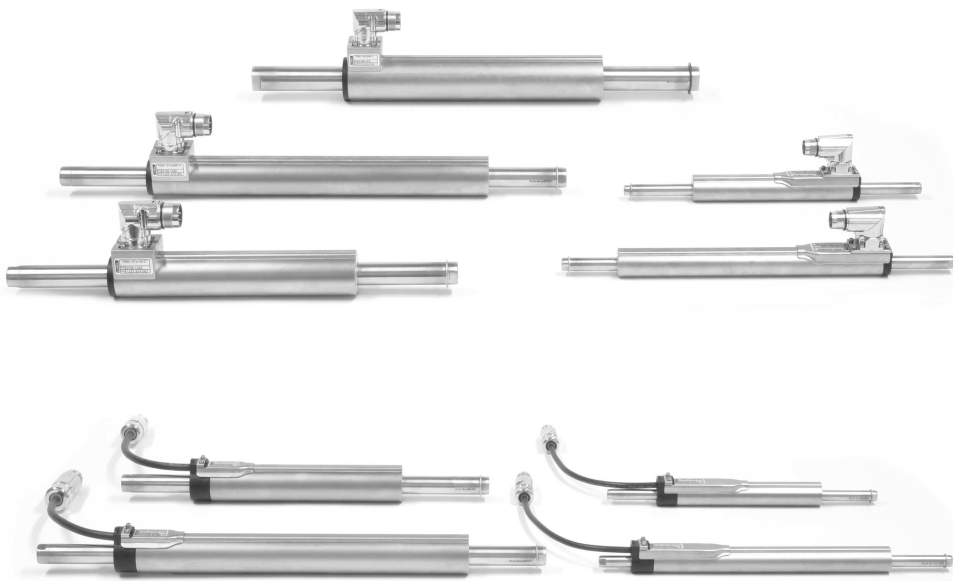


entraînement

MOTEURS LINEAIRES LIMNOT

m o t i o n
la force de la gamme !

transtechnik
servomécanismes



Motor Family P01-23Sx80

119



Motor Family P01-23x80

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Motor Family P01-23x160

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Motor Family P01-37x120

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Motor Family P01-37x240

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Motor Family P01-48x240

241



Linear Motors P01

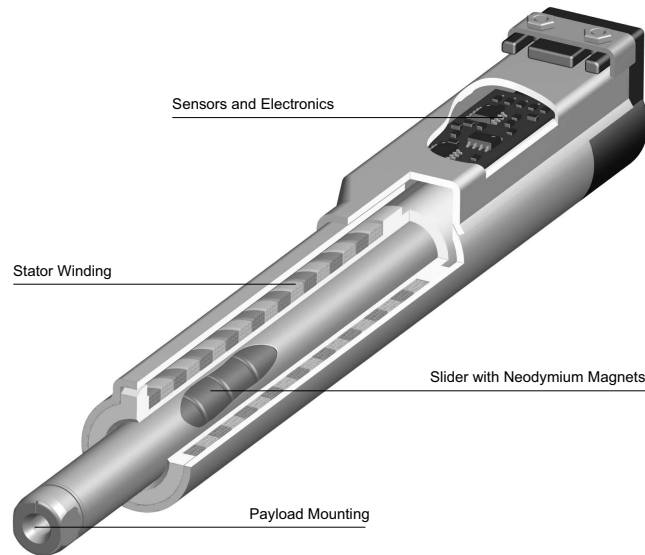
Linear Motors

LinMot P is a family of linear direct drives for highly dynamic motions.

The motor is made up of just two parts: the slider and the stator. The two parts are not connected by brushes or cables. The linear motion is generated directly by electromagnetic forces, without the wear associated with mechanical gearboxes, belts, or levers. Extremely dynamic motion sequences can be obtained with a long lifespan.

Cylindrical design and integrated bearings and position sensing make LinMot linear motors a compact design element.

Typical applications range from rapid positioning, lifting, and pushing motions, to synchronous pick and place applications, to complex palletizing gantry robots.



Linear Motors P01

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.

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.

Flexibility

Freely positionable
with no mechanical end play along the entire stroke

Adjustable speed
within a range of 0.001 - 4 m/s

Adjustable acceleration
for highly dynamic or slower moves.

Synchronization & motion profiling
for complicated motions and replacement of cam discs

Adjustable force
for totally programmable press and joining operations

Dynamics

Highly dynamic
Acceleration values of well over 200 m/s² and travel speeds over 4 m/s allow cyclical motion sequences of several Hertz

Controlled dynamics
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

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.



Integrated Position Measurement

LinMot linear motors and LinMot servo controllers form a closed-loop drive system. The position is detected in the motor by non-contact magnetic field sensors. These provide the servo controller with a sine/cosine signal, so that the current position is always available to the controller with no lag. In contrast to incremental position measurement, steps cannot be lost. Since

position detection is done purely magnetically, with no optical sensors, and with the magnetic sensors being cast into the stator, LinMot linear motors can be used even in damp or dirty environments.

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. 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 controller can, however, immediately recognize a stall condition. Temperature sensors integrated in the stator prevent the drive from overloading in any case.

Linear Motors P01

Lifespan

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.

Reliability

Robust, even in exceptional situations

Since forces are generated purely magnetically, no mechanical components, such as gearboxes, belts, or spindles, can be damaged in case of a crash.

High Reliability

Since LinMot linear motors have no wear parts and a long lifespan, due to their operating principle, a high level of reliability is guaranteed, even in fast-moving machines.

Environmental Conditions

IP67

LinMot linear motors are cast under vacuum, are splash-proof, and have protection class IP67.

Clean Room Compatible

The Fraunhofer Institute has confirmed clean room compatibility (Certification FM9805-3475 per US Fed. Standard 209E).

Use in dirty environments

The magnetic measurement system and cast body style allow secure operation even in damp or dirty environments.

Motor Families

LinMot linear motors are available in various sizes with different strokes and force ranges. The wide range of product variations means that the right linear motor can be found for any application.

The LinMot product range include five motor families:

- P01-23x80 Peak Force: 44N
Maximum stroke: 770mm
- P01-23x160 Peak Force: 86N
Maximum stroke: 770mm
- P01-37x120 Peak Force: 160N
Maximum stroke: 1'460mm
- P01-37x240 Peak Force: 300N
Maximum stroke: 1'460mm
- P01-48x240 Peak Force: 580N
Maximum stroke: 1'840mm

Variants

In order to provide the right solution for every application, the motors are available in various versions:

The stators are available with a rotating IP67 angle connector, or with cable exit. This allows simple installation, even in difficult spaces.

Since no gearboxes are used with linear direct drives, various winding options allow optimal adjustment of force and speed for a given application.



Connector Type Motors



Cable Type Motors

Simple Installation

The connection between the motor and the servo controller requires only a single cable. Since all motors have a connector either directly on the motor (connector models) or at the end of the motor cable (cable models), 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 stati-

onary applications. For applications with moving cables and stators, high-flex motor cables are available for use with cable tracks, and robotic cables are available for applications with cable torsion.

Connector Type Motors

The connector is protection class IP67. The angle connector can be rotated about its own axis, so that the motor cable can be led away from the motor in any direction.



For applications with moving stators, motors with connectors have an advantage; a cable-chain compatible cable can be plugged directly into the motor and run through the cable track.

Cable Type Motors

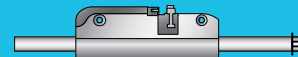
Motors with cable exit are particularly well suited to difficult installation locations, where there is no room for the connector. Since the cable end is cast directly into the motor, these motors can also be used in applications with difficult environmental conditions.



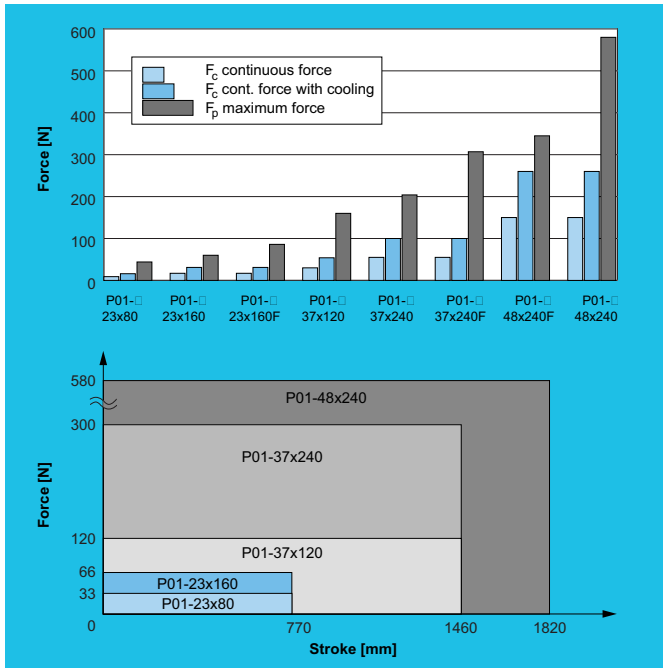
For motors with cable exits, the cable attached to the motor must be mounted securely.

Short Motor

A shorter version of the smallest linear motor is available under the designation P01-23Sx80. Instead of a rotating IP67 connector, the short motor has a ZIF line plug for a flexible flat ribbon cable.

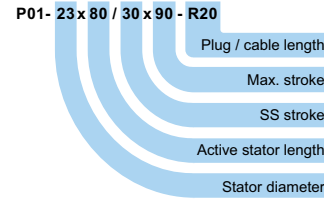


The short motor was developed for laboratory automation applications. Due to the connector style and the flat ribbon cable, this motor is not suitable for use in dirty or damp environments.



Model Description

The most important motor characteristics are encoded in the model description:



Electronic Nameplate

LinMot linear motors have an electronic nameplate in the stator, on which all specific motor data, as well as production and article information, is stored. The electronic nameplate guarantees simple and error-free configuration during start-up. Using the stored production data, the servo

controller compensates for even the smallest production tolerances, in order to provide the best possible accuracy and optimal control behavior, even under difficult conditions.



CAD Data

2D and 3D CAD data are available for linear motors and accessories at www.LinMot.com.

Linear Motors P01

Winding Types

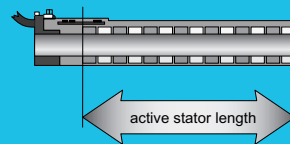
Certain stators are available in two versions, with standard windings or a special winding for higher top speeds. These have advantages primarily in long-stroke applications, which may require increased maximum speed. Stators with the special windings are indicated with an F (for fast) in the description:

- PS01-23x160F
- PS01-37x240F
- PS01-48x480F

Mechanical dimensions are identical to those of stators with standard windings.

Active Stator Length

The active stator length is the length of the windings in the stator.



Motor Cables

Stators with cable exit, in size P01-23, are provided with standard cable lengths of 20cm with IP67 plugs, 100 cm with D-plugs.

Stators with cable exit, in size P01-37, are provided with standard cable lengths of 20cm with IP67 plugs, 150 cm with P-plugs.

Motor cables of up to 50m can be used between the linear motor and the servo controller.

LinMot offers a wide range of extension cables in various versions.

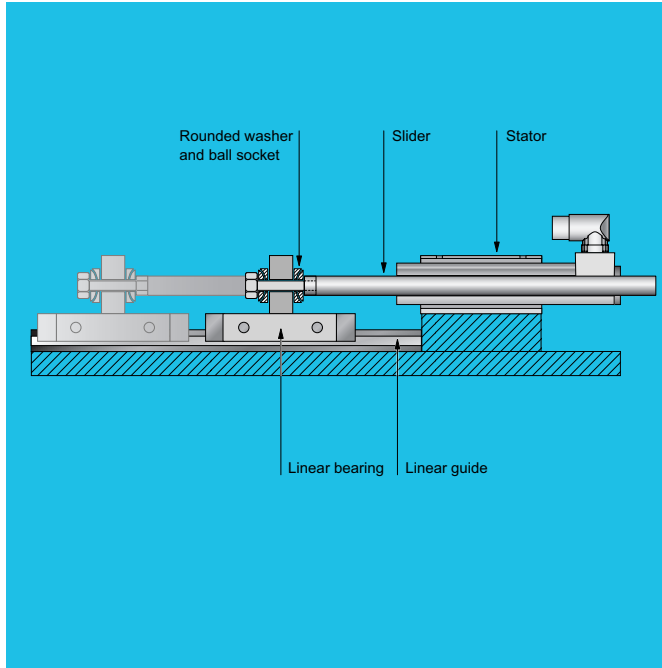
(Motor Cables see page 268).

"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.

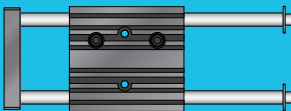


Linear Motors P01

Linear Guides

In order to prevent radial loads on the slider, the load are borne by linear guides.

For short to medium strokes, LinMot has matching linear guides for each motor family in its catalog.



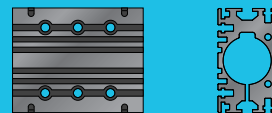
LinMot H01 linear guides are mechanically compatible with H-guides from pneumatics manufacturers.



The H01 linear guides can be optionally equipped with a mechanical brake, a fan, or a counter balance using a MagSpring, for vertical applications.

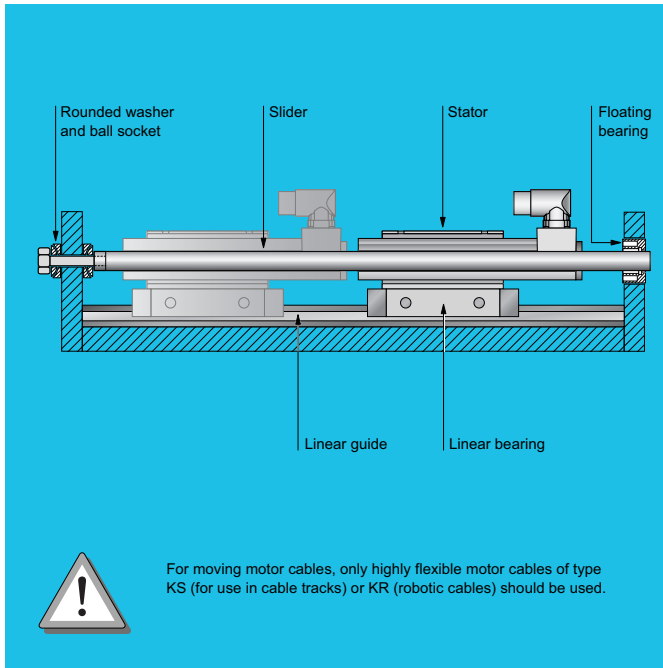
Flange

Various motor flanges are available for simple mounting of the stator.



Motor flanges are available in compatible lengths for the various motors.

For detailed information on the flanges, see page 278.



"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 over-determined 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.

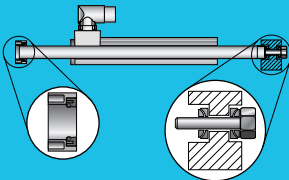
Since the motor cable is always under motion in this installation type, only stators with plug connectors should be used, along with cable-chain compatible motor cables of type KS.

In some applications, multiple stators may be used on a single (long) slider

Linear Motors P01

Mounting Kits for Sliders

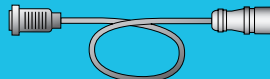
Special mounting kits are available for mounting the slider.



The mounting kits prevent over-determined bearing mounts, and simplify alignment during installation (see page 282).

Standard Motor Cables

The standard motor cable, type K, is suitable for fixed installation, and should not be used in any application where it would be flexed.



Motor cables are to be protected from mechanical damage by wireways.

Preconfigured motor cables are available in any length up to 50m. Standard lengths are available from stock (see page 272).

Moving Motor Cables

For applications with moving motor cables, two different types of cables are available:

- Motor cable type KS
Highly flexible cable for use in cable tracks (flexing, but no torsion)
- Motor cable type KR
For use in robot applications, in which the cable is subject to twisting.

Moving motor cables are to be protected from mechanical damage in cable tracks or flexible cable conduits.

LinMot 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.

Slider descriptions:

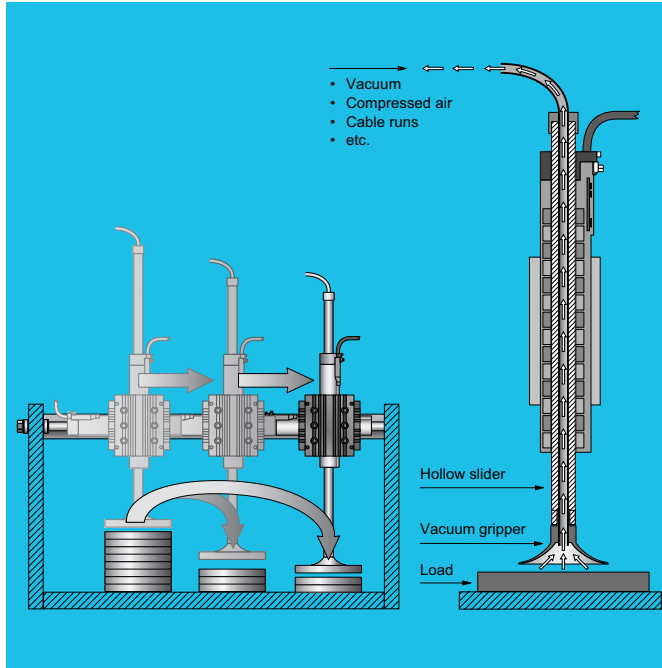
PL01- 20 x 800 / 720

Active slider length

Slider length

Diameter

Linear Motors P01

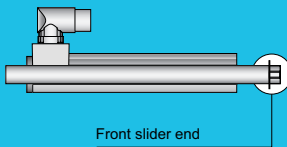


Hollow Sliders

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.

Installation Orientation

LinMot sliders are not symmetrical. All specifications in the data sheets are based on standard slider orientation:



If the slider is installed backwards, the stroke and force ranges shift (see page 337)
The central through-hole in the hollow slide has the following internal diameter

Hollow Sliders

The central through-hole in the hollow slide has the following internal diameter:

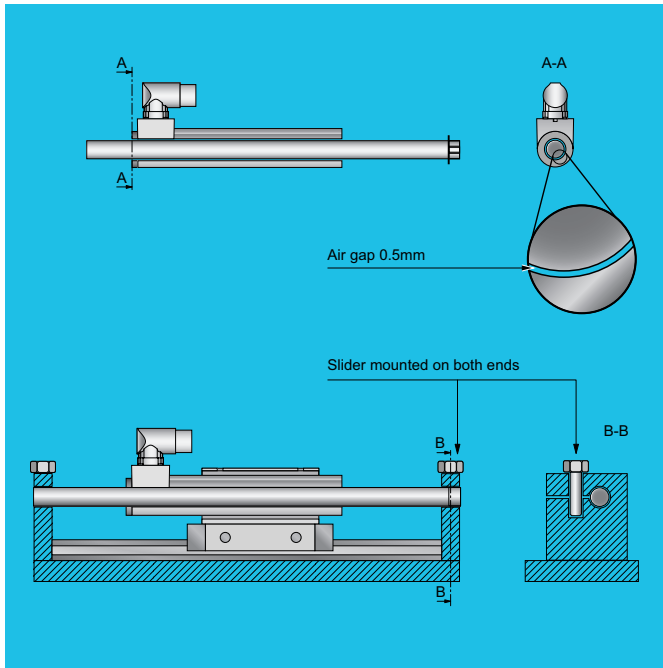
- 4.2mm for Linear Motors series P01-23
- 6.5mm for Linear Motors series P01-37
- 8.5mm for Linear Motors series P01-48

Hollow sliders have a lower mass, compared to standard sliders:

- -12% for Linear Motors series P01-23
- -12% for Linear Motors series P01-37
- -10% for Linear Motors series P01-48

Both the maximum force and the continuous force of hollow slider motors are slightly reduced relative to standard motors:

- -10% for Linear Motors series P01-23
- -10% for Linear Motors series P01-37
- -10% for Linear Motors series P01-48



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 technical data are slightly different from those of the standard sliders (see below).

Heavy-Duty Sliders

PL02 heavy-duty sliders have a special hard-coated surface, with a microhardness of 1000 HV 0.05. The shape and mechanical dimensions are identical to the PL01 version.

Advantages of the heavy-duty version:

- Increased resistance to dirt, especially in contact with abrasive materials.
- Longer lifespan in critical installation conditions.

The heavy-duty version is recommended for:

- Difficult access to the drive for maintenance.
- Dirt in the environment
- Motion frequency greater than 3 Hz

Linear Motors P01

High-Clearance Sliders

High-clearance sliders have a 1 mm smaller diameter compared to standard sliders:

- 19mm for Linear Motors series P01-37
- 27mm for Linear Motors series P01-48

High-clearance sliders have a smaller mass compared to standard sliders:

- -10% for Linear Motors series P01-37
- - 7% for Linear Motors series P01-48

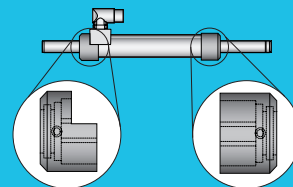
Both the maximum force and the continuous force of motors with high-clearance sliders are slightly different, compared to standard sliders:

- + 8% for Linear Motors series P01-37
- -13% for Linear Motors series P01-48

High-clearance sliders for Linear Motors Series P01-37 have, due to the use of stronger magnets, a slightly higher force than standard sliders.

Wiper Option

Wipers are mounted on the front and/or rear end of the stator, and keep the slider free of dirt.

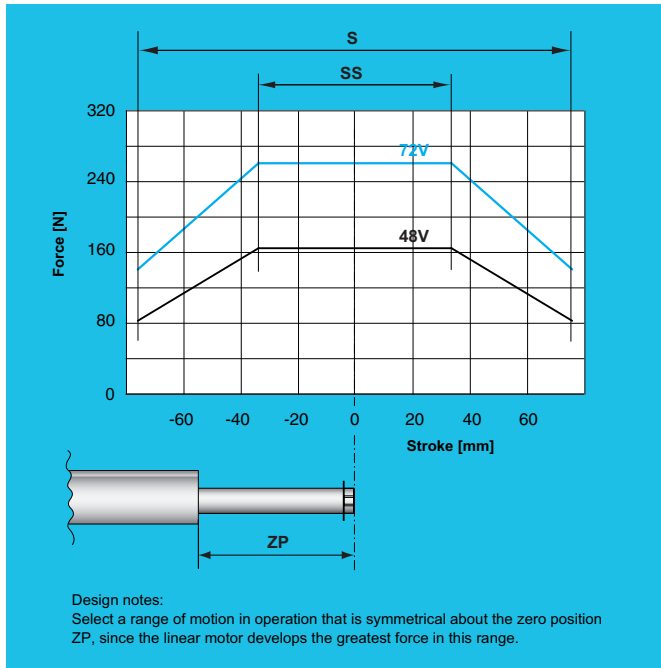


For detailed information, see page 284

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 SS stroke range (shortened stroke), 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 stroke range S. The maximum force is also dependent on the power supply voltage, and the maximum current from the servo controller. The maximum force, depending on the slider position, is shown for various servo controllers in the stroke-force diagram.



Linear Motors P01

Homing

After powering up the servo controller, 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.

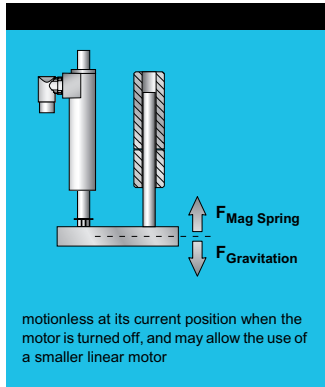
This, in turn, is largely determined by the ambient temperature, cooling, and mounting of the motor. With forced cooling of the linear motor using a fan, the continuous force can be nearly doubled.

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 (see page 315).

