-23x80F-HP-R20	Stator HP, 0.2 m cable, IP67 con. M17/9(m)		0150-1260
	→ Slider	PL01-12x420/380-LC	Slider 'standard LC'		0150-2585
		PL01-12x420/380-HP	Slider 'High Performance'		0150-1523

ACCESSORIES

Fan	HV01-23	Fan for H01-23 Linear Guides		0150-5050
MagSpring	MF01-20/H23	Mounting flange for MagSpring M01-20x...		0250-2306
	MA01-20/H23	Mounting adapter for MagSpring M01-20x...		0250-0116
Center Sleeve	HC01-09/04	Center Sleeve D9x4 mm		0150-3251

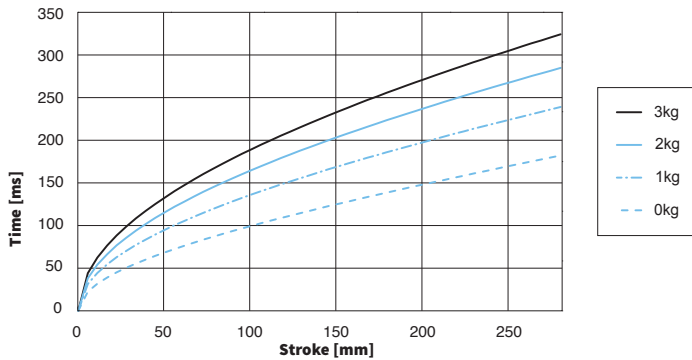
Linear Module	Bearing type	Stroke H [mm (inch)]	Moving Parts L [mm (inch)]	Moving Mass ¹ [g (lb)]	Total Weight [g (lb)]
HM01-23x160/80	Ball bearings	80 (3.15)	305.5 (12.03)	610 (1.34)	1890 (4.17)
HM01-23x160/180	Ball bearings	180 (7.09)	435.5 (17.15)	860 (1.90)	2140 (4.72)
HM01-23x160/280	Ball bearings	280 (11.02)	495.5 (19.51)	1020 (2.25)	2300 (5.07)
HM01-23x160/80-GF	Plain Bushings	80 (3.15)	305.5 (12.03)	610 (1.34)	1890 (4.17)
HM01-23x160/180-GF	Plain Bushings	180 (7.09)	435.5 (17.15)	860 (1.90)	2140 (4.72)
HM01-23x160/280-GF	Plain Bushings	280 (11.02)	495.5 (19.51)	1020 (2.25)	2300 (5.07)

LINEAR GUIDES H01-23x166



Materials	Guide Block & Front Plate	Guide Shaft	Bearing	Wipers
H01-23x166/... Ball Bearings	Anodized Aluminum	Hardened Steel	Steel	Nitrile Rubber
H01-23x166/...-GF Plain Bushings	Anodized Aluminum	Stainless Steel 1.4104	Sintered Bronze	Nitrile Rubber

POSITIONING TIMES WITH HM01-23x160



Minimum positioning times for horizontal motions with different load masses, controlled by an E1100-HC Servo Drive.

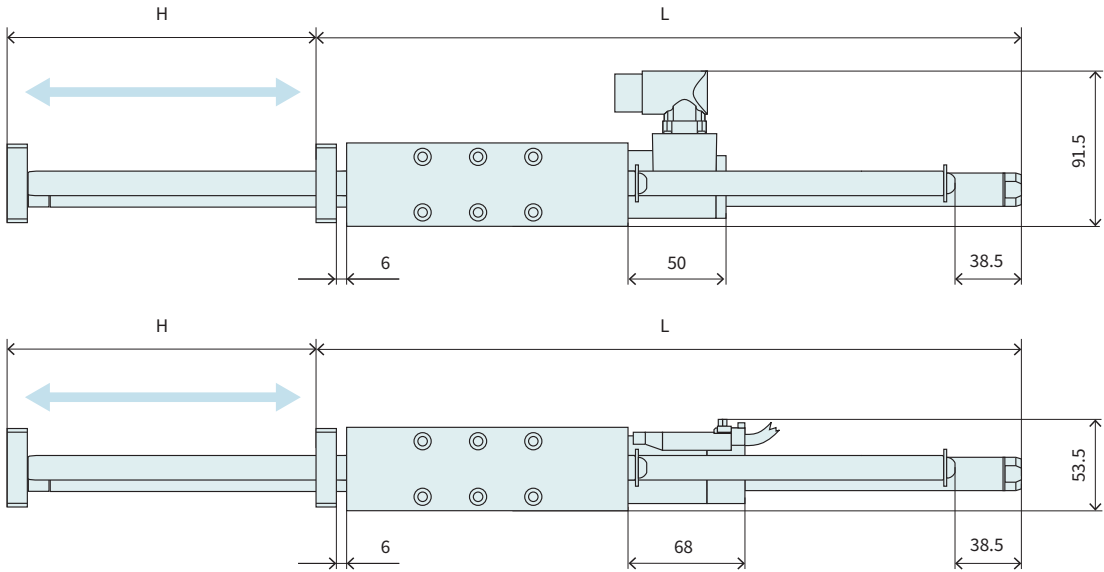
ORDERING INFORMATION

HM01-23x160/80		Linear Module 23x160 with 80 mm Stroke				
	→	Linear Guide	H01-23x166/80	H01 for P01-23x160, 80 mm Stroke, Ball Bearings		0150-5017
			H01-23x166/80-GF	H01 for P01-23x160, 80 mm Stroke, Gleitlager		0150-5077
	→	Stator	PS01-23x160-R	Linear motor Stator, connector R - IP67		0150-1234
			PS01-23x160F-R	Linear motor Stator, connector R - IP67	Fast Winding	0150-1235
			PS01-23x160-R20	Linear motor Stator, 0,2 m Cable, connector R - IP67		0150-1242
			PS01-23x160F-R20	Linear motor Stator, 0,2 m Cable, connector R - IP67	Fast Winding	0150-1243
			PS01-23x160	Linear motor Stator, 1,0 m Cable, connector D		0150-1202
			PS01-23x160H-HP-R	Stator HP with IP67 connector M17/9(m)		0150-1254
			PS01-23x160H-HP-R20	Stator HP, 0,2m cable, IP67 con. M17/9(m)		0150-1255
	→	Slider	PL01-12x290/250-LC	Slider 'standard LC'		0150-2583
			PL01-12x290/250-HP	Slider 'High Performance'		0150-1521
	HM01-23x160/180		Linear Module 23x160 with 180 mm Stroke			
	→	Linear Guide	H01-23x166/180	H01 for P01-23x160, 180 mm Stroke, Ball Bearings		0150-5018
			H01-23x166/180-GF	H01 for P01-23x160, 180 mm Stroke, Gleitlager		0150-5078
	→	Stator	PS01-23x160-R	Linear motor Stator, connector R - IP67		0150-1234
			PS01-23x160F-R	Linear motor Stator, connector R - IP67	Fast Winding	0150-1235
			PS01-23x160-R20	Linear motor Stator, 0,2 m Cable, connector R - IP67		0150-1242
			PS01-23x160F-R20	Linear motor Stator, 0,2 m Cable, connector R - IP67	Fast Winding	0150-1243
			PS01-23x160	Linear motor Stator, 1,0 m Cable, connector D		0150-1202
			PS01-23x160H-HP-R	Stator HP with IP67 connector M17/9(m)		0150-1254
			PS01-23x160H-HP-R20	Stator HP, 0,2 m cable, IP67 con. M17/9(m)		0150-1255
	→	Slider	PL01-12x420/380-LC	Slider 'standard LC'		0150-2585
			PL01-12x420/380-HP	Slider 'High Performance'		0150-1523
	HM01-23x160/280		Linear Module 23x160 with 280 mm Stroke			
	→	Linear Guide	H01-23x166/280	H01 for P01-23x160, 280 mm Stroke, Ball Bearings		0150-5019
			H01-23x166/280-GF	H01 for P01-23x160, 280 mm Stroke, Plain Bushings		0150-5079
	→	Stator	PS01-23x160-R	Linear motor Stator, connector R - IP67		0150-1234
			PS01-23x160F-R	Linear motor Stator, connector R - IP67	Fast Winding	0150-1235
			PS01-23x160-R20	Linear motor Stator, 0,2 m Cable, connector R - IP67		0150-1242
			PS01-23x160F-R20	Linear motor Stator, 0,2 m Cable, connector R - IP67	Fast Winding	0150-1243
			PS01-23x160	Linear motor Stator, 1,0 m Cable, connector D		0150-1202
			PS01-23x160H-HP-R	Stator HP with IP67 connector M17/9(m)		0150-1254
			PS01-23x160H-HP-R20	Stator HP, 0,2 m cable, IP67 con. M17/9(m)		0150-1255
	→	Slider	PL01-12x480/440-LC	Slider 'standard LC'		0150-2586
			PL01-12x480/440-HP	Slider 'High Performance'		0150-1524

ACCESSORIES

Fan	HV01-23	Fan for H01-23 Linear Guides	0150-5050
MagSpring	MF01-20/H23	Mounting flange for MagSpring M01-20x...	0250-2306
	MA01-20/H23	Mounting adapter for MagSpring M01-20x...	0250-0116
Center Sleeve	HC01-09/04	Center Sleeve D9x4mm	0150-3251

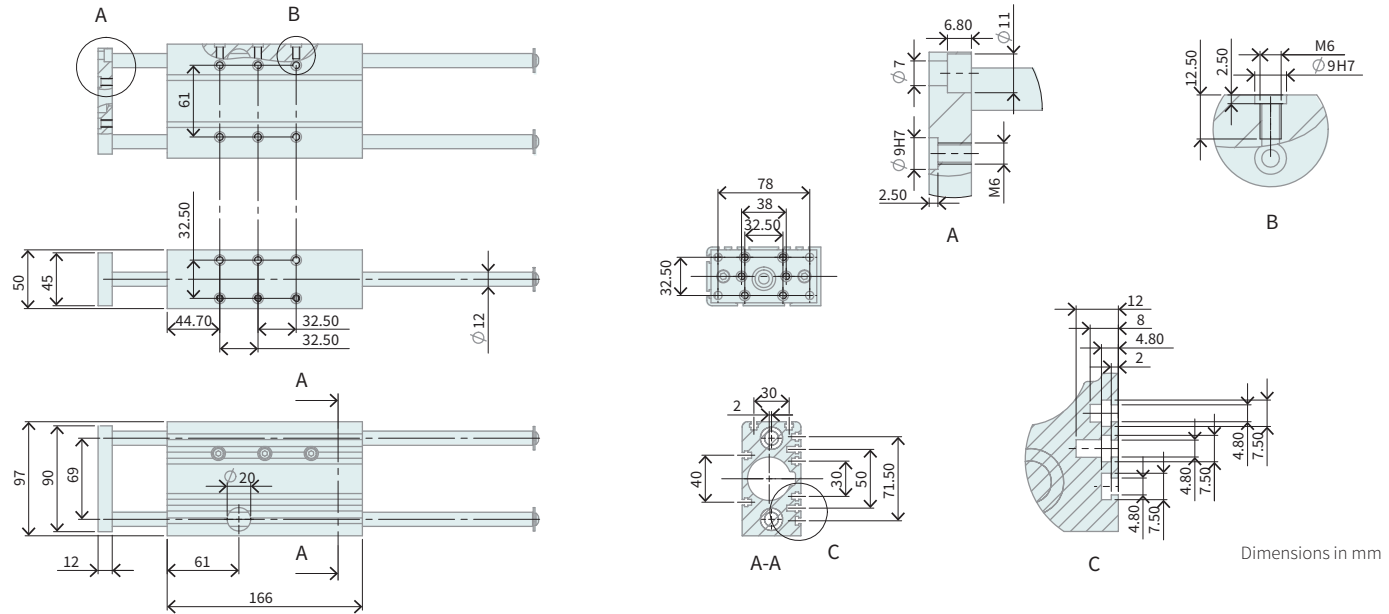
LINEAR MODULE HM01-37x120



Linear Module	Bearing type	Stroke H [mm (inch)]		Moving Parts L [mm (inch)]		Moving Mass ¹ [g (lb)]		Total Weight [g (lb)]	
HM01-37x120/80	Ball bearings	80	(3.15)	318	(12.52)	1190	(2.62)	3260	(7.18)
HM01-37x120/180	Ball bearings	180	(7.09)	413	(16.26)	1600	(3.53)	3670	(8.09)
HM01-37x120/280	Ball bearings	280	(11.02)	518	(20.39)	2030	(4.46)	4100	(9.03)
HM01-37x120/80-GF	Plain Bushings	80	(3.15)	318	(12.52)	1190	(2.62)	3260	(7.18)
HM01-37x120/180-GF	Plain Bushings	180	(7.09)	413	(16.26)	1600	(3.53)	3670	(8.09)
HM01-37x120/280-GF	Plain Bushings	280	(11.02)	518	(20.39)	2030	(4.46)	4100	(9.03)

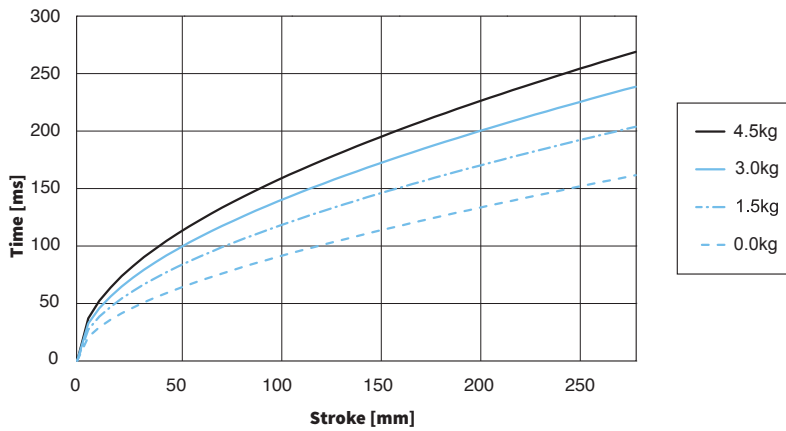
¹ Mass with moving slider

LINEAR GUIDES H01-37x166



Materials	Guide Block & Front Plate	Guide Shaft	Bearing	Wipers
H01-37x166/... Ball Bearings	Anodized Aluminum	Hardened Steel	Steel	Nitrile Rubber
H01-37x166/...-GF Plain Bushings	Anodized Aluminum	Stainless Steel 1.4104	Sintered Bronze	Nitrile Rubber

POSITIONING TIMES WITH HM01-37x120



Minimum positioning times for horizontal motions with different load masses, controlled by an E1100-HC Servo Drive.

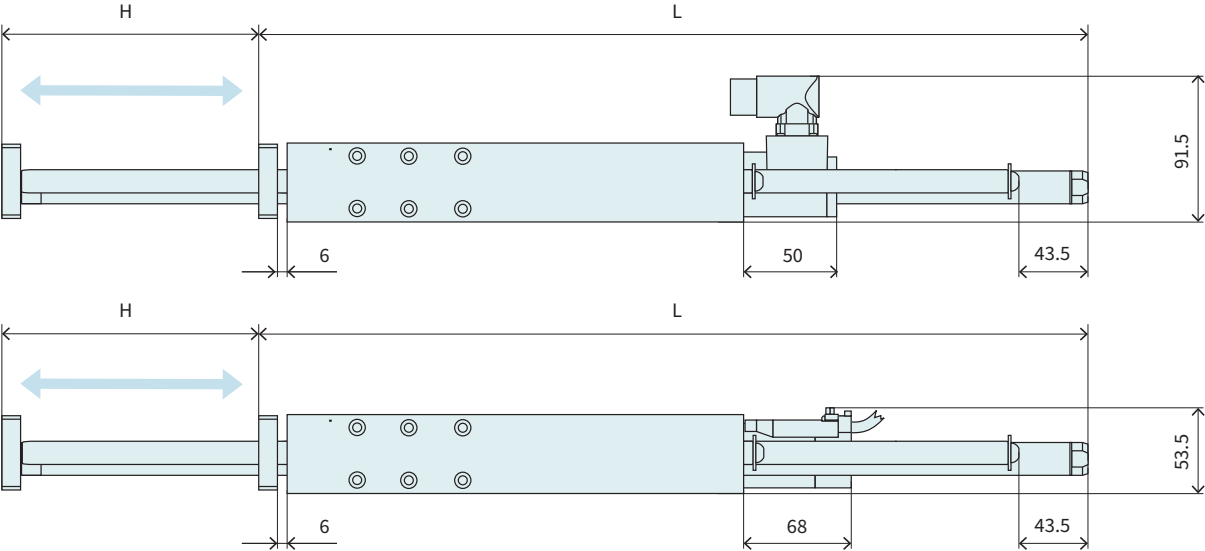
ORDERING INFORMATION

HM01-37x120/80	Linear Module 37x120 with 80 mm Stroke				
	Linear Guide	H01-37x166/80	H01 for P01-37x120, 80mm Stroke, Ball Bearings		0150-5020
		H01-37x166/80-GF	H01 for P01-37x120, 80mm Stroke, Plain Bushings		0150-5080
	Stator	PS01-37x120-C	Linear motor connector, connector C - IP67		0150-1223
		PS01-37x120-C20	Linear motor connector, 0.2m Cable, connector C - IP67		0150-1237
		PS01-37x120	Linear motor connector, 1.5m Cable, connector P		0150-1204
		PS01-37x120F-HP-C	connector HP with IP67 connector M23/9(m)		0150-1251
		PS01-37x120F-HP-C20	connector HP, 0.2 m cable, IP67 con. M23/9(m)		0150-1252
	Slider	PL01-20x300/240-LC	Slider 'standard LC'		0150-2561
		PL01-20x300/240-HP	Slider 'High Performance'		0150-1506
	HM01-37x120/180	Linear Module 37x120 with 180 mm Stroke			
	Linear Guide	H01-37x166/180	H01 for P01-37x120, 180 mm Stroke, Ball Bearings		0150-5021
		H01-37x166/180-GF	H01 for P01-37x120, 180 mm Stroke, Plain Bushings		0150-5081
	Stator	PS01-37x120-C	Linear motor connector, connector C - IP67		0150-1223
		PS01-37x120-C20	Linear motor connector, 0.2m Cable, connector C - IP67		0150-1237
		PS01-37x120	Linear motor connector, 1.5m Cable, connector P		0150-1204
		PS01-37x120F-HP-C	connector HP with IP67 connector M23/9(m)		0150-1251
		PS01-37x120F-HP-C20	connector HP, 0.2 m cable, IP67 con. M23/9(m)		0150-1252
	Slider	PL01-20x400/340-LC	Slider 'standard LC'		0150-2562
		PL01-20x400/340-HP	Slider 'High Performance'		0150-1508
	HM01-37x120/280	Linear Module 37x120 with 280 mm Stroke			
	Linear Guide	H01-37x166/280	H01 for P01-37x120, 280 mm Stroke, Ball Bearings		0150-5022
		H01-37x166/280-GF	H01 for P01-37x120, 280mm Stroke, Plain Bushings		0150-5082
	Stator	PS01-37x120-C	Linear motor connector, connector C - IP67		0150-1223
		PS01-37x120-C20	Linear motor connector, 0.2m Cable, connector C - IP67		0150-1237
		PS01-37x120	Linear motor connector, 1.5m Cable, connector P		0150-1204
		PS01-37x120F-HP-C	connector HP with IP67 connector M23/9(m)		0150-1251
		PS01-37x120F-HP-C20	connector HP, 0.2 m cable, IP67 con. M23/9(m)		0150-1252
	Slider	PL01-20x500/440-LC	Slider 'standard LC'		0150-2563
		PL01-20x500/440-HP	Slider 'High Performance'		0150-1509

ACCESSORIES

Brake	HB01-37	Pneumatic Brake for H01-37/600N (4-6Bar)	0150-5052
Fan	HV01-37/48	Fan for H01-37 und -48 Linear Guides	0150-5051
MagSpring	MF01-37/H37	Mounting flange for MagSpring M01-37x...	0250-2307
	MA01-37/H37	Mounting adapter for MagSpring M01-37x...	0250-0117
Center Sleeve	HC01-09/04	Center Sleeve D9x4mm	0150-3251

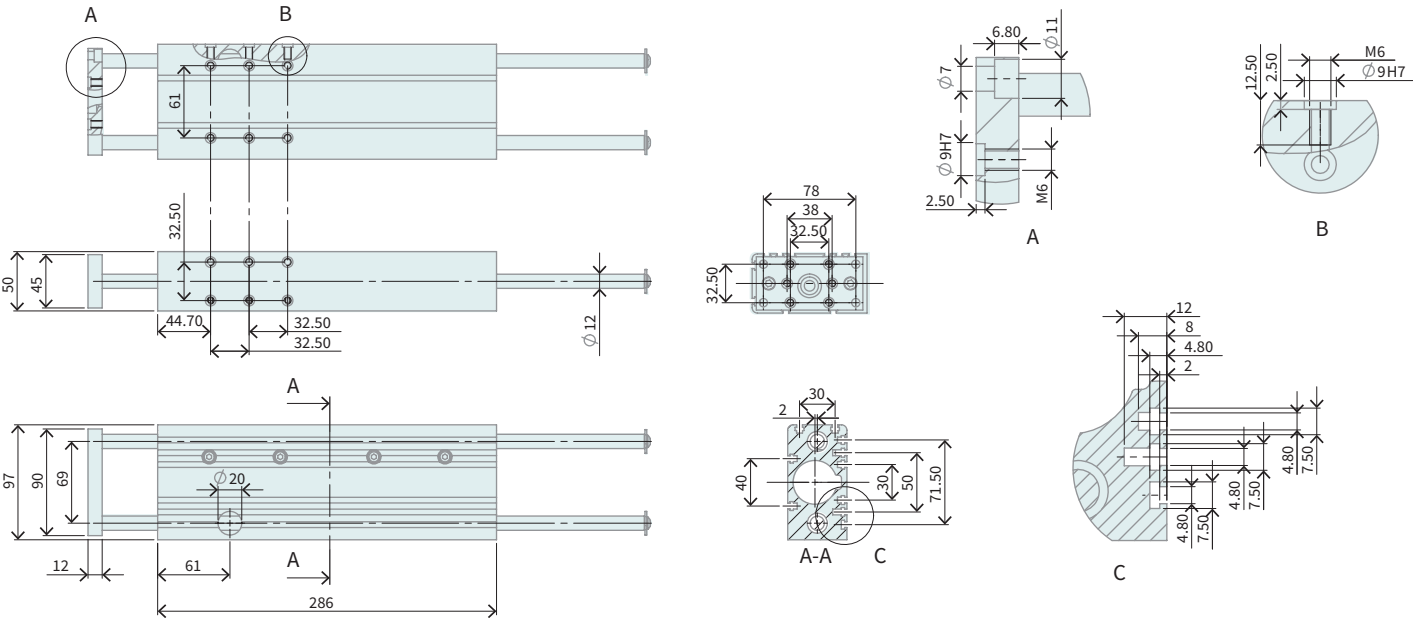
LINEAR MODULE HM01-37x240



Linear Module	Bearing type	Stroke H [mm (inch)]	Moving Parts L [mm (inch)]	Moving Mass ¹ [g (lb)]	Total Weight [g (lb)]
HM01-37x240/60	Ball bearings	60 (2.36)	413 (16.26)	1600 (3.53)	5280 (11.63)
HM01-37x240/160	Ball bearings	160 (6.30)	518 (20.39)	2020 (4.44)	5690 (12.54)
HM01-37x240/260	Ball bearings	260 (10.24)	618 (24.33)	2420 (5.33)	6100 (13.43)
HM01-37x240/60-GF	Plain Bushings	60 (2.36)	413 (16.26)	1600 (3.53)	5280 (11.63)
HM01-37x240/160-GF	Plain Bushings	160 (6.30)	518 (20.39)	2020 (4.44)	5690 (12.54)
HM01-37x240/260-GF	Plain Bushings	260 (10.24)	618 (24.33)	2420 (5.33)	6100 (13.43)

¹ Mass with moving slider

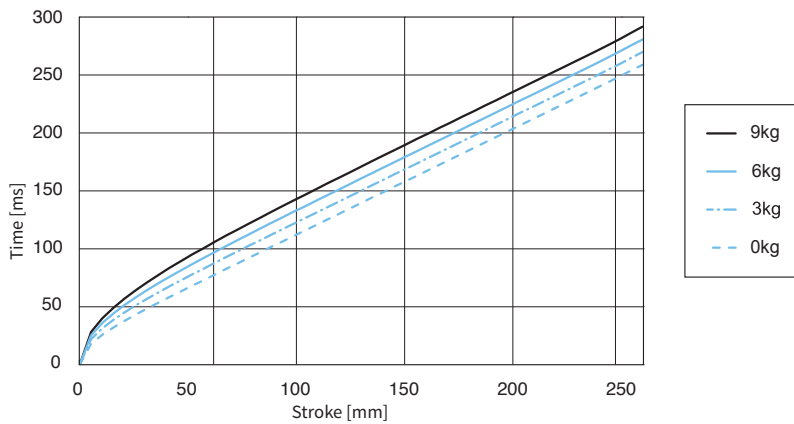
LINEAR GUIDES H01-37x286



Dimensions in mm

Materials	Guide Block & Front Plate	Guide Shaft	Bearing	Wipers
H01-37x286/... Ball Bearings	Anodized Aluminum	Hardened Steel	Steel	Nitrile Rubber
H01-37x286/...-GF Plain Bushings	Anodized Aluminum	Stainless Steel 1.4104	Sintered Bronze	Nitrile Rubber

POSITIONING TIMES WITH HM01-37x240



Minimum positioning times for horizontal motions with different load masses, controlled by an E1100-HC Servo Drive.

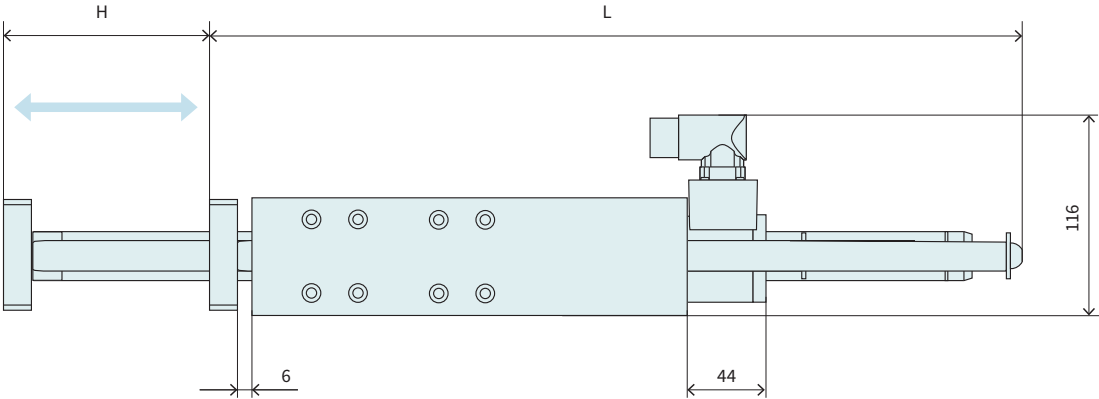
ORDERING INFORMATION

HM01-37x240/60		Linear Module 37x240 with 60mm Stroke			
	Linear Guide	H01-37x286/60	H01 for P01-37x240, 60 mm Stroke, Ball Bearings		0150-5023
		H01-37x286/60-GF	H01 for P01-37x240, 60 mm Stroke, Plain Bushings		0150-5083
	Stator	PS01-37x240-C	Linear motor Stator, connector C - IP67		0150-1224
		PS01-37x240F-C	Linear motor Stator, connector C - IP67	Fast Winding	0150-1225
		PS01-37x240-C20	Linear motor Stator, 0.2 m Cable, connector C - IP67		0150-1238
		PS01-37x240F-C20	Linear motor Stator, 0.2 m Cable, connector C - IP67	Fast Winding	0150-1239
		PS01-37x240	Linear motor Stator, 1.5 m Cable, connector P		0150-1203
		PS01-37x240F	Stator, cable 1.5 m, connector P/10(m)		0150-1256
	Slider	PL01-20x400/340-LC	Slider 'standard LC'		0150-2562
HM01-37x240/160		Linear Module 37x240 with 160 mm Stroke			
	Linear Guide	H01-37x286/160	H01 for P01-37x240, 160 mm Stroke, Ball Bearings		0150-5024
		H01-37x286/160-GF	H01 for P01-37x240, 160 mm Stroke, Plain Bushings		0150-5084
	Stator	PS01-37x240-C	Linear motor Stator, connector C - IP67		0150-1224
		PS01-37x240F-C	Linear motor Stator, connector C - IP67	Fast Winding	0150-1225
		PS01-37x240-C20	Linear motor Stator, 0.2 m Cable, connector C - IP67		0150-1238
		PS01-37x240F-C20	Linear motor Stator, 0.2 m Cable, connector C - IP67	Fast Winding	0150-1239
		PS01-37x240	Linear motor Stator, 1.5 m Cable, connector P		0150-1203
		PS01-37x240F	Stator, cable 1.5 m, connector P/10(m)		0150-1256
	Slider	PL01-20x400/340-LC	Slider 'standard LC'		0150-2563
HM01-37x240/260		Linear Module 37x240 with 260 mm Stroke			
	Linear Guide	H01-37x286/260	H01 for P01-37x240, 260 mm Stroke, Ball Bearings		0150-5025
		H01-37x286/260-GF	H01 for P01-37x240, 260 mm Stroke, Plain Bushings		0150-5085
	Stator	PS01-37x240-C	Linear motor Stator, connector C - IP67		0150-1224
		PS01-37x240F-C	Linear motor Stator, connector C - IP67	Fast Winding	0150-1225
		PS01-37x240-C20	Linear motor Stator, 0.2 m Cable, connector C - IP67		0150-1238
		PS01-37x240F-C20	Linear motor Stator, 0.2 m Cable, connector C - IP67	Fast Winding	0150-1239
		PS01-37x240	Linear motor Stator, 1.5 m Cable, connector P		0150-1203
		PS01-37x240F	Stator, cable 1.5 m, connector P/10(m)		0150-1256
	Slider	PL01-20x600/540-LC	Slider 'standard LC'		150-2564

ACCESSORIES

Brake	HB01-37	Pneumatic brake for H01-37/600N (4-6Bar)	0150-5052
Fan	HV01-37/48	Fan for H01-37 und -48 Linear Guides	0150-5051
MagSpring	MF01-37/H37	Mounting flange for MagSpring M01-37x...	0250-2307
	MA01-37/H37	Montage Adapter for MagSpring M01-37x...	0250-0117
Center Sleeve	HC01-09/04	Center Sleeve D9x4mm	0150-3251
Wiper	HA01-27/20-F	Wiper for H01-37 guides, front side	0150-5108

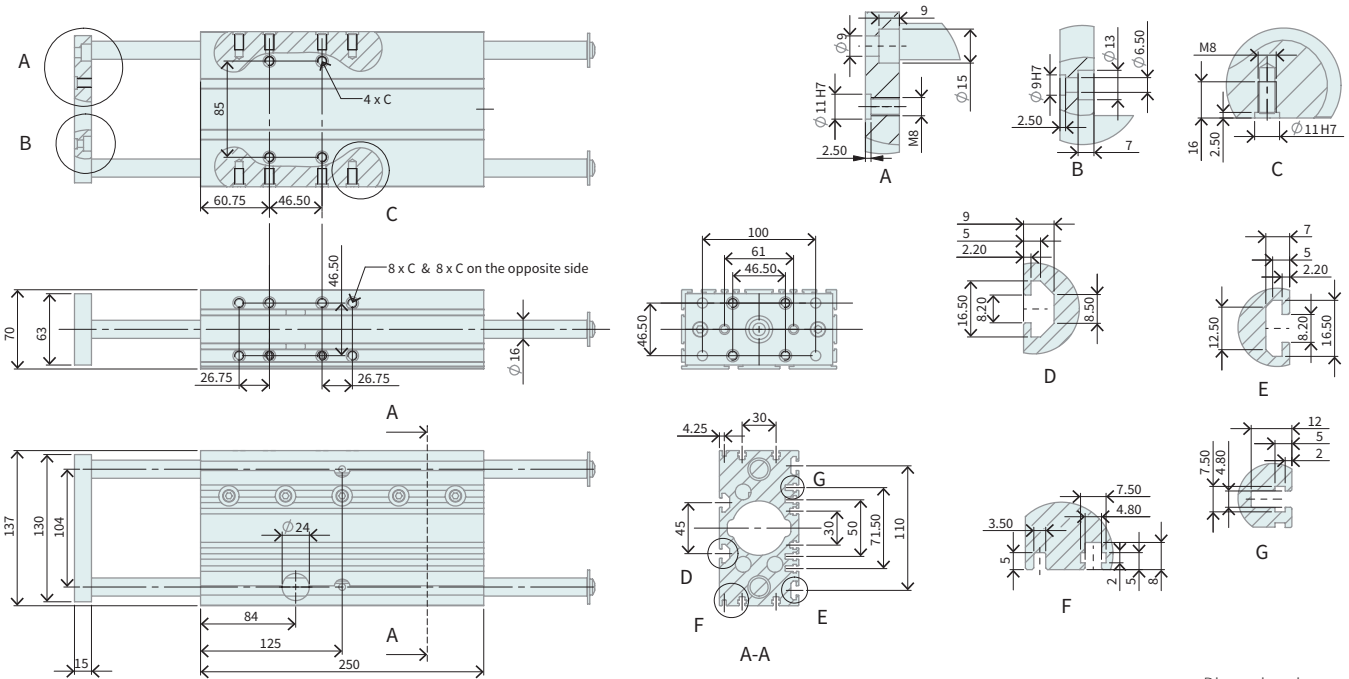
LINEAR MODULE HM01-48x240



Linear Module	Bearing type	Stroke H [mm (inch)]	Moving Parts L [mm (inch)]	Moving Mass ¹ [g (lb)]	Total Weight [g (lb)]
HM01-48x240/120	Ball bearings	120 (4.72)	460 (18.11)	3400 (7.47)	8950 (19.66)
HM01-48x240/210	Ball bearings	210 (8.27)	550 (21.65)	4100 (9.02)	9650 (21.21)
HM01-48x240/330	Ball bearings	330 (12.99)	670 (26.38)	5050 (11.07)	10600 (23.26)
HM01-48x240/420	Ball bearings	420 (16.54)	760 (29.92)	5750 (12.61)	11300 (24.80)
HM01-48x240/120-GF	Plain Bushings	120 (4.72)	460 (18.11)	3400 (7.47)	8950 (19.66)
HM01-48x240/210-GF	Plain Bushings	210 (8.27)	550 (21.65)	4100 (9.02)	9650 (21.21)
HM01-48x240/330-GF	Plain Bushings	330 (12.99)	670 (26.38)	5050 (11.07)	10600 (23.26)
HM01-48x240/420-GF	Plain Bushings	420 (16.54)	760 (29.92)	5750 (12.61)	11300 (24.80)

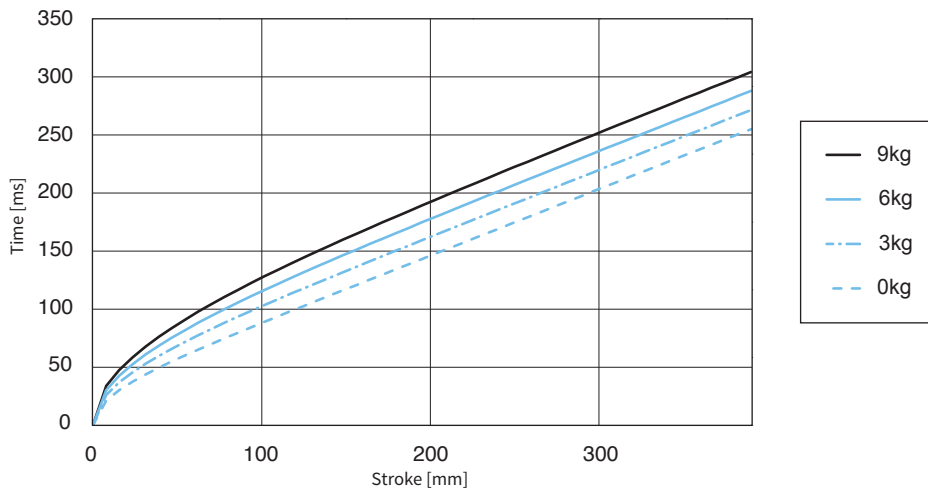
¹ Mass with moving slider

LINEAR GUIDES H01-48x250



Dimensions in mm

Materials	Guide Block & Front Plate	Guide Shaft	Bearing	Wipers
H01-48x250/... Ball Bearings	Anodized Aluminum	Hardened Steel	Steel	Nitrile Rubber
H01-48x250/...-GF Plain Bushings	Anodized Aluminum	Stainless Steel 1.4104	Sintered Bronze	Nitrile Rubber

POSITIONING TIMES WITH HM01-48x240

Minimum positioning times for horizontal motions with different load masses, controlled by an E1100-HC Servo Drive.

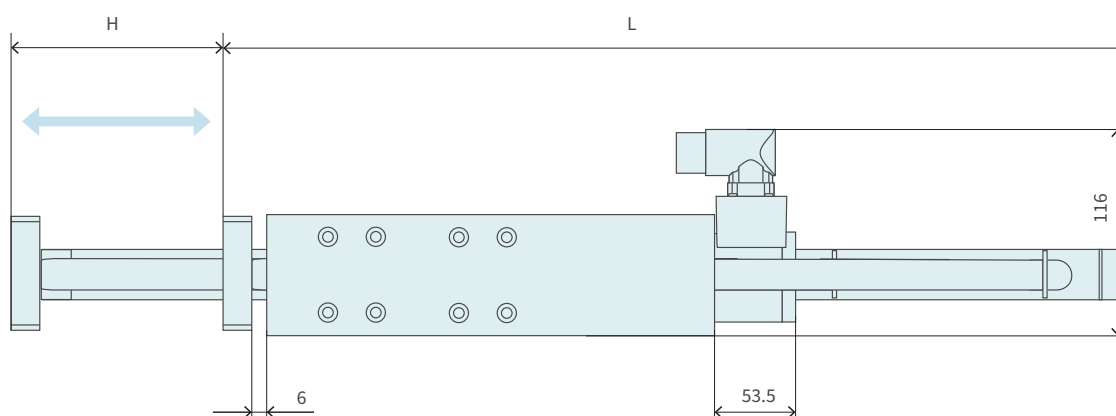
ORDERING INFORMATION

HM01-48x240/120		Linear module 48x240 with 120mm Stroke			
	Linear Guide	H01-48x250/120	H01 for P01-48x240, 120mm Stroke, Ball Bearings		0150-5100
		H01-48x250/120-GF	H01 for P01-48x240, 120mm Stroke, Plain Bushings		0150-5104
	Stator	PS01-48x240-C	Linear motor Stator, connector C - IP67		0150-1219
		PS01-48x240F-C	Linear motor Stator, connector C - IP67	Fast Winding	0150-1220
	Slider	PL01-28x410/330	Standard Slider for H01-48x250/120		0150-1381
HM01-48x240/210		Linear module 48x240 with 210mm Stroke			
	Linear Guide	H01-48x250/210	H01 for P01-48x240, 210mm Stroke, Ball Bearings		0150-5101
		H01-48x250/210-GF	H01 for P01-48x240, 210mm Stroke, Plain Bushings		0150-5105
	Stator	PS01-48x240-C	Linear motor Stator, connector C - IP67		0150-1219
		PS01-48x240F-C	Linear motor Stator, connector C - IP67	Fast Winding	0150-1220
	Slider	PL01-28x500/420	Standard Slider for H01-48x250/210		0150-1382
HM01-48x240/330		Linear module 48x240 with 330mm Stroke			
	Linear Guide	H01-48x250/330	H01 for P01-48x240, 330mm Stroke, Ball Bearings		0150-5102
		H01-48x250/330-GF	H01 for P01-48x240, 330mm Stroke, Plain Bushings		0150-5106
	Stator	PS01-48x240-C	Linear motor Stator, connector C - IP67		0150-1219
		PS01-48x240F-C	Linear motor Stator, connector C - IP67	Fast Winding	0150-1220
	Slider	PL01-28x620/540	Slider Standard for H01-48x250/330		0150-1383
HM01-48x240/420		Linear module 48x240 with 420mm Stroke			
	Linear Guide	H01-48x250/420	H01 for P01-48x240, 420mm Stroke, Ball Bearings		0150-5103
		H01-48x250/420-GF	H01 for P01-48x240, 420mm Stroke, Plain Bushings		0150-5107
	Stator	PS01-48x240-C	Linear motor Stator, connector C - IP67		0150-1219
		PS01-48x240F-C	Linear motor Stator, connector C - IP67	Fast Winding	0150-1220
	Slider	PL01-28x710/630	Slider Standard for H01-48x250/420		0150-1384

ACCESSORIES

Brake	HB01-48	Pneumatic Brake for H01-48/1000N(4-6Bar)		0150-5098
Fan	HV01-37/48	Fan for H01-37 and -48 Linear Guides		0150-5051
MagSpring	MF01-37/H37	Mounting flange for MagSpring M01-37x...		0250-2307
	MA01-37/H48	Mounting adapter for MagSpring M01-37x...		0250-0118
Sliding Block	PFN01-8/M6	Sliding Block 8mm with M6 Thread		0150-3245
Central Sleeve	HC01-11/05	Central Sleeve D11x5mm		0150-3252
Wiper	HA01-48/28-F	Wiper for H01-48 guides, front side		0150-5109

LINEAR MODULE HM01-48X360

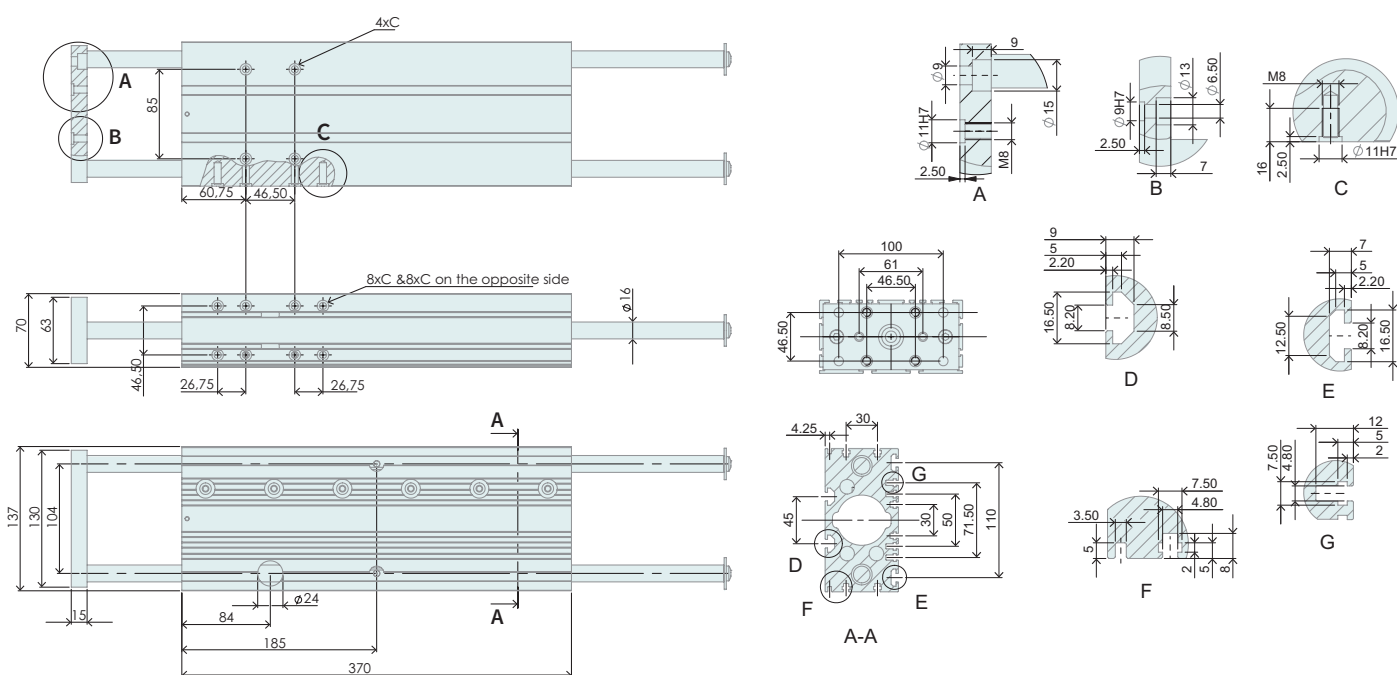


Linear Module	Bearing type	Stroke H [mm (inch)]	Moving Parts L [mm (inch)]	Moving Mass ¹ [g (lb)]	Total Weight [g (lb)]
HM01-48x360/90	Ball bearings	90 (3.54)	521 (20.52)	4000 (8.84)	12300 (27.17)
HM01-48x360/210	Ball bearings	210 (8.27)	641 (25.25)	4910 (10.85)	13210 (29.18)
HM01-48x360/300	Ball bearings	300 (11.82)	731 (28.79)	5630 (12.44)	13930 (30.77)
HM01-48x360/510	Ball bearings	510 (20.01)	941 (37.06)	6980 (15.42)	15280 (33.76)

HM01-48x360/90-GF	Plain Bushings	90	(3.54)	521	(20.52)	4000	(8.84)	12300	(27.17)
HM01-48x360/210-GF	Plain Bushings	210	(8.27)	641	(25.25)	4910	(10.85)	13210	(29.18)
HM01-48x360/300-GF	Plain Bushings	300	(11.82)	731	(28.79)	5630	(12.44)	13930	(30.77)
HM01-48x360/510-GF	Plain Bushings	510	(20.01)	941	(37.06)	6980	(15.42)	15280	(23.76)

¹ Mass with moving slider

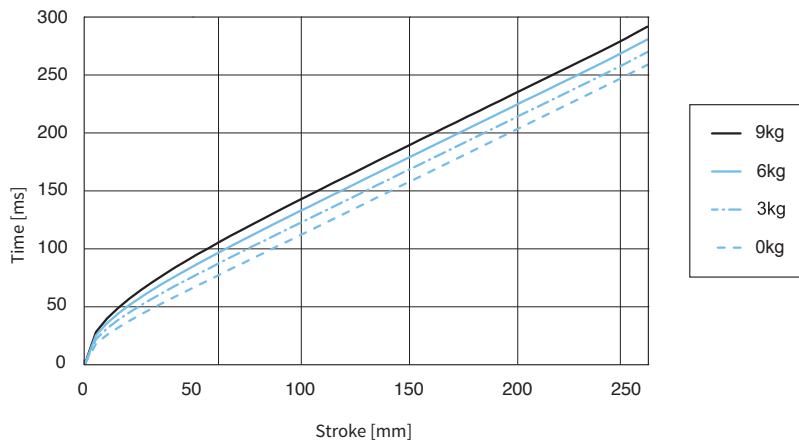
LINEAR GUIDES H01-48x370



Dimensions in mm

Materials		Guide Block & Front Plate	Guide Shaft	Bearing	Wipers
H01-48x370/...	Ball Bearings	Anodized Aluminum	Hardened Steel	Steel	Nitrile Rubber
H01-48x370/...-GF	Plain Bushings	Anodized Aluminum	Stainless Steel 1.4104	Sintered Bronze	Nitrile Rubber

POSITIONING TIMES WITH HM01-48x360



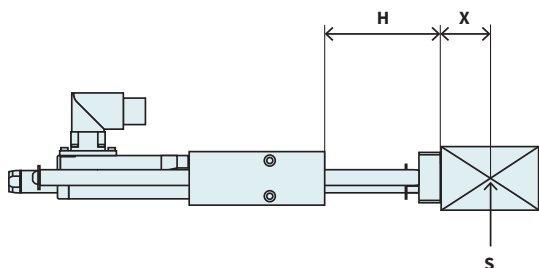
Minimum positioning times for horizontal motions with different load masses, controlled by an E1100-HC Servo Drive.

ORDERING INFORMATION

HM01-48x360/90 Linear module 48x360 with 90 mm Stroke				
	Linear Guides	H01-48x370/90	H01 for P01-48x360, 90 mm Stroke, Ball Bearings	0150-5240
		H01-48x370/90-GF	H01 for P01-48x360, 90 mm Stroke, Plain Bushings	0150-5243
	Stator	PS01-48x360F-C	Stator with IP67 connector M23/9(m)	0150-1269
	Slider	PL01-28x410/330	Slider 'standard' for H01-48x250/120	0150-1382
HM01-48x360/210 Linear module 48x360 with 210 mm Stroke				
	Linear Guides	H01-48x370/210	H01 for P01-48x360, 210 mm Stroke, Ball Bearings	0150-5241
		H01-48x370/210-GF	H01 for P01-48x360, 210 mm Stroke, Plain Bushings	0150-5244
	Stator	PS01-48x360F-C	Stator with IP67 connector M23/9(m)	0150-1269
	Slider	PL01-28x620/540	Slider 'standard' for H01-48x250/330	0150-1383
HM01-48x360/300 Linear module 48x360 with 300 mm Stroke				
	Linear Guides	H01-48x370/300	H01 for P01-48x360, 300 mm Stroke, Ball Bearings	0150-5242
		H01-48x370/300-GF	H01 for P01-48x360, 300 mm Stroke, Plain Bushings	0150-5245
	Stator	PS01-48x360F-C	Stator with IP67 connector M23/9(m)	0150-1269
	Slider	PL01-28x710/630	Slider 'standard' for H01-48x250/420	0150-1384
HM01-48x360/510 Linear module 48x360 with 510 mm Stroke				
	Linear Guides	H01-48x370/510	H01 for P01-48x360, 510 mm Stroke, Ball Bearings	0150-5252
		H01-48x370/510-GF	H01 for P01-48x360, 510 mm Stroke, Plain Bushings	auf Anfrage
	Stator	PS01-48x360F-C	Stator with IP67 connector M23/9(m)	0150-1269
	Slider	PL01-28x920/840	Slider 'standard'	0150-1386

ACCESSORIES				
Brake	HB01-48	Pneumatic brake for H01-48/1000N(4-6Bar)		0150-5098
Fan	HV01-37/48	Fan for H01-37 und -48 Linear Guides		0150-5051
MagSpring	MF01-37/H37	Mounting flange für MagSpring M01-37x...		0250-2307
	MA01-37/H48	Mounting adapter für MagSpring M01-37x...		0250-0118
Sliding Block	PFN01-8/M6	Sliding Block 8mm with M6 thread		0150-3245
Central Sleeve	HC01-11/05	Central Sleeve D11x5mm		0150-3252
Wiper	HA01-48/28-F	Wiper for H01-48 guides, front side		0150-5109

MAXIMUM LOAD



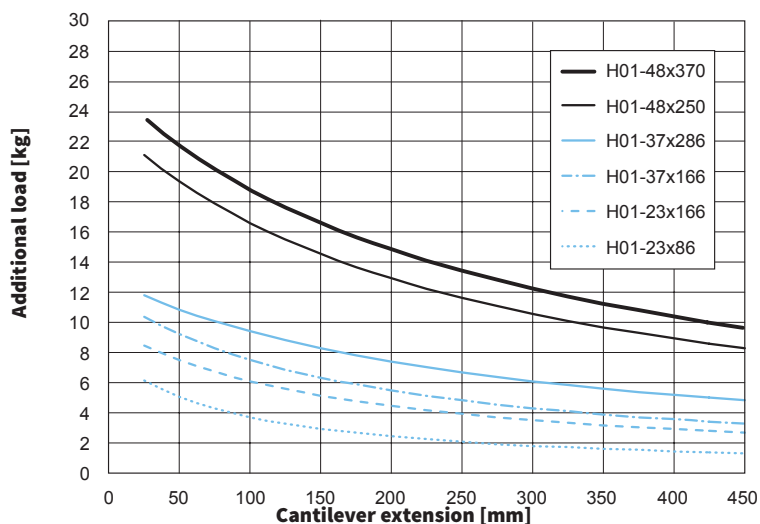
H = Stroke

X = Distance to center of gravity

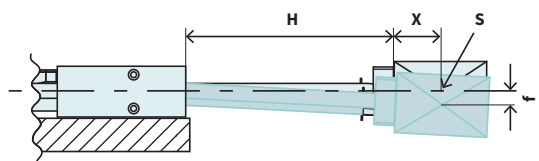
S = Center of gravity

Cantilever extension = H + X

The maximum load depends on the cantilever extension (maximum stroke A plus distance between the center of gravity of the working load and the mounting surface).



VERTICAL DEFLECTION



H = Stroke

S = Center of gravity

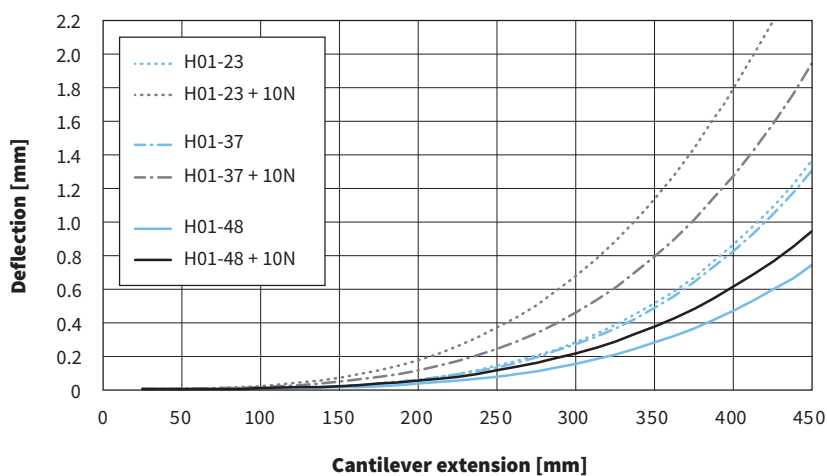
X = Distance to center of gravity

f = Deflection of theoretical axis

Total deflection =

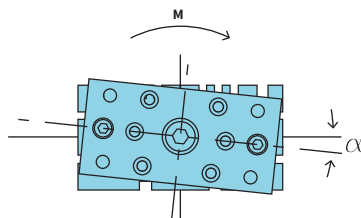
Static deflection + deflection under load

Deflection measured at standstill, with 10 N / 2.25 lbf Load.



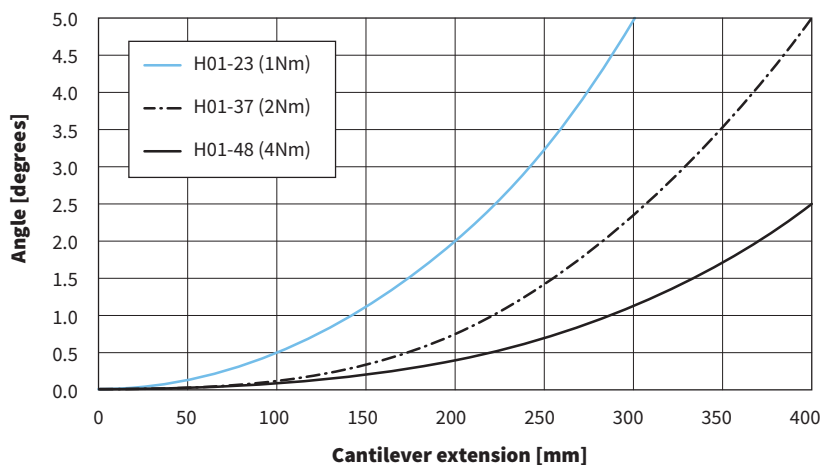
Deflection for smaller or larger load masses can be linearly extrapolated using the data for 10 N / 2.25 lbf.

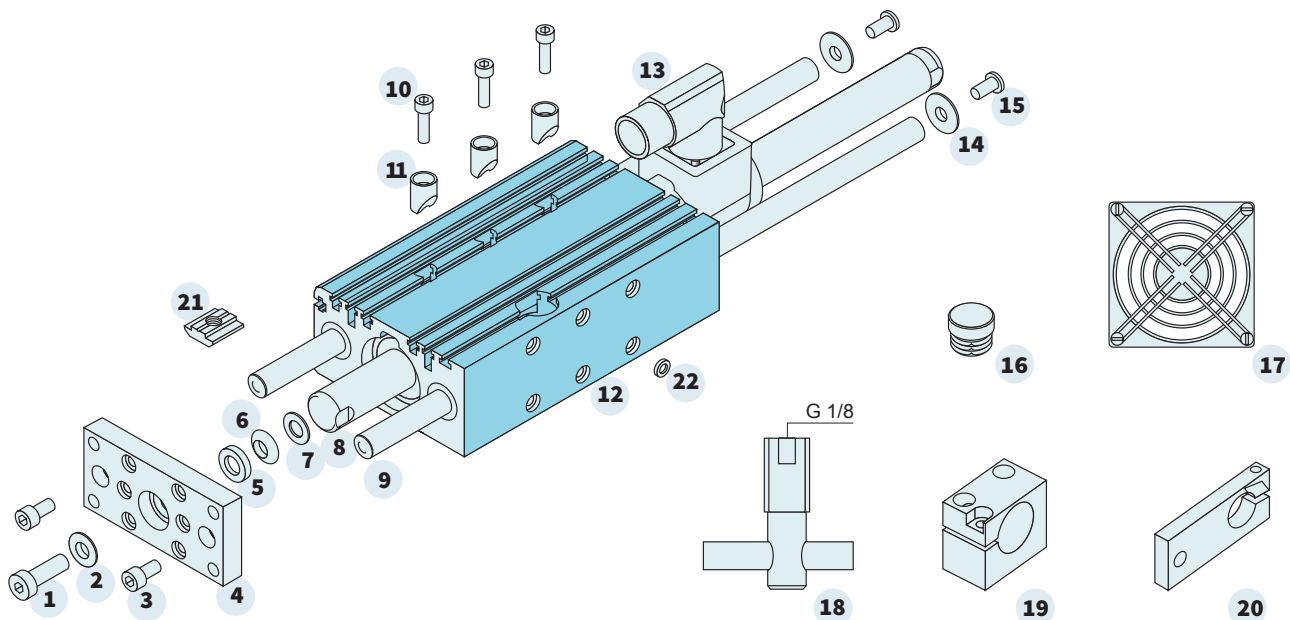
ANGULAR DEFLECTION



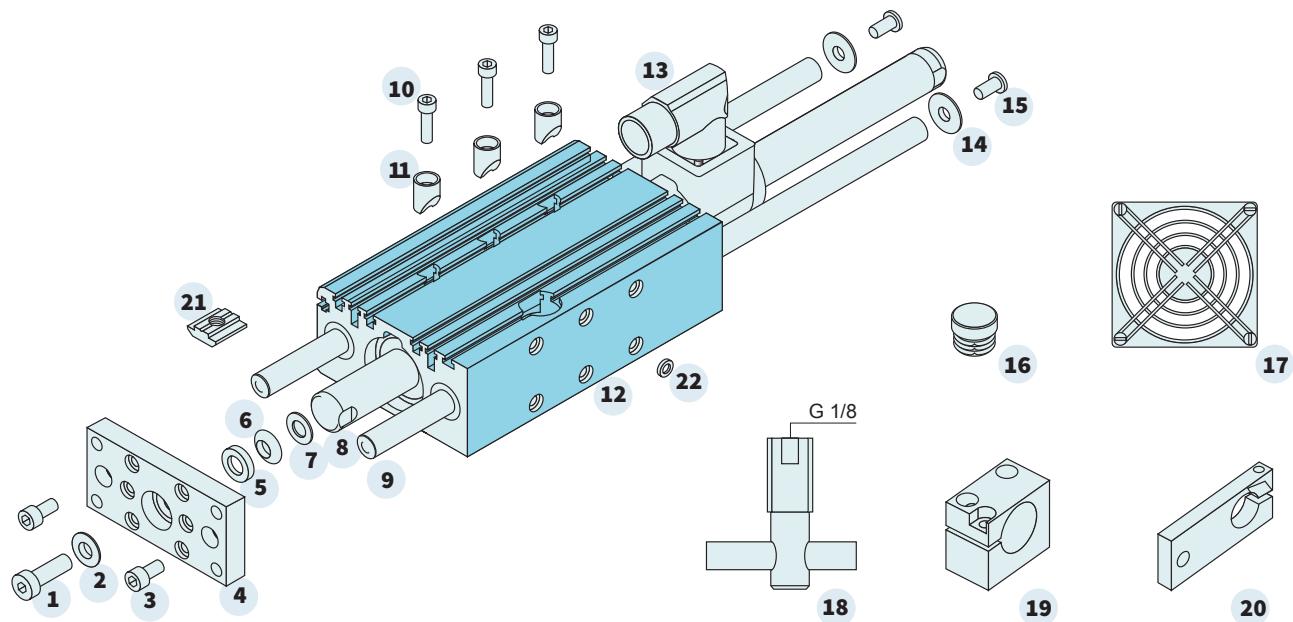
Angular deflection (twist) of the mounting plate depends on the torque load to be absorbed and the cantilever extension.

The angular deflection for smaller or larger torques can be linearly extrapolated from the deflection in the diagram.





PARTS LIST													
	Linear Guide H01	H01-23x86		H01-23x166		H01-37x166		H01-37x286		H01-48x250		H01-48x370	
1	Slider screw	ISO 4762 M5x18		ISO 4762 M5x18		DIN7984 M8x25		DIN7984 M8x25		DIN7984 M10x35		DIN7984 M10x35	
2	Socket washer (f)	DIN 6319 c / M6		DIN 6319 c / M6		DIN 6319 c / M8		DIN 6319 c / M8		DIN 6319 c / M10		DIN 6319 c / M10	
3	Shaft screw	ISO 4762 M5x12		ISO 4762 M5x12		ISO 4762 M6x12		ISO 4762 M6x12		ISO 4762 M8x20		ISO 4762 M8x20	
4	Front plate	0150-5004		0150-5004		0150-5005		0150-5005		0150-5087		0150-5087	
5	Ball washer (r)	DIN 6319 d / M5		DIN 6319 d / M5		DIN 6319 d / M8		DIN 6319 d / M8		DIN 6319 d / M10		DIN 6319 d / M10	
6	Socket washer (f)	DIN 6319 c / M5		DIN 6319 c / M5		DIN 6319 c / M8		DIN 6319 c / M8		DIN 6319 c / M10		DIN 6319 c / M10	
7	Dished washer	DIN 2093A 10/5,2/0,5		DIN 2093A 10/5,2/0,5		DIN 2093A 16/8,2/0,9		DIN 2093A 16/8,2/0,9		DIN 2093A 20/10,2/1,1		DIN 2093A 20/10,2/1,1	
8	Slider	PL01-12x...		PL01-12x...		PL01-20x...		PL01-20x...		PL01-28x...		PL01-28x...	
9	Hardened steel shafts for ball bearings	HL01-10x...	Art-Nr.	HL01-10x...	Art-Nr.	HL01-12x...	Art-Nr.	HL01-12x...	Art-Nr.	HL01-16x...	Art-Nr.	HL01-16x...	Art-Nr.
		160	0150-5006	260	0150-5007	260	0150-5010	360	0150-5011	440	0150-5090	487	0150-5119
		260	0150-5007	360	0150-5008	360	0150-5011	460	0150-5012	530	0150-5091	607	0150-5120
		360	0150-5008	460	0150-5009	460	0150-5012	560	0150-5013	650	0150-5092	697	0150-5121
										740	0150-5093	920	0150-5234
	Stainless steel shafts for plain bushings GF	160-GF	0150-5066	260-GF	0150-5067	260-GF	0150-5070	360-GF	0150-5071	440-GF	0150-5094	487-GF	0150-5127
		260-GF	0150-5067	360-GF	0150-5068	360-GF	0150-5071	460-GF	0150-5072	530-GF	0150-5095	607-GF	0150-5128
		360-GF	0150-5068	460-GF	0150-5069	460-GF	0150-5072	560-GF	0150-5073	650-GF	0150-5096	697-GF	0150-5129
										740-GF	0150-5097	920-GF	auf Anfrage
10	Clamping screw	ISO 4762 M5x18		ISO 4762 M5x18		ISO 4762 M5x18		ISO 4762 M5x18		ISO 4762 M6x25		ISO 4762 M6x25	
11	Clamping cylinder	0150-5053		0150-5054		0150-5055		0150-5056		0150-5086		0150-5086	
12	Guide block with ball bearings	0150-5000		0150-5001		0150-5002		0150-5003		0150-5088		0150-5194	
	Guide block with plain bushing GF	0150-5060		0150-5061		0150-5062		0150-5063		0150-5089		0150-5195	
13	Stator	Typ	Art-Nr.	Typ	Art-Nr.	Typ	Art-Nr.	Typ	Art-Nr.	Typ	Art-Nr.	Typ	Art-Nr.
		PS01-23x80-R	0150-1233	PS01-23x160-R	0150-1234	PS01-37x120-C	0150-1223	PS01-37x240-C	0150-1224	PS01-48x240-C	0150-1219	PS01-48x360F-C	0150-1269
		PS01-23x80-R20	0150-1241	PS01-23x160F-R	0150-1235	PS01-37x120-C20	0150-1237	PS01-37x240F-C	0150-1225	PS01-48x240F-C	0150-1220		
		PS01-23x80	0150-1201	PS01-23x160-R20	0150-1242	PS01-37x120	0150-1204	PS01-37x240-C20	0150-1238				
				PS01-23x160F-R20	0150-1243			PS01-37x240F-C20	0150-1239				
				PS01-23x160	0150-1202			PS01-37x240	0150-1203				



14	Washer	5x20/1,5	5x20/1,5	6x20/1,5	6x20/1,5	8x30/2,0	8x30/2,0
15	Shaft screw	ISO 7380 M5x12	ISO 7380 M5x12	ISO 7380 M6x12	ISO 7380 M6x12	ISO 7380 M8x16	ISO 7380 M8x16
16	Brake hole cap			HDPE 20mm	HDPE 20mm	HDPE 24mm	HDPE 24mm
Fan							
17	Set	0150-5050	0150-5050	0150-5051	0150-5051	0150-5051	0150-5051
Brake							
18	Pneumatic Brake			0150-5052	0150-5052	0150-5098	0150-5098
Magspring							
19	Flange	0250-2306	0250-2306	0250-2307	0250-2307	0250-2307	0250-2307
20	Adapter	0250-0116	0250-0116	0250-0117	0250-0117	0250-0118	0250-0118
Zubehör							
21	Sliding Block					0150-3245	0150-3245
22	Center Sleeve	0150-3251	0150-3251	0150-3251	0150-3251	0150-3252	0150-3252
23	Wiper			0150-5108	0150-5108	0150-5109	0150-5109

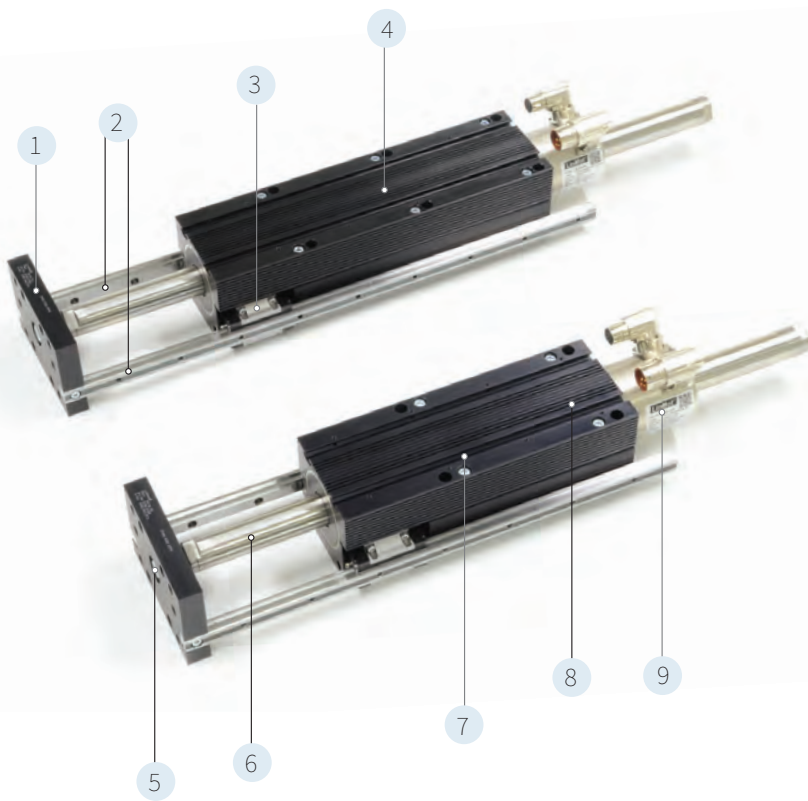
LINEAR GUIDES H10



- ✓ Bearing external forces, torque and bending moments
- ✓ Turning resistance
- ✓ Profile guide rail with four ball rows
- ✓ Load can be mounted directly to the front plate
- ✓ Easy assembly and replacement of individual components by modular design

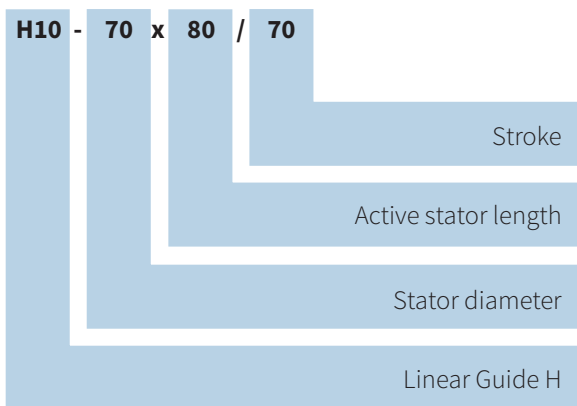
LINEAR GUIDES H10

H10-70x80	984
H10-70x160	986
H10-70x240	988
H10-70x320	990
H10-70x400	992
Technical Data	993
Parts List	994

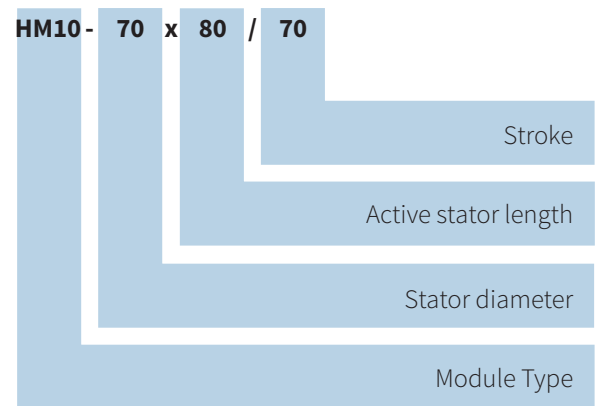


1. Mounting plate with counter bore for precise load mounting
2. Hardened or stainless H-guide rods for precise positioning and quiet operation
3. Profile guide with four ball rows, for high load masses and long life
4. Guide block with counter bores for uncomplicated, precise mounting of the Linear Module
5. Integrated linear coupling for easy installation of the slider
6. Linear motor slider, guarantees maximum force and precise positioning
7. T-slots in the guide block allow simple mounting of accessories.
8. Clamping cylinder to secure the stator in the guide block
9. Linear motor stator with integrated bearings, temperature and position sensors

Designation Linear Guide H10

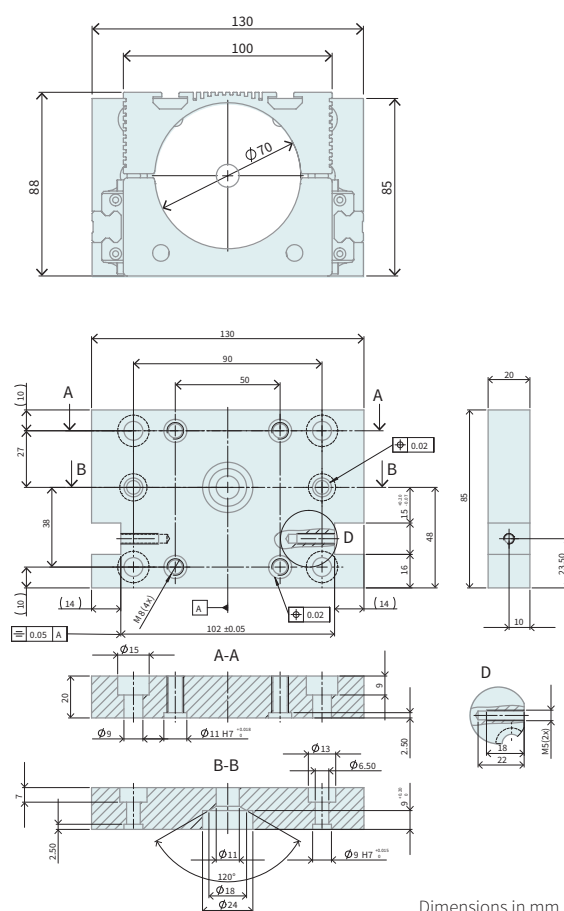


Designation Linear Module HM10



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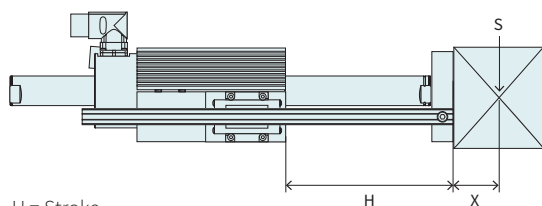
¹ Mass with moving slider



Dimensions in mm

Materials	Guide Block & Front Plate	Guide Shaft	Bearing
H10-70x80/... Guiding carriage	Anodized Aluminum	Hardened Steel	Steel Ball Bearings

MAXIMUM LOAD WITH HM10-70x80



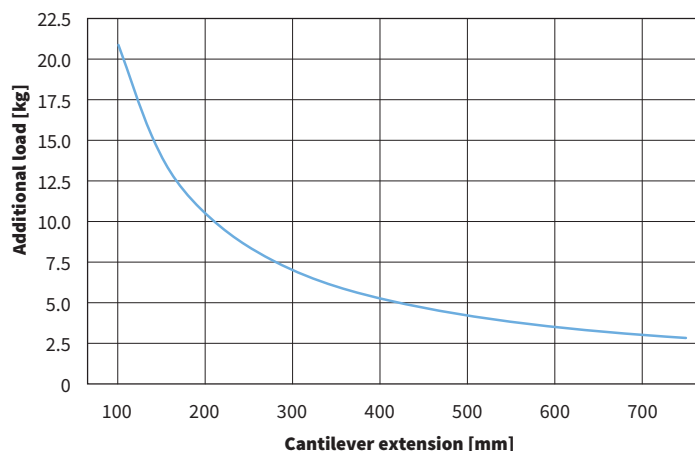
H = Stroke

X = Distance to center of gravity

S = Center of gravity

Cantilever extension = H + X

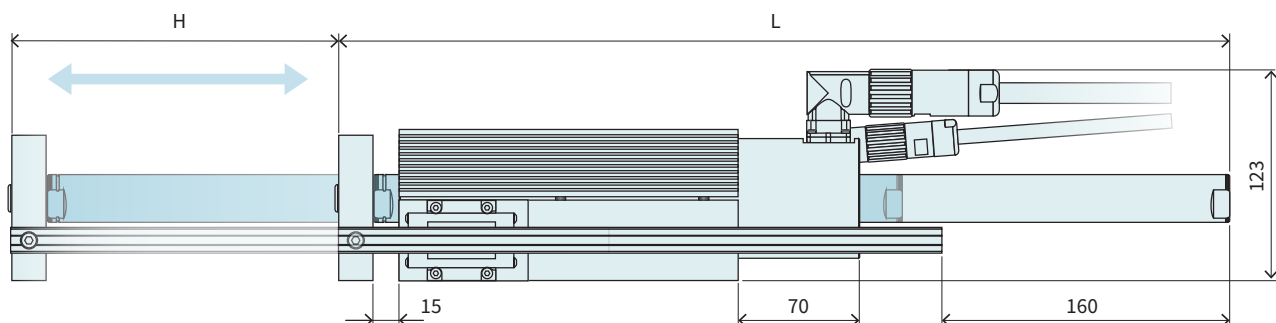
The maximum load depends on the cantilever extension (maximum stroke H plus distance X between the center of gravity of the working load and the mounting surface).