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

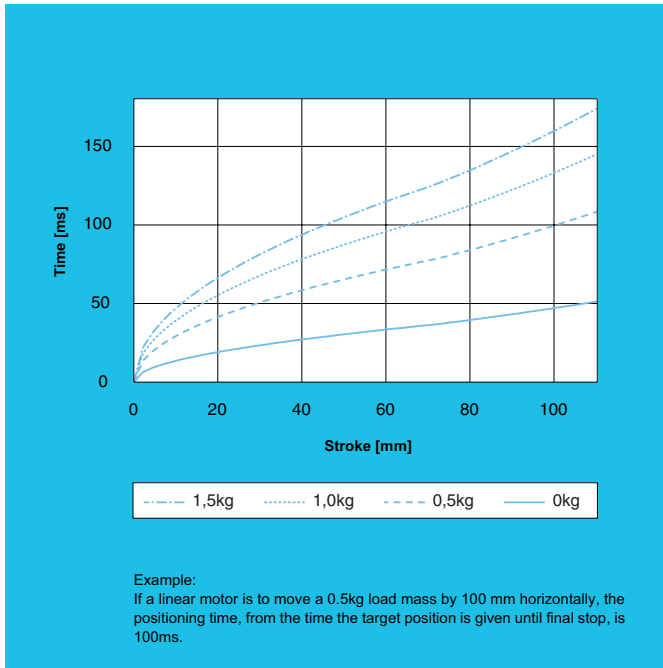


Option: Mechanical Brake

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 controller, 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.



Stroke-Time Diagram

The stroke-time diagram shows the minimum movement time achievable for a horizontal point-to-point motion, depending on various load masses. The values shown in the diagram are the time from the start of the motion until final stop at the desired end position, using a time-optimized profile curve.

Stroke-time diagrams allow quick estimations of the minimum positioning time, without considering the thermal behavior of the motor in continuous operation. For a detailed analysis, LinMot Designer configuration software is available, with which entire motion sequences can be simulated and the correct motor can be determined quickly.

If the required motion times or cycles for an application are beyond the limits determined by the configuration program, then the effective performance limit must be determined with practical experiments, in conjunction with the vendor. This is the only way to capture all application-specific influences (additional friction on bearings, thermal boundary conditions, etc.)

Motor Temperature

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

In addition, the winding 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.

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.

Linear Motors P01

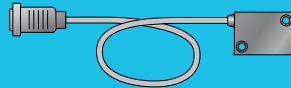
Option: End- and Reference-Switches

Since no mechanical components are used for force transmission in the linear motor, and the force can be limited, 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 controller.

As a rule, LinMot linear motors are referenced to a mechanical end stop at power-up. 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.

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

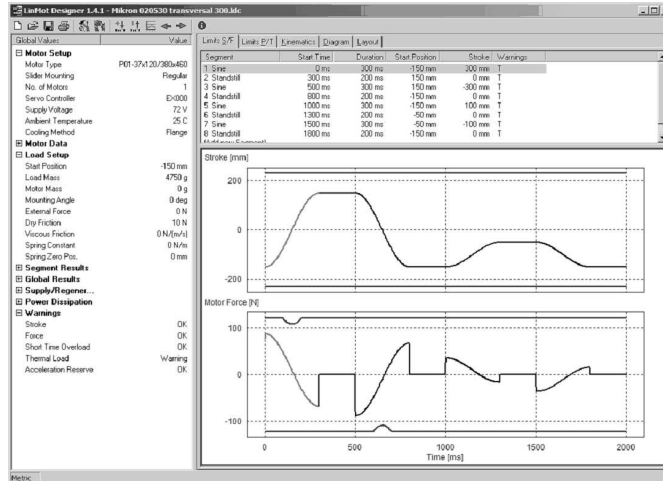
position sensors can be placed precisely where the precision is effective, positioning accuracy in the micrometer and sub-micrometer range can be obtained.

LinMot servo controllers 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.

LinMot carries an external position sensor with an accuracy of 10 µm (see page 286).

Configuration of Linear Motors

The use of a linear drive system starts with configuration of the linear motors. To support the designer during this step, LinMot provides an easy-to-use tool, the LinMot Designer configuration program. LinMot Designer quickly calculates the parameters required for selection of a drive, based on the required motion sequences and loads, and shows them in relation to the selected motor and controller type.



Linear Motors P01

Simulation of a Motion Sequence

The LinMot Designer configuration program calculates the required data points for selecting an appropriate linear motor, such as peak force, nominal force, and maximum speed.

The global data for drive configuration are specified in a first step, such as installation orientation, load mass, friction, etc. The entire motion cycle is then divided into individual motion segments: forward motion, idle time, reverse motion, idle time, etc.

Various motion profiles are available to define motions in the individual segments, such as sinusoidal motions, motion profiles optimized for acceleration or time, etc. Additional, segment-specific data can be defined for each segment, such as increased friction, or a greater load mass during the reverse motion.

After entering the entire motion sequence, the desired motion path is simulated.

Based on the data entered, the critical kinematic data and relevant parameters for the motor are calculated. Both the short-term peak values and the characteristic data for long-term operation are calculated, and compared to those of the selected motor. If the motor performance data are exceeded by the required motion profile, then a warning is automatically given, meaning that the motor selection or the motion sequence must be adjusted.

Motor Controller Database

All data on the LinMot linear motors and servo controllers is stored in a database in LinMot Designer.

Based on the linear motor and servo controller selected, LinMot Designer calculates the drive-specific data, such as maximum and continuous force, maximum speed, etc.

The motor data relevant to the simulation, such as slider or stator mass, are automatically transferred.

Based on the mechanical dimensions, a drawing is generated with the optimal installation orientation.

Dynamic Limits

Based on the motion sequence entered, kinematic data are calculated for each individual segment and for the entire sequence.

The kinematic data from the simulation are displayed graphically in a window, together with the motor limits.

This allows rapid analysis of whether the selected linear motor can follow the required motion profile with the defined load mass.

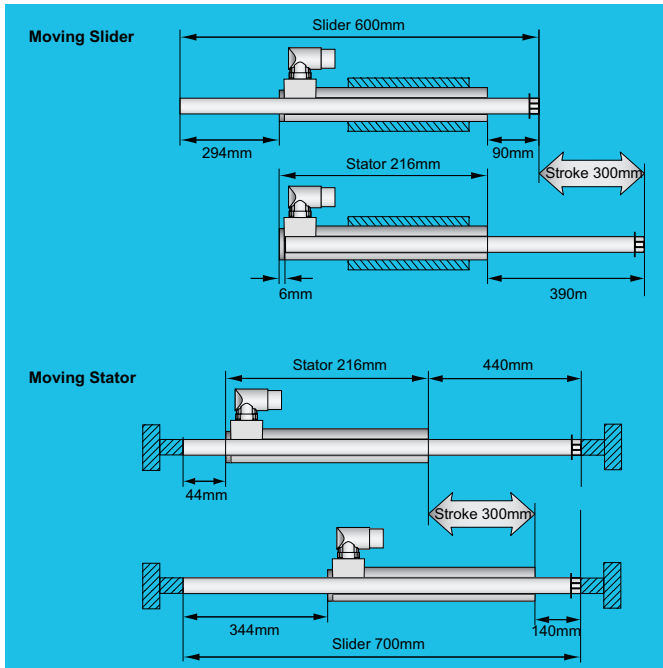
If the application cannot be realized with the selected motor, then a warning is automatically shown.

Continuous Operation

LinMot Designer always assumes for the simulation that the motion sequences entered are executed in continuous operation without pause.

LinMot Designer calculates the power dissipation in continuous operation for the configuration, based on the motion sequence entered, and compares this to the maximum permissible power dissipation of the linear motor.

If the maximum power dissipation of the selected linear motor is exceeded in continuous operation, then an appropriate warning is automatically displayed.



Graphic Display of Results

The motion and force requirements are shown in two graphical windows, together with the motor limits. The graphic representation of the results means that it can be determined at a glance which motion segments must be more closely scrutinized, and how much reserve force the selected linear motor has in the individual segments.

Graphic display of the results also allows simple optimization of the command sequences. For example, individual segments can be optimized for minimum motion times, or entire motion cycles for minimal power dissipation.

Installation Orientation

Another graphic shows the mechanical dimensions of the linear motor, with the slider at the innermost and outermost positions. For applications with a moving stator, the position of the stator is shown at the two outermost positions.

The dimensions, together with detailed motor data and the results of the configuration, can be stored or printed out for documentation purposes.

Linear Motors P01

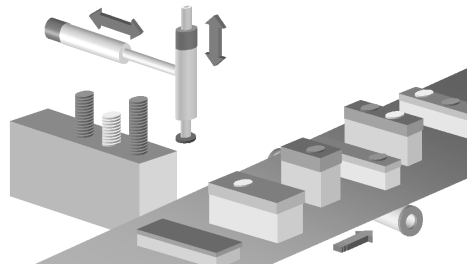
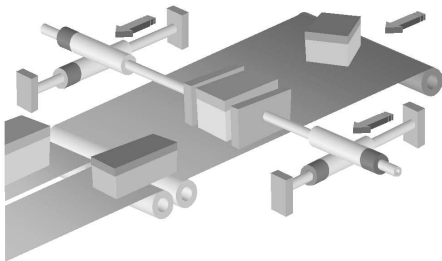
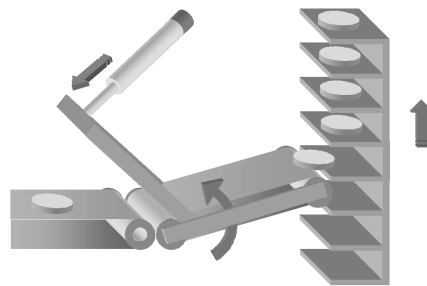
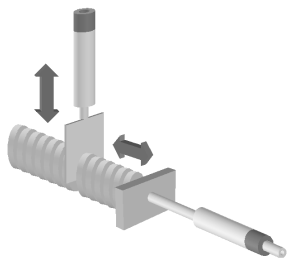
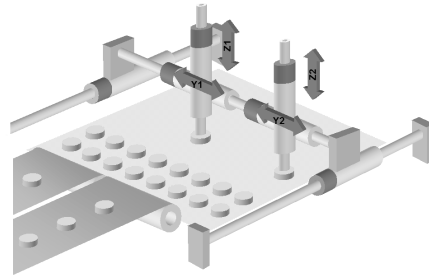
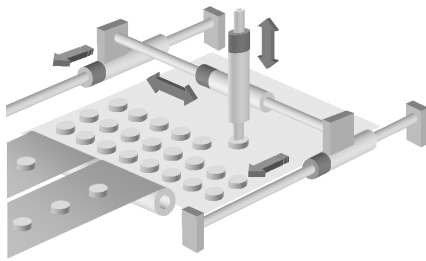
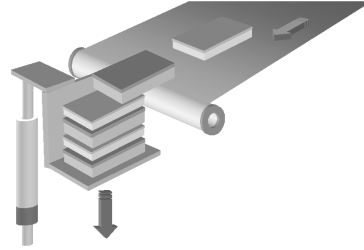
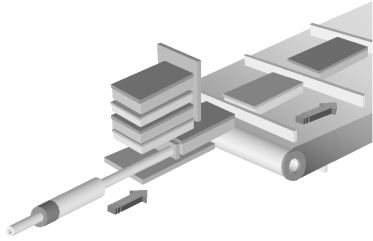


LinMot Designer can be downloaded free of charge from the homepage at www.LinMot.com.

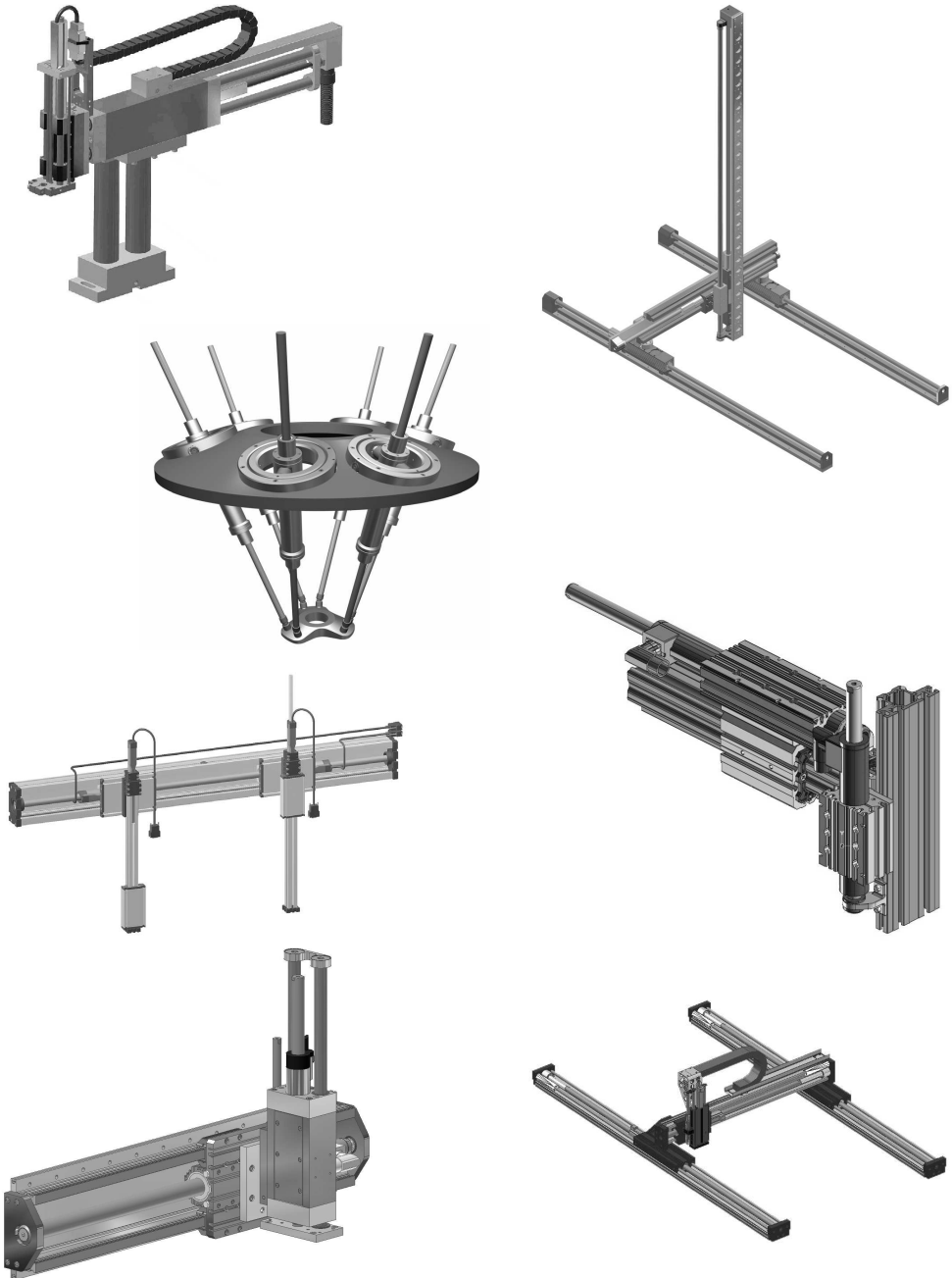
Optimization
Graphic display of the results allows simple and rapid optimization according to various criteria:
Short motion time Optimization for the shortest possible positioning time
Minimum cycle time Optimization for the shortest cycle time for an entire motion sequence
Minimum power dissipation Optimization for minimal power dissipation for the entire motion

Automatic Warnings
If the motor limits are exceeded, an appropriate warning is automatically issued:
Stroke Allowable stroke range exceeded
Force Maximum force not sufficient
Overload Warning of short-term overload, and thermal overload in continuous operation
Acceleration reserve The minimum acceleration reserve of 10 N/kg was not met

Calculation of Power Supply
To estimate the supplied power required, and to size the power supply, LinMot Designer calculates both the peak value and the effective value for the supplied power required for the application.

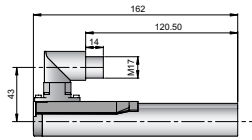


Linear Motors P01

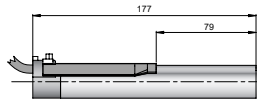


Linear Motors F01

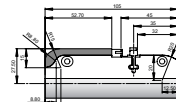
P01-23x80 Series



P01-23x80-R

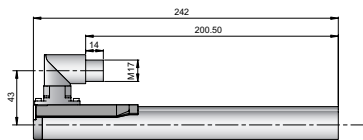


P01-23x80
P01-23x80-R20

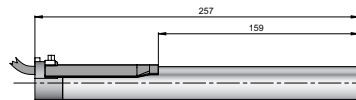


P01-23Sx80

P01-23x160 Series

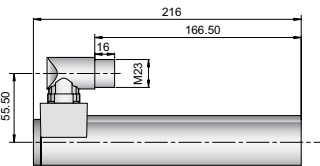


P01-23x160-R

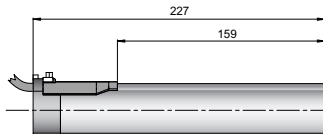


P01-23x160
P01-23x160-R20

P01-37x120 Series

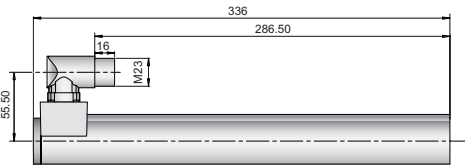


P01-37x120-C

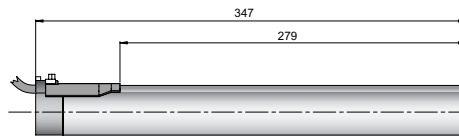


P01-37x120
P01-37x120-C20

P01-37x240 Series

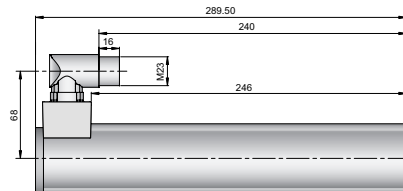


P01-37x240-C



P01-37x240
P01-37x240-C20

P01-48x240 Series



P01-48x240-C

Dimensions in mm

Motor Type	Max. stroke [mm]	Cont. force [N]		Maximum force [N]				Slider mass [g]	Slider ø [mm]	Slider length [mm]	Stator mass [g]	Stator ø [mm]	Stator length [mm]	Connector Type				
		with flange and fan	with flange	Controller E100	Controller E1000	Controller E1100	Controller E1100-HC											
P01-23x80 Series																		
P01-23x80/10x50	50	15	8	29	39	39	39	89	12	130	265 (246)*	23 (23x40) *	162 (105)*					
P01-23x80/30x90	90	16	9	33	44	44	44	118		170								
P01-23x80/50x110	110	16	9	33	44	44	44	135		190								
P01-23x80/80x140	140	16	9	33	44	44	44	171		270								
P01-23x80/150x210	210	16	9	33	44	44	44	220		290								
P01-23x80/210x270	270	16	9	33	44	44	44	271		350								
P01-23x80/280x340	340	16	9	33	44	44	44	330		420								
P01-23x80/340x400	400	16	9	33	44	44	44	465		580								
P01-23x80/440x500	500	16	9	33	44	44	44	465		580								
P01-23x80/620x680	680	16	9	33	44	44	44	610		760								
P01-23x80/710x770	770	16	9	33	44	44	44	690		850								
P01-23x160 Series																		
P01-23x160/70x70	70	17	9	24	49	32	49	112		12				200	450	23	242	
P01-23x160/40x100	100	23	12	32	65	43	65	137	230									
P01-23x160/0x140	140	31	17	43	63	63	86	171	270									
P01-23x160/70x210	210	31	17	43	63	63	86	220	290									
P01-23x160/130x270	270	31	17	43	63	63	86	271	350									
P01-23x160/200x340	340	31	17	43	63	63	86	330	420									
P01-23x160/260x400	400	31	17	43	63	63	86	380	480									
P01-23x160/360x500	500	31	17	43	63	63	86	465	580									
P01-23x160/540x680	680	31	17	43	63	63	86	610	760									
P01-23x160/630x770	770	31	17	43	63	63	86	685	850									
P01-37x120 Series																		
P01-37x120/20x100	100	54	30	61	122	82	163	460	20		240	740	37	216				
P01-37x120/80x160	160	54	30	61	122	82	163	600			300							
P01-37x120/180x260	260	54	30	61	122	82	163	829		395								
P01-37x120/280x360	360	54	30	61	122	82	163	1064		500								
P01-37x120/380x460	460	54	30	61	122	82	163	1297		600								
P01-37x120/480x560	560	54	30	61	122	82	163	1529		700								
P01-37x120/580x660	660	54	30	61	122	82	163	1762		800								
P01-37x120/680x760	760	54	30	61	122	82	163	1994		900								
P01-37x120/780x860	860	54	30	61	122	82	163	2227		1000								
P01-37x120/980x1060	1060	54	30	61	122	82	163	2692		1200								
P01-37x120/1180x1260	1260	54	30	61	122	82	163	3157		1400								
P01-37x120/1380x1460	1460	54	30	61	122	82	163	3622		1600								
P01-37x240 Series																		
P01-37x240/100x100	100	58	31	71	119	95	180	496	20	305	1350	37	336					
P01-37x240/40x160	160	83	44	102	169	136	257	635		635								
P01-37x240/60x260	260	100	55	122	203	163	308	829		395								
P01-37x240/160x360	360	100	55	122	203	163	308	1064		500								
P01-37x240/260x460	460	100	55	122	203	163	308	1297		600								
P01-37x240/360x560	560	100	55	122	203	163	308	1529		700								
P01-37x240/460x660	660	100	55	122	203	163	308	1762		800								
P01-37x240/560x760	760	100	55	122	203	163	308	1994		900								
P01-37x240/660x860	860	100	55	122	203	163	308	2227		1000								
P01-37x240/860x1060	1060	100	55	122	203	163	308	2692		1200								
P01-37x240/1060x1260	1260	100	55	122	203	163	308	3157		1400								
P01-37x240/1260x1460	1460	100	55	122	203	163	308	3622		1600								
P01-48x240 Series																		
P01-48x240/30x180	180	257	145	117	234	156	585	1460	28	350	1900	48	290					
P01-48x240/90x240	240	257	145	117	234	156	585	1740		410								
P01-48x240/180x330	330	257	145	117	234	156	585	2160		500								
P01-48x240/300x450	450	257	145	117	234	156	585	2720		620								
P01-48x240/390x540	540	257	145	117	234	156	585	3140		710								
P01-48x240/480x630	630	257	145	117	234	156	585	3560		800								
P01-48x240/600x750	750	257	145	117	234	156	585	4120		920								
P01-48x240/690x840	840	257	145	117	234	156	585	4540		1010								
P01-48x240/900x1050	1050	257	145	117	234	156	585	5510		1220								
P01-48x240/1080x1230	1230	257	145	117	234	156	585	6350		1400								
P01-48x240/1290x1440	1440	257	145	117	234	156	585	7330		1610								

* Values for PS01-23Sx80 in parentheses



Technical Data and Abbreviations

A data sheet is available for every LinMot linear motor, with all technical data, dimensions, stroke-force and path-time diagrams. The data and parameters specified in the data sheets are clarified further below.

Maximum stroke S:

Maximum travel distance of the linear motor

Short stroke range SS

Stroke range in which the linear motor develops its greatest force, since the magnets move within all of the windings in the short stroke range. The linear motor force is constant throughout the short stroke range.

E100/E1000 peak force

Maximum linear motor force when controlled by a servo controller of series E100 (48 VDC, 3A phase current) or series E1000 (72 VDC, 6A phase current)

E1100/-HC peak force

Maximum linear motor force when controlled by a servo controller of series E1100 (72 VDC, 4A phase current) or series E1100-HC (72 VDC, phase current)

Continuous force

Force that the linear motor can apply permanently in the SS stroke range, when mounted with a standard flange at 25°C ambient temperature.

Continuous force with fan

Force that the linear motor can apply permanently in the SS stroke range, when mounted with a standard flange with a fan, at 25°C ambient temperature.

Boundary force

Peak force that the motor can apply at both ends of the stroke range S.

Force constant

The force constant describes the relationship between the phase current and the force generated in the SS range of the linear motor.

Max. phase current

Maximum phase current (Apeak) at 72 VDC or 48 VDC supply voltage

Max. speed

Maximum speed at 72 VDC or 48 VDC supply voltage

Phase resistance

Phase resistance at 25°C or 80°C winding temperature

Phase inductivity

Connection inductivity of a motor phase

Thermal resistance

Thermal resistance of the linear motor with standard flange. Determines the maximum increase in temperature for a given power dissipation level

Thermal time constant

Is the typical reaction time for temperature changes in the stator mounted in a standard flange.