ORDERING INFORMATION

HM10-70x80/70		Linear Module 70x80 with 70 mm Stroke			
	Linear Guide	H10-70x80/70	H-Guide for P10-70x80, Stroke max 70 mm		0150-5404
	Stator	PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1291
		PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2282
		PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2360
		PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2708
	Slider	PL10-28x290/240	Slider for P10-70 'standard'		0150-2193
HM10-70x80/170		Linear Module 70x80 with 170 mm Stroke			
	Linear Guide	H10-70x80/170	H-Guide for P10-70x80, Stroke max 170 mm		0150-5405
	Stator	PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1291
		PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2282
		PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2360
		PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2708
	Slider	PL10-28x390/340	Slider for P10-70 'standard'		0150-2194
HM10-70x80/270		Linear Module 70x80 with 270 mm Stroke			
	Linear Guide	H10-70x80/270	H-Guide for P10-70x80, Stroke max 270 mm		0150-5406
	Stator	PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1291
		PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2282
		PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2360
		PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2708
	Slider	PL10-28x490/440	Slider for P10-70 'standard'		0150-2195
HM10-70x80/370		Linear Module 70x80 with 370 mm Stroke			
	Linear Guide	H10-70x80/370	H-Guide for P10-70x80, Stroke max 370 mm		0150-5407
	Stator	PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1291
		PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2282
		PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2360
		PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2708
	Slider	PL10-28x590/540	Slider for P10-70 'standard'		0150-2196
HM10-70x80/470		Linear Module 70x80 with 470 mm Stroke			
	Linear Guide	H10-70x80/470	H-Guide for P10-70x80, Stroke max 470 mm		0150-5408
	Stator	PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1291
		PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2282
		PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2360
		PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2708
	Slider	PL10-28x690/640	Slider for P10-70 'standard'		0150-2197
ACCESSORIES					
	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF01-48		0150-5051

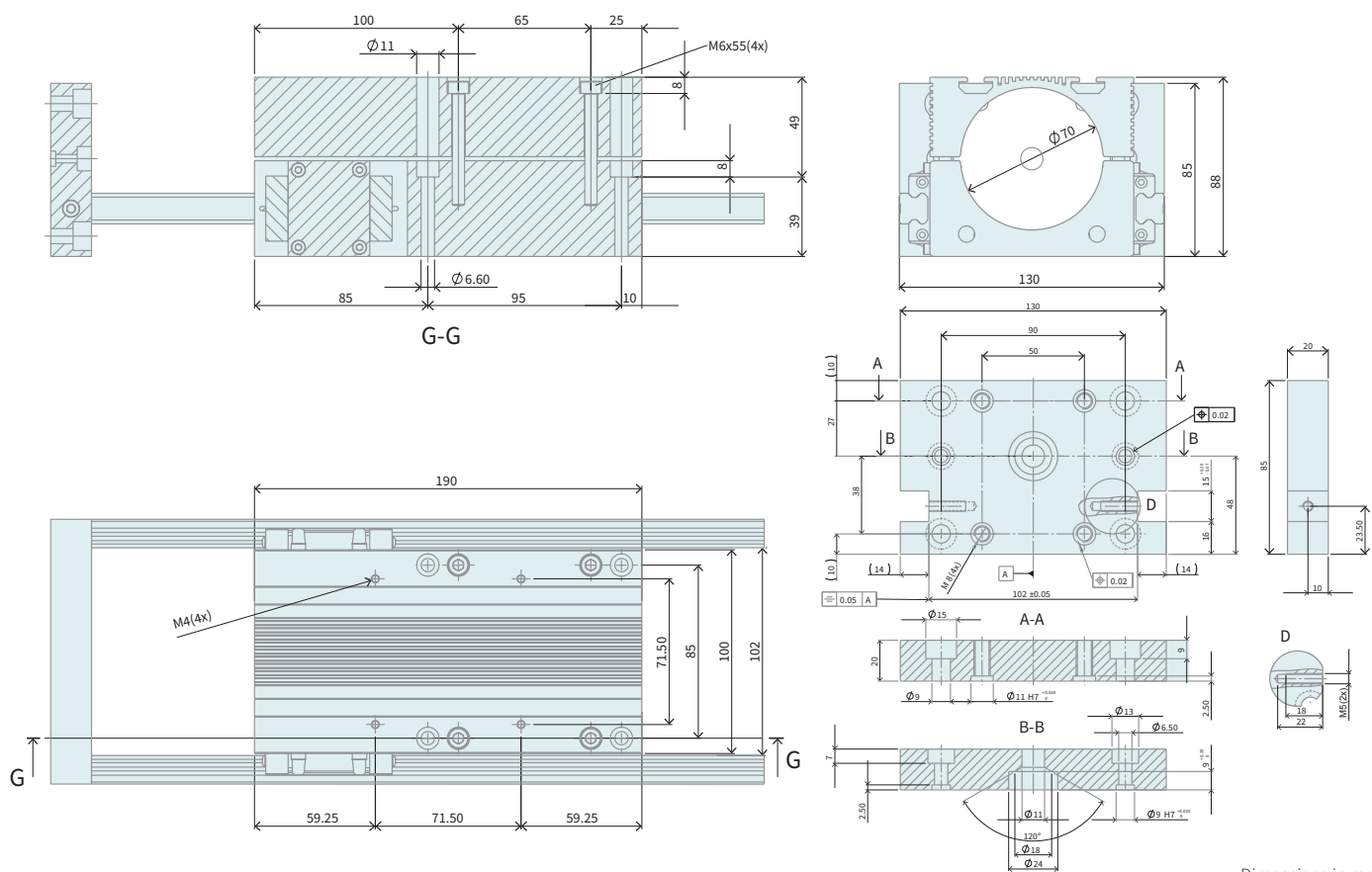
LINEAR MODULE HM10-70x160



Linear Module	Bearing type	Stroke H [mm (inch)]		Moving Parts L [mm (inch)]		Moving Mass ¹ [g (lb)]		Total Weight [g (lb)]	
HM10-70x160/90	Ball Bearings	90	(3.54)	410	(16.14)	3350	(7.39)	10780	(23.77)
HM10-70x160/190	Ball Bearings	190	(7.48)	510	(20.05)	4140	(9.13)	11860	(26.15)
HM10-70x160/290	Ball Bearings	290	(11.42)	610	(24.02)	4930	(10.87)	12940	(28.53)
HM10-70x160/390	Ball Bearings	390	(15.35)	710	(27.95)	5820	(12.83)	14120	(31.13)
HM10-70x160/490	Ball Bearings	490	(19.29)	810	(31.89)	6710	(14.79)	15300	(33.73)

¹ Mass with moving slider

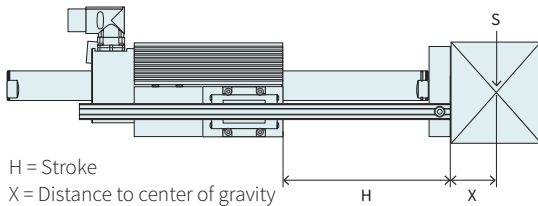
LINEAR GUIDES H10-70x160



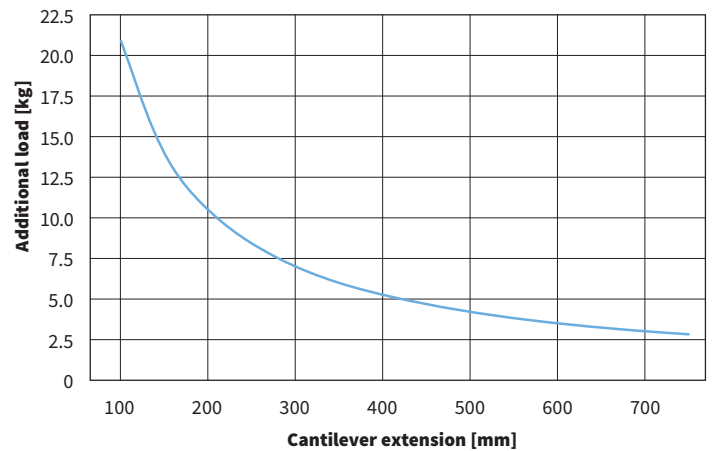
Dimensions in mm

Materials	Guide Block & Front Plate	Guide Shaft	Bearing
H10-70x160/... Guiding carriage	Anodized Aluminum	Hardened Steel	Steel Ball Bearings

MAXIMUM LOAD WITH HM10-70x160



The maximum load depends on the cantilever extension (maximum stroke H plus distance X between the center of gravity of the working load and the mounting surface).



ORDERING INFORMATION

HM10-70x160/90 Linear Module 70x160 with 90 mm Stroke				
	Linear Guide	H10-70x160/90	H-Guide for P10-70x160, 90 mm Stroke	0150-5409
	Stator	PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
		PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
		PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
		PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
	Slider	PL10-28x390/340	Slider for H10-70x160/90 'standard'	0150-2194

HM10-70x160/190 Linear Module 70x160 with 190 mm Stroke				
	Linear Guide	H10-70x160/190	H-Guide for P10-70x160, 190 mm Stroke	0150-5410
	Stator	PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
		PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
		PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
		PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
	Slider	PL10-28x490/440	Slider for H10-70x160/190 'standard'	0150-2195

HM10-70x160/290 Linear Module 70x160 with 290 mm Stroke				
	Linear Guide	H10-70x160/290	H-Guide for P10-70x160, 290 mm Stroke	0150-5411
	Stator	PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
		PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
		PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
		PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
	Slider	PL10-28x590/540	Slider for H10-70x160/290 'standard'	0150-2196

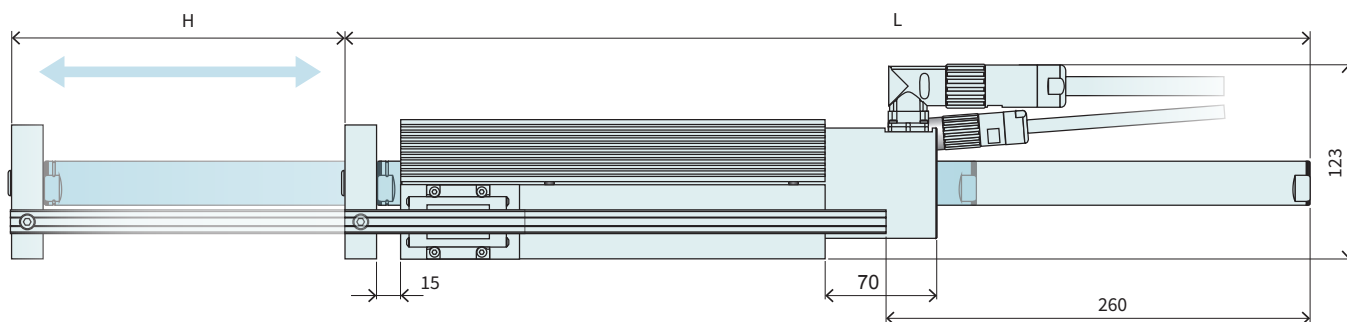
HM10-70x160/390 Linear Module 70x160 with 390 mm Stroke				
	Linear Guide	H10-70x160/390	H-Guide for P10-70x160, 390 mm Stroke	0150-5412
	Stator	PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
		PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
		PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
		PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
	Slider	PL10-28x690/640	Slider for H10-70x160/390 'standard'	0150-2197

HM10-70x160/490 Linear Module 70x160 with 490 mm Stroke				
	Linear Guide	H10-70x160/490	H-Guide for P10-70x160, 490 mm Stroke	0150-5413
	Stator	PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
		PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
		PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
		PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
	Slider	PL10-28x790/740	Slider for H10-70x160/490 'standard'	0150-2198

ACCESSORIES

Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051
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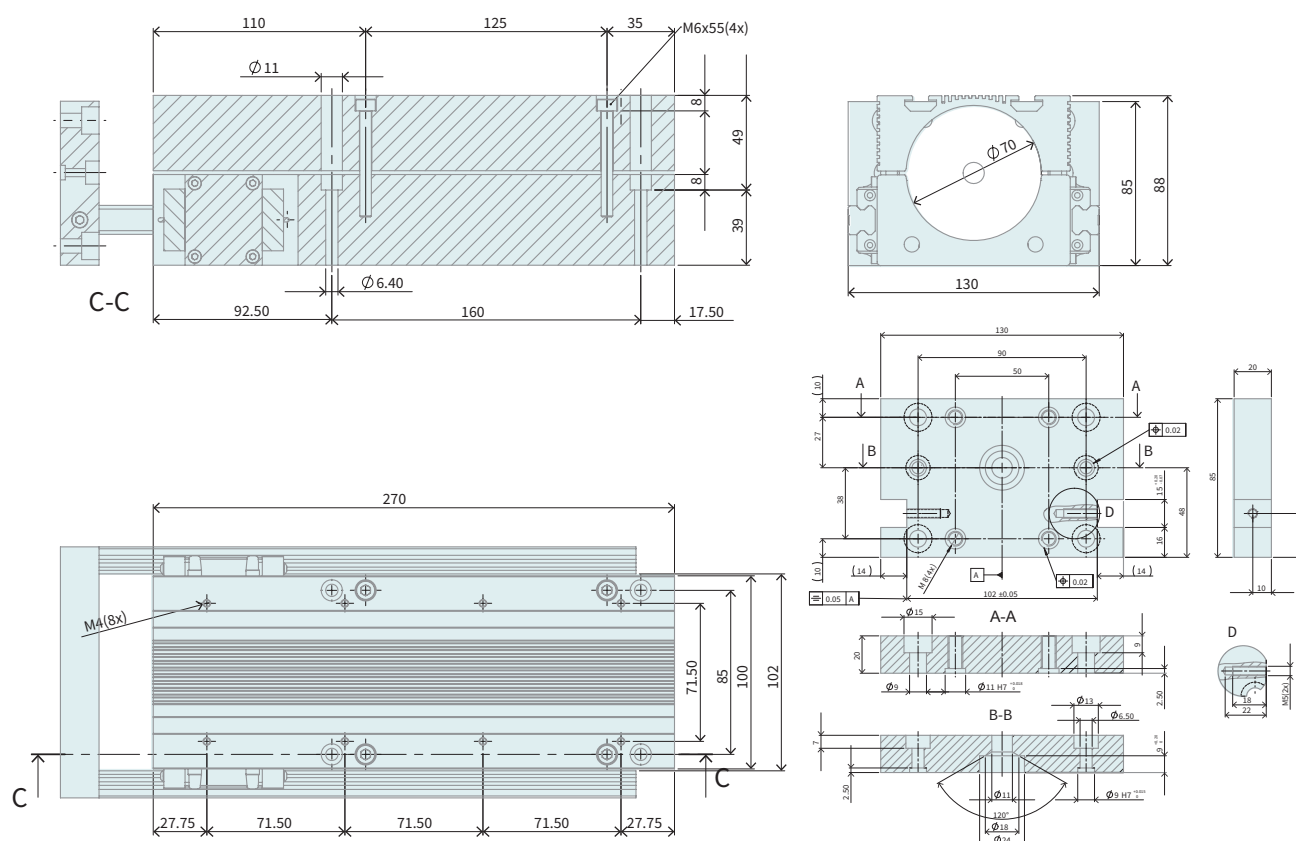
LINEAR MODULE HM10-70x240



Linear Module	Bearing type	Stroke H [mm (inch)]	Moving Parts L [mm (inch)]	Moving Mass ¹ [g (lb)]	Total Weight [g (lb)]
HM10-70x240/110	Ball Bearings	110 (4.33)	510 (20.05)	3850 (8.49)	14130 (31.15)
HM10-70x240/210	Ball Bearings	210 (8.27)	610 (24.02)	5240 (11.55)	15210 (33.53)
HM10-70x240/310	Ball Bearings	310 (12.20)	710 (27.95)	6130 (13.51)	16390 (36.13)
HM10-70x240/410	Ball Bearings	410 (16.41)	810 (31.89)	6920 (15.26)	17570 (38.74)
HM10-70x240/510	Ball Bearings	510 (20.08)	910 (35.83)	7810 (17.22)	18650 (41.12)

¹ Mass with moving slider

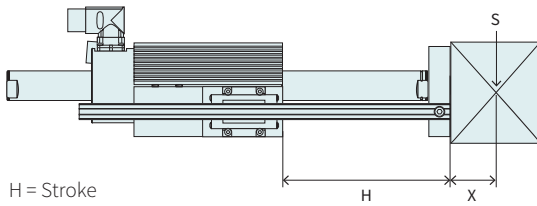
LINEAR GUIDES H10-70x240



Dimensions in mm

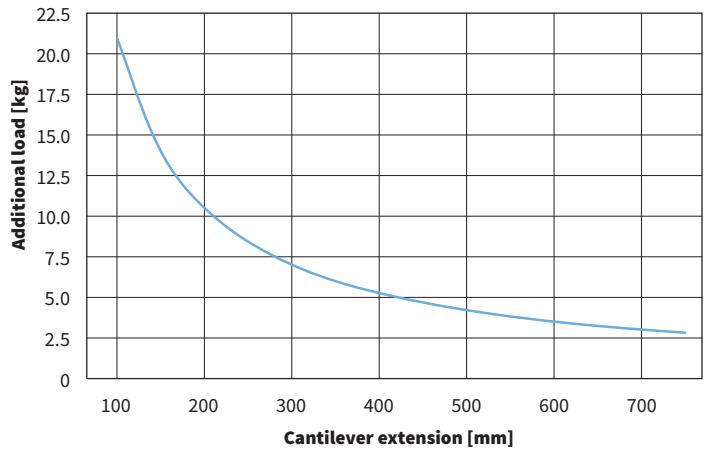
Materials	Guide Block & Front Plate	Guide Shaft	Bearing
H10-70x240/... Guiding carriage	Anodized Aluminum	Hardened Steel	Steel Ball Bearings

MAXIMUM LOAD WITH HM10-70x240



H = Stroke
 X = Distance to center of gravity
 S = Center of gravity
 Cantilever extension = H + X

The maximum load depends on the cantilever extension (maximum stroke H plus distance X between the center of gravity of the working load and the mounting surface).



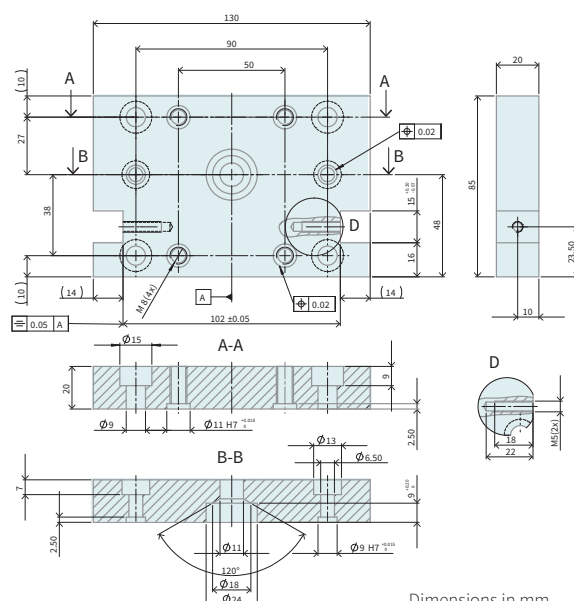
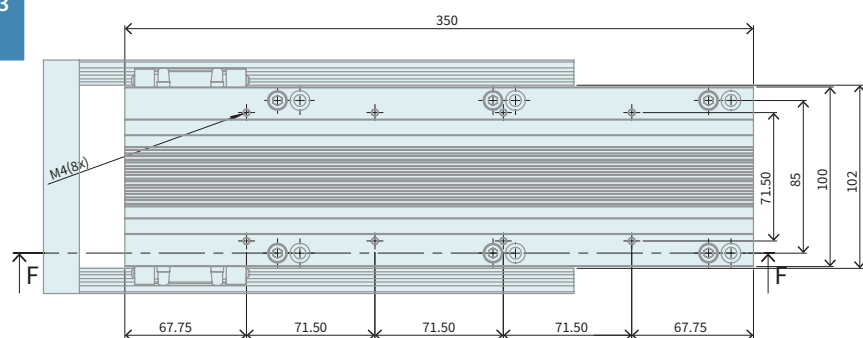
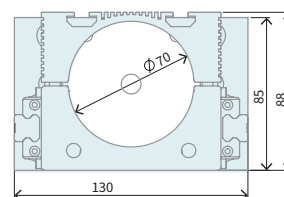
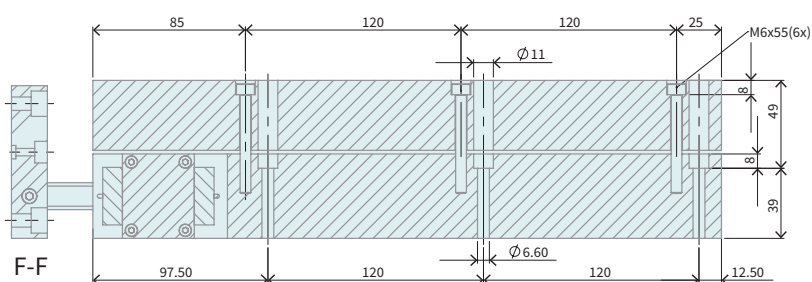
ORDERING INFORMATION

HM10-70x240/110 Linear Module 70x240 with 110 mm Stroke					
	Linear Guide	H10-70x240/110	H-Guide for P10-70x240, 110 mm Stroke		0150-5185
	Stator	PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1293
		PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2284
		PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2362
		PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2710
	Slider	PL10-28x490/440	Slider for H10-70x240/110 'standard'		0150-2195
HM10-70x240/210 Linear Module 70x240 with 210 mm Stroke					
	Linear Guide	H10-70x240/210	H-Guide for P10-70x240, 210 mm Stroke		0150-5400
	Stator	PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1293
		PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2284
		PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2362
		PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2710
	Slider	PL10-28x590/540	Slider for H10-70x240/210 'standard'		0150-2196
HM10-70x240/310 Linear Module 70x240 with 310 mm Stroke					
	Linear Guide	H10-70x240/310	H-Guide for P10-70x240, 310 mm Stroke		0150-5401
	Stator	PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1293
		PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2284
		PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2362
		PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2710
	Slider	PL10-28x690/640	Slider for H10-70x240/310 'standard'		0150-2197
HM10-70x240/410 Linear Module 70x240 with 410 mm Stroke					
	Linear Guide	H10-70x240/410	H-Guide for P10-70x240, 410 mm Stroke		0150-5402
	Stator	PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1293
		PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2284
		PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2362
		PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2710
	Slider	PL10-28x790/740	Slider for H10-70x240/410 'standard'		0150-2198
HM10-70x240/510 Linear Module 70x240 with 510 mm Stroke					
	Linear Guides	H10-70x240/510	H-Guide for P10-70x240, 510 mm Stroke		0150-5403
	Stator	PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1293
		PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2284
		PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2362
		PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2710
	Slider	PL10-28x890/840	Slider for H10-70x240/510 'standard'		0150-2199
ACCESSORIES					
	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48		0150-5051

[illegible]

Linear Module	Bearing type	Stroke H [mm (inch)]		Moving Parts L [mm (inch)]		Moving Mass ¹ [g (lb)]		Total Weight [g (lb)]	
HM10-70x320/130	Ball Bearings	130	(5.12)	610	(24.02)	4350	(9.59)	15950	(35.16)
HM10-70x320/230	Ball Bearings	230	(9.06)	710	(27.95)	5240	(11.55)	17130	(37.77)
HM10-70x320/330	Ball Bearings	330	(12.99)	810	(31.89)	6130	(13.51)	18310	(40.37)
HM10-70x320/430	Ball Bearings	430	(16.93)	910	(35.83)	6920	(15.26)	19390	(42.75)
HM10-70x320/530	Ball Bearings	530	(20.87)	1010	(39.76)	7810	(17.22)	20570	(45.35)

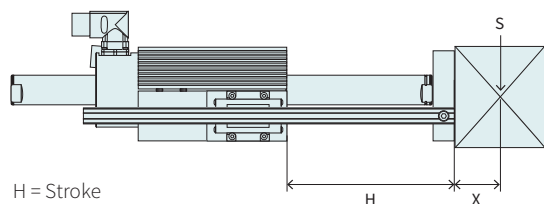
LINEAR GUIDES H10-70x320



Dimensions in mm

Materials	Guide Block & Front Plate	Guide Shaft	Bearing
H10-70x320/... Guiding carriage	Anodized Aluminum	Hardened Steel	Steel Ball Bearings

MAXIMUM LOAD WITH HM10-70x320



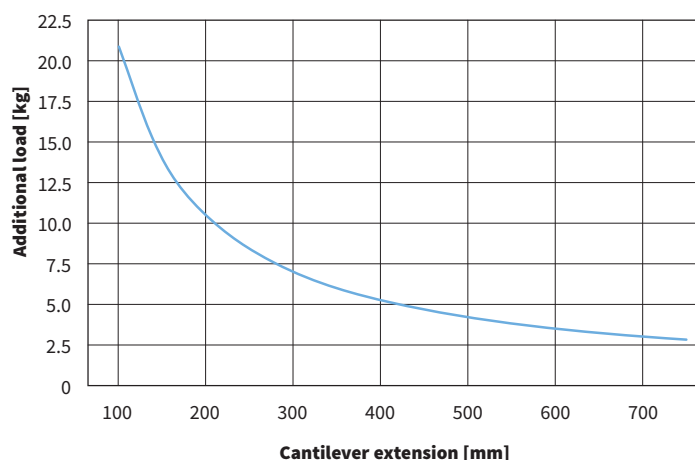
H = Stroke

X = Distance to center of gravity

S = Center of gravity

Cantilever extension = H + X

The maximum load depends on the cantilever extension (maximum stroke H plus distance X between the center of gravity of the working load and the mounting surface).



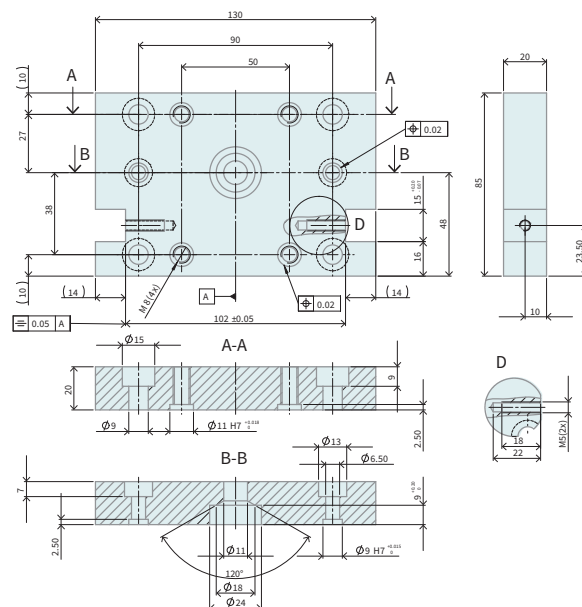
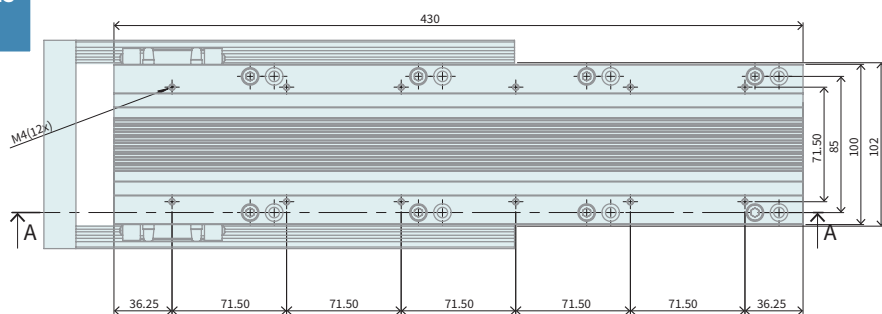
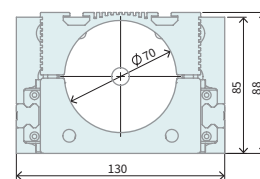
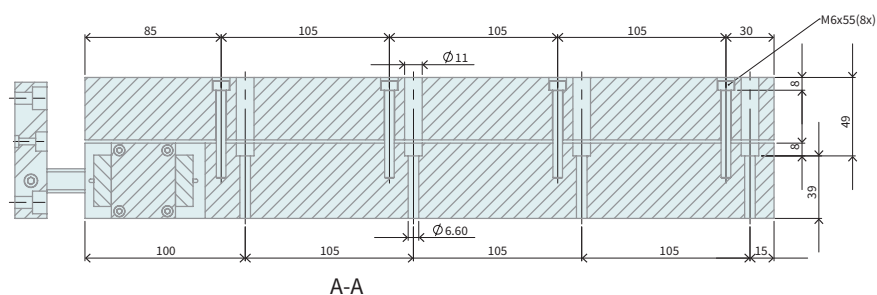
ORDERING INFORMATION

HM10-70x320/130 Linear Module 70x320 with 130 mm Stroke				
Linear Guide	H10-70x320/130	H-Guide for P10-70x320, 130 mm Stroke		0150-5414
Stator	PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1284
	PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2285
	PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2343
	PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2711
Slider	PL10-28x590/540	Slider for H10-70x320/130		0150-2196
HM10-70x320/230 Linear Module 70x320 with 230 mm Stroke				
Linear Guide	H10-70x320/230	H-Guide for P10-70x320, 230 mm Stroke		0150-5415
Stator	PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1284
	PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2285
	PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2343
	PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2711
Slider	PL10-28x690/640	Slider for H10-70x320/230 'standard'		0150-2197
HM10-70x320/330 Linear Module 70x320 with 330 mm Stroke				
Linear Guide	H10-70x320/330	H-Guide for P10-70x320, 330 mm Stroke		0150-5416
Stator	PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1284
	PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2285
	PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2343
	PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2711
Slider	PL10-28x790/740	Slider for H10-70x320/330 'standard'		0150-2198
HM10-70x320/430 Linear Module 70x320 with 430 mm Stroke				
Linear Guide	H10-70x320/430	H-Guide for P10-70x320, 430 mm Stroke		0150-5417
Stator	PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1284
	PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2285
	PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2343
	PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2711
Slider	PL10-28x890/840	Slider for H10-70x320/430 'standard'		0150-2199
HM10-70x320/530 Linear Module 70x320 with 530 mm Stroke				
Linear Guide	H10-70x320/530	H-Guide for P10-70x320, 530 mm Stroke		0150-5418
Stator	PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1284
	PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2285
	PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2343
	PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2711
Slider	PL10-28x990/940	Slider for H10-70x320/530 'standard'		0150-2203
ACCESSORIES				
Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48		0150-5051

Technical drawing of the 1000 Series Linear Actuator showing dimensions H, L, 15, 70, 360, and 123.

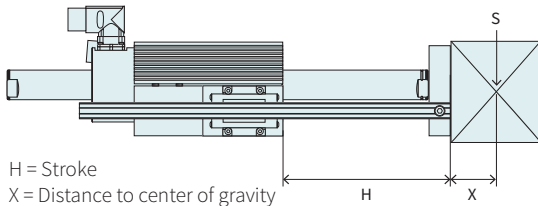
Linear Module	Bearing type	Stroke H [mm (inch)]	Moving Parts L [mm (inch)]	Moving Mass ¹ [g (lb)]	Total Weight [g (lb)]
HM10-70x400/50	Ball Bearings	50 (1.97)	610 (24.02)	4350 (9.59)	18040 (39.77)
HM10-70x400/150	Ball Bearings	150 (5.91)	710 (27.95)	5240 (11.55)	19220 (42.37)
HM10-70x400/250	Ball Bearings	250 (9.84)	810 (31.89)	6130 (13.51)	20400 (44.97)
HM10-70x400/350	Ball Bearings	350 (13.78)	910 (35.83)	6920 (15.26)	21480 (47.36)
HM10-70x400/450	Ball Bearings	450 (17.72)	1010 (39.76)	7810 (17.22)	22660 (49.96)

LINEAR GUIDES H10-70x400

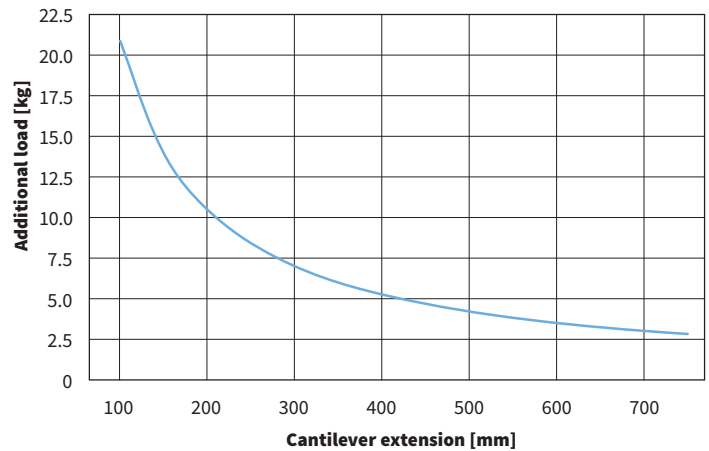


Materials	Guide Block & Front Plate	Guide Shaft	Bearing
H10-70x400/... Guiding carriage	Anodized Aluminum	Hardened Steel	Steel Ball Bearings

MAXIMUM LOAD WITH HM10-70x400

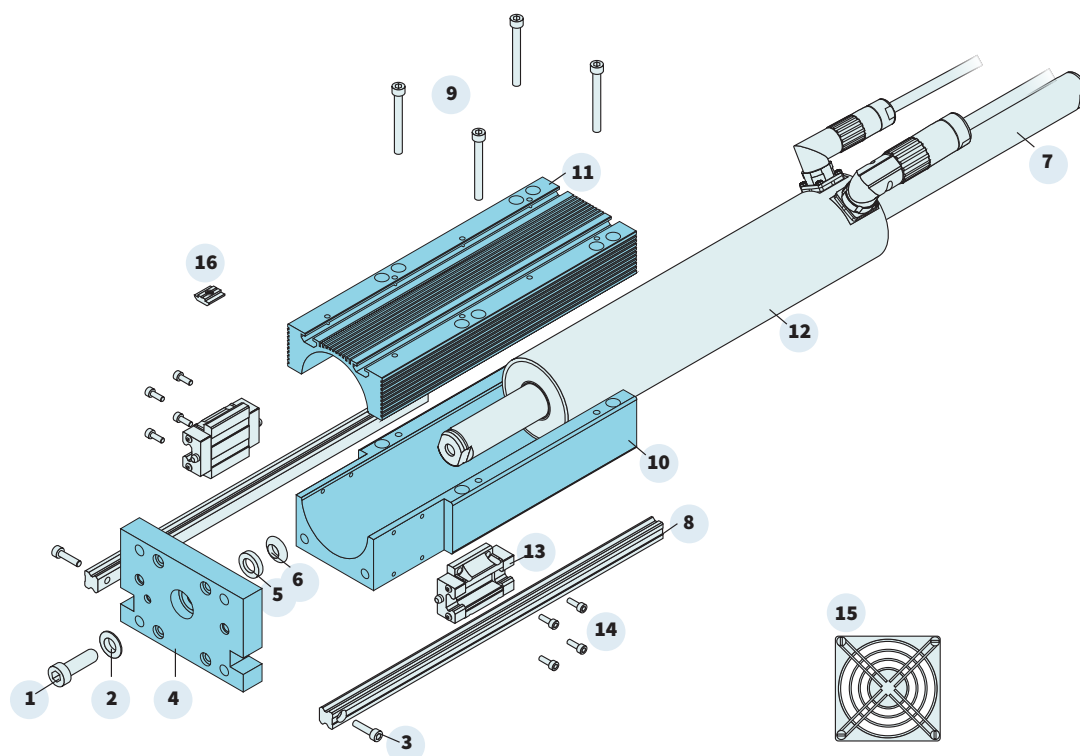


The maximum load depends on the cantilever extension (maximum stroke H plus distance X between the center of gravity of the working load and the mounting surface).



ORDERING INFORMATION

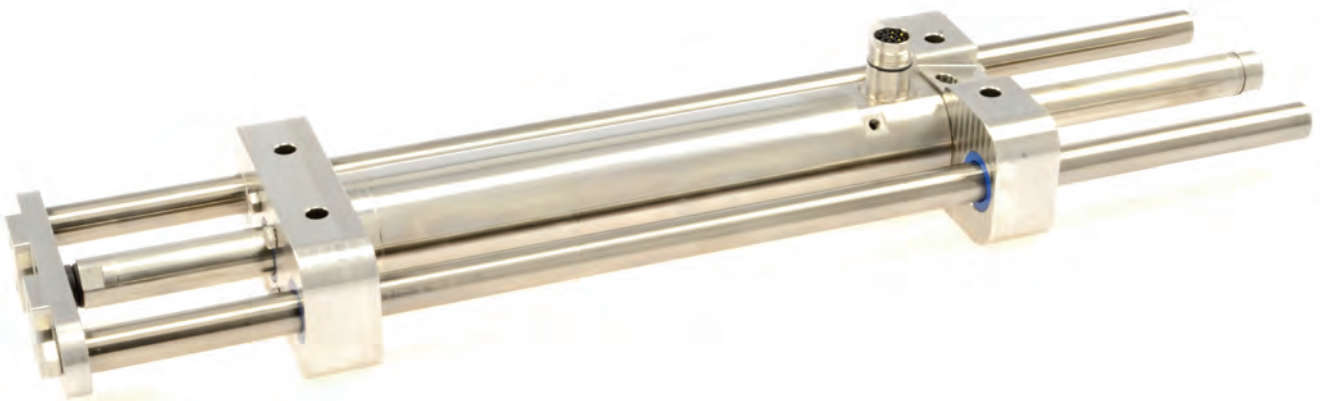
HM10-70x400/50 Linear Module 70x400 with 50 mm Stroke					
	Linear Guide	H10-70x400/50	H-Guide for P10-70x400, 50 mm Stroke		0150-5419
	Stator	PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1294
		PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2286
		PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2363
		PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2712
	Slider	PL10-28x590/540	Slider for H10-70x400/50 'standard'		0150-2196
HM10-70x400/150 Linear Module 70x400 with 150 mm Stroke					
	Linear Guide	H10-70x400/150	H-Guide for P10-70x400, 150 mm Stroke		0150-5420
	Stator	PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1294
		PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2286
		PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2363
		PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2712
	Slider	PL10-28x690/640	Slider for H10-70x400/150 'standard'		0150-2197
HM10-70x400/250 Linear Module 70x400 with 250 mm Stroke					
	Linear Guide	H10-70x400/250	H-Guide for P10-70x400, 250 mm Stroke		0150-5421
	Stator	PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1294
		PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2286
		PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2363
		PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2712
	Slider	PL10-28x790/740	Slider for H10-70x400/250 'standard'		0150-2198
HM10-70x400/350 Linear Module 70x400 with 350 mm Stroke					
	Linear Guide	H10-70x400/350	H-Guide for P10-70x400, 350 mm Stroke		0150-5422
	Stator	PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1294
		PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2286
		PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2363
		PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2712
	Slider	PL10-28x890/840	Slider for H10-70x400/350 'standard'		0150-2199
HM10-70x400/450 Linear Module 70x400 with 450 mm Stroke					
	Linear Guide	H10-70x400/450	H-Guide for P10-70x400, 450 mm Stroke		0150-5423
	Stator	PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder		0150-1294
		PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY		0150-2286
		PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC		0150-2363
		PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector		0150-2712
	Slider	PL10-28x990/940	Slider for H10-70x400/450 'standard'		0150-2203
ZUBEHÖR					
	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48		0150-5051



PARTS LIST

	Linear Guide	H10-70x80		H10-70x160		H10-70x240		H10-70x320		H10-70x400	
1	Slider screw	0230-0181		0230-0181		0230-0181		0230-0181		0230-0181	
2	Socket washer (f)	0160-0807		0160-0807		0160-0807		0160-0807		0160-0807	
3	Rod screws	0230-0097		0230-0097		0230-0097		0230-0097		0230-0097	
4	Front plate	0150-5183		0150-5183		0150-5183		0150-5183		0150-5183	
5	Ball washer (r)	0160-0801		0160-0801		0160-0801		0160-0801		0160-0801	
6	Socket washer (r)	0160-0807		0160-0807		0160-0807		0160-0807		0160-0807	
7	Slider	PL10-28x...	Art.-Nr.	PL10-28x...	Art.-Nr.	PL10-28x...	Art.-Nr.	PL10-28x...	Art.-Nr.	PL10-28x...	Art.-Nr.
		...290/240	0150-2193	...390/340	0150-2194	...490/440	0150-2195	...590/540	0150-2196	...590/540	0150-2196
		...390/340	0150-2194	...490/440	0150-2195	...590/540	0150-2196	...690/640	0150-2197	...690/640	0150-2197
		...490/440	0150-2195	...590/540	0150-2196	...690/640	0150-2197	...790/740	0150-2198	...790/740	0150-2198
		...590/540	0150-2196	...690/640	0150-2197	...790/740	0150-2198	...890/840	0150-2199	...890/840	0150-2199
		...690/640	0150-2197	...790/740	0150-2198	...890/840	0150-2199	...990/940	0150-2203	...990/940	0150-2203
8	H-guide rod	HL10-15x...	Art.-Nr.	HL10-15x...	Art.-Nr.	HL10-15x...	Art.-Nr.	HL10-15x...	Art.-Nr.	HL10-15x...	Art.-Nr.
		250	0150-5182	250	0150-5182	250	0150-5182	250	0150-5182	250	0150-5182
		350	0150-5190	350	0150-5190	350	0150-5190	350	0150-5190	350	0150-5190
		450	0150-5191	450	0150-5191	450	0150-5191	450	0150-5191	450	0150-5191
		550	0150-5192	550	0150-5192	550	0150-5192	550	0150-5192	550	0150-5192
		650	0150-5193	650	0150-5193	650	0150-5193	650	0150-5193	650	0150-5193
9	Clamping screw	0230-0150		0230-0150		0230-0150		0230-0150		0230-0150	
10	Guide block bottom	0160-0919		0160-0923		0160-0915		0160-0927		0160-0927	
11	Guide block top	0160-0921		0160-0925		0160-0917		0160-0929		0160-0929	
12	Stator	PS10-70x80	Art.-Nr.	PS10-70x160	Art.-Nr.	PS10-70x240	Art.-Nr.	PS10-320x80	Art.-Nr.	PS10-320x80	Art.-Nr.
		..BL-QJ	0150-1291	..BL-QJ	0150-1292	..BL-QJ	0150-1293	..BL-QJ	0150-1284	..BL-QJ	0150-1294
		..BL-QJ-D01	0150-2282	..BL-QJ-D01	0150-2283	..BL-QJ-D01	0150-2284	..BL-QJ-D01	0150-2285	..BL-QJ-D01	0150-2286
		..BL-QJ-D02	0150-2360	..BL-QJ-D02	0150-2361	..BL-QJ-D02	0150-2362	..BL-QJ-D02	0150-2343	..BL-QJ-D02	0150-2363
13	Profile rail guide	0150-5184		0150-5184		0150-5184		0150-5184		0150-5184	
14	Screws (Profile rail guide)	0230-0180		0230-0180		0230-0180		0230-0180		0230-0180	
	Accessories										
15	Fan Set	0150-5051		0150-5051		0150-5051		0150-5051		0150-5051	
16	Sliding Block	0150-2559		0150-2559		0150-2559		0150-2559		0150-2559	

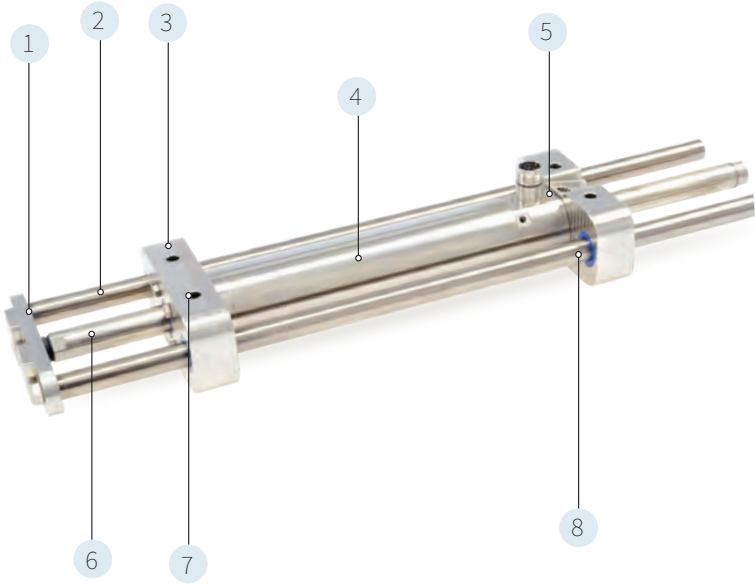
LINEAR GUIDES STAINLESS STEEL



- ✓ Bearing external forces, torque and bending moments
- ✓ Turning resistance
- ✓ Made of stainless steel (1.4404 / AISI 316)
- ✓ Hardened stainless steel guide shafts
- ✓ Sliding bearing with FDA approval
- ✓ No seals; connections are welded
- ✓ Tapered surfaces
- ✓ Motor inside is completely flushable

LINEAR GUIDES STAINLESS STEEL

H01-37x304-SSC	998
H01-48x401-SSC	1000
Parts List	1002



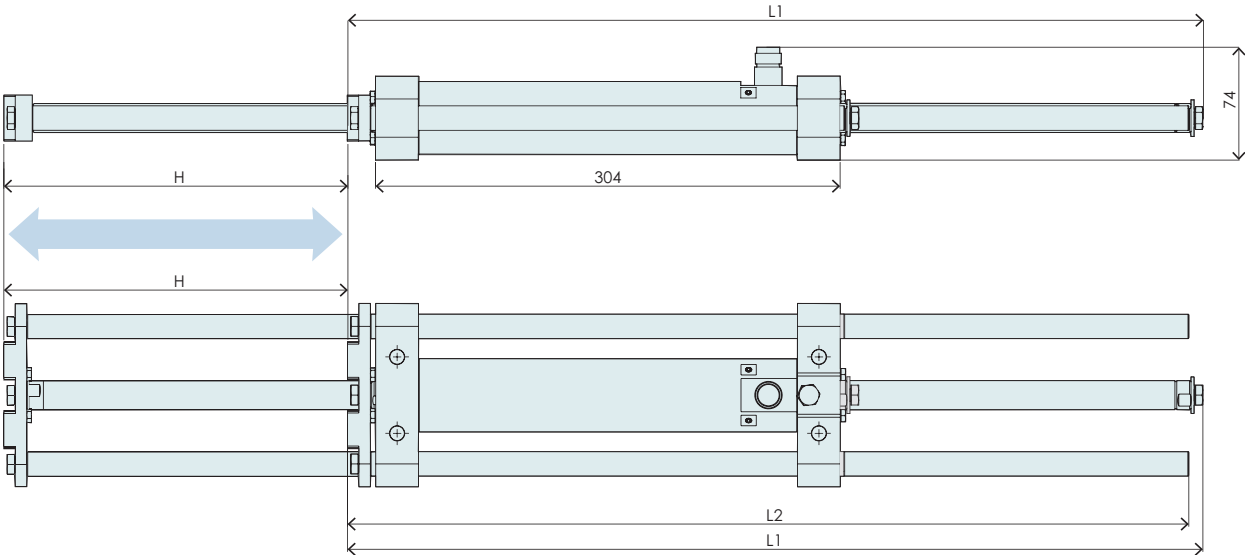
1. Mounting plate with counter bore for precise load mounting
2. Hardened or stainless steel shafts for precise positioning and quiet operation
3. Guide block for assembly of the stator and to the respective application.
4. Stator of stainless steel motor with integrated bearings, temperature and position sensors
5. Channel for flushing the motor
6. Linear motor slider, guarantees maximum force and precise positioning.
7. Centering holes for the uncomplicated and precise mounting of the linear module
8. Plastic plain bearings for special applications in the food- and medical field



Designation Linear Guides H01 Stainless Steel:

H01	-	37	x	304	/	190	-	SSC	Variant stainless steel
									Stroke
									Length of stator + end plates
									Stator diameter
									H-Guide

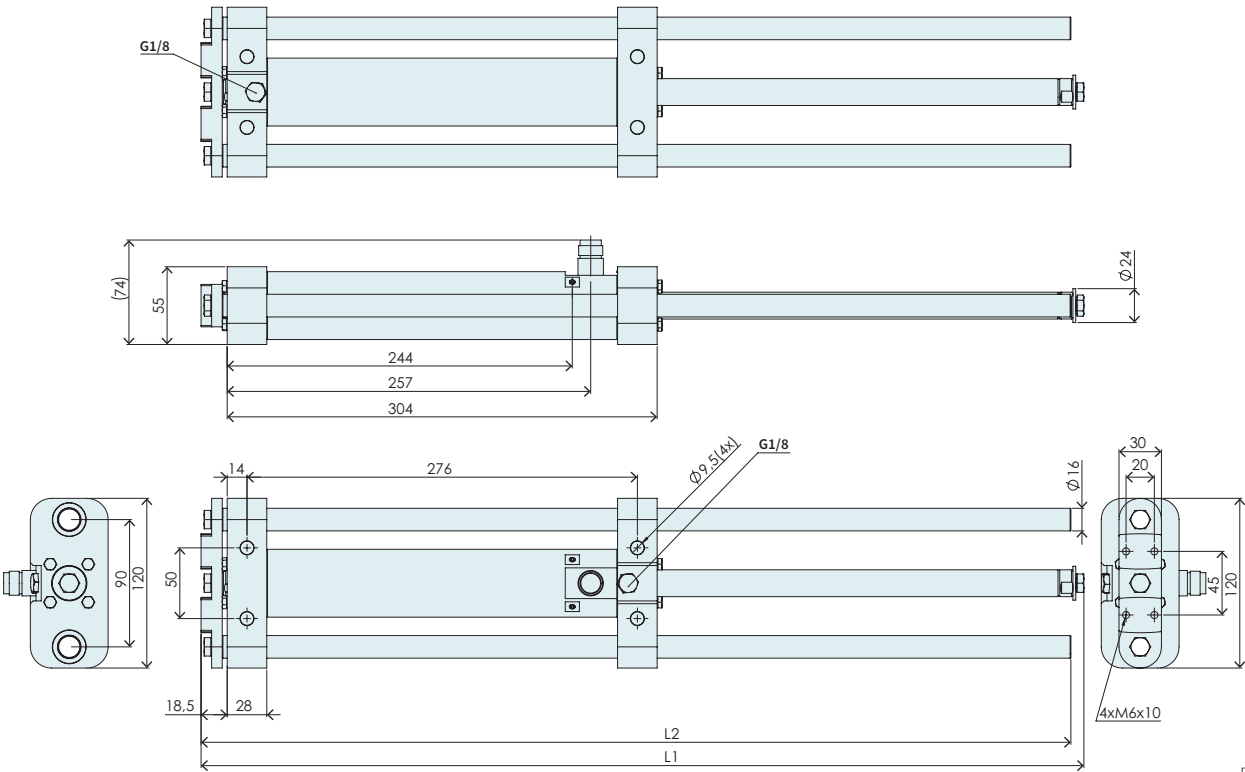
LINEAR MODULE HM01-37x120-SSC



Linear Module	Bearing type	Stroke H [mm (inch)]	Moving Parts L1 [mm (inch)]	Moving Parts L2 [mm (inch)]	Moving Mass ¹ [g (lb)]	Total Weight [g (lb)]
HM01-37x120/85	Plain Bushings	85 (3.35)	420 (16.54)	410 (16.15)	2240 (4.95)	6440 (14.23)
HM01-37x120/190	Plain Bushings	190 (7.48)	525 (20.68)	515 (20.28)	2810 (6.21)	6970 (15.40)
HM01-37x120/290	Plain Bushings	290 (11.42)	625 (24.62)	615 (24.22)	3350 (7.40)	7500 (16.57)
HM01-37x120/390	Plain Bushings	390 (15.36)	725 (28.55)	715 (28.16)	3880 (8.57)	8020 (17.72)

¹ Mass with moving slider

H-GUIDE H01-37x304-SSC



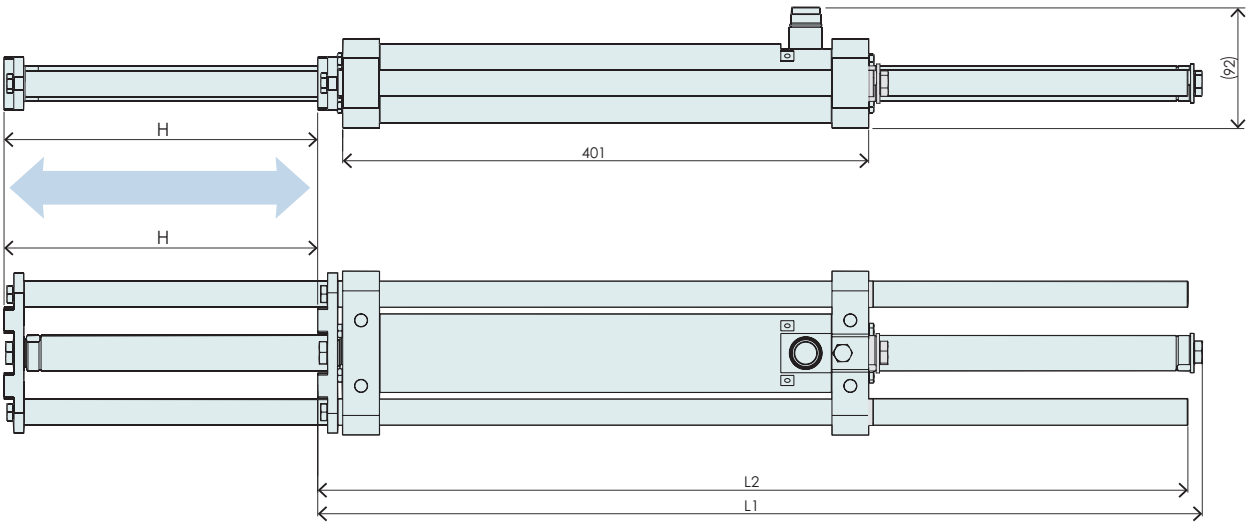
Dimensions in mm

Materials	Guide Block & Front Plate	Guide Shaft	Bearing
H01-37x304/...-SSC Plain Bushings	Stainless Steel 1.4401 / 316 L	Stainless Steel 1.4435 / 316 L	Techtron HPV

ORDERING INFORMATION

HM01-37x120/85-SSC		Linear Module 37x120-SSC with 85 mm Stroke			
	→	Linear Guide	H01-37x304/85-SSC	H-Guide for PS01-37x120F-HP-SSC, Stroke max 85 mm	0150-5271
		Stator	PS01-37x120F-HP-SSC-R	Stator Stainless Steel IP69K	0150-1282
	PS01-37x120F-HP-SSC-R-FC		Stator Stainless Steel IP69K, FC	0150-1283	
	→	Slider	PL01-19x395/320	Slider 'high clearance'	0150-1452
	HM01-37x120/190-SSC		Linear Module 37x120-SSC with 190 mm Stroke		
	→	Linear Guide	H01-37x304/190-SSC	H-Guide for PS01-37x120F-HP-SSC, Stroke max 190 mm	0150-5272
		Stator	PS01-37x120F-HP-SSC-R	Stator Stainless Steel IP69K	0150-1282
	PS01-37x120F-HP-SSC-R-FC		Stator Stainless Steel IP69K, FC	0150-1283	
	→	Slider	PL01-19x500/420	Slider 'high clearance'	0150-1455
	HM01-37x120/290-SSC		Linear Module 37x120-SSC with 290 mm Stroke		
	→	Linear Guide	H01-37x304/290-SSC	H-Guide for PS01-37x120F-HP-SSC, Stroke max 290 mm	0150-5273
		Stator	PS01-37x120F-HP-SSC-R	Stator Stainless Steel IP69K	0150-1282
	PS01-37x120F-HP-SSC-R-FC		Stator Stainless Steel IP69K, FC	0150-1283	
	→	Slider	PL01-19x600/520	Slider 'high clearance'	0150-1456
	HM01-37x120/390-SSC		Linear Module 37x120-SSC with 390 mm Stroke		
	→	Linear Guide	H01-37x304/390-SSC	H-Guide for PS01-37x120F-HP-SSC, Stroke max 390 mm	0150-5274
		Stator	PS01-37x120F-HP-SSC-R	Stator Stainless Steel IP69K	0150-1282
	PS01-37x120F-HP-SSC-R-FC		Stator Stainless Steel IP69K, FC	0150-1283	
	→	Slider	PL01-19x700/620	Slider 'high clearance'	0150-1457

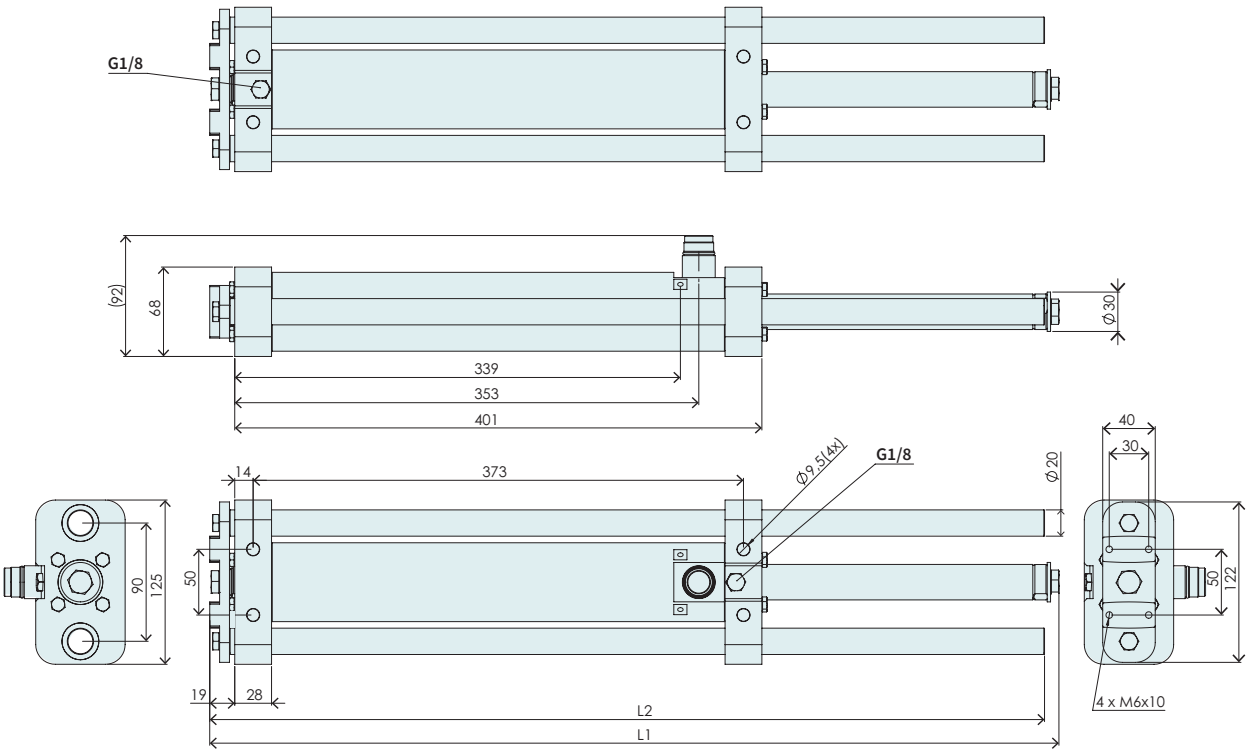
LINEAR MODULE HM01-48x240-SSC



Linear Module	Bearing type	Stroke H [mm (inch)]		Moving Parts L1 [mm (inch)]		Moving Parts L2 [mm (inch)]		Moving Mass ¹ [g (lb)]		Total Weight [g (lb)]	
HM01-48x240/210	Plain Bushings	210	(8.27)	646	(25.44)	637	(25.09)	5970	(13.19)	12200	(26.95)
HM01-48x240/300	Plain Bushings	300	(11.82)	736	(29.0)	727	(28.63)	7380	(16.30)	13030	(28.78)
HM01-48x240/390	Plain Bushings	390	(15.36)	826	(32.53)	817	(32.18)	8260	(18.25)	13860	(30.62)
HM01-48x240/510	Plain Bushings	510	(20.09)	946	(37.26)	937	(36.90)	9520	(21.03)	14980	(33.09)

¹ Mass with moving slider

H-GUIDE H01-48x401-SSC

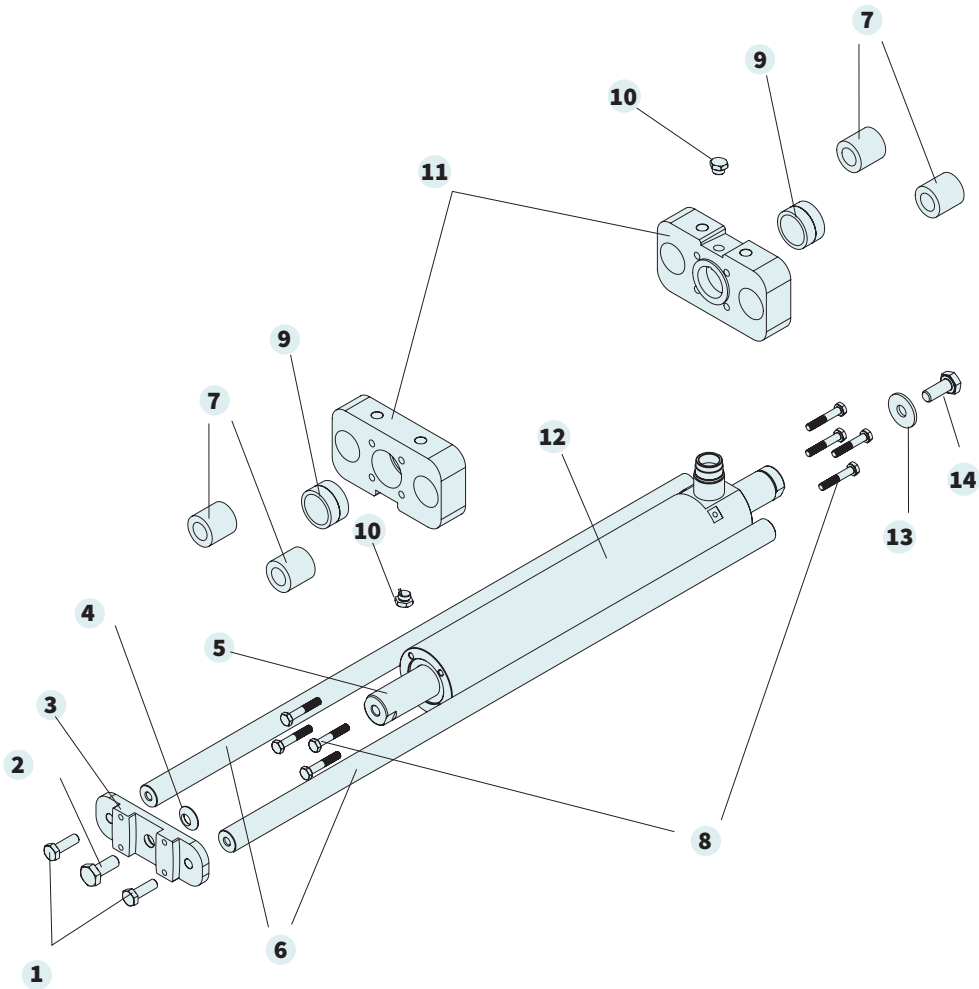


Dimensions in mm

Materials	Guide Block & Front Plate	Guide Shaft	Bearing
H01-48x401/...-SSC Plain Bushings	Stainless Steel 1.4401 / 316 L	Stainless Steel 1.4435 / 316 L	Techtron HPV

ORDERING INFORMATION

HM01-48x240/210-SSC		Linear Module 48x240-SSC with 210 mm Stroke			
	→	Linear Guide	H01-48x401/210-SSC	H-Guide for PS01-48x240F-HP-SSC, Stroke max.210 mm	0150-5280
		Stator	PS01-48x240F-SSC-C	Stator Stainless Steel IP69K	0150-1267
	PS01-48x240F-SSC-C-FC		Stator Stainless Steel IP69K, FC	0150-1268	
	→	Slider	PL01-27x620/540	Slider 'high clearance'	0150-1470
HM01-48x240/300-SSC		Linear Module 48x240-SSC with 300 mm Stroke			
	→	Linear Guide	H01-48x401/300-SSC	H-Guide for PS01-48x240F-HP-SSC, Stroke max.300 mm	0150-5281
		Stator	PS01-48x240F-SSC-C	Stator Stainless Steel IP69K	0150-1267
	PS01-48x240F-SSC-C-FC		Stator Stainless Steel IP69K, FC	0150-1268	
	→	Slider	PL01-27x710/630	Slider 'high clearance'	0150-1471
HM01-48x240/390-SSC		Linear Module 48x240-SSC with 390 mm Stroke			
	→	Linear Guide	H01-48x401/390-SSC	H-Guide for PS01-48x240F-HP-SSC, Stroke max.390 mm	0150-5282
		Stator	PS01-48x240F-SSC-C	Stator Stainless Steel IP69K	0150-1267
	PS01-48x240F-SSC-C-FC		Stator Stainless Steel IP69K, FC	0150-1268	
	→	Slider	PL01-27x800/720	Slider 'high clearance'	0150-1472
HM01-48x240/510-SSC		Linear Module 48x240-SSC with 510 mm Stroke			
	→	Linear Guide	H01-48x401/510-SSC	H-Guide for PS01-48x240F-HP-SSC, Stroke max.510 mm	0150-5283
		Stator	PS01-48x240F-SSC-C	Stator Stainless Steel IP69K	0150-1267
	PS01-48x240F-SSC-C-FC		Stator Stainless Steel IP69K, FC	0150-1268	
	→	Slider	PL01-27x920/840	Slider 'high clearance'	0150-1447



PARTS LIST

Linear Guide		H01-37x304-SSC		H01-48x401-SSC	
1	Shaft screw	ISO 4017 M8 x 25 INOX A4		ISO 4017 M8 x 25 INOX A4	
2	Slider screw (front)	ISO 4017 M8 x 25 INOX A4		ISO 4017 M10 x 25 INOX A4	
3	Front plate	0160-0518		0160-0521	
4	Socket washer	DIN 6319 c / M8 INOX		DIN 6319 c / M10 INOX	
5	Slider	PL01-19x...	Art-Nr.	PL01-27x...	Art-Nr.
		500/420	0150-1455	620/540	0150-1470
		600/520	0150-1456	710/630	0150-1471
		700/620	0150-1457	800/720	0150-1472
				920/840	0150-1447
6	Stainless steel shaft	HL01-16x...	Art-Nr.	HL01-20x...	Art-Nr.
		500-SSC	0150-5268	620-SSC	0150-5275
		600-SSC	0150-5269	710-SSC	0150-5276
		700-SSC	0150-5270	800-SSC	0150-5277
				920-SSC	0150-5278
7	Plain bushing (stainless steel shaft)	Pos. 7 + Pos. 9 0150-5299		Pos. 7 + Pos. 9 0150-5300	
8	Screws	ISO 4017 M5 x 35 INOX A4		ISO 4017 M6 x 35 INOX A4	
9	Plain bushing (slider)	Pos. 7 + Pos. 9 0150-5299		Pos. 7 + Pos. 9 0150-5300	
10	Hexagonal plug	0160-0336		0160-0336	
11	End plate	0160-0515		0160-0520	
12	Stator	Typ	Art-Nr.	Typ	Art-Nr.
		PS01-37x120F-HP-SSC-R	0150-1282	PS01-48x240F-SSC-C	0150-1267
		PS01-37x120F-HP-SSC-R-FC	0150-1283	PS01-48x240F-SSC-C-FC	0150-1268
13	Washer	8.4x24/2 INOX A4		10.5x30/2.5 INOX A4	
14	Slider screw (rear)	ISO 4017 M8 x 20 INOX A4		ISO 4017 M10 x 12 INOX A4	

BRIDGE GUIDES B01



- ✓ Increased stiffness by endplate
- ✓ Use in high-clearance sliders
- ✓ Bearing external forces, torque and bending moments
- ✓ Turning resistance
- ✓ Compatible with pneumatic guides
- ✓ Integrated Linear ball bearings or sintered bearings
- ✓ Load can be mounted directly to the front plate

BRIDGE GUIDES B01

B01-37x166	1006
B01-37x286	1008
B01-48x250	1010
Technical Data	1012
Parts List	1013



1. Mounting plate with counter bore for precise load mounting
2. Hardened or stainless steel shafts for precise positioning and quiet operation.
3. Ball bearings or plain bushings, for high load masses and long life
4. Guide block with counter bores for uncomplicated, precise mounting of the Bridge Module.
5. Mechanical end stop (rear)
6. Linear motor stator with integrated bearings, temperature and position sensors. Available with IP67 connector housing or cable exit.
7. Clamping cylinder to secure the stator in the guide block.
8. T-slots in the guide block allow simple mounting of accessories.
9. Linear motor slider, guarantees maximum force and precise positioning.
10. Integrated linear coupling for simple mounting of the slider



Bridge Module BM01

Complete BM01 bridge modules, consisting of a B01 bridge guide and P01 linear motor, are highly dynamic design components. Compact construction and free positioning have significant advantages, especially in textile and packaging machines, assembly and feeding technology, laboratory automation, and special machines and systems.

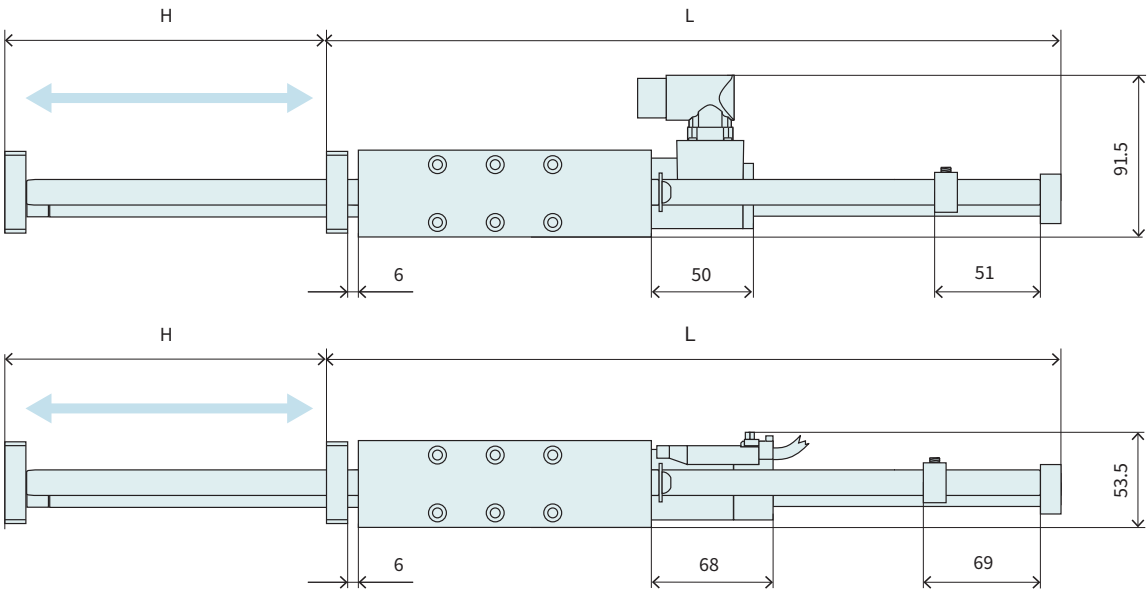
Designation

B01	-	37	x	166	/	160	-	GF	Bearing type
									Stroke
									Guide block length
									Stator diameter
									Bridge Guide

Designation

BM01	-	37	x	120	/	60	-	C	Connector type
									Stroke
									Active stator length
									Stator diameter
									Module type

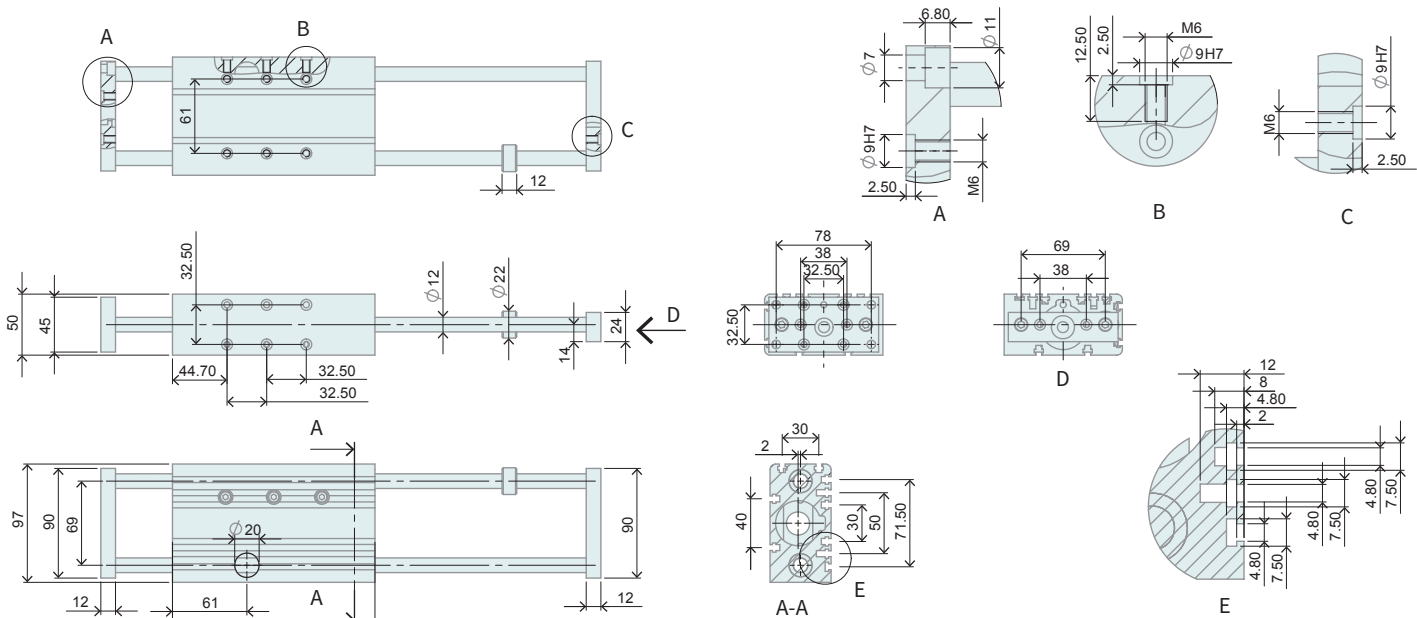
BRIDGE MODULE BM01-37x120



Bridge Module	Bearing type	Stroke H [mm (inch)] ¹	Moving Parts L [mm (inch)]	Moving Mass ² [g (lb)]	Total Weight [g (lb)]
BM01-37x120/160	Ball bearings	160 (6.30)	410 (16.14)	1450 (3.15)	3500 (7.72)
BM01-37x120/260	Ball bearings	260 (10.24)	510 (20.08)	1820 (4.01)	3900 (8.57)
BM01-37x120/360	Ball bearings	360 (14.17)	610 (24.02)	2210 (4.87)	4300 (9.44)
BM01-37x120/160-GF	Plain Bushings	160 (6.30)	410 (16.14)	1450 (3.15)	3500 (7.72)
BM01-37x120/260-GF	Plain Bushings	260 (10.24)	510 (20.08)	1820 (4.01)	3900 (8.57)
BM01-37x120/360-GF	Plain Bushings	360 (14.17)	610 (24.02)	2210 (4.87)	4300 (9.44)

¹ The stroke is reduced by 18mm when using cable models
² Mass with moving slider

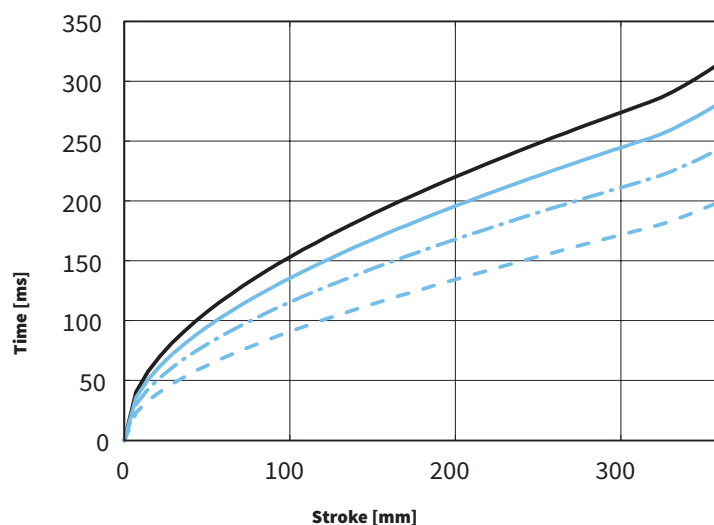
BRIDGE GUIDES B01-37x166



Dimensions in mm

Materials	Guide Block & Front Plate	Guide Shaft	Bearing	Wipers
B01-37x166/... Ball Bearings	Anodized Aluminum	Hardened Steel	Steel Ball Bearings	Nitrile Rubber
B01-37x166/... -GF Plain Bushings	Anodized Aluminum	Stainless Steel 1.4104	Sintered Bronze	Nitrile Rubber

POSITIONING TIMES WITH BM01-37x120



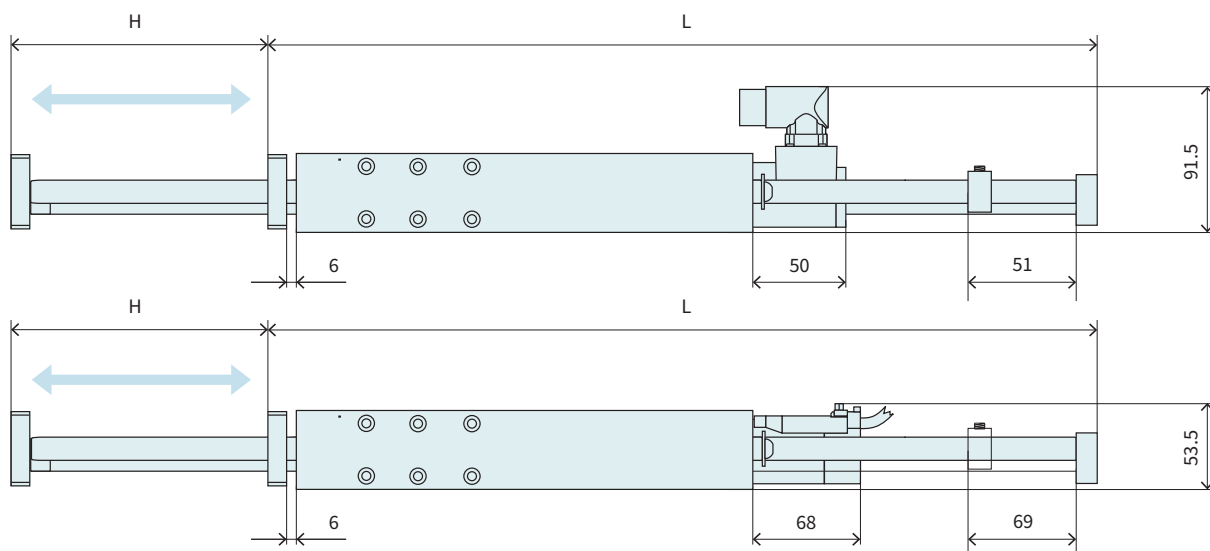
Minimum positioning times for horizontal motions with different load masses, controlled by an E1100-HC Servo Drive.