Stator diameter

Outer diameter of the stator, in millimeters. Note that this number is an average value. Precise dimensions are found in the design drawing

Stator length

Length of the stator

Stator mass

Mass of the stator

Slider diameter

Diameter of the slider

Slider length

Length of the slider from end to end

Slider mass

Mass of the slider

Repeatability

Maximum deviation from the intended position, in mm, when traveling to the same position under identical conditions.

Linearity

Absolute accuracy of the drive, relative to the maximum stroke S of the linear motor.

Repeatability with ES

Maximum deviation from the intended position, in mm, when traveling to the same position under identical conditions with external position sensors.

Linearity with ES

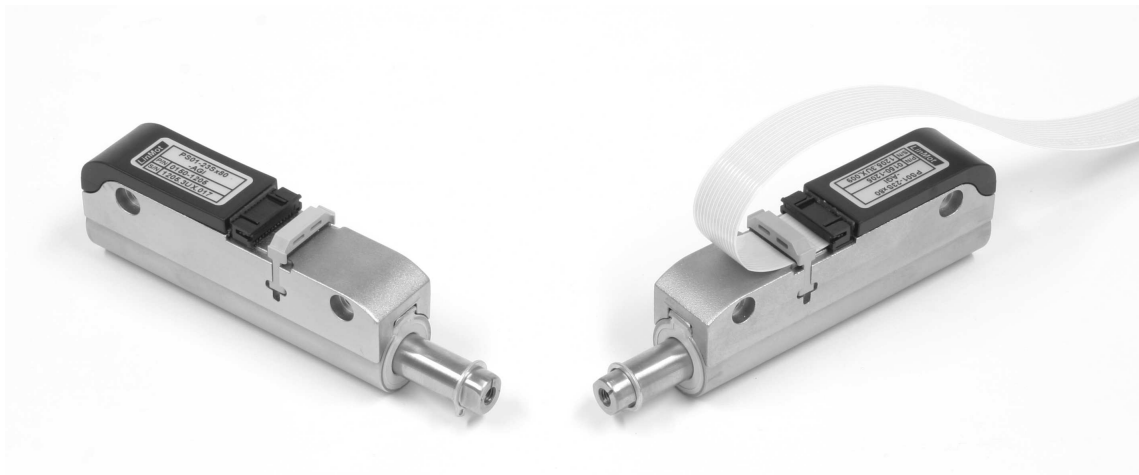
Maximum linearity error when positioning with external sensors.

Motor Family P01-23Sx80

LinMot®

P01-23Sx80/10x50	120
P01-23Sx80/30x90	122
P01-23Sx80/50x110	124
P01-23Sx80/80x140	126
P01-23Sx80/150x210	128
P01-23Sx80/210x270	130
P01-23Sx80/280x340	132
P01-23Sx80/340x400	134
P01-23Sx80/440x500	136
P01-23Sx80/620x680	138

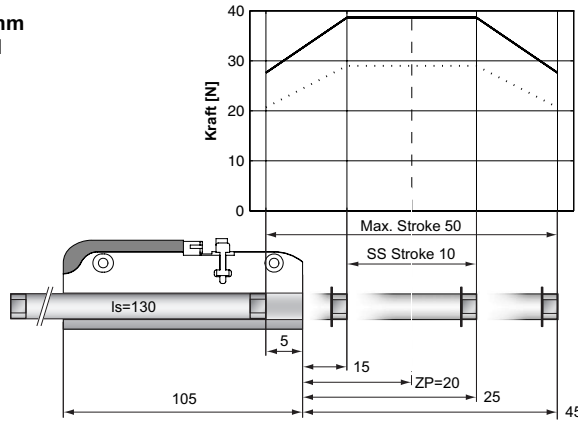
Motorfamilie 23Sx80



P01-23Sx80/10x50

LinMot®

Max. Stroke: 50mm
Peak Force: 39N



Standard Winding:
 — E1100-HC, 72VDC
 — E1100, 72VDC
 — E1000, 72VDC
 ····· E100, 48VDC

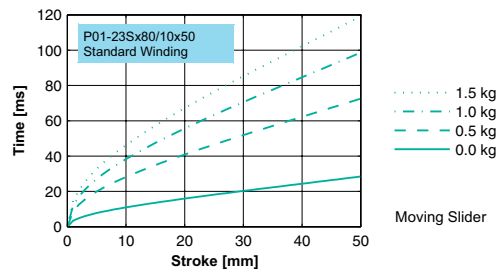
Dimensions in mm

Motor Specification

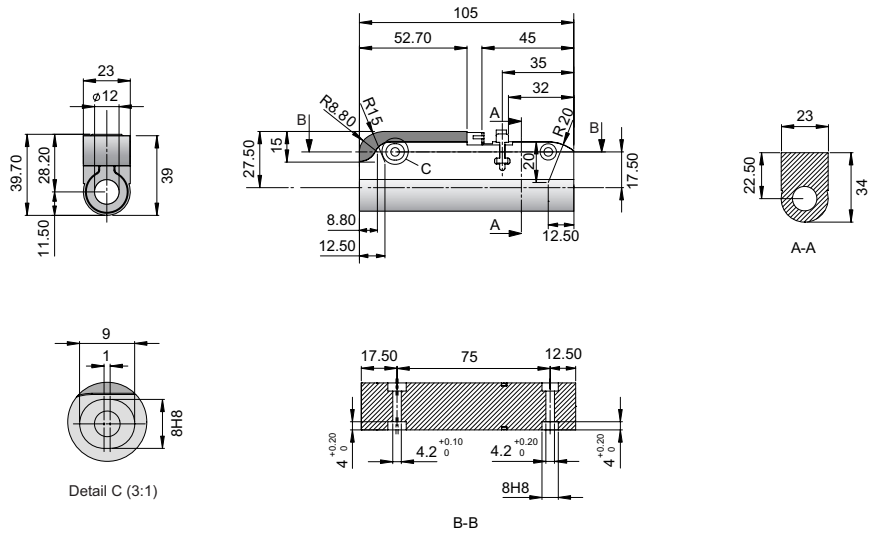
		P01-23Sx80/10x50
Stroke Max.	mm (in)	50 (1.97)
Stroke SS	mm (in)	10 (0.39)
Peak Force E100/1000	N (lbf)	29/39 (6.5/8.7)
Peak Force E1100	N (lbf)	39/39 (8.7/8.7)
Cont. Force	N (lbf)	8 (1.8)
Cont. Force Fan cooling	N (lbf)	15 (3.4)
Border Force	%	71
Force Constant	N/A (lbf/A)	9.7 (2.17)
Max. Current @ 72VDC	A	4.0
Max. Current @ 48VDC	A	4.0
Max. Velocity @ 72VDC	m/s (in/s)	6.9 (270)
Max. Velocity @ 48VDC	m/s (in/s)	4.6 (180)
Phase Resist. 25/80 °C	Ohm	10.3/12.5
Phase Inductance	mH	1.4
Thermal Resistance	°K/W	7.0
Thermal Time Const.	sec	900
Stator Diameter	mm (in)	23 (0.91)
Stator Length	mm (in)	105 (4.13)
Stator Mass	g (lb)	245 (0.54)
Slider Diameter	mm (in)	12 (0.47)
Slider Length	mm (in)	130 (5.12)
Slider Mass	g (lb)	89 (0.20)
Position Repeatability	mm (in)	±0.05 (±0.0020)
Linearity	%	±0.7
Position Rep. with ES	mm (in)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)

P01-23Sx80/10x50

Position-Time Diagram

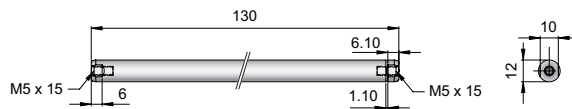


Stator



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23Sx80/10x50	→	PS01-23Sx80	0150-1207	& PL01-12x130/80	0150-1399

Slider



Standard Type	Slider Standard	PL01-12x130/80	0150-1399
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x130/80	0150-1424
	Hollow Slider Hole Diameter 4.2mm	PL01-12x130/80-L	0150-1445

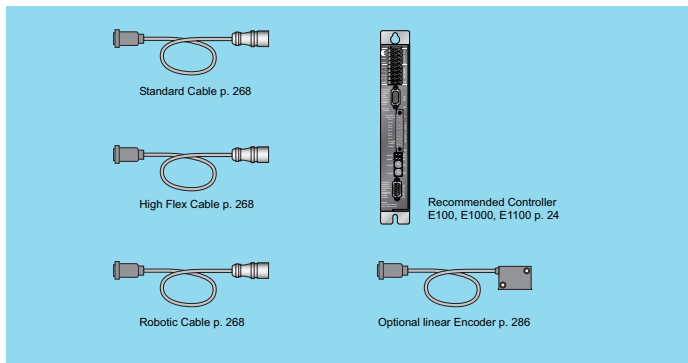
P01-23Sx80/10x50

Connectors

Motor Connector Wiring

Pin 1	Phase 1+
Pin 2	Phase 1+
Pin 3	Phase 2+
Pin 4	Phase 2+
Pin 5	Sine
Pin 6	Cosine
Pin 7	GND
Pin 8	Temp
Pin 9	+5V
Pin 10	Phase 1-
Pin 11	Phase 1-
Pin 12	Phase 2-
Pin 13	Phase 2-

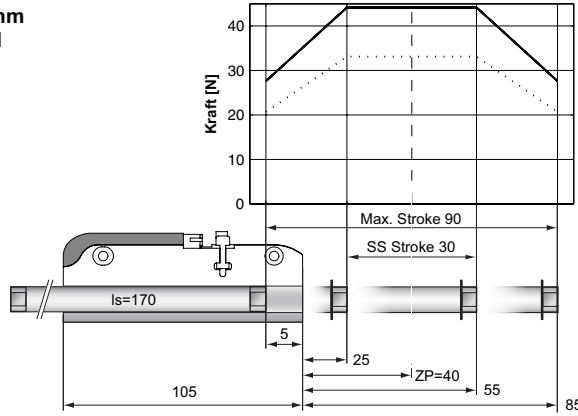
Accessoires



P01-23Sx80/30x90

LinMot®

Max. Stroke: 90mm
Peak Force: 44N



Standard Winding:
 — E1100-HC, 72VDC
 — E1100, 72VDC
 — E1000, 72VDC
 ····· E100, 48VDC

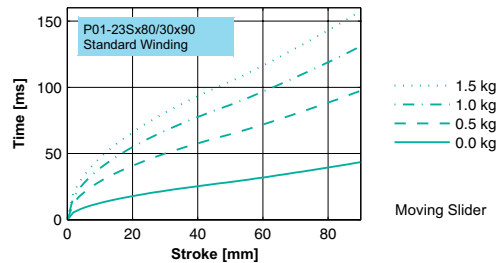
Dimensions in mm

Motor Specification

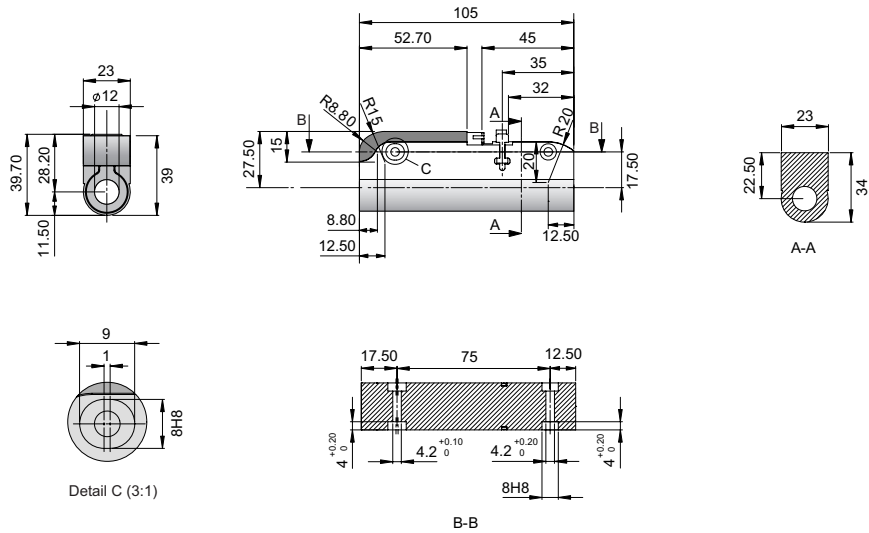
		P01-23Sx80/30x90
Stroke Max.	mm (in)	90 (3.54)
Stroke SS	mm (in)	30 (1.18)
Peak Force E100/1000	N (lbf)	33/44 (7.4/9.9)
Peak Force E1100	N (lbf)	44/44 (9.9/9.9)
Cont. Force	N (lbf)	9 (2.0)
Cont. Force Fan cooling	N (lbf)	16 (3.6)
Border Force	%	63
Force Constant	N/A (lbf/A)	11.0 (2.48)
Max. Current @ 72VDC	A	4.0
Max. Current @ 48VDC	A	4.0
Max. Velocity @ 72VDC	m/s (in/s)	6.0 (236)
Max. Velocity @ 48VDC	m/s (in/s)	4.0 (157)
Phase Resist. 25/80 °C	Ohm	10.3/12.5
Phase Inductance	mH	1.4
Thermal Resistance	°K/W	7.0
Thermal Time Const.	sec	900
Stator Diameter	mm (in)	23 (0.91)
Stator Length	mm (in)	105 (4.13)
Stator Mass	g (lb)	245 (0.54)
Slider Diameter	mm (in)	12 (0.47)
Slider Length	mm (in)	170 (6.69)
Slider Mass	g (lb)	118 (0.26)
Position Repeatability	mm (in)	±0.05 (±0.0020)
Linearity	%	±0.5
Position Rep. with ES	mm (in)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)

P01-23Sx80/30x90

Position-Time Diagram

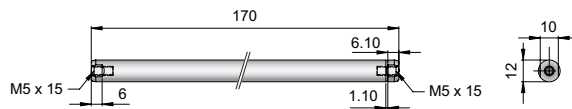


Stator



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23Sx80/30x90	→	PS01-23Sx80	0150-1207	& PL01-12x170/120	0150-1301

Slider



Standard Type	Slider Standard	PL01-12x170/120	0150-1301
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x170/120	0150-1303
	Hollow Slider Hole Diameter 4.2mm	PL01-12x170/120-L	0150-1375

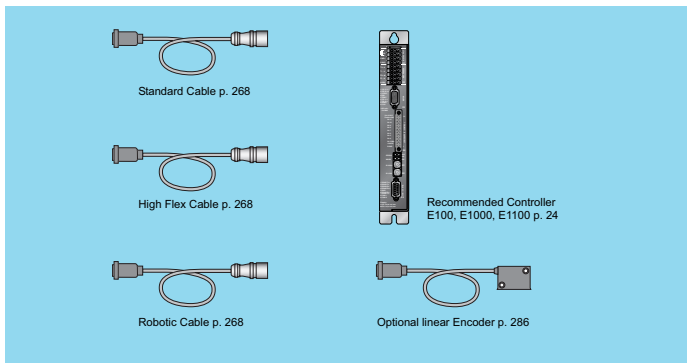
P01-23Sx80/30x90

Connectors

Motor Connector Wiring

Pin 1	Phase 1+
Pin 2	Phase 1+
Pin 3	Phase 2+
Pin 4	Phase 2+
Pin 5	Sine
Pin 6	Cosine
Pin 7	GND
Pin 8	Temp
Pin 9	+5V
Pin 10	Phase 1-
Pin 11	Phase 1-
Pin 12	Phase 2-
Pin 13	Phase 2-

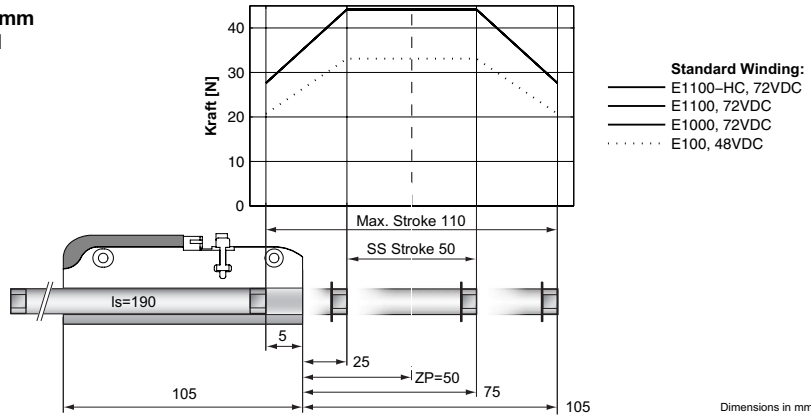
Accessoires



P01-23Sx80/50x110

LinMot®

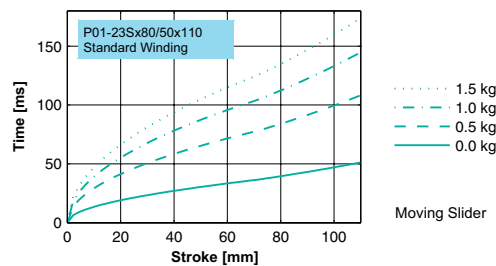
Max. Stroke: 110mm
Peak Force: 44N



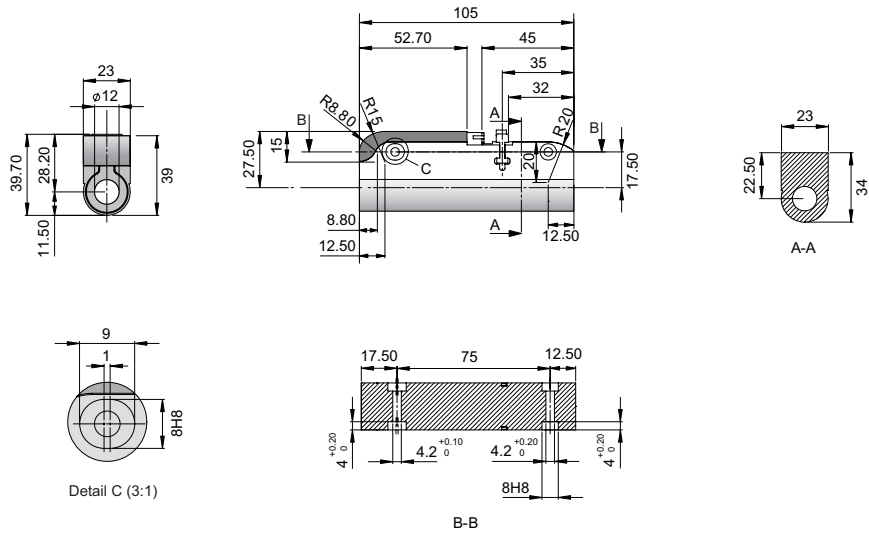
Motor Specification

		P01-23Sx80/50x110
Stroke Max.	mm (in)	110 (4.33)
Stroke SS	mm (in)	50 (1.97)
Peak Force E100/1000	N (lbf)	33/44 (7.4/9.9)
Peak Force E1100	N (lbf)	44/44 (9.9/9.9)
Cont. Force	N (lbf)	9 (2.0)
Cont. Force Fan cooling	N (lbf)	16 (3.6)
Border Force	%	63
Force Constant	N/A (lbf/A)	11.0 (2.48)
Max. Current @ 72VDC	A	4.0
Max. Current @ 48VDC	A	4.0
Max. Velocity @ 72VDC	m/s (in/s)	6.0 (236)
Max. Velocity @ 48VDC	m/s (in/s)	4.0 (157)
Phase Resist. 25/80 °C	Ohm	10.3/12.5
Phase Inductance	mH	1.4
Thermal Resistance	°K/W	7.0
Thermal Time Const.	sec	900
Stator Diameter	mm (in)	23 (0.91)
Stator Length	mm (in)	105 (4.13)
Stator Mass	g (lb)	245 (0.54)
Slider Diameter	mm (in)	12 (0.47)
Slider Length	mm (in)	190 (7.48)
Slider Mass	g (lb)	135 (0.30)
Position Repeatability	mm (in)	±0.05 (±0.0020)
Linearity	%	±0.4
Position Rep. with ES	mm (in)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)

Position-Time Diagram

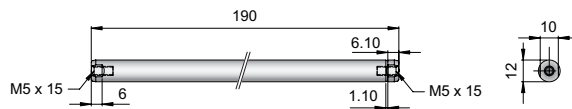


Stator



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23Sx80/50x110	→	PS01-23Sx80	0150-1207	& PL01-12x190/140	0150-1302

Slider



Standard Type	Slider Standard	PL01-12x190/140	0150-1302
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x190/140	0150-1304
	Hollow Slider Hole Diameter 4.2mm	PL01-12x190/140-L	0150-1478

P01-23Sx80/50x110

Connectors

Motor Connector Wiring

Pin 1	Phase 1+
Pin 2	Phase 1+
Pin 3	Phase 2+
Pin 4	Phase 2+
Pin 5	Sine
Pin 6	Cosine
Pin 7	GND
Pin 8	Temp
Pin 9	+5V
Pin 10	Phase 1-
Pin 11	Phase 1-
Pin 12	Phase 2-
Pin 13	Phase 2-

Accessoires



Standard Cable p. 268



High Flex Cable p. 268



Robotic Cable p. 268



Recommended Controller
E100, E1000, E1100 p. 24

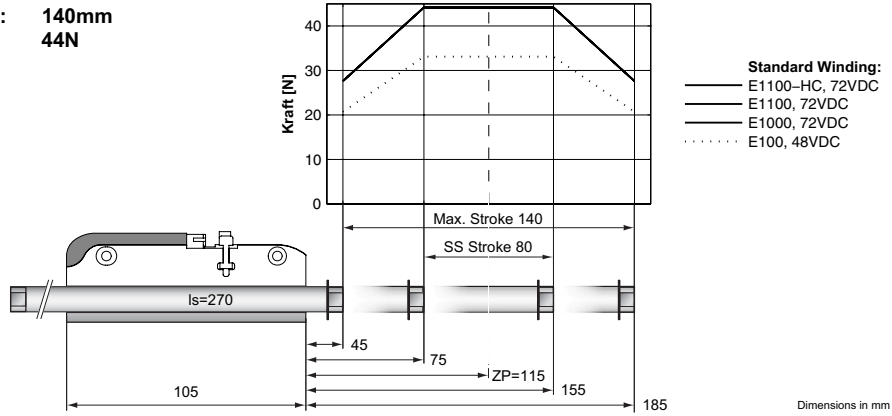


Optional linear Encoder p. 286

P01-23Sx80/80x140

LinMot®

Max. Stroke: 140mm
Peak Force: 44N

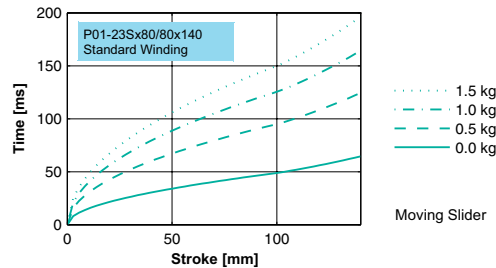


Motor Specification

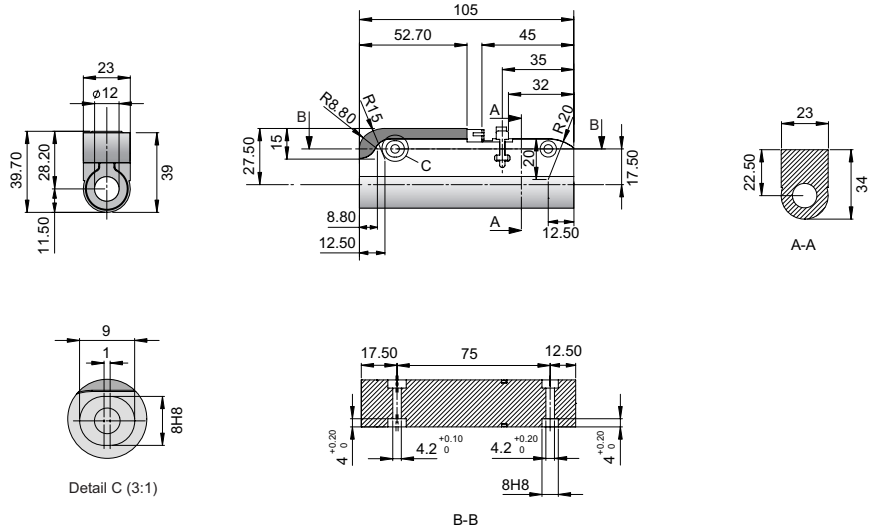
		P01-23Sx80/80x140
Stroke Max.	mm (in)	140 (5.51)
Stroke SS	mm (in)	80 (3.15)
Peak Force E100/1000	N (lbf)	33/44 (7.4/9.9)
Peak Force E1100	N (lbf)	44/44 (9.9/9.9)
Cont. Force	N (lbf)	9 (2.0)
Cont. Force Fan cooling	N (lbf)	16 (3.6)
Border Force	%	63
Force Constant	N/A (lbf/A)	11.0 (2.48)
Max. Current @ 72VDC	A	4.0
Max. Current @ 48VDC	A	4.0
Max. Velocity @ 72VDC	m/s (in/s)	6.0 (236)
Max. Velocity @ 48VDC	m/s (in/s)	4.0 (157)
Phase Resist. 25/80 °C	Ohm	10.3/12.5
Phase Inductance	mH	1.4
Thermal Resistance	°K/W	7.0
Thermal Time Const.	sec	900
Stator Diameter	mm (in)	23 (0.91)
Stator Length	mm (in)	105 (4.13)
Stator Mass	g (lb)	245 (0.54)
Slider Diameter	mm (in)	12 (0.47)
Slider Length	mm (in)	270 (10.63)
Slider Mass	g (lb)	171 (0.38)
Position Repeatability	mm (in)	±0.05 (±0.0020)
Linearity	%	±0.3
Position Rep. with ES	mm (in)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)