ORDERING INFORMATION

BM01-37x120/160 Bridge Module 37x120 with 160 mm Stroke ¹					
	Bridge Guide	B01-37x166/160	B01 for P01-37x120, 160 mm Stroke, Ball Bearings		0150-5138
		B01-37x166/160-GF	B01 for P01-37x120, 160 mm Stroke, Plain Bushings		0150-5141
	Stator	PS01-37x120-C	Linearmotor Stator, connector type C - IP67		0150-1223
		PS01-37x120-C20	Linearmotor Stator, 0.2m Cable, connector C - IP67		0150-1237
		PS01-37x120	Linearmotor Stator, 1.5m Cable, connector P		0150-1204
	Slider	PL01-19x395/320	High Clearance Slider for B01-37x166/160		0150-1452
BM01-37x120/260 Bridge Module 37x120 with 260 mm Stroke ¹					
	Bridge Guide	B01-37x166/260	B01 for P01-37x120, 260 mm Stroke, Ball Bearings		0150-5139
		B01-37x166/260-GF	B01 for P01-37x120, 260 mm Stroke, Plain Bushings		0150-5142
	Stator	PS01-37x120-C	Linearmotor Stator, connector type C - IP67		0150-1223
		PS01-37x120-C20	Linearmotor Stator, 0.2m Cable, connector C - IP67		0150-1237
		PS01-37x120	Linearmotor Stator, 1.5m Cable, connector P		0150-1204
	Slider	PL01-19x500/420	High Clearance Slider for B01-37x166/260		0150-1455
BM01-37x120/360 Bridge Module 37x120 with 360 mm Stroke ¹					
	Bridge Guide	B01-37x166/360	B01 for P01-37x120, 360 mm Stroke, Ball Bearings		0150-5140
		B01-37x166/360-GF	B01 for P01-37x120, 360 mm Stroke, Plain Bushings		0150-5143
	Stator	PS01-37x120-C	Linearmotor Stator, connector type C - IP67		0150-1223
		PS01-37x120-C20	Linearmotor Stator, 0.2m Cable, connector C - IP67		0150-1237
		PS01-37x120	Linearmotor Stator, 1.5m Cable, connector P		0150-1204
	Slider	PL01-19x600/520	High Clearance Slider for B01-37x166/360		0150-1456
Accessories					
	Brake	HB01-37	Pneumatic Brake for H01-37 / 600N (4-6 Bar)		0150-5052
	Fan	HV01-37/48	Fan for H01-37 and -48 Linear Guides		0150-5051
	MagSpring	MF01-37/H37	Mounting flange for MagSpring M01-37x...		0250-2307
		MA01-37/H37	Mounting adapter for MagSpring M01-37x...		0250-0117
	Center Sleeve	HC01-09/04	Center Sleeve D9x4 mm		0150-3251
	Wiper	HA01-37/19-F	Wiper for B01-37 guides, front side		0150-5177

¹ The stroke is reduced by 18mm when using cable models

BRIDGE MODULE BM01-37x240

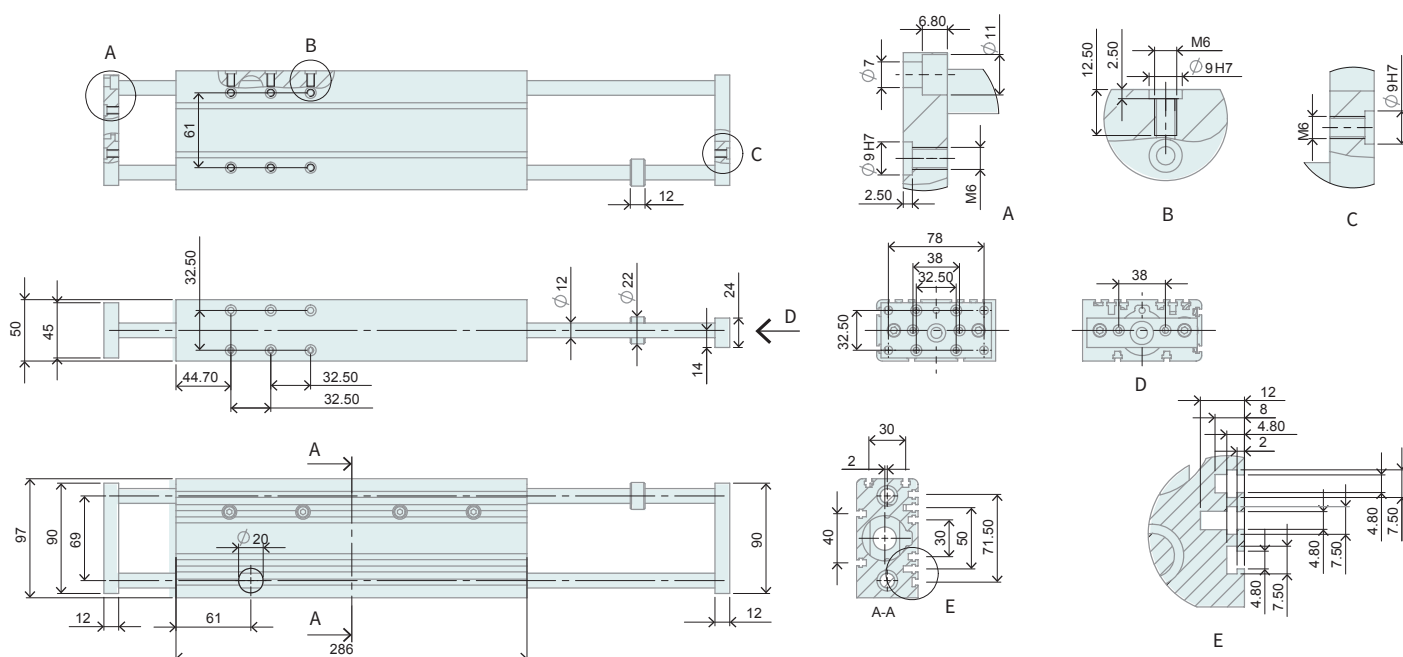


Bridge Module	Bearing type	Stroke H [mm (inch)] ¹	Moving Parts L [mm (inch)]	Moving Mass ² [g (lb)]	Total Weight [g (lb)]
BM01-37x240/140	Ball bearings	140 (5.51)	510 (20.08)	1820 (4.01)	5500 (12.11)
BM01-37x240/240	Ball bearings	240 (9.45)	610 (24.02)	2210 (4.87)	5900 (12.97)
BM01-37x240/340	Ball bearings	340 (13.39)	710 (27.95)	2600 (5.71)	6300 (13.81)

BM01-37x240/140-GF	Plain Bushings	140 (5.51)	510 (20.08)	1820 (4.01)	5500 (12.11)
BM01-37x240/240-GF	Plain Bushings	240 (9.45)	610 (24.02)	2210 (4.87)	5900 (12.97)
BM01-37x240/340-GF	Plain Bushings	340 (13.39)	710 (27.95)	2600 (5.71)	6300 (13.81)

¹ The stroke is reduced by 18mm when using cable models² Mass with moving slider

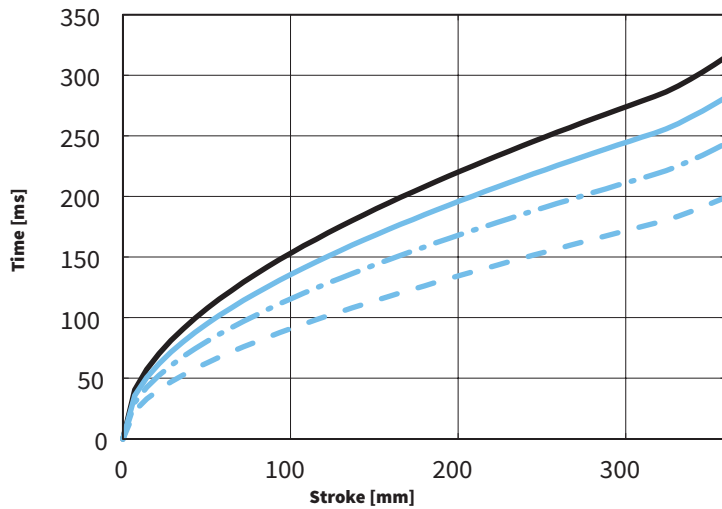
BRIDGE GUIDES B01-37x286



Dimensions in mm

Materials	Guide Block & Front Plate	Guide Shaft	Bearing	Wipers
B01-37x286/... Ball Bearings	Anodized Aluminum	Hardened Steel	Steel Ball Bearings	Nitrile Rubber
B01-37x286/...-GF Plain Bushings	Anodized Aluminum	Stainless Steel 1.4104	Sintered Bronze	Nitrile Rubber

POSITIONING TIMES WITH BM01-37x240



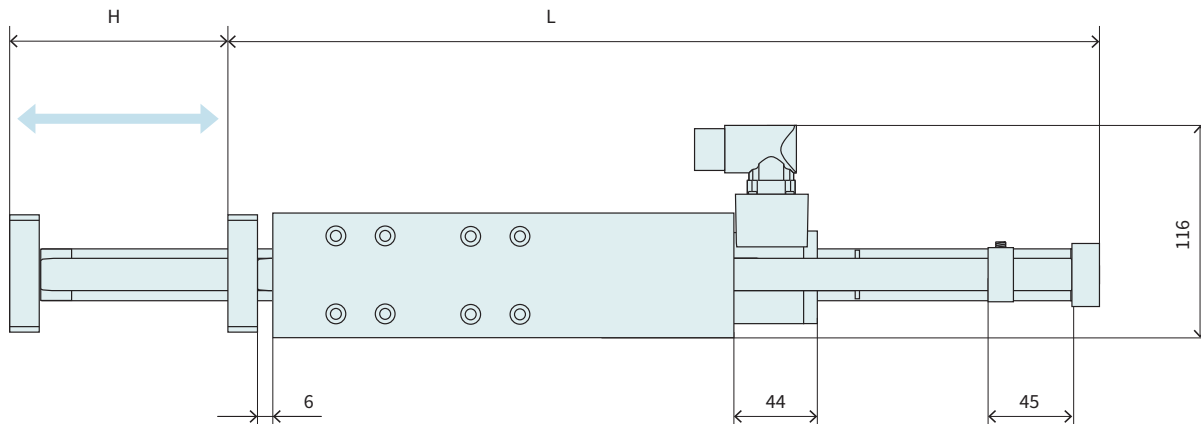
Minimum positioning times for horizontal motions with different load masses, controlled by an E1100-HC Servo Drive.

ORDERING INFORMATION

BM01-37x240/140 Bridge Module 37x240 with 140 mm Stroke ¹					
	Bridge Guide	B01-37x286/140	B01 for P01-37x240, 140 mm Stroke, Ball Bearings		0150-5144
		B01-37x286/140-GF	B01 for P01-37x240, 140 mm Stroke, Plain Bushings		0150-5147
	Stator	PS01-37x240-C	Linear motor Stator, connector type C - IP67		0150-1224
		PS01-37x240F-C	Linear motor Stator, connector type C - IP67	F-Wicklung	0150-1225
		PS01-37x240-C20	Linear motor Stator, 0.2m Cable, connector C - IP67		0150-1238
		PS01-37x240F-C20	Linear motor Stator, 0.2m Cable, connector C - IP67	F-Wicklung	0150-1239
		PS01-37x240	Linear motor Stator, 1.5m Cable, connector P		0150-1203
	Slider	PL01-19x500/420	High clearance Slider B01-37x286/140		0150-1455
BM01-37x240/240 Bridge Module 37x240 with 240 mm Stroke ¹					
	Bridge Guide	B01-37x286/240	B01 for P01-37x240, 240 mm Stroke, Ball Bearings		0150-5145
		B01-37x286/240-GF	B01 for P01-37x240, 240 mm Stroke, Plain Bushings		0150-5148
	Stator	PS01-37x240-C	Linear motor Stator, connector type C - IP67		0150-1224
		PS01-37x240F-C	Linear motor Stator, connector type C - IP67	F-Wicklung	0150-1225
		PS01-37x240-C20	Linear motor Stator, 0.2m Cable, connector C - IP67		0150-1238
		PS01-37x240F-C20	Linear motor Stator, 0.2m Cable, connector C - IP67	F-Wicklung	0150-1239
		PS01-37x240	Linear motor Stator, 1.5m Cable, connector P		0150-1203
	Slider	PL01-19x600/520	High clearance Slider B01-37x286/240		0150-1456
BM01-37x240/340 Bridge Module 37x240 with 340 mm Stroke ¹					
	Bridge Guide	B01-37x286/340	B01 for P01-37x240, 340 mm Stroke, Ball Bearings		0150-5146
		B01-37x286/340-GF	B01 for P01-37x240, 340 mm Stroke, Plain Bushings		0150-5149
	Stator	PS01-37x240-C	Linear motor Stator, connector type C - IP67		0150-1224
		PS01-37x240F-C	Linear motor Stator, connector type C - IP67	F-Wicklung	0150-1225
		PS01-37x240-C20	Linear motor Stator, 0.2m Cable, connector C - IP67		0150-1238
		PS01-37x240F-C20	Linear motor Stator, 0.2m Cable, connector C - IP67	F-Wicklung	0150-1239
		PS01-37x240	Linear motor Stator, 1.5m Cable, connector P		0150-1203
	Slider	PL01-19x700/620	High clearance Slider for B01-37x286/340		0150-1457
Accessories					
	Brake	HB01-37	Pneumatische Bremse for H01-37 / 600N (4-6 Bar)		0150-5052
	Fan	HV01-37/48	Fan for H01-37 und -48 Linear Guides		0150-5051
	MagSpring	MF01-37/H37	Mounting flange for MagSpring M01-37x...		0250-2307
		MA01-37/H37	Mounting adapter for MagSpring M01-37x...		0250-0117
	Center Sleeve	HC01-09/04	Center Sleeve D9x4 mm		0150-3251
	Wiper	HA01-37/19-F	Wiper for B01-37 guides, front side		0150-5177

¹The stroke is reduced by 18mm when using cable models

BRIDGE MODULE BM01-48x240

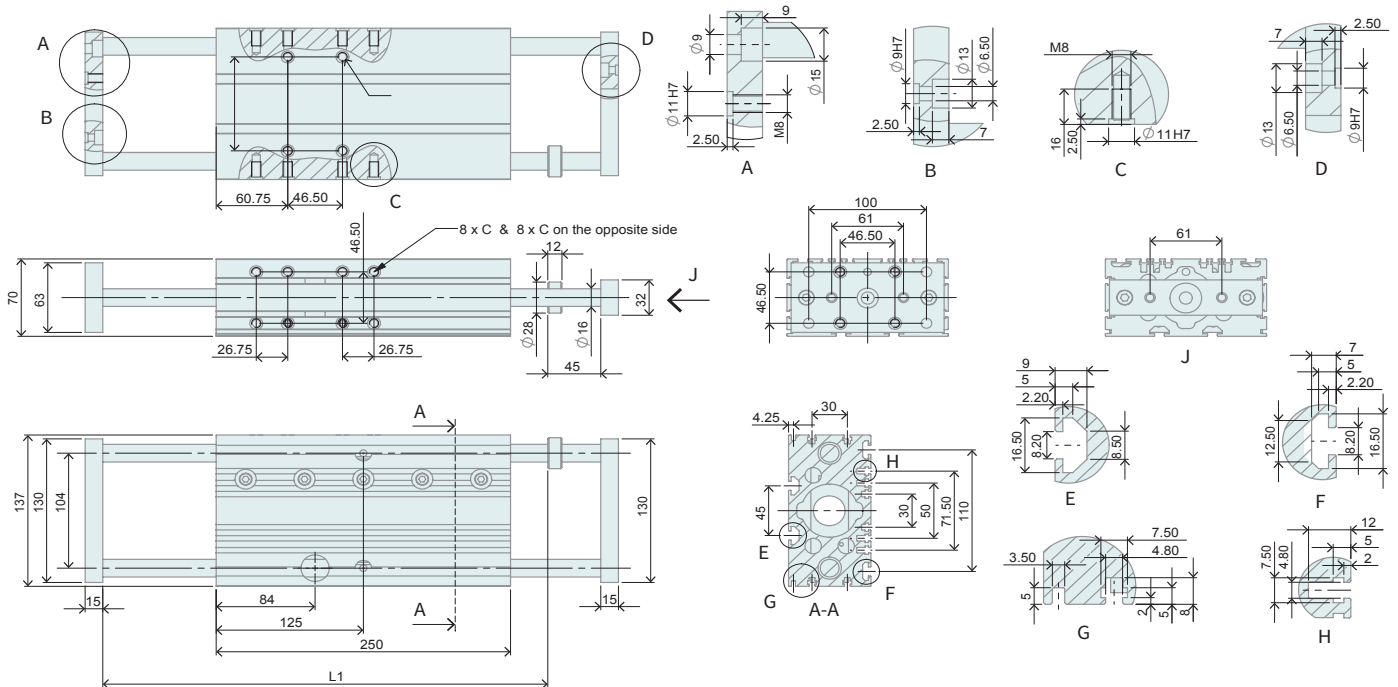


Bridge Module	Bearing type	Stroke H [mm (inch)] ¹	Moving Parts L [mm (inch)]	Moving Mass ¹ [g (lb)]	Total Weight [g (lb)]
BM01-48x240/90	Ball bearings	90 (3.54)	423 (16.65)	3350 (7.39)	8900 (19.58)
BM01-48x240/180	Ball bearings	180 (7.09)	513 (20.20)	4020 (8.86)	9600 (21.05)
BM01-48x240/300	Ball bearings	300 (11.81)	633 (24.92)	4950 (10.82)	10500 (23.02)
BM01-48x240/390	Ball bearings	390 (15.35)	723 (28.46)	5600 (12.32)	11200 (24.51)

BM01-48x240/90-GF	Plain Bushings	90 (3.54)	423 (16.65)	3350 (7.39)	8900 (19.58)
BM01-48x240/180-GF	Plain Bushings	180 (7.09)	513 (20.20)	4020 (8.86)	9600 (21.05)
BM01-48x240/300-GF	Plain Bushings	300 (11.81)	633 (24.92)	4950 (10.82)	10500 (23.02)
BM01-48x240/390-GF	Plain Bushings	390 (15.35)	723 (28.46)	5600 (12.32)	11200 (24.51)

¹ Mass with moving slider

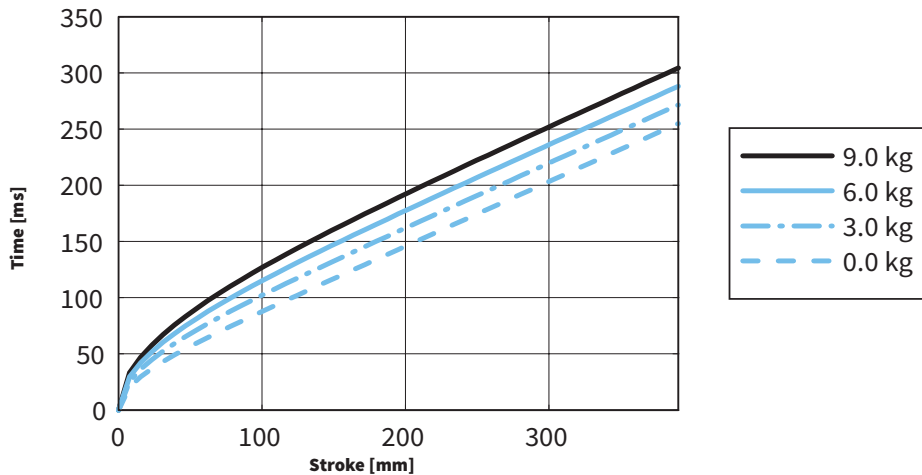
BRIDGE GUIDES B01-48x250



Dimensions in mm

Materials	Guide Block & Front Plate	Guide Shaft	Bearing	Wipers
B01-48x250/... Ball Bearings	Anodized Aluminum	Hardened Steel	Steel	Nitrile Rubber
B01-48x250/...-GF Plain Bushings	Anodized Aluminum	Stainless Steel 1.4104	Sintered Bronze	Nitrile Rubber

POSITIONING TIMES WITH BM01-48x240

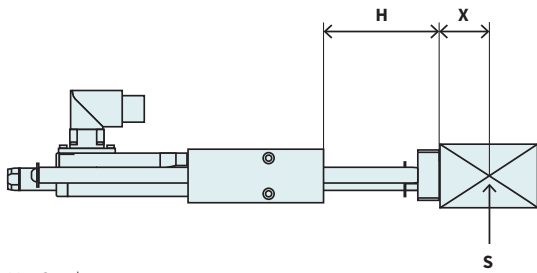


Minimum positioning times for horizontal motions with different load masses, controlled by an E1100-HC Servo Drive.

ORDERING INFORMATION

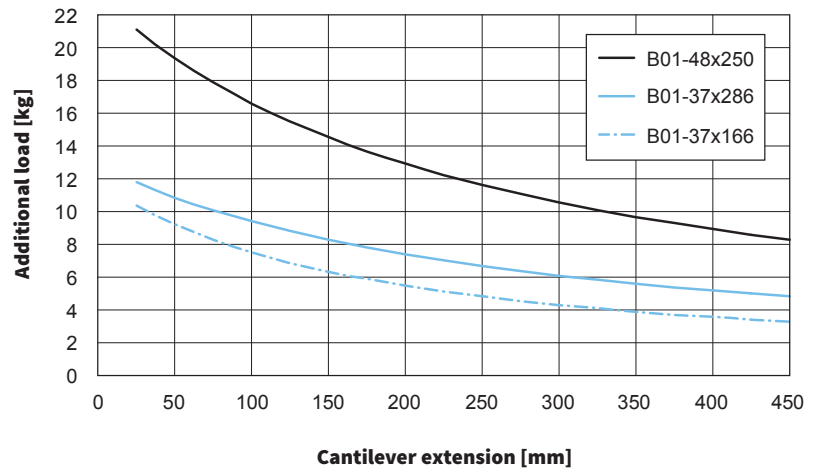
BM01-48x240/90 Bridge Module 48x240 with 90 mm Stroke				
	Bridge Guide	B01-48x250/90	B01 for P01-48x240, 90 mm Stroke, Ball Bearings	0150-5150
		B01-48x250/90-GF	B01 for P01-48x240, 90 mm Stroke, Plain Bushings	0150-5154
	Stator	PS01-48x240-C	Linearmotor Stator, connector type C - IP67	0150-1219
		PS01-48x240F-C	Linearmotor Stator, connector type C - IP67	Fast Winding 0150-1220
	Slider	PL01-27x410/330	High clearance Slider for B01-48x250/90	0150-1468
BM01-48x240/180 Bridge Module 48x240 with 180 mm Stroke				
	Bridge Guide	B01-48x250/180	B01 for P01-48x240, 180 mm Stroke, Ball Bearings	0150-5151
		B01-48x250/180-GF	B01 for P01-48x240, 180 mm Stroke, Plain Bushings	0150-5155
	Stator	PS01-48x240-C	Linearmotor Stator, connector type C - IP67	0150-1219
		PS01-48x240F-C	Linearmotor Stator, connector type C - IP67	Fast Winding 0150-1220
	Slider	PL01-27x500/420	High clearance Slider for B01-48x250/180	0150-1469
BM01-48x240/300 Bridge Module 48x240 with 300 mm Stroke				
	Bridge Guide	B01-48x250/300	B01 for P01-48x240, 300 mm Stroke, Ball Bearings	0150-5152
		B01-48x250/300-GF	B01 for P01-48x240, 300 mm Stroke, Plain Bushings	0150-5156
	Stator	PS01-48x240-C	Linearmotor Stator, connector type C - IP67	0150-1219
		PS01-48x240F-C	Linearmotor Stator, connector type C - IP67	Fast Winding 0150-1220
	Slider	PL01-27x620/540	High clearance Slider for B01-48x250/300	0150-1470
BM01-48x240/390 Bridge Module 48x240 with 390 mm Stroke				
	Bridge Guide	B01-48x250/390	B01 for P01-48x240, 390 mm Stroke, Ball Bearings	0150-5153
		B01-48x250/390-GF	B01 for P01-48x240, 390 mm Stroke, Plain Bushings	0150-5157
	Stator	PS01-48x240-C	Linearmotor Stator, connector type C - IP67	0150-1219
		PS01-48x240F-C	Linearmotor Stator, connector type C - IP67	Fast Winding 0150-1220
	Slider	PL01-27x710/630	High clearance Slider for B01-48x250/390	0150-1471
Accessories				
	Brake	HB01-48	Pneumatic Brake for B01-48 / 1000N (4-6 Bar)	0150-5098
	Fan	HV01-37/48	Fan for B01-37 und -48 B-Führungen	0150-5051
	MagSpring	MF01-37/H37	Mounting flange for MagSpring M01-37x...	0250-2307
		MA01-37/H48	Mounting adapter for MagSpring M01-37x...	0250-0118
	Sliding Block	PFN01-8/M6	Sliding Block 8 mm with M6 Thread	0150-3245
	Center Sleeve	HC01-11/05	Center Sleeve D11x5 mm	0150-3252
	Wiper	HA01-48/27-F	Wiper for B01-48 guides, front side	0150-5178

MAXIMUM LOAD

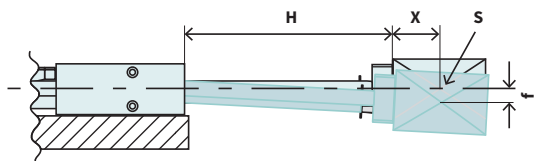


H = Stroke
X = Distance to center of gravity
S = Center of gravity
Cantilever extension = H + X

The maximum load depends on the cantilever extension (maximum stroke A plus distance between the center of gravity of the working load and the mounting surface).

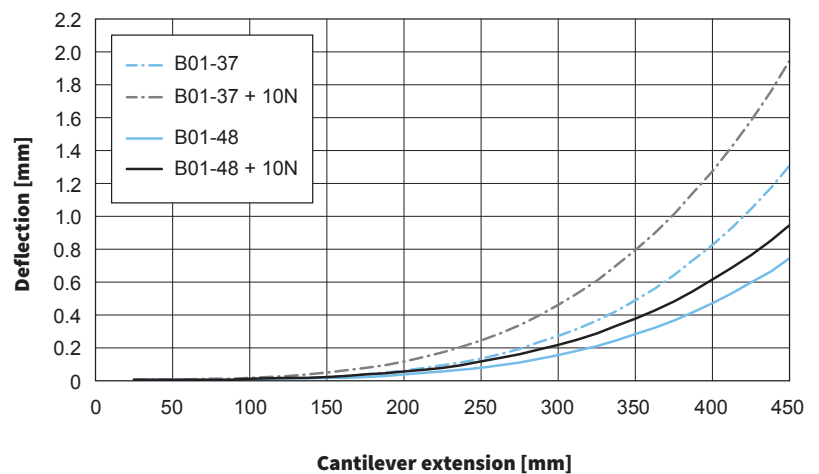


VERTICAL DEFLECTION



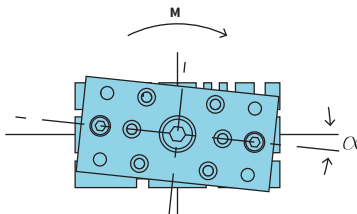
H = Stroke
S = Center of gravity
X = Distance to center of gravity
f = Deflection of theoretical axis

Total deflection =
static deflection + deflection under load
Deflection measured at standstill, with
10N / 2.25lbf Load.



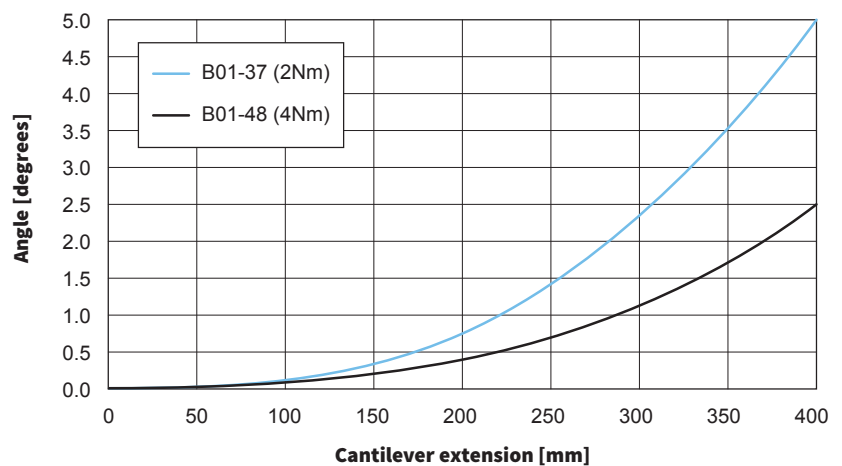
Deflection for smaller or larger load masses
can be linearly extrapolated using the data
for 10 N / 2.25 lbf.

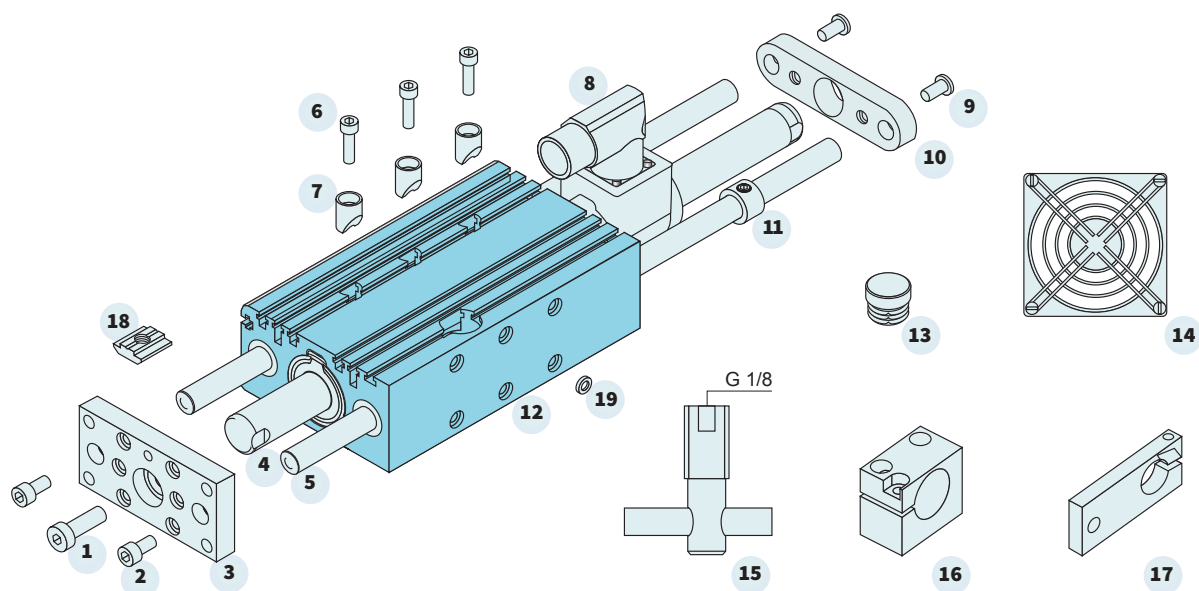
ANGULAR DEFLECTION



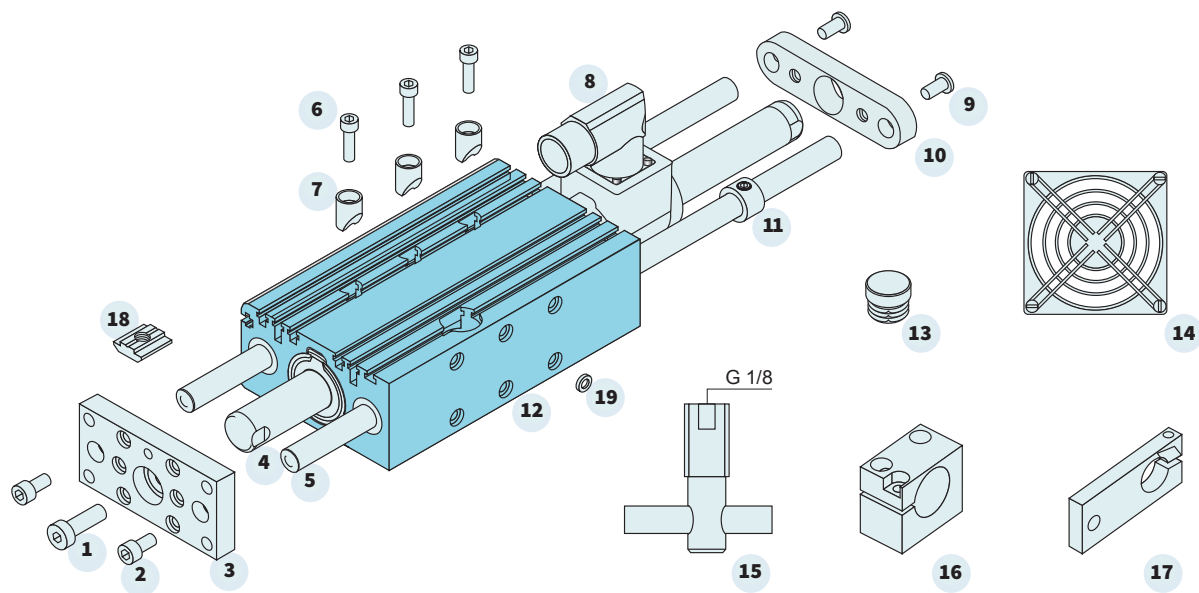
Angular deflection (twist) of the mounting
plate depends on the torque load to be absorbed
and the cantilever extension.

The angular deflection for smaller or larger
torques can be linearly extrapolated from the
deflection in the diagram.





PARTS LIST							
	Bridge Guide	B01-37x166		B01-37x286		B01-48x250	
1	Slider screw	DIN7984 M8x25		DIN7984 M8x25		DIN7984 M10x35	
2	Shaft screw	ISO 4762 M6x12		ISO 4762 M6x12		ISO 4762 M8x20	
3	Front plate	0150-5112		0150-5112		0150-5110	
4	Slider	PL01-19x...	Art-Nr.	PL01-19x...	Art-Nr.	PL01-27x...	Art-Nr.
		395/320	0150-1452	500/420	0150-1455	410/330	0150-1468
		500/420	0150-1455	600/520	0150-1456	500/420	0150-1469
		600/520	0150-1456	700/620	0150-1457	620/540	0150-1470
						710/630	0150-1471
5	Hardened steel shafts for ball bearings	HL01-12x...	Art-Nr.	HL01-12x...	Art-Nr.	HL01-16x...	Art-Nr.
		390	0150-5114	490	0150-5115	397	0150-5118
		490	0150-5115	590	0150-5116	487	0150-5119
		590	0150-5116	690	0150-5117	607	0150-5120
						697	0150-5121
	Stainless steel shafts for plain bushings GF	390-GF	0150-5122	490-GF	0150-5123	397-GF	0150-5126
		490-GF	0150-5123	590-GF	0150-5124	487-GF	0150-5127
		590-GF	0150-5124	690-GF	0150-5125	607-GF	0150-5128
						697-GF	0150-5129
6	Clamping screw	ISO 4762 M5x18		ISO 4762 M5x18		ISO 4762 M6x25	
7	Clamping cylinder	0150-5053		0150-5053		0150-5086	
8	Stator	Typ	Art-Nr.	Typ	Art-Nr.	Typ	Art-Nr.
		PS01-37x120-C	0150-1223	PS01-37x240-C	0150-1224	PS01-48x240-C	0150-1219
		PS01-37x120-C20	0150-1237	PS01-37x240F-C	0150-1225	PS01-48x240F-C	0150-1220
		PS01-37x120	0150-1204	PS01-37x240-C20	0150-1238		
				PS01-37x240F-C20	0150-1239		
				PS01-37x240	0150-1203		



9	Shaft screw	ISO 4762 M6x12	ISO 4762 M6x12	ISO 4762 M8x20
10	Endplatte	0150-5113	0150-5113	0150-5111
11	Rear end stop	0150-5136	0150-5136	0150-5137
12	Guide block with ball bearings	0150-5002	0150-5003	0150-5088
	Guide block with plain bushings GF	0150-5062	0150-5063	0150-5089
13	Brake hole cap	HDPE 20mm	HDPE 20mm	HDPE 24mm
Fan				
14	Set	0150-5051	0150-5051	0150-5051
Brake				
15	Pneumatic brake	0150-5052	0150-5052	0150-5098
Magspring				
16	Flange	0250-2307	0250-2307	0250-2307
17	Adapter	0250-0117	0250-0117	0250-0118
Accessories				
18	Sliding Block			0150-3245
19	Center Sleeve	0150-3251	0150-3251	0150-3252
20	Wipers	0150-5177	0150-5177	0150-5178

ACCESSORIES

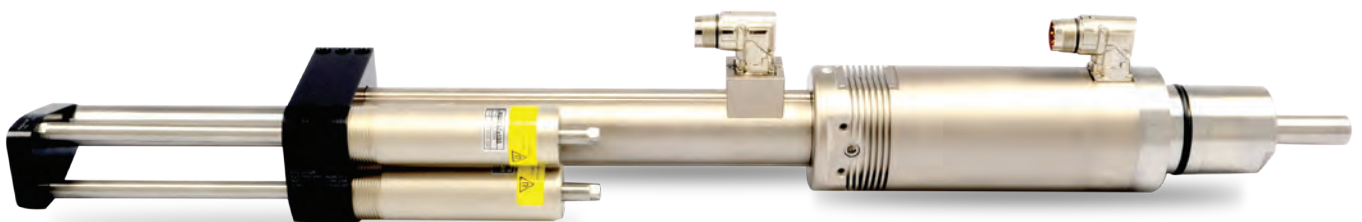


An extensive array of accessories, tailored to LinMot linear motors and compatible with the Servo Drives, rounds out the LinMot Drive Systems product range.

LinMot's array of accessories allows quick, simple implementation and startup of various tasks. The original motor accessories, specially designed for LinMot, also ensure reliable and fault-free operation of the linear motors.



Linear motor with flange and fan installed



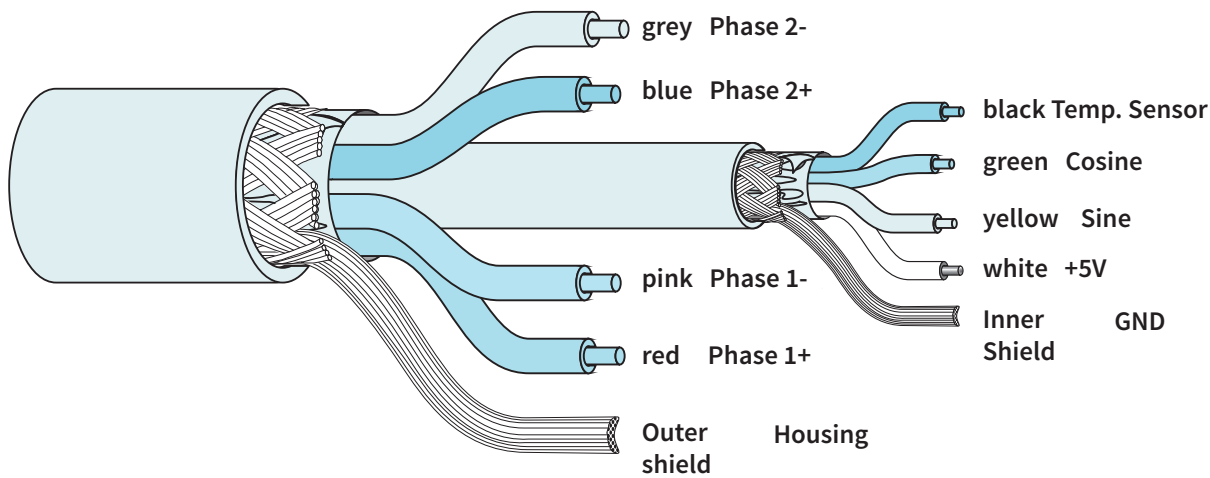
Linear-Rotary unit with DUO MagSpring installed

MOTOR CABLES FOR STANDARD AND LINEAR ROTARY MOTORS



- ✓ Single-cable principle to feed signals and motor phases
- ✓ Standard cables for fixed installation
- ✓ High-flex cables for cable chain applications
- ✓ Robot cables for torsional loads
- ✓ Prefabricated motor cables

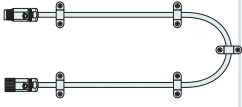
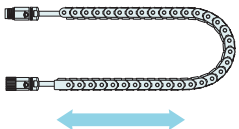
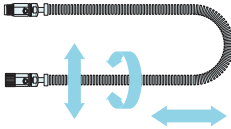
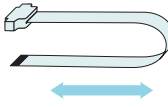
For type P0x and PR linear motors, one single cable is sufficient to connect the motor and drive. This motor cable contains the motor phases and sensor signals for the position measurement integrated in the motor. The double shielding in the cable (see illustration) ensures that the linear motor can operate without interference with a cable up to 30 m long.



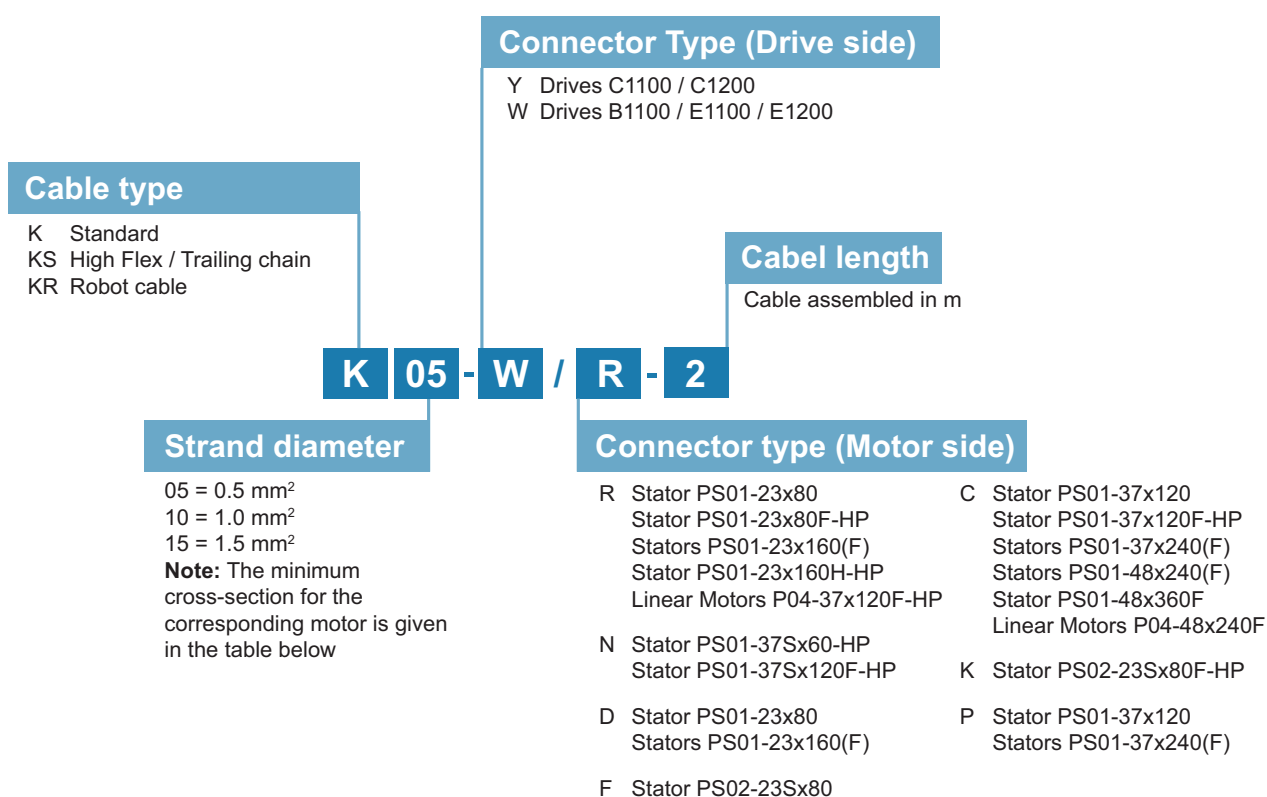
Single-cable concept for type P0x linear motors and PR01 motors

TYPES OF MOTOR CABLES	MOTOR CABLE BY LENGTH	PREFABRICATED MOTOR CABLES
<p>The abbreviations K, KS, KR, and KF specify the available types of the cables.</p> <p>The standard type K motor cable is suitable for stationary cable routing. It is used wherever the motor cable is fixed and not subject to any motion.</p> <p>The high-flex trailing chain KS motor cable is suitable for applications where the motor cable moves, where the cable is routed through a cable carrier and undergoes a roll-up motion.</p> <p>If the motor cable is subject to a torsional motion, then the special type KR robot cable should be used. In order to protect the robot cable from mechanical damage, it should be routed through a suitable cable tube.</p> <p>A ribbon cable is with the designation KF is available for the P02-23Sx80 short motor. The ribbon cable can be subjected to roll-up motion, just like the high-flex cable.</p>	<p>LinMot motor cables are available by length in versions K, KS, and KR. The cable can be cut to the desired length or ordered in large quantities on rolls.</p> <p>LinMot carries all of the motor plugs for customers to assemble their own motor cables. The individual connections for customer-assembled motor cables should be checked carefully for short circuits and correct configuration prior to commissioning. The insulation strength between individual conductors must be tested with a test voltage of 1500VDC.</p>	<p>Fully assembled motor cables can be shipped in lengths up to 30 m. Order the motor cable in the desired length together with the matching motor plugs (assembled). Longer cables can also be assembled after consultation with LinMot.</p> <p>Prefabricated motor cables with the most commonly used plug combinations can be shipped from stock in standard lengths.</p> <p>LinMot motor cables are produced using only crimped contacts and are tested under high voltage prior to shipment.</p>

Cables for stators P01 / P02 / P03 / P04 / PR01

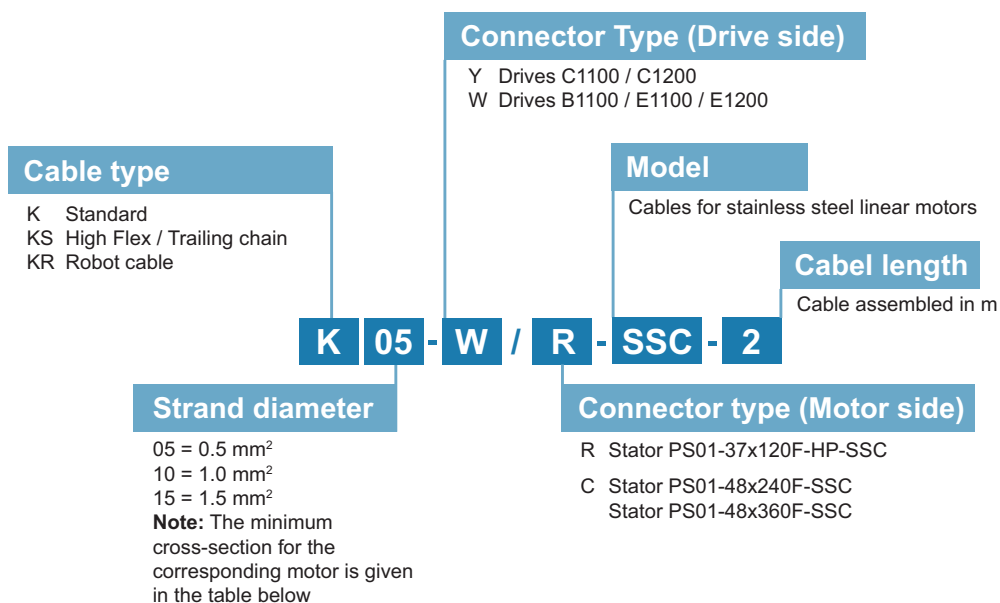
	Standard Motor Cable		Trailing Chain Cable			Robot Cable			Flat Cable
									
Cable type	K05-04/05	K15-04/05	KS03-09	KS05-04/05	KS10-04/05	KR03-09	KR05-04/05	KR10-04/05	KF02-D15/F...
Wire cross-section Motor phases	0.5 mm ² (AWG20)	1.5 mm ² (AWG16)	0.34 mm ² (AWG22)	0.5 mm ² (AWG20)	1.0 mm ² (AWG18)	0.34 mm ² (AWG22)	0.5 mm ² (AWG20)	1.0 mm ² (AWG18)	(-)
Wire cross-section Sensor signal	0.14 mm ² (AWG26)		0.14 mm ² (AWG26)			0.14 mm ² (AWG26)			(-)
Material Wire insulation	TPE-U		TPE-E			TPE-E			Polyester
Material Cable sheath	PUR		PUR			PUR			(-)
Colour Cable sheath	black		black			black			white
Cable cross section	8.2 mm (0.31 in)	11.2 mm (0.44 in)	6.7 mm (0.26 in)	9.5 mm (0.38 in)	10.8 mm (0.42 in)	6.7 mm (0.26 in)	9.7 mm (0.38 in)	10.9 mm (0.43 in)	17.8x0.2 mm (0.7x0.008 in)
Weight	83 kg/km (295 lb/mi)	180 kg/km (639 lb/mi)	64 kg/km (227 lb/mi)	113 kg/km (401 lb/mi)	139 kg/km (493 lb/mi)	64 kg/km	109 kg/km (387 lb/mi)	136 kg/km (493 lb/mi)	(-)
Approvals	Cable material according to UL		UL / CSA 300V			UL / CSA 300V			(-)
Minimum bend- ing radius static	25 mm (1 in)	50 mm (2 in)	25 mm (1 in)	30 mm (1.2 in)	50 mm (2 in)	25 mm (1 in)	30 mm (1.2 in)	50 mm (2 in)	foldable
Minimum bend- ing radius moving	Not suitable for applications With moving motor cable		50 mm (2 in)	60 mm (2.4 in) no torsion	100 mm (4 in) no torsion	50 mm (2 in) Max. Torsion: ±270° pro 0.5 m	60 mm (2.4 in) Max. Torsion: ±270° per 0.5 m (19.7 in)	100 mm (4 in) Max. Torsion: ±270° per 0.5 m (19.7 in)	25 mm (0.99 in)
Temperature range	-40°...+80°C		-40°...+80°C			-40°...+80°C			-55°...+105°C

TYPE CODE OF MOTOR CABLE FOR STANDARD LINEAR MOTORS



Minimum Strand Diameter						
	Max. Cont. Force [A rms]		Strand diameter according to DIN		Strand diameter according to UL	
	Passive cooling	Fan cooling	Passive cooling	Fan cooling	Passive cooling	Fan cooling
PS01-23x80	0.6	1.1	K(x)05	K(x)05	K(x)05	K(x)05
PS01-23x80F-HP	1.2	1.0	K(x)05	K(x)05	K(x)05	K(x)05
PS02-23Sx80	0.6	1.0	K(x)05	K(x)05	K(x)05	K(x)05
PS02-23Sx80F-HP	1.1	2.0	K(x)05	K(x)05	K(x)05	K(x)05
PS01-23x160	0.6	1.0	K(x)05	K(x)05	K(x)05	K(x)05
PS01-23x160F	0.8	1.6	K(x)05	K(x)05	K(x)05	K(x)05
PS01-23x160H-HP	1.8	2.7	K(x)05	K(x)05	K(x)05	K(x)05
PS01-37Sx60-HP	0.9	1.8	K(x)05	K(x)05	K(x)05	K(x)05
PS01-37x120	1.5	1.9	K(x)05	K(x)05	K(x)05	K(x)05
PS01-37x120F-HP	2.1	3.8	K(x)05	K(x)05	K(x)05	K(x)05
PS01-37Sx120F-HP	1.5	3.0	K(x)05	K(x)05	K(x)05	K(x)05
PS01-37x240	1.0	1.8	K(x)05	K(x)05	K(x)05	K(x)05
PS01-37x240F	1.5	2.8	K(x)05	K(x)05	K(x)05	K(x)05
PS01-48x240	2.7	4.7	K(x)05	K(x)05	K(x)05	K(x)10
PS01-48x240F	4.8	8.3	K(x)05	K(x)05	K(x)10	K(x)15
PS01-48x360F	4.6	7.9	K(x)05	K(x)05	K(x)10	K(x)15
P04-37x120F-HP	2.9	4.0	K(x)05	K(x)05	K(x)05	K(x)05
P04-48x240F	4.7	8.3	K(x)05	K(x)05	K(x)10	K(x)15

TYPE CODE OF MOTOR CABLE FOR STAINLESS STEEL LINEAR MOTORS

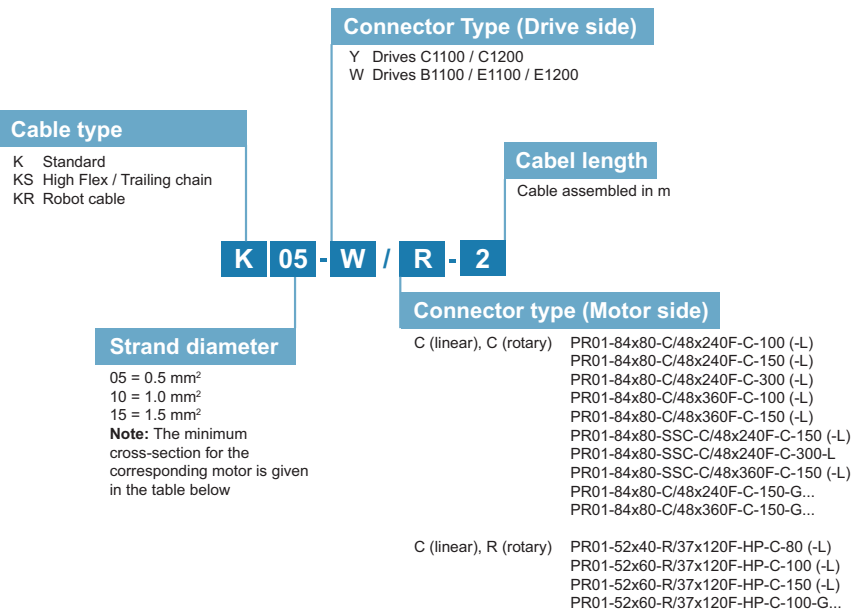


Minimum Strand Diameter						
	Max. Cont. Force [A rms]		Strand diameter according to DIN		Strand diameter according to UL	
	Passive cooling	Fluid cooling	Passive cooling	Fluid cooling	Passive cooling	Fluid cooling
PS01-37x120F-HP-SSC	1.3	3.4	K(x)05	K(x)05	K(x)05	K(x)05
PS01-48x240F-SSC	3.3	9.2	K(x)05	K(x)05	K(x)05	K(x)15*
PS01-48x360F-SSC	3.4	9.4	K(x)05	K(x)05	K(x)05	K(x)15**

*Up to max. cont. force 230 N rms

**Up to max. cont. force 333 N rms

TYPE CODE OF MOTOR CABLE FOR LINEAR ROTARY MOTORS



Minimum Strand Diameter						
	Max. Cont. Force [A rms]		Strand diameter according to DIN		Strand diameter according to UL	
	Passive cooling	Fan cooling	Passive cooling	Fan cooling	Passive cooling	Fan cooling
PR01-52x40-R/37x120F-HP-C-80 (-L)	2.1	3.8	K(x)05	K(x)05	K(x)05	K(x)05
PR01-52x60-R/37x120F-HP-C-100 (-L)	2.1	3.8	K(x)05	K(x)05	K(x)05	K(x)05
PR01-52x60-R/37x120F-HP-C-150 (-L)	2.1	3.8	K(x)05	K(x)05	K(x)05	K(x)05
PR01-84x80-C/48x240F-C-100 (-L)	4.8	8.3	K(x)05	K(x)05	K(x)10	K(x)15
PR01-84x80-C/48x240F-C-150 (-L)	4.8	8.3	K(x)05	K(x)05	K(x)10	K(x)15
PR01-84x80-C/48x240F-C-300 (-L)	4.8	8.3	K(x)05	K(x)05	K(x)10	K(x)15
PR01-84x80-C/48x360F-C-100 (-L)	4.6	7.9	K(x)05	K(x)05	K(x)10	K(x)15
PR01-84x80-C/48x360F-C-150 (-L)	4.6	7.9	K(x)05	K(x)05	K(x)10	K(x)15
PR01-84x80-SSC-C/48x240F-C-150 (-L)	4.8	8.3	K(x)05	K(x)05	K(x)10	K(x)15
PR01-84x80-SSC-C/48x240F-C-300-L	4.8	8.3	K(x)05	K(x)05	K(x)10	K(x)15
PR01-84x80-SSC-C/48x360F-C-150 (-L)	4.6	7.9	K(x)05	K(x)05	K(x)10	K(x)15
PR01-52x60-R/37x120F-HP-C-100-G...	2.1	3.8	K(x)05	K(x)05	K(x)05	K(x)15
PR01-84x80-C/48x240F-C-150-G...	4.8	8.3	K(x)05	K(x)05	K(x)10	K(x)15
PR01-84x80-C/48x360F-C-150-G...	4.6	7.9	K(x)05	K(x)05	K(x)10	K(x)15

Minimum Strand Diameter						
	Max. Cont. Force [A rms]		Strand diameter according to DIN		Strand diameter according to UL	
	Passive cooling	Fan cooling	Passive cooling	Fan cooling	Passive cooling	Fan cooling
PR01-52x40-R/37x120F-HP-C-80 (-L)	1.2	1.8	K(x)05	K(x)05	K(x)05	K(x)05
PR01-52x60-R/37x120F-HP-C-100 (-L)	2.1	3.1	K(x)05	K(x)05	K(x)05	K(x)05
PR01-52x60-R/37x120F-HP-C-150 (-L)	2.1	3.1	K(x)05	K(x)05	K(x)05	K(x)05
PR01-84x80-C/48x240F-C-100 (-L)	3.9	5.5	K(x)05	K(x)05	K(x)05	K(x)10
PR01-84x80-C/48x240F-C-150 (-L)	3.9	5.5	K(x)05	K(x)05	K(x)05	K(x)10
PR01-84x80-C/48x240F-C-300 (-L)	3.9	5.5	K(x)05	K(x)05	K(x)05	K(x)10
PR01-84x80-C/48x360F-C-100 (-L)	3.9	5.5	K(x)05	K(x)05	K(x)05	K(x)10
PR01-84x80-C/48x360F-C-150 (-L)	3.9	5.5	K(x)05	K(x)05	K(x)05	K(x)10
PR01-84x80-SSC-C/48x240F-C-150 (-L)	3.9	5.5	K(x)05	K(x)05	K(x)05	K(x)10
PR01-84x80-SSC-C/48x240F-C-300-L	3.9	5.5	K(x)05	K(x)05	K(x)05	K(x)10
PR01-84x80-SSC-C/48x360F-C-150 (-L)	3.9	5.5	K(x)05	K(x)05	K(x)05	K(x)10
PR01-52x60-R/37x120F-HP-C-100-G...	2.1	3.1	K(x)05	K(x)05	K(x)05	K(x)10
PR01-84x80-C/48x240F-C-150-G...	3.9	5.5	K(x)05	K(x)05	K(x)05	K(x)10
PR01-84x80-C/48x360F-C-150-G...	3.9	5.5	K(x)05	K(x)05	K(x)05	K(x)10

MOTOR CABLE PER M

Item	Description	Item-No.
K05-04/05	Motor cable per m	0150-1920
K05-04/05-50	Motor cable 50 m roll	0150-1956
K05-04/05-100	Motor cable 100 m roll	0150-1957
K05-04/05-200	Motor cable 200 m roll	0150-1958
K15-04/05	Motor cable per m	0150-1978
K15-04/05-100	Motor cable 100 m roll	0150-1969
K15-04/05-050	Motor cable 50 m roll	0150-5495
KS03-09	Trailing chain cable per m (max. 6 m)	0150-2182
KS05-04/05	Trailing chain cable per m	0150-1938
KS05-04/05-100	Trailing chain cable 100 m roll	0150-1959
KS10-04/05	Trailing chain cable per m	0150-1977
KS10-04/05-100	Trailing chain cable 100 m roll	0150-1968
KR05-04/05	Robotic cable per m	0150-1846
KR05-04/05-100	Robotic cable 100 m roll	0150-1847
KR10-04/05	Robotic cable per m	0150-1830
KR10-04/05-100	Robotic cable 100 m roll	0150-1831

MOTOR CABLE FLAT FOR SHORT TYPE MOTORS P02-23Sx80-F

Item	Description	Item-No.
KF02-D15/F-0.08	Flat cable 0.08m, for PS02-23Sx80-F	0150-2150
KF02-D15/F-0.16	Flat cable 0.16m, for PS02-23Sx80-F	0150-2156
KF02-D15/F-0.32	Flat cable 0.32m, for PS02-23Sx80-F	0150-2152
KF02-D15/F-0.48	Flat cable 0.48m, for PS02-23Sx80-F	0150-2154
KF02-D15/F-0.70	Flat cable 0.70m, for PS02-23Sx80-F	0150-2158
K05-D/D15-1	Adapter cable D/D15,1m (for PS01-23Sx80)	0150-1936

MOTOR CABLE FOR LINEAR MOTORS WITH R CONNECTOR

Item	Description	Item-No.
K05-W/R-2	Motor cable W/R, 2 m	0150-2119
K05-W/R-3	Motor cable W/R, 3 m	0150-2459
K05-W/R-4	Motor cable W/R, 4 m	0150-2120
K05-W/R-6	Motor cable W/R, 6 m	0150-2121
K05-W/R-8	Motor cable W/R, 8 m	0150-2122
K05-W/R-10	Motor cable W/R, 10 m	0150-2132
K05-Y/R-2	Motor cable Y/R, 2 m	0150-2421
K05-Y/R-4	Motor cable Y/R, 4 m	0150-2422
K05-Y/R-6	Motor cable Y/R, 6 m	0150-2423
K05-Y/R-8	Motor cable Y/R, 8 m	0150-2424
K05-HI/R-2	Motor cable HI/R, 2 m	0150-2449
K05-HI/R-4	Motor cable HI/R, 4 m	0150-2450
KS05-W/R-4	Trailing chain cable W/R, 4 m	0150-2106
KS05-W/R-6	Trailing chain cable W/R, 6 m	0150-2131
KS05-W/R-8	Trailing chain cable W/R, 8 m	0150-2107
KS05-Y/R-4	Trailing chain cable Y/R, 4 m	0150-2433
KS05-Y/R-6	Trailing chain cable Y/R, 6 m	0150-2434
KS05-Y/R-8	Trailing chain cable Y/R, 8 m	0150-2435
KS05-R/R-2	Trailing chain cable R/R, 2 m	0150-1838
KS05-R/R-4	Trailing chain cable R/R, 4 m	0150-1839

MOTOR CABLE FOR LINEAR MOTORS WITH R-SSC CONNECTORS (STAINLESS STEEL)		
Item	Description	Item-No.
KS05-W/R-SSC-2	Trailing chain cable W/R-SSC, 2 m	0150-2683
KS05-W/R-SSC-4	Trailing chain cable W/R-SSC, 4 m	0150-2684
KS05-W/R-SSC-6	Trailing chain cable W/R-SSC, 6 m	0150-2685
KS05-W/R-SSC-8	Trailing chain cable W/R-SSC, 8 m	0150-2686
KS05-Y/R-SSC-2	Trailing chain cable Y/R-SSC, 2 m	0150-2687
KS05-Y/R-SSC-4	Trailing chain cable Y/R-SSC, 4 m	0150-2688
KS05-Y/R-SSC-6	Trailing chain cable Y/R-SSC, 6 m	0150-2689
KS05-Y/R-SSC-8	Trailing chain cable Y/R-SSC, 8 m	0150-2690

MOTOR CABLE FOR LINEAR MOTORS WITH C CONNECTOR		
Item	Description	Item-No.
K05-W/C-2	Motor cable W/C, 2 m	0150-2123
K05-W/C-4	Motor cable W/C, 4 m	0150-2124
K05-W/C-6	Motor cable W/C, 6 m	0150-2125
K05-W/C-8	Motor cable W/C, 8 m	0150-2126
K05-Y/C-2	Motor cable Y/C, 2 m	0150-2425
K05-Y/C-4	Motor cable Y/C, 4 m	0150-2426
K05-Y/C-6	Motor cable Y/C, 6 m	0150-2427
K05-Y/C-8	Motor cable Y/C, 8 m	0150-2428
K05-HI/C-2	Motor cable HI/C, 2 m	0150-2452
K05-HI/C-4	Motor cable HI/C, 4 m	0150-2451
K15-W/C-2	Motor cable W/C, 2 m	0150-1811
K15-W/C-4	Motor cable W/C, 4 m	0150-1801
K15-W/C-5	Motor cable W/C, 5 m	0150-1849
K15-W/C-6	Motor cable W/C, 6 m	0150-1802
K15-W/C-8	Motor cable W/C, 8 m	0150-1803
K15-Y/C-2	Motor cable Y/C, 2 m	0150-2429
K15-Y/C-4	Motor cable Y/C, 4 m	0150-2430
K15-Y/C-6	Motor cable Y/C, 6 m	0150-2431
K15-Y/C-8	Motor cable Y/C, 8 m	0150-2432
K15-HI/C-2	Motor cable HI/C, 2 m	0150-2453
K15-HI/C-4	Motor cable HI/C, 4 m	0150-2458
KS05-W/C-4	Trailing chain cable W/C, 4 m	0150-2127
KS05-W/C-6	Trailing chain cable W/C, 6 m	0150-2128
KS05-W/C-8	Trailing chain cable W/C, 8 m	0150-2129
KS05-Y/C-4	Trailing chain cable Y/C, 4 m	0150-2436
KS05-Y/C-6	Trailing chain cable Y/C, 6 m	0150-2437
KS05-Y/C-8	Trailing chain cable Y/C, 8 m	0150-2438
KS05-C/C-2	Trailing chain cable C/C, 2 m	0150-1827
KS05-C/C-4	Trailing chain cable C/C, 4 m	0150-1828
KS10-W/C-4	Trailing chain cable W/C, 4 m	0150-1807
KS10-W/C-5	Trailing chain cable W/C, 5 m	0150-1860
KS10-W/C-6	Trailing chain cable W/C, 6 m	0150-1858
KS10-W/C-8	Trailing chain cable W/C, 8 m	0150-1808
KS10-Y/C-4	Trailing chain cable Y/C, 4 m	0150-2439
KS10-Y/C-6	Trailing chain cable Y/C, 6 m	0150-2440
KS10-Y/C-8	Trailing chain cable Y/C, 8 m	0150-2441
KS10-C/C-2	Trailing chain cable C/C, 2 m	0150-1816
KS10-C/C-4	Trailing chain cable C/C, 4 m	0150-1817

MOTOR CABLE FOR LINEAR MOTORS WITH C-SSC CONNECTORS (STAINLESS STEEL)

Item	Description	Item-No.
KS10-W/C-SSC-2	Trailing chain cable W/C-SSC, 2 m	0150-2675
KS10-W/C-SSC-4	Trailing chain cable W/C-SSC, 4 m	0150-2676
KS10-W/C-SSC-6	Trailing chain cable W/C-SSC, 6 m	0150-2677
KS10-W/C-SSC-8	Trailing chain cable W/C-SSC, 8 m	0150-2678
KS10-Y/C-SSC-2	Trailing chain cable Y/C-SSC, 2 m	0150-2679
KS10-Y/C-SSC-4	Trailing chain cable Y/C-SSC, 4 m	0150-2680
KS10-Y/C-SSC-6	Trailing chain cable Y/C-SSC, 6 m	0150-2681
KS10-Y/C-SSC-8	Trailing chain cable Y/C-SSC, 8 m	0150-2682

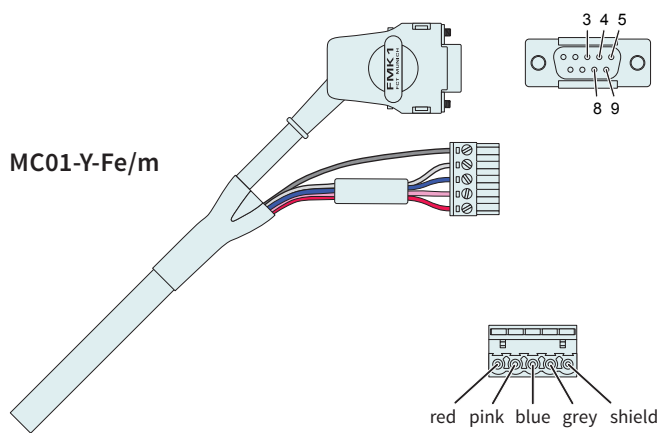
MOTOR CABLE FOR SHORT TYPE MOTORS P02-23Sx80-F-HP-K

Item	Description	Item-No.
KS03-W-Fe/K-2	Trailing chain cable W-Fe/K 2 m	0150-2187
KS03-W-Fe/K-4	Trailing chain cable W-Fe/K 4 m	0150-2369
KS03-W-Fe/K-6	Trailing chain cable W-Fe/K 6 m	0150-2370
KS03-Y-Fe/K-2	Trailing chain cable Y-Fe/K, 2 m	0150-2446
KS03-Y-Fe/K-4	Trailing chain cable Y-Fe/K, 4 m	0150-2447
KS03-Y-Fe/K-6	Trailing chain cable Y-Fe/K, 6 m	0150-2448
KS03-R/K-1	Trailing chain cable R/K 1 m	0150-2185
KS03-R/K-2	Trailing chain cable R/K 2 m	0150-2186

MOTOR CABLE FOR SHORT TYPE MOTORS P01-37SX...-HP-N

Item	Description	Item-No.
KS05-W/N-2	Trailing chain cable W/N, 2 m	0150-2296
KS05-W/N-4	Trailing chain cable W/N, 4 m	0150-2297
KS05-W/N-6	Trailing chain cable W/N, 6 m	0150-2298
KS05-W/N-8	Trailing chain cable W/N, 8 m	0150-2299
KS05-Y/N-2	Trailing chain cable Y/N, 2 m	0150-2442
KS05-Y/N-4	Trailing chain cable Y/N, 4 m	0150-2443
KS05-Y/N-6	Trailing chain cable Y/N, 6 m	0150-2444
KS05-Y/N-8	Trailing chain cable Y/N, 8 m	0150-2445

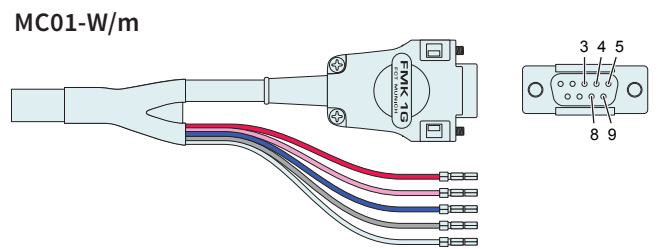
Y-CONNECTOR



Strand red	Phase 1+	red
Strand pink	Phase 1-	pink
Strand blue	Phase 2+	blue
Strand grey	Phase 2-	grey
3	+5V	white
8	GND	inner Shield
4	Sensor Sine	yellow
9	Sensor Cosine	green
5	Temp. Sensor	black
Shield	Shield	Outer shield

Item	Description	Item-No.
MC01-Y-Fe/m	Motor connector Y-Fe/m	0150-3289
MC01-Y-Fe/m-as (assembled)	Y/m-Connector assembled	0150-3500

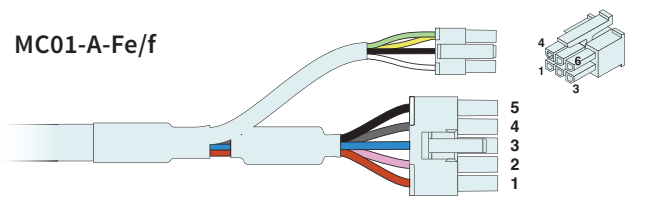
W-CONNECTOR



Strand red	Phase 1+	red
Strand pink	Phase 1-	pink
Strand blue	Phase 2+	blue
Strand grey	Phase 2-	grey
3	+5V	white
8	GND	inner Shield
4	Sensor Sine	yellow
9	Sensor Cosine	green
5	Temp. Sensor	black
Shield	Shield	Outer Shield

Item	Description	Item-No.
MC01-W/m	Motor connector W/m	0150-3140
MC01-W/m-as (assembled)	W/m-Connector assembled	0150-3147

A-CONNECTOR



Power

1	Phase 1+	red
2	Phase 1-	pink
3	Phase 2+	blue
4	Phase 2-	grey
5	Shield	Outer Shield

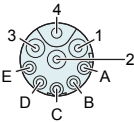
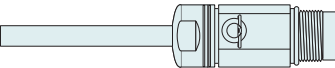
Signal

1	GND	brown (Kx03) / Drain wire inner shield (Kx05)
2	Temp. Sensor	black
3	Sensor Sine	yellow
4	+5V	white
5	n. c.	n. c.
6	Sensor Cosine	green

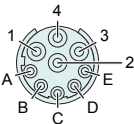
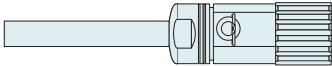
Item	Description	Item-No.
MC01-A-Fe/f-as	A-Fe/f-connector assembled	0150-3541

R-CONNECTOR

MC01-R/m

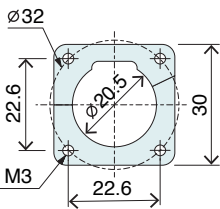


MC01-R/f

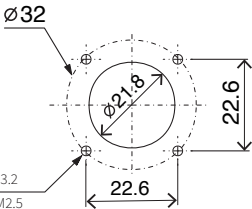


1	Phase 1+	red
2	Phase 1-	pink
3	Phase 2+	blue
4	Phase 2-	grey
A	+5V	white
B	GND	inner Shield
C	Sensor Sine	yellow
D	Sensor Cosine	green
E	Temp. Sensor	black
Housing	Shield	Outer Shield

MC01-F/R



Mounting window



Back panel mounting: Ø3.2
Front panel mounting: M2.5

Item	Description	Item-No.
MC01-R/m	Motor connector R/m	0150-3130
MC01-R/f	Motor connector R/f	0150-3129
MC01-R/m-as (assembled)	R/m-Connector assembled	0150-3097
MC01-R/f-as (assembled)	R/f-Connector assembled	0150-3143
MC01-F/R	Mounting flange for connector MC01-R	0150-3253
MC01-R/m-cap (Kappe)	Metal protection cap for R/m (Motor)	0150-3376
MC01-R/f-cap (Kappe)	Metal protection cap for R/f (Cable)	0150-3377

MC01-R/m-cap

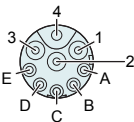
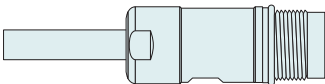


MC01-R/f-cap

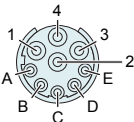
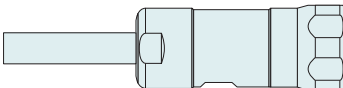


R-CONNECTOR STAINLESS STEEL

MC01-R/m-IP69K-SSC



MC01-R/f-IP69K-SSC



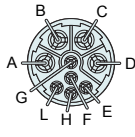
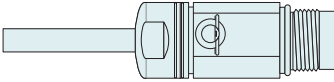
1	Phase 1+	red
2	Phase 1-	pink
3	Phase 2+	blue
4	Phase 2-	grey
A	+5V	white
B	GND	inner Shield
C	Sensor Sine	yellow
D	Sensor Cosine	green
E	Temp. Sensor	black
Housing	Shield	Outer Shield

Item	Description	Item-No.
MC01-R/m-IP69K-SSC	Motor connector R/m-SSC	0150-3381
MC01-R/f-IP69K-SSC	Motor connector R/f, IP69k, SSC	0150-3347
MC01-R/m-IP69K-SSC-as (assembled)	R/m-Connector IP69K, SSC, assembled	0150-3685
MC01-R/f-IP69K-SSC-as (assembled)	R/f-Connector IP69K, SSC, assembled	0150-3343

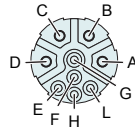
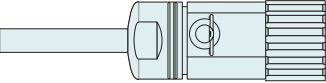
Material: Stainless steel, Mat-Nr. 1.4404

C-CONNECTOR

MC01-C/m

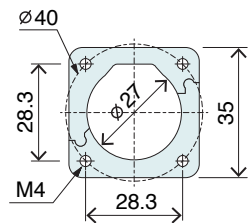


MC01-C/f

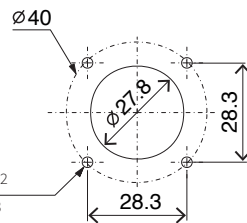


A	Phase 1+	red
B	Phase 1-	pink
C	Phase 2+	blue
D	Phase 2-	grey
E	+5V	white
F	GND	inner Shield
G	Sensor Sine	yellow
H	Sensor Cosine	green
L	Temp. Sensor	black
Housing	Shield	Outer Shield

MC01-F/C



Mounting window



Back panel mounting: Ø4.2
Front panel mounting: M3

Item	Description	Item-No.
MC01-C/m	Motor connector C/m	0150-3093
MC01-C/f	Motor connector C/f	0150-3080
MC01-C/m-as (assembled)	C/m-Connector assembled	0150-3099
MC01-C/f-as (assembled)	C/f-Connector assembled	0150-3146
MC01-F/C Steckerflansch	Mounting flange for connector MC01-C	0150-3254
MC01-C/m-cap (Kappe)	Metal protection cap for C/m (Motor)	0150-3378
MC01-C/f-cap (Kappe)	Metal protection cap for C/f (Cable)	0150-3379

MC01-C/m-cap

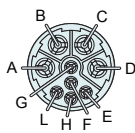
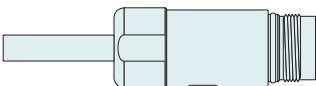


MC01-R/m-cap

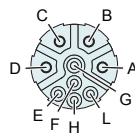
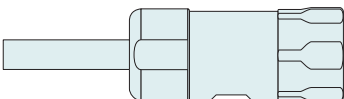


C-CONNECTOR INOX

MC01-C/m-IP69K-SSC



MC01-C/f-IP69K-SSC



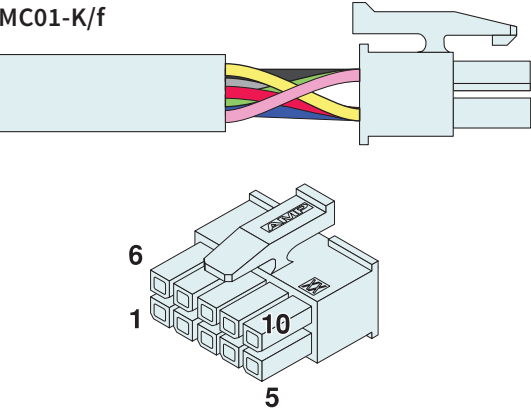
A	Phase 1+	red
B	Phase 1-	pink
C	Phase 2+	blue
D	Phase 2-	grey
E	+5V	white
F	GND	inner Shield
G	Sensor Sine	yellow
H	Sensor Cosine	green
L	Temp. Sensor	black
Housing	Shield	Outer Shield

Item	Description	Item-No.
MC01-C/m-IP69K-SSC	Motor connector C/m-SSC	0150-3372
MC01-C/f-IP69K-SSC	Motor connector C/f, IP69K, SSC	0150-3306
MC01-C/m-IP69K-SSCas (assembled)	Motor connector C/m, IP69K, SSC assembled	0150-3404
MC01-C/f-IP69K-SSC-as (assembled)	C/f-Connector IP69K, SSC assembled	0150-3325

Material: Stainless steel, Mat-Nr. 1.4404

K-CONNECTOR

MC01-K/f

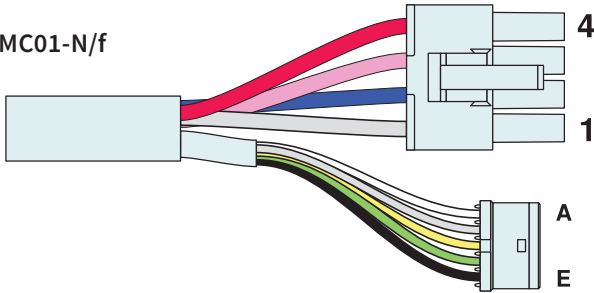


1	Phase 1+	red
2	Phase 2+	blue
4	Phase 1-	pink
5	Phase 2-	grey
9	+5V	white
8	GND	brown
6	Sensor Sine	yellow
7	Sensor Cosine	green
10	Temp. Sensor	black
Shield	Shield	Outer Shield

Item	Description	Item-No.
MC01-K/f	Motor connector K (f)	0150-3345
MC01-K/f-as (assembled)	K/f-Connector assembled	0150-3346

N-CONNECTOR

MC01-N/f

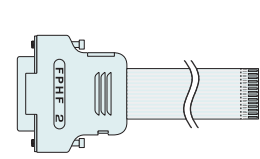


4	Phase 1+	red
3	Phase 1-	pink
2	Phase 2+	blue
1	Phase 2-	grey
A	+5V	white
B	GND	inner Shield
C	Sensor Sine	yellow
D	Sensor Cosine	green
E	Temp. Sensor	black
	Housing	Outer shield

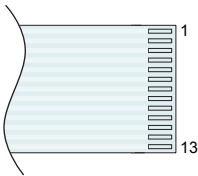
Item	Description	Item-No.
MC01-N/f	Motor connector N/f	0150-3407
MC01-N/f-as (assembled)	N/f-Connector assembled	0150-3408

F-CONNECTOR

MC01-D15W/f



ZIF-Line Molex
pitch 1.2 5mm



12 & 13	Phase 2-	12 & 13
3 & 4	Phase 2+	3 & 4
10 & 11	Phase 1-	10 & 11
1 & 2	Phase 1+	1 & 2
5	Sensor Sine	5
7	GND	7
9	+5V	9
8	Temp. Sensor	8
6	Sensor Cosine	6

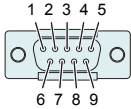
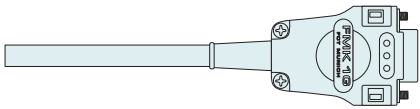
Item	Description	Item-No.
KF02-D15/F-...	Flat cable with D15/m-Connector	see section ordering information / Motor cable flat for short motors P02-23Sx80-F



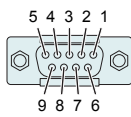
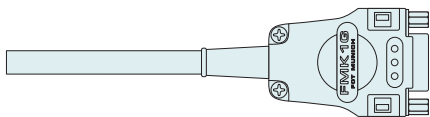
Plugging in or unplugging the flat ribbon cable under voltage can damage the motor and drive.

D-CONNECTOR

MC01-D/m



MC01-D/f

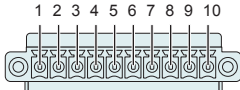
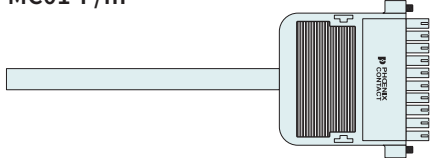


1	Phase 1+	red
6	Phase 1-	pink
2	Phase 2+	blue
7	Phase 2-	grey
3	+5V	white
8	GND	inner Shield
4	Sensor Sine	yellow
9	Sensor Cosine	green
5	Temp. Sensor	black
Housing	Shield	Outer Shield

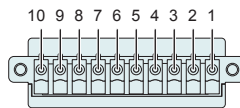
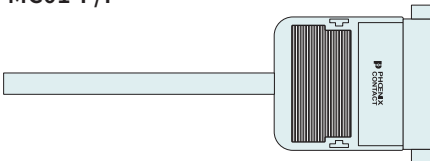
Item	Description	Item-No.
MC01-D/m	Motor connector D (m)	0150-3024
MC01-D/f	Motor connector D (f)	0150-3025
MC01-D/m-as (assembled)	D/m-Connector assembled	0150-3055
MC01-D/f-as (assembled)	D/f-Connector assembled	0150-3142

P-CONNECTOR

MC01-P/m



MC01-P/f

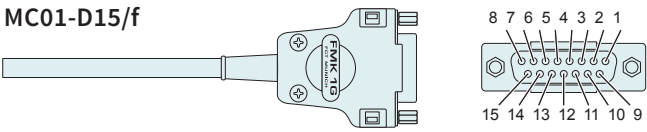


1	Phase 1+	red
2	Phase 1-	pink
3	Phase 2+	blue
4	Phase 2-	grey
5	+5V	white
6	GND	inner Shield
7	Sensor Sine	yellow
8	Sensor Cosine	green
9	Temp. Sensor	black
10	Shield	Outer Shield

Item	Description	Item-No.
MC01-P/m	Motor connector P (m)	0150-3020
MC01-P/f	Motor connector P (f)	0150-3021
MC01-P/m-as (assembled)	P/m-Connector assembled	0150-3056
MC01-P/f-as (assembled)	P/f-Connector assembled	0150-3144

D15-CONNECTOR

MC01-D15/f

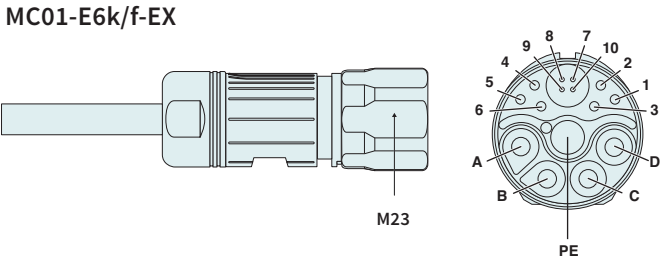


7 & 15	Phase 1+	red
3 & 10	Phase 1-	pink
6 & 14	Phase 2+	blue
2 & 9	Phase 2-	grey
11	+5V	white
12	GND	inner Shield
13	Sensor Sine	yellow
5	Sensor Cosine	green
4	Temp. Sensor	black
Housing	Shield	Outer shield

Item	Description	Item-No.
MC01-D15/f	Motor connector D15 (f)	0150-3136
MC01-D15/f-as (assembled)	D15/f-Connector assembled	0150-3073

E6k-CONNECTOR EX

MC01-E6k/f-EX



A	Phase 1+	red
B	Phase 1-	pink
C	Phase 2+	blue
D	Phase 2-	grey
PE	Protective Earth	green-yellow
1	+5V	white
2	GND	Inner shield (Signal Leads)
3	Sensor Sine	yellow
4	Sensor Cosine	green
5	Temp. Sensor	black
6	n.c.	-
7	Kty 1+	orange
8	Kty 1-	brown
9	Kty 2+	violett
10	Kty 2-	beige
Housing	Shield	Inner shield (Kty Leads) Outer shield

Item	Description	Item-No.
MC01-E6k/f-EX	Connector with hexagonal union nut	0150-3538
MC01-E6k/f-EX-as	E/f-Connector with hexagonal union nut assembled	0150-3641

MOTOR CABLES FOR P10 MOTORS



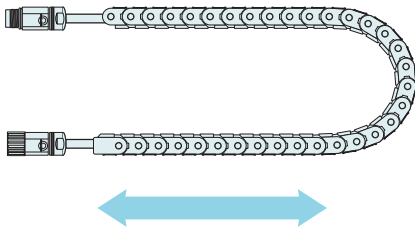
- ✓ High-flex cables for cable chain applications
- ✓ Tested under high voltage
- ✓ Completely prefabricated
- ✓ With quick-connect plugs
- ✓ Very good EMC properties

Motor cables for P10 Motors

For type P10 three-phase linear motors, LinMot uses the conventional two-cable solution. The connection is made using one power cable and one signal cable. Both cables have external shielding and can be used in moving cable carriers. The use of twisted conductor pairs in the signal cable provides even better signal transmission. The influence of external interference from oscillating fields is greatly reduced.



HIGH FLEX KS MOTOR CABLES



The high-flex type KS motor cable is suitable for applications where the motor cable moves, where the cable is routed through a cable carrier and undergoes a roll-up motion.

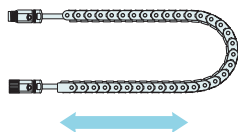
BY LENGTH OR COMPLETELY PREFABRICATED



The LinMot cable for P10 motors is available by length. It can be cut to the desired length or ordered in large quantities on rolls. LinMot carries all of the motor plugs for customers to assemble their own motor cables.

Fully assembled motor cables can be shipped in lengths up to 50 m. Order the motor cable in the desired length together with the matching motor plugs (assembled.) Prefabricated motor cables with the most commonly used plug combinations can be shipped from stock in standard lengths. LinMot motor cables are produced using only crimped contacts and are tested under high voltage prior to shipment.

High flex trailing chain cable for P10 Stators



Cable type	KSS05-02/06	KSS05-02/08	KSS05-02/13	KPS07-04/02	KPS15-04	KPS15-04/04
Wire cross-section Motor phases	0.5 mm ² (AWG20)	0.5 mm ² (AWG20)	0.5 mm ² (AWG20)	0.75 mm ² (AWG18)	1.5 mm ² (AWG15)	1.5 mm ² (AWG15)
Wire cross-section Sensor signal	0.25 mm ² (AWG23)	0.25 mm ² (AWG23)	0.25 mm ² (AWG23)	0.25 mm ² (AWG23)	(-)	0.75 mm ² (AWG18)
Material Wire insulation	PP	TPE	PE	PES	TPE	TPE
Material Cable sheath	PUR	Special TPU	PUR	PUR	Special TPU	PUR
Colour Cable sheath	green	green	green	orange	orange	orange
Cable cross section	7.7 mm (0.3 in)	8.9 mm (0.35 in)	9 mm (0.35 in)	9.1 mm (0.36 in)	10.2 mm (0.4 in)	12.3 mm (0.48 in)
Weight	76 kg/km (270 lb/mi)	106 kg/km (376 lb/mi)	100 kg/km (355 lb/mi)	116 kg/km (412 lb/mi)	167 kg/km (593 lb/mi)	228 kg/km (809 lb/mi)
Approvals	UL / CSA 300V	UL / CSA 300V	UL / CSA 300V	UL / CSA 1000V / 300V	UL / CSA 1000V	UL / CSA 1000V / 300V
Minimum bend- ing radius static	60 mm (2.36 in)	45 mm (1.75)	45 mm (1.75)	70 mm (2.76 in)	50 mm (2 in)	60 mm (2.36 in)
Minimum bend- ing radius moving	120 mm (4.72 in)	90 mm (3.54 in)	90 mm (3.54 in)	140 mm (5.52 in)	100 mm (4 in)	120 mm (4.72 in)
Temperature range	-20°...+70°C	-20°...+70°C	-20°...+70°C	-20°...+70°C	-20°...+70°C	-40°...+80°C

TYPE CODE OF MOTOR CABLE FOR P10 MOTORS

Number of strands (A)

Number of strands with a cross-section as indicated in the designation.

Cable type

KPS Trailing chain cable (Power)
KSS Trailing chain cable (Encoder)

Connector Type (Drive side)

B (Power) Drives C1400
D15s (Signal) Drives C1400
L (Power) Drives E1400
D15 (Signal) Drives E1400

Cabel length

Cable assembled in m

KSS 05 - 02 / 08 - D15 / J - 2

Strand diameter

05 = 0.5 mm²
10 = 1.0 mm²
15 = 1.5 mm²

Note: The minimum cross-section for the corresponding motor is given in the table below

Connector type (Motor side)

T (Power) Stators PS10-54
Uk (Signal) Stators PS10-54
Q (Power) Stators PS10-70
J (Signal) Stators PS10-70

Number of strands (B)

Number of strands with a cross-section other than that indicated in the designation.

Minimum Strand Diameter						
	Max. Cont. Force [A rms]		Strand diameter according to DIN		Strand diameter according to UL	
	Passive cooling	Fluid cooling	Passive cooling	Fluid cooling	Passive cooling	Fluid cooling
P10-54x120U	1.4	2.7	KPS07	KPS07	KPS07	KPS07
P10-54x180U	2.6	5.1	KPS07	KPS07	KPS07	KPS07
P10-54x240U	2.6	5.1	KPS07	KPS07	KPS07	KPS07
P10-54x300U	3.2	6.5	KPS07	KPS07	KPS07	KPS07
P10-70x80U	1.3	3.7	KPS15	KPS15	KPS15	KPS15
P10-70x160U	2.4	6.6	KPS15	KPS15	KPS15	KPS15
P10-70x240U	3.4	9.1	KPS15	KPS15	KPS15	KPS15
P10-70x320U	3.0	8.0	KPS15	KPS15	KPS15	KPS15
P10-70x400U	4.2	11.5	KPS15	KPS15	KPS15	KPS15

Encoder cable	
P10-54x120U	KSS05 encoder cable is used for all P10 motors.
P10-54x180U	
P10-54x240U	
P10-54x300U	
P10-70x80U	
P10-70x160U	
P10-70x240U	
P10-70x320U	
P10-70x400U	

MOTOR CABLE PER M		
Item	Description	Item-No.
KSS05-02/08	Encoder trailing chain cable LinMot (per m)	0150-2258
KSS05-02/08-100	Encoder trailing chain cable LinMot (100 m)	0150-3575
KSS05-02/13	Encoder trailing chain cable P10-...-Dxx (per m)	0150-2259
KSS05-02/06	Encoder trailing chain cable P10-...-Dx3 (per m)	0150-2490
KPS15-04	Power trailing chain cable P10-70 (per m)	0150-2257
KPS15-04-100	Power trailing chain cable P10-70 (100 m)	0150-3576
KPS07-04/02	Power trailing chain cable P10-54 (per m)	0150-2372
KPS15-04/04	Power trailing chain cable P10-...-Dx3 (per m)	0150-2269

POWER & ENCODER CABLES FOR LINEAR MOTORS P10-54

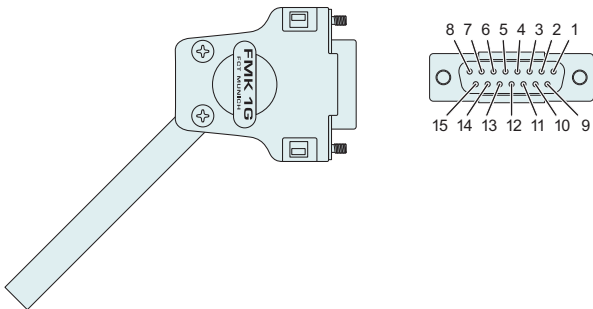
Item	Description	Item-No.
KPS07-04/02-L/Tk-3	Power trailing chain cable L/Tk, 3 m for Servo Drive E1400	0150-2670
KPS07-04/02-L/Tk-5	Power trailing chain cable L/Tk, 5 m for Servo Drive E1400	0150-2671
KPS07-04/02-L/Tk-8	Power trailing chain cable L/Tk, 8 m for Servo Drive E1400	0150-2672
KPS07-04/02-L/Tk-12	Power trailing chain cable L/Tk, 12 m for Servo Drive E1400	0150-2673
KPS07-04/02-B/Tk-3	Power trailing chain cable B/Tk, 3 m for Servo Drive C1400	0150-3648
KPS07-04/02-B/Tk-5	Power trailing chain cable B/Tk, 5 m for Servo Drive C1400	0150-3657
KPS07-04/02-B/Tk-8	Power trailing chain cable B/Tk, 8 m for Servo Drive C1400	0150-3658
KPS07-04/02-B/Tk-12	Power trailing chain cable B/Tk, 12 m for Servo Drive C1400	0150-3659
KSS 05-02/08-D15s/Uk-3	Encoder trailing chain cable D15s/Uk, 3 m	0150-2650
KSS 05-02/08-D15s/Uk-5	Encoder trailing chain cable D15s/Uk, 5 m	0150-2651
KSS 05-02/08-D15s/Uk-8	Encoder trailing chain cable D15s/Uk, 8 m	0150-2652
KSS 05-02/08-D15s/Uk-12	Encoder trailing chain cable D15s/Uk, 12 m	0150-2653
KPS07-04/02-./Tk-10	Power trailing chain cable ./Tk, 10 m	0150-3626
KSS 05-02/13-./Uk-10	Encoder trailing chain cable ./Uk, 10 m	0150-3627

POWER & ENCODER CABLES FOR LINEAR MOTORS P10-70

Item	Description	Item-No.
KPS15-04-L/Q-3	Power trailing chain cable L/Q, 3 m for Servo Drive E1400	0150-2266
KPS15-04-L/Q-5	Power trailing chain cable L/Q, 5 m for Servo Drive E1400	0150-2261
KPS15-04-L/Q-8	Power trailing chain cable L/Q, 8 m for Servo Drive E1400	0150-2267
KPS15-04-L/Q-12	Power trailing chain cable L/Q, 12 m for Servo Drive E1400	0150-2268
KPS15-04-B/Q-3	Power trailing chain cable B/Q, 3 m for Servo Drive C1400	0150-3660
KPS15-04-B/Q-5	Power trailing chain cable B/Q, 5 m for Servo Drive C1400	0150-3661
KPS15-04-B/Q-8	Power trailing chain cable B/Q, 8 m for Servo Drive C1400	0150-3662
KPS15-04-B/Q-12	Power trailing chain cable B/Q, 12 m for Servo Drive C1400	0150-3663
KSS 05-02/08-D15/J-3	Encoder trailing chain cable D15/J, 3 m	0150-2263
KSS 05-02/08-D15/J-5	Encoder trailing chain cable D15/J, 5 m	0150-2262
KSS 05-02/08-D15/J-8	Encoder trailing chain cable D15/J, 8 m	0150-2264
KSS 05-02/08-D15/J-12	Encoder trailing chain cable D15/J, 12 m	0150-2265
KPS15-04-..../Q-10	Power trailing chain cable .../Q, 10m for D0x	0150-2376
KPS15-04/04..../Q-10	Power trailing chain cable .../Q, 10m for D03	0150-3654
KSS 05-02/13-./J-10	Encoder trailing chain cable ./J, 10m for D0x	0150-2377
KSS 05-02/06-./J-10	Encoder trailing chain cable ./J, 10m for D03	0150-3655

D15-45° - CONNECTOR

MC10-D15-45°/f

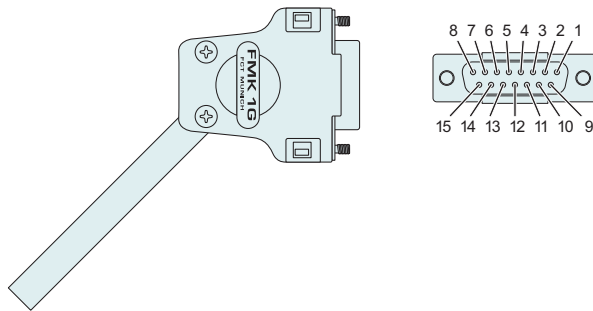


1	+5V	red
2	Sine-	orange
3	Cosine-	blue
4	GND Sense	brown
5	GND	black
6	Not connected	n.c.
7	Not connected	n.c.
8	Motor Link C-	grey
9	Sine+	yellow
10	Cosine+	green
11	+5V Sense	white
12	Not connected	n.c.
13	Not connected	n.c.
14	Not connected	n.c.
15	Motor Link C+	pink
Housing		all shields

Item	Description	Item-No.
MC10-D15-45°/f	Connector encoder C1400/E1400/X3	0150-3397
MC10-D15-45°/f-as	Connector encoder C1400/E1400/X3 assembled	0150-3399

D15S-45° - CONNECTOR

MC10-D15s-45°/f

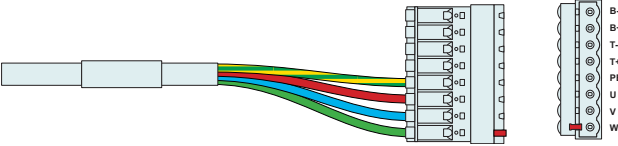


1	+5V	red
2	Sine-	orange
3	Cosine-	blue
4	Not connected	n.c.
5	GND	black
6	GND Sense	brown
7	Not connected	n.c.
8	Motor Link C-	grey
9	Sine+	yellow
10	Cosine+	green
11	Not connected	n.c.
12	Not connected	n.c.
13	+5V Sense	white
14	Not connected	n.c.
15	Motor Link C+	pink
Housing		all shields

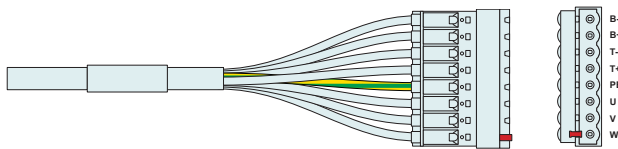
Item	Description	Item-No.
MC10-D15s-45°/f-as	Connector encoder C1400/E1400/X3 assembled	0150-3632

B-CONNECTOR

MC10-B/m



MC10-B/m



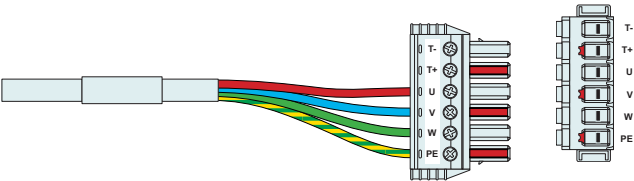
	Connector Wiring (without brake)	
PE	Protective Earth	yellow-green
W	Motor Phase W	green
V	Motor Phase V	blue
U	Motor Phase U	red
T+	Temperature Sensor T+	n.c.
T-	Temperature Sensor T-	n.c.
B+	Motor Brake+	n.c.
B-	Motor Brake-	n.c.

	Connector Wiring (with brake)	
PE	Protective Earth	yellow-green
W	Motor Phase W	black (Nr. 3)
V	Motor Phase V	black (Nr. 2)
U	Motor Phase U	black (Nr. 1)
T+	Temperature Sensor T+	black (Nr. 5)
T-	Temperature Sensor T-	black (Nr. 6)
B+	Motor Brake+	black (Nr. 7)
B-	Motor Brake-	black (Nr. 8)

Item	Description	Item-No.
MC10-B/m	Connector Power C1400/X2	0150-3605
MC10-B/m-as	Connector Power C1400/X2 assembled	0150-3606

L-CONNECTOR

MC10-L/m

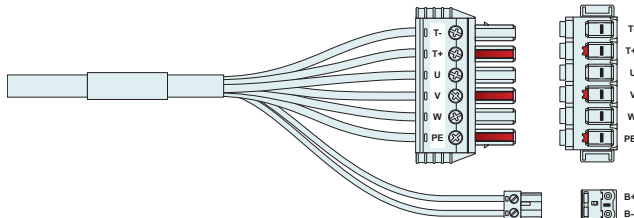


	Connector Wiring	
PE	Protective Earth	yellow-green
W	Motor Phase W	green
V	Motor Phase V	blue
U	Motor Phase U	red
T+	Temperature Sensor T+	n.c.
T-	Temperature Sensor T-	n.c.

Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
MC10-L/m-as	Connector Power E1400/X2 assembled	0160-2330

Lb-CONNECTOR

MC10-L/m



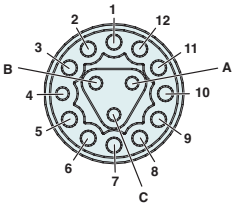
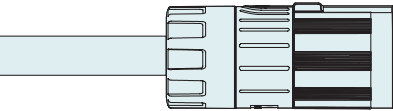
DC01-E1400/X32

	Connector Wiring (with brake)	
PE	Protective Earth	yellow-green
W	Motor Phase W	black (Nr. 3)
V	Motor Phase V	black (Nr. 2)
U	Motor Phase U	black (Nr. 1)
T+	Temperature Sensor T+	black (Nr. 5)
T-	Temperature Sensor T-	black (Nr. 6)
B+	Brake B+	black (Nr. 7)
B-	Brake B-	black (Nr. 8)

Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
DC01-E1400/X32	Drive Connector Brake	0150-3450
MC10-Lb/m-as	Connector Power E1400/X2/b assembled	0160-2723

Uk-CONNECTOR

MC10-Uk/f



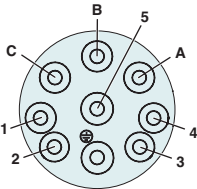
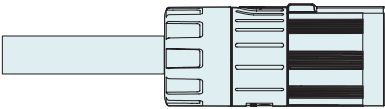
	PS10-54	
1	+Vcc	red
2	GND	black
3	Sin+	yellow
4	Sin-	orange
5	Cos+	green
6	Cos-	blue
7	Motor Link C+	pink
8	Motor Link C+	grey
9	n.c.	n.c.
10	n.c.	n.c.
11	n.c.	n.c.
12	n.c.	n.c.
A	n.c.	n.c.
B	n.c.	n.c.
C	n.c.	n.c.

	PS10-54...D24	PS10-54...D25	PS10-54...D25S	
1	+Vcc	+Vcc	+Vcc	white
2	GND	GND	GND	brown
3	A	A	A	grey
4	/ A	/ A	/ A	pink
5	B	B	B	blue
6	/ B	/ B	/ B	red
7	-	-	-	do not connect
8	-	-	-	do not connect
9	Pt1000+	PTC+	PTC+	yellow-brown
10	Pt1000-	PTC-	PTC-	white-yellow
11	REF+	REF+	REF+	black
12	REF-	REF-	REF-	violett
A	Hall U	Hall U	Hall U	grey-red
B	Hall V	Hall V	Hall V	red-blue
C	Hall W	Hall W	Hall W	white-green

Item	Description	Item-No.
MC10-Uk/f	Connector encoder PS10-54	0150-3483
MC10-Uk/f-as	Connector encoder PS10-54 assembled	0150-3620

Tk-CONNECTOR

MC10-Tk/f

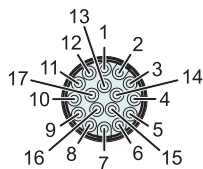
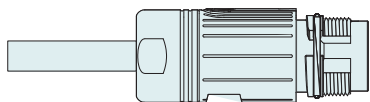


	PS10-54	PS10-54...D24	PS10-54...D25	PS10-54...D25S	
A	Phase U	Phase U	Phase U	Phase U	red
PE	Protective Earth	Protective Earth	Protective Earth	Protective Earth	yellow-green
B	Phase V	Phase V	Phase V	Phase V	blue
C	Phase W	Phase W	Phase W	Phase W	green
1	n.c.	Pt1000+	PTC+	PTC+	turquoise
2	n.c.	Pt1000-	PTC-	PTC-	grey
3	n.c.	n.c.	n.c.	n.c.	n.c.
4	n.c.	n.c.	n.c.	n.c.	n.c.
5	n.c.	n.c.	n.c.	n.c.	n.c.

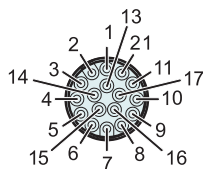
Item	Description	Item-No.
MC10-Tk/f	Connector Power PS10-54	0150-3482
MC10-Tk/f-as	Connector Power PS10-54 assembled	0150-3623

J-CONNECTOR

MC10-J/m



MC10-J/f



Item	Description	Item-No.
MC10-J/m	Connector encoder PS10-70/m	0160-2407
MC10-J/m-as	Connector encoder PS10-70/m assembled	0160-2408
MC10-J/f	Connector encoder PS10-70	0160-2269
MC10-J/f-as	Connector encoder PS10-70 assembled	0160-2331

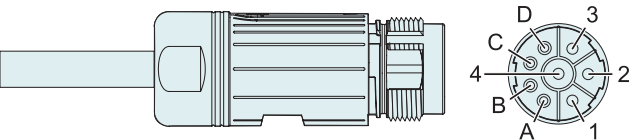
	P10-70	
1	+5 VDC	red
2	GND	black
3	Sense +5V	white
4	Sense GND	brown
5	Motor Link C+	pink
6	Motor Link C-	grey
7	Sine+	yellow
8	Sine-	orange
9	Cosine+	green
10	Cosine-	blue
11	n.c.	-
12	n.c.	-
13	n.c.	-
14	n.c.	-
15	n.c.	-
16	n.c.	-
17	n.c.	-

	P10-70...D01	P10-70...D02	
1	3...13 VDC	3...13 VDC	white
2	GND	GND	brown
3	Vcc Sense (opt.)	Vcc Sense (opt.)	green
4	GND Sense (opt.)	GND Sense (opt.)	yellow
5	Do not connect	Do not connect	-
6	Do not connect	Do not connect	-
7	Sine+	Sine+	grey
8	Sine-	Sine-	pink
9	Cosine+	Cosine+	blue
10	Cosine-	Cosine-	red
11	Ref+	Ref+	black
12	Ref-	Ref-	violett
13	Hall U	Hall U	grey-red
14	Hall V	Hall V	red-blue
15	Hall W	Hall W	white-green
16	KTY+	PTC+	yellow-brown
17	KTY-	PTC-	white-yellow

	P10-70...D03	
1	3...13 VDC	red
2	GND	black
3	Vcc Sense (opt.)	white
4	GND Sense (opt.)	brown
5	Do not connect	-
6	Do not connect	-
7	Sine+	yellow
8	Sine-	orange
9	Cosine+	green
10	Cosine-	blue
11	n.c.	n.c.
12	n.c.	n.c.
13	n.c.	n.c.
14	Do not connect	n.c.
15	n.c.	n.c.
16	n.c.	n.c.
17	n.c.	n.c.

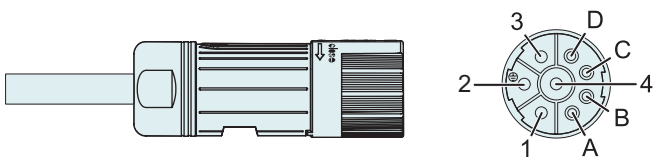
Q-CONNECTOR

MC10-Q/m



	P10-70	P10-70...D01/D02	
1	Phase U	Phase U	red
2	Protective Earth	Protective Earth	yellow-green
3	Phase W	Phase W	green
4	Phase V	Phase V	blue
A	n.c.	n.c.	-
B	n.c.	n.c.	-
C	n.c.	n.c.	-
D	n.c.	n.c.	-

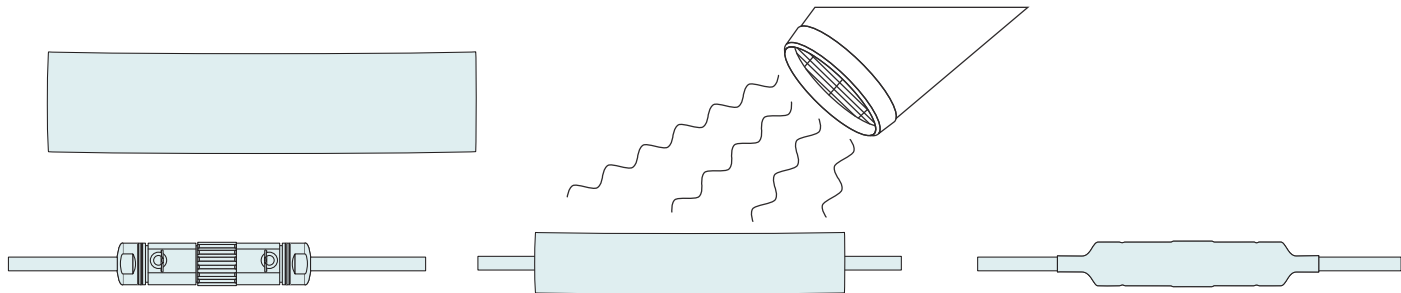
MC10-Q/f



	P10-70...D03	
1	Phase U	red (previously: black 1)
2	Protective Earth	yellow-green
3	Phase W	green (previously: black 3)
4	Phase V	blue (previously: black 2)
A	KTY+	purple (previously: black 5)
B	KTY-	grey (previously: black 6)
C	n.c.	yellow (previously: black 7)
D	n.c.	brown (previously: black 8)

Item	Description	Item-No.
MC10-Q/m	Connector Power PS10-70/m	0160-2405
MC10-Q/m-as (assembled)	Connector Power PS10-70/m assembled	0160-2406
MC10-Q/f	Connector Power PS10-70	0160-2268
MC10-Q/f-as (assembled)	Connector Power PS10-70 assembled	0160-2329

SHRINK TUBING FOR IP67 CONNECTOR



Item		Material	Item-No.
MCP01-18	Shrink tubing (with hot glue coating) for additional protection of IP67 connectors	Polyolefin	0150-3089



ACCESSORIES LINEAR MOTORS

P01 / P02



- ✓ Motor flanges for mounting LinMot motors
- ✓ Fans to increase effectiveness of the linear motor
- ✓ Slider mounting kits to mount sliders easily
- ✓ Replaceable bearings
- ✓ Wipers for use in difficult environmental conditions
- ✓ External position sensor for high-precision tasks

ACCESSORIES LINEAR MOTORS P01 / P02

Motor Flanges _____ **1045**

Slider Mounting _____ **1049**

Bearing kits _____ **1051**

Wipers _____ **1054**

External Position Sensor _____ **1056**

Motor Flanges

LinMot PF motor flanges enable easy mounting of linear motors. The clamping plate design enables quick assembly and disassembly of the linear motors without disassembling the flange.

A matching flange of the correct length is available for every family of linear motors. This not only ensures secure mechanical mounting, but also guarantees optimal cooling of the linear motor.



Motor with flange and fan

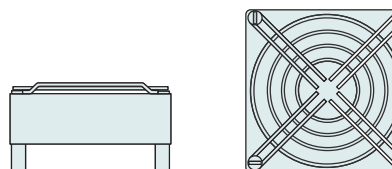
STATOR AND FLANGE MOUNTING

The same flange is used for stators with a cable output or a plug housing. The stator is secured in the flanges by means of clamping screws, so that the stator is clamped over a large surface area.

Clamping over a large surface area, practically the entire length of the stator, and the cooling fins on the flange, ensure optimal cooling of the linear motor.

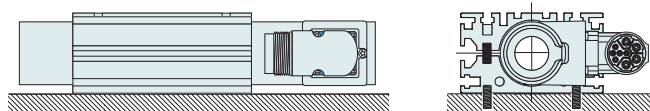
Depending on the application and available space, the flanges can be installed horizontally with screws or vertically by means of the T-slots provided.

FAN OPTION

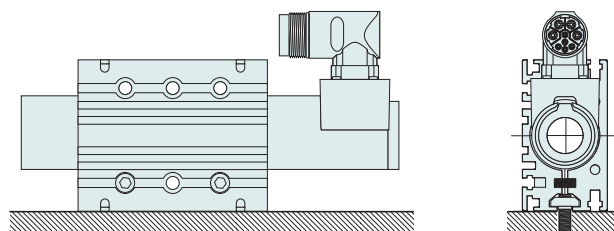


The optional fan can nearly double the effective force of the linear motor.

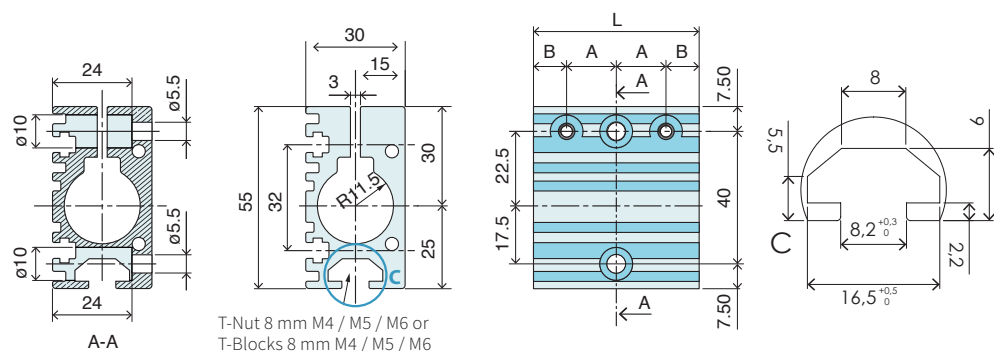
MOUNTING WITH SCREWHOLES



MOUNTING WITH T-NUT



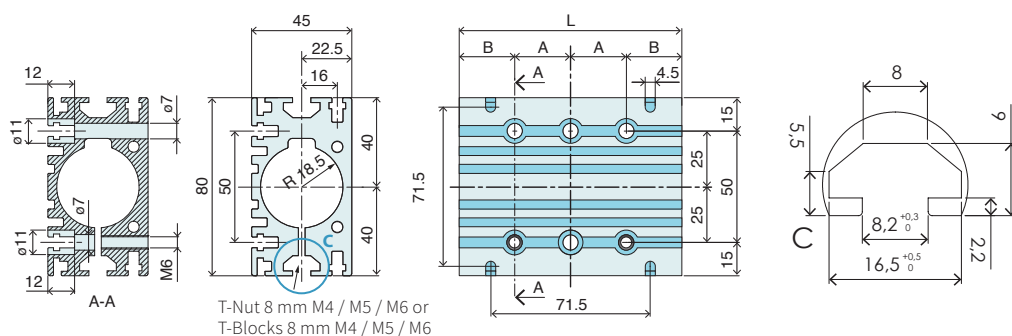
PF02-23



Max. torque for clamp
plate screws: 4Nm

Item	Description	Stator type	L [mm]	A [mm]	B [mm]	Weight [g]	Item-No.
PF02-23x50	Flange 23x50 mm	P01-23x80	50	15	10	115	0150-2102
PF02-23x120	Flange 23x120 mm	P01-23x160	120	30	30	280	0150-2103
PF02-23x170	Flange 23x170 mm	P01-23x160	170	45	40	390	0150-2117
PF02-23 Flange profile	PF02-23 Flange profile per m	P01-23x...	(-)	(-)	(-)	(-)	0150-2101

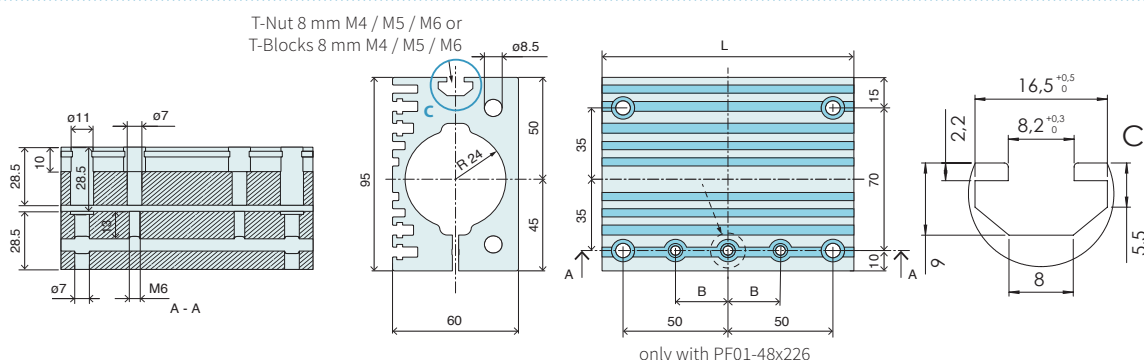
PF02-37



Max. torque for clamp
plate screws: 8Nm

Item	Description	Stator type	L [mm]	A [mm]	B [mm]	Weight [g]	Item-No.
PF02-37x100	Flange 37x100 mm	P01-37x120	100	25	25	450	0150-1998
PF02-37x140	Flange 37x140 mm	P01-37x120	140	50	20	630	0150-2105
PF02-37x200	Flange 37x200 mm	P01-37x240	200	50	50	920	0150-1999
PF02-37 Flange profile	PF02-37 Flange profile per M	P01-37x...	(-)	(-)	(-)	(-)	0150-1997

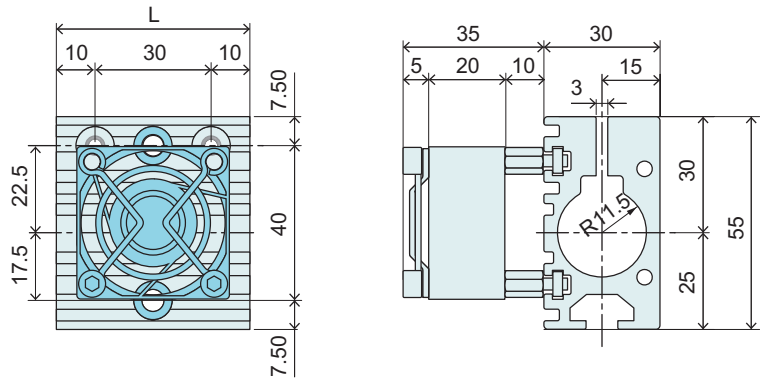
PF01-48



Max. torque for clamp
plate screws: 12Nm

Item	Description	Stator type	L [mm]	B [mm]	Weight [g]	Item-No.
PF01-48x120	Flange 48x120 mm	P01-48x240	120	25	970	0150-1976
PF01-48x226	Flange 48x226 mm	P01-48x240	226	85	1850	0150-2108
PF01-48 Flange profile	PF01-48 Flange profile per M	P01-48x...	(-)	(-)	(-)	0150-2104

OPTIONAL FAN FOR PF02-23

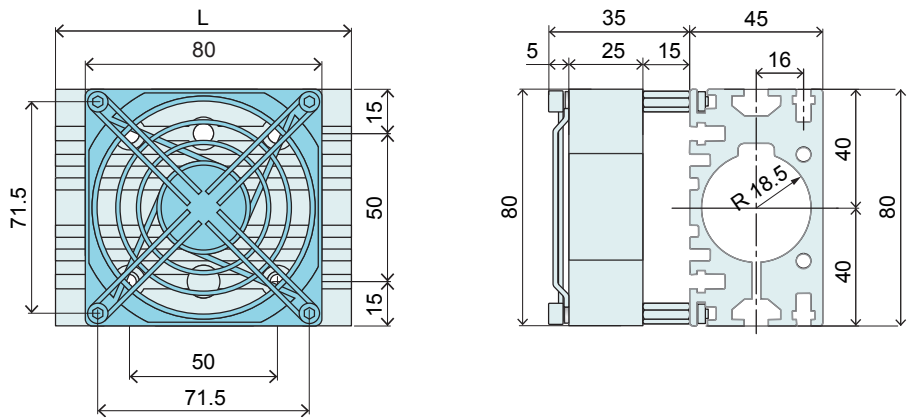


Fan supply:
24VDC, 70mA

Air flow:
15m³/h

Item	Description	Item-No.
HV01-23	Fan kit for H01-23 and PF02-23	0150-5050

OPTIONAL FAN FOR PF02-37

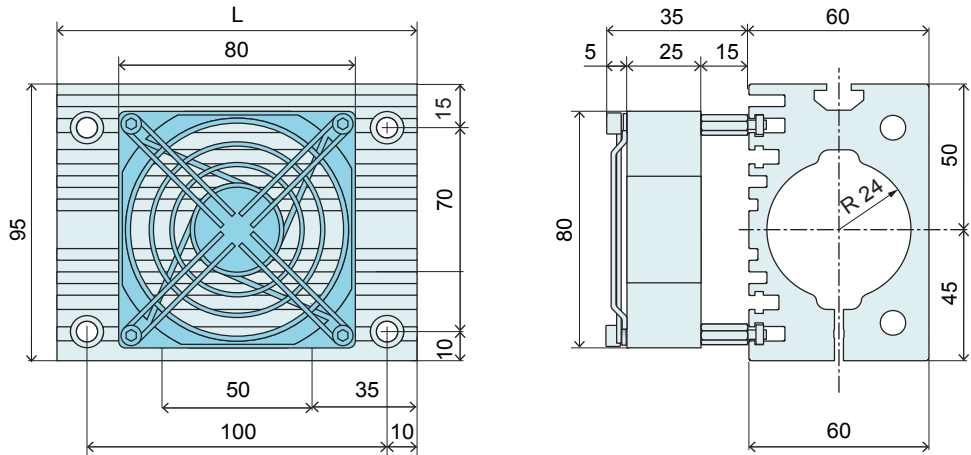


Fan supply:
24VDC, 120mA

Air flow:
80m³/h

Item	Description	Item-No.
HV01-37/48	Fan kit for H01-37, B01-37 and PF02-37	0150-5051

OPTIONAL FAN FOR PF01-48

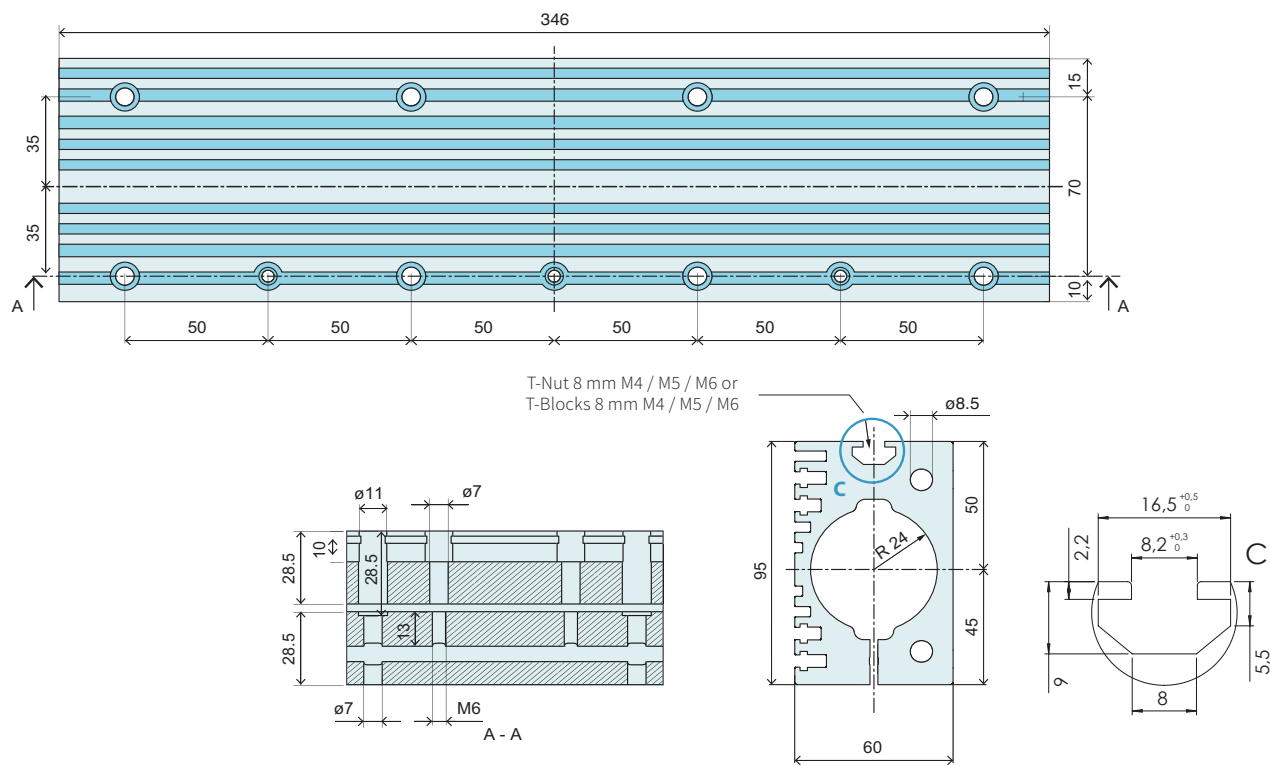


Fan supply:
24VDC, 120mA

Air flow:
80m³/h

Item	Description	Item-No.
HV01-37/48	Fan kit for H01-48, B01-48 and PF01-48	0150-5051

PF01-48



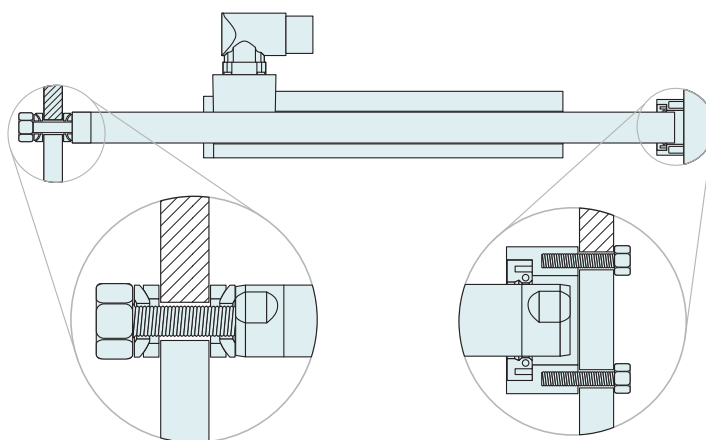
Item	Description	Stator type	L [mm]	B [mm]	Weight [g]	Item-No.
PF01-48x346	Flange 48x346 mm	P01-48x360	346	85	2840	0150-2145

Slider Mounting

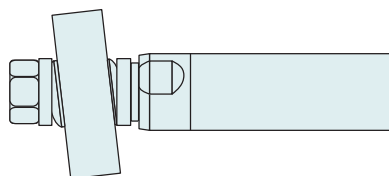
Depending on the application, LinMot linear motors can be operated with a "moving Slider" or "moving stator." Applications with short stroke ranges are preferably implemented with moving sliders; applications with long strokes are better with a moving stator. In both cases, LinMot recommends the use of special mounting kits for mounting the Slider, in order to avoid overdetermining the mount.

In moving Slider applications, the stator is mounted, and the Slider is connected to a load that is guided by a linear guide. In order to avoid alignment errors, the Slider is attached to the load or guide using fixed bearings, each consisting of two rounded washers and two bevel washers.

In moving stator applications, the Slider is mounted and the stator is attached to a linear guide, together with the load. In order to avoid overdetermining the Slider bearing, one end of the Slider is mounted on a fixed bearing, and the other on a floating bearing.

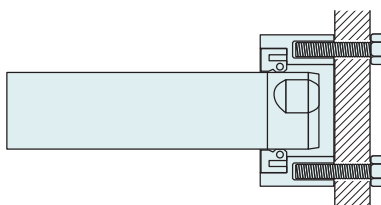


FIXED BEARING






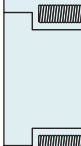
The fixed bearing consists of two rounded washers and two bevel washers. It compensates for angular and axial deflection.

FLOATING BEARING

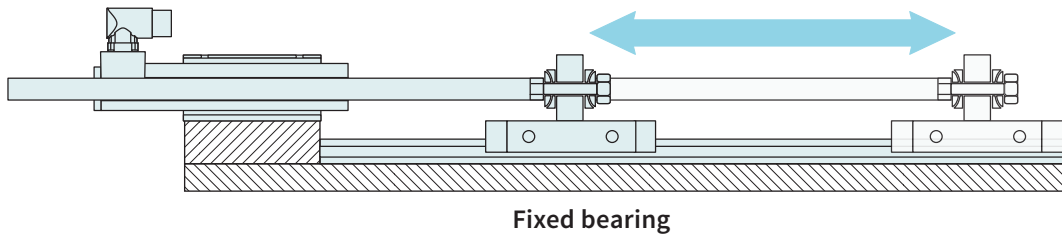


The Slider is mounted in a rubber ring as a floating bearing. The floating bearing compensates for angular and axial displacement and length tolerance.

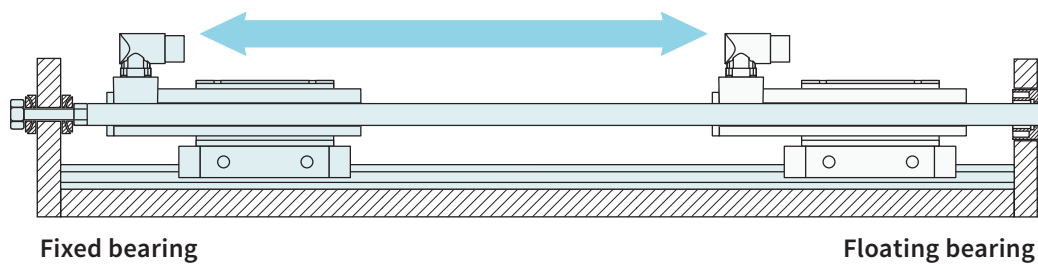
MATERIAL

-   Rounded and bevel washers:
Stainless steel, case-hardened
steel or nickel plated
-  Bearing:
NBR
(Nitrile-Butadiene-Rubber with
DIN17223 spring steel)
-  Housing:
Stainless steel 1.4305

MOVING SLIDER



MOVING STATOR

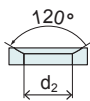
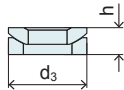


DIMENSIONS AND ORDERING INFORMATION

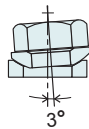
Fixed bearing



DIN 6319 C

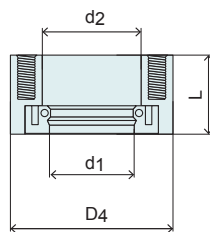
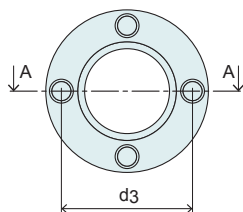


DIN 6319 D



Item	Material	Slider	Thread	d1	d2	d3	h
PLF01-12	Steel case hardened	12 mm	M5	5.2 mm (0.20 in)	6.0 mm (0.24 in)	10.5 mm (0.41 in)	3.2 mm (0.13 in)
PLF01-12-Ni	Steel nickel plated						
PLF01-20	Steel case hardened	19/20 mm	M8	8.4 mm (0.33 in)	9.6 mm (0.38 in)	17 mm (0.67 in)	5.5 mm (0.22 in)
PLF01-20-SS	Stainless steel 1.4301						
PLF01-28	Steel case hardened	27/28 mm	M10	10.5 mm (0.41 in)	12 mm (0.47 in)	21 mm (0.83 in)	6.5 mm (0.26 in)
PLF01-28-SS	Stainless steel 1.4301						

Floating bearing



A-A

Item	Slider	Thread	d1	d2	d3	d4	L
PLL02-12	12 mm	-	12 mm (0.47 in)	Rubber ring	-	22 mm H8 (0.87 in)	7.0 mm (0.28 in)
PLL01-19	19 mm	M5	19 mm (0.75 in)	23 mm (0.90 in)	30 mm (1.18 in)	37 mm (1.46 in)	20 mm (0.79 in)
PLL01-20	20 mm	M5	20 mm (0.79 in)	23 mm (0.90 in)	30 mm (1.18 in)	37 mm (1.46 in)	20 mm (0.79 in)
PLL01-27	27 mm	M5	27 mm (1.06 in)	32 mm (1.26 in)	40 mm (1.57 in)	48 mm (1.89 in)	20 mm (0.79 in)
PLL01-28	28 mm	M5	28 mm (1.10 in)	32 mm (1.26 in)	40 mm (1.57 in)	48 mm (1.89 in)	20 mm (0.79 in)

Item	Description	Item-No.
PLF01-12	Fixed bearing for 12 mm Slider	0150-3085
PLF01-12-Ni	Fixed bearing for 12 mm Slider, nickel plated	0150-3573
PLF01-20	Fixed bearing for 19 mm and 20 mm Slider	0150-3083
PLF01-20-SS	Fixed End Washer Set for 19/20 mm sliders, stainless steel	0150-3296
PLF01-28	Fixed End Washer Set for 27/28 mm sliders	0150-3087
PLF01-28-SS	Fixed End Washer Set for 27/28 mm sliders, stainless steel	0150-3297
PLL02-12	Floating bearing for PL01-12 Slider, Mat. 1.4305 /AISI 303	0150-3111
PLL01-19	Floating bearing for PL01-19 Slider, Mat. 1.4305 /AISI 303	0150-3335
PLL01-20	Floating bearing for PL01-20 Slider, Mat. 1.4305 /AISI 303	0150-3084
PLL01-27	Floating bearing for PL01-27 Slider, Mat. 1.4305 /AISI 303	0150-3294
PLL01-28	Floating bearing for PL01-28 Slider, Mat. 1.4305 /AISI 303	0150-3094
PLM01-20-MK	Mounting kit for PL01-20 Slider	0150-3079
PLM01-28-MK	Mounting kit for PL01-28 Slider	0150-3095

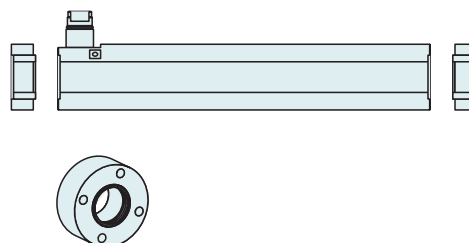
Bearing kits

Linear motors in the INOX and ATEX model series are used under challenging conditions. For fast, uncomplicated maintenance, these types of motors are equipped with replaceable slider bearings. Two types of bearings are available. One is a stainless steel version and the other is a plastic bearing.



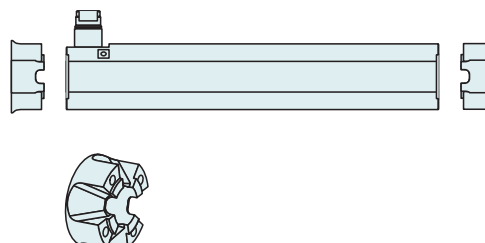
STAINLESS STEEL BEARINGS

Stainless steel bearings are simply attached to the stator with 4 socket head cap screws. The integrated plastic sleeves guarantee optimal support and guidance for the slider.

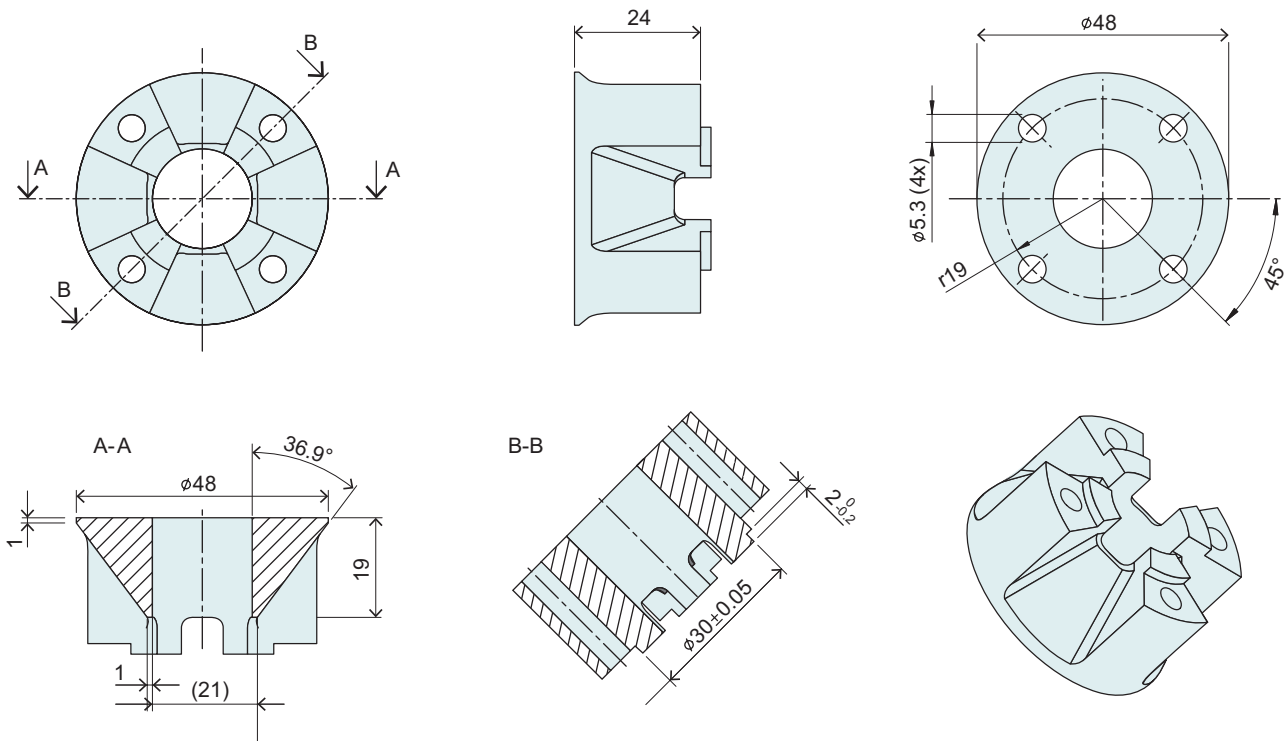


WD BEARINGS

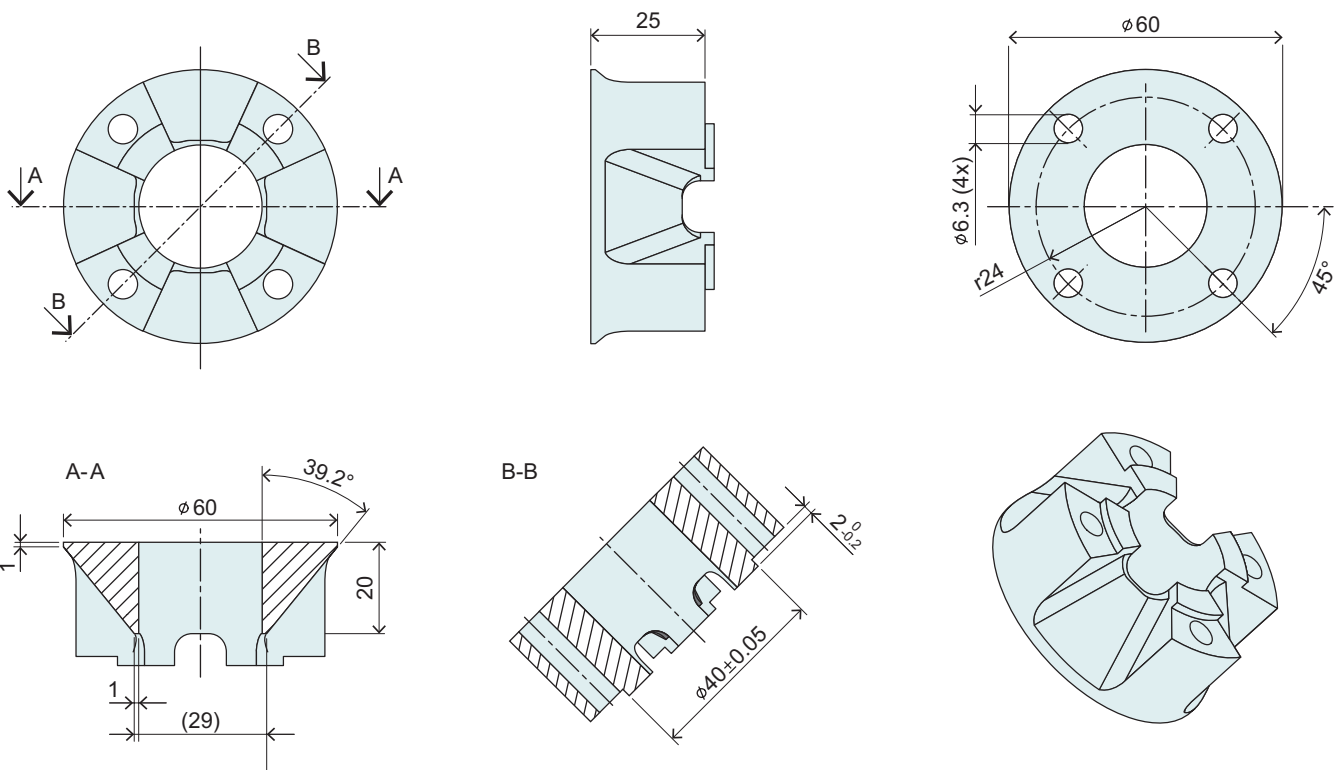
This type of bearing is made of solid plastic and is designed for use in wash-down applications for food production. Food residues can be removed without a trace.



PB02-37x24-P-WD

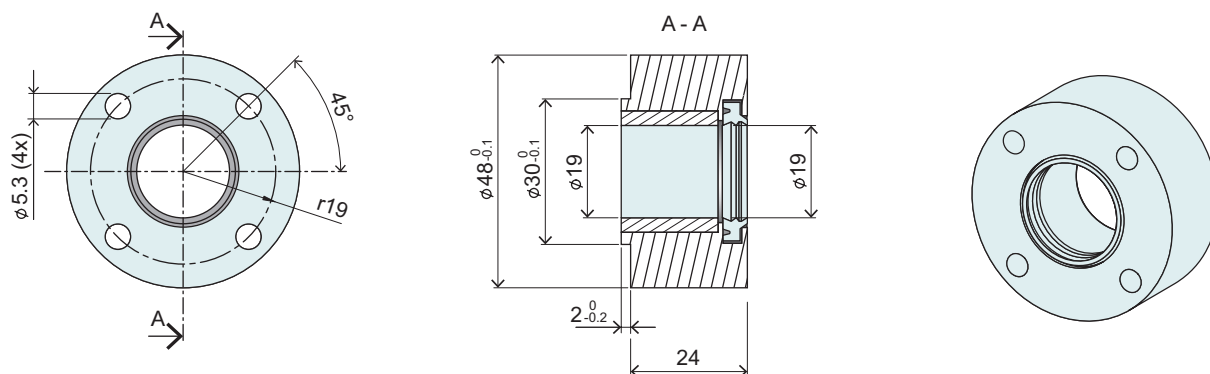
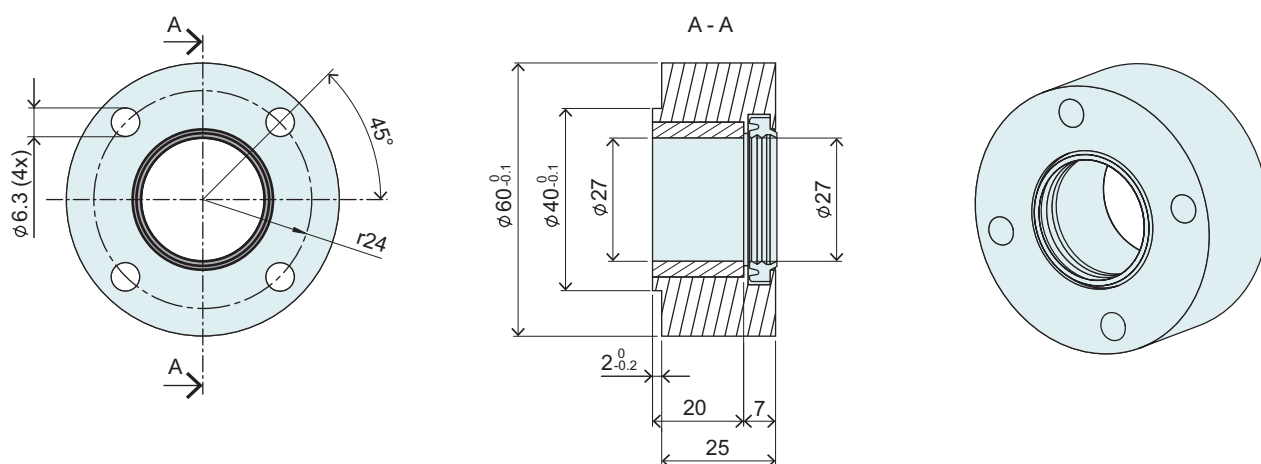
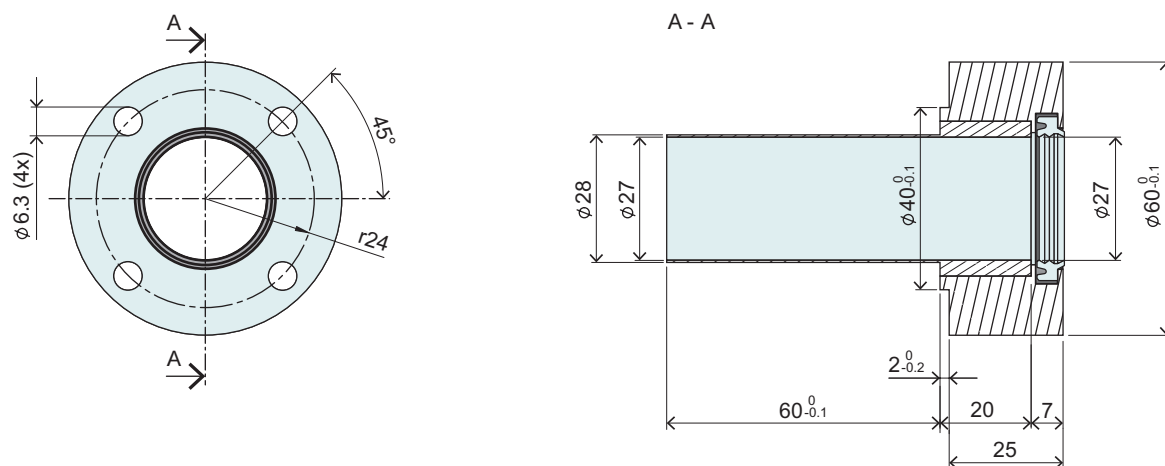


PB02-48x25-P-WD



ORDERING INFORMATION

Item	Description	Item-No.
PB02-37x24-P-WD	Plain Bearing for PS01-37x...-SSC (synthetical, FDA materials)	0150-3299
PB02-48x25-P-WD	Plain Bearing for PS01-48x...-SSC (synthetical, FDA materials)	0150-3271

PB01-37x24-P-SSC**PB01-48x25-P-SSC****PB01-48x25-80-P-SSC****ORDERING INFORMATION**

Item	Description	Item-No.
PB01-37x24-P-SSC	Plain Bearing for PS01-37x120...-SSC (synthetical, FDA materials)	0150-3290
PB01-48x25-P-SSC	Plain Bearing for PS01-48x240...-SSC (synthetical, FDA materials)	0150-3281
PB01-48x25-80-P-SSC	Plain Bearing for PS01-48x360...-SSC (synthetical, FDA materials)	0150-3413

Wipers

LinMot stators can be equipped with wipers as an option. Wipers increase maintenance intervals and allow simple relubrication using a grease gun with the integrated lubrication nipple. The wipers also keep grease and dirt off of the slider and protect the stator from contamination.



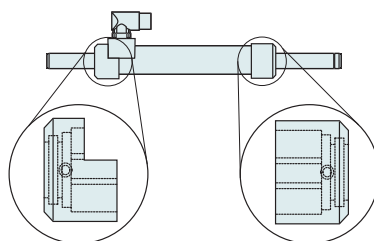
INSTALLATION

The wipers are slid onto the front or rear end of the stator and attached to the stator with two clamping screws.

The installation space required for the stator increases in length by 12 mm or 14 mm for each wiper.

Make sure that the end of the slider does not go past the wiper during operation.

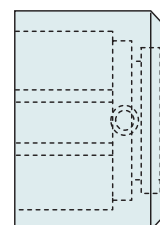
WIPERS



Rear
wiper

Front
wiper

MATERIAL

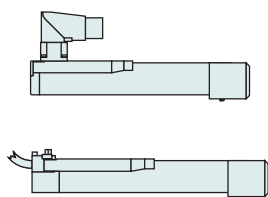


Housing: POM

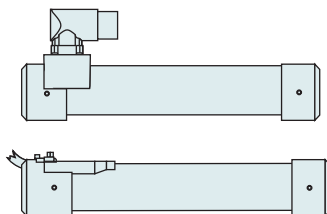


Wipers: H-PU

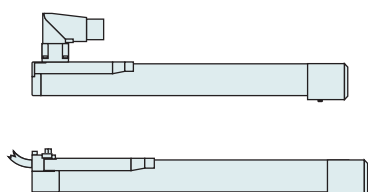
AVAILABLE WIPERS



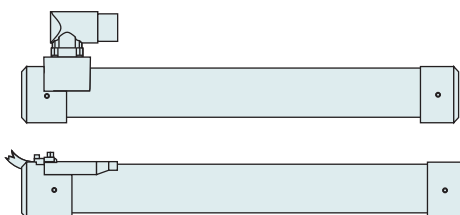
P01-23x80



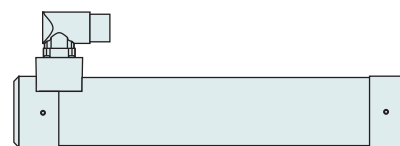
P01-37x120



P01-23x160

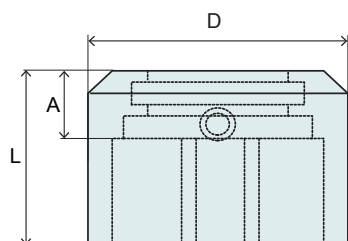


P01-37x240

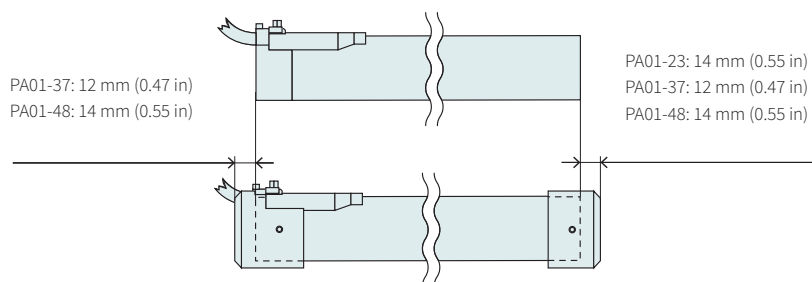


P01-48x240

DIMENSIONS AND ORDERING INFORMATION



Item	D	L	A	Weight
PA01-23	29 mm (1.14 in)	33 mm (1.30 in)	14 mm (0.55 in)	0.014 kg
PA01-37	45 mm (1.77 in)	32 mm (1.26 in)	12 mm (0.47 in)	0.028 kg
PA01-37R	45 mm (1.77 in)	37 mm (1.45 in)	12 mm (0.47 in)	0.026 kg
PA01-37R Cable	45 mm (1.77 in)	40 mm (1.57 in)	12 mm (0.47 in)	0.030 kg
PA01-48	58 mm (2.28 in)	32 mm (1.26 in)	14 mm (0.55 in)	0.056 kg
PA01-48R	58 mm (2.28 in)	38.5 mm (1.52 in)	14 mm (0.55 in)	0.050 kg



Item	Description	Item-No.
PA01-23/12-F-2	Wipers for PS01-23x... (front wiper)	0150-3293
PA01-37/19-F	Wipers for PS01-37x... (front wiper for high clearance sliders)	0150-3225
PA01-37/19-R	Wipers for PS01-37x... (-C rear wiper for high clearance sliders)	0150-3226
PA01-37/19-R cable	Wipers for PS01-37x... (cable rear wiper for high clearance sliders)	0150-3227
PA01-37/20-F	Wipers for PS01-37x... (front wiper)	0150-3126
PA01-37/20-R	Wipers for PS01-37x... (-C rear wiper)	0150-3201
PA01-37/20-R cable	Wipers for PS01-37x... (cable rear wiper)	0150-3221
PA01-48/27-F	Wipers for PS01-48x... (front wiper for high clearance sliders)	0150-3228
PA01-48/27-R	Wipers for PS01-48x... (-C rear wiper for high clearance sliders)	0150-3229
PA01-48/28-F	Wipers for PS01-48x... (front wiper)	0150-3127
PA01-48/28-R	Wipers for PS01-48x... (-C rear wiper)	0150-3202

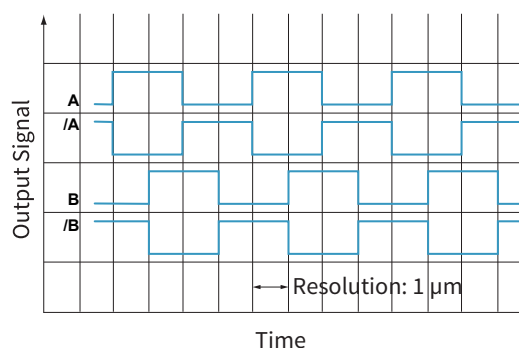
External Position Sensor

Non-contacting measuring position sensors, using magnets with integrated processing electronics and differential encoder outputs for the LinMot Servo Drives.

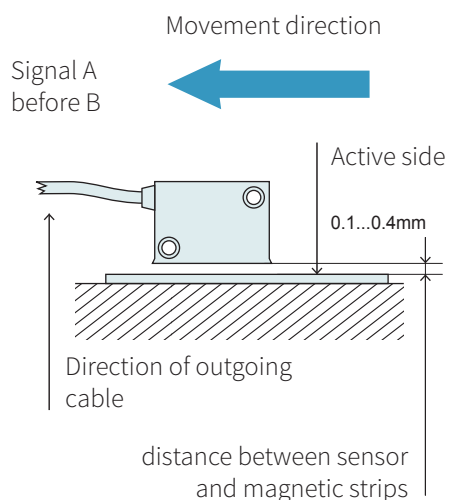
Together with the MB01-1000 magnetic band, the MS01/D position sensor is part of a high-resolution, robust, linear measurement system.

Features:

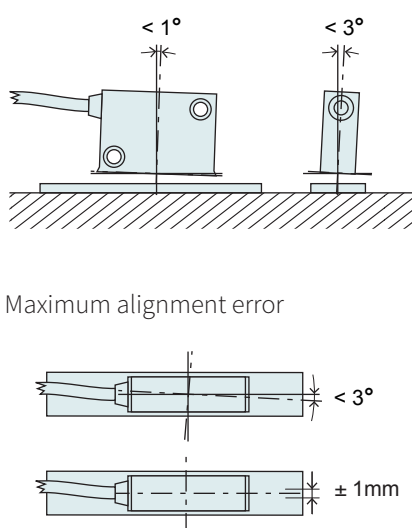
- » Simple installation, by sticking on the magnetic band
- » IP67 protection class, not sensitive to dust, moisture, or dirt
- » Status display with LEDs directly at the sensor head
- » Highest precision-
Resolution 0.001 mm
- System accuracy ± 0.01 mm
- » Allows high travel speeds of up to 3 m/s



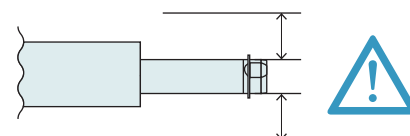
COUNTING DIRECTION



INSTALLATION



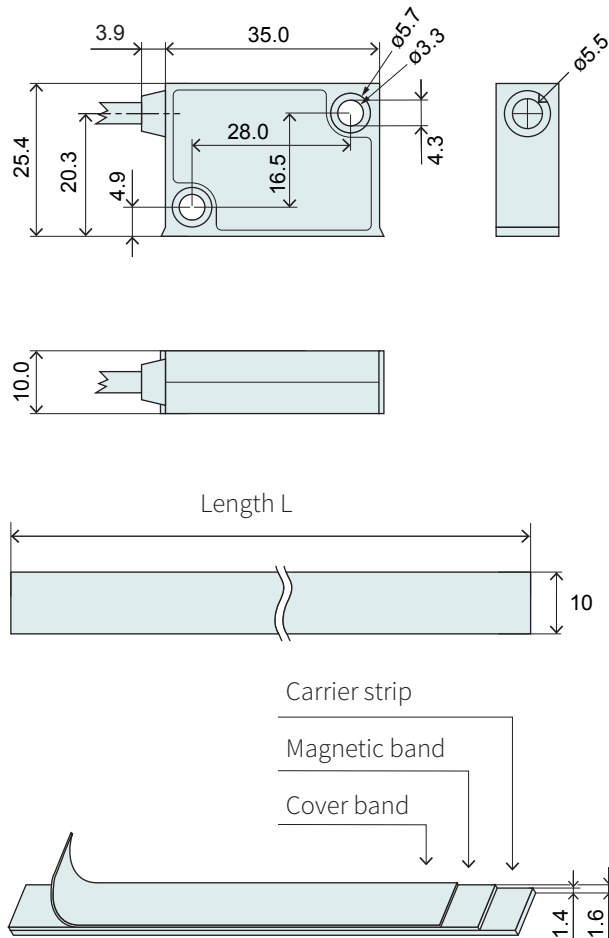
MINIMUM DISTANCE FROM SLIDER



In order to rule out influence of the magnetic LinMot slider on the position measurement, the following minimal distances to the magnetic strip should be observed:

Linear Motor:	Minimum distance:
P01-23...	30 mm
P01-37...	40 mm
P01-48...	60 mm
P10-54...	60 mm
P10-70...	50 mm

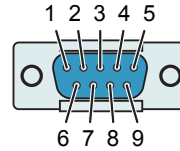
DIMENSIONS



Cable

Cable length	2 m, High Flex, PUR
Connector type	Dsub-9 (male)

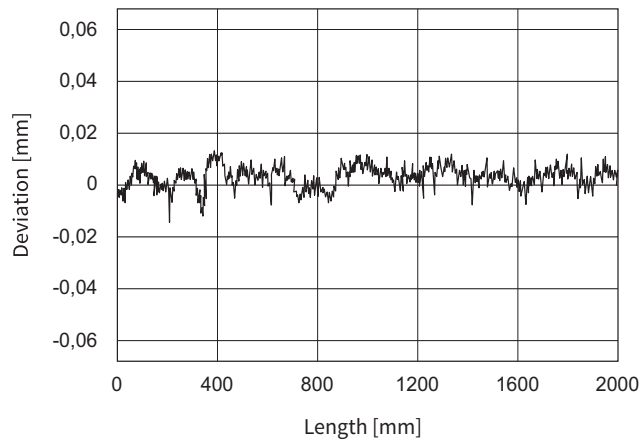
Connector wiring



Pin 1	+5VDC
Pin 2	Kanal /A
Pin 3	Kanal /B
Pin 5	GND
Pin 6	Kanal A
Pin 7	Kanal B
Pin 4, 8, 9	n.c.