P01-23Sx80/80x140

Position-Time Diagram

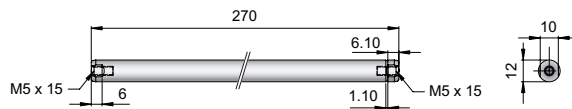


Stator



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23Sx80/80x140	→	PS01-23Sx80	0150-1207	& PL01-12x270/170	0150-1307

Slider



Standard Type	Slider Standard	PL01-12x270/170	0150-1307
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x270/170	0150-1310
	Hollow Slider Hole Diameter 4.2mm	PL01-12x270/170-L	0150-1393

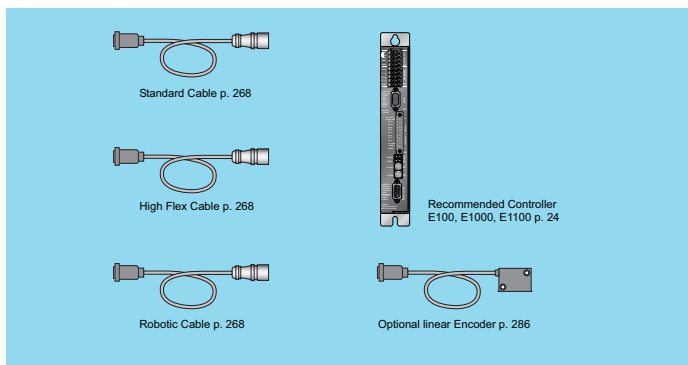
P01-23Sx80/80x140

Connectors

Motor Connector Wiring

Pin 1	Phase 1+
Pin 2	Phase 1+
Pin 3	Phase 2+
Pin 4	Phase 2+
Pin 5	Sine
Pin 6	Cosine
Pin 7	GND
Pin 8	Temp
Pin 9	+5V
Pin 10	Phase 1-
Pin 11	Phase 1-
Pin 12	Phase 2-
Pin 13	Phase 2-

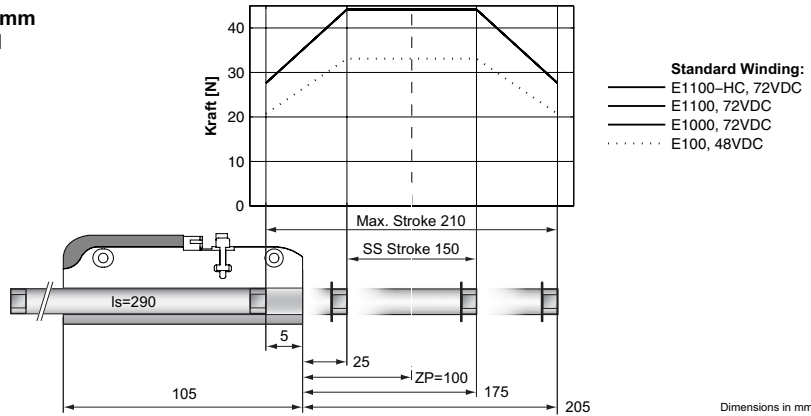
Accessoires



P01-23Sx80/150x210

LinMot®

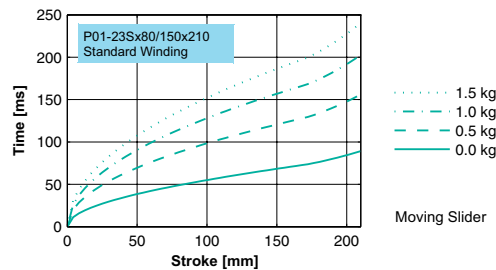
Max. Stroke: 210mm
Peak Force: 44N



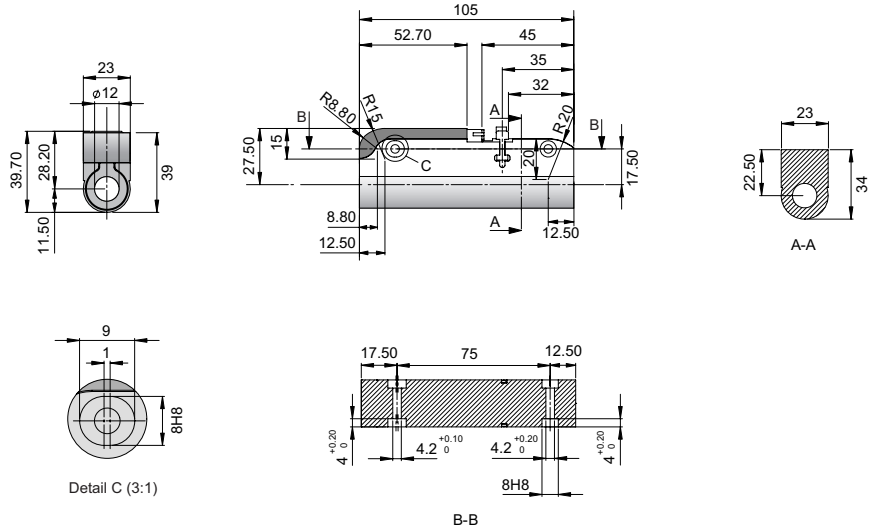
Motor Specification

		P01-23Sx80/150x210
Stroke Max.	mm (in)	210 (8.27)
Stroke SS	mm (in)	150 (5.91)
Peak Force E100/1000	N (lbf)	33/44 (7.4/9.9)
Peak Force E1100	N (lbf)	44/44 (9.9/9.9)
Cont. Force	N (lbf)	9 (2.0)
Cont. Force Fan cooling	N (lbf)	16 (3.6)
Border Force	%	63
Force Constant	N/A (lbf/A)	11.0 (2.48)
Max. Current @ 72VDC	A	4.0
Max. Current @ 48VDC	A	4.0
Max. Velocity @ 72VDC	m/s (in/s)	6.0 (236)
Max. Velocity @ 48VDC	m/s (in/s)	4.0 (157)
Phase Resist. 25/80 °C	Ohm	10.3/12.5
Phase Inductance	mH	1.4
Thermal Resistance	°K/W	7.0
Thermal Time Const.	sec	900
Stator Diameter	mm (in)	23 (0.91)
Stator Length	mm (in)	105 (4.13)
Stator Mass	g (lb)	245 (0.54)
Slider Diameter	mm (in)	12 (0.47)
Slider Length	mm (in)	290 (11.42)
Slider Mass	g (lb)	220 (0.49)
Position Repeatability	mm (in)	±0.05 (±0.0020)
Linearity	%	±0.3
Position Rep. with ES	mm (in)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)

Position-Time Diagram

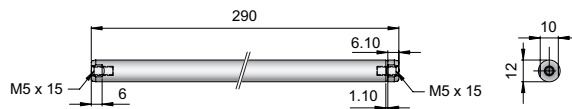


Stator



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23Sx80/150x210	→	PS01-23Sx80	0150-1207	& PL01-12x290/240	0150-1320

Slider



Standard Type	Slider Standard	PL01-12x290/240	0150-1320
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x290/240	0150-1321
	Hollow Slider Hole Diameter 4.2mm	PL01-12x290/240-L	0150-1363

P01-23Sx80/150x210

Connectors

Motor Connector Wiring

Pin 1	Phase 1+
Pin 2	Phase 1+
Pin 3	Phase 2+
Pin 4	Phase 2+
Pin 5	Sine
Pin 6	Cosine
Pin 7	GND
Pin 8	Temp
Pin 9	+5V
Pin 10	Phase 1-
Pin 11	Phase 1-
Pin 12	Phase 2-
Pin 13	Phase 2-

Accessoires



Standard Cable p. 268



High Flex Cable p. 268



Robotic Cable p. 268



Recommended Controller
E100, E1000, E1100 p. 24

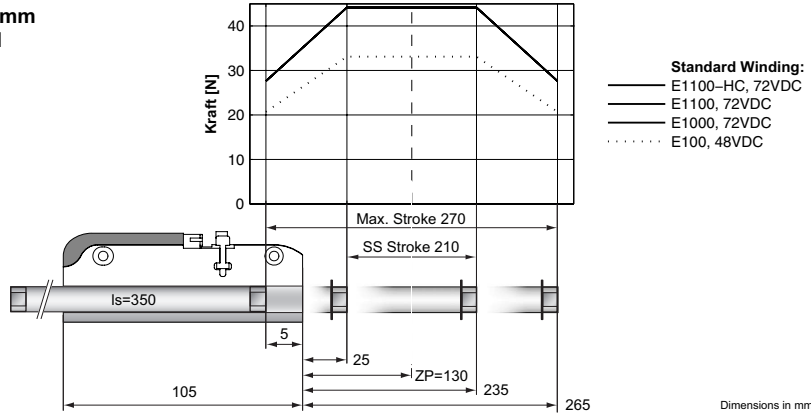


Optional linear Encoder p. 286

P01-23Sx80/210x270

LinMot®

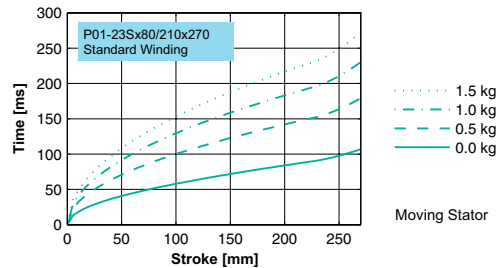
Max. Stroke: 270mm
Peak Force: 44N



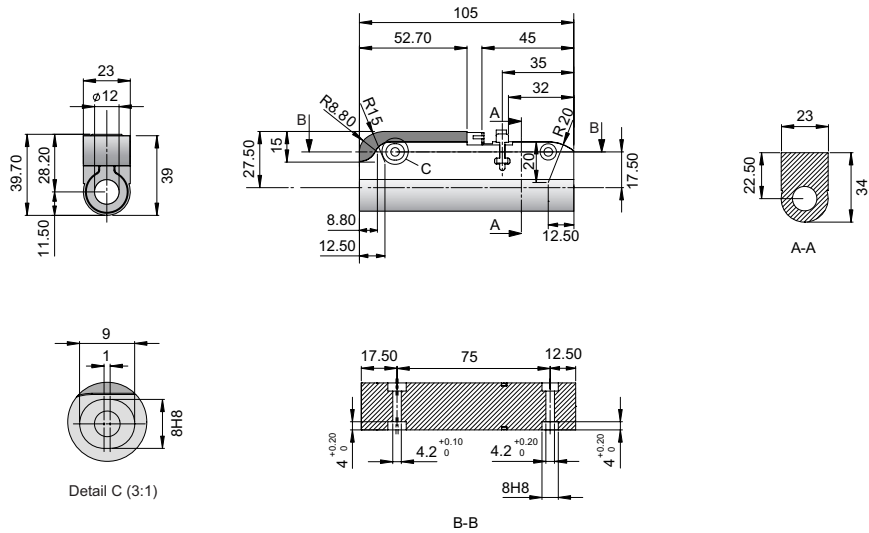
Motor Specification

		P01-23Sx80/210x270
Stroke Max.	mm (in)	270 (10.63)
Stroke SS	mm (in)	210 (8.27)
Peak Force E100/1000	N (lbf)	33/44 (7.4/9.9)
Peak Force E1100	N (lbf)	44/44 (9.9/9.9)
Cont. Force	N (lbf)	9 (2.0)
Cont. Force Fan cooling	N (lbf)	16 (3.6)
Border Force	%	63
Force Constant	N/A (lbf/A)	11.0 (2.48)
Max. Current @ 72VDC	A	4.0
Max. Current @ 48VDC	A	4.0
Max. Velocity @ 72VDC	m/s (in/s)	6.0 (236)
Max. Velocity @ 48VDC	m/s (in/s)	4.0 (157)
Phase Resist. 25/80 °C	Ohm	10.3/12.5
Phase Inductance	mH	1.4
Thermal Resistance	°K/W	7.0
Thermal Time Const.	sec	900
Stator Diameter	mm (in)	23 (0.91)
Stator Length	mm (in)	105 (4.13)
Stator Mass	g (lb)	245 (0.54)
Slider Diameter	mm (in)	12 (0.47)
Slider Length	mm (in)	350 (13.78)
Slider Mass	g (lb)	271 (0.60)
Position Repeatability	mm (in)	±0.05 (±0.0020)
Linearity	%	±0.3
Position Rep. with ES	mm (in)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)

Position-Time Diagram

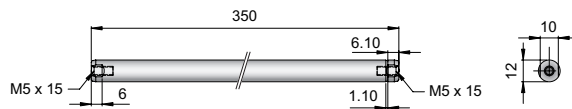


Stator



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23Sx80/210x270	→	PS01-23Sx80	0150-1207	& PL01-12x350/300	0150-1322

Slider



Standard Type	Slider Standard	PL01-12x350/300	0150-1322
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x350/300	0150-1323
	Hollow Slider Hole Diameter 4.2mm	PL01-12x350/300-L	0150-1479

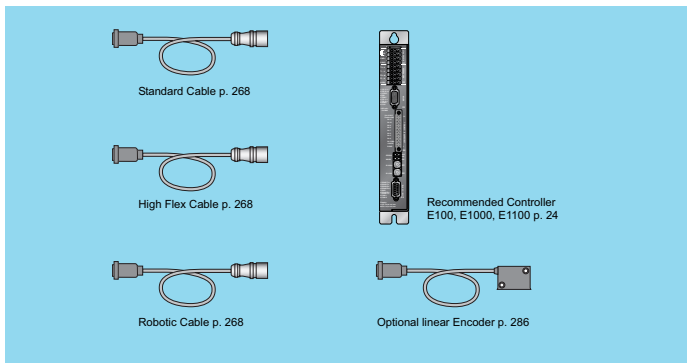
P01-23Sx80/210x270

Connectors

Motor Connector Wiring

Pin 1	Phase 1+
Pin 2	Phase 1+
Pin 3	Phase 2+
Pin 4	Phase 2+
Pin 5	Sine
Pin 6	Cosine
Pin 7	GND
Pin 8	Temp
Pin 9	+5V
Pin 10	Phase 1-
Pin 11	Phase 1-
Pin 12	Phase 2-
Pin 13	Phase 2-

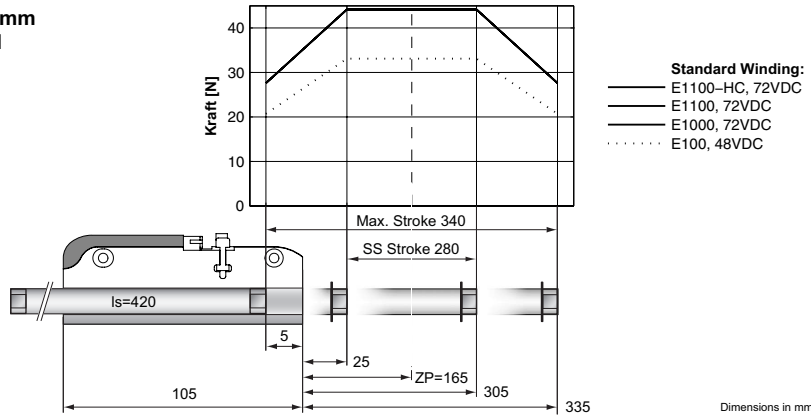
Accessoires



P01-23Sx80/280x340

LinMot®

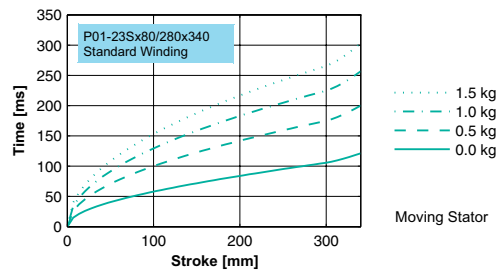
Max. Stroke: 340mm
Peak Force: 44N



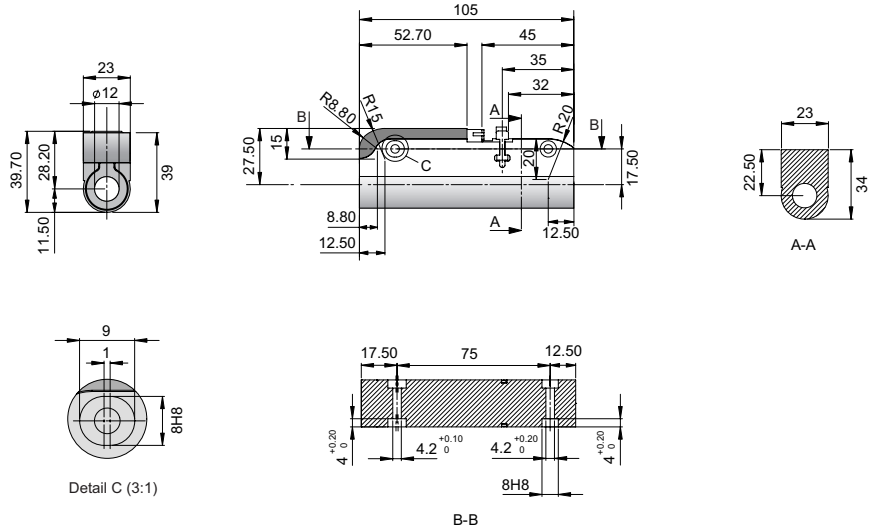
Motor Specification

		P01-23Sx80/280x340	
Stroke Max.	mm (in)	340 (13.39)	
Stroke SS	mm (in)	280 (11.02)	
Peak Force E100/1000	N (lbf)	33/44 (7.4/9.9)	
Peak Force E1100	N (lbf)	44/44 (9.9/9.9)	
Cont. Force	N (lbf)	9 (2.0)	
Cont. Force Fan cooling	N (lbf)	16 (3.6)	
Border Force	%	63	
Force Constant	N/A (lbf/A)	11.0 (2.48)	
Max. Current @ 72VDC	A	4.0	
Max. Current @ 48VDC	A	4.0	
Max. Velocity @ 72VDC	m/s (in/s)	6.0 (236)	
Max. Velocity @ 48VDC	m/s (in/s)	4.0 (157)	
Phase Resist. 25/80 °C	Ohm	10.3/12.5	
Phase Inductance	mH	1.4	
Thermal Resistance	°K/W	7.0	
Thermal Time Const.	sec	900	
Stator Diameter	mm (in)	23 (0.91)	
Stator Length	mm (in)	105 (4.13)	
Stator Mass	g (lb)	245 (0.54)	
Slider Diameter	mm (in)	12 (0.47)	
Slider Length	mm (in)	420 (16.54)	
Slider Mass	g (lb)	330 (0.73)	
Position Repeatability	mm (in)	±0.05 (±0.0020)	
Linearity	%	±0.3	
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	
Linearity with ES	mm (in)	±0.01 (±0.0004)	

Position-Time Diagram

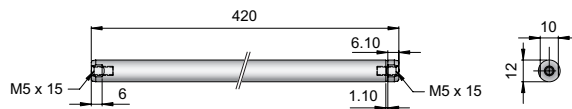


Stator



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23Sx80/280x340	→	PS01-23Sx80	0150-1207	& PL01-12x420/370	0150-1324

Slider



Standard Type	Slider Standard	PL01-12x420/370	0150-1324
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x420/370	0150-1325
	Hollow Slider Hole Diameter 4.2mm	PL01-12x420/370-L	0150-1394

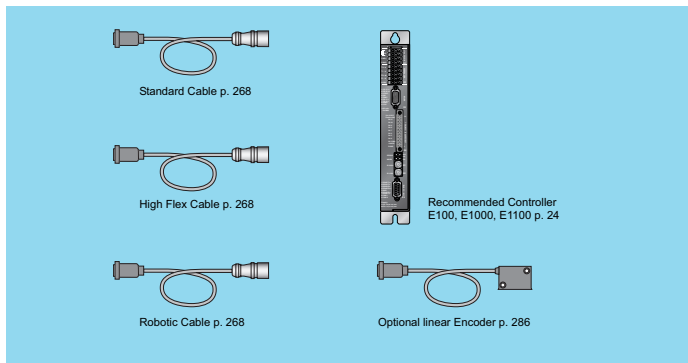
P01-23Sx80/280x340

Connectors

Motor Connector Wiring

Pin 1	Phase 1+
Pin 2	Phase 1+
Pin 3	Phase 2+
Pin 4	Phase 2+
Pin 5	Sine
Pin 6	Cosine
Pin 7	GND
Pin 8	Temp
Pin 9	+5V
Pin 10	Phase 1-
Pin 11	Phase 1-
Pin 12	Phase 2-
Pin 13	Phase 2-