Technical data magnetic band

Order length	maximal stroke +3.0 cm
Width	10 mm
Carrier material	Spring steel band
Precision class	$\pm 10 \mu\text{m/m}$
Temperature coefficient	$(11 \pm 1) \times 10^{-6} / ^\circ\text{K}$
Storage temperature range	-20...70°C
Storage temperature range	-40...70°C
Protection class	IP 67
Mounting	Self adhesive magnetic band



ORDERING INFORMATION

Item	Description	Item-No.
MS01-1/D	Linear Encoder 1μm, A/B(for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D-Encoder	Encoder Cable, High Flex (Length in m)	0150-3166
KS025-D15/D-Encoder	Encoder Cable, High Flex (Length in m)	0150-3168

External Position Sensor

MS01-1/D-SSI

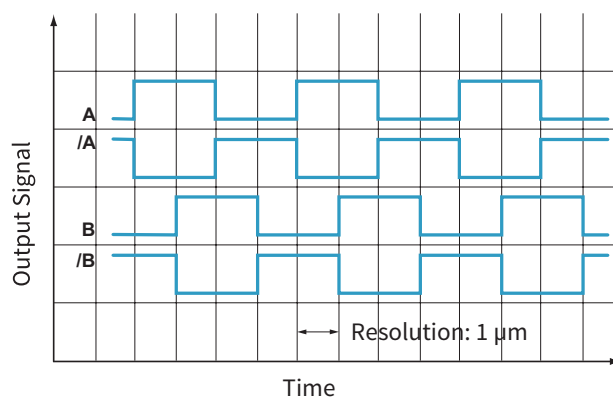
Non-contacting measuring position sensors, using magnets with integrated processing electronics for servo drives series C and E. The absolute position value can be read from an upstream control unit with a resolution of 5mm via encoder interface. In addition, an incremental interface with quadrature signals in various resolutions is available as an option.

Together with the MB01-1000-ABS magnetic band, the MS01/D-SSI position sensor is part of a high-resolution, robust, linear measurement system.



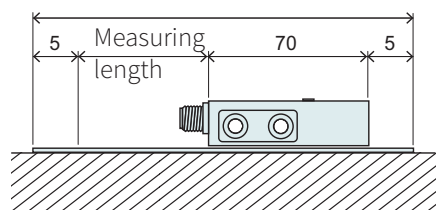
Features:

- » Max. resolution::
5 µm absolute, 1 µm incremental
- » Repeatability 0.005 mm
- » Output circuit SSI, RS485 (absolute),
LD (incremental)
- » Reading distance/Strip max. 1.3 mm
- » Max. measuring length 10.24 m
- » Status-LEDs for Diagnosis
- » IP67 protection class, not sensitive to
dust, moisture, or dirt



STRIP LENGTH AND COUNTING DIRECTION

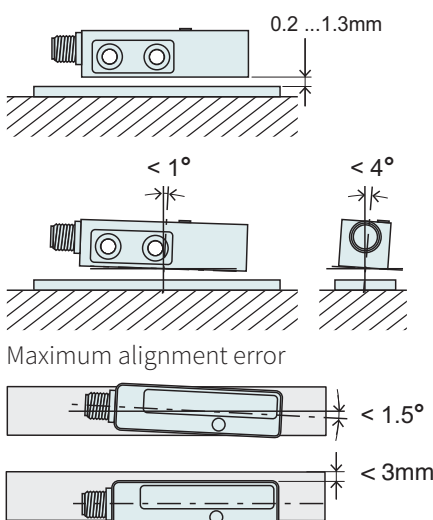
required strip length =
Measuring length + 80mm (min. 200 mm)



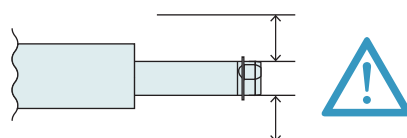
Print on
strip Print on
Sensor



INSTALLATION



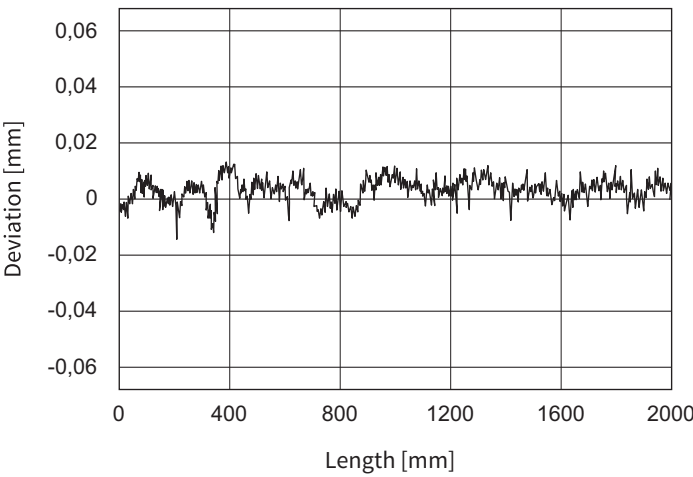
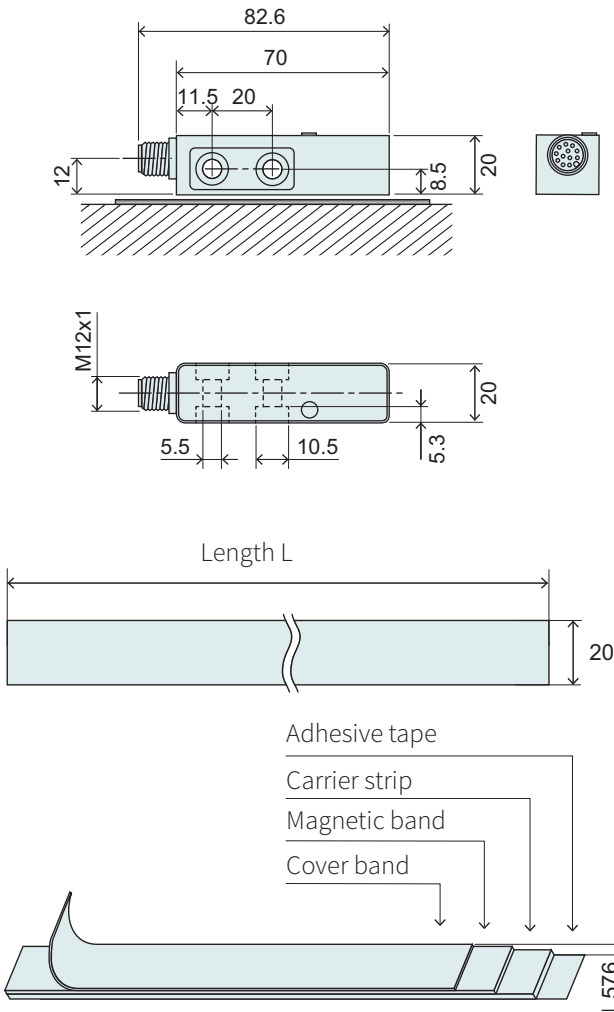
MINIMUM DISTANCE FROM SLIDER



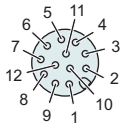
In order to rule out influence of the magnetic LinMot slider on the position measurement, the following minimal distances to the magnetic strip should be observed:

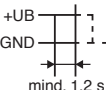
Linear Motor:	Minimum distance:
P01-23...	30 mm
P01-37...	40 mm
P01-48...	60 mm
P10-54...	60 mm
P10-70...	50 mm

DIMENSIONS



Connector wiring



Pin 1	nc		
Pin 2	D+		
Pin 3	D-		
Pin 4	T-		
Pin 5	+UB		
Pin 6	/A		
Pin 7	A		
Pin 8	/B		
Pin 9	B		
Pin 10	Config	GND	The sensor is in the SSI mode.
		+UB (while encoder supply is being turned on)	The sensor is in the boot loader mode for the first 10s (installing new firm- ware is enabled), then it changes over to the service mode.
			Setting of the position value to the calibration value (only if the sensor is in the SSI mode)
Pin 11	T+		
Pin 12	OV		

Technical data magnetic band	
Order length	Measuring length +80 mm
Width	20 mm
Carrier material	Spring steel band
Precision class	$\pm 50 \mu\text{m}$ at 20°C
Temperature coefficient	$(11 \pm 1) \times 10^{-6} / ^\circ\text{K}$
Storage temperature range	-20...70°C
Storage temperature range	-40...70°C
Protection class	IP 67
Mounting	Self adhesive magnetic band

ORDERING INFORMATION

Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1 μm , A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip, 1 mm Pitch, per cm	0150-2096
EC01-ABS/ENC-12-S	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3616

ACCESSORIES

LINEAR MOTORS P10



- ✓ Motor flanges for mounting LinMot motors
- ✓ Fans to increase effectiveness of the linear motor
- ✓ Complete installation kits for replacing slider bearings
- ✓ External position sensor for high-precision tasks

ACCESSORIES LINEAR MOTORS P10

Motor Flanges	1063
Slider Mounting	1072
Bearing kits	1074
Lubricant reservoirs	1077
External Position Sensor	1078

Motor Flanges

LinMot PF motor flanges enable easy mounting of linear motors. The clamping plate design enables quick assembly and disassembly of the linear motors without disassembling the flange.

A matching flange of the correct length is available for every family of linear motors. This not only ensures secure mechanical mounting, but also guarantees optimal cooling of the linear motor.



Flange



Flange with Fluid-Cooling

STATOR AND FLANGE MOUNTING

The same flange is used for stators with a cable output or a plug housing. The stator is secured in the flanges by means of clamping screws, so that the stator is clamped over a large surface area.

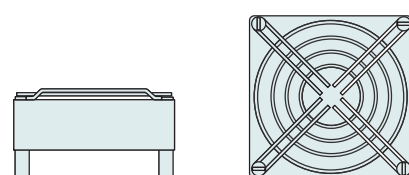
Clamping over a large surface area, practically the entire length of the stator, and the cooling fins on the flange, ensure optimal cooling of the linear motor.

Depending on the application and available space, the flanges can be installed horizontally with screws or vertically by means of the T-slots provided.

FLANGE WITH LIQUID COOLING

The heat losses generated in the motor are dissipated through the liquid cooling system. When the motor is operated with liquid cooling, the continuous rated power increases to a multiple of the self-cooled level.

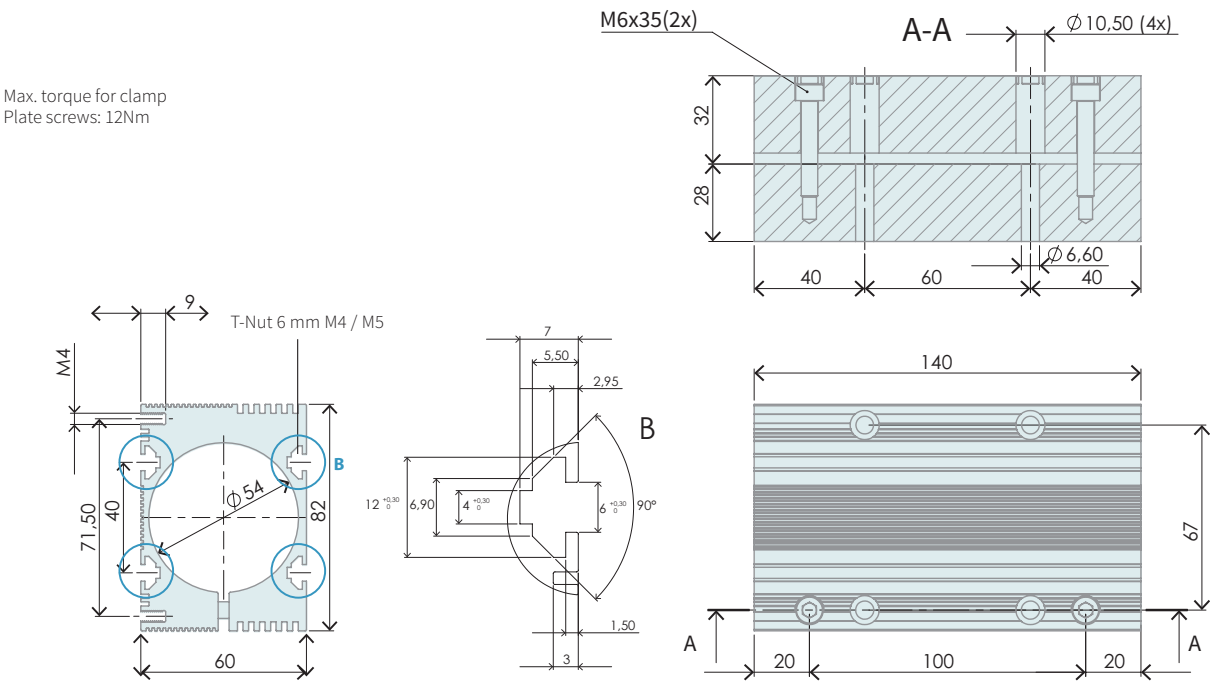
FAN OPTION



The optional fan can nearly double the effective force of the linear motor.

PF10-54x140

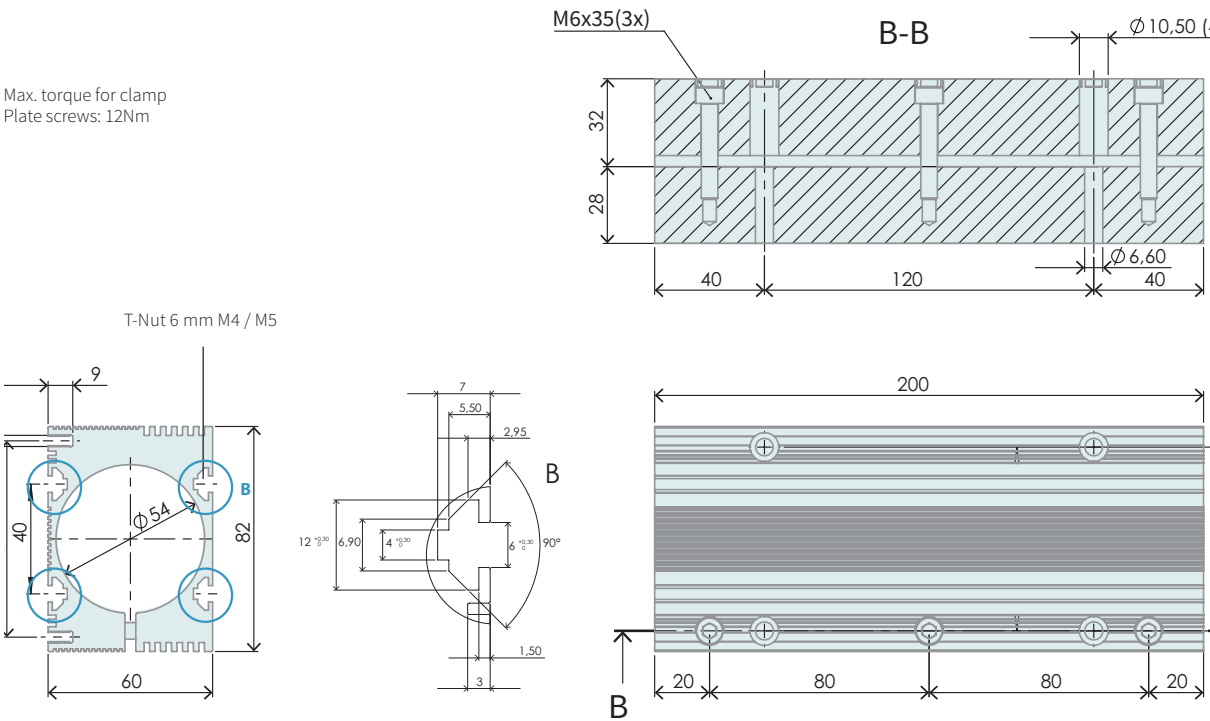
Max. torque for clamp
Plate screws: 12Nm



Item	Description	Stator type	Weight [g]	Item-No.
PF10-54x140	Flange for PS10-54x120	PS10-70x400	781	0150-2733

PF10-54x200

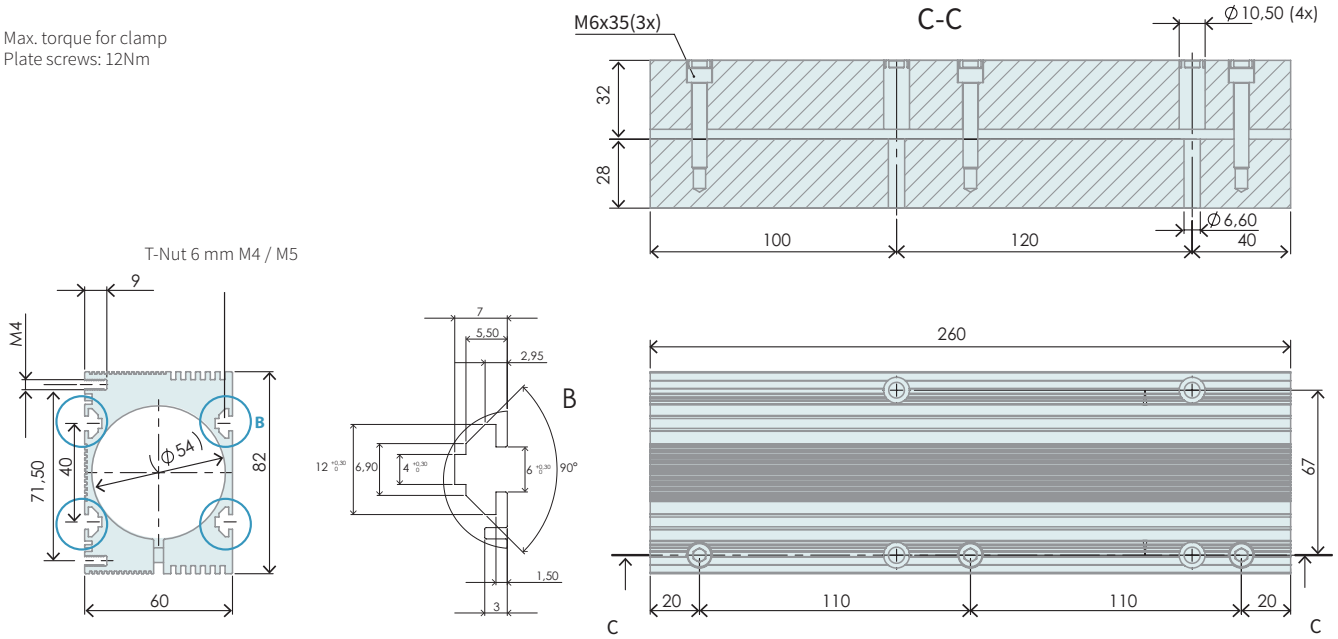
Max. torque for clamp
Plate screws: 12Nm



Item	Description	Stator type	Weight [g]	Item-No.
PF10-54x200	Flange for PS10-54x180	PS10-54x180	1132	0150-2734

PF10-54x260

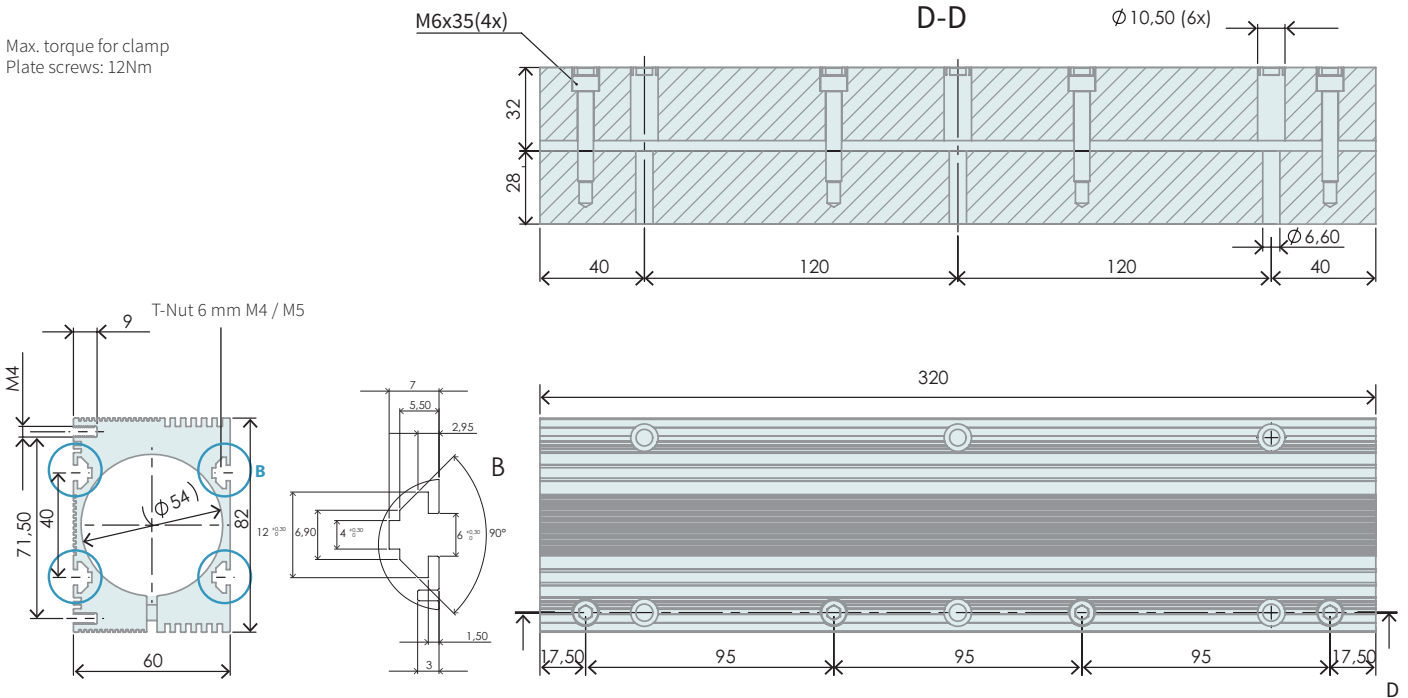
Max. torque for clamp
Plate screws: 12Nm



Item	Description	Stator type	Weight [g]	Item-No.
PF10-54x260	Flange for PS10-54x240	PS10-54x240	1475	0150-2735

PF10-54x320

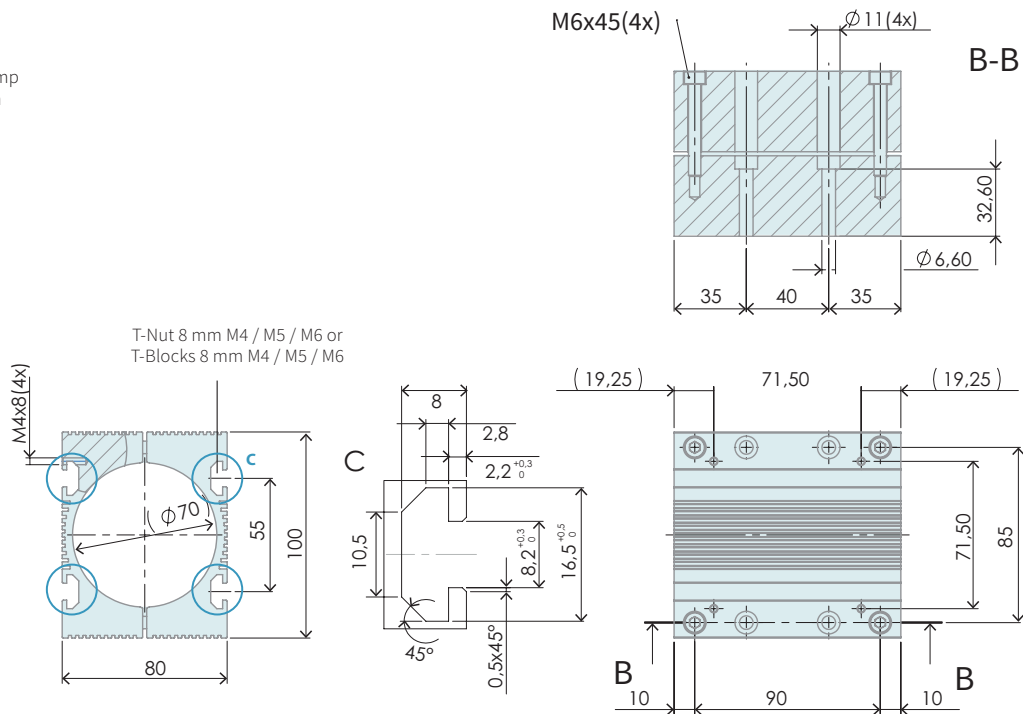
Max. torque for clamp
Plate screws: 12Nm



Item	Description	Stator type	Weight [g]	Item-No.
PF10-54x320	Flange for PS10-54x300	PS10-54x300	1809	0150-2736

PF10-70x110

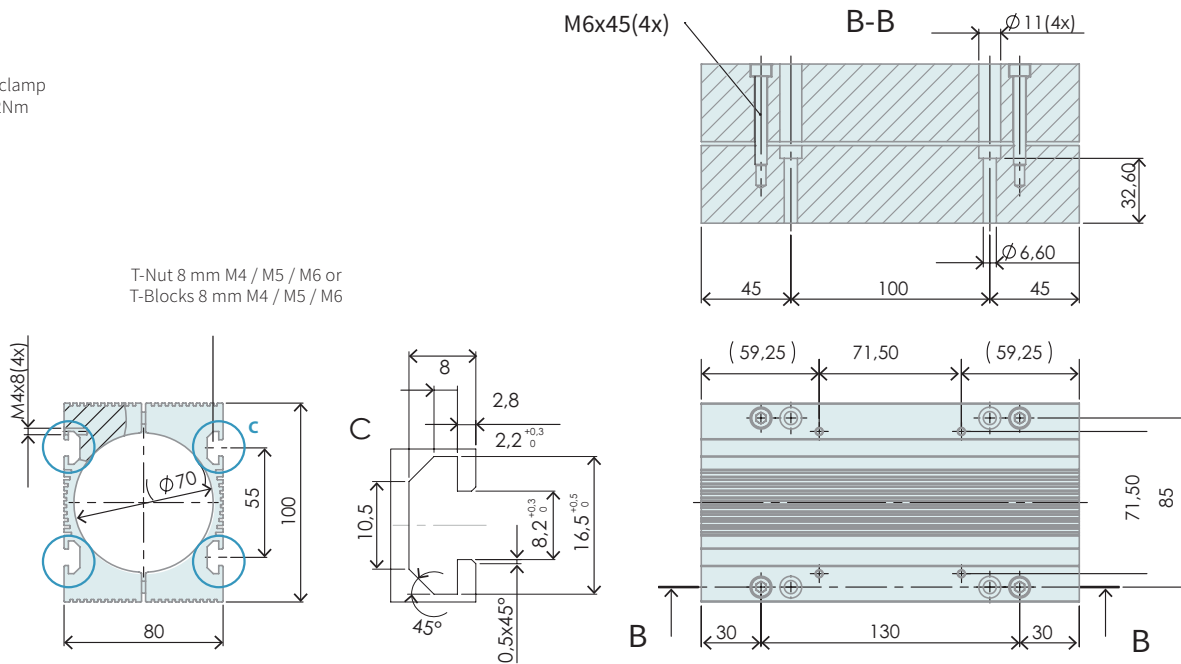
Max. torque for clamp
Plate screws: 12Nm



Item	Description	Stator type	Weight [g]	Item-No.
PF10-70x110	Flange for PS10-70x80	PS10-70x80	1015	0150-2272

PF10-70x190

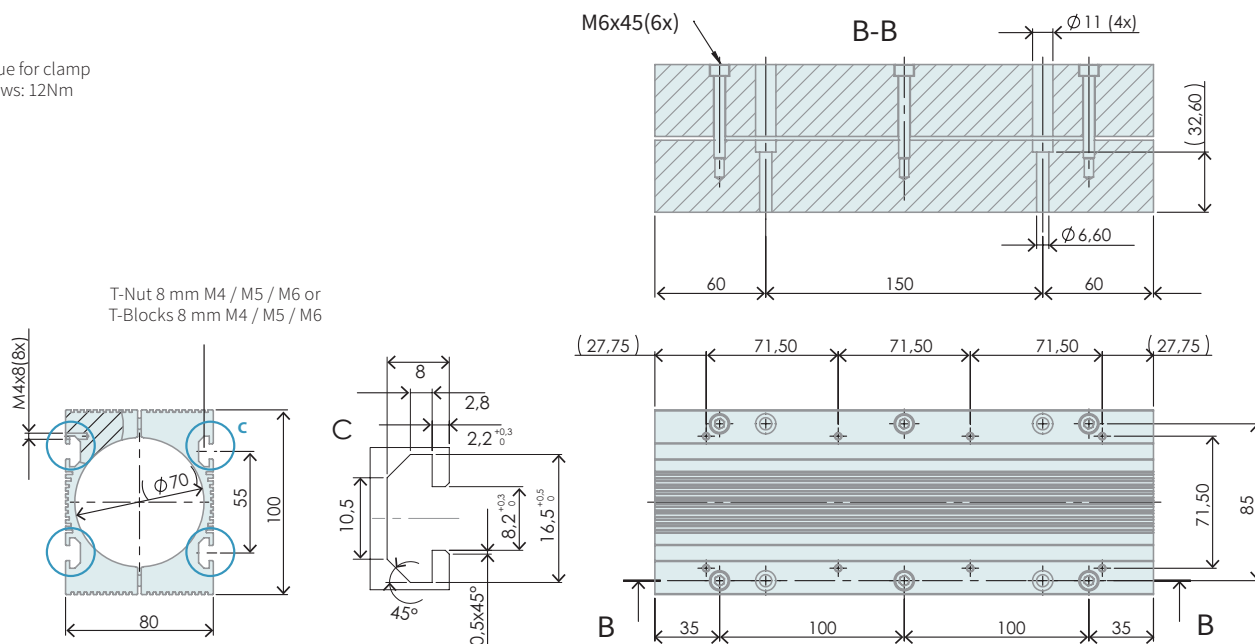
Max. torque for clamp
Plate screws: 12Nm



Item	Description	Stator type	Weight [g]	Item-No.
PF10-70x190	Flange for PS10-70x160	PS10-70x160	1776	0150-2273

PF10-70x270

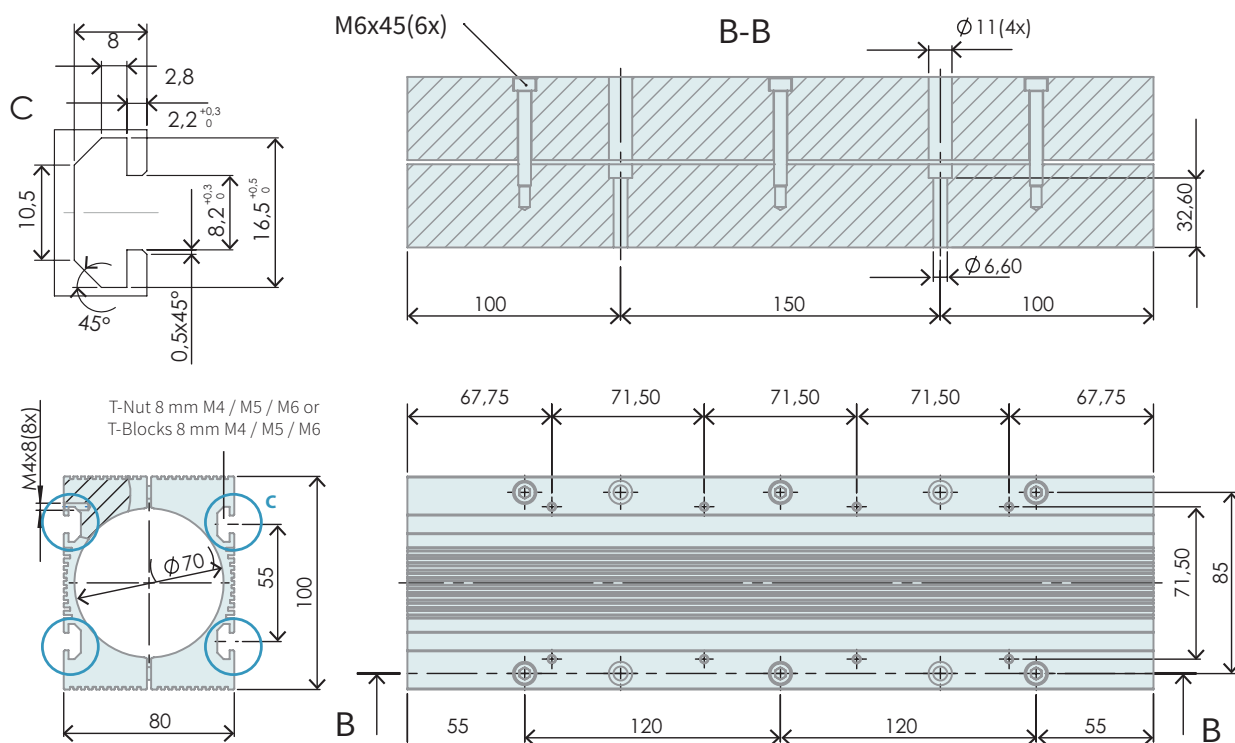
Max. torque for clamp
Plate screws: 12Nm



Item	Description	Stator type	Weight [g]	Item-No.
PF10-70x270	Flange for PS10-70x240	PS10-70x240	2550	0150-2274

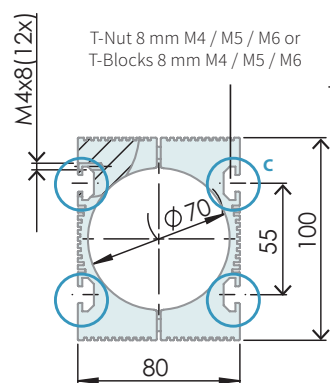
PF10-70x350

Max. torque for clamp
Plate screws: 12Nm



Item	Description	Stator type	Weight [g]	Item-No.
PF10-70x350	Flange for PS10-70x320	PS10-70x320	3311	0150-2290

Max. torque for clamp
Plate screws: 12Nm



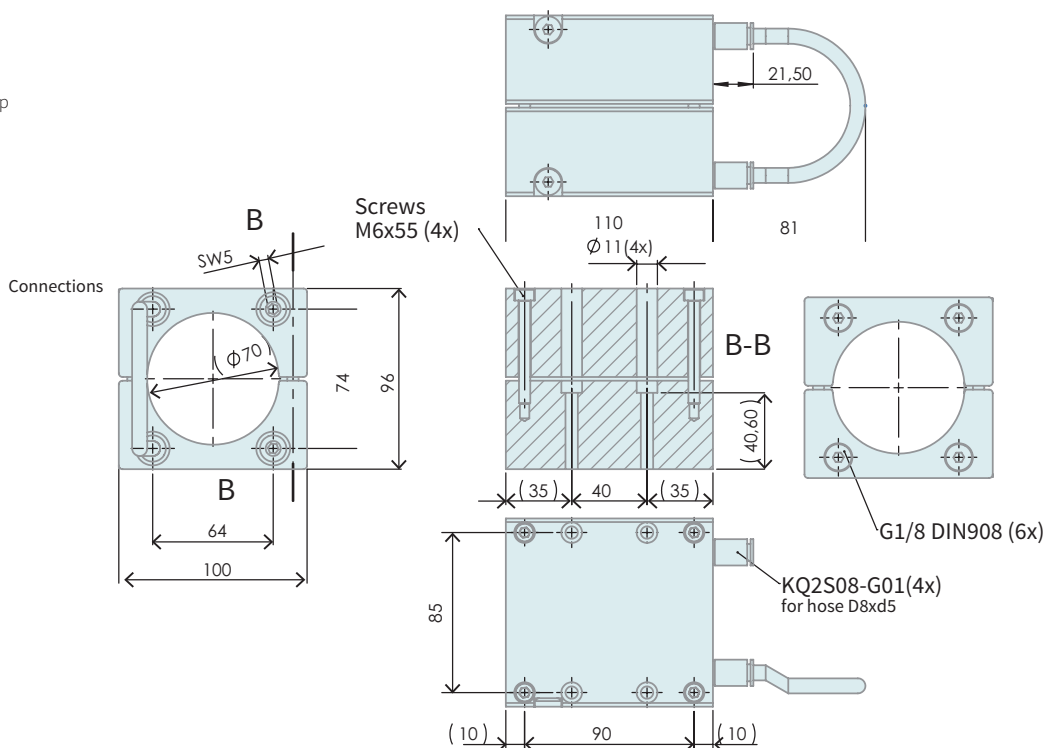
OPTIONAL FAN FOR PF10-70



1068 ACCESSORIES

PF10-70x110-FC

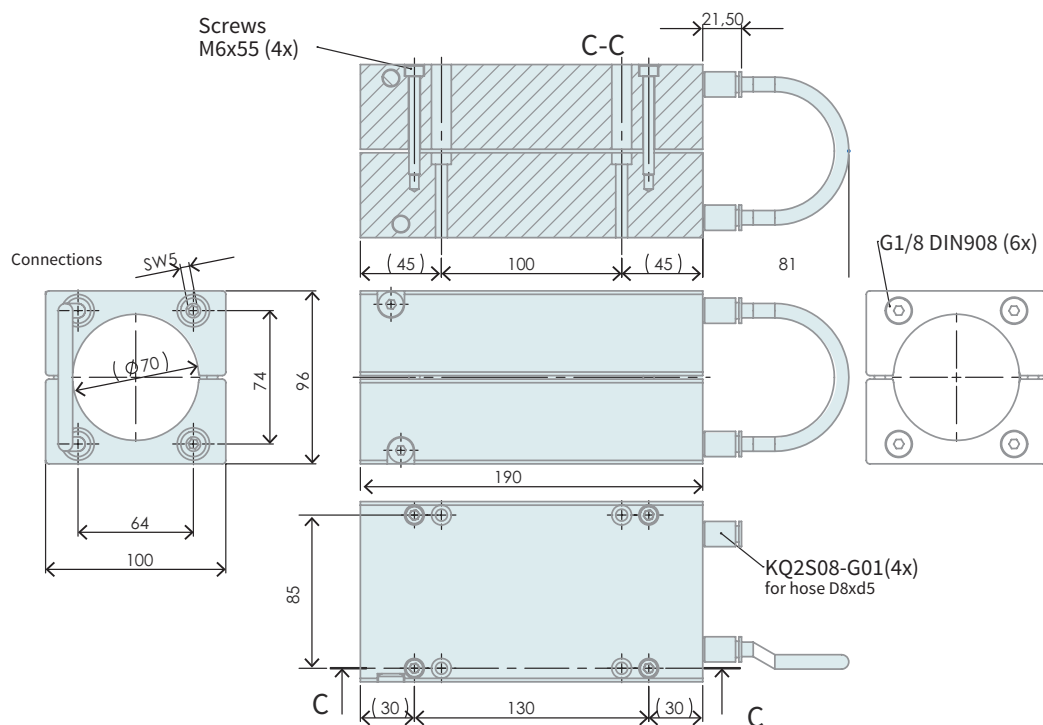
Max. torque for clamp
Plate screws: 12Nm



Item	Description	Stator type	Weight [g]	Item-No.
PF10-70x110-FC	Flange for PS10-70x80 fluid cooling	PS10-70x80	1641	0150-2291

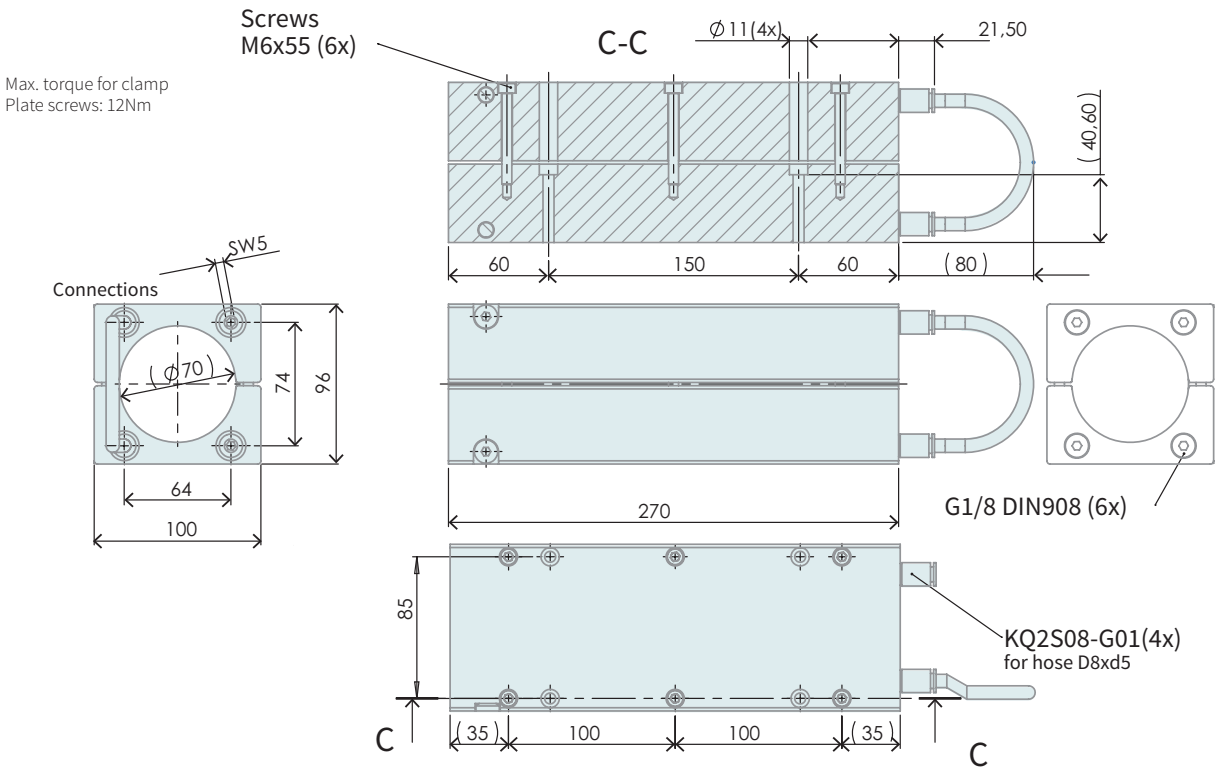
PF10-70x190-FC

Max. torque for clamp
Plate screws: 12Nm



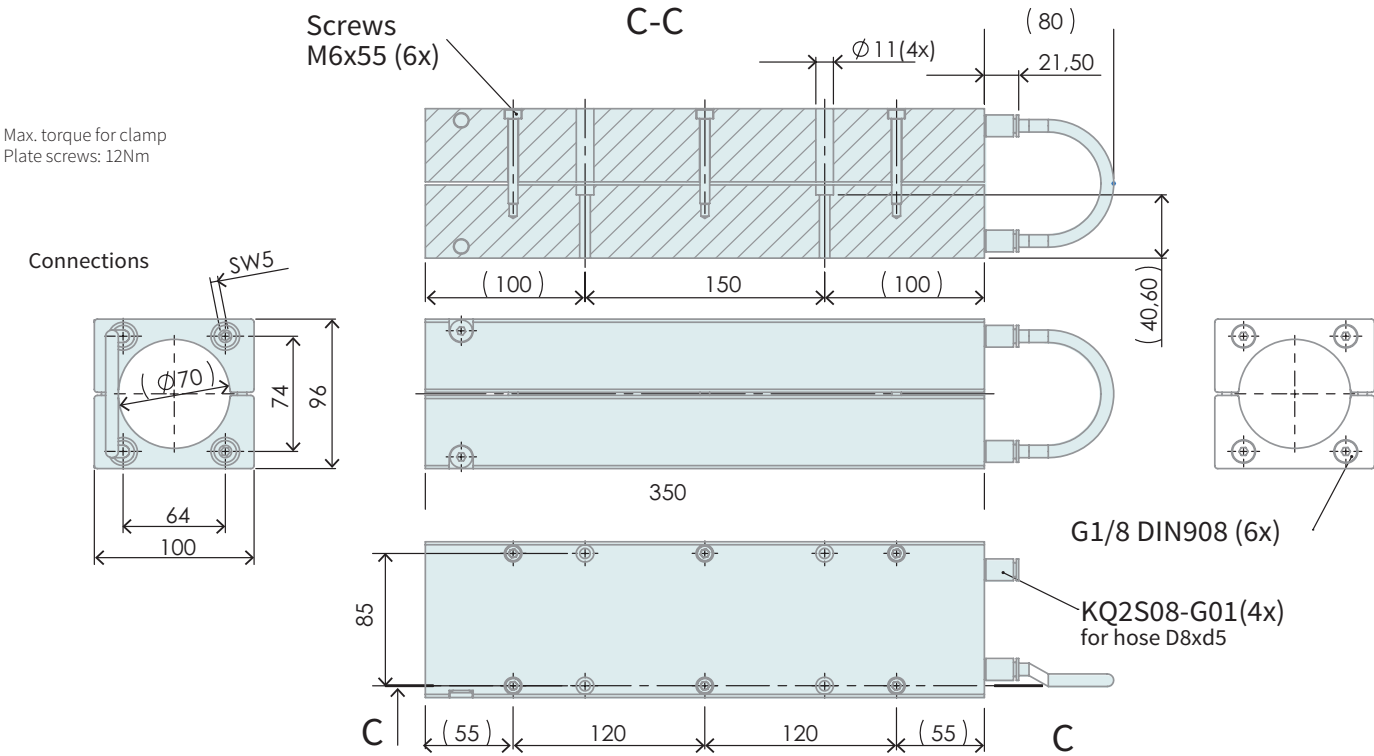
Item	Description	Stator type	Weight [g]	Item-No.
PF10-70x190-FC	Flange for PS10-70x160 fluid cooling	PS10-70x160	2825	0150-2292

PF10-70x270-FC



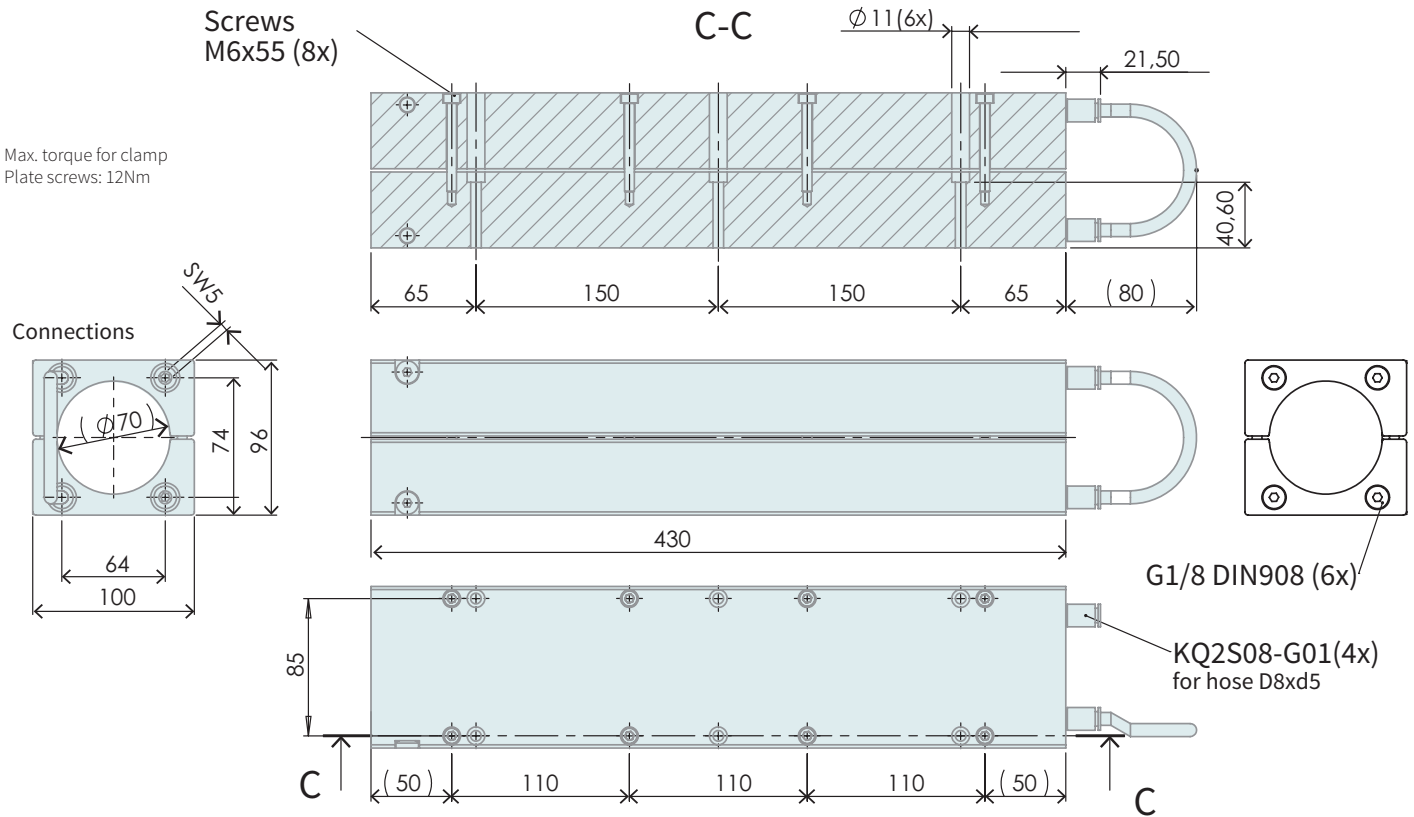
Item	Description	Stator type	Weight [g]	Item-No.
PF10-70x270-FC	Flange for PS10-70x240 fluid cooling	PS10-70x240	4000	0150-2293

PF10-70x350-FC



Item	Description	Stator type	Weight [g]	Item-No.
PF10-70x350-FC	Flange for PS10-70x320 fluid cooling	PS10-70x320	5185	0150-2294

PF10-70x430-FC



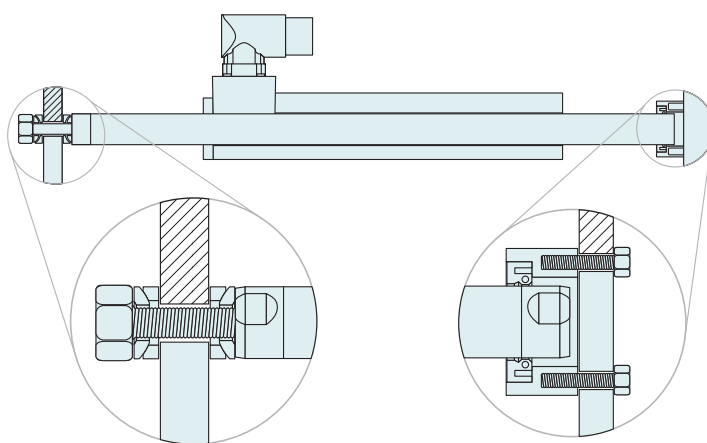
Item	Description	Stator type	Weight [g]	Item-No.
PF10-70x430-FC	Flange for PS10-70x400 fluid cooling	PS10-70x400	6325	0150-2295

Slider Mounting

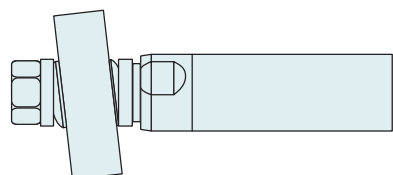
Depending on the application, LinMot linear motors can be operated with a "moving Slider" or "moving stator." Applications with short stroke ranges are preferably implemented with moving sliders; applications with long strokes are better with a moving stator. In both cases, LinMot recommends the use of special mounting kits for mounting the Slider, in order to avoid overdetermining the mount.

In moving Slider applications, the stator is mounted, and the Slider is connected to a load that is guided by a linear guide. In order to avoid alignment errors, the Slider is attached to the load or guide using fixed bearings, each consisting of two rounded washers and two bevel washers.

In moving stator applications, the Slider is mounted and the stator is attached to a linear guide, together with the load. In order to avoid overdetermining the Slider bearing, one end of the Slider is mounted on a fixed bearing, and the other on a floating bearing.

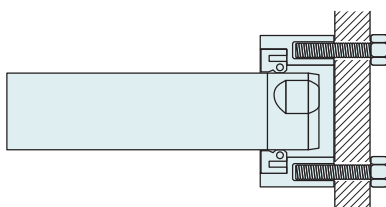


FIXED BEARING






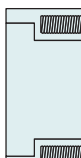
The fixed bearing consists of two rounded washers and two bevel washers. It compensates for angular and axial deflection.

FLOATING BEARING

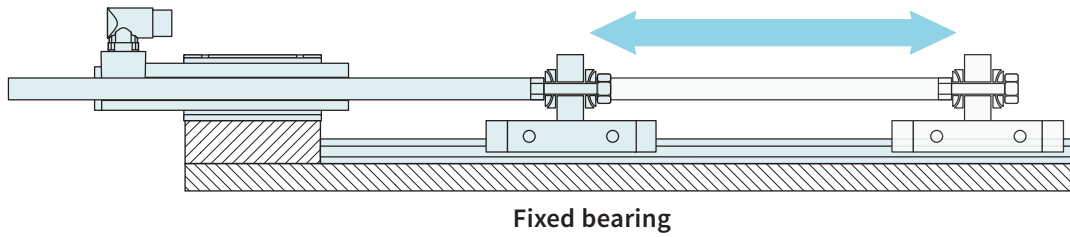


The Slider is mounted in a rubber ring as a floating bearing. The floating bearing compensates for angular and axial displacement and length tolerance.

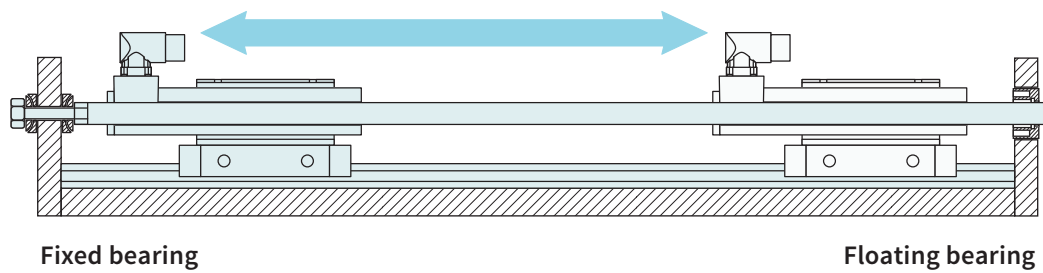
MATERIAL

-   Rounded and bevel washers:
Stainless steel, case-hardened
steel or nickel plated
-  Bearing:
NBR
(Nitrile-Butadiene-Rubber with
DIN17223 spring steel)
-  Housing:
Stainless steel 1.4305

MOVING SLIDER



MOVING STATOR

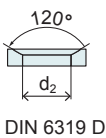


DIMENSIONS AND ORDERING INFORMATION

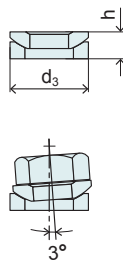
Fixed bearing



DIN 6319 C

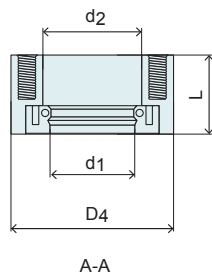
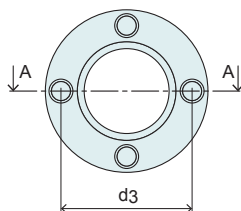


DIN 6319 D



Item	Material	Slider	Thread	d1	d2	d3	h
PLF01-28	Steel case hardened	27/28 mm	M10	10.5 mm (0.41 in)	12 mm (0.47 in)	21 mm (0.83 in)	6.5 mm (0.26 in)
PLF01-28-SS	Stainless steel 1.4301						

Floating bearing



A-A

Item	Slider	Thread	d1	d2	d3	d4	L
PLL01-28	28 mm	M5	28 mm (1.10 in)	32 mm (1.26 in)	40 mm (1.57 in)	48 mm (1.89 in)	20 mm (0.79 in)

Item	Description	Item-No.
PLF01-28	Fixed End Washer Set for 27/28 mm sliders	0150-3087
PLF01-28-SS	Fixed End Washer Set for 27/28 mm sliders, stainless steel	0150-3297
PLL01-28	Floating bearing for PL01-28 slider, Mat. 1.4305 / AISI 303	0150-3094
PLM01-28-MK	Mounting kit for PL01-28 slider	0150-3095

Bearing kits

Linear motors in the P10 model series are used under challenging conditions. For fast, uncomplicated maintenance, these types of motors are equipped with replaceable slider bearings. The integrated sliding bearings are easy to replace in a few manual steps.



COMPLETE BEARING KIT

Bearing kits for P10 motors consist of plastic bearing sleeves that are installed over the entire length of the stator. For the larger P10-70 motors, these sliding bearings are already installed in a complete stainless steel tube.

In addition to the bearings themselves, each installation kit contains both stator end pieces (front/rear) with integrated wipers. The bearing is thus protected from external contamination.

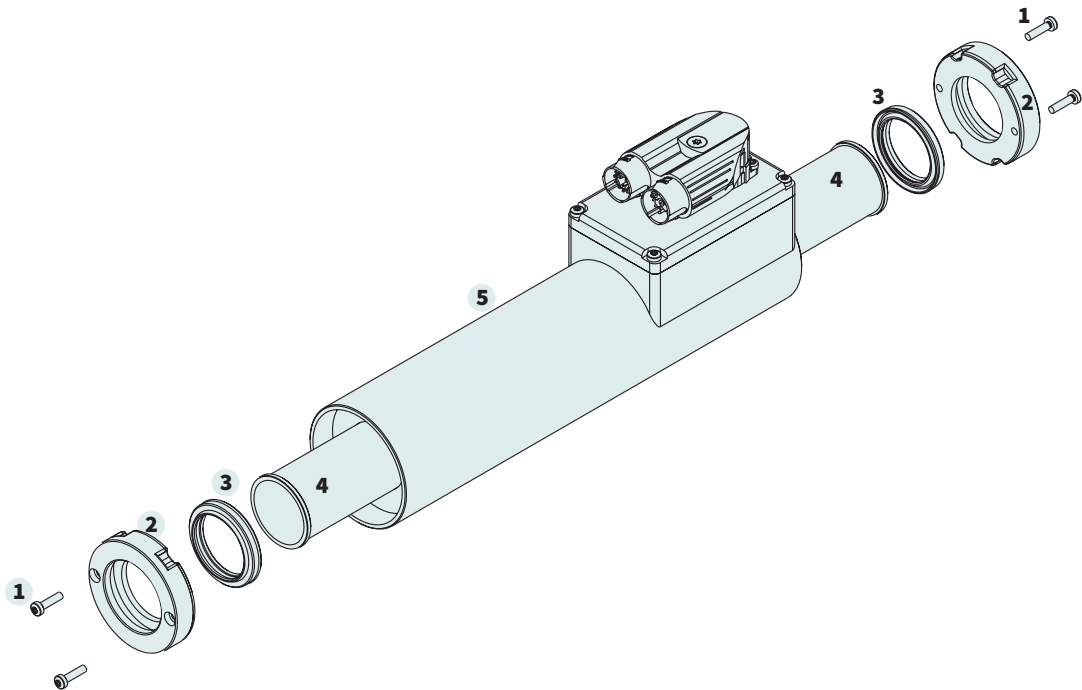


Bearing kit PB10-54



Bearing kit PB10-70

PB10-54

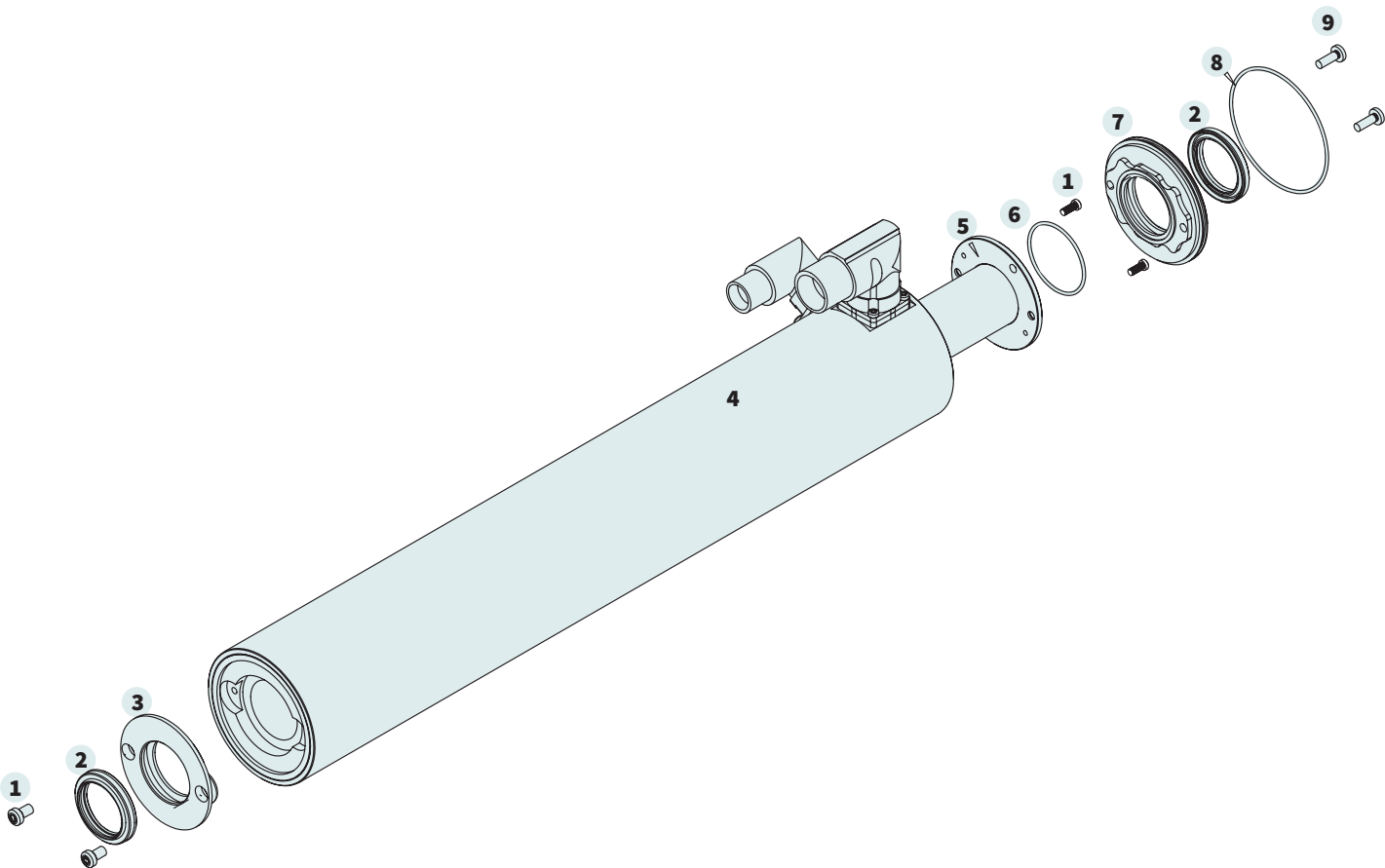


PARTS LIST	
Pos	Description
1	Pan head screw stainless steel
2	Stator end piece
3	Wiper
4	Bearing bushing
5	Stator

ORDERING INFORMATION

Item	Description	Item-No.
PB10-54x120-L	Bearing kit for PS10-54x120	0150-3671
PB10-54x180-L	Bearing kit for PS10-54x180	0150-3672
PB10-54x240-L	Bearing kit for PS10-54x240	0150-3673
PB10-54x300-L	Bearing kit for PS10-54x300	0150-3674

PB10-70



PARTS LIST	
Pos	Description
1	Pan head screw stainless steel
2	Wipers
3	Stator end piece front
4	Stator
5	Bearing tube
6	O-Ring 33 x 1.5 mm ISO 3601
7	Stator end piece rear
8	O-Ring 60 x 1.5 mm ISO 3601
9	Pan head screw stainless steel

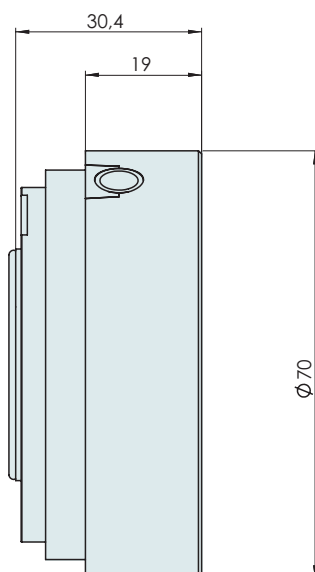
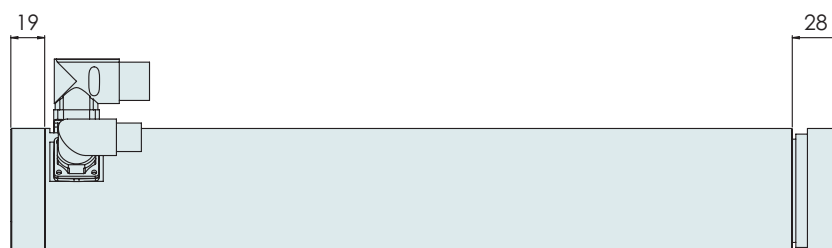
ORDERING INFORMATION

Item	Description	Item-No.
PB10-70x80-L	Bearing kit for PS10-70x80	0150-3431
PB10-70x160-L	Bearing kit for PS10-70x160	0150-3432
PB10-70x240-L	Bearing kit for PS10-70x240	0150-3433
PB10-70x320-L	Bearing kit for PS10-70x320	0150-3434
PB10-70x400-L	Bearing kit for PS10-70x400	0150-3435

Lubricant reservoirs

LinMot stators in the P10-70 family can be equipped with grease reservoirs as an option. When grease reservoirs are used, lubrication can be regulated optimally. Only the amount of lubricant that is necessary is released. This makes maintenance easier and extends maintenance intervals. The integrated wipers hold the grease in the stator and thus prevent contamination from the outside.

The grease reservoirs are screwed onto the front or rear end of the stator. Depending on the side of the stator, the installation space required for the stator increases in length by 19 mm (rear) or 28 mm (front).



Material:
Ryton

ORDERING INFORMATION

Item	Description	Item-No.
PA10-70/28	Lubricant reservoirs for PS10-70	0150-3543

External Position Sensor MS01-1/D

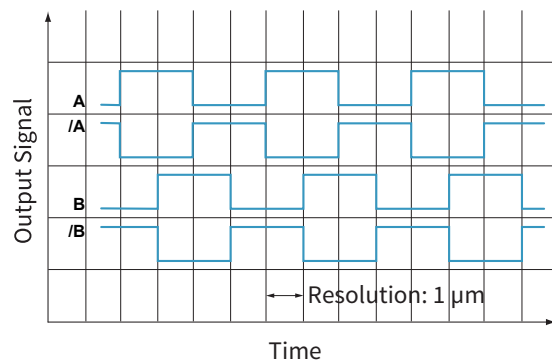
Non-contacting measuring position sensors, using magnets with integrated processing electronics and differential encoder outputs for the LinMot Servo Drives.

Together with the MB01-1000 magnetic band, the MS01/D position sensor is part of a high-resolution, robust, linear measurement system.

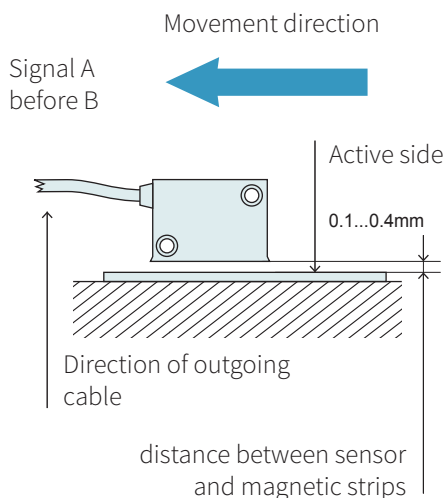


Features:

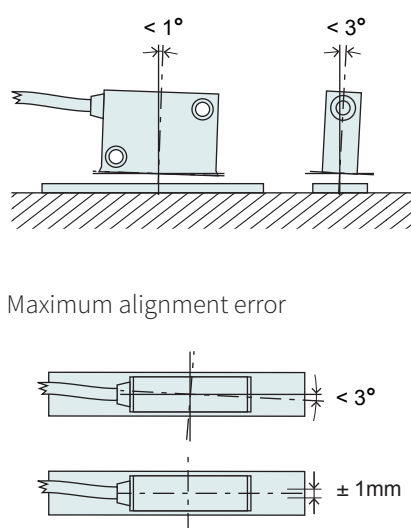
- » Simple installation, by sticking on the magnetic band
- » IP67 protection class, not sensitive to dust, moisture, or dirt
- » Status display with LEDs directly at the sensor head
- » Highest precision-
Resolution 0.001 mm
- System accuracy ± 0.01 mm
- » Allows high travel speeds of up to 3 m/s



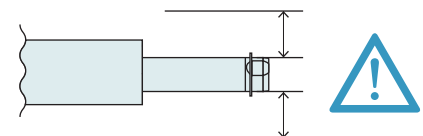
COUNTING DIRECTION



INSTALLATION



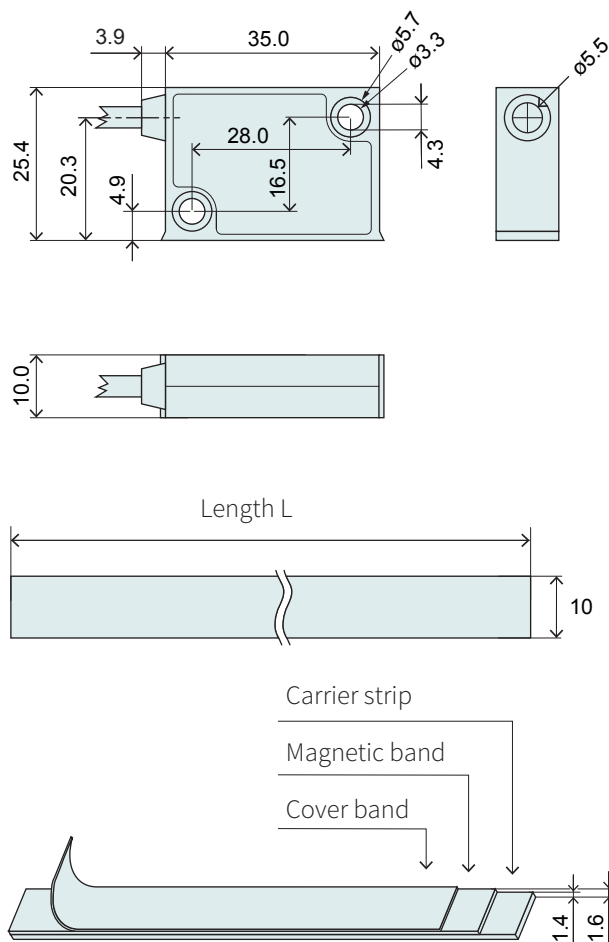
MINIMUM DISTANCE FROM SLIDER



In order to rule out influence of the magnetic LinMot slider on the position measurement, the following minimal distances to the magnetic strip should be observed:

Linear Motor:	Minimum distance:
P01-23...	30 mm
P01-37...	40 mm
P01-48...	60 mm
P10-54...	60 mm
P10-70...	50 mm

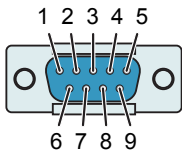
DIMENSIONS



Cable

Cable length	2 m, High Flex, PUR
Connector type	Dsub-9 (male)

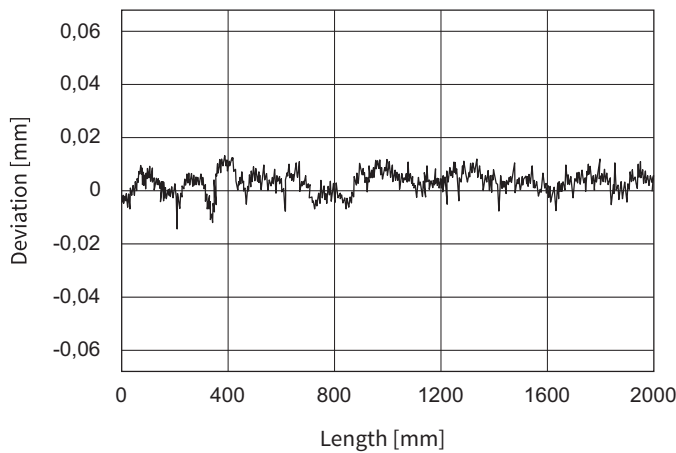
Connector wiring



Pin 1	+5VDC
Pin 2	Kanal A
Pin 3	Kanal B
Pin 5	GND
Pin 6	Kanal A
Pin 7	Kanal B
Pin 4, 8, 9	n.c.

Technical data magnetic band

Order length	maximal stroke +3.0 cm
Width	10 mm
Carrier material	Spring steel band
Precision class	$\pm 10 \mu\text{m/m}$
Temperature coefficient	$(11 \pm 1) \times 10^{-6} / ^\circ\text{K}$
Storage temperature range	-20...70°C
Storage temperature range	-40...70°C
Protection class	IP 67
Mounting	Self adhesive magnetic band



ORDERING INFORMATION

Item	Description	Item-No.
MS01-1/D	Linear Encoder 1μm, A/B(for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D/D15-Encoder	Encoder Cable, High Flex (Length in m)	0150-3168

External Position Sensor

MS01-1/D-SSI

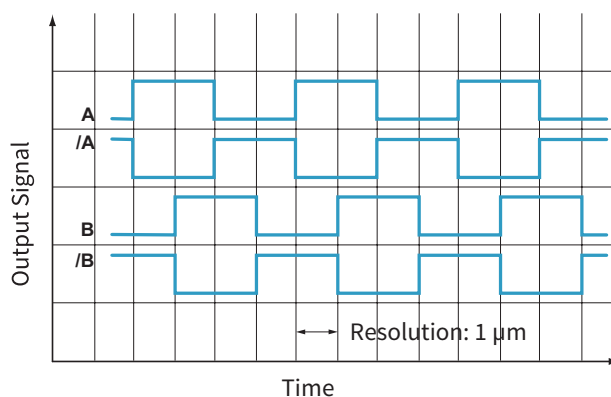
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Together with the MB01-1000-ABS magnetic band, the MS01/D-SSI position sensor is part of a high-resolution, robust, linear measurement system.



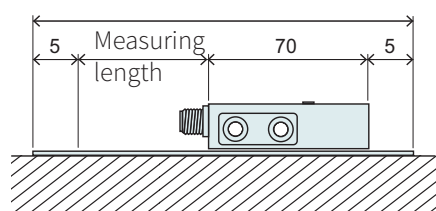
Features:

- » Max. resolution::
5 µm absolute, 1 µm incremental
- » Repeatability 0.005 mm
- » Output circuit SSI, RS485 (absolute),
LD (incremental)
- » Reading distance/Strip max. 1.3 mm
- » Max. measuring length 10.24 m
- » Status-LEDs for Diagnosis
- » IP67 protection class, not sensitive to
dust, moisture, or dirt



STRIP LENGTH AND COUNTING DIRECTION

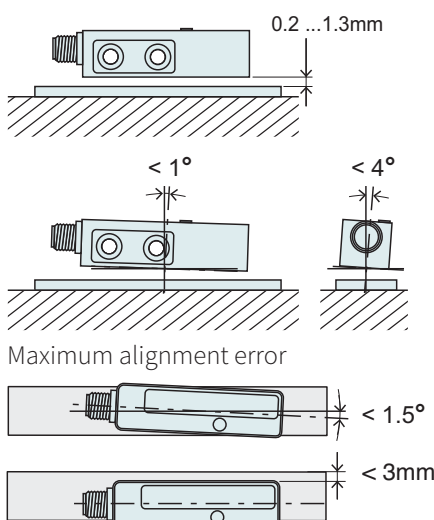
required strip length =
Measuring length + 80mm (min. 200 mm)



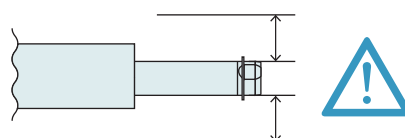
Print on
strip Print on
Sensor



INSTALLATION



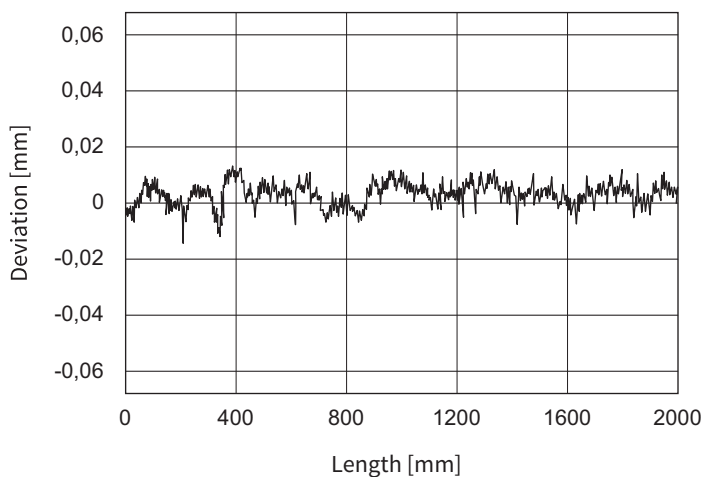
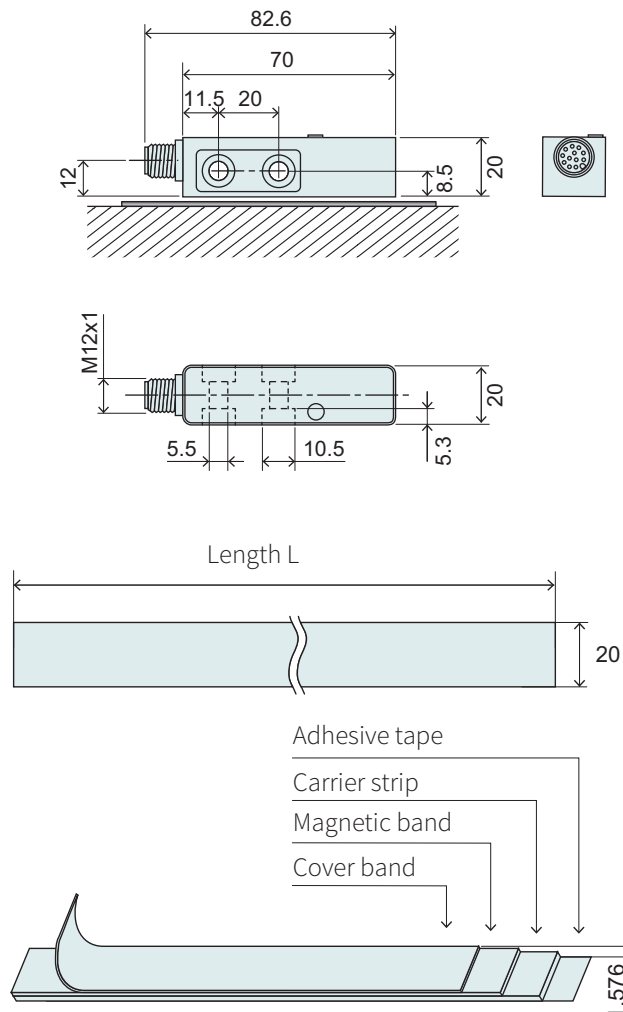
MINIMUM DISTANCE FROM SLIDER



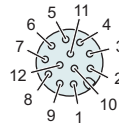
In order to rule out influence of the magnetic LinMot slider on the position measurement, the following minimal distances to the magnetic strip should be observed:

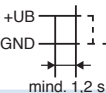
Linear Motor:	Minimum distance:
P01-23...	30 mm
P01-37...	40 mm
P01-48...	60 mm
P10-54...	60 mm
P10-70...	50 mm

DIMENSIONS



Connector wiring



Pin 1	nc		
Pin 2	D+		
Pin 3	D-		
Pin 4	T-		
Pin 5	+UB		
Pin 6	/A		
Pin 7	A		
Pin 8	/B		
Pin 9	B		
Pin 10	Config	GND	The sensor is in the SSI mode.
		+UB (while encoder suply is being turned on)	Der Sensor befindet sich in den ersten 10 s im Bootloadermodus (einspielen neuer Firmware möglich), anschlies- send wechselt er in den Servicemode.
			Setzen des Positionswerts auf den Kalibrierwert (nur wenn sich der Sen- sor in der SSI-Betriebsart befindet)
Pin 11	T+		
Pin 12	OV		

Technical data magnetic band

Order length	Measuring length + 80 mm
Width	20 mm
Carrier material	Spring steel band
Precision class	$\pm 50 \mu\text{m}$ at 20°C
Temperature coefficient	$(11 \pm 1) \times 10^{-6} / ^\circ\text{K}$
Storage temperature range	-20...70°C
Storage temperature range	-40...70°C
Protection class	IP 67
Mounting	Self adhesive magnetic band

ORDERING INFORMATION

Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1 μm , A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip, 1 mm Pitch, per cm	0150-2096
EC01-ABS/ENC-12-S	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3616

ACCESSORIES

LINEAR ROTARY MOTORS



- ✓ Cooling profiles for optimal thermal dissipation
- ✓ Fans for cooling rotary motors
- ✓ Accessories for mounting a MagSpring
- ✓ Accessories for implementing a cam kit
- ✓ Optimal load mounting with LinMot shaft-hub clamping

ACCESSORIES LINEAR ROTARY MOTORS

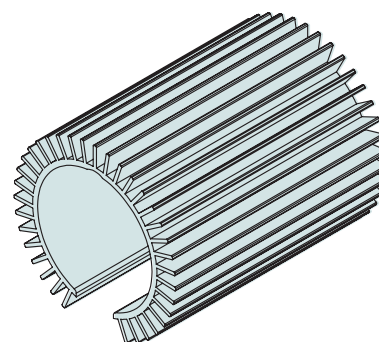
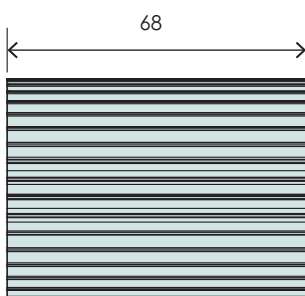
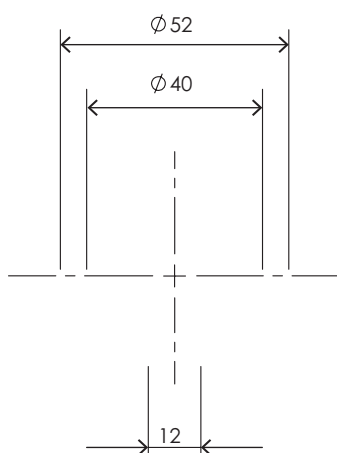
Cooling Profile	1085
Fan Kits	1086
Mounting Flange and MagSpring Adapter	1087
Brake Kit	1092
Cam kit	1093
MagSpring Cover	1095
Shaft-Hub Clamping	1096

Cooling Profile

Cooling profiles increase the continuous force of the linear component for LinMot linear-rotary motors. The fin design generates a large cooling surface that ensures optimal thermal dissipation. The user simply slides the component onto the linear motor. No further installation materials are required.

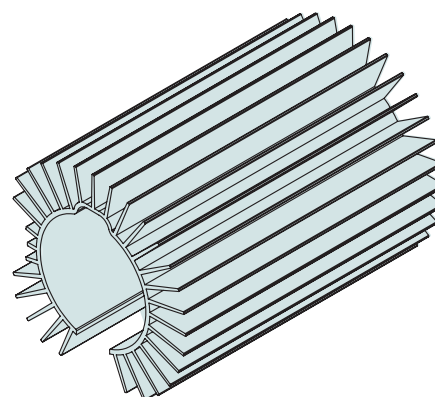
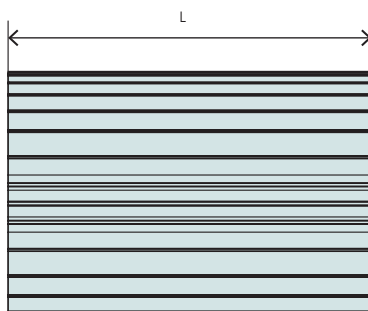
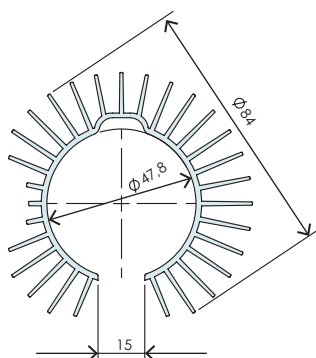


PC01-37



Item	Description	Weight [g]	Item-No.
PC01-37x68	Cooling Profile for PS01-37x120F-HP-C	70	0160-2131

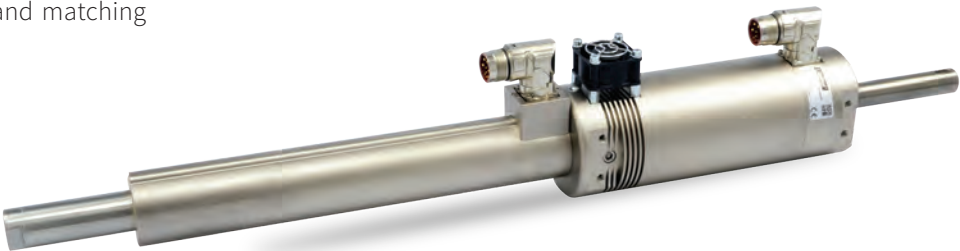
PC01-48



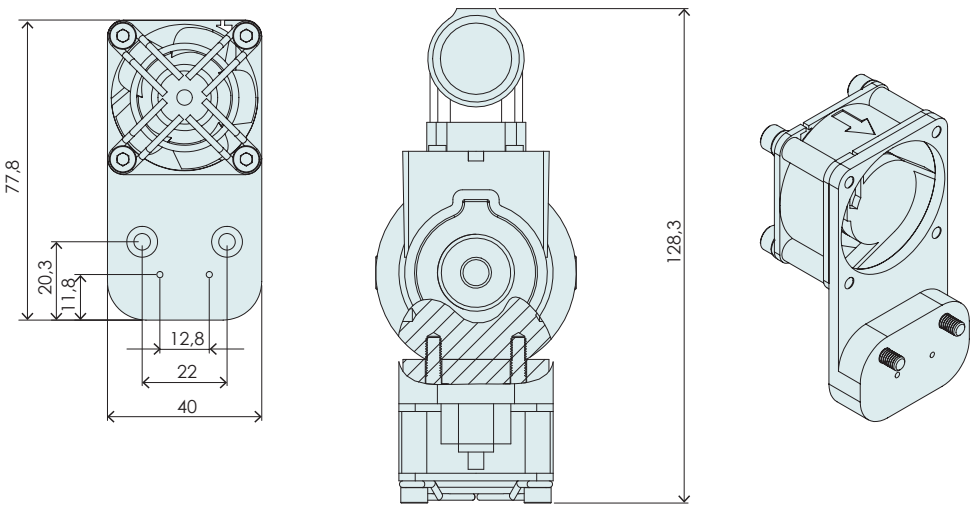
Item	Description	L [mm]	Weight [g]	Item-No.
PC01-48x100	Cooling Profile for PS01-48x240F-C-... and PS01-48x360F-C-...	99	210	0160-2145
PC01-48x117	Cooling Profile for PS01-48x240F-C-... and PS01-48x360F-C-...	117	250	0160-2138

Fan Kits

LinMot offers fan kits for size 52 and 84 rotary motors. These consist of a fan, the cover grid, and matching mounting screws.



RS01-VA52-KIT

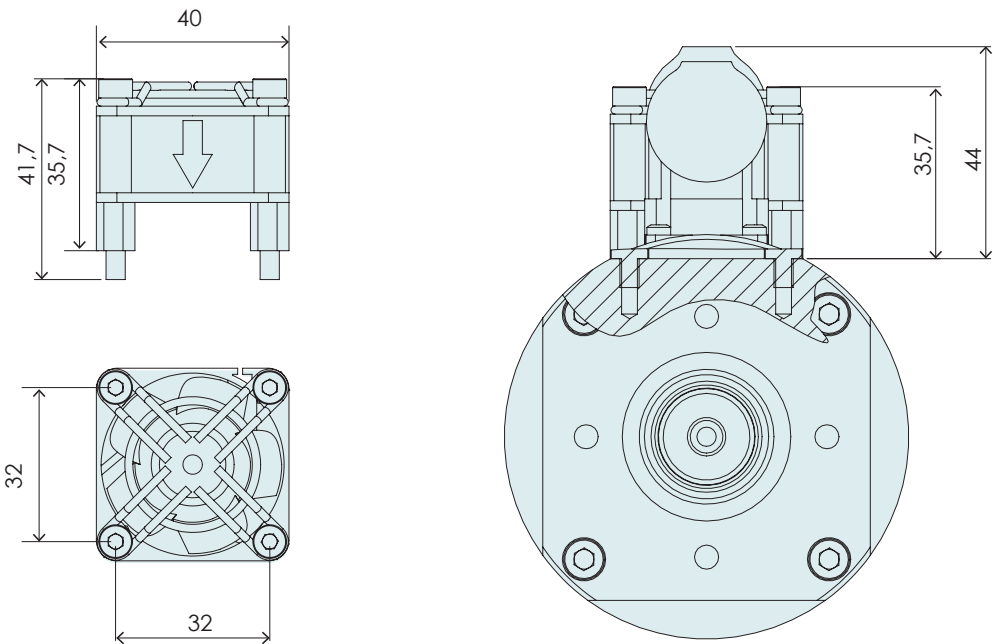


Fan supply:
24 VDC, 60 mA

Air flow:
14.7 m³/h

Item	Description	Weight [g]	Item-No.
RS01-VA52-Kit	Fan Kit for RS01-52 Rotary Motors	75	0150-1599

RS01-VA84-KIT



Fan supply:
24 VDC, 60 mA

Air flow:
14.7 m³/h

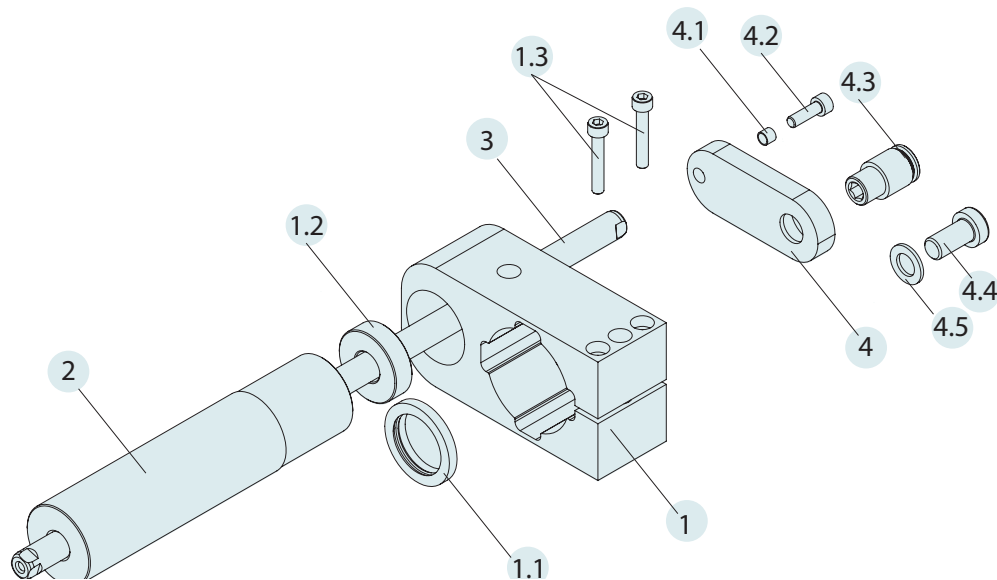
Item	Description	Weight [g]	Item-No.
RS01-VA84-Kit	Fan Kit for RS01-84 Rotary Motors	30	0150-1600

Mounting Flange and MagSpring Adapter

If the weight force of the linear-rotary axis needs to be compensated for passively, then a "MagSpring" magnetic spring can be installed. LinMot provides appropriate flanges and adapters for simple installation. The mounting flange is available in the variant UNO and DUO for the PR01-84 typos of Linear Rotary Motors.

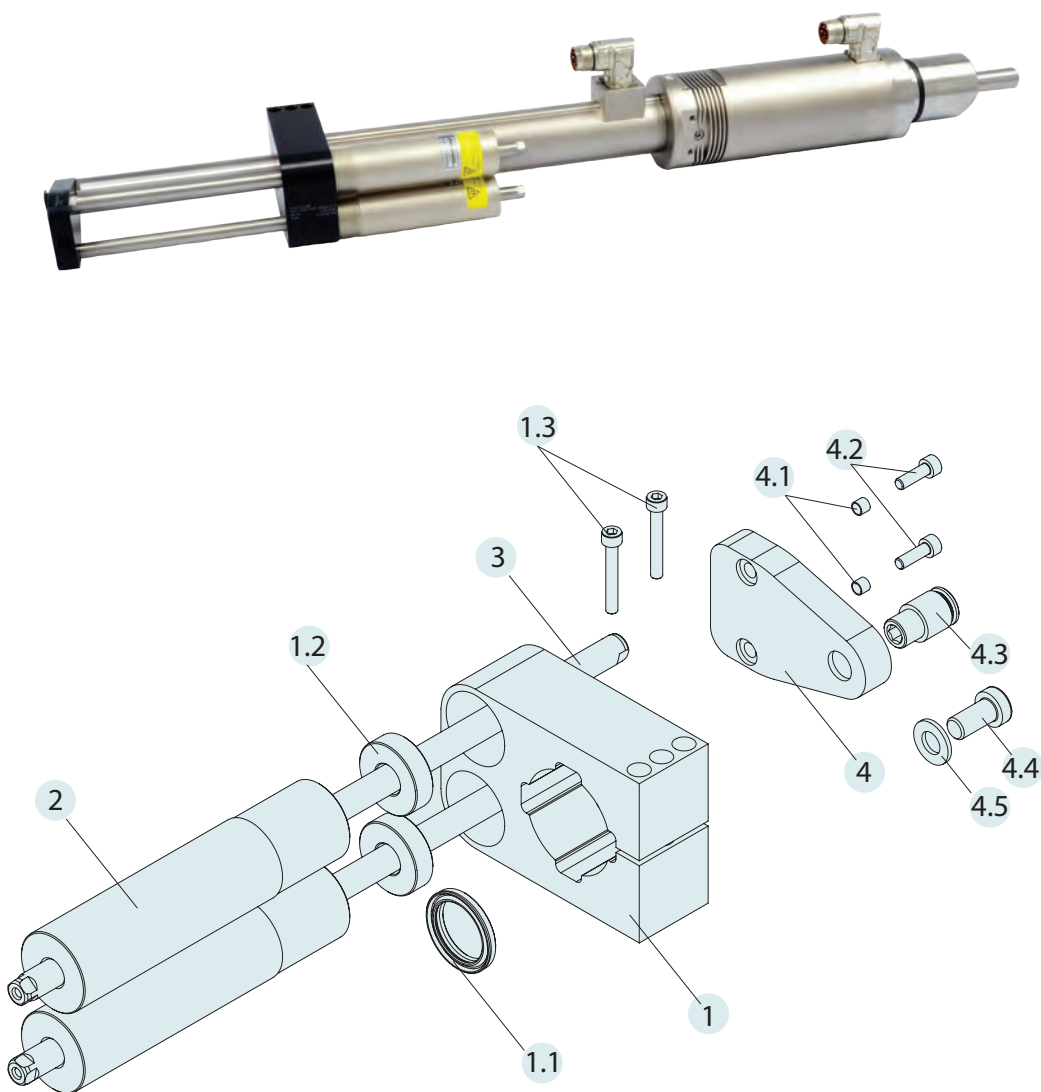


OVERVIEW MAGSPRING MOUNTING FLANGE UNO



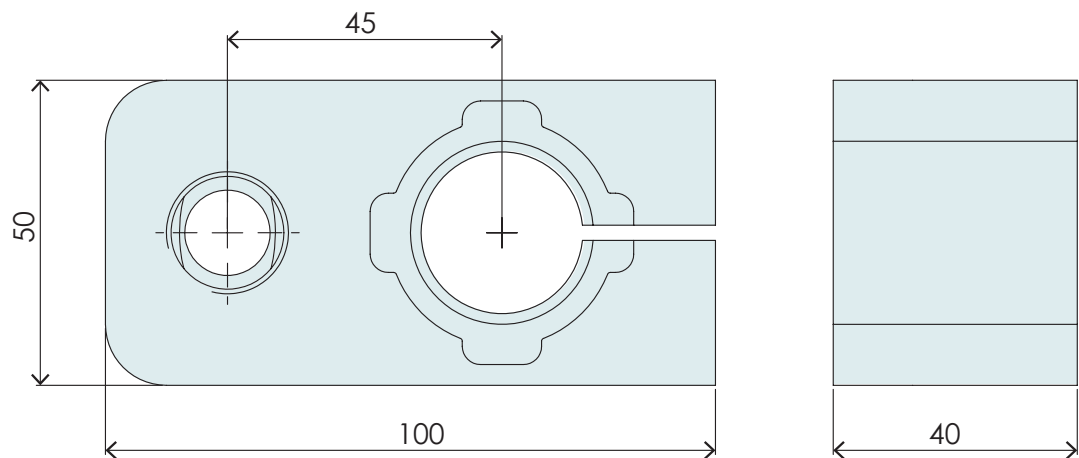
Pos.		Description	Item-No. for type 52 and 52-L		Item-No. for type 84 and 84-L
1		MagSpring Mounting Flange UNO	MF01-PR01-52x40-20 Item-No. 0250-2322	MF01-PR01-52x40-37 Item-No. 0250-2319	MF01-PR01-84x37-1 Item-No. 0250-2337
delivered with:					
	1.1	Wiper	PAW01-20 Item-No. 0150-3112		PAW01-28 Art.-No. 0150-3133
	1.2	Spacer sleeve	For type 52 and 52-L not available		MF01-AR-84 Art-Nr. 0250-0132
	1.3	Socket screw (2x)	M5x30 / ISO 4762		M5x35 / ISO 4762
2		MagSpring Stator	MS01-20x140 (22 F _{const.}) Item-No. 0250-2201	MS01-37x155 (40 F _{const.}) Item-No. 0250-2204 MS01-37x155 (60 F _{const.}) Item-No. 0250-2204	MS01-37x155 (60 F _{const.}) Item-No. 0250-2204 For Linear Rotary Motors with 300 mm stroke: MS01-37x305 / Art.-No. 0250-2206
3		MagSpring Slider	ML01-12x350/160-20 Item-No. 0250-2321	ML01-12x350/160-10 Item-No. 0250-2333 ML01-12x350/160-20 Item-No. 0250-2321	ML01-12x350/160-20 Item-No. 0250-2321 For Linear Rotary Motors with 300 mm stroke: ML01-12x650/320-20 / Art.-No. 0250-2343
4		MagSpring Adapter	MA01-PR01-52-37/20 Item-No. 0250-0128		MA01-PR01-84x80-37x1 Item-No. 0250-2341
delivered with:					
	4.1	Spacer sleeve	MA01-PR01-sleeve 4,9		MA01-PR01-sleeve 4,9
	4.2	Socket screw	M5x14 / ISO 4762		M5x14 / ISO 4762
	4.3	Pneumatic fitting	for 6 mm hose 1/8"		for 10 mm hose 1/4"
	4.4	Socket screw	M8x14 / ISO 4762		M10x14 / DIN 7984
	4.5	Adjusting washer	M8		M10

OVERVIEW MAGSPRING MOUNTING FLANGE DUO



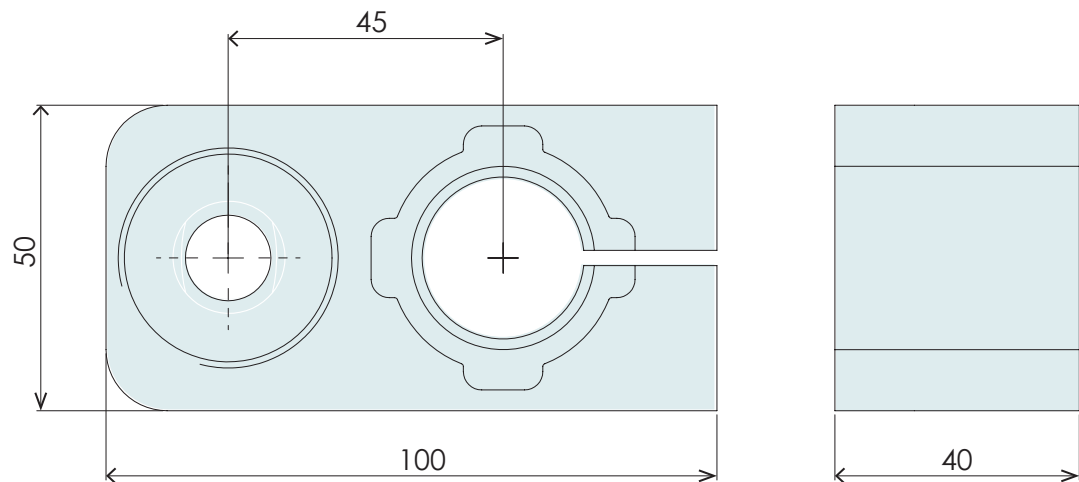
Pos.	Description	Item-No.
1	MagSpring Mounting Flange DUO	MF01-PR01-84x37-2 Item-No. 0250-2338
delivered with:		
1.1	Wiper	PAW01-28 Art.-No. 0150-3133
1.2	Spacer sleeve (2x)	MF01-AR-84
1.3	Socket screw (2x)	M5x35 / ISO 4762
2	MagSpring Stator (2x)	MS01-37x155 (60 F _{const.}) Item-No. 0250-2204
3	MagSpring Slider (2x)	ML01-12x350/160-20 Item-No. 0250-2321
4	MagSpring Adapter	MA01-PR01-84x80-37x2 Item-No. 0250-2340
delivered with:		
4.1	Spacer sleeve (2x)	MA01-PR01-sleeve 4,9
4.2	Socket screw (2x)	M5x14 / ISO 4762
4.3	Pneumatic fitting	for 10 mm hose 1/4"
4.4	Socket screw	M10x20 / DIN 7984
4.5	Adjusting washer	M10

MF01-PR01-52x40-20



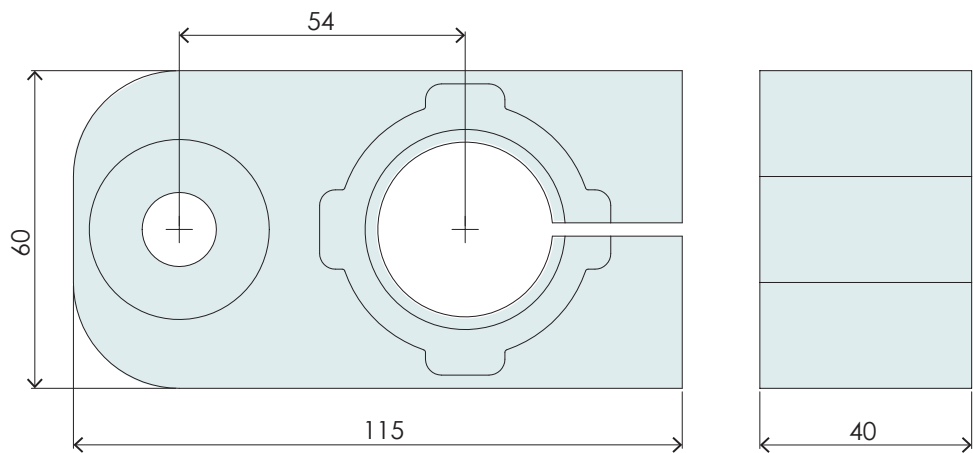
Item	Description	Weight [g]	Item-No.
MF01-PR01-52x40-20	MagSpring Mounting Flange for Linear Rotary Motors	330	0250-2322

MF01-PR01-52x40-37



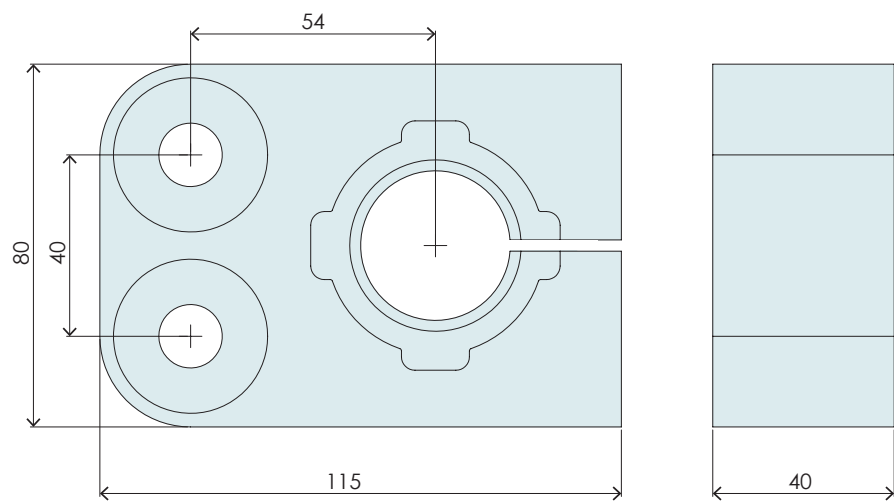
Item	Description	Weight [g]	Item-No.
MF01-PR01-52x40-37	MagSpring Mounting Flange for Linear Rotary Motors	310	0250-2319

MF01-PR01-84x80-37-1



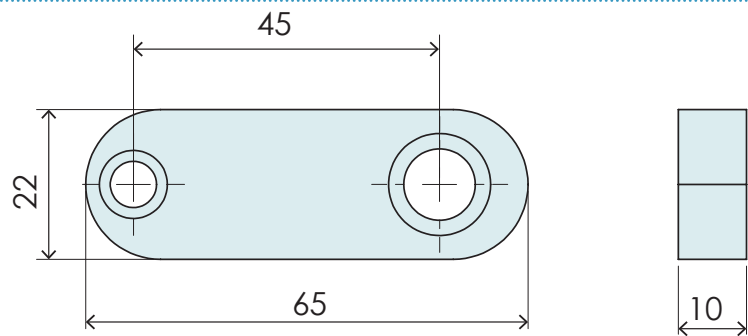
Item	Description	Weight [g]	Item-No.
MF01-PR01-84x80-37-1	MagSpring Mounting Flange for Linear Rotary Motors UNO	425	0250-2337

MF01-PR01-84x80-37-2



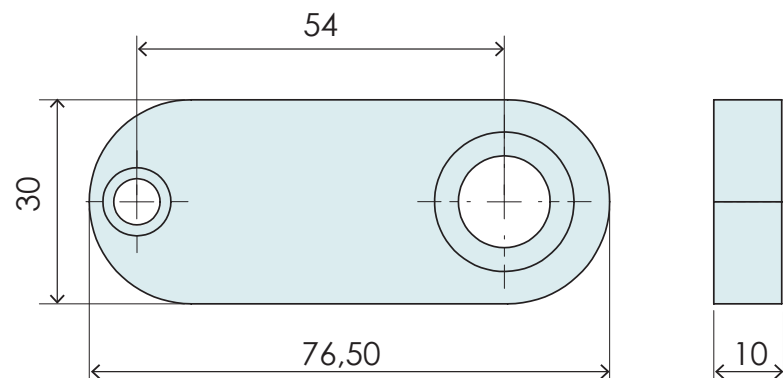
Item	Description	Weight [g]	Item-No.
MF01-PR01-84x80-37-2	MagSpring Mounting Flange for Linear Rotary Motors DUO	590	0250-2338

MA01-PR01-52-37/20



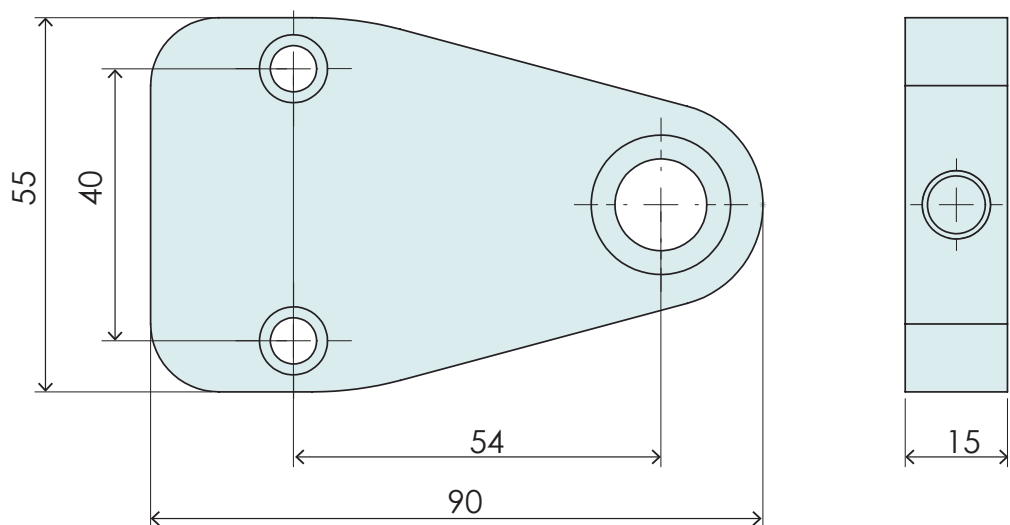
Item	Description	Weight [g]	Item-No.
MA01-PR01-52-37/20	MagSpring Adapter for Linear Rotary Motor	50	0250-0128

MA01-PR01-84x80-37-1



Item	Description	Weight [g]	Item-No.
MA01-PR01-84x80-37-1	MagSpring Adapter for Linear Rotary Motors UNO	85	0250-2341

MA01-PR01-84x80-37-2



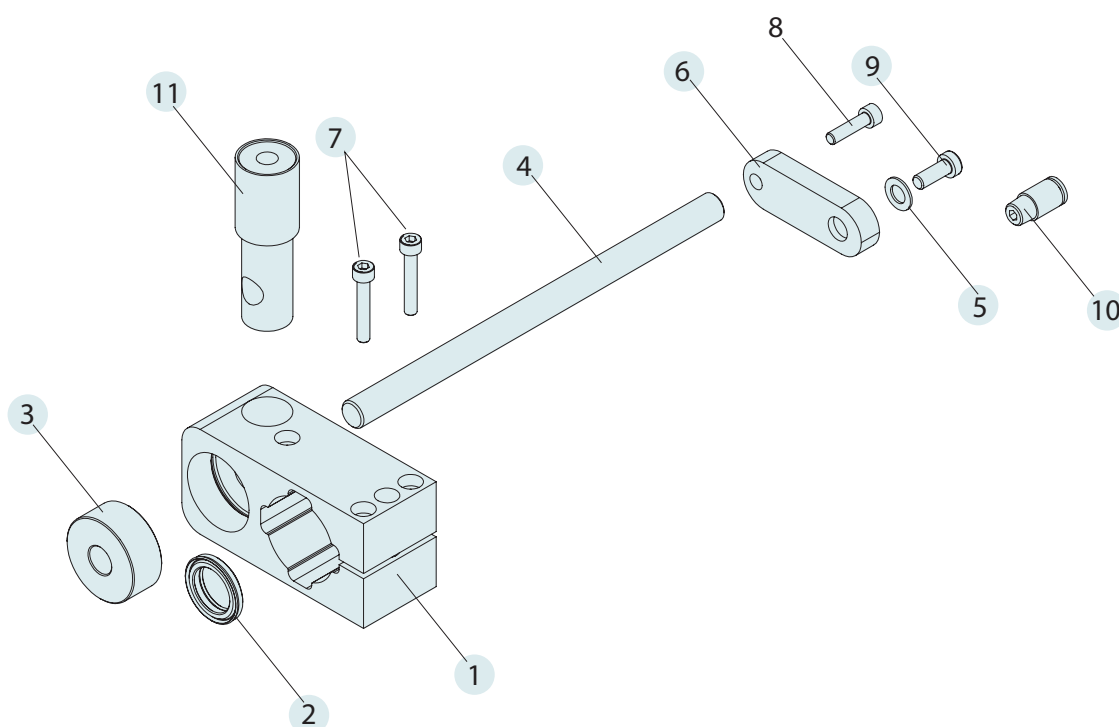
Item	Description	Weight [g]	Item-No.
MA01-PR01-84x80-37-2	Adapter MagSpring Linear Rotary Motor DUO	186	0250-2340

Brake Kit

The brake kit for size 52 linear-rotary motors prevents the axis from dropping down when oriented vertically. The pneumatic brake included in the set provides the braking action. It is activated when the power is off and acts directly on the slotted guide shaft installed parallel to the motor axis.



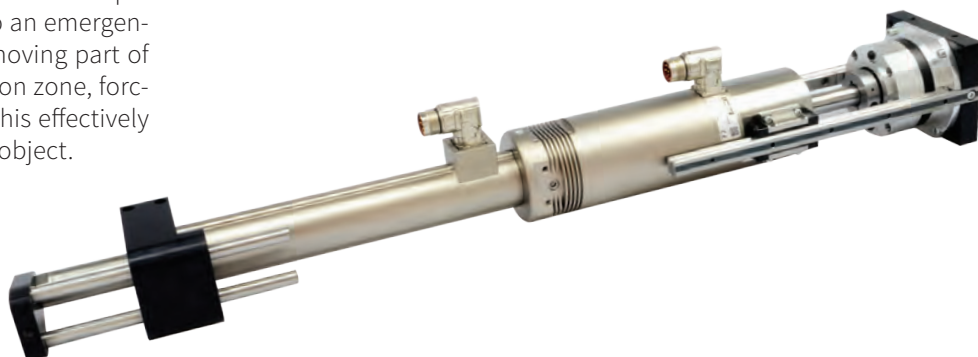
OVERVIEW



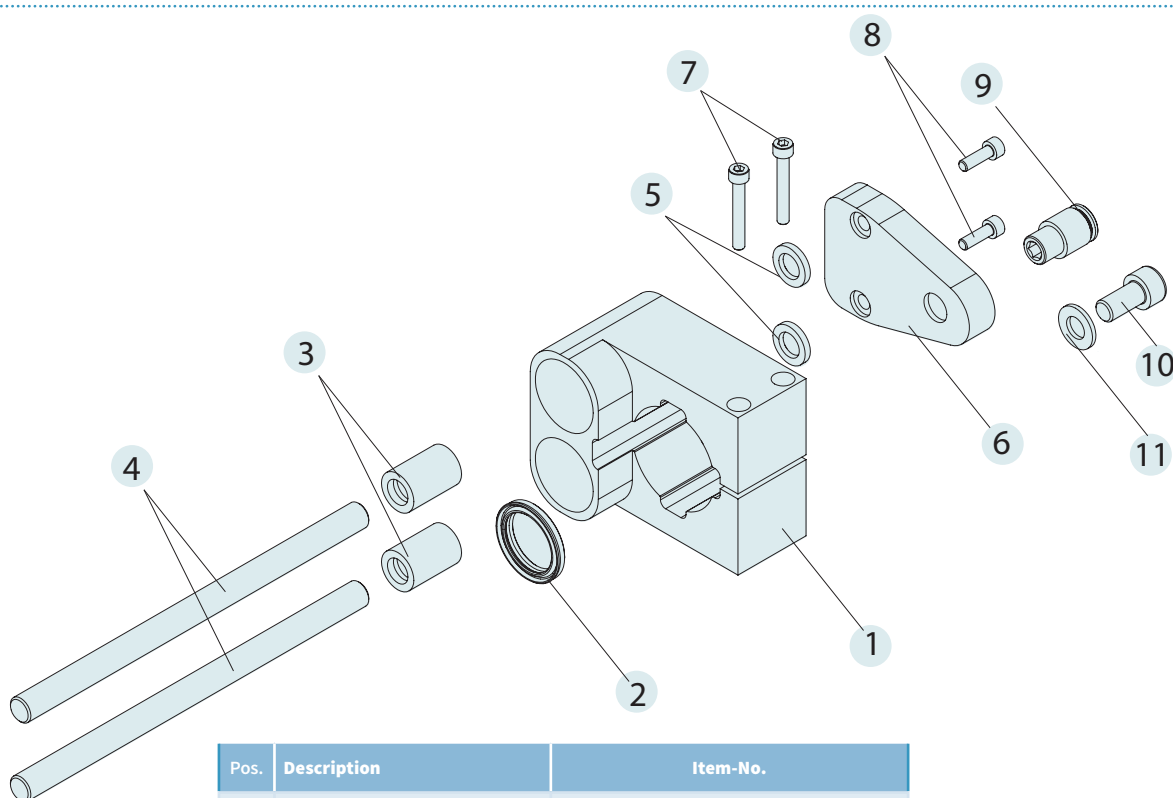
Pos.	Description	Item-No.
	MF01-BK52	Brake kit Linear Rotary Motor for PR01-52
		Item-No. 0250-2344
	consisting of:	
1	Mounting Flange	MF01k-PR01-52x40-37 Art-Nr. 0260-0152
2	Wiper	PAW01-20 Item-No. 0150-3112
3	Brake ring	MF01-BR-52
4	Cam shaft	MF01k-KS12x200
5	Adjusting washer	M8
6	Adapter	MA01-PR01-52-37/20 Item-No. 0250-0128
7	Socket screw (2x)	MF01k-KS12x200 Art-Nr. 0260-0250
8	Socket screw	M5x14 / ISO4762
9	Socket screw	M8x18 / DIN7984
10	Pneumatic fitting	for 6mm hose 1/8"
11	Pneumatic brake	Item-No. 0150-5052

Cam kit

The multi-part cam kit provides the user with a simple way to couple the linear-rotary motor to an emergency cam kit. The cam guide moves the moving part of the linear-rotary motor out of the collision zone, forcing it upward, when the power is lost. This effectively prevents the axis from colliding with an object.

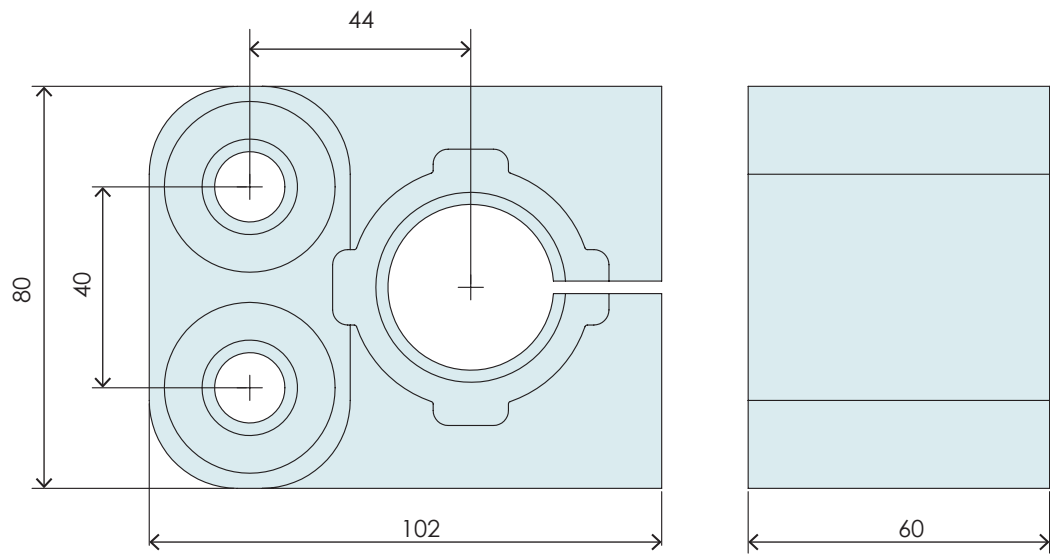


OVERVIEW



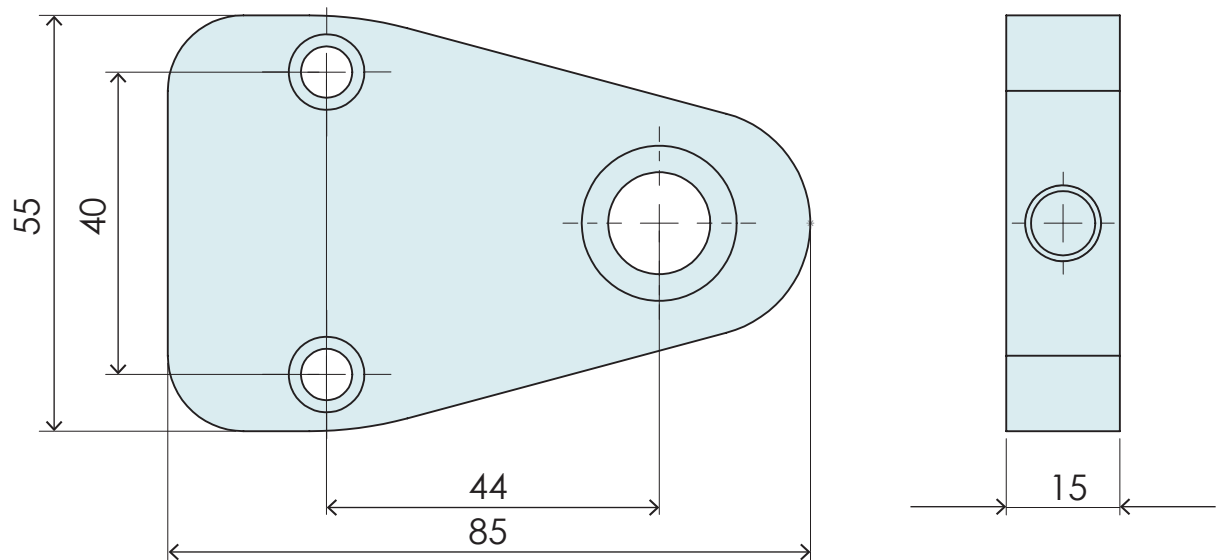
Pos.	Description	Item-No.
	MF01-PK84	Cam kit for PR01-84 Item-No. 0250-2324
	consisting of:	
1	Cam flange	MF01k-PR01-84x80-K 0260-0151
2	Wiper	PAW01-28 Item-No. 0150-3133
3	Linear ball bearings	2x LBBR 12-2LS
4	Guiding rods	2x MF01k-KS12x200 Length 200 mm
5	Shaft seals	2x SP-12x19x3 Item-No. 0230-0018
6	Adapter	MA01-PR01-84x80-K
7	Socket screws	2x M5x35 / ISO 4762
8	Socket screws	2x M5x14 / ISO 4762
9	Pneumatic fitting	for 10 mm hose 1/4"
10	Socket screws	M10x14 / DIN 7984
11	Adjusting washer	M10

MF01-PR01-84x80-K



Item	Description	Weight [g]	Item-No.
MF01-PR01-84x80-K	Linear Rotary Motor Cam-Flange	610	0250-2323

MA01-PR01-84x80-K



Item	Description	Weight [g]	Item-No.
MA01-PR01-84x80-K	Cam Kit Adapter	125	0250-0130

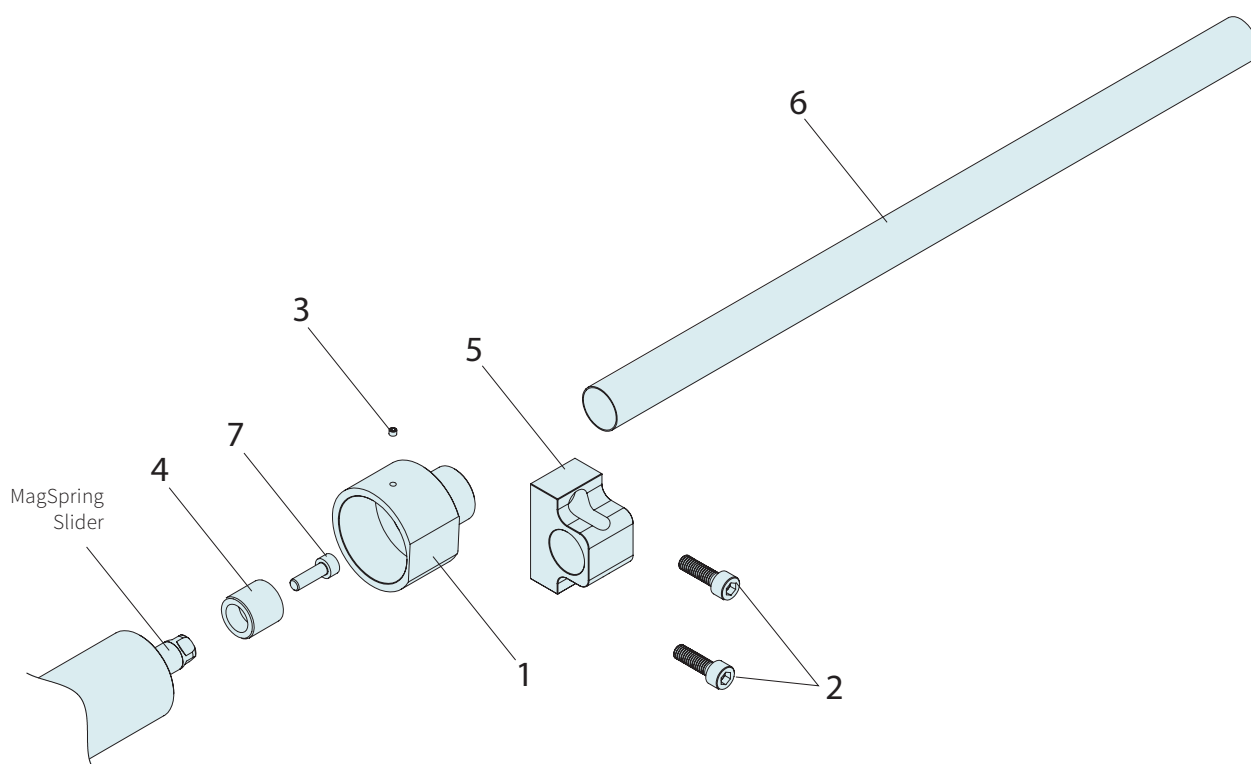
MagSpring Cover

LinMot offers a cover set for stabilizing a long Mag-Spring slider.

A stainless steel tube in which the slider rod is then guided is mounted on the housing of the rotary motor. This set is required for all large PR01-84 linear-rotary motors with a stroke of 300 mm.



OVERVIEW



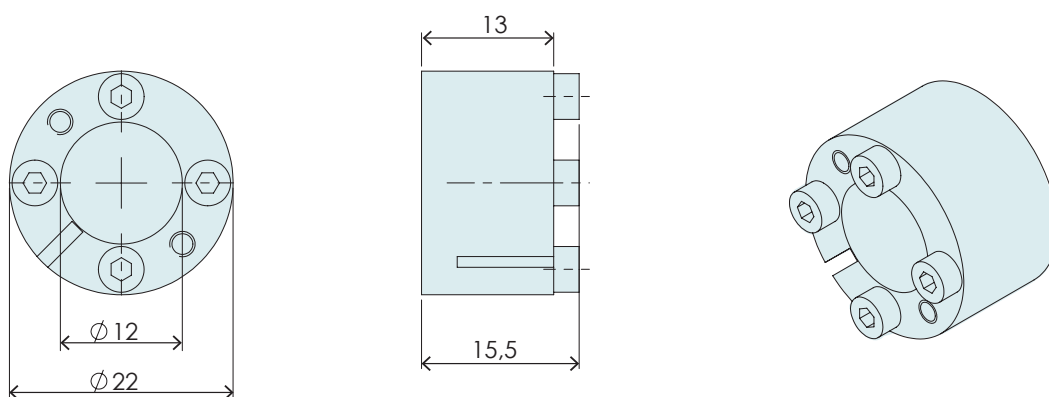
Pos.	Description	Item-No.
	ML01-AS300	MagSpring cover for PR01-84x -300 Item-No. 0250-2345
	consisting of:	
1	Extension flange	MS01k-EF37
2	Socket screw (2x)	M6x16 / ISO4762
3	Hex socket set screw with cone point	M3x3 / ISOP4027
4	Plain bearing	ML01k-GL17.9x17
5	Spacer	ML01k-DF37
6	Cover tube	ML01k-AR19x350
7	Socket screw	M5x14 / ISO4762

Shaft-Hub Clamping

Because linear-rotary motors perform both rotary and linear motions, the type of mounting must be able to support both torque loads and forces in the longitudinal direction. Clamping sets that allow simple, fast installation of the load mass are available for this purpose. They provide a force-fit connection produced by means of two conical rings. The completely eliminates the need to use drivers and produce grooves.

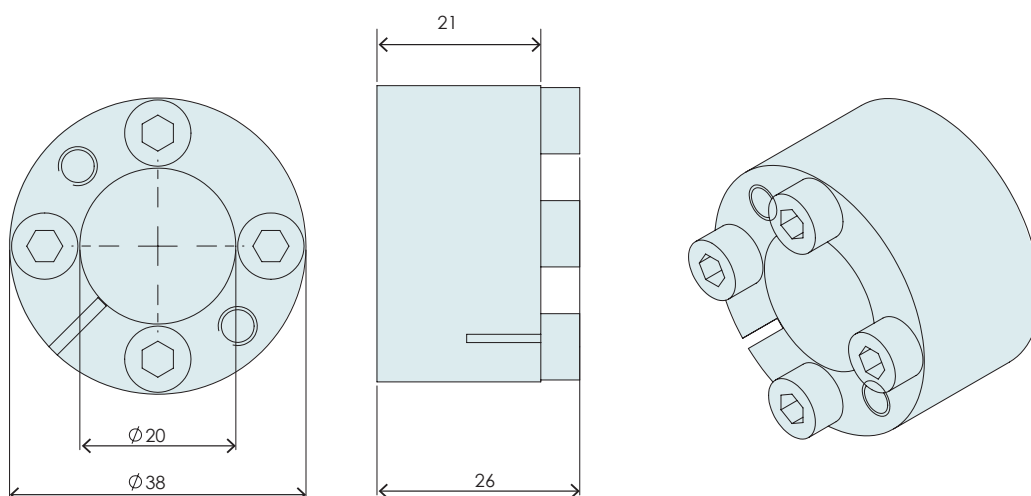


RS01-SS12x22



Item	Description	Weight [g]	Item-No.
RS01-SS12x22	Shaft-hub clamping for 12mm shaft	22	0230-0101

RS01-SS20x38



Item	Description	Weight [g]	Item-No.
RS01-SS20x38	Shaft-hub clamping for 20mm shaft	100	0230-0100

ACCESSORIES SERVO DRIVES

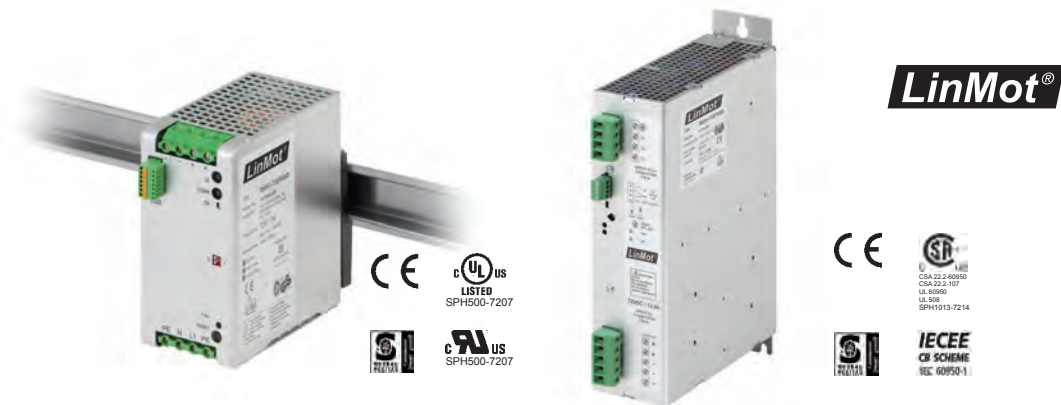


- ✓ Switched-Mode Power Supplies
- ✓ Transformer Supplies
- ✓ Regeneration Resistors
- ✓ Connector Cables and Converters
- ✓ Control Box
- ✓ EMC Filters

ACCESSORIES SERVO DRIVES

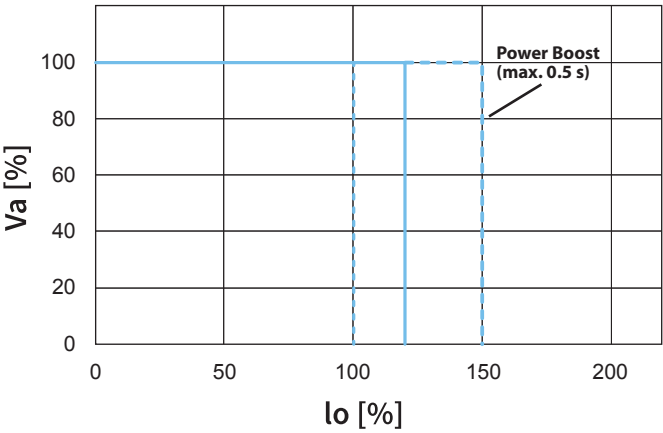
Power Supplies	1099
Transformer Supplies	1101
Regeneration Resistorst	1104
Connector Cables and Converters	1106
Control-Box	1107
EMV / RFI Filter	1108
EC Servo motors	1112

Power Supplies 24 V and 72 V



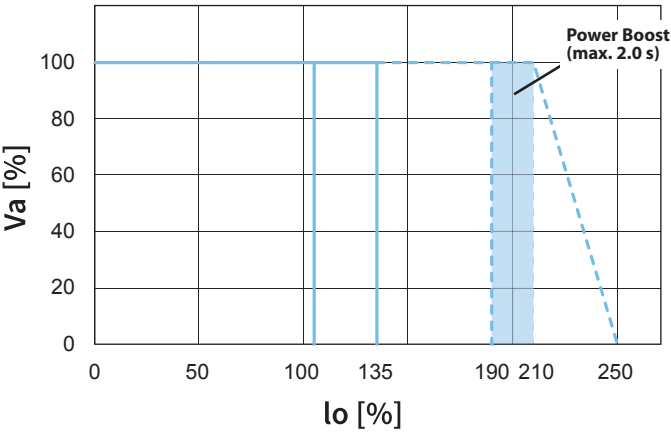
Power Supplies	S01-24/500	S01-72/500	S01-72/1000
Input			
Input voltage range	90...132VAC / 180...264VAC automatical switchover		AC 3 x 340-550V
Power frequency	50/60Hz		50/60Hz
Efficiency	typ. 86%	typ. 88%	typ. 91,5%
Input current limitation	≤ 70A _{peak} typ. cold, ≤ 150A _{peak} factory setting		≤ 70A _{peak} typ. cold, ≤ 150A _{peak} hot
Internal fuse	16ATH/250VAC		
External fuse			16A (IEC), 20A (USA) required
Output			
Preset range Vo	22 - 29VDC, factory setting 24VDC ± 0.5% (Vo will be saved after 1s)	54 - 80VDC, factory setting 24VDC ± 0.5% (Vo will be saved after 1s)	72V: 56 - 80VDC factory setting Vo _{nom} ± 0,15/0,2V
Max. Ouputpower	480W - Powerboost 720W at (Vo≥ Vo _{nom})		1000W
Powerboost (only in Boostmode)	up to 150% (see chart)		up to 190 - 210% (see chart)
Ripple	120mV _{ss} typ.		72V: 40mV _{ss} typ.
Noise voltage (20MHz)	200mV _{ss} typ.		200mV _{ss} typ.
Temperature coefficient	≤ 0,025% / K		≤ 0,025% / K
Start-up delay	< 1,5s (at 230VAC)		250 ms typ.
Rise time	40 ms typ.	80 ms typ.	72V:20ms typ./155ms typ.at 50.000 µF load
Back feeding voltage	up to 35Vdc	up to 100 Vdc	up to 100 Vdc
Serial connection	yes (max. 2 identical power supplies)		yes, max. 2 identical power supplies
Parallel connection	yes - only in parallel mode (max. 3 identical power supplies)		yes, max. 3 identical power supplies
Regulation			
Line regulation	< 0.2% for Vo at Vi _{min} - Vi _{max}		< 0.3% for Vo at Vi _{min} - Vi _{max}
Load regulation	< 0.5% for Vo at Io 0 - 100% Boost-M. < 3.0% for Vo at Io 0 - 100% Parallel-M.		< 0.5% for Vo at Io 0 - 100% single operation < 3% for Vo at Io 0 - 100% parallel operat.
Response time	typ. 1ms at Io 20 - 80%		typ. 1ms at Io 20 - 80%
Protection and Controlling			
Overtemperature protectio	Switches off if inside temperature becomes to high, reconnection with hysteresis		Switches off if inside temperature becomes to high, reconnection with hysteresis
Safety/Standards	IEC60950 / UL60950 / UL508 / CSA22.2-60950 / CSA22.2-107.1 / IP20, safety class 1 / pollution degree 2		EN 60950-1 / IEC 60950-1 / VDE 0160 safety class I / VDE 0100 / IP20 CSA-C22.2 No 107 / CSA-C22.2 No. 60950-1-03 UL Std. 60950-1 / UL Std. 508 (Operation in Delta mains only for UL508) SELV-output according EN60950-1 at 48V pollution degree 2
EMV			
Mains feedback / PFC	EN 61000-3-2 Class A only with ext. PFC 12mH/4,5A/230VAC		
Flicker	EN 61000-3-3		EN 61000-3-3
Interference immunity	EN 61000-6-2 Industrial generic standard		EN 61000-6-2
ESD	EN 61000-4-2 8/15KV		EN 61000-4-2 8/15 kV
Electrical fields	EN 61000-4-3 noise level 10V/m (Krit. A)		EN 61000-4-3 noise level 10V/m
Burst	EN 61000-4-4 4KV (Krit.A)		Input: EN 61000-4-4 4kV / Output: EN 61000-4-4 2kV
Surge	EN 61000-4-5 4/2KV (Krit.A)		Input: EN 61000-4-5 2/4kV / Output: EN 61000-4-5 0,5kV
HF Immunity	EN 61000-4-6 noise level 10V (Krit.A)		EN 61000-4-6 noise level 10V
Voltage drop	EN 61000-4-11		EN 61000-4-11
Interference emission	EN 61000-6-4 Industrial generic standard EN 55011 class B, Radiation depends on assembly		EN 61000-6-3 / EN 61204-3
Operating Data			
Temperature range	-25°C...70°C integral, temperature regulated fan, sucking in air from below		-25...+70°C, integral, temperature controlled fan, air intake bottom-up (fan swichted on/off in two steps dependent on temperature)
Derating	3% / K ab +60°C		2% / K at +60°C
Weight	1.0 kg		2.0 kg
Mechanics			
Assembly	All systems can be snapped onto a symmetrical 35mm DIN-rail according to EN 50022 with a diameter of 1 to 2.5 mm or directly be screwed onto the wall.		All devices can be attached to a back wall using the mounting tabs.

CURRENT LIMITING CHARACTERISTICS (TYP.)
S01-24/500 AND S01-72/500



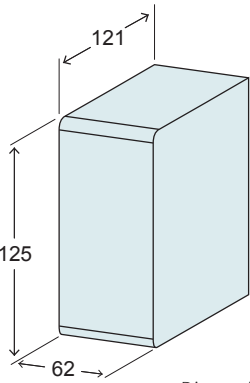
Up to 150% I_{nom} possible for 500ms, then the power boost is min. 500ms not available. (Indications for boost mode only).

CURRENT LIMITING CHARACTERISTICS (TYP.) S01-72/1000



Start-up takes place with power boost between 190% and 210% of the nominal current for a period of approx. 2s. You can use power boost also in running operation.

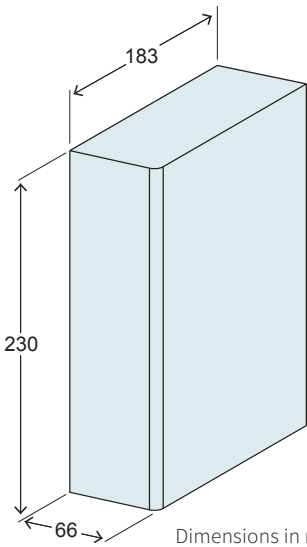
DIMENSIONS S01-24/500 AND S01-72/500



Dimensions in mm

The distance between the surrounding components and the air admission and air exit holes should be at least 20 mm. Please ensure that exhaust air is not immediately sucked in again.

DIMENSIONS S01-72/1000



Dimensions in mm

Operation in any assembly position possible. The distance between the surrounding components and the air admission and air exit holes should be at least 50 mm. Please ensure that exhaust air is not immediately sucked in again.

ORDERING INFORMATION

Item	Description	Item-No.
S01-24/500	Power Supply 24V/500W, 1x120/230VAC	0150-2480
S01-72/500	Power Supply 72V/500W	0150-1874
S01-72/1000	Power Supply 72V/1000W	0150-1872

Transformer Supplies

Modern T01 transformer power supplies meet international specifications and have been designed and developed to the following criteria:

- » Input ranges:
1x208VAC / 1x220VAC / 1x230VAC / 1x240VAC
3x230VAC / 3x400VAC / 3x480VAC
- » Three power classes:
420VA / 900VA / 1500VA
- » With integrated bridge inductor, discharge resistor, LED, PTC, secondary protection, and intermediate circuit capacitor
- » Easy, stable installation with bolted mount
- » Optimal space-saving design

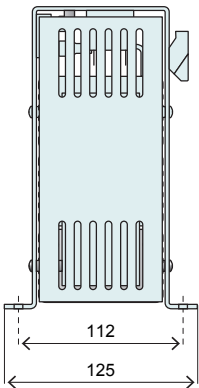
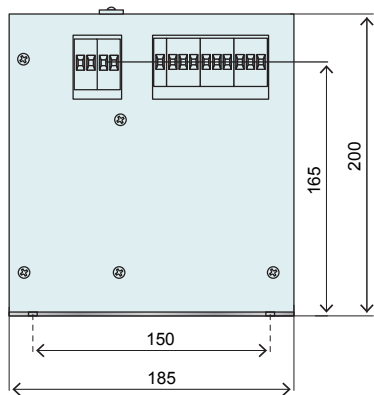


Transformatoren	T01-72/420-1ph	T01-72/420-Multi	T01-72/900-Multi	T01-72/1500-Multi
Power	420 W	420 W	860 W	1140 W
Primary side	AC 208 / 220 / 230 / 240 V	3AC 230 / 400 / 480 V	3AC 230 / 400 / 480 V	3AC 230 / 400 / 480 V
Current	2.57 / ... / 2.25 A	1.1 / 0.7 / 0.6 A	2.3 / 1.3 / 1.1 A	3.5 / 2.0 / 1.7 A
Secondary side	DC 72 V	DC 72 V	DC 72 V	DC 72 V
Current	5.8 A (100% ED)	5.8 A (100% ED) 10 A (35% ED) 15 A (15% ED)	12 A (100% ED) 20 A (35% ED) 30 A (15% ED)	20 A (100% ED) 33 A (35% ED) 50 A (15% ED)
Frequency	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
External fuse secondary side	6.3At (slow blow)	3x230V: 3.15At 3x400V: 2.0At 3x480V: 1.6At	3x230V: 8.0At 3x400V: 4.0At 3x480V: 3.15At	3x230V: 10.0At 3x400V: 6.0At 3x480V: 5.0At
Fuse secondary side	15 A 80 V	15 A 80 V	30 A 80 V	2 x 30 A 80 V
Vector group	li0	DYyd	DYyd	DYyd
Loss of copper	≈ 22.5 W	≈ 22.5 W	≈ 38 W	≈ 44.3 W
Loss of iron	≈ 6.8 W	≈ 7.3 W	≈ 12.2 W	≈ 18.7 W
Copper temperature	≈ 71 K	≈ 37 K	≈ 44 K	≈ 42 K
Iron temperature	≈ 52 K	≈ 33 K	≈ 38 K	≈ 36 K
Set-up location	up to 1000 m over mean sea level	up to 1000 m over mean sea level	up to 1000 m over mean sea level	up to 1000 m over mean sea level
Cooling	AN	AN	AN	AN
Max. ambient temperature	ta 40°C	ta 40°C	ta 40°C	ta 40°C
tested complying to	VDE 570 (EN61558)	VDE 570 (EN61558)	VDE 570 (EN61558)	VDE 570 (EN61558)
Copper weight	≈ 1.2 kg	≈ 2.35 kg	≈ 3.9 kg	≈ 5.8 kg
Total weight	≈ 6.5 kg	≈ 6.5 kg	≈ 12 kg	≈ 19 kg
Continuous Duty	S1 / 100 %	S1 / 100 %	S1 / 100 %	S1 / 100 %
Insulating material class	B	B	B	B
Protection class	IP 00	IP 00	IP 00	IP 00



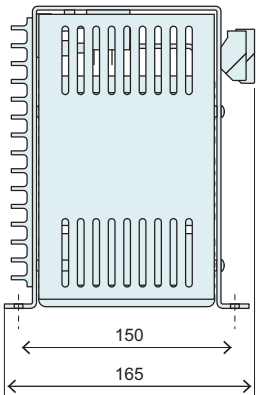
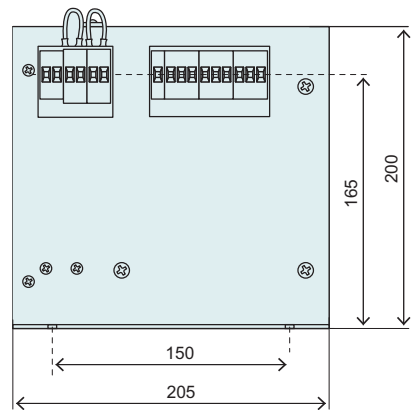
The required external fuse (primary side) can be taken from the table.

420 VA



Weight: 6.6 kg
Dimensions mm

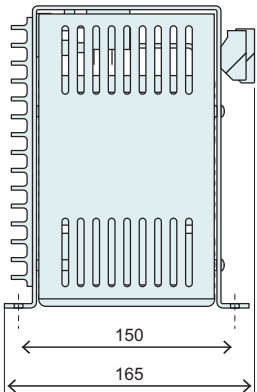
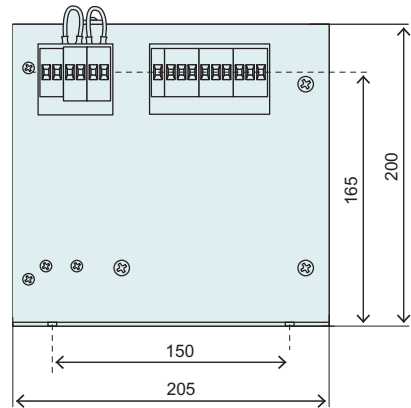
Item	Description	Item-No.
T01-72/420-Multi	Transformer Supply 3x230/400/480 VAC, 50/60Hz, 420VA	0150-1869



Weight: 10.6 kg
Dimensions mm

Item	Description	Item-No.
T01-72/420-1ph	Transformer Supply 1x208/220/230/240VAC, 50/60Hz, 420VA	0150-1859

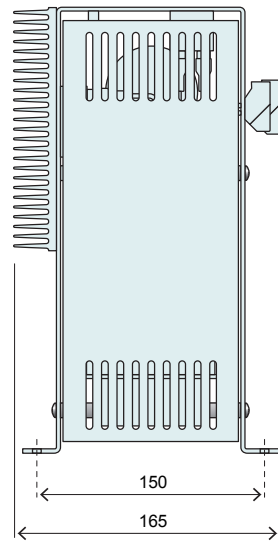
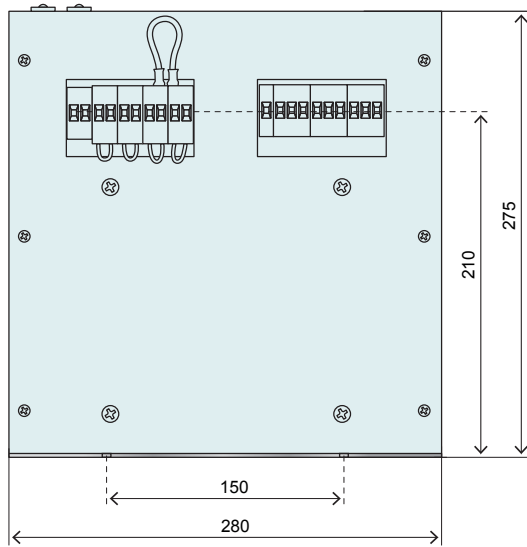
900 VA



Weight: 10.6 kg
Dimensions mm

Item	Description	Item-No.
T01-72/900-Multi	Transformer Supply 3x230/400/480 VAC, 50/60Hz, 900VA	0150-1870

1500 VA



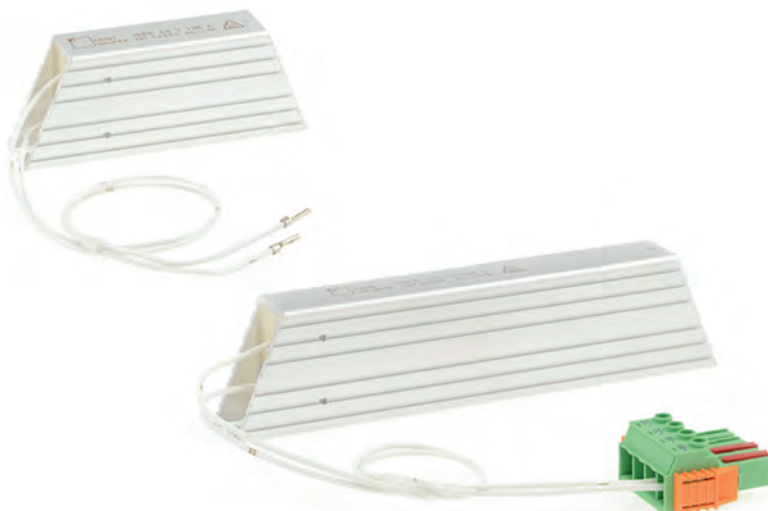
Weight: 20 kg
Dimensions mm

Item	Description	Item-No.
T01-72/1500-Multi	Transformer Supply 3x230/400/480 VAC, 50/60Hz, 1500VA	0150-1871

Accessories Transformer Supplies		
Item	Description	Item-No.
TF01-80V/15A	Blade fuse for T01-72/420	0150-1850
TF01-80V/30A	Blade fuse for T01-72/900 & 1500	0150-1851

Regeneration Resistorst

The regeneration or braking resistor is connected to the integrated regeneration stage of series E1400, E1200, or C1400 drives. The regeneration resistor prevents an impermissible increase in the intermediate circuit voltage when dynamically braking high load masses. The braking resistors are highly durable and have high resistance to voltage and impulses. Complete encapsulation also provides protection against contamination and prevents contact with live high-voltage parts.



	RR01-10/60	RR01-68/100	RR01-68/100-E1400
Resistance range ¹⁾	10 Ω	68 Ω	
Tolerances of resistance ¹⁾	F (1%); G (2%); J(5%); K(10%)	10 %	
Temperature coefficient ¹⁾	-80...200 (10 ⁻⁶ K ⁻¹)	-80...200 (10 ⁻⁶ K ⁻¹)	
Insulation resistance ²⁾	> 20 MΩ	> 20 MΩ	
Operating voltage U _b ³⁾	1000 V _{AC} (50 Hz)	1000 VAC (50 Hz)	
Testing voltage U _p ³⁾	2500 V _{AC} (50 Hz; 1 min.)	2500 VAC (50 Hz; 1 min.)	
Power rating	60 W	100 W	
Derating of power	from 40 °C = P _N up to 200 °C = P _N (linear)	from 40 °C = P _N up to 200 °C = 0.25 P _N (linear)	
Impulse energy	500 Ws	1000 Ws	
Max. Impulse energy ⁴⁾	10 kWs	35 kWs	
Protection level	IP 65	IP 65	
Climatic category (IEC68-1)	40 / 155 / 21	40 / 155 / 21	
Temperature range	-40...200 °C	-40...200 °C	
Langzeitkonstanz (P _N 40 °C 1000h)	3%	3%	
Long term environmental test (IEC 115 - 1/23)	2%	2%	
Periodical change of temperature (IEC 68 2.14)	2%	2%	
Safe max. load of vibration	40 ms ⁻²	40 ms ⁻²	
Kind of terminals	Wire	Wire	Wire with Connector (Art. 0150-3445)
Leitungslänge	300 mm	300 mm	

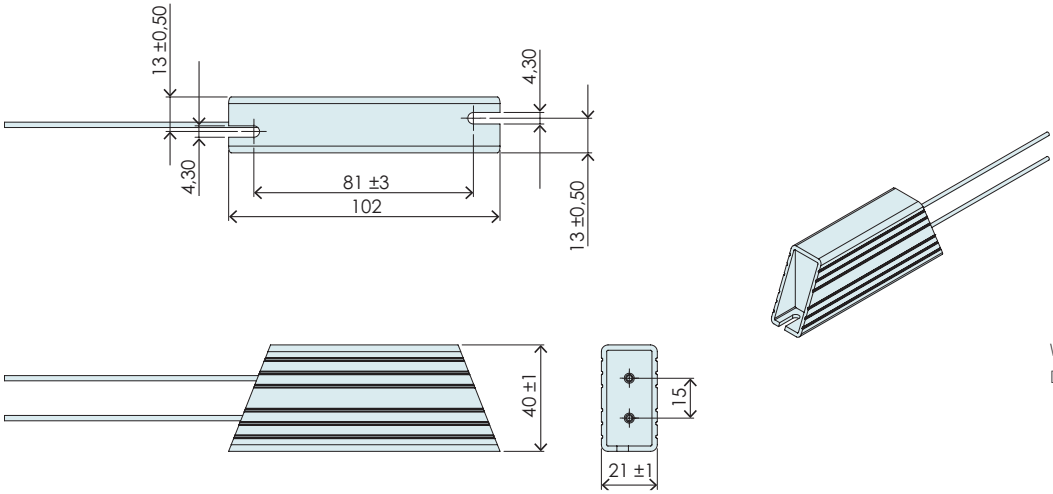
¹⁾ Without consideration of the wire

²⁾ Voltage = 1000 VDC

³⁾ Deviating operating voltage U_b and test voltages U_p are possible.

⁴⁾ Depending on the resistance value

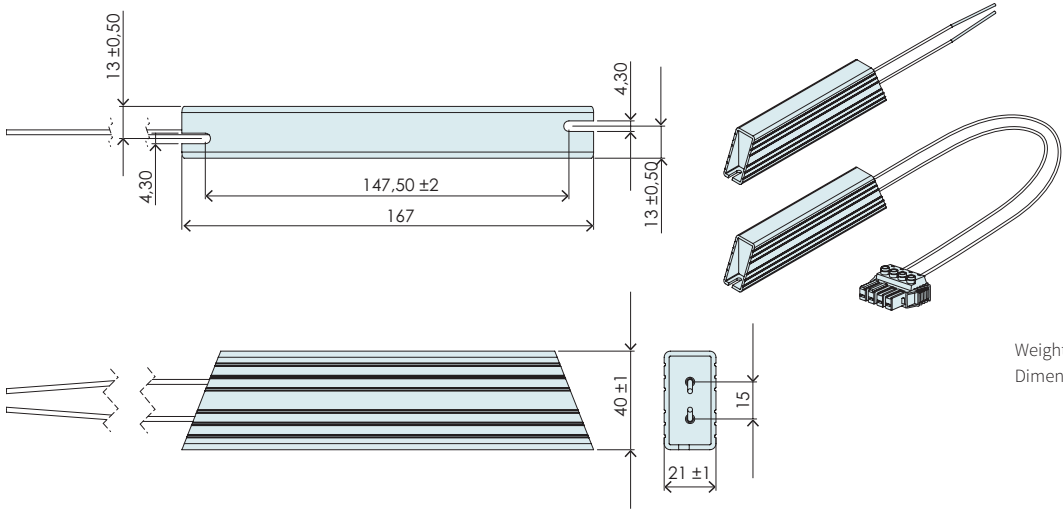
RR01-10/60



Weight: 0.14 kg
Dimensions mm

Item	Description	Item-No.
RR01-10/60	Regeneration Resistor 60W	0150-3088

RR01-68/100



Weight: 0.24 kg
Dimensions mm

Item	Description	Item-No.
RR01-68/100	Regeneration Resistor 100W	0150-3581
RR01-68/100-E1400	Regeneration Resistor for E1400 with Connector Item-No. 0150-3445	0150-3373

Connector Cables and Converters

LinMot servo drives can be configured via the RS232 interface or CAN-Bus. CAN-Bus can be used to configure several drives at the same time. CAN-Bus is also used for configuration if the serial interface is used for actuation by an upper-level controller.

Since the RS232 interface is not galvanically isolated on many PCs and laptops, and a variety of commercially available USB-RS232 converters does not provide this either, LinMot offers a separate galvanically isolated USB-RS232 converter. Additionally, LinMot offers also prefabricated adapter and / or config cables.

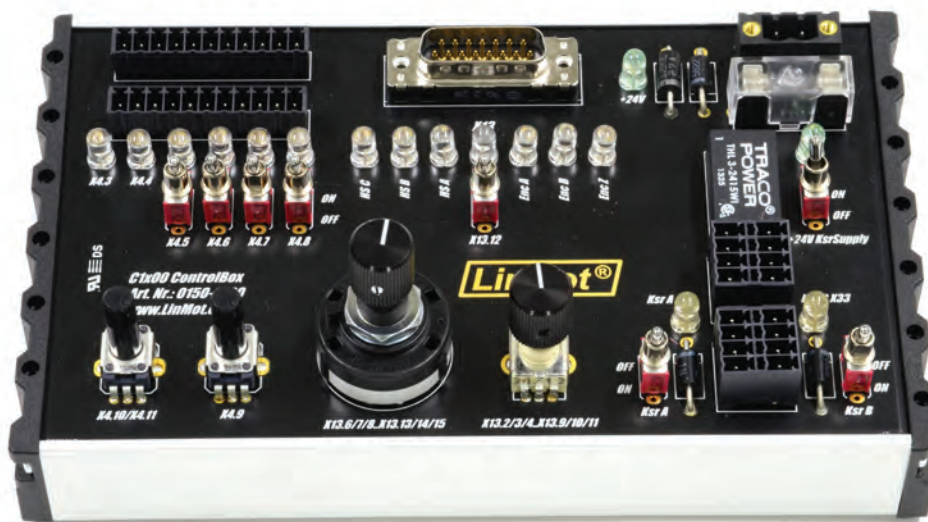


Item	Description	Item-No.
RS232 PC config. Cable 2.5 m	for C1100/C1200/E1200/E1400/M8000	0150-2143
AC01-RJ12/Df-2.5-RS1	for A1100, D-Sub9 RS232 PC config. cable 2.5 m	0150-3544
USB-CAN Converter Pro	USB to CAN Converter for LinMot Drives	0150-3532
USB-RS232 Converter (isolated)	for C1100, C1200, C1400, E1200, E1400 drives	0150-2473
AC01-RJ45/RJ12-2.5-RS1	Adaptor cable for A1100 drives	0150-2477
RJ45/RJ45-0,2-ML1	MC-Link Cable 0,2m	0150-3308

Control Box

The B01-C1x00 control box allows the user to quickly commission C1100 and C1200 series drives. The device allows manual actuation of control signals and is primarily intended for test operations or initial commissioning.