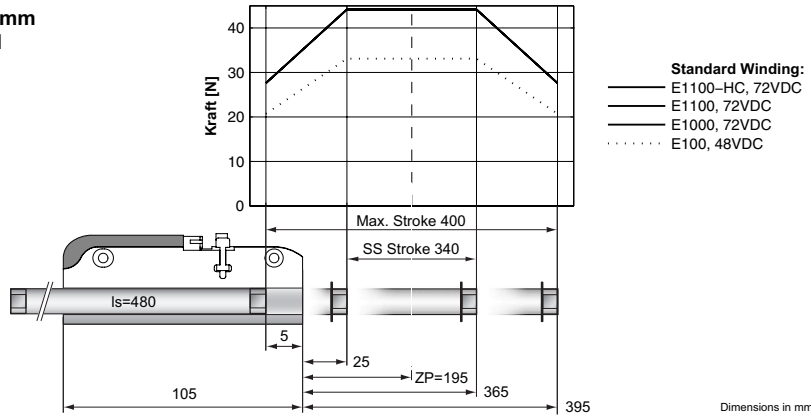
Accessoires



P01-23Sx80/340x400

LinMot®

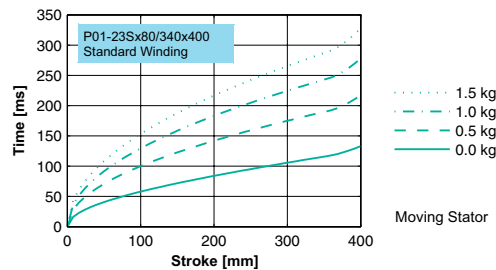
Max. Stroke: 400mm
Peak Force: 44N



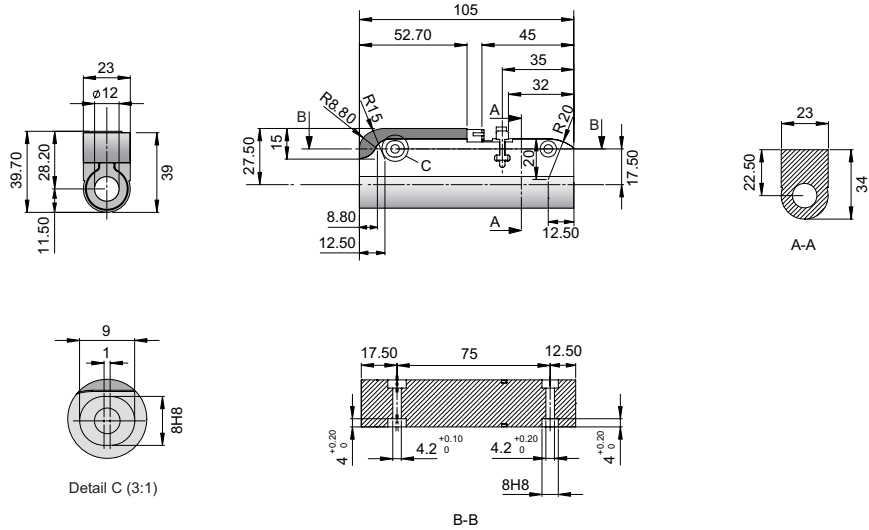
Motor Specification

P01-23Sx80/340x400		
Stroke Max.	mm (in)	400 (15.75)
Stroke SS	mm (in)	340 (13.39)
Peak Force E100/1000	N (lbf)	33/44 (7.4/9.9)
Peak Force E1100	N (lbf)	44/44 (9.9/9.9)
Cont. Force	N (lbf)	9 (2.0)
Cont. Force Fan cooling	N (lbf)	16 (3.6)
Border Force	%	63
Force Constant	N/A (lbf/A)	11.0 (2.48)
Max. Current @ 72VDC	A	4.0
Max. Current @ 48VDC	A	4.0
Max. Velocity @ 72VDC	m/s (in/s)	6.0 (236)
Max. Velocity @ 48VDC	m/s (in/s)	4.0 (157)
Phase Resist. 25/80 °C	Ohm	10.3/12.5
Phase Inductance	mH	1.4
Thermal Resistance	°K/W	7.0
Thermal Time Const.	sec	900
Stator Diameter	mm (in)	23 (0.91)
Stator Length	mm (in)	105 (4.13)
Stator Mass	g (lb)	245 (0.54)
Slider Diameter	mm (in)	12 (0.47)
Slider Length	mm (in)	480 (18.90)
Slider Mass	g (lb)	380 (0.84)
Position Repeatability	mm (in)	±0.05 (±0.0020)
Linearity	%	±0.3
Position Rep. with ES	mm (in)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)

Position-Time Diagram

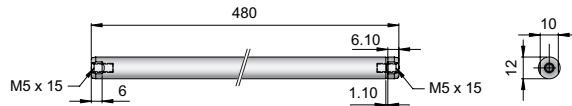


Stator



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23Sx80/340x400	→	PS01-23Sx80	0150-1207	& PL01-12x480/430	0150-1372

Slider



Standard Type	Slider Standard	PL01-12x480/430	0150-1372
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x480/430	0150-1373
	Hollow Slider Hole Diameter 4.2mm	PL01-12x480/430-L	on request

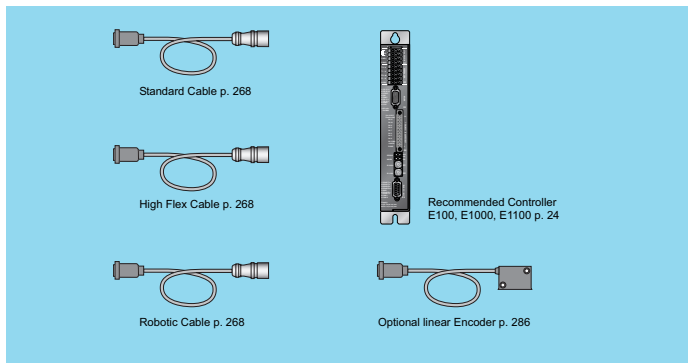
P01-23Sx80/340x400

Connectors

Motor Connector Wiring

Pin 1	Phase 1+
Pin 2	Phase 1+
Pin 3	Phase 2+
Pin 4	Phase 2+
Pin 5	Sine
Pin 6	Cosine
Pin 7	GND
Pin 8	Temp
Pin 9	+5V
Pin 10	Phase 1-
Pin 11	Phase 1-
Pin 12	Phase 2-
Pin 13	Phase 2-

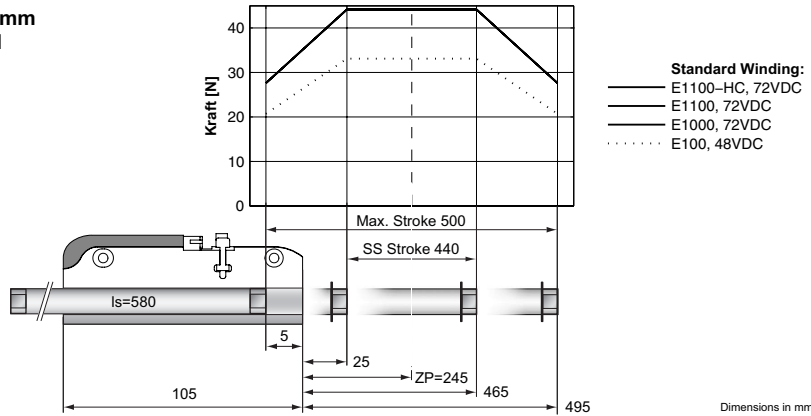
Accessoires



P01-23Sx80/440x500

LinMot®

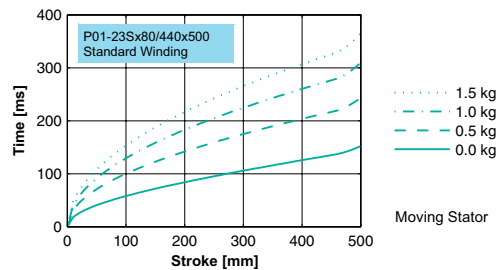
Max. Stroke: 500mm
Peak Force: 44N



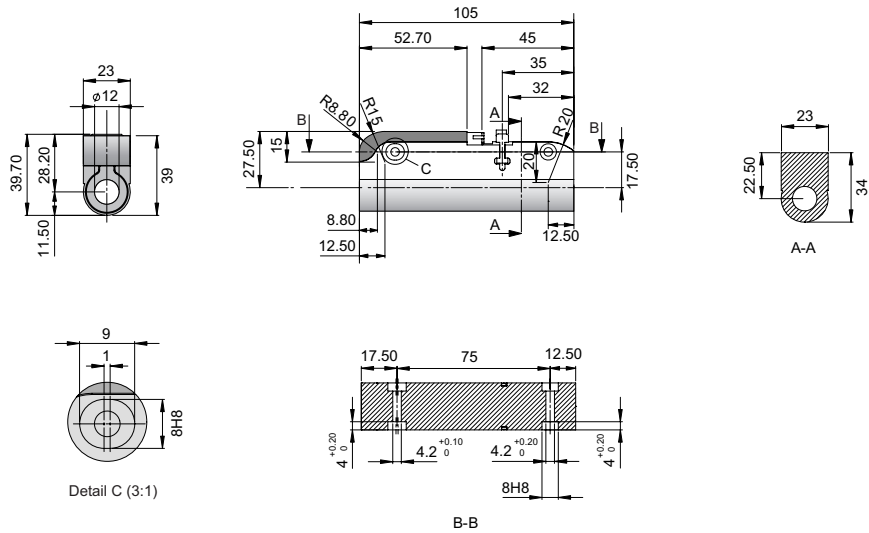
Motor Specification

		P01-23Sx80/440x500
Stroke Max.	mm (in)	500 (19.69)
Stroke SS	mm (in)	440 (17.32)
Peak Force E100/1000	N (lbf)	33/44 (7.4/9.9)
Peak Force E1100	N (lbf)	44/44 (9.9/9.9)
Cont. Force	N (lbf)	9 (2.0)
Cont. Force Fan cooling	N (lbf)	16 (3.6)
Border Force	%	63
Force Constant	N/A (lbf/A)	11.0 (2.48)
Max. Current @ 72VDC	A	4.0
Max. Current @ 48VDC	A	4.0
Max. Velocity @ 72VDC	m/s (in/s)	6.0 (236)
Max. Velocity @ 48VDC	m/s (in/s)	4.0 (157)
Phase Resist. 25/80 °C	Ohm	10.3/12.5
Phase Inductance	mH	1.4
Thermal Resistance	°K/W	7.0
Thermal Time Const.	sec	900
Stator Diameter	mm (in)	23 (0.91)
Stator Length	mm (in)	105 (4.13)
Stator Mass	g (lb)	245 (0.54)
Slider Diameter	mm (in)	12 (0.47)
Slider Length	mm (in)	580 (22.83)
Slider Mass	g (lb)	465 (1.03)
Position Repeatability	mm (in)	±0.05 (±0.0020)
Linearity	%	±0.2
Position Rep. with ES	mm (in)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)

Position-Time Diagram

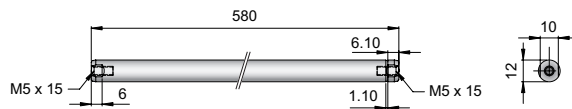


Stator



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23Sx80/440x500	→	PS01-23Sx80	0150-1207	& PL01-12x580/530	0150-1355

Slider



Standard Type	Slider Standard	PL01-12x580/530	0150-1355
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x580/530	0150-1356
	Hollow Slider Hole Diameter 4.2mm	PL01-12x580/530-L	0150-1391

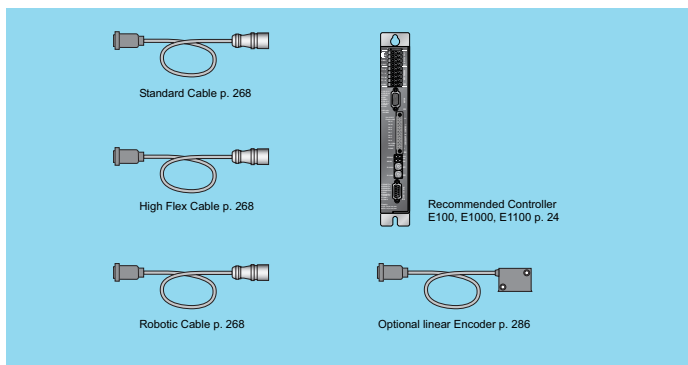
P01-23Sx80/440x500

Connectors

Motor Connector Wiring

Pin 1	Phase 1+
Pin 2	Phase 1+
Pin 3	Phase 2+
Pin 4	Phase 2+
Pin 5	Sine
Pin 6	Cosine
Pin 7	GND
Pin 8	Temp
Pin 9	+5V
Pin 10	Phase 1-
Pin 11	Phase 1-
Pin 12	Phase 2-
Pin 13	Phase 2-

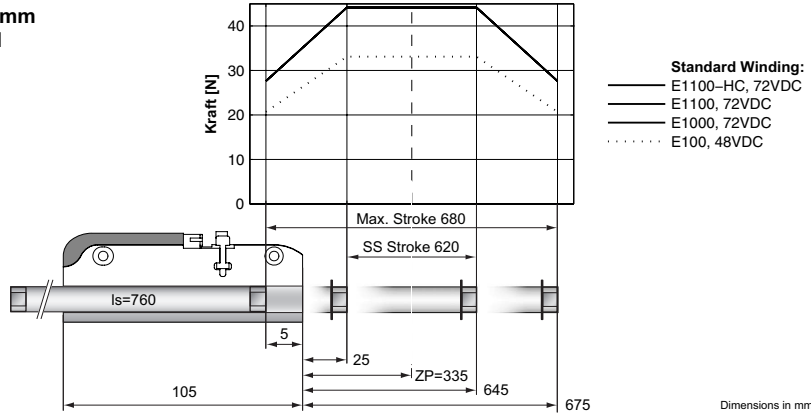
Accessoires



P01-23Sx80/620x680

LinMot®

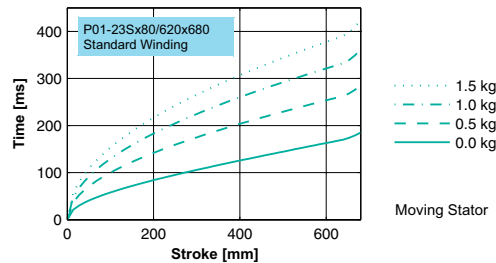
Max. Stroke: 680mm
Peak Force: 44N



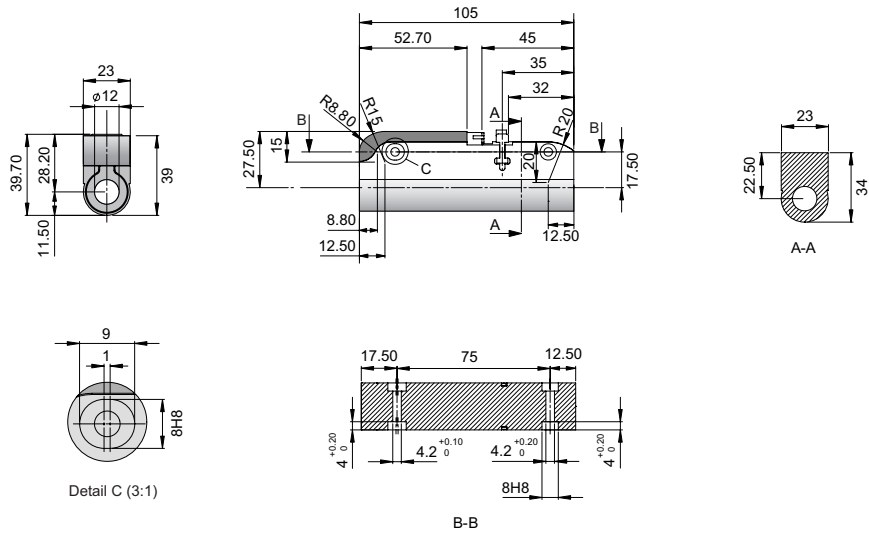
Motor Specification

		P01-23Sx80/620x680
Stroke Max.	mm (in)	680 (26.77)
Stroke SS	mm (in)	620 (24.41)
Peak Force E100/1000	N (lbf)	33/44 (7.4/9.9)
Peak Force E1100	N (lbf)	44/44 (9.9/9.9)
Cont. Force	N (lbf)	9 (2.0)
Cont. Force Fan cooling	N (lbf)	16 (3.6)
Border Force	%	63
Force Constant	N/A (lbf/A)	11.0 (2.48)
Max. Current @ 72VDC	A	4.0
Max. Current @ 48VDC	A	4.0
Max. Velocity @ 72VDC	m/s (in/s)	6.0 (236)
Max. Velocity @ 48VDC	m/s (in/s)	4.0 (157)
Phase Resist. 25/80 °C	Ohm	10.3/12.5
Phase Inductance	mH	1.4
Thermal Resistance	°K/W	7.0
Thermal Time Const.	sec	900
Stator Diameter	mm (in)	23 (0.91)
Stator Length	mm (in)	105 (4.13)
Stator Mass	g (lb)	245 (0.54)
Slider Diameter	mm (in)	12 (0.47)
Slider Length	mm (in)	760 (29.92)
Slider Mass	g (lb)	615 (1.36)
Position Repeatability	mm (in)	±0.05 (±0.0020)
Linearity	%	±0.2
Position Rep. with ES	mm (in)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)

Position-Time Diagram

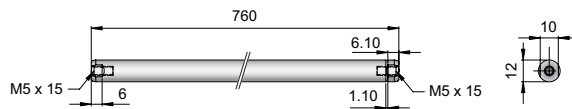


Stator



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23Sx80/620x680	→	PS01-23Sx80	0150-1207	& PL01-12x760/710	0150-1366

Slider



Standard Type	Slider Standard	PL01-12x760/710	0150-1366
Special Slider	Heavy Duty Slider with WC/C-Coating	PL01-12x760/710	on Request
	Hollow Slider Hole Diameter 4.2mm	PL01-12x760/710-L	0150-1392

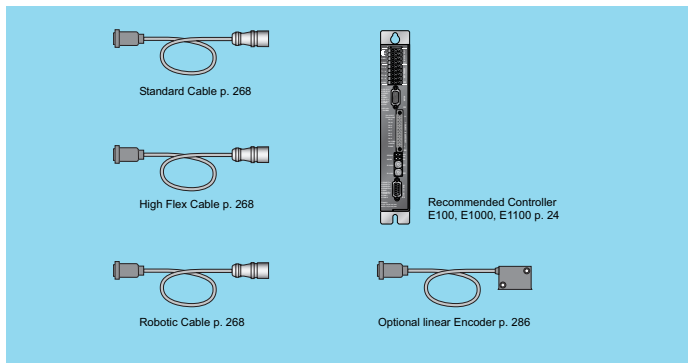
P01-23Sx80/620x680

Connectors

Motor Connector Wiring

Pin 1	Phase 1+
Pin 2	Phase 1+
Pin 3	Phase 2+
Pin 4	Phase 2+
Pin 5	Sine
Pin 6	Cosine
Pin 7	GND
Pin 8	Temp
Pin 9	+5V
Pin 10	Phase 1-
Pin 11	Phase 1-
Pin 12	Phase 2-
Pin 13	Phase 2-

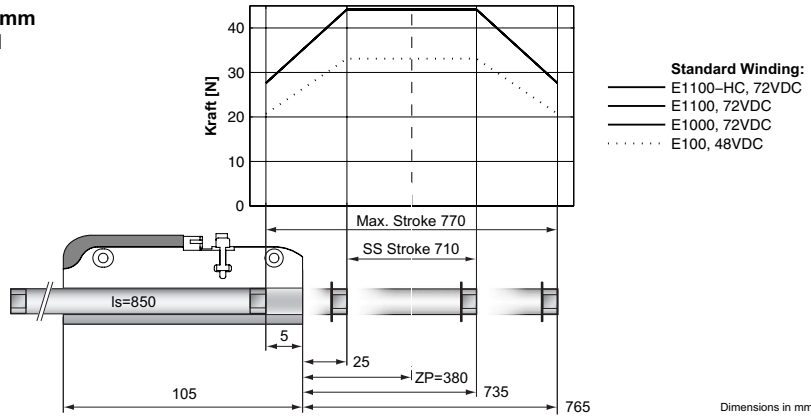
Accessoires



P01-23Sx80/710x770

LinMot®

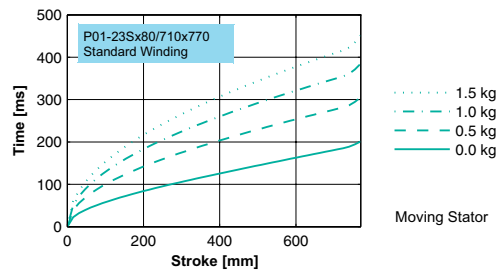
Max. Stroke: 770mm
Peak Force: 44N



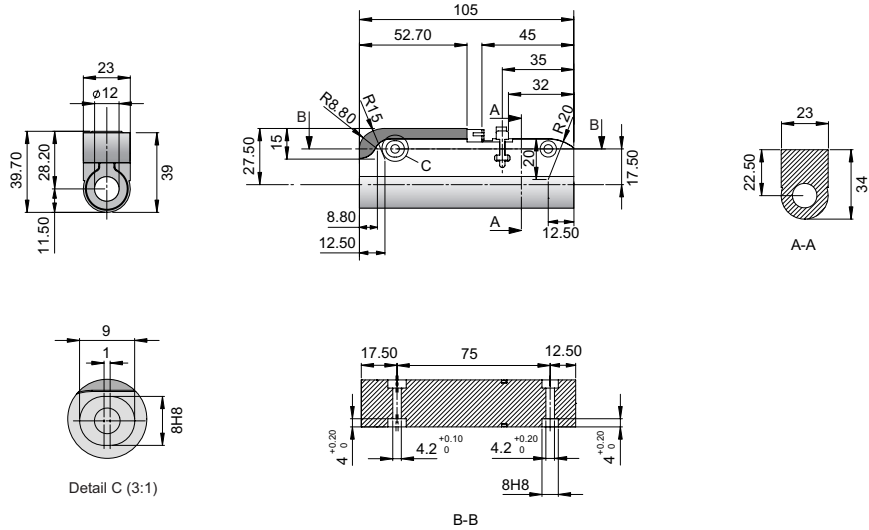
Motor Specification

		P01-23Sx80/710x770	
Stroke Max.	mm (in)	770 (30.31)	
Stroke SS	mm (in)	710 (27.95)	
Peak Force E100/1000	N (lbf)	33/44 (7.4/9.9)	
Peak Force E1100	N (lbf)	44/44 (9.9/9.9)	
Cont. Force	N (lbf)	9 (2.0)	
Cont. Force Fan cooling	N (lbf)	16 (3.6)	
Border Force	%	63	
Force Constant	N/A (lbf/A)	11.0 (2.48)	
Max. Current @ 72VDC	A	4.0	
Max. Current @ 48VDC	A	4.0	
Max. Velocity @ 72VDC	m/s (in/s)	6.0 (236)	
Max. Velocity @ 48VDC	m/s (in/s)	4.0 (157)	
Phase Resist. 25/80 °C	Ohm	10.3/12.5	
Phase Inductance	mH	1.4	
Thermal Resistance	°K/W	7.0	
Thermal Time Const.	sec	900	
Stator Diameter	mm (in)	23 (0.91)	
Stator Length	mm (in)	105 (4.13)	
Stator Mass	g (lb)	245 (0.54)	
Slider Diameter	mm (in)	12 (0.47)	
Slider Length	mm (in)	850 (33.46)	
Slider Mass	g (lb)	690 (1.52)	
Position Repeatability	mm (in)	±0.05 (±0.0020)	
Linearity	%	±0.2	
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	
Linearity with ES	mm (in)	±0.01 (±0.0004)	

Position-Time Diagram

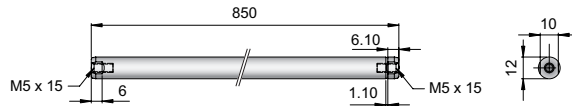


Stator



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23Sx80/710x770	→	PS01-23Sx80	0150-1207	& PL01-12x850/800	0150-1365

Slider



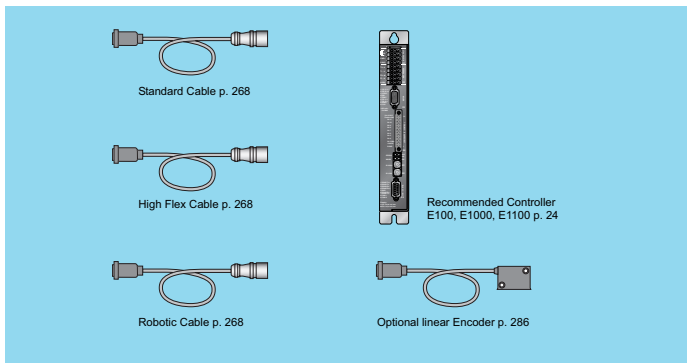
Standard Type	Slider Standard	PL01-12x850/800	0150-1365
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x850/800	on Request
	Hollow Slider Hole Diameter 4.2mm	PL01-12x850/800-L	on Request

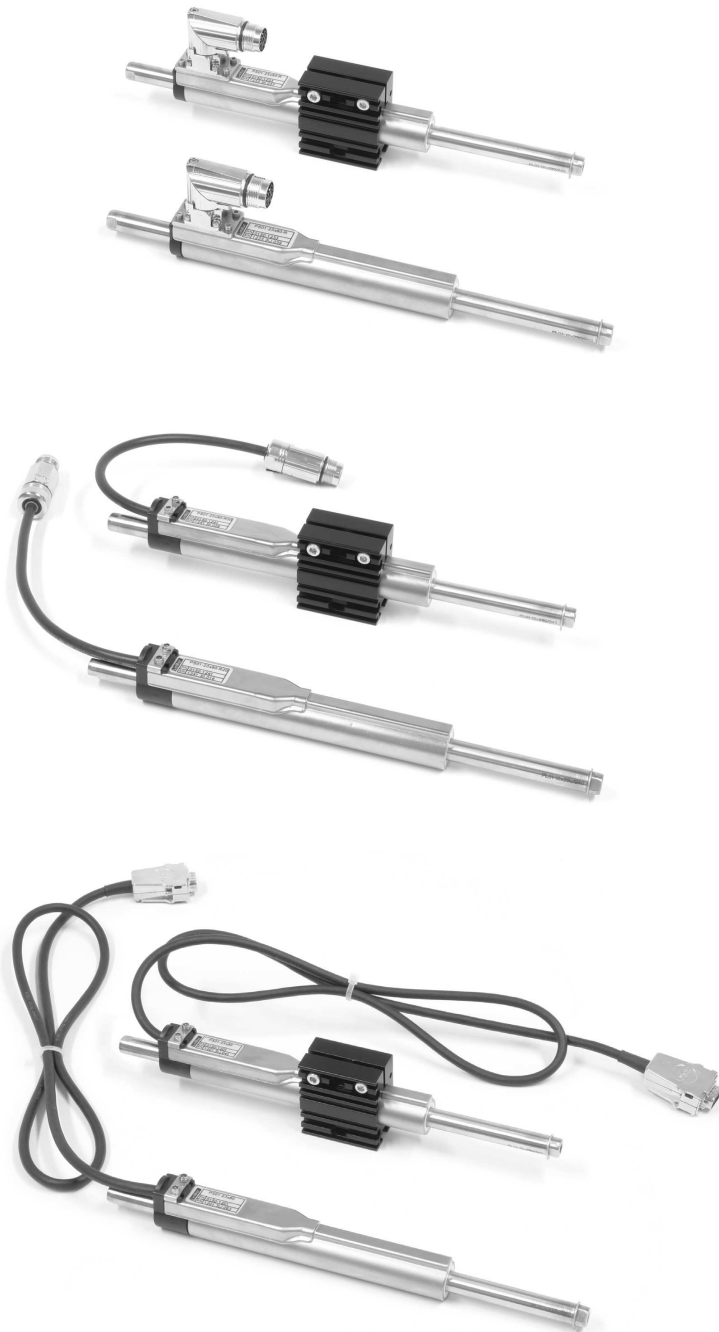
Connectors

Motor Connector Wiring

Pin 1	Phase 1+
Pin 2	Phase 1+
Pin 3	Phase 2+
Pin 4	Phase 2+
Pin 5	Sine
Pin 6	Cosine
Pin 7	GND
Pin 8	Temp
Pin 9	+5V
Pin 10	Phase 1-
Pin 11	Phase 1-
Pin 12	Phase 2-
Pin 13	Phase 2-

Accessoires





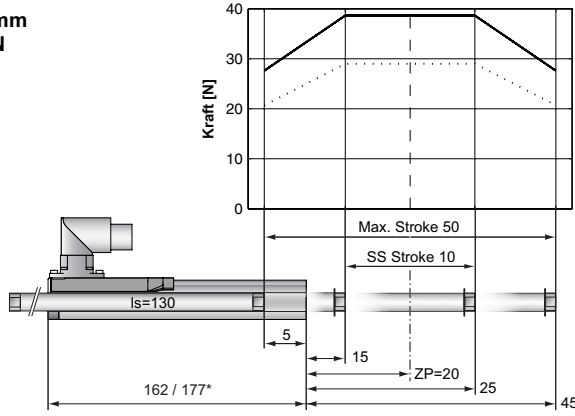
P01-23x80/10x50	144
P01-23x80/30x90	146
P01-23x80/50x110	148
P01-23x80/80x140	150
P01-23x80/150x210	152
P01-23x80/210x270	154
P01-23x80/280x340	156
P01-23x80/340x400	158
P01-23x80/440x500	160
P01-23x80/620x680	162
P01-23x80/710x770	164

Motorfamilie 23x80

P01-23x80/10x50

LinMot®

Max. Stroke: 50mm
Peak Force: 39N



Standard Winding:
 — E1100-HC, 72VDC
 — E1100, 72VDC
 — E1000, 72VDC
 ····· E100, 48VDC

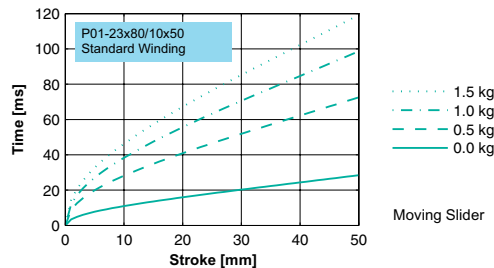
Dimensions in mm
*Cable Type

Motor Specification

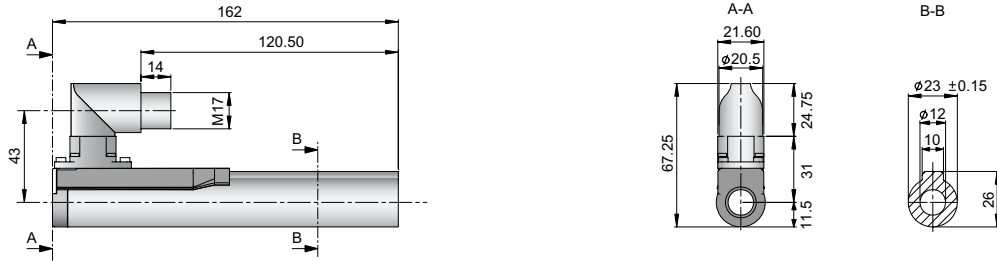
P01-	Connector Type		Cable Type	
	23x80/10x50-R		23x80/10x50	23x80/10x50-R20
Stroke Max.	mm (in)	50 (1.97)	50 (1.97)	50 (1.97)
Stroke SS	mm (in)	10 (0.39)	10 (0.39)	10 (0.39)
Peak Force E100/1000	N (lbf)	29/39 (6.5/8.7)	29/39 (6.5/8.7)	29/39 (6.5/8.7)
Peak Force E1100/-HC	N (lbf)	39/39 (8.7/8.7)	39/39 (8.7/8.7)	39/39 (8.7/8.7)
Cont. Force	N (lbf)	8 (1.8)	8 (1.8)	8 (1.8)
Cont. Force Fan cooling	N (lbf)	9 (2.0)	9 (2.0)	9 (2.0)
Border Force	%	71	71	71
Force Constant	N/A (lbf/A)	9.7 (2.17)	9.7 (2.17)	9.7 (2.17)
Max. Current @ 72VDC	A	4.0	4.0	4.0
Max. Current @ 48VDC	A	4.0	4.0	4.0
Max. Velocity @ 72VDC	m/s (in/s)	6.9 (270)	6.9 (270)	6.9 (270)
Max. Velocity @ 48VDC	m/s (in/s)	4.6 (180)	4.6 (180)	4.6 (180)
Phase Resist. 25/80 °C	Ohm	10.3/12.5	10.3/12.5	10.3/12.5
Phase Inductance	mH	1.4	1.4	1.4
Thermal Resistance	°K/W	7.0	7.0	7.0
Thermal Time Const.	sec	1600	1600	1600
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	162 (6.38)	177 (6.97)	177 (6.97)
Stator Mass	g (lb)	265 (0.58)	265 (0.58)	265 (0.58)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	130 (5.12)	130 (5.12)	130 (5.12)
Slider Mass	g (lb)	89 (0.20)	89 (0.20)	89 (0.20)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.7	±0.7	±0.7
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-23x80/10x50

Position-Time Diagram

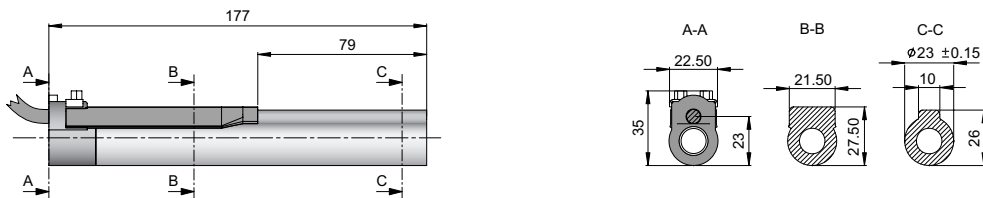


Connector Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/10x50-R	->	PS01-23x80-R	0150-1233	& PL01-12x130/80	0150-1399

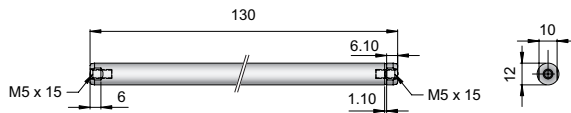
Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/10x50	->	PS01-23x80	0150-1201	& PL01-12x130/80	0150-1399
P01-23x80/10x50-R20	->	PS01-23x80-R20	0150-1241	& PL01-12x130/80	0150-1399

P01-23x80/10x50

Slider

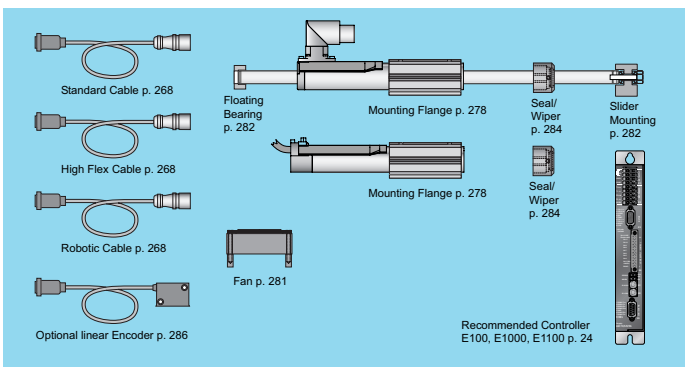


Standard Type	Slider Standard	PL01-12x130/80	0150-1399
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x130/80	0150-1424
	Hollow Slider Hole Diameter 4.2mm	PL01-12x130/80-L	0150-1445

Connectors

Motor Connector Wiring		Cable Length:	
Line	Color	P01-23...-R P01-23...-R20	P01-23... P01-23...-R20
Ph 1+	red	1	1
Ph 1-	pink	2	6
Ph 2+	blue	3	2
Ph 2-	gray	4	7
+5VDC	white	A	3
GND	inner Shield	B	8
Sine	yellow	C	4
Cosine	green	D	9
Temp.	black	E	5
Shield	outer Shield	Case	Case

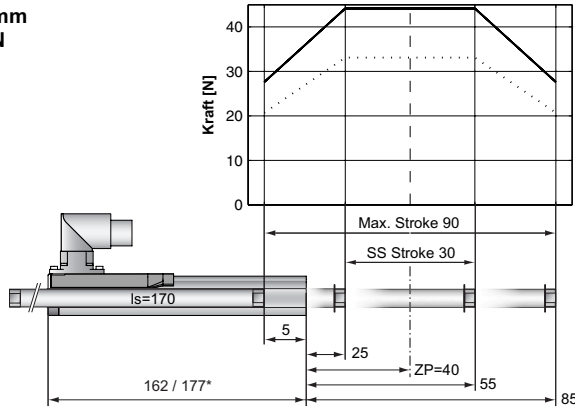
Accessories



P01-23x80/30x90

LinMot®

Max. Stroke: 90mm
Peak Force: 44N



Standard Winding:
 — E1100-HC, 72VDC
 — E1100, 72VDC
 — E1000, 72VDC
 ····· E100, 48VDC

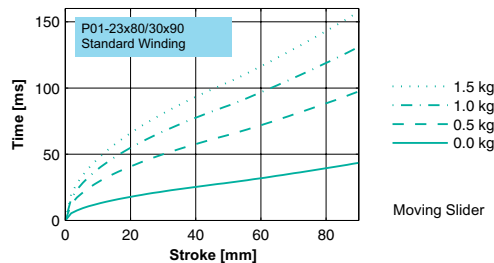
Dimensions in mm
*Cable Type

Motor Specification

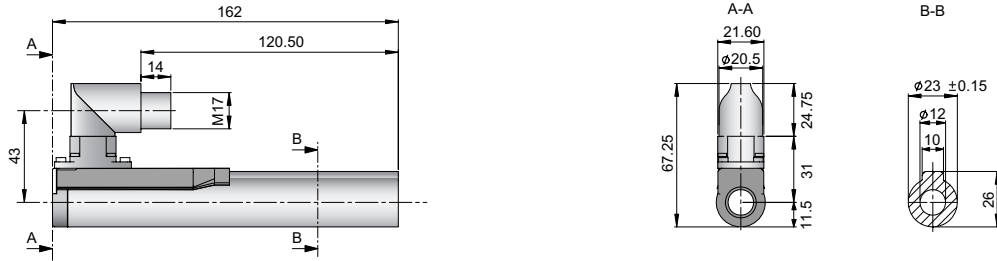
P01-		Connector Type	Cable Type
		23x80/30x90-R	23x80/30x90 23x80/30x90-R20
Stroke Max.	mm (in)	90 (3.54)	90 (3.54)
Stroke SS	mm (in)	30 (1.18)	30 (1.18)
Peak Force E100/1000	N (lbf)	33/44 (7.4/9.9)	33/44 (7.4/9.9)
Peak Force E1100-HC	N (lbf)	44/44 (9.9/9.9)	44/44 (9.9/9.9)
Cont. Force	N (lbf)	9 (2.0)	9 (2.0)
Cont. Force Fan cooling	N (lbf)	16 (3.6)	16 (3.6)
Border Force	%	63	63
Force Constant	N/A (lbf/A)	11.0 (2.48)	11.0 (2.48)
Max. Current @ 72VDC	A	4.0	4.0
Max. Current @ 48VDC	A	4.0	4.0
Max. Velocity @ 72VDC	m/s (in/s)	6.0 (236)	6.0 (236)
Max. Velocity @ 48VDC	m/s (in/s)	4.0 (157)	4.0 (157)
Phase Resist. 25/80 °C	Ohm	10.3/12.5	10.3/12.5
Phase Inductance	mH	1.4	1.4
Thermal Resistance	°K/W	7.0	7.0
Thermal Time Const.	sec	1600	1600
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	162 (6.38)	177 (6.97)
Stator Mass	g (lb)	265 (0.58)	265 (0.58)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	170 (6.69)	170 (6.69)
Slider Mass	g (lb)	118 (0.26)	118 (0.26)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.5	±0.5
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-23x80/30x90

Position-Time Diagram

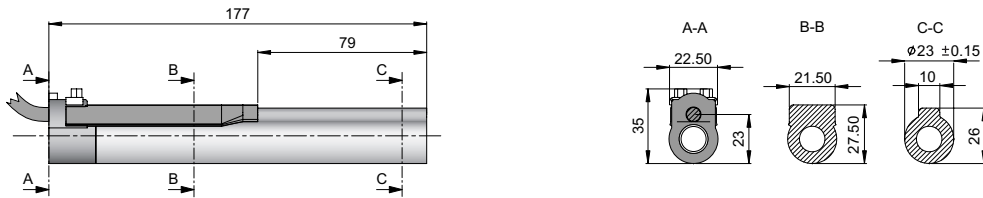


Connector Type



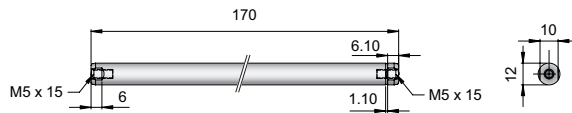
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/30x90-R	->	PS01-23x80-R	0150-1233	& PL01-12x170/120	0150-1301

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/30x90	->	PS01-23x80	0150-1201	& PL01-12x170/120	0150-1301
P01-23x80/30x90-R20	->	PS01-23x80-R20	0150-1241	& PL01-12x170/120	0150-1301

Slider

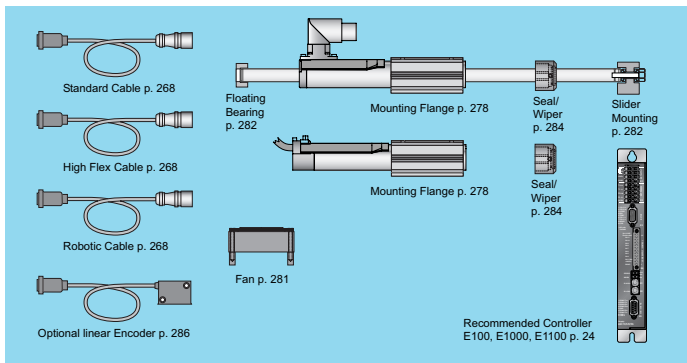


Standard Type	Slider Standard	PL01-12x170/120	0150-1301
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x170/120	0150-1303
	Hollow Slider Hole Diameter 4.2mm	PL01-12x170/120-L	0150-1375

Connectors

Motor Connector Wiring		P01-23...-R P01-23...-R20		P01-23...-R	
Cable Length:					
P01-23x80/.x... 1.0m					
P01-23x80/.x...-R20 0.2m					
Ph 1+	red	1	1		
Ph 1-	pink	2	6		
Ph 2+	blue	3	2		
Ph 2-	gray	4	7		
+5VDC	white	A	3		
GND	inner Shield	B	8		
Sine	yellow	C	4		
Cosine	green	D	9		
Temp.	black	E	5		
Shield	outer Shield	Case	Case		

Accessoires

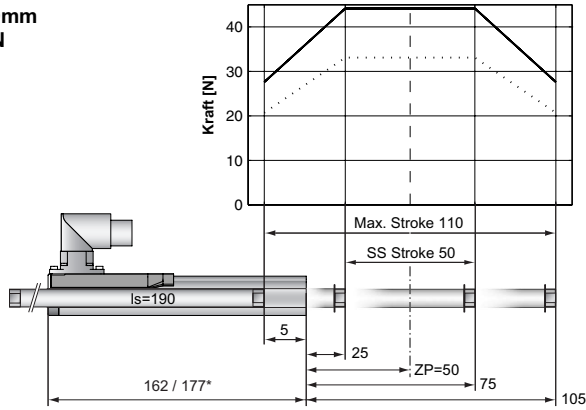


P01-23x80/30x90

P01-23x80/50x110

LinMot®

Max. Stroke: 110mm
Peak Force: 44N



Standard Winding:
 — E1100-HC, 72VDC
 — E1100, 72VDC
 — E1000, 72VDC
 ····· E100, 48VDC

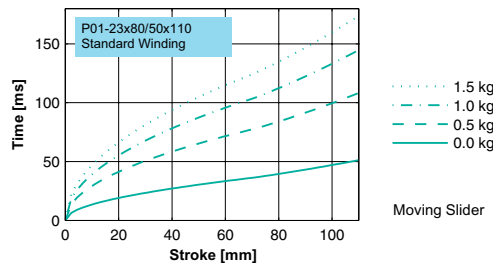
Dimensions in mm
*Cable Type

Motor Specification

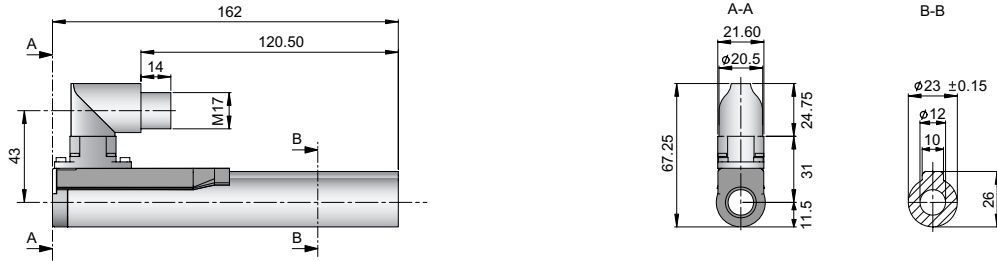
P01-		Connector Type	Cable Type
		23x80/50x110-R	23x80/50x110 23x80/50x110-R20
Stroke Max.	mm (in)	110 (4.33)	110 (4.33)
Stroke SS	mm (in)	50 (1.97)	50 (1.97)
Peak Force E100/1000	N (lbf)	33/44 (7.4/9.9)	33/44 (7.4/9.9)
Peak Force E1100-HC	N (lbf)	44/44 (9.9/9.9)	44/44 (9.9/9.9)
Cont. Force	N (lbf)	9 (2.0)	9 (2.0)
Cont. Force Fan cooling	N (lbf)	16 (3.6)	16 (3.6)
Border Force	%	63	63
Force Constant	N/A (lbf/A)	11.0 (2.48)	11.0 (2.48)
Max. Current @ 72VDC	A	4.0	4.0
Max. Current @ 48VDC	A	4.0	4.0
Max. Velocity @ 72VDC	m/s (in/s)	6.0 (236)	6.0 (236)
Max. Velocity @ 48VDC	m/s (in/s)	4.0 (157)	4.0 (157)
Phase Resist. 25/80 °C	Ohm	10.3/12.5	10.3/12.5
Phase Inductance	mH	1.4	1.4
Thermal Resistance	°K/W	7.0	7.0
Thermal Time Const.	sec	1600	1600
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	162 (6.38)	177 (6.97)
Stator Mass	g (lb)	265 (0.58)	265 (0.58)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	190 (7.48)	190 (7.48)
Slider Mass	g (lb)	135 (0.30)	135 (0.30)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.4	±0.4
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-23x80/50x110

Position-Time Diagram

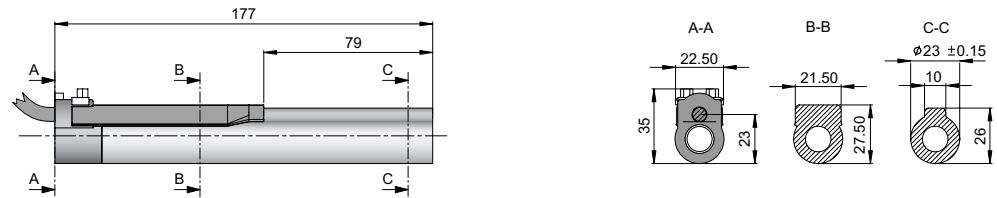


Connector Type



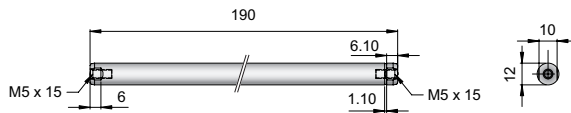
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/50x110-R	->	PS01-23x80-R	0150-1233	& PL01-12x190/140	0150-1302

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/50x110	->	PS01-23x80	0150-1201	& PL01-12x190/140	0150-1302
P01-23x80/50x110-R20	->	PS01-23x80-R20	0150-1241	& PL01-12x190/140	0150-1302

Slider

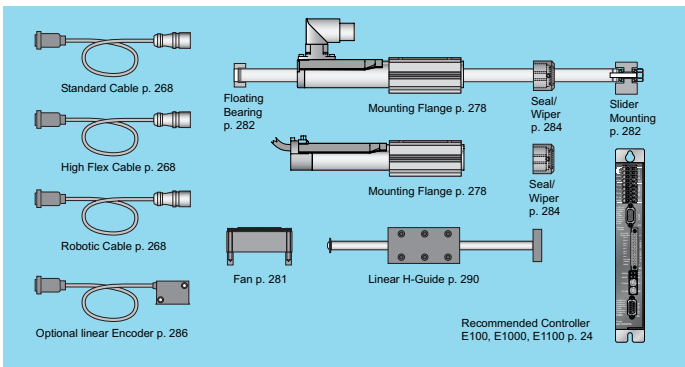


Standard Type	Slider Standard	PL01-12x190/140	0150-1302
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x190/140	0150-1304
	Hollow Slider Hole Diameter 4.2mm	PL01-12x190/140-L	0150-1478

Connectors

Motor Connector Wiring		Cable Length:	
Wire	Color	P01-23...-R P01-23...-R20	P01-23... P01-23...-R20
Ph 1+	red	1	1
Ph 1-	pink	2	6
Ph 2+	blue	3	2
Ph 2-	gray	4	7
+5VDC	white	A	3
GND	inner Shield	B	8
Sine	yellow	C	4
Cosine	green	D	9
Temp.	black	E	5
Shield	outer Shield	Case	Case