- » All digital and analog IOs can be defined.
- » The ABZ encoder and Hall-effect switch inputs can be simulated.
- » Galvanically isolated 24V power supply
- » With 1S safety relay



Item	Description	Item-No.
B01-C1x00 24VDC	Control box for C1x00 (incl. cables)	0150-2130

EMV / RFI Filter

EMV / RFI Filter for Inverters and Power Drive Systems.

- » 16A current rating
- » 480V/50°C ratings for world compatibility and simple specification
- » slim book-style housing
- » designed for long cable lengths (50m/54yds+)



UL / CSA: FN 258 up to 180 A (ex. -180-07)



UL / CSA: HV and HVIT up to 600VAC

3-Phase Filter	NF01-FN258-16-07
Maximum continuous operating voltage:	480VAC @ 50°C
Operating frequency:	DC up to 60Hz
High potential test voltage:	P → E 2650VDC for 2 sec P → P 2100VDC for 2 sec
Protection category:	IP20
Overload capability:	4x current rating at switch on 1.5x current rating for 1 Minute → Einmal pro Stunde
Temperature range (operation and storage):	-25°C to +100°C (25/100/21)
Flammability corresponding to:	UL 94V-2 or better
Design corresponding to:	UL 1283, CSA 22.2 No.8 1986, IEC/EN 60939
MTBF @ 50°C/400V (Mil-HB-217F):	220'000 h
current rating @ 50°C (40°C):	16A (17.5A)
Typical drive power rating ¹⁾	7.5kW
Leakage current @ 440VAC / 50Hz ²⁾	18.3mA
Power loss @ 25°C / 50Hz:	20W
Weight:	1.4k g

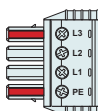
FILTER INPUT / OUTPUT CONNECTOR:

Input Connector



Solid wire	6 mm ²
Flex wire	4 mm ²
AWG Type Wire	AWG 10
Recommended torque	0.6 – 0.8 Nm

Output Connector

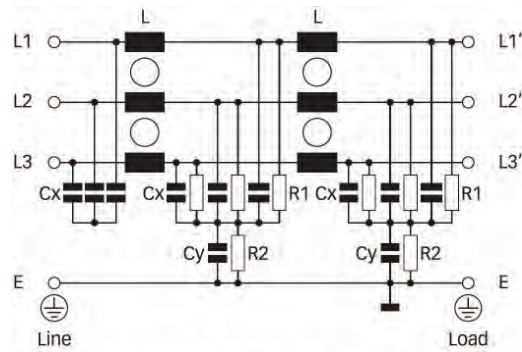


Leitungslänge	300mm ±10mm
LinMot-connector type:	X30 Stromversorgung for E1400

1) Calculated at rated current, 440VAC and cos phi = 0.8. The exact value depends upon the efficiency of the drive, the motor and the entire application.

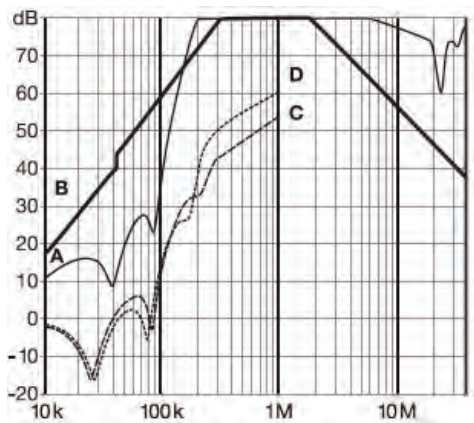
2) Maximum leakage under normal operating conditions at 440VAC. **Note:** if two phases are interrupted, worst case leakage could reach 5.7 times higher levels.

ELECTRICAL SCHEMATIC



Note: HVIT versions without discharge resistor to ground.

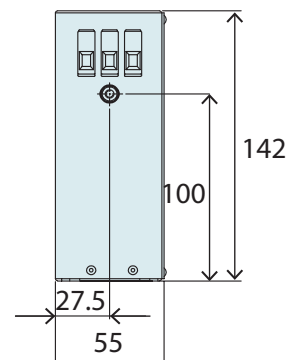
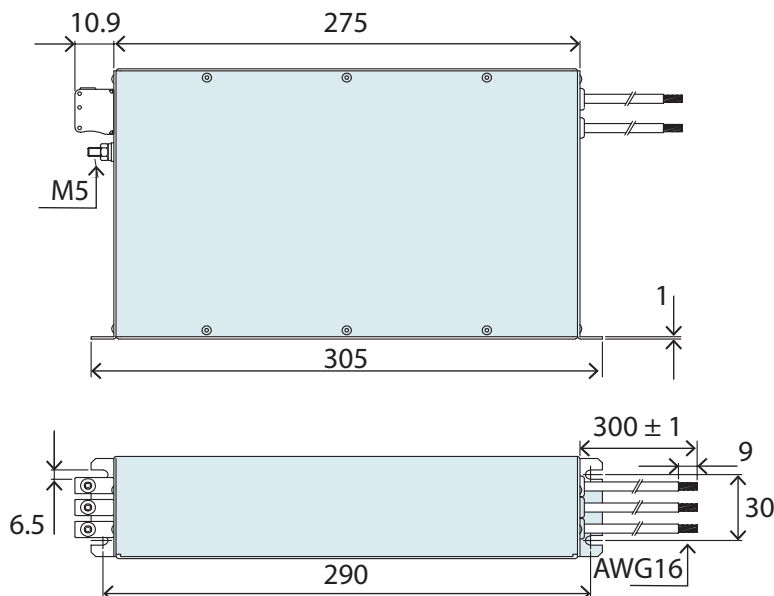
TYPICAL FILTER ATTENUATION



Per CISPAR 17

- A = 50Ω/50Ω sym
- B = 50Ω/50Ω asym
- C = 0.1Ω/100Ω sym
- D = 100Ω/0.1Ω sym

DIMENSIONS



Dimensions mm

Item	Description	Item-No.
NF01-FN258-16-07	Filter for E1400 Drives (Motor cable up to 50m)	0150-2359

EMV / RFI Filter

DIN-Rail EMV / RFI Filter with Minimum Leakage Current.

- » Compact state-of-the-art filter concept
- » Light weight plastic enclosure design
- » Minimized filter leakage current
- » Hinged safety covers
- » Revolutionary embedded filter terminals
- » Environmental friendly design without potting compound



Design protected by European patent (EP 1727280)

3-Phase Filter	NF01-FS34985-20-71
Maximum continuous operating voltage:	3x 520/300 VAC
Operating frequency:	DC up to 60Hz
High potential test voltage:	P → E 3000 VDC for 2 sec (HP Typen)
Protection category:	IP20
Overload capability:	4x Nennstromm at switch on 1.5x current rating for 1 Minute → Einmal pro Stunde
Temperature range (operation and storage):	-25 °C to +100 °C (25/100/21)
Flammability corresponding to:	UL 94 V-2 or besser
Design corresponding to:	UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939
MTBF @ 50°C/400V (Mil-HB-217F):	>200,000 h
current rating @ 50°C (40°C):	20 (21.4) A
Typical drive power rating ¹⁾	11 kW
Leakage current @ 480VAC / 50Hz ²⁾	2.5 mA
Power loss @ 25°C / 50Hz:	6.2 W
Weight:	0.52 kg

FILTER INPUT / OUTPUT CONNECTOR:

Input / Output Connector (cross sections)



Wire	4 - 6 mm ²
AWG Type Wire	AWG 12-AWG 10
Ring / Gabel Kabelschuhe ³⁾	max. 11 mm (9.5 mm) / min. Ø 4.3 mm ⁴⁾
Recommended torque	1.0 – 1.2 Nm

1) Calculated at rated current, 480 VAC and cos phi = 0.8. The exact value depends upon the efficiency of the drive, the motor and the entire application.

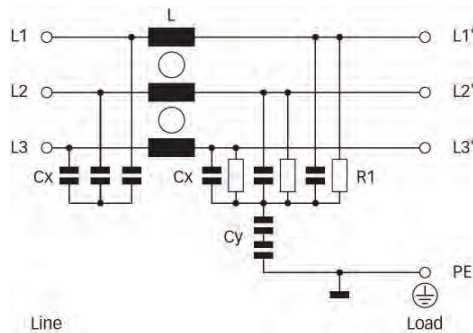
2) Maximum leakage under normal operating conditions.

Note: if two phases are interrupted, worst case leakage could reach up to 10 times higher levels (at 520 VAC 60 Hz).

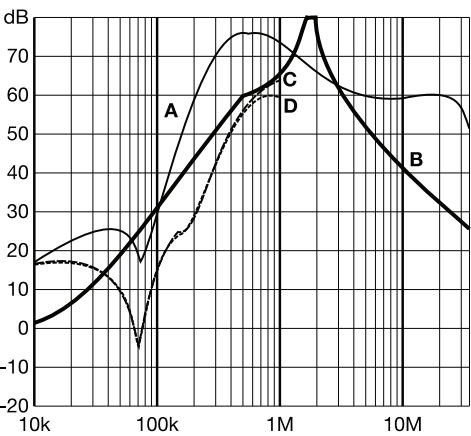
3) LinMot recommends the use of insulated and UL-recognized ring lugs or fork lugs of the appropriate size.

4) Specification in () relates to earth connector.

ELECTRICAL SCHEMATIC



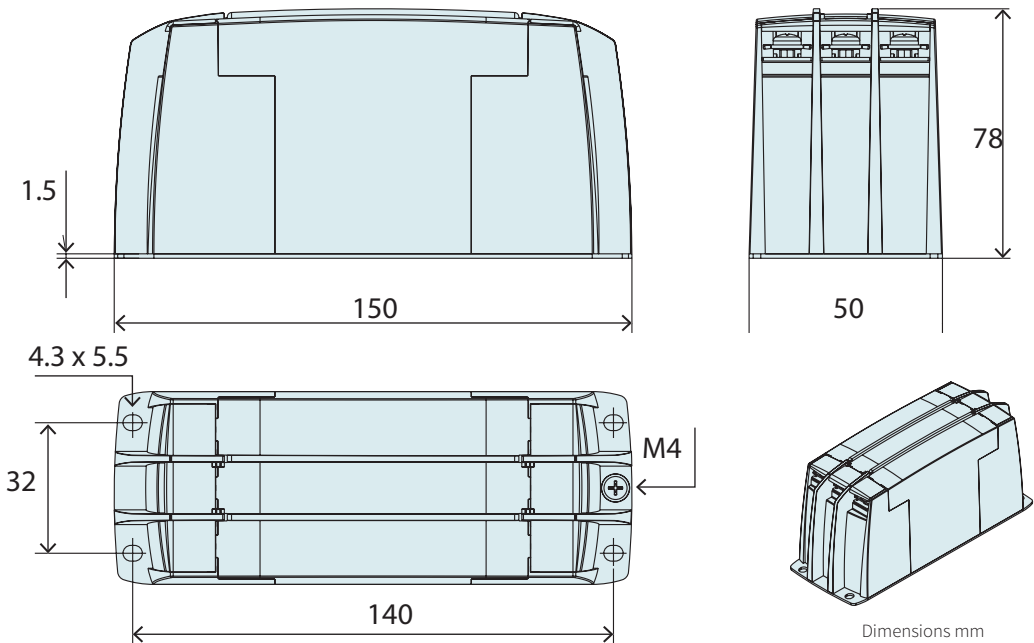
TYPICAL FILTER ATTENUATION



Per CISPAR 17

- A = 50Ω/50Ω sym
- B = 50Ω/50Ω asym
- C = 0.1Ω/100Ω sym
- D = 100Ω/0.1Ω sym

DIMENSIONS



Item	Description	Item-No.
NF01-FS34985-20-71	Line Filter for E1400 (motor cable up to 20 m)	0150-2746

EC Servo motors

The EC02-40 series servomotors are brushless EC servomotors. The compact construction and high performance density allows for positioning tasks in tight spaces.

For the wiring the LinMot one cable solution is used, which is well-proven for decades. Thereby significant cost savings for components and implementation can be realised.

The series EC02-40 motors are optimized for LinMot servo drives C1100 and C1200.

- » Compact 70W and 140W models
- » Standstill Torque 0,19Nm to 0,38Nm
- » Robust rotatable Push-Pull Connectors
- » Cost Effective Single-Cable Solution
- » 40 x 40mm Flange
- » Highest Performance Density
- » Optional Holding Brake
- » Single Turn Absolut Encoder
- » Absolute Motor Temperature Monitoring
- » Plug & Play (Electronic Data Sheet)

EC02-40/70



EC02-40/140



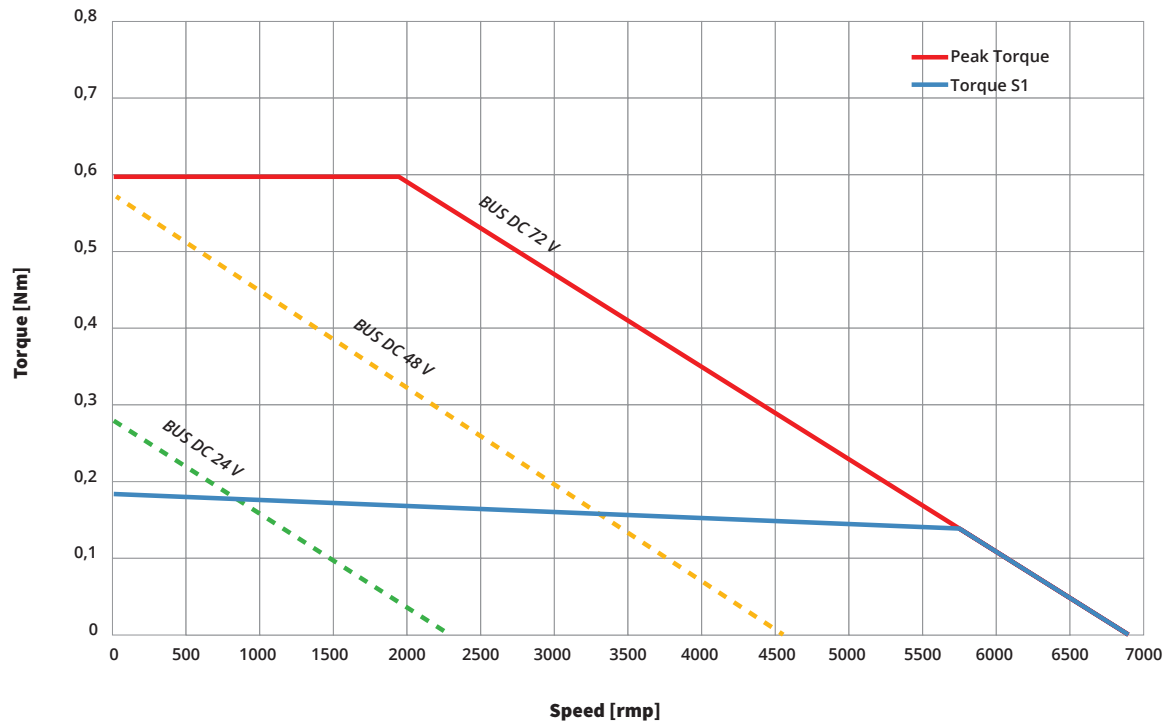
TECHNICAL DATA

Motor Specifications			EC02-40/70	EC02-40/140
Nominal Power	P_N	W	70	140
Nominal Torque	M_N	Nm	0.16	0.32
Nominal speed	N_N	min ⁻¹	4'000	4'000
Nominal Current	I_N	A (rms)	1.4	2.8
Stall Torque	M_0	Nm	0.19	0.38
Stall Current	I_0	A (rms)	1.52	3.0
Max Torque	M_{MAX}	Nm	0.6	1.3
Max Speed	N_{MAX}	min ⁻¹	5'000	5'000
Max Current	I_{MAX}	A (rms)	6	12
Max Mechanical Speed	N_{PK}	min ⁻¹	8'500	8'500
Back EMF	K_E	10 ⁻³ V(rms)min ⁻¹	7.4	7.7
Torque Constant	K_T	Nm/A(rms)	0.122	0.13
Number of pole pairs			4	4
Moment of Inertia (without brake)	J_R	kg cm ²	0.037	0.061
Phase Resistance @ 20°C	R_{U-V}	Ohm	6.8	2.4
Phase Inductance	L_{U-V}	mH	2.6	1.3
Weight (without brake)	m	kg	0.53	0.68
Ambient Temperature		°C	0...40	
Max Temperature Increase		K	100	
Insulation Class		°C	155 (F)	
Protection Class			IP65 (except for shaft opening)	
Cooling Class			Totally enclosed, self-cooled	

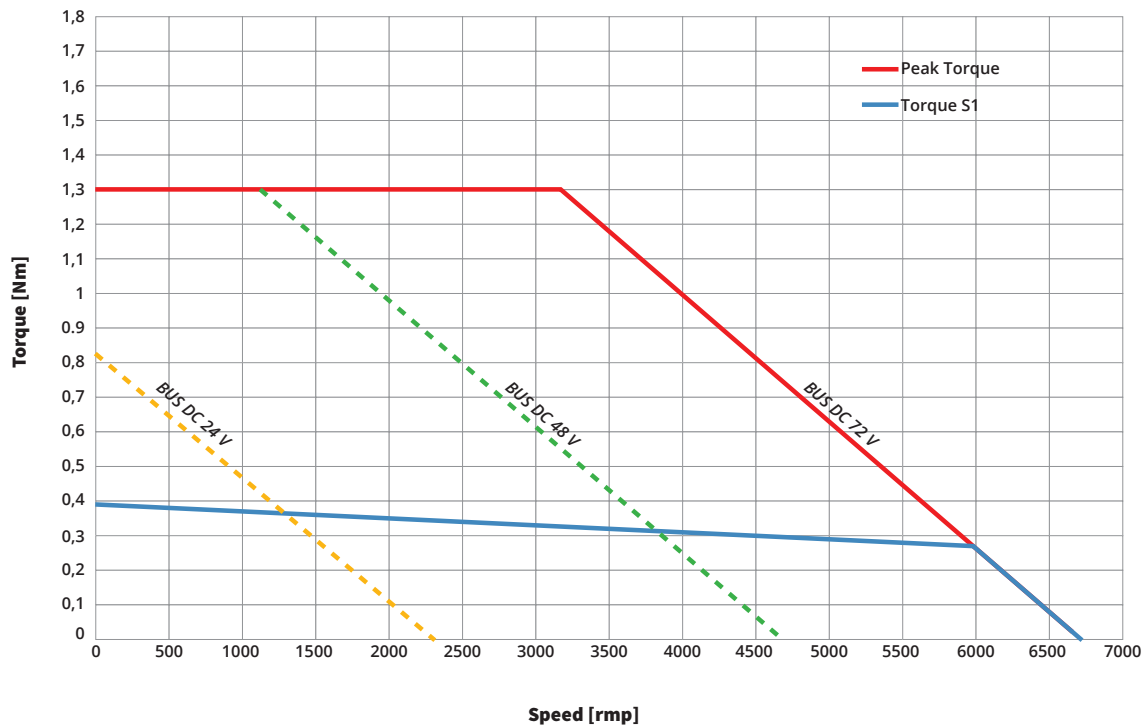
Brake Specifications

Nominal Voltage		VDC	24
Nominal Power		W	6
Brake Torque	M_{br}	Nm	0.4
Moment of Inertia	J	kg cm ²	0.019
Weight	m	kg	0.085

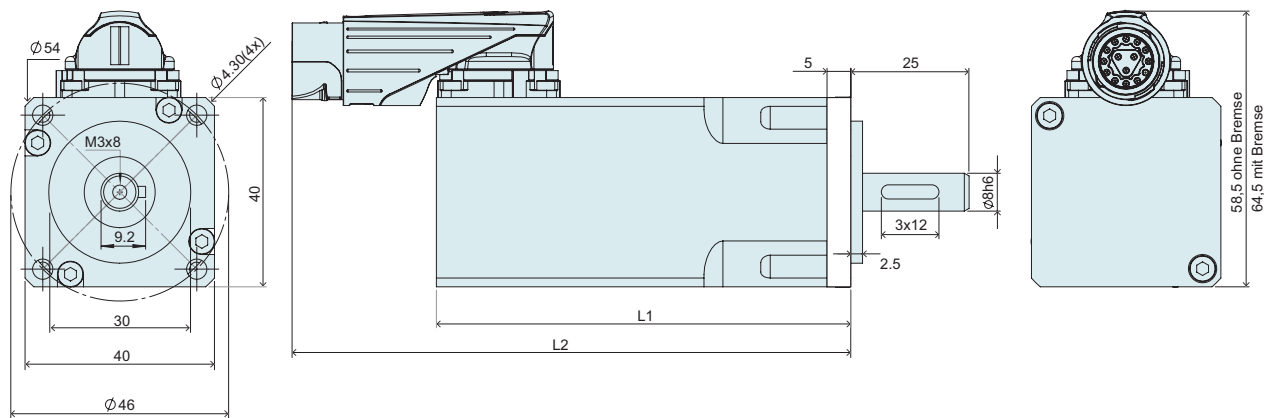
EC02-40/70



EC02-40/140

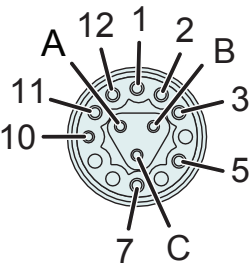


DIMENSIONS



Motor type		EC02-40/70		EC02-40/140	
		without brake	with brake	without brake	with brake
L1	mm	87.5	119.5	105.5	137.5
L2	mm	118.5	150.5	136.5	168.5
F _{radial} @ 4000 rpm	N	220			
F _{axial} @ 4000 rpm	N	80			

CONNECTOR WIRING



Pin	Funktion	Adernfarbe
A	Motor Phase U	
B	Motor Phase V	
C	Motor Phase W	
1	+5VDC	
2	GND	
3	Sin	
4	-	
5	Cos	

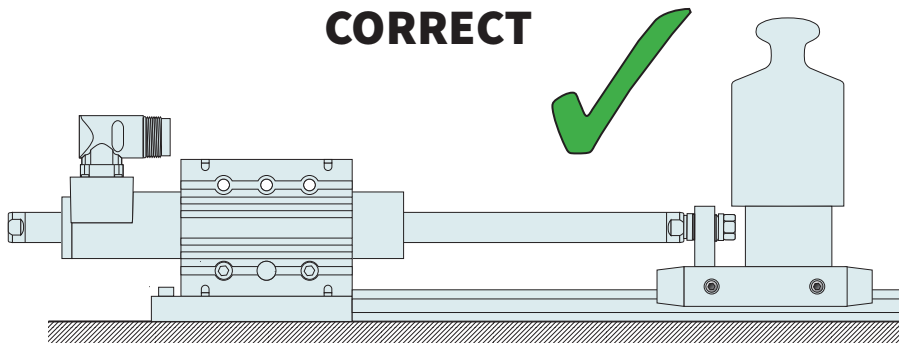
Pin	Funktion	Adernfarbe
6	-	
7	Comm.	
8	-	
9	-	
10	Earth	
11	Brake + (Option)	
12	Brake - (Option)	

Item	Description	Item-No.
EC02-40/70	EC-Servomotor 70W (0.19Nm, 4'000//min)	0150-3456
EC02-40/70-B	EC-Servomotor 70W (0.19Nm, 4'000//min) mit Brake	0150-3460
EC02-40/140	EC-Servomotor 140W (0.38Nm, 4'000//min)	0150-3457
EC02-40/140-B	EC-Servomotor 140W (0.38Nm, 4'000//min) mit Brake	0150-3461
Spezialkabel KS05-04/06-Y-Fe/UK-xx	Motor cable for EC02-Motors, custom length (m), C1100/C1200	0150-3639
Spezialkabel KS05-W/UK	Motor cable for EC02-Motors, custom length (m), E1200, (only without brake)	0150-3682

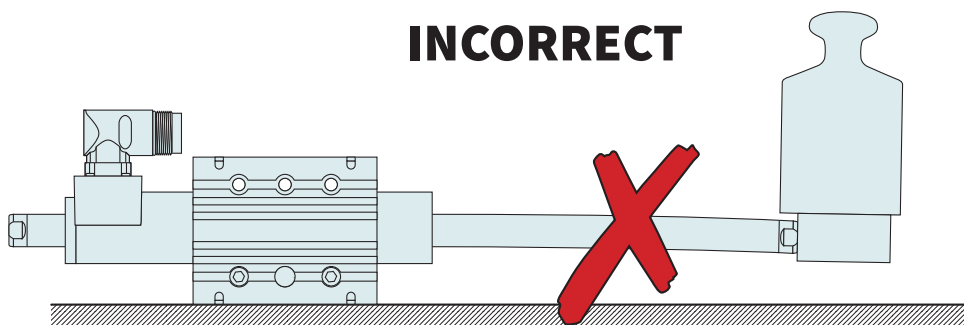
The values in the datasheet refer to a maximum level of operation 1000m over the sea level, tolerance $\pm 10\%$.

APPENDIX

Design notes	1116
Technology Functions	1126
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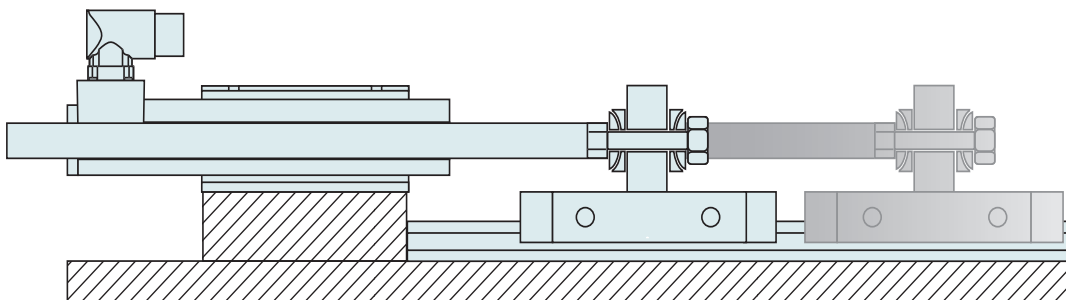
CORRECT INSTALLATION

In order to ensure long life for the linear motor, the load to be positioned is mounted on a linear bearing. This external bearing mount prevents excessive load on the slider guide integrated in the stator. The external linear bearing is selected based on the load and environmental conditions.

AVOID SIDE LOADS ON THE SLIDER

If the load is attached directly to the linear motor without any guide, then the side loads generated can lead to wear of the stator and slider, which reduces the life of the motor. The integrated stator bearing is primarily designed to guide the slider, and should not be subjected to additional loads transverse to the direction of motion. The slider should also be loaded only in the direction of motion.

“MOVING SLIDER” INSTALLATION

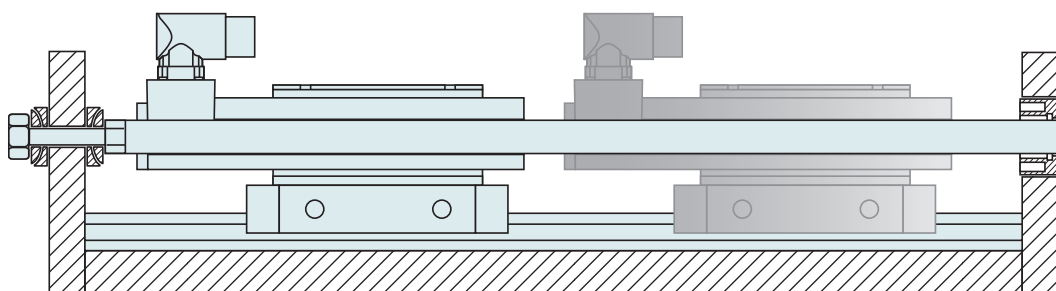


The slider of the linear motor is guided in the stator, and the load is mounted on a linear bearing. To simplify installation and avoid alignment errors, the load is attached with a fixed bearing, consisting of a rounded washer and a bevel washer.

Installation Accessories:

- Stator mounting motor flange, see section "Accessories"
- Slider mounting fixed bearing, see section "Accessories"

“MOVING STATOR” INSTALLATION



The stator of the linear motor and the load are mounted on linear bearings. To avoid binding, the slider is attached with a fixed bearing at one end and a floating bearing at the other.

Mounting Accessories:

- Stator mounting motor flange, see section "Accessories"
- Slider mounting kit, see section "Accessories"

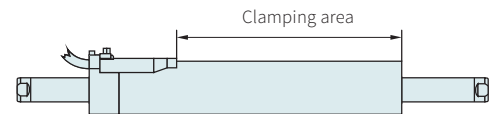
STATOR MOUNTINGS

The linear motor stators are mounted in a clamp flange.

Matching clamp flanges are available for each family of motors, with the designation PF. These ensure simple installation and optimum cooling of the linear motor. The flange can be mounted horizontally by the through-holes, or vertically using T-nuts and the T-slot.

Integrated cooling fins, or even forced-air cooling with a ventilator, can increase the continuous force of the linear motor even further.

If needed, stators can also be integrated into the design using customer specific clamp flanges. Care must be taken that the stator is mounted with as much surface contact as possible, in order to provide optimum cooling of the motor.



Correct: Large contact surface area guarantees optimum cooling of the linear motor.



LinMot flange with optional fan to increase continuous force



Incorrect: Small mounting surface area prevents proper cooling of the linear motor.

LOAD MOUNTING

LinMot sliders are precision components, designed to bear very large motor forces in the direction of motion. Forces acting transverse to the direction of motion, as well as torques, are to be avoided in installation and operation.

Correct Installation: In order to prevent torque loads on the slider, the wrench and allen key are used at the same end of the slider during installation.

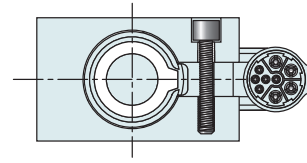


Incorrect: The tools used to attach the load must not be used on opposite ends of the slider. Avoid subjecting the slider to torque loads.



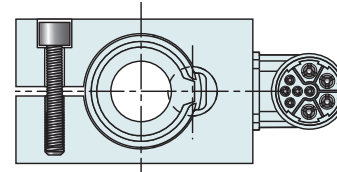
CLAMP FLANGE WITH MOUNTING HOLES AND SIDE SLOT

With a through bore and milled slot on one side, the stator can be mounted relatively easily. The lengthwise key on the motor fits into the milled slot. It also serves to clamp the stator.



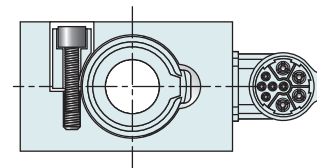
CLAMPING FLANGE WITH TWO ASYMMETRICAL HOLES

Using two asymmetrical bores and a small slit to clamp the motor, the stator is mounted inside the flange.



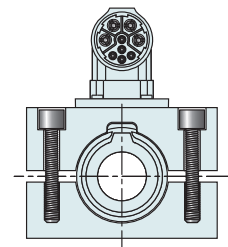
MOUNTING WITH CLAMPING CYLINDERS

The LinMot H01 and B01 guides hold the stator in a closed hollow profile using clamping cylinders. In order to ensure even clamping loads over the stator length, between two and five clamping cylinders, depending on the size of the linear motor, must be used along the entire length of the stator.



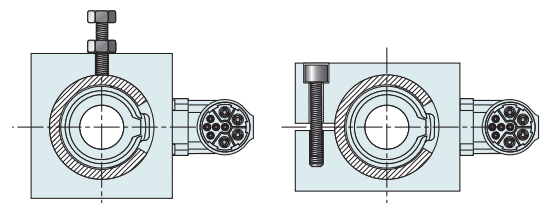
TWO-PIECE DESIGN

Another possibility is to make the motor flange in two parts. The two half rounds and the slot for the stator can be milled into the open halves from above.



HOLLOW PROFILE WITH CLAMPING TUBE

A clamp mount with a round bore and a clamping tube segment, as shown in the adjacent drawing, is easy to manufacture. Clamping is provided either by a side slit or with clamping screws that compress the tube segment.



Moving Motor Cables

For designs with moving stators, guidance of the cables must be given particular attention. The motor cables are often forgotten when designing drive modules, and then have to be somehow inserted into a finished design. This often causes difficulty maintaining the required bend radii. Cable guidance should therefore be given the proper attention, from the beginning of the design, for applications with moving motor cables.

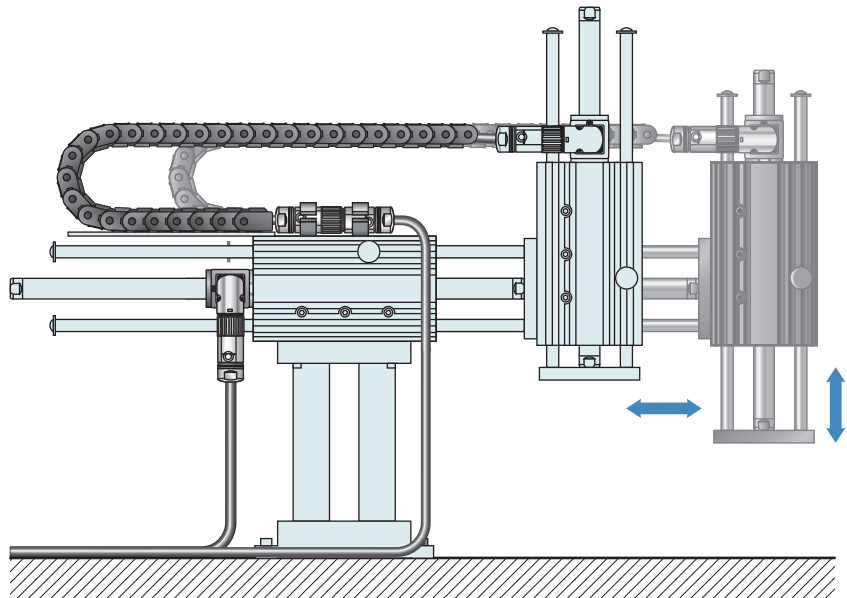
Cable radii should be kept as large as possible to ensure long life. The minimum prescribed bend radius should never be exceeded. For service purposes, the moving cable sections should be designed with cable-chain or robot cables, with as short a length as possible, and with plug connectors on both ends (see illustration.)

The motor cable can then be replaced quickly and easily when service is needed. For this reason, it is recommended that applications with moving motor cables use connector type stators.

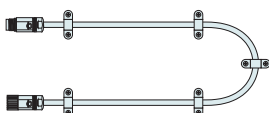
LinMot provides a large selection of pre-assembled motor cables in standard lengths from stock.

All motor cables are available in any desired length, in the three versions of standard, high-flex, and robot cables.

For LinMot motor cables, see section "Accessories"

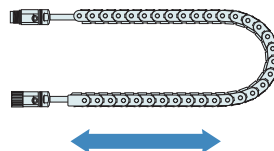


STANDARD CABLE



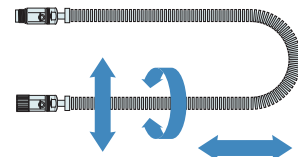
The standard motor cable is suitable only for connections in which the cable is fixed. The cable attached to the cable-type stator must also be installed in a fixed location and must not move.

HIGH-FLEX CABLE



High-flex motor cables are suitable for installation in cable chains (rolling up, no torsion). For long life, the minimum bend radius must not be exceeded, and should be kept as large as possible. High-Flex cable comes without cable track.

ROBOT CABLE



The robot cable is used if the motor cable will be subjected to torsion, as is typically the case with moving cable sleeves. In addition to torsion, robot cables can also be subjected to rolling-up motion.

CABLE MOUNTING

For stators with direct cable exits, special attention must be paid to ensure that the motor cable is not damaged by exceeding the minimum prescribed bend radius. In no case can the motor cable be kinked at the stator (or anywhere else).

For applications with a moving stator or moving linear motor, care must also be taken that the motor cable does not move due to constant acceleration and deceleration.

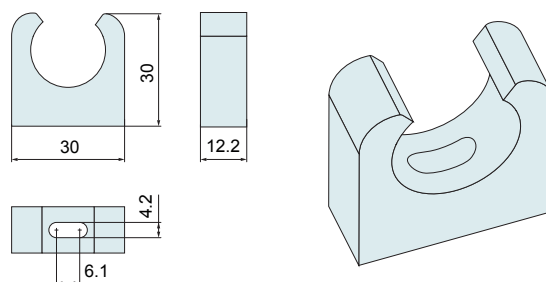
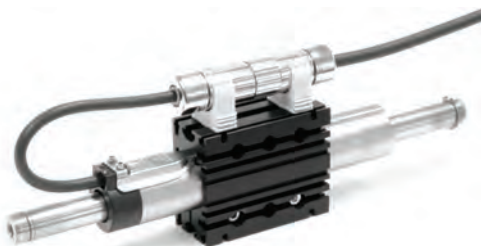
The cable attached to the cable-type stator must not move. It is not suitable for installation in cable chains or moving cable conduit.

In applications with moving motor cables, wherever possible, stators with plug connectors should be used. These allow a motor cable of the desired quality to be plugged directly into the stator. A motor cable installed in this manner can be replaced, if needed, without a problem.



MOUNTING CLIP FOR IP67 PLUG

Cable-type stators with IP67 plugs are shipped with two mounting clips for attaching the "flying IP67 plug connector." Primarily in applications where strong vibrations or motions occur, the plug connection must be secured in order to prevent damage to the motor cable due to vibrations.

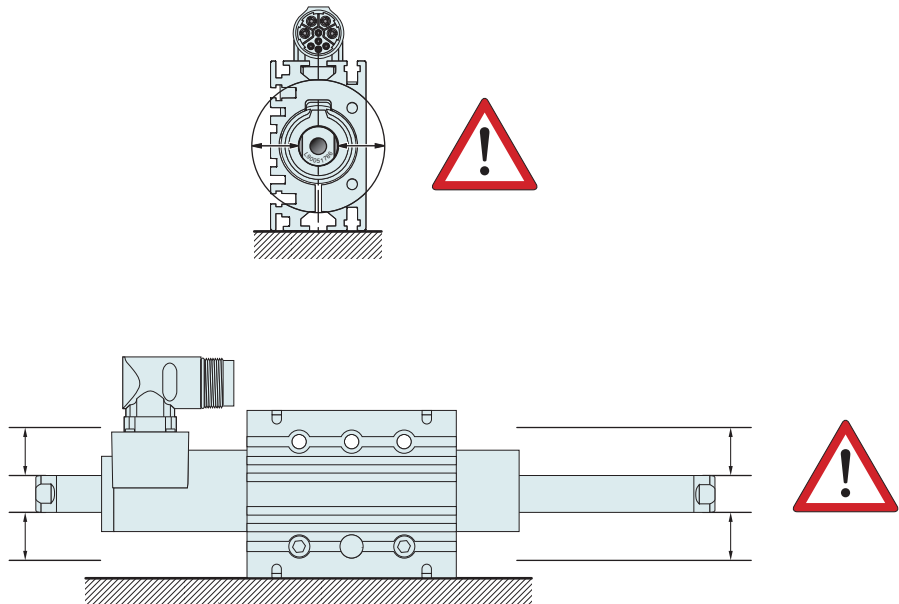


In applications with moving motor cables, wherever possible, connector type stators should be used (see above).

Minimum distance
from slider

When installing linear motors in modules with metal parts near the slider, undesired forces can arise due to magnetic attraction or eddy currents. These generally manifest as erratic and jerky positioning, or reduced dynamics of the linear motor.

In order to avoid this, minimum distances between the slider and any metal parts are to be observed whenever metal materials are used nearby



Minimum distance from slider surface to
ferromagnetic parts (iron, steel, etc.):

Linear Motor series P01-23x...	10mm
Linear Motor series P01-37x...	15mm
Linear Motor series P01-48x...	20mm

Minimum distance from slider surface to
nonferromagnetic parts (aluminum, bronze,
stainless steel, etc.):

Linear Motor series P01-23x...	5 mm
Linear Motor series P01-37x...	7 mm
Linear Motor series P01-48x...	10mm

MAGNETIC FIELDS

In order to achieve very high power density in the linear motor, very strong neodymium magnets are normally used. These generate very strong magnetic fields at a distance of a few mm, in order to obtain the highest motor forces possible.

Due to their cylindrical shape, the magnetic fields of LinMot linear motors drop off quickly with increasing distance from the slider surface. The earth's magnetic field is already stronger than the magnetic field generated by the linear motor at a distance of 3x the slider diameter.

MAGNETIC ATTRACTION

Magnetic attraction between ferromagnetic materials, such as iron or steel, and the magnetic slider, is based on reluctance force.

Distances less than the minimum can lead to erratic motion, overshooting, and excessive heating of the linear motor.

In general, the minimum distance to the slider surface must be maintained, regardless of whether the ferromagnetic part moves with slider, or the slider moves past the part.

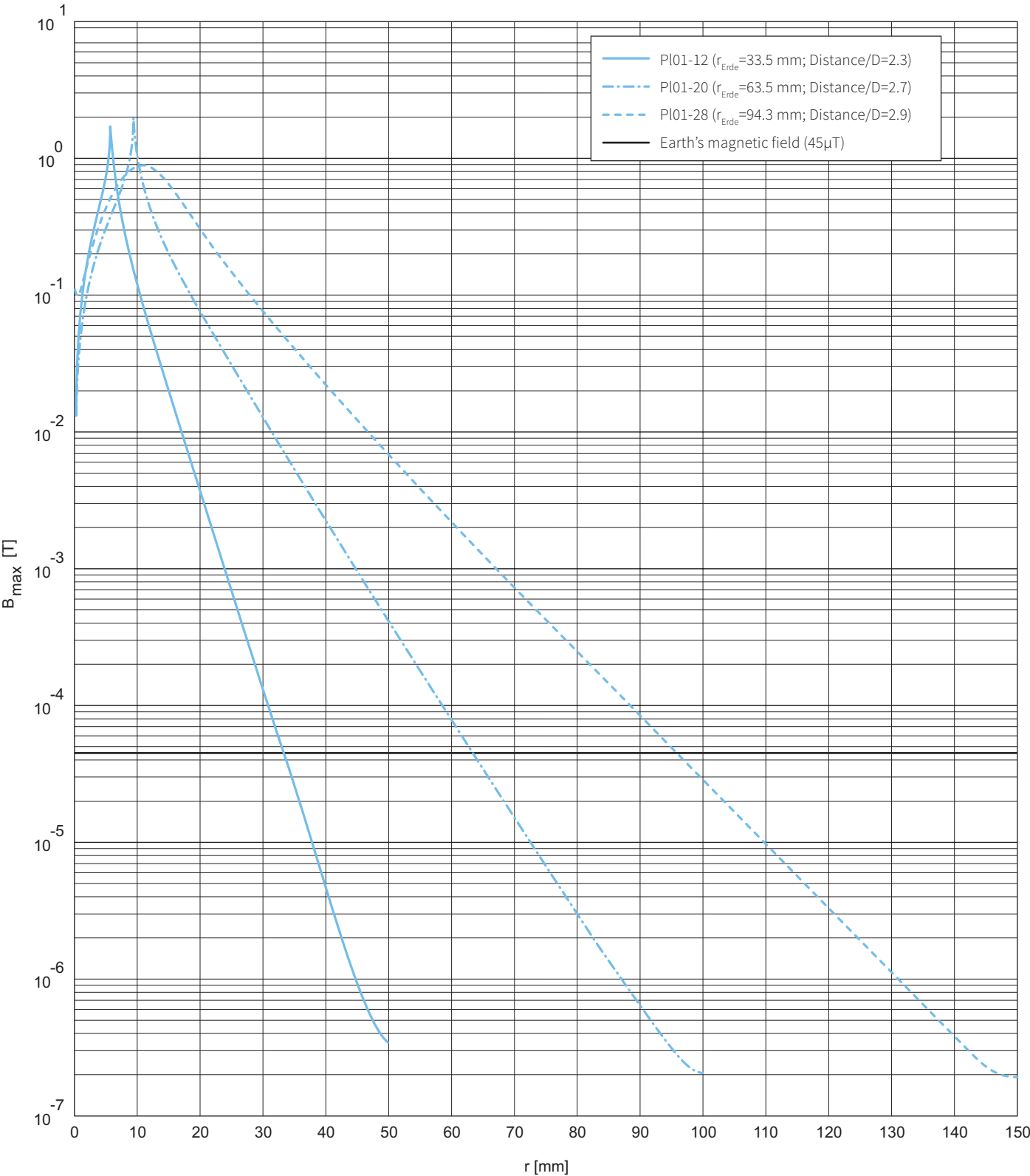
EDDY CURRENTS

If the slider moves very close to fixed, nonferromagnetic metal parts, such as aluminum, bronze, stainless steel, etc, then the slider is decelerated by the eddy currents induced in the metals.

This deceleration limits the dynamics of the linear motor and leads to severe heating of the stator.

For this reason, a minimum distance must also be observed for designs with non-ferromagnetic parts.

Magnetic fields



At a distance of 2.8 mm, 54 mm, or 91 mm from the slider surface, the magnetic induction from the earth's magnetic field is already stronger than the magnetic induction from the LinMot slider. This distance is no more than three times the slider diameter.

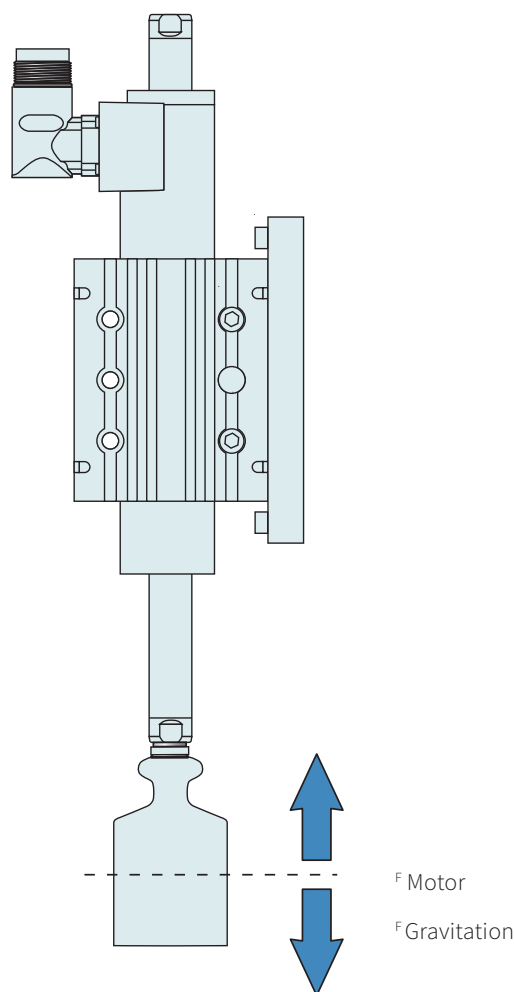
Vertical Installation

Vertically mounted linear axes have the negative aspect that the drive must compensate for the force of gravity, both during the motion and when stopped. Part of the motor force is therefore required to hold the load mass in place. Asymmetrical forces also arise under acceleration, depending on the direction of motion. Less force is needed for acceleration in a downward direction than for upward motion, where the force of gravity must also be applied. This leads to asymmetrical load ratios, which make optimal control more difficult. All of these effects occur regardless of whether a linear motor or a rotary servomotor is used as the drive.

If the force of gravity is compensated for, then the drive only has to provide the dynamic force necessary to move the load during acceleration and deceleration, and the load ratios do not depend on the direction of motion.

In this section, three different methods for compensating for gravity are presented:

1. MagSpring magnetic springs
2. Mechanical Springs
3. Pneumatic cylinders



MAGSPRING MAGNETIC SPRING

Weight compensation using magnetic springs is very close to the ideal method of compensating for the force of gravity.

MagSpring generates a constant force over its entire stroke range, regardless of position, speed, or mounting orientation. MagSpring is also a purely passive design element that does not require any external energy source.

MagSpring magnetic springs are available with forces up to 60N and a maximum stroke of 350 mm.

For MagSpring Products, see the chapter.

MECHANICAL SPRING

The mechanical spring is a very inexpensive design element for providing weight compensation in vertical installations. The linear increase in force over the stroke range, however, does not allow for ideal compensation of gravity over the entire stroke.

If mechanical springs are used as force compensation, then compression springs or extension springs with an appropriate end component (see graphic, right) should be used for longer lifespan. Extension springs with mounting loops bent onto the ends are not suitable.

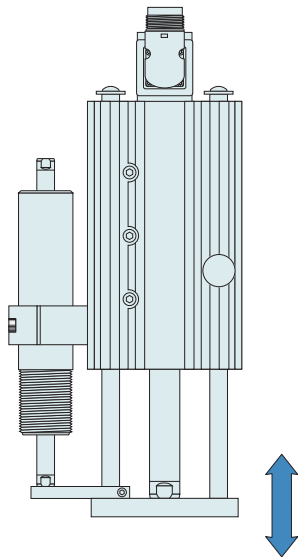
PNEUMATIC CYLINDERS

Constant high forces can be applied over a long stroke range using a pneumatic cylinder. If the pneumatic cylinder is used to compensate for the force of gravity, it is connected directly to the compressed air supply without a control valve. If an additional pressure reducing valve is installed between the air supply and the cylinder, then the force can be adjusted continuously.

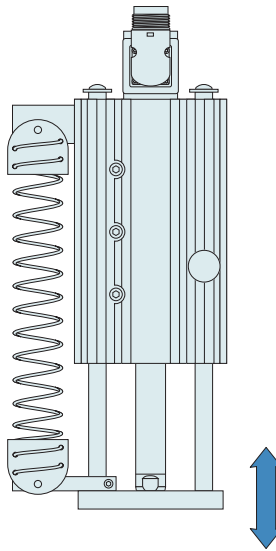
Important:

In order to prevent the cylinder from building up an air cushion during downward motion, a rapid vent valve must be installed as close as possible to the air connector to allow air to escape during downward motion.

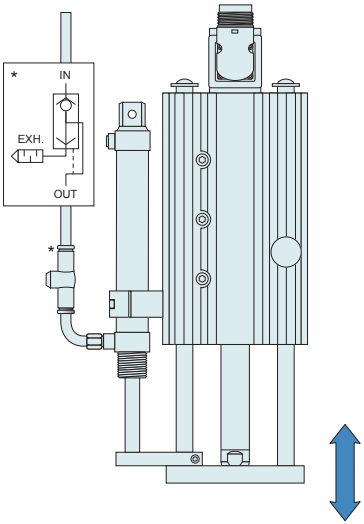
WEIGHT COMPENSATION: SETUP FOR DOWNWARD MOTION



Weight compensation with MagSpring mounted on the side

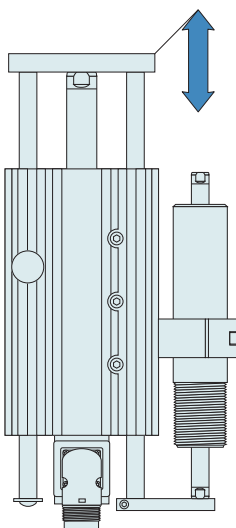


Weight compensation with mechanical spring

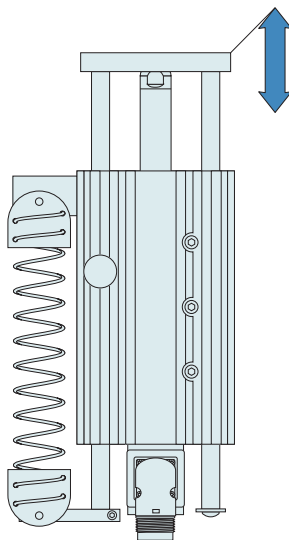


Weight compensation with pneumatic cylinder and rapid vent valve

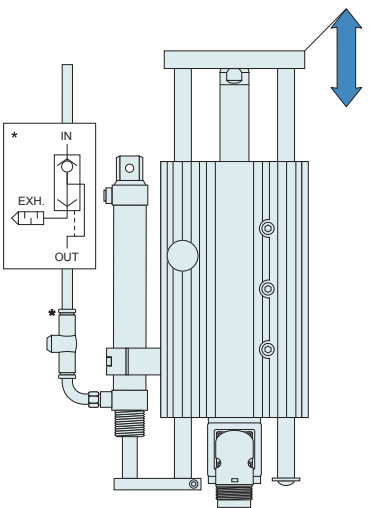
WEIGHT COMPENSATION: SETUP FOR UPWARD MOTION



Weight compensation with MagSpring mounted on the side



Weight compensation with mechanical spring



Weight compensation with pneumatic cylinder and rapid vent valve

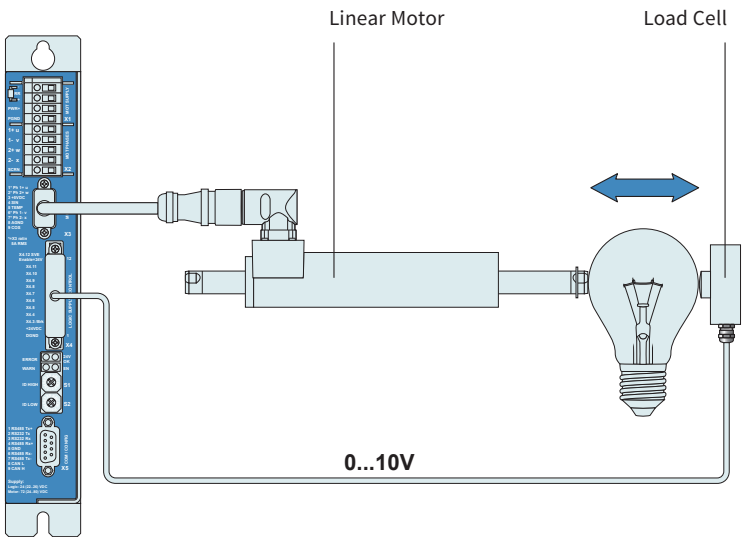
Force Control

The "Force Control" technology function for LinMot servo drives allows closed-loop force control at a resolution of up to 0.1N.

Force control allows precise definition of a constant force across the entire stroke, regardless of the current position.

Since the force generated by the linear motor is measured by the load cell, and is controlled directly in the Servo Drive, interference effects, such as differences in friction, dirt, slip-stick effects, temperature variations, and other variables are compensated for.

Servo Drive



The force exerted on the product by the linear motor is measured by the load cell and transmitted to the servo drive. It controls the linear motor current and guarantees precise force control across the entire stroke.

15

FORCE CONTROL COMMANDS

VAI Go To Pos With Force Ctrl Limit Moves to the defined target position. As soon as the measured force reaches the force limit, the drive changes to force control mode, with the target force = force limit. To move with position control again, use the command, VAI Go To Pos From Act Pos And Reset Force Control. Force Ctrl Change Target Force Using this command, the target force can be changed in force control mode.

VAI Go To Pos With Force Ctrl Limit And Target Force

VAI Go To Pos With Force Ctrl Limit And Target Force Travels to a defined target position. As soon as the measured force reaches the force limit, the drive changes to force control mode, with the target force = target force. To move with position control again, use the command, VAI Go To Pos From Act Pos And Reset Force Control.

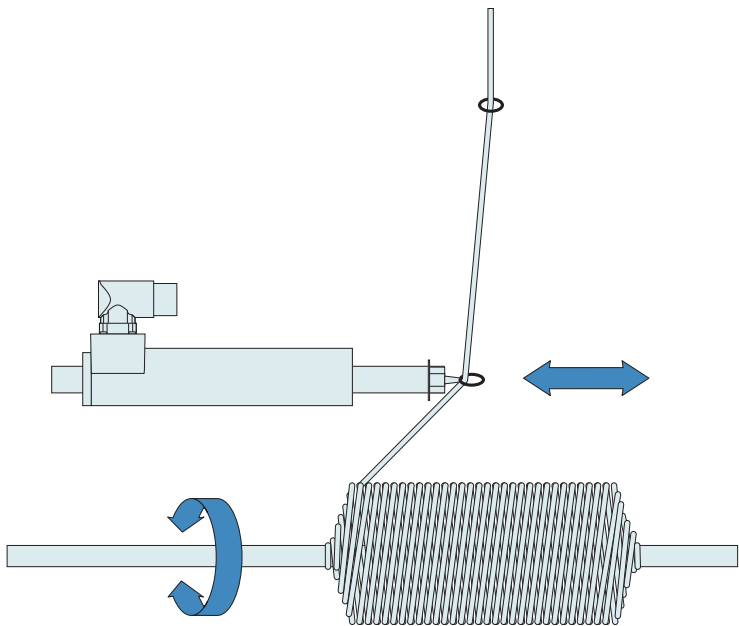
VAI Go To Pos From Act Pos And Reset Force Control Reactivates position control, and travels to the defined position.

ACTIVATION OF FORCE CONTROL

Activation of force control requires an activation code:

Ordering Information:
TF-1100-Force-Control
Technology Function Force Control
Item Number: 0150-2503

Detailed descriptions of the commands are found in the Motion Control SW manual.



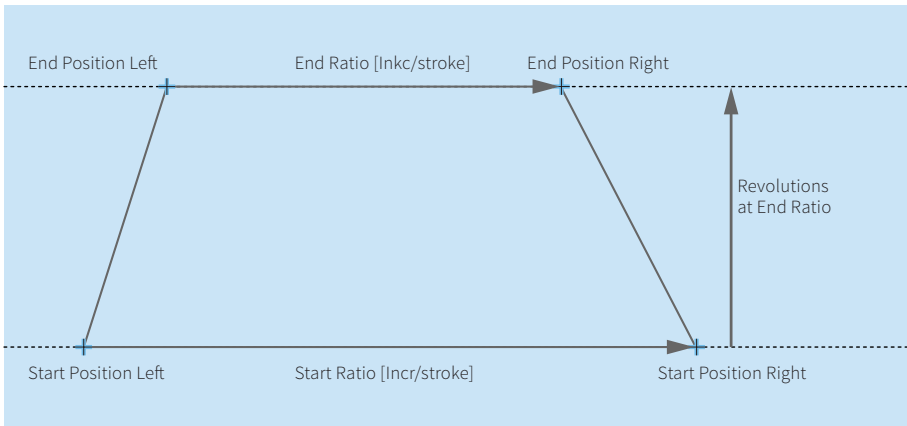
Winding

For winding cotton or synthetic yarns, threads, optical data cables, etc., the "winding" functional component is available with Series E1200 Servo Drives. This carries out a complete winding process on its own, without any overarching drive.

The complete winding process is specified by a few parameters. To avoid the so-called "dog bone" effect, two different pre-programmed correction modes can be selected.

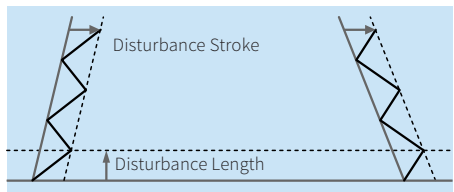
WINDING PARAMETER

A complete winding process is specified by the following parameters:

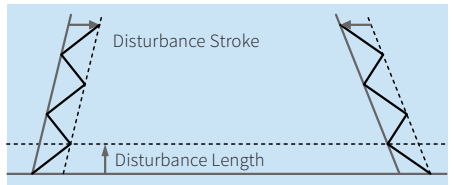


PARALLEL AND ANTIPARALLEL DISTURBANCE

Parallel Disturbance



Antiparallel Disturbance



Working with LinMot sliders

LIABILITY

NTI AG, as owner of the LinMot and MagSpring brand names, disclaims liability for any damages caused by improper handling of magnetic sliders. By purchasing LinMot products, you confirm that you have read and understood the following warnings. Provide these safety notes to your customer if you resell LinMot products. Inform your customers and employees of the potential hazards.



LINMOT SLIDERS

LinMot and MagSpring sliders are precision components that must be handled with due care. The slider consists of a thin-walled stainless steel tube in which very strong neodymium magnets are mounted. An uncontrolled collision between two sliders, or a slider and a ferrous component (caused by magnetic attraction) can damage the surface of the slider. A damaged slider surface can lead to severe wear and reduced lifespan of the motor. Damaged sliders should not be reused.



CONTUSIONS

LinMot sliders can exert an enormous force when they are brought close enough to each other. Be very careful, especially when handling large sliders, and keep them away from other sliders, magnets, or ferrous components. Keep the slider in the original packaging prior to final installation, or after removal from a machine. Keep unpacked sliders away from untrained persons. Wear heavy protective gloves when handling sliders.



MAGNETISM

NdFeB-Magnets are much stronger than "typical" magnets. Keep them a good, safe distance away from any devices or objects that can be damaged by magnetism. This includes:

TVs, laptops, computer hard drives, credit cards, ATM cards, data storage media, mechanical watches, hearing aids, and speakers.



BRITTLENESS, SPLINTER HAZARD

The NdFeB magnets used in LinMot sliders are not made of metal, but are made by sintering, and therefore can break. For this reason, LinMot sliders should be handled with care, and, as much as possible, never allowed to "bang" against each other or against other ferrous parts. It is also possible that magnetic splinters could break off from damaged sliders. When handling damaged sliders, therefore, gloves and safety glasses should be worn.



NO WORK DONE ON SLIDERS

LinMot sliders are available in set lengths, and are attached via internal threads on the end, or by clamping around their ends. In no case should you attempt to saw, drill, or otherwise work on the slider. Not only will the slider magnets break, but the drill dust generated is also slightly flammable. Keep the LinMot slider away from open flame and heat, to avoid damaging the drive magnets with excessive temperatures.



EFFECTS ON HUMANS

Whether permanent magnets can affect the human organism is a point of dispute. Therapists who use magnets for healing would agree with this, but scientific experiments show that the fields of permanent magnets (electromagnets are a separate case) are too weak to have any measurable effect on humans. Whether longterm exposure to permanent magnets is good or bad for the health is not relevant for LinMot sliders, since the slider's magnetic field is already weaker than the earth's magnetic field at a distance of 90 mm.



PACEMAKER / IMPLANTED HEART DEFIBRILLATOR

Sliders could affect the functioning of pacemakers and implanted heart defibrillators. For the duration of a strong approach to a magnetic field, these devices switch into test mode and will not function properly.

If you wear one of those devices keep the following distances between the pacemaker / defibrillator and slider:

Min. 250 mm for sliders PL01-27 / 28

Min. 150 mm for sliders PL01-19 / 20

Min. 100 mm for sliders PL01-12



FAST-MOVING MACHINE PARTS

The sliders of LinMot linear motors are fast-moving machine parts. The sliders of LinMot motors can reach temperatures of 80 °C, which may cause burns upon contact. The user must take all necessary precautions to prevent access during operation (provide covers, guards, etc.).

Magnetic slider length

The magnetic slider length is the length of the magnet column in the slider.

Active stator length

Length of the electrical motor winding within the linear motor stator.

Slider

The slider is the rod-shaped part of the motor which is pushed into the stator. The slider consists of a thin-walled stainless steel tube in which the motor magnets (permanent magnets) are accommodated.

Pole pitch

Distance from North Pole to South Pole produced by magnets in the slider.

Magnetic Period

Distance from North Pole to North Pole is produced by magnets in the slider. Both the stator winding and the position sensors of a corresponding stator are based on this period length.

Max. cont. force [Passive cooling / Fan / Fluid]

Maximum force which the linear motor can apply continuously at a coolant temperature of 25°C and different cooling variants without exceeding the maximum winding temperature.

Max. cont. current [Passive cooling / Fan / Fluid]

Maximum continuous current values of the linear motor for different cooling variants at a temperature of the cooling medium of 25°C without exceeding the maximum winding temperature.

Max. winding temperature

Maximum permissible winding temperature. When this temperature is reached, the drive motor must be switched off to prevent the motor from being damaged by overheating.

Motor type HP

High-performance linear motors with identical dimensions and nearly twice the power density of standard motors.

Motor type LC

New standard motor series, compatible with the previous standard motors.

Motor type FC

Liquid-cooled linear motor stators with integrated cooling coil for the cooling medium. These motors have a much higher power range than normal-cooled motors.

Stator

The stator is the motor part of the linear motor in which the motor windings, position sensors, temperature monitoring and the electronic nameplate are integrated.

Stator design S

Linear motors with particularly compact, short construction. In the type designation recognizable by an S (short) after the stator diameter.

Winding type in standard motors P01

E, F, H: Depending on the winding type, different phase current values, force and voltage constants as well as maximum speed values (with a given DC link voltage) result for a given motor family.

Winding type in motors P10

M, U, W: Depending on the winding type, different phase current values, force and voltage constants as well as maximum speed values (with a given DC link voltage) result for a given motor family.

Stall torque

The torque that the rotary motor can apply permanently at standstill.

Position resolution

The smallest deviation between actual and setpoint position detected by the LinMot Servo Drive when using the linear motor internal position sensor.

Position resolution ES

The smallest deviation between the actual and target position detected by the LinMot Servo Drive when using the external linear sensor offered by LinMot as an accessory.

Moment of inertia (rotative)

Moment of inertia of the rotating slider mass of a motor

Force constant

The force constant describes the relationship between phase current and the force released within the standard stroke range.

Max. force @ 48VDC

Maximum force of the linear motor when controlled with a LinMot Servo Drive at 48VDC supply voltage.

Max. force @ 72VDC

Maximum force of the linear motor when controlled with a LinMot Servo Drive at 72VDC supply voltage.

Max. force @ 1x230VAC

Maximum force of the linear motor when controlled with a LinMot Servo Drive at 1x230VAC supply voltage.

Max. force @ 3x400VAC

Maximum force of the linear motor when controlled with a LinMot Servo Drive at 3x400VAC supply voltage.

Max. current @ 48VDC

Maximum permissible phase current (I_{peak}) at 48VDC supply voltage

Max. current @ 72VDC

Maximum permissible phase current (I_{peak}) at 72VDC supply voltage

Max. current @ 1x230VAC

Maximum permissible phase current (I_{peak}) at 1x230VAC supply voltage

Max. current @ 3x400VAC

Maximum permissible phase current (I_{peak}) at 3x400VAC supply voltage

Standard stroke (SS)

Stroke range in which the linear motor develops its greatest force, since all windings of the stator (active range) are in the magnetic field of the slider. The force in the standard stroke range is constant.

Thermal resistance [Passive cooling / Fan / Fluid]

Thermal resistance between stator winding and cooling medium of the corresponding cooling type. Determines the maximum heating at a given power loss.

Thermal time constant**[Passive cooling / Fan / Fluid]**

Describes the typical reaction time for a temperature change of the stator with appropriate cooling mode.

Slider diameter

Outer diameter of the linear motor slider

Slider mass

Weight of the slider

Linearity

Maximum linearity error of the drive in relation to the maximum stroke of the linear motor when controlled by a LinMot Servo Drive.

Linearity ES

Maximum linearity error when positioning the linear motor with a LinMot servo drive and an external position sensor system optionally available from LinMot.

Max. velocity @ 48VDC

Maximum speed of the linear motor when controlled with a LinMot Servo Drive at 48VDC supply voltage.

Max. velocity @ 72VDC

Maximum speed of the linear motor when controlled with a LinMot Servo Drive at 72VDC supply voltage.

Max. velocity @ 1x230VAC

Maximum speed of the linear motor when controlled with a LinMot Servo Drive at 1x230VAC supply voltage.

Max. velocity @ 3x400VAC

Maximum speed of the linear motor when controlled with a LinMot Servo Drive at 3x400VAC supply voltage.

Max. stroke / Extended stroke (ES)

Maximum travel distance of the linear motor

Terminal inductivity

Effective inductance between two motor winding connections

Terminal resistance 25/Tmax °C

Effective ohmic resistance between two motor winding connections at appropriate winding temperature.

Max. border force relative

Maximum force applied by the motor at the ends of the extended stroke relative to the force in the standard stroke range.

Stator diameter

Outer diameter of the stator tube. It should be noted that the diameter can be larger in some places due to the special shape of the stator tube. The exact dimensions can be found in the construction drawing.

Stator length [Connector type / Cable type]

The length of the stator does not take into account the motor cable, the minimum bending radius for cable types or the connector for connector types.

Stator mass

Mass of the stator (without slider)

Repeatability ES

Maximum deviation of the reached position in case of repeated approach to the same position under identical conditions with external position sensors.

Repeatability

Maximum deviation of the reached position in case of repeated approach to the same position under identical conditions. Repeatability of the rotary axes of the linear motors in closing processes.