Accessoires

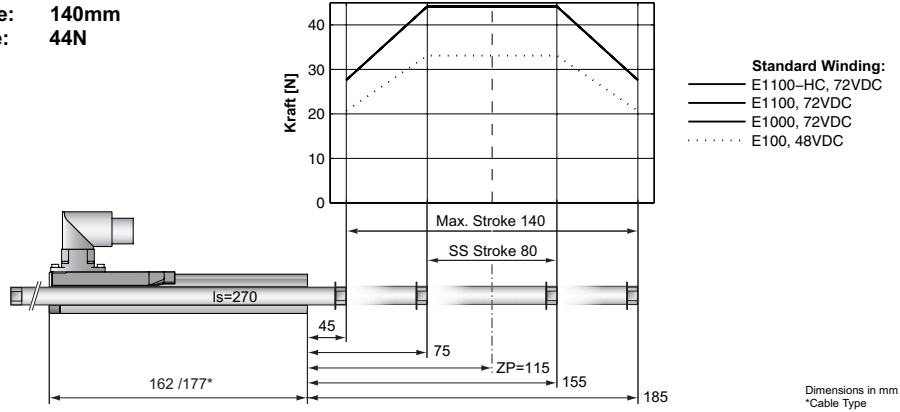


P01-23x80/50x110

P01-23x80/80x140

LinMot®

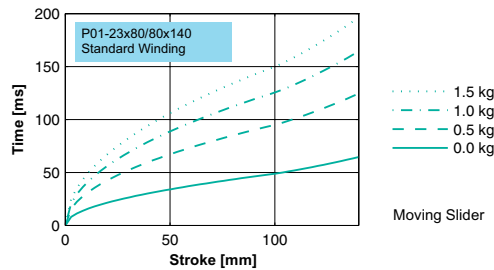
Max. Stroke: 140mm
Peak Force: 44N



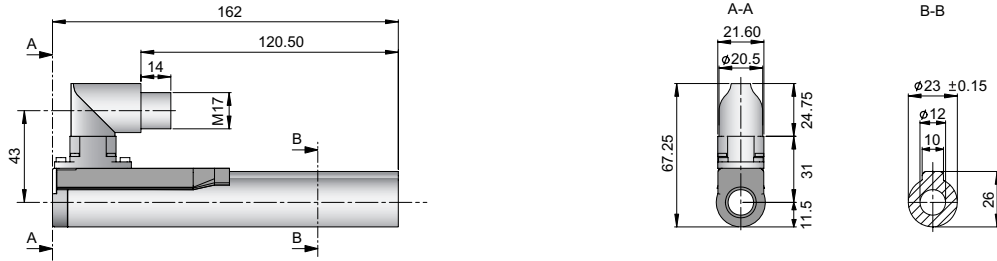
Motor Specification

P01-		Connector Type		Cable Type	
		23x80/80x140-R		23x80/80x140 23x80/80x140-R20	
Stroke Max.	mm (in)	140 (5.51)		140 (5.51)	
Stroke SS	mm (in)	80 (3.15)		80 (3.15)	
Peak Force E100/1000	N (lbf)	33/44 (7.4/9.9)		33/44 (7.4/9.9)	
Peak Force E1100/-HC	N (lbf)	44/44 (9.9/9.9)		44/44 (9.9/9.9)	
Cont. Force	N (lbf)	9 (2.0)		9 (2.0)	
Cont. Force Fan cooling	N (lbf)	16 (3.6)		16 (3.6)	
Border Force	%	63		63	
Force Constant	N/A (lbf/A)	11.0 (2.48)		11.0 (2.48)	
Max. Current @ 72VDC	A	4.0		4.0	
Max. Current @ 48VDC	A	4.0		4.0	
Max. Velocity @ 72VDC	m/s (in/s)	6.0 (236)		6.0 (236)	
Max. Velocity @ 48VDC	m/s (in/s)	4.0 (157)		4.0 (157)	
Phase Resist. 25/80 °C	Ohm	10.3/12.5		10.3/12.5	
Phase Inductance	mH	1.4		1.4	
Thermal Resistance	°K/W	7.0		7.0	
Thermal Time Const.	sec	1600		1600	
Stator Diameter	mm (in)	23 (0.91)		23 (0.91)	
Stator Length	mm (in)	162 (6.38)		177 (6.97)	
Stator Mass	g (lb)	265 (0.58)		265 (0.58)	
Slider Diameter	mm (in)	12 (0.47)		12 (0.47)	
Slider Length	mm (in)	270 (10.63)		270 (10.63)	
Slider Mass	g (lb)	171 (0.38)		171 (0.38)	
Position Repeatability	mm (in)	±0.05 (±0.0020)		±0.05 (±0.0020)	
Linearity	%	±0.3		±0.3	
Position Rep. with ES	mm (in)	±0.01 (±0.0004)		±0.01 (±0.0004)	
Linearity with ES	mm (in)	±0.01 (±0.0004)		±0.01 (±0.0004)	

Position-Time Diagram

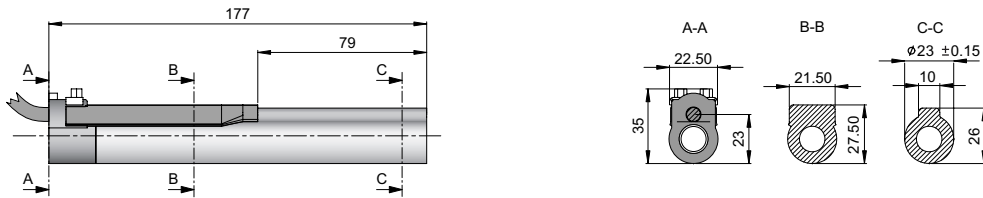


Connector Type



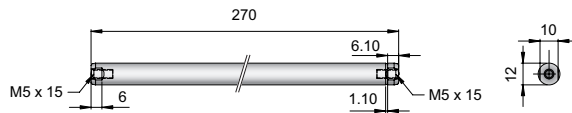
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/80x140-R	->	PS01-23x80-R	0150-1233	& PL01-12x270/170	0150-1307

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/80x140	->	PS01-23x80	0150-1201	& PL01-12x270/170	0150-1307
P01-23x80/80x140-R20	->	PS01-23x80-R20	0150-1241	& PL01-12x270/170	0150-1307

Slider

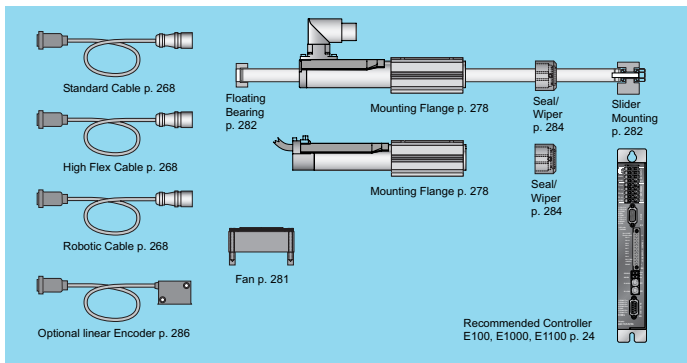


Standard Type	Slider Standard	PL01-12x270/170	0150-1307
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x270/170	0150-1310
	Hollow Slider Hole Diameter 4.2mm	PL01-12x270/170-L	0150-1393

Connectors

Motor Connector Wiring		P01-23...-R P01-23...-R20		P01-23...-R	
Cable Length: P01-23x80/.x... 1.0m P01-23x80/.x...-R20 0.2m					
Ph 1+	red	1	1		
Ph 1-	pink	2	6		
Ph 2+	blue	3	2		
Ph 2-	gray	4	7		
+5VDC	white	A	3		
GND	inner Shield	B	8		
Sine	yellow	C	4		
Cosine	green	D	9		
Temp.	black	E	5		
Shield	outer Shield	Case	Case		

Accessories

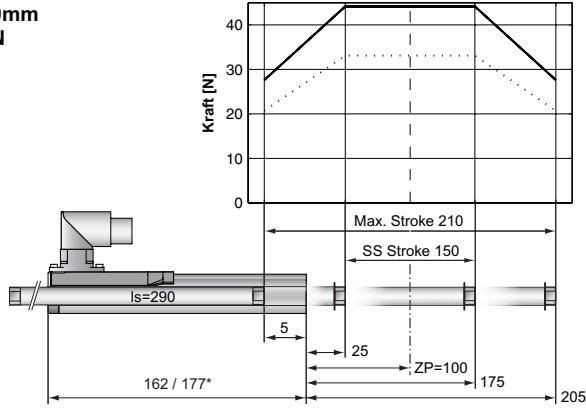


P01-23x80/80x140

P01-23x80/150x210

LinMot®

Max. Stroke: 210mm
Peak Force: 44N



Standard Winding:
 — E1100-HC, 72VDC
 — E1100, 72VDC
 — E1000, 72VDC
 ····· E100, 48VDC

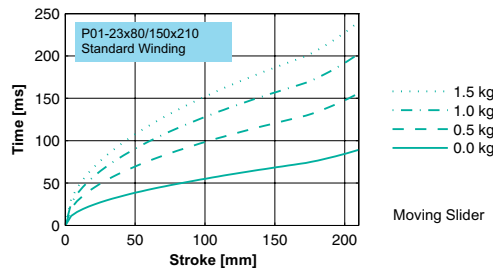
Dimensions in mm
*Cable Type

Motor Specification

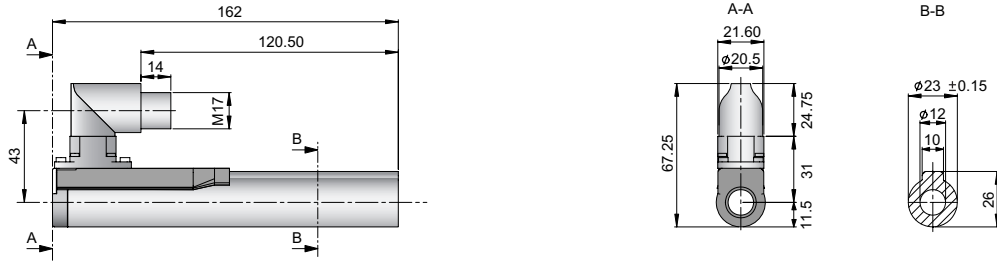
P01-	Connector Type		Cable Type	
	23x80/150x210-R		23x80/150x210 23x80/150x210-R20	
Stroke Max.	mm (in)	210 (8.27)	210 (8.27)	210 (8.27)
Stroke SS	mm (in)	150 (5.91)	150 (5.91)	150 (5.91)
Peak Force E100/1000	N (lbf)	33/44 (7.4/9.9)	33/44 (7.4/9.9)	33/44 (7.4/9.9)
Peak Force E1100/-HC	N (lbf)	44/44 (9.9/9.9)	44/44 (9.9/9.9)	44/44 (9.9/9.9)
Cont. Force	N (lbf)	9 (2.0)	9 (2.0)	9 (2.0)
Cont. Force Fan cooling	N (lbf)	16 (3.6)	16 (3.6)	16 (3.6)
Border Force	%	63	63	63
Force Constant	N/A (lbf/A)	11.0 (2.48)	11.0 (2.48)	11.0 (2.48)
Max. Current @ 72VDC	A	4.0	4.0	4.0
Max. Current @ 48VDC	A	4.0	4.0	4.0
Max. Velocity @ 72VDC	m/s (in/s)	6.0 (236)	6.0 (236)	6.0 (236)
Max. Velocity @ 48VDC	m/s (in/s)	4.0 (157)	4.0 (157)	4.0 (157)
Phase Resist. 25/80 °C	Ohm	10.3/12.5	10.3/12.5	10.3/12.5
Phase Inductance	mH	1.4	1.4	1.4
Thermal Resistance	°K/W	7.0	7.0	7.0
Thermal Time Const.	sec	1600	1600	1600
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	162 (6.38)	177 (6.97)	177 (6.97)
Stator Mass	g (lb)	265 (0.58)	265 (0.58)	265 (0.58)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	290 (11.42)	290 (11.42)	290 (11.42)
Slider Mass	g (lb)	220 (0.49)	220 (0.49)	220 (0.49)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.3	±0.3	±0.3
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-23x80/150x210

Position-Time Diagram

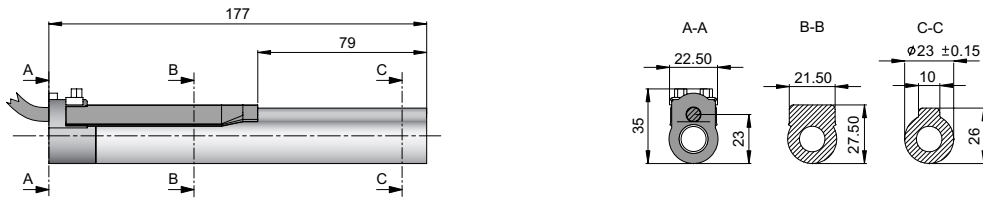


Connector Type



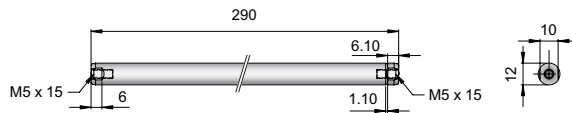
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/150x210-R	-->	PS01-23x80-R	0150-1233	& PL01-12x290/240	0150-1320

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/150x210	-->	PS01-23x80	0150-1201	& PL01-12x290/240	0150-1320
P01-23x80/150x210-R20	-->	PS01-23x80-R20	0150-1241	& PL01-12x290/240	0150-1320

Slider

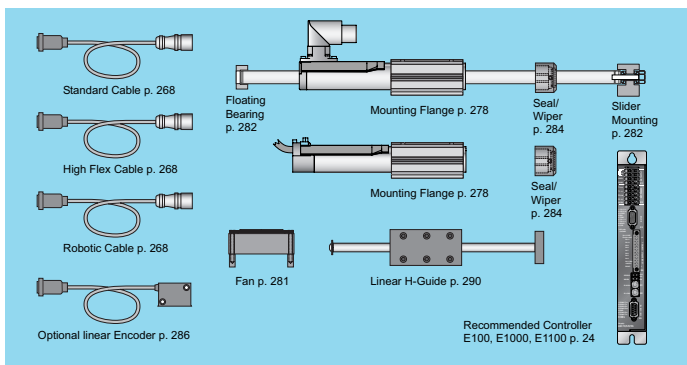


Standard Type	Slider Standard	PL01-12x290/240	0150-1320
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x290/240	0150-1321
	Hollow Slider Hole Diameter 4.2mm	PL01-12x290/240-L	0150-1363

Connectors

Motor Connector Wiring		P01-23...-R P01-23...-R20		P01-23...-R20	
Cable Length: P01-23x80/.x... 1.0m P01-23x80/.x...-R20 0.2m					
Ph 1+	red	1	1		
Ph 1-	pink	2	6		
Ph 2+	blue	3	2		
Ph 2-	gray	4	7		
+5VDC	white	A	3		
GND	inner Shield	B	8		
Sine	yellow	C	4		
Cosine	green	D	9		
Temp.	black	E	5		
Shield	outer Shield	Case	Case		

Accessoires

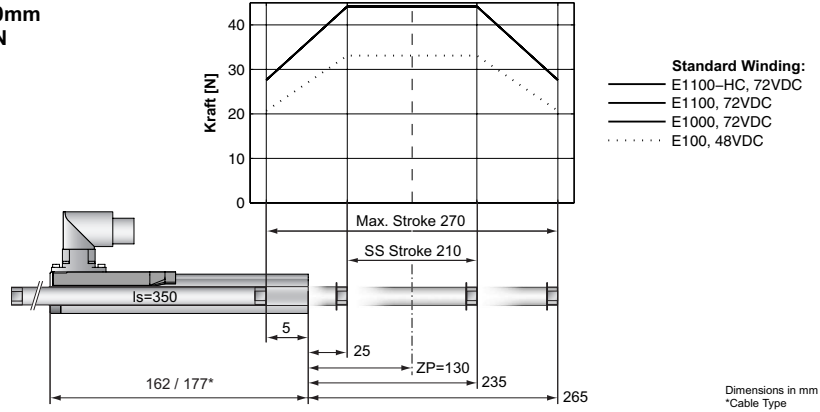


P01-23x80/150x210

P01-23x80/210x270

LinMot®

Max. Stroke: 270mm
Peak Force: 44N



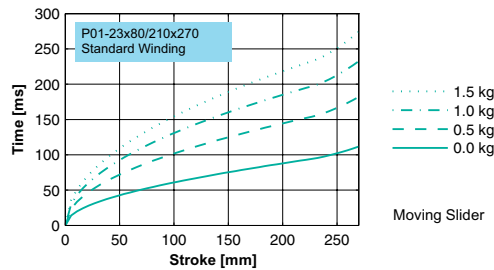
Dimensions in mm
*Cable Type

Motor Specification

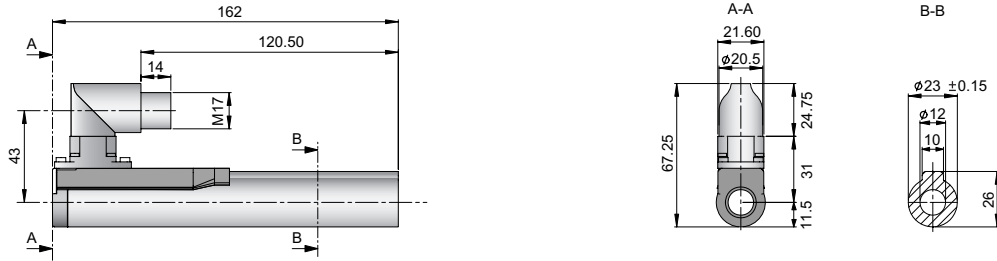
P01-	Connector Type		Cable Type	
	23x80/210x270-R		23x80/210x270 23x80/210x270-R20	
Stroke Max.	mm (in)	270 (10.63)	270 (10.63)	270 (10.63)
Stroke SS	mm (in)	210 (8.27)	210 (8.27)	210 (8.27)
Peak Force E100/1000	N (lbf)	33/44 (7.4/9.9)	33/44 (7.4/9.9)	33/44 (7.4/9.9)
Peak Force E1100/-HC	N (lbf)	44/44 (9.9/9.9)	44/44 (9.9/9.9)	44/44 (9.9/9.9)
Cont. Force	N (lbf)	9 (2.0)	9 (2.0)	9 (2.0)
Cont. Force Fan cooling	N (lbf)	16 (3.6)	16 (3.6)	16 (3.6)
Border Force	%	63	63	63
Force Constant	N/A (lbf/A)	11.0 (2.48)	11.0 (2.48)	11.0 (2.48)
Max. Current @ 72VDC	A	4.0	4.0	4.0
Max. Current @ 48VDC	A	4.0	4.0	4.0
Max. Velocity @ 72VDC	m/s (in/s)	6.0 (236)	6.0 (236)	6.0 (236)
Max. Velocity @ 48VDC	m/s (in/s)	4.0 (157)	4.0 (157)	4.0 (157)
Phase Resist. 25/80 °C	Ohm	10.3/12.5	10.3/12.5	10.3/12.5
Phase Inductance	mH	1.4	1.4	1.4
Thermal Resistance	°K/W	7.0	7.0	7.0
Thermal Time Const.	sec	1600	1600	1600
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	162 (6.38)	177 (6.97)	177 (6.97)
Stator Mass	g (lb)	265 (0.58)	265 (0.58)	265 (0.58)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	350 (13.78)	350 (13.78)	350 (13.78)
Slider Mass	g (lb)	271 (0.60)	271 (0.60)	271 (0.60)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.3	±0.3	±0.3
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-23x80/210x270

Position-Time Diagram

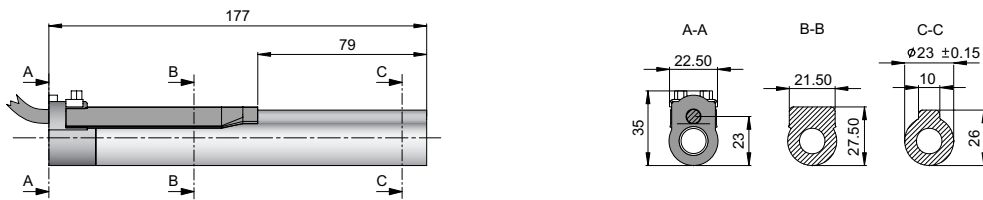


Connector Type



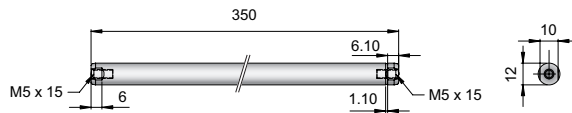
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/210x270-R	->	PS01-23x80-R	0150-1233	& PL01-12x350/300	0150-1322

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/210x270	->	PS01-23x80	0150-1201	& PL01-12x350/300	0150-1322
P01-23x80/210x270-R20	->	PS01-23x80-R20	0150-1241	& PL01-12x350/300	0150-1322

Slider

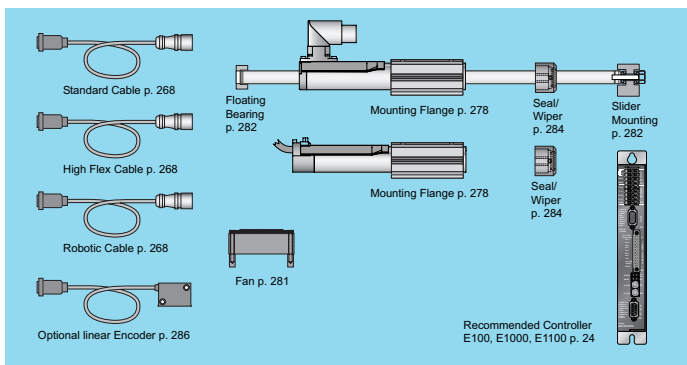


Standard Type	Slider Standard	PL01-12x350/300	0150-1322
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x350/300	0150-1323
	Hollow Slider Hole Diameter 4.2mm	PL01-12x350/300-L	0150-1479

Connectors

Motor Connector Wiring		P01-23...-R	P01-23...-R20	P01-23...-R20
Cable Length:				
P01-23x80/.x... 1.0m				
P01-23x80/.x...-R20 0.2m				
Ph 1+	red	1	1	
Ph 1-	pink	2	6	
Ph 2+	blue	3	2	
Ph 2-	gray	4	7	
+5VDC	white	A	3	
GND	inner Shield	B	8	
Sine	yellow	C	4	
Cosine	green	D	9	
Temp.	black	E	5	
Shield	outer Shield	Case	Case	

Accessories

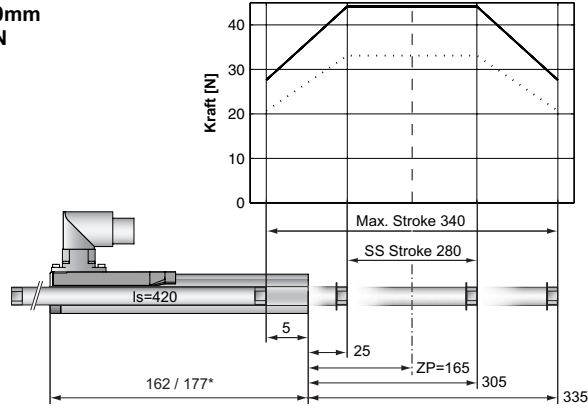


P01-23x80/210x270

P01-23x80/280x340

LinMot®

Max. Stroke: 340mm
Peak Force: 44N



Standard Winding:
 — E1100-HC, 72VDC
 - - E1100, 72VDC
 . . . E1000, 72VDC
 - . . . E100, 48VDC