Item	Description	Item-No.
LINEAR MOTOR STATORS: CONNECTOR TYPES		
P04-37x120F/80-HP-R	Linear Motor P04-37, 80 mm Stroke	0150-2756
P04-37x120F/135-HP-R	Linear Motor P04-37, 135 mm Stroke	0150-2738
P04-48x240F/100-C	Linear Motor P04-48, 100 mm Stroke	0150-2757
P04-48x240F/150-C	Linear Motor P04-48, 150 mm Stroke	0150-2745
PD04-37x120F/80-HP	Linear Motor PD04-37, 80 mm Stroke	0150-2792
PD04-37x120F/135-HP	Linear Motor PD04-37, 135 mm Stroke	0150-2793
PD04-48x240F/100	Linear Motor PD04-48, 100 mm Stroke	0150-2794
PD04-48x240F/150	Linear Motor PD04-48, 150 mm Stroke	0150-2795

LINEAR MOTOR STATORS: CONNECTOR TYPES		
STANDARD		
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x160-R	Stator with IP67 Connector M17/9(m)	0150-1234
PS01-23x160F-R	Stator with IP67 Connector M17/9(m)	0150-1235
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x240-C	Stator with IP67 Connector M23/9(m)	0150-1224
PS01-37x240F-C	Stator with IP67 Connector M23/9(m)	0150-1225
PS01-48x210E-C	Stator with IP67 Connector M23/9(m)	0150-2797
PS01-48x240-C	Stator with IP67 Connector M23/9(m)	0150-1219
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PS01-48x360F-C	Stator with IP67 Connector M23/9(m)	0150-1269
HIGH PERFORMANCE		
PS01-23x80F-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1259
PS01-23x160H-HP-R	Stator HP with IP67 Connector M17/9(m)	0150-1254
PS01-37x120F-HP-C	Stator HP with IP67 Connector M23/9(m)	0150-1251

LINEAR MOTOR STATORS: CABLE TYPES		
STANDARD		
PS01-23x80-R20	Stator, 0.2m Cable, IP67 St. M17/9(m)	0150-1241
PS01-23x160-R20	Stator, 0.2m Cable, IP67 St. M17/9(m)	0150-1242
PS01-23x160F-R20	Stator, 0.2m Cable, IP67 St. M17/9(m)	0150-1243
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PS01-37x240-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1238
PS01-37x240F-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1239
HIGH PERFORMANCE		
PS01-23x80F-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1260
PS01-23x160H-HP-R20	Stator HP, 0.2m Cable, IP67 St. M17/9(m)	0150-1255
PS01-37x120F-HP-C20	Stator HP, 0.2m Cable, IP67 St. M23/9(m)	0150-1252

STATORS WITH D- AND P- CONNECTORS		
PS01-23x80	Stator, 1m Cable, Connector D-Sub-9(m)	0150-1201
PS01-23x160	Stator, 1m Cable, Connector D-Sub-9(m)	0150-1202
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x240	Stator, 1.5m Cable, Connector P/10(m)	0150-1203
PS01-37x240F	Stator, 1.5m Cable, Connector P/10(m)	0150-1256

STATORS SHORT TYPES IP50		
PS02-23Sx80-F	Stator w. flat cable connector 13 Pin	0150-1272
PS02-23Sx80-F-AGI	Stator w. flat cable connector 13 Pin	0150-1273
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PS02-23Sx80F-HP-K-AGI	Stator HP, Cable -90°, 0°, +90°	0150-2788
PS01-37Sx60-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1295
PS01-37Sx60-HP-N-AGI	Stator HP, Cable -90°, 0°, +90°	0150-2549

PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PS01-37Sx120F-HP-N-AGI	Stator HP, Cable -90°, 0°, +90°	0150-2550

STATORS IN STAINLESS STEEL - IP69K

PS01-37x120F-HP-SSC-R	Stator Stainless Steel IP69K	0150-1282
PS01-48x240F-SSC-C	Stator Stainless Steel IP69K	0150-1267
PS01-48x360F-SSC-C	Stator Stainless Steel IP69K	0150-1270
PS01-37x120F-HP-SSC-R-FC	Stator Stainless Steel IP69K, FC	0150-1283
PS01-48x240F-SSC-C-FC	Stator Stainless Steel IP69K, FC	0150-1268
PS01-48x360F-SSC-C-FC	Stator Stainless Steel IP69K, FC	0150-1271

STATORS IN STAINLESS STEEL - ATEX - IP69K

PS01-48x240F-EX-E	Stator EX, IP67	0150-2544
PS01-48x360F-EX-E	Stator EX, IP67	0150-2545
PS01-48x240F-EX-E-FC	Stator EX, IP67, FC	0150-1299
PS01-48x360F-EX-E-FC	Stator EX, IP67, FC	0150-1300

PLAIN BUSHINGS FOR STAINLESS STEEL STATORS

PB02-37x24-P-WD	Bearing for PS01-37x...-SSC	0150-3299
PB02-48x25-P-WD	Bearing for PS01-48x...-SSC	0150-3271
PB01-37x24-P-SSC	Bearing for PS01-37x120-SSC (Stainless)	0150-3290
PB01-48x25-P-SSC	Bearing for PS01-48x240-SSC (Stainless)	0150-3281
PB01-48x25-80-P-SSC	Bearing for PS01-48x360-SSC (Stainless)	0150-3413
PBS01-37x24-P-SSC	Spare-Bearing Set for PS01-37x120-SSC	0150-3439
PBS01-48x25-P-SSC	Spare-Bearing Set for PS01-48x240-SSC	0150-3437
PBS01-48x25-80-P-SSC	Spare-Bearing Set for PS01-48x360-SSC	0150-3438

HIGH PERFORMANCE SLIDERS

PL01-12x130/90-HP	Slider 'High Performance'	0150-2209
PL01-12x150/110-HP	Slider 'High Performance'	0150-2281
PL01-12x170/130-HP	Slider 'High Performance'	0150-1529
PL01-12x200/160-HP	Slider 'High Performance'	0150-1518
PL01-12x230/190-HP	Slider 'High Performance'	0150-1519
PL01-12x270/230-HP	Slider 'High Performance'	0150-1520
PL01-12x290/250-HP	Slider 'High Performance'	0150-1521
PL01-12x350/310-HP	Slider 'High Performance'	0150-1522
PL01-12x420/380-HP	Slider 'High Performance'	0150-1523
PL01-12x480/440-HP	Slider 'High Performance'	0150-1524
PL01-12x580/540-HP	Slider 'High Performance'	0150-1525
PL01-12x760/720-HP	Slider 'High Performance'	0150-1526
PL01-12x850/810-HP	Slider 'High Performance'	0150-1527
PL01-20x160/100-HP	Slider 'High Performance'	0150-2513
PL01-20x200/140-HP	Slider 'High Performance'	0150-2512
PL01-20x240/180-HP	Slider 'High Performance'	0150-1505
PL01-20x300/240-HP	Slider 'High Performance'	0150-1506
PL01-20x360/300-HP	Slider 'High Performance'	0150-1507
PL01-20x400/340-HP	Slider 'High Performance'	0150-1508
PL01-20x500/440-HP	Slider 'High Performance'	0150-1509
PL01-20x600/540-HP	Slider 'High Performance'	0150-1510
PL01-20x700/640-HP	Slider 'High Performance'	0150-1511
PL01-20x800/740-HP	Slider 'High Performance'	0150-1512
PL01-20x900/840-HP	Slider 'High Performance'	0150-1513
PL01-20x1000/940-HP	Slider 'High Performance'	0150-1514
PL01-20x1100/1040-HP	Slider 'High Performance'	0150-2600
PL01-20x1200/1140-HP	Slider 'High Performance'	0150-1515
PL01-20x1400/1340-HP	Slider 'High Performance'	0150-1516

PL01-20x1600/1540-HP	Slider 'High Performance'	0150-1517
PL01-20x1800/1740-HP	Slider 'High Performance'	0150-1556
PL01-20x2000/1940-HP	Slider 'High Performance'	0150-1543

SLIDERS STANDARD (USE STANDARD LC-SLIDERS FOR NEW DESIGNS)

PL01-12x130/80	Slider 'standard'	0150-1399
PL01-12x170/120	Slider 'standard'	0150-1301
PL01-12x190/140	Slider 'standard'	0150-1302
PL01-12x200/100	Slider 'standard'	0150-1305
PL01-12x230/130	Slider 'standard'	0150-1306
PL01-12x270/170	Slider 'standard'	0150-1307
PL01-12x290/240	Slider 'standard'	0150-1320
PL01-12x350/300	Slider 'standard'	0150-1322
PL01-12x420/370	Slider 'standard'	0150-1324
PL01-12x480/430	Slider 'standard'	0150-1372
PL01-12x580/530	Slider 'standard'	0150-1355
PL01-12x760/710	Slider 'standard'	0150-1366
PL01-12x850/800	Slider 'standard'	0150-1365
PL01-20x240/160	Slider 'standard'	0150-1346
PL01-20x300/220	Slider 'standard'	0150-1348
PL01-20x305/160	Slider 'standard'	0150-1311
PL01-20x365/220	Slider 'standard'	0150-1312
PL01-20x395/320	Slider 'standard'	0150-1318
PL01-20x500/420	Slider 'standard'	0150-1328
PL01-20x600/520	Slider 'standard'	0150-1330
PL01-20x700/620	Slider 'standard'	0150-1332
PL01-20x800/720	Slider 'standard'	0150-1334
PL01-20x900/820	Slider 'standard'	0150-1336
PL01-20x1000/920	Slider 'standard'	0150-1338
PL01-20x1200/1120	Slider 'standard'	0150-1340
PL01-20x1300/1220	Slider 'standard'	0150-1377
PL01-20x1400/1320	Slider 'standard'	0150-1342

SLIDERS STANDARD LC

PL01-12x130/90-LC	Slider 'standard LC'	0150-2580
PL01-12x170/130-LC	Slider 'standard LC'	0150-2581
PL01-12x190/150-LC	Slider 'standard LC'	0150-2582
PL01-12x230/190-LC	Slider 'standard LC'	0150-2598
PL01-12x290/250-LC	Slider 'standard LC'	0150-2583
PL01-12x350/310-LC	Slider 'standard LC'	0150-2584
PL01-12x420/380-LC	Slider 'standard LC'	0150-2585
PL01-12x480/440-LC	Slider 'standard LC'	0150-2586
PL01-12x580/540-LC	Slider 'standard LC'	0150-2587
PL01-12x760/720-LC	Slider 'standard LC'	0150-2589
PL01-12x850/810-LC	Slider 'standard LC'	0150-2588
PL01-20x240/180-LC	Slider 'standard LC'	0150-2560
PL01-20x300/240-LC	Slider 'standard LC'	0150-2561
PL01-20x400/340-LC	Slider 'standard LC'	0150-2562
PL01-20x500/440-LC	Slider 'standard LC'	0150-2563
PL01-20x600/540-LC	Slider 'standard LC'	0150-2564
PL01-20x700/640-LC	Slider 'standard LC'	0150-2565
PL01-20x800/740-LC	Slider 'standard LC'	0150-2566
PL01-20x900/840-LC	Slider 'standard LC'	0150-2567
PL01-20x1000/940-LC	Slider 'standard LC'	0150-2568
PL01-20x1200/1140-LC	Slider 'standard LC'	0150-2569
PL01-20x1400/1340-LC	Slider 'standard LC'	0150-2570
PL01-20x1600/1540-LC	Slider 'standard LC'	0150-2571

PL01-20x1800/1740-LC	Slider 'standard LC'	0150-2649
PL01-20x2000/1940-LC	Slider 'standard LC'	0150-2551

HOLLOW SLIDERS STANDARD (USE HIGH PERFORMANCE HOLLOW SLIDERS FOR NEW DESIGNS)

PL01-12x130/80-L	Slider 'standard L'	0150-1445
PL01-12x170/120-L	Slider 'standard L'	0150-1375
PL01-12x190/140-L	Slider 'standard L'	0150-1478
PL01-12x270/170-L	Slider 'standard L'	0150-1393
PL01-12x290/240-L	Slider 'standard L'	0150-1363
PL01-12x350/300-L	Slider 'standard-L'	0150-1479
PL01-12x420/370-L	Slider 'standard L'	0150-1394
PL01-12x580/530-L	Slider 'standard-L'	0150-1391
PL01-12x480/430-L	Slider 'standard-L'	0150-1491
PL01-12x760/710-L	Slider 'standard-L'	0150-1392
PL01-20x240/160-L	Slider 'standard L'	0150-1350
PL01-20x300/220-L	Slider 'standard L'	0150-1351
PL01-20x305/160-L	Slider 'standard L'	0150-1352
PL01-20x365/220-L	Slider 'standard L'	0150-1353
PL01-20x395/320-L	Slider 'standard L'	0150-1354
PL01-20x500/420-L	Slider 'standard L'	0150-1358
PL01-20x600/520-L	Slider 'standard L'	0150-1359
PL01-20x700/620-L	Slider 'standard L'	0150-1360
PL01-20x800/720-L	Slider 'standard L'	0150-1361
PL01-20x900/820-L	Slider 'standard L'	0150-1362

HOLLOW SLIDERS HIGH PERFORMANCE

PL01-12x130/90-HP-L	Slider 'High Performance L'	0150-3687
PL01-12x170/130-HP-L	Slider 'High Performance L'	0150-3688
PL01-12x200/160-HP-L	Slider 'High Performance L'	0150-3689
PL01-12x230/190-HP-L	Slider 'High Performance L'	0150-2546
PL01-12x270/230-HP-L	Slider 'High Performance L'	0150-2557
PL01-12x290/250-HP-L	Slider 'High Performance L'	0150-3690
PL01-12x350/310-HP-L	Slider 'High Performance L'	0150-3691
PL01-12x420/380-HP-L	Slider 'High Performance L'	0150-3692
PL01-12x480/440-HP-L	Slider 'High Performance L'	0150-3693
PL01-12x580/540-HP-L	Slider 'High Performance L'	0150-3694
PL01-12x760/720-HP-L	Slider 'High Performance L'	0150-3695
PL01-20x240/180-HP-L	Slider 'High Performance L'	0150-2540
PL01-20x300/240-HP-L	Slider 'High Performance L'	0150-3696
PL01-20x360/300-HP-L	Slider 'High Performance L'	0150-1537
PL01-20x400/340-HP-L	Slider 'High Performance L'	0150-3697
PL01-20x500/440-HP-L	Slider 'High Performance L'	0150-3698
PL01-20x600/540-HP-L	Slider 'High Performance L'	0150-3699
PL01-20x600/540-HP-L-S	Slider 'High Performance L'	0150-3720
PL01-20x700/640-HP-L	Slider 'High Performance L'	0150-3700
PL01-20x800/740-HP-L	Slider 'High Performance L'	0150-3701
PL01-20x900/840-HP-L	Slider 'High Performance L'	0150-3702
PL01-20x1000/940-HP-L	Slider 'High Performance L'	0150-3703
PL01-20x1200/1140-HP-L	Slider 'High Performance L'	0150-2510

HEAVY DUTY SLIDERS (USE HEAVY DUTY LC SLIDERS FOR NEW DESIGNS)

PL02-12x130/80	Slider 'heavy duty'	0150-1424
PL02-12x170/120	Slider 'heavy duty'	0150-1303
PL02-12x190/140	Slider 'heavy duty'	0150-1304
PL02-12x200/100	Slider 'heavy duty'	0150-1308
PL02-12x230/130	Slider 'heavy duty'	0150-1309
PL02-12x270/170	Slider 'heavy duty'	0150-1310

PL02-12x290/240	Slider 'heavy duty'	0150-1321
PL02-12x350/300	Slider 'heavy duty'	0150-1323
PL02-12x420/370	Slider 'heavy duty'	0150-1325
PL02-12x480/430	Slider 'heavy duty'	0150-1373
PL02-12x580/530	Slider 'heavy duty'	0150-1356
PL02-20x240/160	Slider 'heavy duty'	0150-1347
PL02-20x300/220	Slider 'heavy duty'	0150-1349
PL02-20x305/160	Slider 'heavy duty'	0150-1314
PL02-20x365/220	Slider 'heavy duty'	0150-1315
PL02-20x395/320	Slider 'heavy duty'	0150-1319
PL02-20x500/420	Slider 'heavy duty'	0150-1329
PL02-20x600/520	Slider 'heavy duty'	0150-1331
PL02-20x700/620	Slider 'heavy duty'	0150-1333
PL02-20x800/720	Slider 'heavy duty'	0150-1335
PL02-20x900/820	Slider 'heavy duty'	0150-1337

HEAVY DUTY LC SLIDERS

PL02-12x130/90-LC	Slider 'heavy duty LC'	0150-2590
PL02-12x170/130-LC	Slider 'heavy duty LC'	0150-2591
PL02-12x190/150-LC	Slider 'heavy duty LC'	0150-2592
PL02-12x230/190-LC	Slider 'heavy duty LC'	0150-2599
PL02-12x290/250-LC	Slider 'heavy duty LC'	0150-2593
PL02-12x350/310-LC	Slider 'heavy duty LC'	0150-2594
PL02-12x420/380-LC	Slider 'heavy duty LC'	0150-2595
PL02-12x480/440-LC	Slider 'heavy duty LC'	0150-2597
PL02-12x580/540-LC	Slider 'heavy duty LC'	0150-2596
PL02-20x240/180-LC	Slider 'heavy duty LC'	0150-2572
PL02-20x300/240-LC	Slider 'heavy duty LC'	0150-2573
PL02-20x400/340-LC	Slider 'heavy duty LC'	0150-2574
PL02-20x500/440-LC	Slider 'heavy duty LC'	0150-2575
PL02-20x600/540-LC	Slider 'heavy duty LC'	0150-2576
PL02-20x700/640-LC	Slider 'heavy duty LC'	0150-2577
PL02-20x800/740-LC	Slider 'heavy duty LC'	0150-2578
PL02-20x900/840-LC	Slider 'heavy duty LC'	0150-2579

HEAVY DUTY / HIGH PERFORMANCE SLIDERS

PL02-12x170/130-HP	Slider 'heavy duty' 'High Performance'	0150-1559
PL02-12x200/160-HP	Slider 'heavy duty' 'High Performance'	0150-1532
PL02-12x230/190-HP	Slider 'heavy duty' 'High Performance'	0150-1552
PL02-12x270/230-HP	Slider 'heavy duty' 'High Performance'	0150-1533
PL02-12x290/250-HP	Slider 'heavy duty' 'High Performance'	0150-1495
PL02-12x350/310-HP	Slider 'heavy duty' 'High Performance'	0150-1555
PL02-12x380/340-HP	Slider 'heavy duty' 'High Performance'	0150-2271
PL02-12x420/380-HP	Slider 'heavy duty' 'High Performance'	0150-1554
PL02-12x480/440-HP	Slider 'heavy duty' 'High Performance'	0150-2519
PL02-12x580/540-HP	Slider 'heavy duty' 'High Performance'	0150-2520
PL02-12x760/720-HP	Slider 'heavy duty' 'High Performance'	0150-2521
PL02-12x850/810-HP	Slider 'heavy duty' 'High Performance'	0150-2516
PL02-20x240/180-HP	Slider 'heavy duty' 'High Performance'	0150-2162
PL02-20x300/240-HP	Slider 'heavy duty' 'High Performance'	0150-2163
PL02-20x360/300-HP	Slider 'heavy duty' 'High Performance'	0150-2164
PL02-20x400/340-HP	Slider 'heavy duty' 'High Performance'	0150-2165
PL02-20x500/440-HP	Slider 'heavy duty' 'High Performance'	0150-2166
PL02-20x600/540-HP	Slider 'heavy duty' 'High Performance'	0150-2167
PL02-20x700/640-HP	Slider 'heavy duty' 'High Performance'	0150-2168
PL02-20x800/740-HP	Slider 'heavy duty' 'High Performance'	0150-2169
PL02-20x900/840-HP	Slider 'heavy duty' 'High Performance'	0150-2170

SLIDERS STANDARD		
PL01-28x350/270	Slider 'standard'	0150-1380
PL01-28x410/330	Slider 'standard'	0150-1381
PL01-28x500/420	Slider 'standard'	0150-1382
PL01-28x620/540	Slider 'standard'	0150-1383
PL01-28x710/630	Slider 'standard'	0150-1384
PL01-28x800/720	Slider 'standard'	0150-1385
PL01-28x920/840	Slider 'standard'	0150-1386
PL01-28x1010/930	Slider 'standard'	0150-1387
PL01-28x1220/1140	Slider 'standard'	0150-1388
PL01-28x1400/1320	Slider 'standard'	0150-1389
PL01-28x1610/1530	Slider 'standard'	0150-1390
PL01-28x1820/1740	Slider 'standard'	0150-1395
PL01-28x2000/1920	Slider 'standard'	0150-1396
PL01-28x2210/2130	Slider 'standard'	0150-1397
PL01-28x2450/2370	Slider 'standard'	0150-1398

HOLLOW SLIDERS STANDARD		
PL01-28x350/270-L	Slider 'standard L'	0150-1475
PL01-28x410/330-L	Slider 'standard L'	0150-1476
PL01-28x500/420-L	Slider 'standard L'	0150-1480
PL01-28x620/540-L	Slider 'standard L'	0150-1481
PL01-28x710/630-L	Slider 'standard L'	0150-1482
PL01-28x800/720-L	Slider 'standard L'	0150-1483
PL01-28x920/840-L	Slider 'standard L'	0150-1484

HEAVY DUTY SLIDERS		
PL02-28x350/270	Slider 'heavy duty'	0150-1411
PL02-28x410/330	Slider 'heavy duty'	0150-1412
PL02-28x500/420	Slider 'heavy duty'	0150-1413
PL02-28x620/540	Slider 'heavy duty'	0150-1414
PL02-28x710/630	Slider 'heavy duty'	0150-1415
PL02-28x800/720	Slider 'heavy duty'	0150-1416
PL02-28x920/840	Slider 'heavy duty'	0150-1417

HIGH CLEARANCE SLIDERS		
PL01-19x240/160	Slider 'high clearance'	0150-1448
PL01-19x300/220	Slider 'high clearance'	0150-1449
PL01-19x350/260	Slider 'high clearance'	0150-1498
PL01-19x395/320	Slider 'high clearance'	0150-1452
PL01-19x500/420	Slider 'high clearance'	0150-1455
PL01-19x600/520	Slider 'high clearance'	0150-1456
PL01-19x700/620	Slider 'high clearance'	0150-1457
PL01-19x800/720	Slider 'high clearance'	0150-1458
PL01-27x350/270	Slider 'high clearance'	0150-1467
PL01-27x410/330	Slider 'high clearance'	0150-1468
PL01-27x500/420	Slider 'high clearance'	0150-1469
PL01-27x620/540	Slider 'high clearance'	0150-1470
PL01-27x710/630	Slider 'high clearance'	0150-1471
PL01-27x800/720	Slider 'high clearance'	0150-1472
PL01-27x920/840	Slider 'high clearance'	0150-1447
PL01-27x1010/930	Slider 'high clearance'	0150-1473
PL01-27x1220/1140	Slider 'high clearance'	0150-1587
PL01-27x1400/1320	Slider 'high clearance'	0150-1588
PL01-27x1610/1530	Slider 'high clearance'	0150-1589
PL01-27x1820/1740	Slider 'high clearance'	0150-1590
PL01-27x2000/1920	Slider 'high clearance'	0150-1553

MOUNTING PARTS AND ACCESSORIES FOR LINEAR MOTORS

PF02-23x50	Flange 23x50 mm	0150-2102
PF02-23x90	Flange 23x90 mm	0150-2146
PF02-23x120	Flange 23x120 mm	0150-2103
PF02-23x170	Flange 23x170 mm	0150-2117
PF02-37x100	Flange 37x100 mm	0150-1998
PF02-37x140	Flange 37x140 mm	0150-2105
PF02-37x200	Flange 37x200 mm	0150-1999
PF01-48x120	Flange 48x120 mm	0150-1976
PF01-48x226	Flange 48x226 mm	0150-2108
PF01-48x346	Flange 48x346 mm	0150-2145
PF03-48x226	Flange 48x226mm F01-48 Guide	0150-5489
PF03-48x346	Flange 48x346 mm F01-48 Guide	0150-5490

HV01-23	Fan cooling for H01-23 & PF02-23	0150-5050
HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

PLF01-12	Fixed End Washer Set for 12 mm Slider	0150-3085
PLF01-12-Ni	Fixed End Washer Set for 12 mm Slider, vernickelt	0150-3573
PLF01-20	Fixed End Washer Set for 19 und 20 mm Slider	0150-3083
PLF01-20-SS	Fixed End Washer Set for 19 und 20 mm Slider, INOX	0150-3296
PLF01-28	Fixed End Washer Set for 27 und 28 mm Slider	0150-3087
PLF01-28-SS	Fixed End Washer Set for 27 und 28 mm Slider, INOX	0150-3297

PLL02-12	Floating support for PL01-12 (replaces PLL01-12)	0150-3111
PLL01-19	Floating support for PL01-19 Slider	0150-3335
PLL01-20	Floating support for PL01-20 Slider	0150-3084
PLL01-27	Floating support for PL01-27 Slider	0150-3294
PLL01-28	Floating support for PL01-28 Slider	0150-3094

PLM01-20-MK	Mounting kit for PL01-20 Slider	0150-3079
PLM01-28-MK	Mounting kit for PL01-28 Slider	0150-3095

MCF01-C	Mounting clips for C-Connector	0150-3151
MCP01-18	Shrink Tube with heat activated sealant	0150-3089

WIPER/SEALINGS FOR LINEAR MOTORS

PA01-23/12-F-2	Seal front side for PS01-23x...	0150-3293
PA01-37/19-F	Seal front side for PS01-37x...	0150-3225
PA01-37/19-R	Seal front side for PS01-37x...-C	0150-3226
PA01-37/19-R cable	Seal front side for PS01-37x...-Cable type	0150-3227
PA01-37/20-F	Seal front side for PS01-37x...	0150-3126
PA01-37/20-R	Seal front side for PS01-37x...-C	0150-3201
PA01-37/20-R cable	Seal front side for PS01-37x...-Cable type	0150-3221

PA01-48/27-F	Seal front side for PS01-48x...	0150-3228
PA01-48/27-R	Seal front side for PS01-48x...-C	0150-3229
PA01-48/28-F	Seal front side for PS01-48x...	0150-3127
PA01-48/28-R	Seal front side for PS01-48x...-C	0150-3202

PAW01-12	Wiper for PL01-12	0150-3167
PAW01-19	Wiper for PL01-19	0150-3223
PAW01-20	Wiper for PL01-20	0150-3112
PAW01-27	Wiper for PL01-27	0150-3224
PAW01-28	Wiper for PL01-28	0150-3133

CLEANING & LUBRICANT FOR LINEAR MOTORS

LU02-50	Lubricant for linear motors (50ml)	0150-1954
LU02-1000	Lubricant for linear motors (1000ml)	0150-1955
LU07-400	Interflon Food Grease 2 for SSC (400ml)	0150-2744
LU06-250	Maintenance spray for linear motors (250ml)	0150-2394

H01-LINEAR GUIDES WITH BALL BEARINGS)		
H01-23x86/60	H-Guide for P01-23x80, Stroke max. 60mm	0150-5014
H01-23x86/160	H-Guide for P01-23x80, Stroke max. 160mm	0150-5015
H01-23x86/260	H-Guide for P01-23x80, Stroke max. 260mm	0150-5016
H01-23x166/80	H-Guide for P01-23x160, Stroke max. 80mm	0150-5017
H01-23x166/180	H-Guide for P01-23x160, Stroke max. 180mm	0150-5018
H01-23x166/280	H-Guide for P01-23x160, Stroke max. 280mm	0150-5019
H01-37x166/80	H-Guide for P01-37x120, Stroke max. 80mm	0150-5020
H01-37x166/180	H-Guide for P01-37x120, Stroke max. 180mm	0150-5021
H01-37x166/280	H-Guide for P01-37x120, Stroke max. 280mm	0150-5022
H01-37x286/60	H-Guide for P01-37x240, Stroke max. 60mm	0150-5023
H01-37x286/160	H-Guide for P01-37x240, Stroke max. 160mm	0150-5024
H01-37x286/260	H-Guide for P01-37x240, Stroke max. 260mm	0150-5025
H01-48x250/120	H-Guide for P01-48x240, Stroke max. 120mm	0150-5100
H01-48x250/210	H-Guide for P01-48x240, Stroke max. 210mm	0150-5101
H01-48x250/330	H-Guide for P01-48x240, Stroke max. 330mm	0150-5102
H01-48x250/420	H-Guide for P01-48x240, Stroke max. 420mm	0150-5103
H01-48x370/90	H-Guide for P01-48x360, Stroke max. 90mm	0150-5240
H01-48x370/210	H-Guide for P01-48x360, Stroke max. 210mm	0150-5241
H01-48x370/300	H-Guide for P01-48x360, Stroke max. 300mm	0150-5242
H01-48x370/510	H-Guide for P01-48x360, Stroke max. 510mm	0150-5252

H01-LINEAR GUIDES WITH PLAIN BEARINGS		
H01-23x86/60-GF	H-Guide for P01-23x80, Stroke max. 60mm	0150-5074
H01-23x86/160-GF	H-Guide for P01-23x80, Stroke max. 160mm	0150-5075
H01-23x86/260-GF	H-Guide for P01-23x80, Stroke max. 260mm	0150-5076
H01-23x166/80-GF	H-Guide for P01-23x160, Stroke max. 80mm	0150-5077
H01-23x166/180-GF	H-Guide for P01-23x160, Stroke max. 180mm	0150-5078
H01-23x166/280-GF	H-Guide for P01-23x160, Stroke max. 280mm	0150-5079
H01-37x166/80-GF	H-Guide for P01-37x120, Stroke max. 80mm	0150-5080
H01-37x166/180-GF	H-Guide for P01-37x120, Stroke max. 180mm	0150-5081
H01-37x166/280-GF	H-Guide for P01-37x120, Stroke max. 280mm	0150-5082
H01-37x286/60-GF	H-Guide for P01-37x240, Stroke max. 60mm	0150-5083
H01-37x286/160-GF	H-Guide for P01-37x240, Stroke max. 160mm	0150-5084
H01-37x286/260-GF	H-Guide for P01-37x240, Stroke max. 260mm	0150-5085
H01-48x250/120-GF	H-Guide for P01-48x240, Stroke max. 120mm	0150-5104
H01-48x250/210-GF	H-Guide for P01-48x240, Stroke max. 210mm	0150-5105
H01-48x250/330-GF	H-Guide for P01-48x240, Stroke max. 330mm	0150-5106
H01-48x250/420-GF	H-Guide for P01-48x240, Stroke max. 420mm	0150-5107
H01-48x370/90-GF	H-Guide for P01-48x360, Stroke max. 90mm	0150-5243
H01-48x370/210-GF	H-Guide for P01-48x360, Stroke max. 210mm	0150-5244
H01-48x370/300-GF	H-Guide for P01-48x360, Stroke max. 300mm	0150-5245

B01-LINEAR GUIDES WITH BALL BEARINGS		
B01-37x166/160	B-Guide for P01-37x120, Stroke max. 160mm	0150-5138
B01-37x166/260	B-Guide for P01-37x120, Stroke max. 260mm	0150-5139
B01-37x166/360	B-Guide for P01-37x120, Stroke max. 360mm	0150-5140
B01-37x286/140	B-Guide for P01-37x240, Stroke max. 140mm	0150-5144
B01-37x286/240	B-Guide for P01-37x240, Stroke max. 240mm	0150-5145
B01-37x286/340	B-Guide for P01-37x240, Stroke max. 340mm	0150-5146
B01-48x250/90	B-Guide for P01-48x240, Stroke max. 90mm	0150-5150

B01-48x250/180	B-Guide for P01-48x240, Stroke max. 180mm	0150-5151
B01-48x250/300	B-Guide for P01-48x240, Stroke max. 300mm	0150-5152
B01-48x250/390	B-Guide for P01-48x240, Stroke max. 390mm	0150-5153

B01-LINEAR GUIDES WITH PLAIN BEARINGS

B01-37x166/160-GF	B-Guide for P01-37x120, Stroke max. 160mm	0150-5141
B01-37x166/260-GF	B-Guide for P01-37x120, Stroke max. 260mm	0150-5142
B01-37x166/360-GF	B-Guide for P01-37x120, Stroke max. 360mm	0150-5143
B01-37x286/140-GF	B-Guide for P01-37x240, Stroke max. 140mm	0150-5147
B01-37x286/240-GF	B-Guide for P01-37x240, Stroke max. 240mm	0150-5148
B01-37x286/340-GF	B-Guide for P01-37x240, Stroke max. 340mm	0150-5149
B01-48x250/90-GF	B-Guide for P01-48x240, Stroke max. 90mm	0150-5154
B01-48x250/180-GF	B-Guide for P01-48x240, Stroke max. 180mm	0150-5155
B01-48x250/300-GF	B-Guide for P01-48x240, Stroke max. 300mm	0150-5156
B01-48x250/390-GF	B-Guide for P01-48x240, Stroke max. 390mm	0150-5157

ACCESSORIES FOR LINEAR GUIDES (FAN SEE MOTOR ACCESSORIES)

HB01-37	Pneumatic brake for H01-37 Guides	0150-5052
HB01-48	Pneumatic brake for H01-48 Guides	0150-5098
HA01-37/20-F	Seal front side for H01-37 Guides Front side	0150-5108
HA01-37/19-F	Seal front side for B01-37 Guides Front side	0150-5177
HA01-48/28-F	Seal front side for H01-48 Guides Front side	0150-5109
HA01-48/27-F	Seal front side for B01-48 Guides Front side	0150-5178
PFN01-8/M6	Sliding block 8mm mit M6 thread	0150-3245
PFN01-8/M6-10	Sliding block 8mm mit M6 thread, 10 pcs.	0150-2559
HC01-09/04	Centering sleeve D9x4mm	0150-3251
HC01-11/05	Centering sleeve D11x5mm	0150-3252
Linearkugellagerset for H01-23	Linear Bearings including seals	0150-3369
Linearkugellagerset for H01-37	Linear Bearings including seals	0150-3370
Lineargleitlagerset for H01-23	Linear Slider Bearings including seals	0150-3386
Lineargleitlagerset for H01-37	Linear Slider Bearings including seals	0150-3387

STAINLESS STEEL LINEAR GUIDES WITH PLAIN BEARINGS

H01-37x304/85-SSC	H-Guide for PS01-37x120F-HP-SSC, Stroke max.85 mm	0150-5271
H01-37x304/190-SSC	H-Guide for PS01-37x120F-HP-SSC, Stroke max.190 mm	0150-5272
H01-37x304/290-SSC	H-Guide for PS01-37x120F-HP-SSC, Stroke max.290 mm	0150-5273
H01-37x304/390-SSC	H-Guide for PS01-37x120F-HP-SSC, Stroke max.390 mm	0150-5274
H01-48x401/210-SSC	H-Guide for PS01-48x240F-HP-SSC, Stroke max.210mm	0150-5280
H01-48x401/300-SSC	H-Guide for PS01-48x240F-HP-SSC, Stroke max.300mm	0150-5281
H01-48x401/390-SSC	H-Guide for PS01-48x240F-HP-SSC, Stroke max.390mm	0150-5282
H01-48x401/510-SSC	H-Guide for PS01-48x240F-HP-SSC, Stroke max.510mm	0150-5283

STAINLESS STEEL LINEAR GUIDES SPARE PARTS

PB01-H01-37-SSC	Plain bearing kit for H01-37-SSC	0150-5299
PB01-H01-48-SSC	Plain bearing kit for H01-48-SSC	0150-5300

SERVO DRIVES SERIES E1200

E1200-GP-UC	General Purpose Drive (72V/32A)	0150-1771
E1230-DP-UC	Profibus DP Drive (72V/32A)	0150-1766
E1250-EC-UC	EtherCAT Drive (72V/32A)	0150-1763
E1250-DS-UC	EtherCAT CoE Drive (72V/32A)	0150-2410
E1250-SE-UC	EtherCAT SoE Drive (72V/32A)	0150-1898
E1250-PN-UC	ProfiNet Drive (72V/32A)	0150-1762
E1250-PD-UC	PROFIdrive Drive (72V/32A)	0150-2620

E1250-IP-UC	Ethernet/IP Drive (72V/32A)	0150-1761
E1250-SC-UC	Sercos III Drive (72V/32A)	0150-1764
E1250-PL-UC	POWERLINK Drive (72V/32A)	0150-1760
E1250-LU-UC	LinUDP Drive (72V/32A)	0150-2493

SERVO DRIVES SERIES C1200

C1250-EC-XC-0S-000	EtherCAT Drive (72V/25A)	0150-1884
C1250-DS-XC-0S-000	EtherCAT CoE Drive (72V/25A)	0150-2415
C1250-SE-XC-0S-000	EtherCAT SoE Drive (72V/25A)	0150-1897
C1250-PN-XC-0S-000	ProfiNet Drive (72V/25A)	0150-1888
C1250-PD-XC-0S-000	PROFIdrive Drive (72V/25A)	0150-2618
C1250-IP-XC-0S-000	Ethernet/IP Drive (72V/25A)	0150-1886
C1250-SC-XC-0S-000	Sercos III Drive (72V/25A)	0150-1887
C1250-PL-XC-0S-000	POWERLINK Drive (72V/25A)	0150-1885
C1250-LU-XC-0S-000	LinUDP Drive (72V/25A)	0150-2491
C1250-EC-XC-1S-000	EtherCAT Drive (72V/25A), STO	0150-2345
C1250-DS-XC-1S-000	EtherCAT CoE Drive (72V/25A), STO	0150-2416
C1250-SE-XC-1S-000	EtherCAT SoE Drive (72V/25A), STO	0150-2350
C1250-PN-XC-1S-000	ProfiNet Drive (72V/25A), STO	0150-2348
C1250-PD-XC-1S-000	PROFIdrive Drive (72V/25A), STO	0150-2619
C1250-IP-XC-1S-000	Ethernet/IP Drive (72V/25A), STO	0150-2346
C1250-SC-XC-1S-000	Sercos III Drive (72V/25A), STO	0150-2349
C1250-PL-XC-1S-000	POWERLINK Drive (72V/25A), STO	0150-2347
C1250-LU-XC-1S-000	LinUDP Drive (72V/25A), STO	0150-2492

SERVO DRIVES SERIES C1100

C1100-GP-XC-0S-000	General Purpose Drive (72V/25A)	0150-2380
C1150-EC-XC-0S-000	EtherCAT Drive (72V/25A)	0150-2382
C1150-DS-XC-0S-000	EtherCAT CoE Drive (72V/25A)	0150-2417
C1150-SE-XC-0S-000	EtherCAT SoE Drive (72V/25A)	0150-2625
C1150-PN-XC-0S-000	ProfiNet Drive (72V/25A)	0150-2384
C1100-GP-XC-1S-000	General Purpose Drive (72V/25A), STO	0150-2381
C1150-EC-XC-1S-000	EtherCAT Drive (72V/25A), STO	0150-2383
C1150-DS-XC-1S-000	EtherCAT CoE Drive (72V/25A), STO	0150-2418
C1150-SE-XC-1S-000	EtherCAT SoE Drive (72V/25A), STO	0150-2626
C1150-PN-XC-1S-000	ProfiNet Drive (72V/25A), STO	0150-2385

SERVO DRIVES SERIES A1100

A1100-GP-LC-0S-000	Mini CANopen Drive (72V/8A)	0150-2499
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DRIVES CONNECTORS FOR C1200, C1100, A1100

DC01-C1X00-0S/X1/X4	Drive Connector Set for C1X00-0S	0150-3527
DC01-C1X00-1S/X1/X4/X33	Drive Connector Set for C1X00-1S	0150-3528
DC01-C1X00/X1	Drive Connector for PWR 72VDC Input	0150-3525
DC01-C1X00/X2	Drive Connector Motor Phases	0150-3526
DC01-Signal/X4	Drive Connector 24VDC & Logic	0150-3447
DC01-Safety/X33 gelb	Drive Connector Safety	0150-3451
DC01-X44-4m	Cable IO's for A1100/X44, 4m flying leads	0150-3553
DC01-X40-4m	Cable Supply A1100/X40, 4m flying leads	0150-3545
DC01-X40/41-0.15m	Cable IO for A1100/X40-X41, 0.15m daisy chain	0150-3552

SERVO DRIVES SERIES E1100

E1100-RS	RS232/485 Drive (72V/8A)	0150-1677
E1100-RS-HC	RS232/485 Drive (72V/15A)	0150-1678
E1100-RS-XC	RS232/485 Drive (72V/25A)	0150-1862
E1100-CO	CANopen Drive (72V/8A)	0150-1681
E1100-CO-HC	CANopen Drive (72V/15A)	0150-1682
E1100-CO-XC	CANopen Drive (72V/25A)	0150-1683

E1100-DN	DeviceNet Drive (72V/8A)	0150-1679
E1100-DN-HC	DeviceNet Drive (72V/15A)	0150-1680
E1100-DN-XC	DeviceNet Drive (72V/25A)	0150-1863
E1130-DP	Profibus DP Drive, (72V/8A)	0150-1667
E1130-DP-HC	Profibus DP Drive (72V/15A)	0150-1668
E1130-DP-XC	Profibus DP Drive (72V/25A)	0150-1861
E1100-GP	General Purpose (72V/8A)	0150-1665
E1100-GP-HC	General Purpose (72V/15A)	0150-1666
E1100-GP-XC	General Purpose (72V/25A)	0150-1864

SERVO DRIVES SERIES B1100

B1100-PP	Point to Point Drive (72V/8A)	0150-1735
B1100-PP-HC	Point to Point Drive (72V/15A)	0150-1736
B1100-PP-XC	Point to Point Drive (72V/25A)	0150-1740
B1100-VF	Force Velocity Drive (72V/8A)	0150-1685
B1100-VF-HC	Force Velocity Drive (72V/15A)	0150-1686
B1100-VF-XC	Force Velocity Drive (72V/25A)	0150-1739
B1100-GP	General Purpose Drive (72V/8A)	0150-1737
B1100-GP-HC	General Purpose Drive (72V/15A)	0150-1738
B1100-GP-XC	General Purpose Drive (72V/25A)	0150-1741

SERVO DRIVES SERIES B1100 ETHERNET

B1150-ML	MC-Link Drive (72V/8A)	0150-1796
B1150-ML-HC	MC-Link Drive (72V/15A)	0150-1797
B1150-ML-XC	MC-Link Drive (72V/25A)	0150-1798
B8050-ML-EC	8-Axis Bus Module EtherCAT	0150-1878
B8050-ML-IP	8-Axis Bus Module Ethernet IP	0150-1879
B8050-ML-PL	8-Axis Bus Module Power Link	0150-1877
B8050-ML-PN	8-Axis Bus Module Profinet	0150-1880
B8050-ML-SC	8-Axis Bus Module Sercos III	0150-1881

MODULARES SERVO DRIVE SYSTEM M8000

MB1150-ML-XC-1S-H	MC-Link Drive (72V/25A) for M8000	0150-2034
MB0000-1S	Blindmodul MB0000-1S	0150-2074
MB8050-ML-EC	Bus Module EtherCAT for M8050-EC	0150-2029
MB8050-ML-IP	Bus Module Ethernet IP for M8050-IP	0150-2030
MB8050-ML-PL	Bus Module Power Link for M8050-PL	0150-2028
MB8050-ML-PN	Bus Module Profinet for M8050-PN	0150-2031
MB8050-ML-SC	Bus Module Sercos III for MB8050-SC	0150-2032
MP8000-01	Backplane Modul for M8000	0150-2037
MS8000-02	Speisungs/Sicherungs-Modul for M8000	0150-2053
MF8000-01	Ventilator-Modul for M8000	0150-2036

DRIVES CONNECTORS FOR M8000

DC01-EM8000/X33/X34/X36	Drive Connector Set for M8000-1S	0150-3524
DC01-M8000/X34	Drive Connector 2x72VDC Supply	0150-3522
DC01-M8000/X36	Drive Connector 24VDC & Logic	0150-3523

SERVO DRIVES SERIES E100/E1001 (LAST REGULAR ORDER DATE 30.09.2017)

E100-AT	AnalogTrigger Drive 1 Axis (48V/3A)	0150-1601
E200-AT	AnalogTrigger Drive 2 Axis (48V/3A)	0150-1602
E400-AT	AnalogTrigger Drive 4 Axis (48V/3A)	0150-1604
E1001-AT	AnalogTrigger Drive 1 Axis (72V/8A)	0150-2300
E2001-AT	AnalogTrigger Drive 2 Axis (72V/8A)	0150-2301
E4001-AT	AnalogTrigger Drive 4 Axis (72V/8A)	0150-2303
E100-MT	Multi Trigger Drive 1 Axis (48V/3A)	0150-1611

E200-MT	Multi Trigger Drive 2 Axis (48V/3A)	0150-1612
E400-MT	Multi Trigger Drive 4 Axis (48V/3A)	0150-1614
E1001-MT	Multi Trigger Drive 1 Axis (72V/8A)	0150-2304
E2001-MT	Multi Trigger Drive 2 Axis (72V/8A)	0150-2305
E4001-MT	Multi Trigger Drive 4 Axis (72V/8A)	0150-2307
E100-CO	CanOpen Drive 1 Axis (48V/3A)	0150-1669
E200-CO	CanOpen Drive 2 Axis (48V/3A)	0150-1670
E400-CO	CanOpen Drive 4 Axis (48V/3A)	0150-1672
E1001-CO	CanOpen Drive 1 Axis (72V/8A)	0150-2308
E2001-CO	CanOpen Drive 2 Axis (72V/8A)	0150-2309
E4001-CO	CanOpen Drive 4 Axis (72V/8A)	0150-2311
E100-DN	DeviceNet Drive 1 Axis (48V/3A)	0150-1641
E200-DN	DeviceNet Drive 2 Axis (48V/3A)	0150-1642
E400-DN	DeviceNet Drive 4 Axis (48V/3A)	0150-1644
E1001-DN	DeviceNet Drive 1 Axis (72V/8A)	0150-2312
E2001-DN	DeviceNet Drive 2 Axis (72V/8A)	0150-2313
E4001-DN	DeviceNet Drive 4 Axis (72V/8A)	0150-2315
E130-DP	Profibus DP Drive 1 Axis (48V/3A)	0150-1621
E230-DP	Profibus DP Drive 2 Axis (48V/3A)	0150-1622
E430-DP	Profibus DP Drive 4 Axis (48V/3A)	0150-1624
E1031-DP	Profibus DP Drive 1 Axis (72V/8A)	0150-2316
E2031-DP	Profibus DP Drive 2 Axis (72V/8A)	0150-2317
E4031-DP	Profibus DP Drive 4 Axis (72V/8A)	0150-2319

SWITCHED MODE POWER SUPPLIES		
S01-24/150	Power Supply 24V/150W	0150-1944
S01-24/500	Power Supply 24V/500W, 1x120/230VAC	0150-2480
*S01-48/300	Power Supply 48V/300W for E400	0150-1941
S01-48/600	Power Supply 48V/600W	0150-1946
S01-72/300	Power Supply 72V/300W for E1000/E2000	0150-1942
S01-72/600	Power Supply 72V/600W for E4000	0150-1943
S01-72/500	Power Supply 72V/500W, 1x120/230VAC	0150-1874
S01-72/1000	Power Supply 72V/1000W, 3x340-550VAC	0150-1872
SM01-150	Mounting part for power supply 150W	0150-3039
SM01-300	Mounting part for power supply 300 W	0150-3040
SM01-600	Mounting part for power supply 600W	0150-3041

TRANSFORMATOR SUPPLIES		
T01-72/420-Multi	T-Supply 420VA, 3x230/400/480VAC	0150-1869
T01-72/900-Multi	T-Supply 900VA, 3x230/400/480 VAC	0150-1870
T01-72/1500-Multi	T-Supply 1500VA, 3x230/400/480 VAC	0150-1871
T01-72/420-US	T-Supply 420VA, 3x220/230/240VAC	0150-1967
T01-72/420 -1ph	T-Supply 420VA, 1x208/220/230/240VAC	0150-1859
TF01-80V/15A	blade fuse for T01-72/420 (-US)	0150-1850
TF01-80V/30A	blade fuse for T01-72/900 & 1500 (-US)	0150-1851

ACCESSORIES FOR SERVO DRIVES		
USB-RS232 Converter (isolated)	for C1100, C1200, C1400, E1200, E1400 drives	0150-2473
AC01-RJ45/RJ12-2.5-RS1	adaptor cable for A1100 drives	0150-2477
AC01-RJ45/Df-2.5-RS1	adaptor cable for B1100, E1100, E100, E1001 drives	0150-2476
B01-E1100 24VDC	control box for E1100 (incl. cables)	0150-1970
B01-B1100 24VDC	control box for B1100 (incl. cables)	0150-2110
B01-C1x00 24VDC	control box for C1x00 (incl. cables)	0150-2130
M01-DSUB25	Breakout Module for DSUB25	0150-2142
RS232 PC config.. Cable 2m	for E100/E1001	0150-3009

RS232 PC config.. Cable 2m	for E100/E1001/E1100/B1100	0150-3307
RS232 PC config.. Cable 2.5m	for C1100/C1200/E1200/E1400/M8000	0150-2143
AC01-RJ12/Df-2.5-RS1	for A1100, D-Sub9 RS232 PC config.. Cable 2.5m	0150-3544
USB-CAN Converter Pro	USB to CAN Converter for LinMot Drives	0150-3532
RJ45-08/0.3	RJ45 patch cable 0.3m for E1100	0150-1852
RJ45-08/0.6	RJ45 crossover patch cable 0.6m	0150-1853
RJ45/RJ45-0,2-ML1	MC-Link Cable 0,2m	0150-3308
RR01-10/60	Regeneration Resistor 60W for E1100	0150-3088
Capacitor 10'000uF/100V	with mounting material	0150-3075

OPTION: EXTERNAL POSITION SENSOR

MS01-1/D	Linear Encoder 1um, A/B(for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
MS01-1/D-SSI	Linear Encoder 1um, A/B(for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12.../ABS-ENC-10	for MS01-1/D-SSI,10m, flying leads	0160-3387

MOTOR CABLE FOR LINEAR MOTORS WITH R-CONNECTOR

K05-W/R-2	Motor cable W/R, 2 m	0150-2119
K05-W/R-3	Motor cable W/R, 3 m	0150-2459
K05-W/R-4	Motor cable W/R, 4 m	0150-2120
K05-W/R-6	Motor cable W/R, 6 m	0150-2121
K05-W/R-8	Motor cable W/R, 8 m	0150-2122
K05-W/R-10	Motor cable W/R, 10 m	0150-2132
K05-Y/R-2	Motor cable Y/R, 2 m	0150-2421
K05-Y/R-4	Motor cable Y/R, 4 m	0150-2422
K05-Y/R-6	Motor cable Y/R, 6 m	0150-2423
K05-Y/R-8	Motor cable Y/R, 8 m	0150-2424
K05-HI/R-2	Motor cable HI/R, 2 m	0150-2449
K05-HI/R-4	Motor cable HI/R, 4 m	0150-2450
KS05-W/R-4	Trailing chain cable W/R, 4 m	0150-2106
KS05-W/R-6	Trailing chain cable W/R, 6 m	0150-2131
KS05-W/R-8	Trailing chain cable W/R, 8 m	0150-2107
KS05-Y/R-4	Trailing chain cable Y/R, 4 m	0150-2433
KS05-Y/R-6	Trailing chain cable Y/R, 6 m	0150-2434
KS05-Y/R-8	Trailing chain cable Y/R, 8 m	0150-2435
KS05-R/R-2	Trailing chain cable R/R, 2 m	0150-1838
KS05-R/R-4	Trailing chain cable R/R, 4 m	0150-1839

MOTOR CABLE FOR LINEAR MOTORS WITH R-SSC CONNECTOR (INOX)

KS05-W/R-SSC-2	Trailing chain cable W/R-SSC, 2m	0150-2683
KS05-W/R-SSC-4	Trailing chain cable W/R-SSC, 4m	0150-2684
KS05-W/R-SSC-6	Trailing chain cable W/R-SSC, 6m	0150-2685
KS05-W/R-SSC-8	Trailing chain cable W/R-SSC, 8m	0150-2686
KS05-Y/R-SSC-2	Trailing chain cable Y/R-SSC, 2m	0150-2687
KS05-Y/R-SSC-4	Trailing chain cable Y/R-SSC, 4m	0150-2688
KS05-Y/R-SSC-6	Trailing chain cable Y/R-SSC, 6m	0150-2689
KS05-Y/R-SSC-8	Trailing chain cable Y/R-SSC, 8m	0150-2690

MOTOR CABLE FOR LINEAR MOTORS WITH C-CONNECTOR

K05-W/C-2	Motor cable W/C, 2 m	0150-2123
K05-W/C-4	Motor cable W/C, 4 m	0150-2124

K05-W/C-6	Motor cable W/C, 6 m	0150-2125
K05-W/C-8	Motor cable W/C, 8 m	0150-2126
K05-Y/C-2	Motor cable Y/C, 2 m	0150-2425
K05-Y/C-4	Motor cable Y/C, 4 m	0150-2426
K05-Y/C-6	Motor cable Y/C, 6 m	0150-2427
K05-Y/C-8	Motor cable Y/C, 8 m	0150-2428
K05-Y/C-10	Motor cable Y/C, 10 m	0150-5514
K05-HI/C-2	Motor cable HI/C, 2 m	0150-2452
K05-HI/C-4	Motor cable HI/C, 4 m	0150-2451
K15-W/C-2	Motor cable W/C, 2 m	0150-1811
K15-W/C-4	Motor cable W/C, 4 m	0150-1801
K15-W/C-5	Motor cable W/C, 5 m	0150-1849
K15-W/C-6	Motor cable W/C, 6 m	0150-1802
K15-W/C-8	Motor cable W/C, 8 m	0150-1803
K15-Y/C-2	Motor cable Y/C, 2 m	0150-2429
K15-Y/C-4	Motor cable Y/C, 4 m	0150-2430
K15-Y/C-6	Motor cable Y/C, 6 m	0150-2431
K15-Y/C-8	Motor cable Y/C, 8 m	0150-2432
K15-HI/C-2	Motor cable HI/C, 2 m	0150-2453
K15-HI/C-4	Motor cable HI/C, 4m	0150-2458
KS05-W/C-4	Trailing chain cable W/C, 4 m	0150-2127
KS05-W/C-6	Trailing chain cable W/C, 6 m	0150-2128
KS05-W/C-8	Trailing chain cable W/C, 8 m	0150-2129
KS05-Y/C-4	Trailing chain cable Y/C, 4 m	0150-2436
KS05-Y/C-6	Trailing chain cable Y/C, 6 m	0150-2437
KS05-Y/C-8	Trailing chain cable Y/C, 8 m	0150-2438
KS05-C/C-2	Trailing chain cable C/C, 2 m	0150-1827
KS05-C/C-4	Trailing chain cable C/C, 4 m	0150-1828
KS10-W/C-4	Trailing chain cable W/C, 4 m	0150-1807
KS10-W/C-5	Trailing chain cable W/C, 5 m	0150-1860
KS10-W/C-6	Trailing chain cable W/C, 6 m	0150-1858
KS10-W/C-8	Trailing chain cable W/C, 8 m	0150-1808
KS10-Y/C-4	Trailing chain cable Y/C, 4 m	0150-2439
KS10-Y/C-6	Trailing chain cable Y/C, 6 m	0150-2440
KS10-Y/C-8	Trailing chain cable Y/C, 8 m	0150-2441
KS10-C/C-2	Trailing chain cable C/C, 2 m	0150-1816
KS10-C/C-4	Trailing chain cable C/C, 4 m	0150-1817

MOTOR CABLE FOR LINEAR MOTORS WITH C-SSC CONNECTOR (INOX)

KS10-W/C-SSC-2	Trailing chain cable W/C-SSC, 2m	0150-2675
KS10-W/C-SSC-4	Trailing chain cable W/C-SSC, 4 m	0150-2676
KS10-W/C-SSC-6	Trailing chain cable W/C-SSC, 6 m	0150-2677
KS10-W/C-SSC-8	Trailing chain cable W/C-SSC, 8 m	0150-2678
KS10-Y/C-SSC-2	Trailing chain cable Y/C-SSC, 2m	0150-2679
KS10-Y/C-SSC-4	Trailing chain cable Y/C-SSC, 4m	0150-2680
KS10-Y/C-SSC-6	Trailing chain cable Y/C-SSC, 6m	0150-2681
KS10-Y/C-SSC-8	Trailing chain cable Y/C-SSC, 8m	0150-2682

MOTOR CABLE FOR SHORT MOTORS P01-37Sx... HP-N

KS05-W/N-2	Trailing chain cable W/N, 2 m	0150-2296
KS05-W/N-4	Trailing chain cable W/N, 4 m	0150-2297

KS05-W/N-6	Trailing chain cable W/N, 6 m	0150-2298
KS05-W/N-8	Trailing chain cable W/N, 8 m	0150-2299
KS05-Y/N-2	Trailing chain cable Y/N, 2 m	0150-2442
KS05-Y/N-4	Trailing chain cable Y/N, 4 m	0150-2443
KS05-Y/N-6	Trailing chain cable Y/N, 6 m	0150-2444
KS05-Y/N-8	Trailing chain cable Y/N, 8 m	0150-2445

MOTOR CABLE FOR SHORT MOTOR P02-23Sx80F-HP-K

KS03-W-Fe/K-2	Trailing chain cable W-Fe/K 2 m	0150-2187
KS03-W-Fe/K-4	Trailing chain cable W-Fe/K 4m	0150-2369
KS03-W-Fe/K-6	Trailing chain cable W-Fe/K 6m	0150-2370
KS03-Y-Fe/K-2	Trailing chain cable Y-Fe/K, 2 m	0150-2446
KS03-Y-Fe/K-4	Trailing chain cable Y-Fe/K, 4 m	0150-2447
KS03-Y-Fe/K-6	Trailing chain cable Y-Fe/K, 6 m	0150-2448
KS03-R/K-1	Trailing chain cable R/K 1 m	0150-2185
KS03-R/K-2	Trailing chain cable R/K 2 m	0150-2186

MOTOR CABLE FOR SHORT MOTOR P02-23Sx80-F

KF02-D15/F-0.08	Flat cable 0.08m, for PS02-23Sx80-F	0150-2150
KF02-D15/F-0.16	Flat cable 0.16m, for PS02-23Sx80-F	0150-2156
KF02-D15/F-0.32	Flat cable 0.32m, for PS02-23Sx80-F	0150-2152
KF02-D15/F-0.48	Flat cable 0.48m, for PS02-23Sx80-F	0150-2154
KF02-D15/F-0.70	Flat cable 0.70m, for PS02-23Sx80-F	0150-2158
K05-D/D15-1	adapter cable D/D15, 1 m	0150-1936

MOTOR CABLE FOR LINEAR MOTORS WITH D-CONNECTOR

K05-W/D-0.4	Motor cable W/D, 0.4 m	0150-1947
K05-Y/D-0.4	Adapter cable for C Series drives 0.4m	0150-5511
K05-P/D-0.4	motor cable P/D, 0.4 m	0150-1922
K05-D/D-2	Motor cable D/D, 2 m	0150-1910
K05-D/D-4	Motor cable D/D, 4 m	0150-1911
K05-D/D-6	Motor cable D/D, 6 m	0150-1912
K05-D/D-8	Motor cable D/D, 8 m	0150-1913
KS05-D/D-2	Trailing chain cable D/D, 2 m	0150-1988
KS05-D/D-4	Trailing chain cable D/D, 4 m	0150-1989
KS05-D/D-6	Trailing chain cable D/D, 6 m	0150-2115

MOTOR CABLE FOR LINEAR MOTORS WITH P-CONNECTOR

K05-W/P-0.4	motor cable W/P, 0.4 m	0150-1948
K05-Y/P-0.4	Adapter cable for C Series drives 0.4m	0150-5512
K05-D/P-0.25	motor cable D/P, 0.25m	0150-1921
K05-P/P-2	motor cable P/P, 2 m	0150-1915
K05-P/P-4	motor cable P/P, 4 m	0150-1916
K05-P/P-6	motor cable P/P, 6 m	0150-1917
K05-P/P-8	motor cable P/P, 8 m	0150-1918
KS05-P/P-2	trailing chain cable P/P, 2 m	0150-1990
KS05-P/P-4	trailing chain cable P/P, 4 m	0150-1991

MOTORKABEL PER M

K05-04/05	Motor cable per m	0150-1920
K05-04/05-50	Motor cable 50m auf Rolle	0150-1956
K05-04/05-100	Motor cable 100m auf Rolle	0150-1957
K05-04/05-200	Motor cable 200m auf Rolle	0150-1958
K15-04/05	Motor cable per m	0150-1978

K15-04/05-100	Motor cable, 100 m roll	0150-1969
K15-04/05-050	Motor cable, 50 m roll	0150-5495
KS03-09	Trailing chain cable per m (max. 6m)	0150-2182
KS05-04/05	Trailing chain cable (per m)	0150-1938
KS05-04/05-100	Trailing chain cable 100m roll	0150-1959
KS10-04/05	Trailing chain cable per m	0150-1977
KS10-04/05-100	Trailing chain cable, 100m roll	0150-1968
KS10-05/05/04-EX	Motor cable for EX applications per m	0150-9010
KR03-09	robotic cable per m (max. 6m)	0150-2801
KR05-04/05	robotic cable (per m)	0150-1846
KR05-04/05-100	robotic cable, 100m roll	0150-1847
KR10-04/05	robotic cable (per m)	0150-1830
KR10-04/05-100	robotic cable, 100m roll	0150-1831

CONNECTOR FOR MOTOR CABLES

MC01-C/f	Motor connector C/f	0150-3080
MC01-C/f-IP69K-SSC	Motor connector C/f, IP69K, SSC	0150-3306
MC01-C/m-IP69K-SSC	Motor connector C/m, IP69K, SSC	0150-3372
MC01-C/m	Motor connector C/m	0150-3093
MC01-D/f	Motor connector D (f)	0150-3025
MC01-D/m	Motor connector D (m)	0150-3024
MC01-D15/f	Motor connector D15 (f)	0150-3136
MC01-D15/m	Motor connector D15 (m)	0150-3135
MC01-Hk/m-05	Motor connector Hk/m, for K05 & Kx05	0150-3533
MC01-Hk/m-10	Motor connector Hk/m, for Kx10 & K15	0150-3480
MC01-Hk/f	Motor connector Hk/f, for K05 & Kx05	0150-3558
MC01-Hk/f	Motor connector Hk/f, for KS10 & K15	0150-3559
MC01-K/f	Motor connector K (f)	0150-3345
MC01-N/f	Motor connector N/f	0150-3407
MC01-P/f	Motor connector P(f)	0150-3021
MC01-P/m	Motor connector P (m)	0150-3020
MC01-R/f	Motor connector R/f	0150-3129
MC01-R/f-IP69K-SSC	Motor connector R/f, IP69K, SSC	0150-3347
MC01-R/m-IP69K-SSC	Motor connector R/m, IP69K, SSC	0150-3381
MC01-R/m	Motor connector R/m	0150-3130
MC01-E6k/f-EX	Connector with hexagonal union nut	0150-3538
MC01-W/m	Motor connector W/m	0150-3140
MC01-W-Fe/m	Motor connector W-Fe/m	0150-3465
MC01-Y-Fe/m	Motor connector Y-Fe/m	0150-3289

ASSEMBLED CONNECTORS FOR MOTOR CABLES

MC01-C/f-as	C/f-connector assembled	0150-3146
MC01-C/m-as	C/m-connector assembled	0150-3099
MC01-C/f-IP69K-SSC-as	Motor connector C/f, IP69K, SSC, assembled	0150-3325
MC01-C/m-IP69K-SSC-as	Motor connector C/m, IP69K, SSC, assembled	0150-3404
MC01-R/f-as	R/f-connector assembled	0150-3143
MC01-R/m-as	R/m-connector assembled	0150-3097
MC01-R/f-IP69K-SSC-as	Motor connector R/f, IP69K, SSC, assembled	0150-3343
MC01-R/m-IP69K-SSC-as	Motor connector R/m, IP69K, SSC, assembled	0150-3685
MC01-E6k/f-EX-as	E/f-Stecker with 6edge sleeve nut assembled	0150-3641
MC01-D/f-as	D/f-connector assembled	0150-3142
MC01-D/m-as	D/m-connector assembled	0150-3055
MC01-D15/f-as	D15/f-connector assembled	0150-3073
MC01-D15/m-as	D15/m-connector assembled	0150-3148
MC01-Hk/m-as	Motor connector Hk(m) assembled	0150-3481
MC01-K/f-as	K/f-connector assembled	0150-3346
MC01-N/f-as	N/f-connector assembled	0150-3408
MC01-P/f-as	P/f-connector assembled	0150-3144

MC01-P/m-as	P/m-connector assembled	0150-3056
MC01-W/m-as	W/m-connector assembled	0150-3147
MC01-W-Fe/m-as	W-Fe/m-connector assembled	0150-3466
MC01-Y-Fe/m-as	Y-Fe/m-connector assembled	0150-3500

CONNECTOR ACCESSORIES

MC01-C/f-cap	Metal protection cap for C/f	0150-3379
MC01-C/m-cap	Metal protection cap for C/m	0150-3378
MC01-R/f-cap	Metal protection cap for R/f	0150-3377
MC01-R/m-cap	Metal protection cap for R/m	0150-3376
MC01-F/C	Mounting flange for connector MC01-C	0150-3254
MC01-F/R	Mounting flange for connector MC01-R	0150-3253

SERVO DRIVE SERIES C1400 (240VAC)

C1400-GP-VS-1S-000	General Purpose Drive (1x240VAC/20A), STO	0150-2655
C1450-EC-VS-1S-000	EtherCAT Drive (1x240VAC/20A), STO	0150-2657
C1450-DS-VS-1S-000	EtherCAT CoE Drive (1x240VAC/20A), STO	0150-2665
C1450-SE-VS-1S-000	EtherCAT SoE Drive (1x240VAC/20A), STO	0150-2660
C1450-PN-VS-1S-000	ProfiNet Drive (1x240VAC/20A), STO	0150-2658
C1450-PD-VS-1S-000	PROFIdrive Drive (1x240VAC/20A), STO	0150-2664
C1450-IP-VS-1S-000	Ethernet/IP Drive (1x240VAC/20A), STO	0150-2666
C1450-SC-VS-1S-000	Sercos III Drive (1x240VAC/20A), STO	0150-2659
C1450-PL-VS-1S-000	POWERLINK Drive (1x240VAC/20A), STO	0150-2656
C1450-LU-VS-1S-000	LinUDP Drive (1x240VAC/20A), STO	0150-2667

SERVO DRIVE SERIES E1400 (3x400...480VAC)

E1400-GP-QN-0S	General Purpose Drive (3x400V/28A)	0150-1779
E1430-DP-QN-0S	Profibus DP Drive (3x400V/28A)	0150-1786
E1450-EC-QN-0S	EtherCAT Drive (3x400V/28A)	0150-1784
E1450-DS-QN-0S	EtherCAT CoE Drive (3x400V/28A)	0150-2411
E1450-SE-QN-0S	EtherCAT SoE Drive (3x400V/28A)	0150-1899
E1450-PN-QN-0S	ProfiNet Drive (3x400V/28A)	0150-1783
E1450-PD-QN-0S	PROFIdrive Drive (3x400V/28A)	0150-2621
E1450-IP-QN-0S	Ethernet/IP Drive (3x400V/28A)	0150-1782
E1450-SC-QN-0S	Sercos III Drive (3x400V/28A)	0150-1785
E1450-PL-QN-0S	PowerLink Drive (3x400V/28A)	0150-1791
E1450-LU-QN-0S	LinUDP Drive (3x400V/28A)	0150-2494
E1400-GP-QN-1S	General Purpose Drive (3x400V/28A), STO	0150-2351
E1430-DP-QN-1S	Profibus DP Drive (3x400V/28A), STO	0150-2352
E1450-EC-QN-1S	EtherCAT Drive (3x400V/28A), STO	0150-2353
E1450-DS-QN-1S	EtherCAT CoE Drive (3x400V/28A), STO	0150-2412
E1450-SE-QN-1S	EtherCAT SoE Drive (3x400V/28A), STO	0150-2358
E1450-PN-QN-1S	ProfiNet Drive (3x400V/28A), STO	0150-2356
E1450-PD-QN-1S	PROFIdrive Drive (3x400V/28A), STO	0150-2622
E1450-IP-QN-1S	Ethernet/IP Drive (3x400V/28A), STO	0150-2354
E1450-SC-QN-1S	Sercos III Drive (3x400V/28A), STO	0150-2357
E1450-PL-QN-1S	PowerLink Drive (3x400V/28A), STO	0150-2355
E1450-LU-QN-1S	LinUDP Drive (3x400V/28A), STO	0150-2495

ACCESSORIES FOR SERVO DRIVES SERIES E1400 & C1400

RR01-68/100	Regeneration resistor 100W for C1400	0150-3581
RR01-68/100-E1400	Regeneration resistor set 100W for E1400	0150-3373
NF01-FS34984-6-61	Line Filter for Drives Series C1400	0150-2747
NF01-FS34985-20-71	Line Filter for E1400 (motor cable up to 20m)	0150-2746
NF01-FN258-16-07	Line Filter for E1400 (motor cable up to 50m)	0150-2359
DC01-E1400/X4/X30	Drive Connector Set for E1400-0S	0150-3452
DC01-E1400/X4/X30/X33	Drive Connector Set for E1400-1S	0150-3453

DC01-E1400/X1	Drive Connector Regeneration/Busbar	0150-3445
DC01-E1400/X30	Drive Connector 3x400VAC Supply	0150-3449
DC01-E1400/X32	Drive Connector Brake	0150-3450
DC01-C1400/X4/X30	Drive Connector Set for C1400-0S	0150-3676
DC01-C1400/X4/X30/X33	Drive Connector Set for C1400-1S	0150-3677
DC01-C1400/X30	Drive Connector 230VAC Supply	0150-3607
MC10-EMV/14-D	Shield clamp for P10 motor power cable	0150-3631

STATOR SERIES PS10-54 FOR LINEAR MOTORS P10-54 (240-480VAC)

PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x180U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x180U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PS10-54x180U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785

SLIDER FOR LINEAR MOTORS P10-54**SEE SLIDER SERIES PL01-28****FLANGES PF10-54 FOR LINEAR MOTORS P10-54**

PF10-54x140	Flansch für PS10-54x120	0150-2733
PF10-54x200	Flansch für PS10-54x180	0150-2734
PF10-54x260	Flansch für PS10-54x240	0150-2735
PF10-54x320	Flansch für PS10-54x300	0150-2736

POWER & ENCODER CABLE FOR LINEAR MOTORS P10-54

KPS07-04/02-L/Tk-3	Power trailing chain cable L/Tk, 3m	0150-2670
KPS07-04/02-L/Tk-5	Power trailing chain cable L/Tk, 5m	0150-2671
KPS07-04/02-L/Tk-8	Power trailing chain cable L/Tk, 8m	0150-2672
KPS07-04/02-L/Tk-12	Power trailing chain cable L/Tk, 12m	0150-2673
KSS05-02/08-D15s/Uk-3	Encoder trailing chain cable D15s/Uk, 3m	0150-2650
KSS05-02/08-D15s/Uk-5	Encoder trailing chain cable D15s/Uk, 5m	0150-2651
KSS05-02/08-D15s/Uk-8	Encoder trailing chain cable D15s/Uk, 8m	0150-2652
KSS05-02/08-D15s/Uk-12	Encoder trailing chain cable D15s/Uk, 12m	0150-2653
KPS07-04/02-./Tk-10	Power trailing chain cable ./Tk, 10m	0150-3626
KSS05-02/13-./Uk-10	Encoder trailing chain cable ./Uk, 10m	0150-3627

SPARE BEARINGS FOR LINEAR MOTOR SERIES P10-54

PB10-54x120-L	bearing kit for PS10-54x120	0150-3671
PB10-54x180-L	bearing kit for PS10-54x180	0150-3672
PB10-54x240-L	bearing kit for PS10-54x240	0150-3673
PB10-54x300-L	bearing kit for PS10-54x300	0150-3674

STATOR SERIES PS10-70 FOR LINEAR MOTORS P10-70 (3x400...480VAC)

PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711

SLIDER SERIES PL10-28 FOR LINEAR MOTORS P10-70

PL10-28x290/240	Slider for P10-70 'standard'	0150-2193
PL10-28x390/340	Slider for P10-70 'standard'	0150-2194
PL10-28x430/380	Slider for P10-70 'standard'	0150-2548
PL10-28x490/440	Slider for P10-70 'standard'	0150-2195
PL10-28x590/540	Slider for P10-70 'standard'	0150-2196
PL10-28x690/640	Slider for P10-70 'standard'	0150-2197
PL10-28x790/740	Slider for P10-70 'standard'	0150-2198
PL10-28x890/840	Slider for P10-70 'standard'	0150-2199
PL10-28x990/940	Slider for P10-70 'standard'	0150-2203
PL10-28x1190/1140	Slider for P10-70 'standard'	0150-2204
PL10-28x1390/1340	Slider for P10-70 'standard'	0150-2205
PL10-28x1590/1540	Slider for P10-70 'standard'	0150-2206
PL10-28x1790/1740	Slider for P10-70 'standard'	0150-2207
PL10-28x1990/1940	Slider for P10-70 'standard'	0150-2208

FLANGES PF10-70 FOR LINEAR MOTORS P10-70

PF10-70x110	Flange for PS10-70x80	0150-2272
PF10-70x190	Flange for PS10-70x160	0150-2273
PF10-70x270	Flange for PS10-70x240	0150-2274
PF10-70x350	Flange for PS10-70x320	0150-2290
PF10-70x430	Flange for PS10-70x400	0150-2276
PF10-70x110-FC	Flange for PS10-70x80 fluid cooling	0150-2291
PF10-70x190-FC	Flange for PS10-70x160 fluid cooling	0150-2292
PF10-70x270-FC	Flange for PS10-70x240 fluid cooling	0150-2293
PF10-70x350-FC	Flange for PS10-70x320 fluid cooling	0150-2294
PF10-70x430-FC	Flange for PS10-70x400 fluid cooling	0150-2295

POWER & ENCODER CABLE FOR LINEAR MOTORS P10-70

KPS15-04-L/Q-3	Power trailing chain cable L/Q, 3m	0150-2266
KPS15-04-L/Q-5	Power trailing chain cable L/Q, 5m	0150-2261
KPS15-04-L/Q-8	Power trailing chain cable L/Q, 8m	0150-2267
KPS15-04-L/Q-12	Power trailing chain cable L/Q, 12m	0150-2268
KSS05-02/08-D15/J-3	Encoder trailing chain cable D15/J, 3m	0150-2263

KSS05-02/08-D15/J-5	Encoder trailing chain cable D15/J, 5m	0150-2262
KSS05-02/08-D15/J-8	Encoder trailing chain cable D15/J, 8m	0150-2264
KSS05-02/08-D15/J-12	Encoder trailing chain cable D15/J, 12m	0150-2265
KPS15-04-..../Q-10	Power trailing chain cable .../Q, 10m	0150-2376
KPS15-04/04-..../Q-10	Power trailing chain cable .../Q, 10m for D03	0150-3654
KSS05-02/13-./J-10	Encoder trailing chain cable .../J, 10m	0150-2377
KSS05-02/06-./J-10	Encoder trailing chain cable .../J, 10m, for D03	0150-3655

GUIDES FOR LINEAR MOTORS SERIES P10-70

H10-70x80/70	H-Guide for P10-70x80, Stroke max. 70mm	0150-5404
H10-70x80/170	H-Guide for P10-70x80, Stroke max. 170mm	0150-5405
H10-70x80/270	H-Guide for P10-70x80, Stroke max. 270mm	0150-5406
H10-70x80/370	H-Guide for P10-70x80, Stroke max. 370mm	0150-5407
H10-70x80/470	H-Guide for P10-70x80, Stroke max. 470mm	0150-5408
H10-70x160/90	H-Guide for P10-70x160, Stroke max. 90mm	0150-5409
H10-70x160/190	H-Guide for P10-70x160, Stroke max. 190mm	0150-5410
H10-70x160/290	H-Guide for P10-70x160, Stroke max. 290mm	0150-5411
H10-70x160/390	H-Guide for P10-70x160, Stroke max. 390mm	0150-5412
H10-70x160/490	H-Guide for P10-70x160, Stroke max. 490mm	0150-5413
H10-70x240/110	H-Guide for P10-70x240, Stroke max. 110mm	0150-5185
H10-70x240/210	H-Guide for P10-70x240, Stroke max. 210mm	0150-5400
H10-70x240/310	H-Guide for P10-70x240, Stroke max. 310mm	0150-5401
H10-70x240/410	H-Guide for P10-70x240, Stroke max. 410mm	0150-5402
H10-70x240/510	H-Guide for P10-70x240, Stroke max. 510mm	0150-5403
H10-70x320/130	H-Guide for P10-70x320, Stroke max. 130mm	0150-5414
H10-70x320/230	H-Guide for P10-70x320, Stroke max. 230mm	0150-5415
H10-70x320/330	H-Guide for P10-70x320, Stroke max. 330mm	0150-5416
H10-70x320/430	H-Guide for P10-70x320, Stroke max. 430mm	0150-5417
H10-70x320/530	H-Guide for P10-70x320, Stroke max. 530mm	0150-5418
H10-70x400/50	H-Guide for P10-70x400, Stroke max. 50mm	0150-5419
H10-70x400/150	H-Guide for P10-70x400, Stroke max. 150mm	0150-5420
H10-70x400/250	H-Guide for P10-70x400, Stroke max. 250mm	0150-5421
H10-70x400/350	H-Guide for P10-70x400, Stroke max. 350mm	0150-5422
H10-70x400/450	H-Guide for P10-70x400, Stroke max. 450mm	0150-5423

SPARE BEARINGS & ACCESSORIES FOR LINEAR MOTOR SERIES P10-70

PB10-70x80-L	bearing kit for PS10-70x80	0150-3431
PB10-70x160-L	bearing kit for PS10-70x160	0150-3432
PB10-70x240-L	bearing kit for PS10-70x240	0150-3433
PB10-70x320-L	bearing kit for PS10-70x320	0150-3434
PB10-70x400-L	bearing kit for PS10-70x400	0150-3435
PA10-70/28	Lubricant reservoir for PS10-70	0150-3543

CABLE AND CONNECTORS FOR LINEAR MOTORS P10-54 & P10-70

KSS05-02/08	Trailing chain cable LinMot encoder (per m)	0150-2258
KSS05-02/08-100	Trailing chain cable LinMot encoder (100m)	0150-3575
KSS05-02/13	Trailing chain cable encoder P10-...-Dxx (per m)	0150-2259
KSS05-02/06	Trailing chain cable encoder P10-...-Dx3 (per m)	0150-2490
KPS15-04	Trailing chain cable power P10-70 (per m)	0150-2257
KPS15-04-100	Trailing chain cable power P10-70 (100m)	0150-3576
KPS07-04/02	Trailing chain cable power P10-54 (per m)	0150-2372
KPS15-04/04	Trailing chain cable power P10-...-Dx3 (per m)	0150-2269
MC10-Uk/f	Connector encoder PS10-54	0150-3483

MC10-J/f	Connector encoder PS10-70	0160-2269
MC10-J/m	Connector encoder PS10-70/m	0160-2407
MC10-D15-45°/f	Connector encoder C1400/E1400/X3	0150-3397
MC10-Tk/f	Connector power PS10-54	0150-3482
MC10-Q/f	Connector power PS10-70	0160-2268
MC10-Q/m	Connector power PS10-70/m	0160-2405
MC10-B/m	Connector power C1400/X2	0150-3605
MC10-L/m	Connector power E1400/X2	0150-3382
MC10-Uk/f-as	Connector encoder PS10-54 assembled	0150-3620
MC10-J/f-as	Connector encoder PS10-70 assembled	0160-2331
MC10-J/m-as	Connector encoder PS10-70/m assembled	0160-2408
MC10-D15-45°/f-as	Connector encoder C1400/E1400/X3 assembled	0150-3399
MC10-Tk/f-as	Connector power PS10-54 assembled	0150-3623
MC10-Q/f-as	Connector power PS10-70 assembled	0160-2329
MC10-Q/m-as	Connector power PS10-70/m assembled	0160-2406
MC10-B/m-as	Connector power C1400/X2 assembled	0150-3606
MC10-Lb/m-as	Connector power E1400/X2/b assembled	0160-2723
MC10-L/m-as	Connector power E1400/X2 assembled	0160-2330

LINEAR-ROTARY-MOTORS

PR01-52x40-R/37x120F-HP-C-80	Linear Rotary Motor	0150-1573
PR01-52x60-R/37x120F-HP-C-100	Linear Rotary Motor	0150-1197
PR01-52x60-R/37x120F-HP-C-150	Linear Rotary Motor	0150-2705
PR01-84x80-C/48x240F-C-100	Linear Rotary Motor	0150-1194
PR01-84x80-C/48x240F-C-150	Linear Rotary Motor	0150-1187
PR01-84x80-C/48x240F-C-300	Linear Rotary Motor	0150-1580
PR01-84x80-C/48x360F-C-100	Linear Rotary Motor	0150-1199
PR01-84x80-C/48x360F-C-150	Linear Rotary Motor	0150-1168
PR01-52x40-R/37x120F-HP-C-80-L	Linear Rotary Motor with hollow Shaft	0150-2703
PR01-52x60-R/37x120F-HP-C-100-L	Linear Rotary Motor with hollow Shaft	0150-2704
PR01-52x60-R/37x120F-HP-C-150-L	Linear Rotary Motor with hollow Shaft	0150-2706
PR01-84x80-C/48x240F-C-100-L	Linear Rotary Motor with hollow Shaft	0150-1196
PR01-84x80-C/48x240F-C-150-L	Linear Rotary Motor with hollow Shaft	0150-1188
PR01-84x80-C/48x240F-C-300-L	Linear Rotary Motor with hollow Shaft	0150-2554
PR01-84x80-C/48x360F-C-100-L	Linear Rotary Motor with hollow Shaft	0150-1200
PR01-84x80-C/48x360F-C-150-L	Linear Rotary Motor with hollow Shaft	0150-1166
PR01-84x80-SSC-C/48x240F-C-150	Linear Rotary Motor, Stainless Steel	0150-1581
PR01-84x80-SSC-C/48x360F-C-150	Linear Rotary Motor, Stainless Steel	0150-1579
PR01-84x80-SSC-C/48x240F-C-150-L	Linear Rotary Motor, Stainless Steel, hollow Shaft	0150-1582
PR01-84x80-SSC-C/48x240F-C-300-L	Linear Rotary Motor, Stainless Steel, hollow Shaft	0150-2555
PR01-84x80-SSC-C/48x360F-C-150-L	Linear Rotary Motor, Stainless Steel, hollow Shaft	0150-1583
PR01-52x60-R-G/37x120F-HP-C-100-G05	Linear Rotary Motor with Gearbox 5:1	0150-2648
PR01-52x60-R-G/37x120F-HP-C-100-G10	Linear Rotary Motor with 10:1 Gearbox	0150-2647
PR01-84x80-C-G/48x240F-C-150-G05	Linear Rotary Motor with Gearbox 5:1	0150-2531
PR01-84x80-C-G/48x240F-C-150-G07	Linear Rotary Motor with Gearbox 7:1	0150-2532
PR01-84x80-C-G/48x240F-C-150-G10	Linear Rotary Motor with Gearbox 10:1	0150-2533
PR01-84x80-C-G/48x360F-C-150-G05	Linear Rotary Motor with Gearbox 5:1	0150-2535
PR01-84x80-C-G/48x360F-C-150-G07	Linear Rotary Motor with Gearbox 7:1	0150-2536
PR01-84x80-C-G/48x360F-C-150-G10	Linear Rotary Motor with Gearbox 10:1	0150-2537

ACCESSORIES FOR LINEAR-ROTARY-MOTORS

PC01-37x68	Cooling Profile for PS01-37	0160-2131
PC01-48x100	Cooling Profile for PS01-48	0160-2145

PC01-48x117	Cooling Profile for PS01-48	0160-2138
RS01-VA52-Kit	Fan Kit for RS01-52 Rotary Motors	0150-1599
RS01-VA84-Kit	Fan Kit for RS01-84 Rotary Motors	0150-1600
RS01-SS12x22	Shaft-hub clamping for 12mm shaft	0230-0101
RS01-SS20x38	Shaft-hub clamping for 20mm shaft	0230-0100
MF01-PK84	Motor Cam Kit for Linear Rotary Motor	0250-2324
MF01-BK52	Brake Kit for PR01-52 Linear Rotary Motor	0250-2344
ML01-AS300	MagSpring Cover	0250-2345

EC-BRUSHLESS MOTORS (ROTARY)		
EC02-40/70	EC-Servo Motor 70W (0.19Nm, 4'000//min)	0150-3456
EC02-40/140	EC-Servo Motor 140W (0.38Nm, 4'000//min)	0150-3457
EC02-40/70-B	EC-Servo Motor 70W (0.19Nm, 4'000//min), Bremse	0150-3460
EC02-40/140-B	EC-Servo Motor 140W (0.38Nm, 4'000//min), Bremse	0150-3461
KS05-04/06	Trailing chain cable for EC02 motors (per m)	0150-2694
MS01-20x35	MagSpring Stator	0250-2214

MAGSPRING STATORS		
MS01-20x60	MagSpring Stator	0250-2200
MS01-20x140	MagSpring Stator	0250-2201
MS01-20x220	MagSpring Stator	0250-2202
MS01-20x300	MagSpring Stator	0250-2207
MS01-37x80	MagSpring Stator	0250-2203
MS01-37x155	MagSpring Stator	0250-2204
MS01-37x230	MagSpring Stator	0250-2205
MS01-37x305	MagSpring Stator	0250-2206
MS01-37x380	MagSpring Stator	0250-2209

MAGSPRING SLIDERS		
ML01-12x130/80-10	MagSpring Slider	0250-2300
ML01-12x130/80-15	MagSpring Slider	0250-2308
ML01-12x130/80-20	MagSpring Slider	0250-2301
ML01-12x210/160-10	MagSpring Slider	0250-2302
ML01-12x210/160-15	MagSpring Slider	0250-2309
ML01-12x210/160-20	MagSpring Slider	0250-2303
ML01-12x290/240-10	MagSpring Slider	0250-2304
ML01-12x290/240-15	MagSpring Slider	0250-2310
ML01-12x290/240-20	MagSpring Slider	0250-2305
ML01-12x370/320-10	MagSpring Slider	0250-2311
ML01-12x370/320-15	MagSpring Slider	0250-2312
ML01-12x370/320-20	MagSpring Slider	0250-2313
ML01-12x450/400-20	MagSpring Slider	0250-2332
ML01-12x335/160-20	MagSpring Slider for Linear Rotary Motor	0250-2320
ML01-12x350/160-10	MagSpring Slider for Linear Rotary Motor	0250-2333
ML01-12x350/160-20	MagSpring Slider for Linear Rotary Motor	0250-2321
ML01-12x375/160-20	MagSpring Slider for Linear Rotary Motor	0250-2326
ML01-12x650/320-20	MagSpring Slider for Linear Rotary Motor	0250-2343

MAGSPRING MOUNTING PARTS		
MF01-20/H23	Flange MagSpring 20 / H-Guide 23	0250-2306
MF01-20/H37	Flange MagSpring 20 / H-Guide 37	0250-2315
MF01-37/H37	Flange MagSpring 37 / H-Guide 37/48	0250-2307

MF01-PR01-52x40-20	MagSpring Mounting Flange for Linear Rotary Motors	0250-2322
MF01-PR01-52x40-37	MagSpring Mounting Flange for Linear Rotary Motors	0250-2319
MF01-PR01-84x80-37-1	MagSpring Mounting Flange for Linear Rotary Motors UNO	0250-2337
MF01-PR01-84x80-37-2	MagSpring Mounting Flange for Linear Rotary Motors DUO	0250-2338
MA01-20/H23	Adapter MagSpring 20 / H-Guide 23	0250-0116
MA01-37/H23	Adapter MagSpring 37 / H-Guide 23	0250-0122
MA01-37/H37	Adapter MagSpring 37&20 / H-Guide 37	0250-0117
MA01-37/H48	Adapter MagSpring 37 / H-Guide 48	0250-0118
MA01-PR01-52-37/20	MagSpring Adapter for Linear Rotary Motor	0250-0128
MA01-PR01-84x80-37-1	MagSpring Adapter for Linear Rotary Motors UNO	0250-2341
MA01-PR01-84x80-37-2	Adapter MagSpring Linear Rotary Motor DUO	0250-2340

MARKETING ARTICLES		
LinMot Pen	with LinMot logo	0150-0271
LinMot Cup	with LinMot logo	0150-0284
LinMot Baseball Cap Sand	with LinMot logo	0150-0282
LinMot Baseball Cap Black	with LinMot logo	0150-0286
LinMot knife	Victorinox	0150-0231
LinMot Poster Servo Drive	Dimension 1'400x1'000mm	0150-0256
LinMot Poster Linear Motors	Dimension 1'400x1'000mm	0150-0255
LinMot Poster INOX Motors IP69K	Dimension 1'400x1'000mm	0150-0257

Contact



HEADQUARTER EUROPE

**NTI AG
LinMot & MagSpring**

Bodenaeckerstrasse 2
CH - 8957 Spreitenbach

☎ +41-(0)56-419 91 91
📠 +41-(0)56-419 91 92

✉ office@linmot.com
🏠 www.linmot.com

HEADQUARTER USA

LinMot USA Inc.

204 E Morrissey Dr.
Elkhorn, WI 53121

☎ 262-743-2555
📠 262-723-6688

✉ usasales@linmot.com
🏠 www.linmot-usa.com/

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Tel.: +41-(0)56-419 91 91

Fax: +41-(0)56-419 91 92

office@linmot.com
www.linmot.com

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LinMot Europe

NTI AG - LinMot & MagSpring
Bodenaeckerstrasse 2
CH - 8957 Spreitenbach
Switzerland

☎ +41 (0)56 419 91 91

📠 +41 (0)56 419 91 92

✉ office@linmot.com

🏠 www.linmot.com

LinMot USA

LinMot USA, Inc.
204 E Morrissey Dr.
Elkhorn, WI 53121
United States

☎ 262-743-2555

📠 262-723-6688

✉ usasales@linmot.com

🏠 www.linmot-usa.com