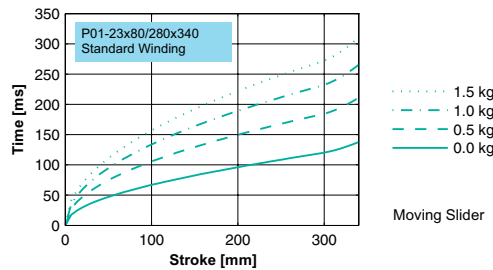
Dimensions in mm
*Cable Type

Motor Specification

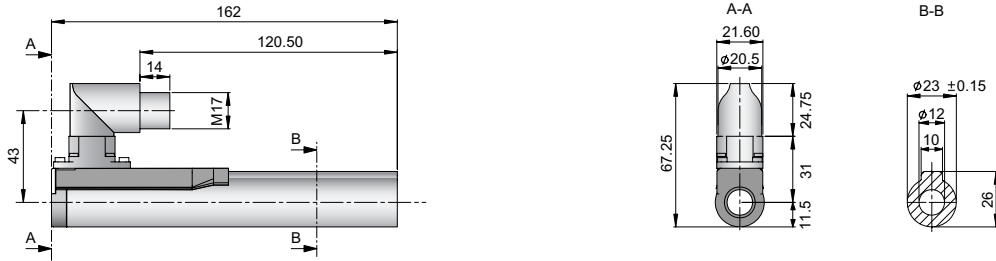
P01-	Connector Type		Cable Type	
	23x80/280x340-R		23x80/280x340-R20	
Stroke Max.	mm (in)	340 (13.39)	340 (13.39)	340 (13.39)
Stroke SS	mm (in)	280 (11.02)	280 (11.02)	280 (11.02)
Peak Force E100/1000	N (lbf)	33/44 (7.4/9.9)	33/44 (7.4/9.9)	33/44 (7.4/9.9)
Peak Force E1100/-HC	N (lbf)	44/44 (9.9/9.9)	44/44 (9.9/9.9)	44/44 (9.9/9.9)
Cont. Force	N (lbf)	9 (2.0)	9 (2.0)	9 (2.0)
Cont. Force Fan cooling	N (lbf)	16 (3.6)	16 (3.6)	16 (3.6)
Border Force	%	63	63	63
Force Constant	N/A (lbf/A)	11.0 (2.48)	11.0 (2.48)	11.0 (2.48)
Max. Current @ 72VDC	A	4.0	4.0	4.0
Max. Current @ 48VDC	A	4.0	4.0	4.0
Max. Velocity @ 72VDC	m/s (in/s)	6.0 (236)	6.0 (236)	6.0 (236)
Max. Velocity @ 48VDC	m/s (in/s)	4.0 (157)	4.0 (157)	4.0 (157)
Phase Resist. 25/80 °C	Ohm	10.3/12.5	10.3/12.5	10.3/12.5
Phase Inductance	mH	1.4	1.4	1.4
Thermal Resistance	°K/W	7.0	7.0	7.0
Thermal Time Const.	sec	1600	1600	1600
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	162 (6.38)	177 (6.97)	177 (6.97)
Stator Mass	g (lb)	265 (0.58)	265 (0.58)	265 (0.58)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	420 (16.54)	420 (16.54)	420 (16.54)
Slider Mass	g (lb)	330 (0.73)	330 (0.73)	330 (0.73)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.3	±0.3	±0.3
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-23x80/280x340

Position-Time Diagram

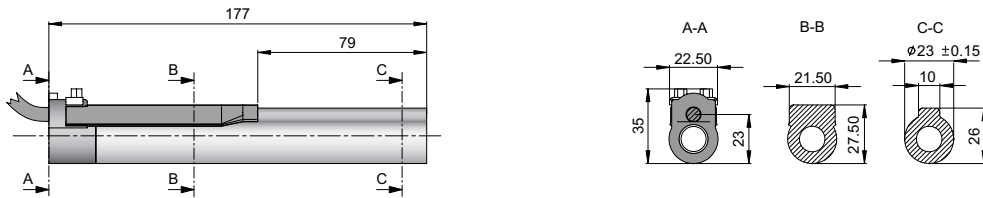


Connector Type



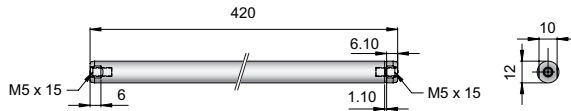
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/280x340-R	-->	PS01-23x80-R	0150-1233	& PL01-12x420/370	0150-1324

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/280x340	-->	PS01-23x80	0150-1201	& PL01-12x420/370	0150-1324
P01-23x80/280x340-R20	-->	PS01-23x80-R20	0150-1241	& PL01-12x420/370	0150-1324

Slider



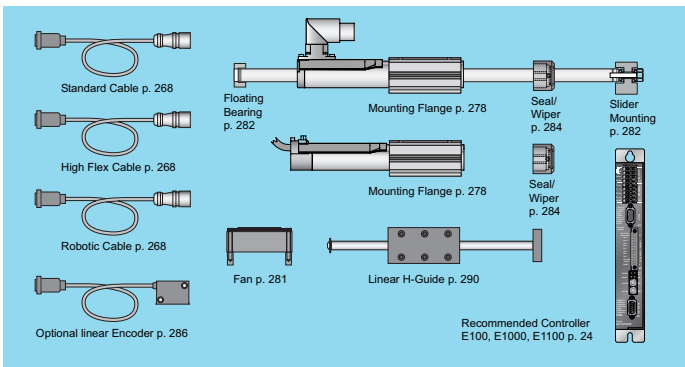
Standard Type	Slider Standard	PL01-12x420/370	0150-1324
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x420/370	0150-1325
	Hollow Slider Hole Diameter 4.2mm	PL01-12x420/370-L	0150-1394

P01-23x80/280x340

Connectors

Motor Connector Wiring		Cable Length:	
Line	Color	P01-23...-R P01-23...-R20	P01-23... P01-23...-R20
Ph 1+	red	1	1
Ph 1-	pink	2	6
Ph 2+	blue	3	2
Ph 2-	gray	4	7
+5VDC	white	A	3
GND	inner Shield	B	8
Sine	yellow	C	4
Cosine	green	D	9
Temp.	black	E	5
Shield	outer Shield	Case	Case

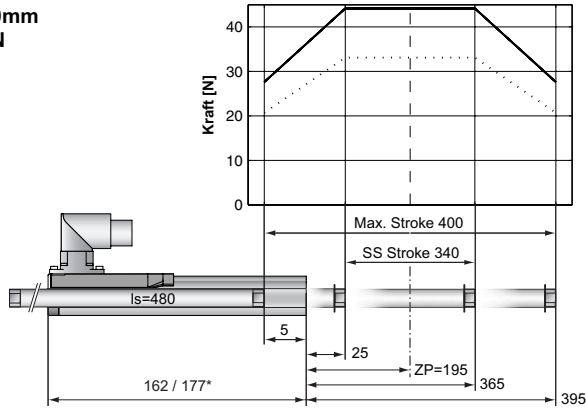
Accessoires



P01-23x80/340x400

LinMot®

Max. Stroke: 400mm
Peak Force: 44N



Standard Winding:
 — E1100-HC, 72VDC
 - - E1100, 72VDC
 — E1000, 72VDC
 ···· E100, 48VDC

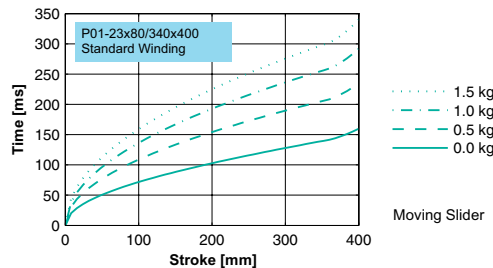
Dimensions in mm
*Cable Type

Motor Specification

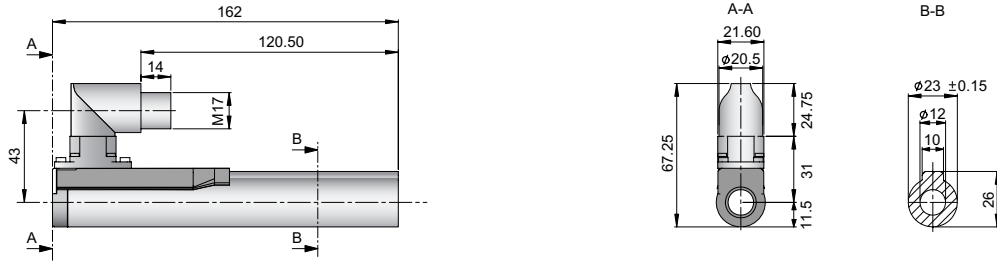
P01-		Connector Type	Cable Type
		23x80/340x400-R	23x80/340x400 23x80/340x400-R20
Stroke Max.	mm (in)	400 (15.75)	400 (15.75)
Stroke SS	mm (in)	340 (13.39)	340 (13.39)
Peak Force E100/1000	N (lbf)	33/44 (7.4/9.9)	33/44 (7.4/9.9)
Peak Force E1100/-HC	N (lbf)	44/44 (9.9/9.9)	44/44 (9.9/9.9)
Cont. Force	N (lbf)	9 (2.0)	9 (2.0)
Cont. Force Fan cooling	N (lbf)	16 (3.6)	16 (3.6)
Border Force	%	63	63
Force Constant	N/A (lbf/A)	11.0 (2.48)	11.0 (2.48)
Max. Current @ 72VDC	A	4.0	4.0
Max. Current @ 48VDC	A	4.0	4.0
Max. Velocity @ 72VDC	m/s (in/s)	6.0 (236)	6.0 (236)
Max. Velocity @ 48VDC	m/s (in/s)	4.0 (157)	4.0 (157)
Phase Resist. 25/80 °C	Ohm	10.3/12.5	10.3/12.5
Phase Inductance	mH	1.4	1.4
Thermal Resistance	°K/W	7.0	7.0
Thermal Time Const.	sec	1600	1600
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	162 (6.38)	177 (6.97)
Stator Mass	g (lb)	265 (0.58)	265 (0.58)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	480 (18.90)	480 (18.90)
Slider Mass	g (lb)	380 (0.84)	380 (0.84)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.3	±0.3
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-23x80/340x400

Position-Time Diagram

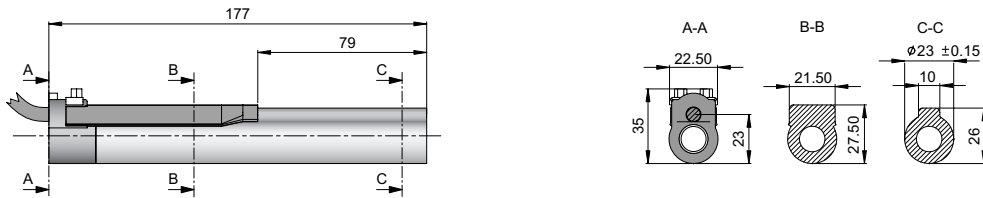


Connector Type



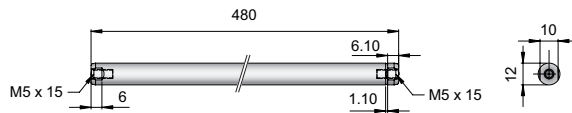
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/340x400-R	->	PS01-23x80-R	0150-1233	& PL01-12x480/430	0150-1372

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/340x400	->	PS01-23x80	0150-1201	& PL01-12x480/430	0150-1372
P01-23x80/340x400-R20	->	PS01-23x80-R20	0150-1241	& PL01-12x480/430	0150-1372

Slider

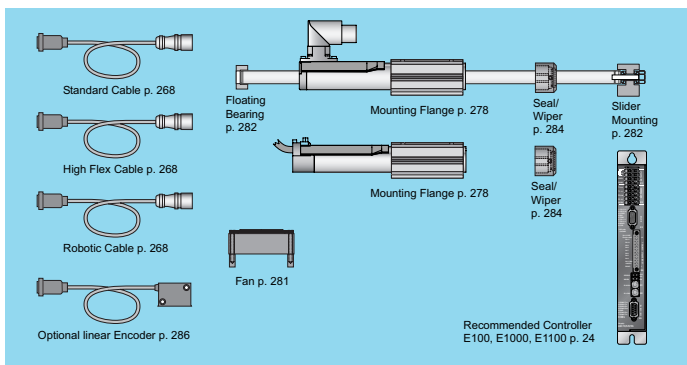


Standard Type	Slider Standard	PL01-12x480/430	0150-1372
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x480/430	0150-1373
	Hollow Slider Hole Diameter 4.2mm	PL01-12x480/430-L	on request

Connectors

Motor Connector Wiring		Cable Length:		P01-23...-R		P01-23...-R20		P01-23...-R20	
P01-23x80/.x..	1.0m	P01-23...-R		P01-23...-R20		P01-23...-R20		P01-23...-R20	
P01-23x80/.x..-R20	0.2m								
Ph 1+	red	1	1						
Ph 1-	pink	2	6						
Ph 2+	blue	3	2						
Ph 2-	gray	4	7						
+5VDC	white	A	3						
GND	inner Shield	B	8						
Sine	yellow	C	4						
Cosine	green	D	9						
Temp.	black	E	5						
Shield	outer Shield	Case	Case						

Accessories

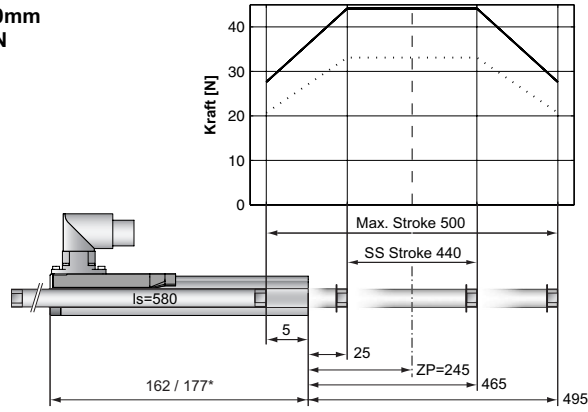


P01-23x80/340x400

P01-23x80/440x500

LinMot®

Max. Stroke: 500mm
Peak Force: 44N



Standard Winding:
 — E1100-HC, 72VDC
 — E1100, 72VDC
 — E1000, 72VDC
 ····· E100, 48VDC

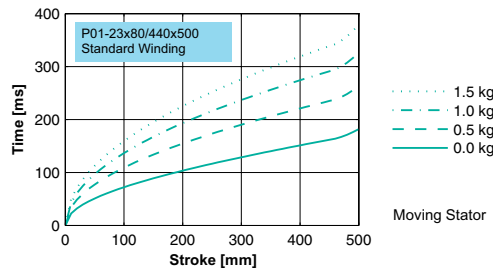
Dimensions in mm
*Cable Type

Motor Specification

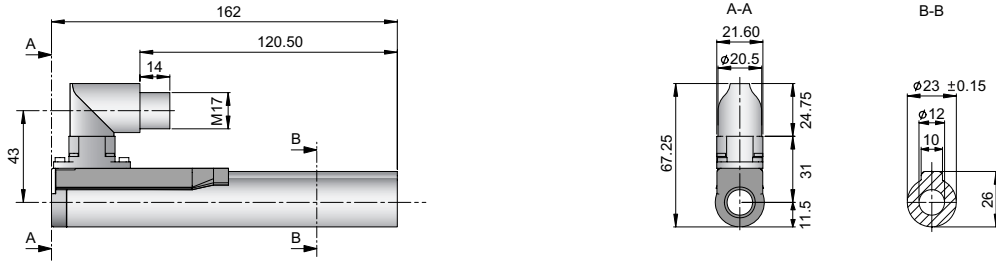
P01-	Connector Type		Cable Type	
	23x80/440x500-R		23x80/440x500 23x80/440x500-R20	
Stroke Max.	mm (in)	500 (19.69)	500 (19.69)	500 (19.69)
Stroke SS	mm (in)	440 (17.32)	440 (17.32)	440 (17.32)
Peak Force E100/1000	N (lbf)	33/44 (7.4/9.9)	33/44 (7.4/9.9)	33/44 (7.4/9.9)
Peak Force E1100/-HC	N (lbf)	44/44 (9.9/9.9)	44/44 (9.9/9.9)	44/44 (9.9/9.9)
Cont. Force	N (lbf)	9 (2.0)	9 (2.0)	9 (2.0)
Cont. Force Fan cooling	N (lbf)	16 (3.6)	16 (3.6)	16 (3.6)
Border Force	%	63	63	63
Force Constant	N/A (lbf/A)	11.0 (2.48)	11.0 (2.48)	11.0 (2.48)
Max. Current @ 72VDC	A	4.0	4.0	4.0
Max. Current @ 48VDC	A	4.0	4.0	4.0
Max. Velocity @ 72VDC	m/s (in/s)	6.0 (236)	6.0 (236)	6.0 (236)
Max. Velocity @ 48VDC	m/s (in/s)	4.0 (157)	4.0 (157)	4.0 (157)
Phase Resist. 25/80 °C	Ohm	10.3/12.5	10.3/12.5	10.3/12.5
Phase Inductance	mH	1.4	1.4	1.4
Thermal Resistance	°K/W	7.0	7.0	7.0
Thermal Time Const.	sec	1600	1600	1600
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	162 (6.38)	177 (6.97)	177 (6.97)
Stator Mass	g (lb)	265 (0.58)	265 (0.58)	265 (0.58)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	580 (22.83)	580 (22.83)	580 (22.83)
Slider Mass	g (lb)	465 (1.03)	465 (1.03)	465 (1.03)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.2	±0.2	±0.2
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-23x80/440x500

Position-Time Diagram

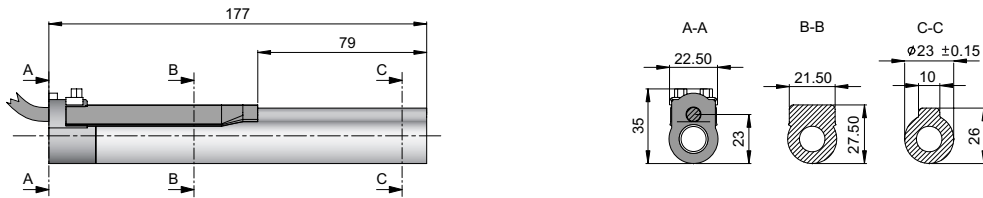


Connector Type



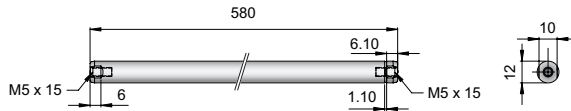
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/440x500-R	->	PS01-23x80-R	0150-1233	& PL01-12x580/530	0150-1355

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/440x500	->	PS01-23x80	0150-1201	& PL01-12x580/530	0150-1355
P01-23x80/440x500-R20	->	PS01-23x80-R20	0150-1241	& PL01-12x580/530	0150-1355

Slider

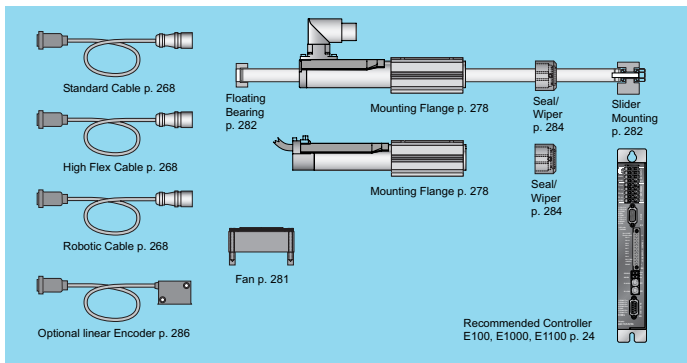


Standard Type	Slider Standard	PL01-12x580/530	0150-1355
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x580/530	0150-1356
	Hollow Slider Hole Diameter 4.2mm	PL01-12x580/530-L	0150-1391

Connectors

Motor Connector Wiring		P01-23...-R P01-23...-R20		P01-23...-R	
Cable Length: P01-23x80/.x... 1.0m P01-23x80/.x...-R20 0.2m					
Ph 1+	red	1	1		
Ph 1-	pink	2	6		
Ph 2+	blue	3	2		
Ph 2-	gray	4	7		
+5VDC	white	A	3		
GND	inner Shield	B	8		
Sine	yellow	C	4		
Cosine	green	D	9		
Temp.	black	E	5		
Shield	outer Shield	Case	Case		

Accessoires

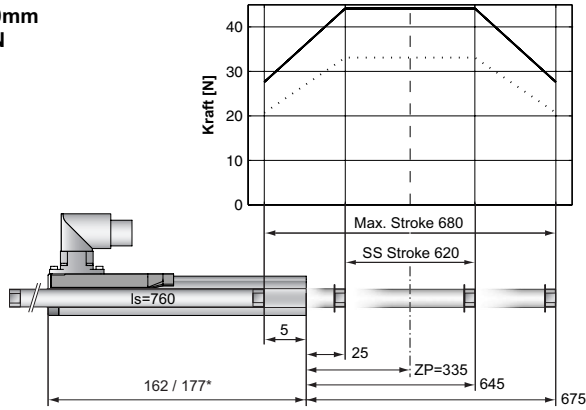


P01-23x80/440x500

P01-23x80/620x680

LinMot®

Max. Stroke: 680mm
Peak Force: 44N



Standard Winding:
 — E1100-HC, 72VDC
 — E1100, 72VDC
 — E1000, 72VDC
 ····· E100, 48VDC

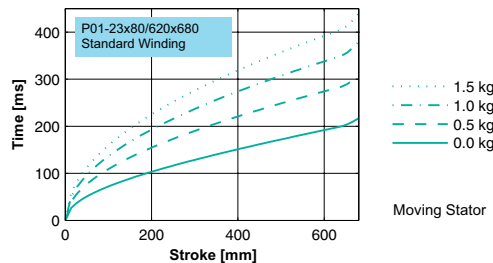
Dimensions in mm
*Cable Type

Motor Specification

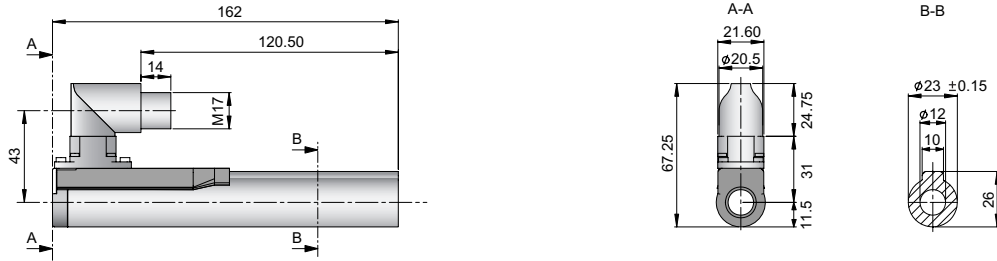
P01-		Connector Type	Cable Type
		23x80/620x680-R	23x80/620x680 23x80/620x680-R20
Stroke Max.	mm (in)	680 (26.77)	680 (26.77)
Stroke SS	mm (in)	620 (24.41)	620 (24.41)
Peak Force E100/1000	N (lbf)	33/44 (7.4/9.9)	33/44 (7.4/9.9)
Peak Force E1100/-HC	N (lbf)	44/44 (9.9/9.9)	44/44 (9.9/9.9)
Cont. Force	N (lbf)	9 (2.0)	9 (2.0)
Cont. Force Fan cooling	N (lbf)	16 (3.6)	16 (3.6)
Border Force	%	63	63
Force Constant	N/A (lbf/A)	11.0 (2.48)	11.0 (2.48)
Max. Current @ 72VDC	A	4.0	4.0
Max. Current @ 48VDC	A	4.0	4.0
Max. Velocity @ 72VDC	m/s (in/s)	6.0 (236)	6.0 (236)
Max. Velocity @ 48VDC	m/s (in/s)	4.0 (157)	4.0 (157)
Phase Resist. 25/80 °C	Ohm	10.3/12.5	10.3/12.5
Phase Inductance	mH	1.4	1.4
Thermal Resistance	°K/W	7.0	7.0
Thermal Time Const.	sec	1600	1600
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	162 (6.38)	177 (6.97)
Stator Mass	g (lb)	265 (0.58)	265 (0.58)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	760 (29.92)	760 (29.92)
Slider Mass	g (lb)	615 (1.36)	615 (1.36)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.2	±0.2
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-23x80/620x680

Position-Time Diagram

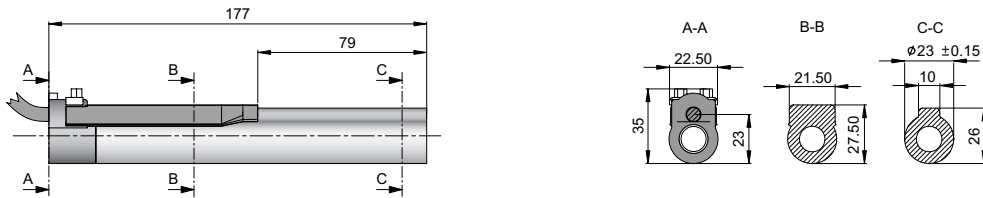


Connector Type



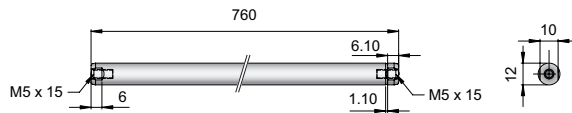
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/620x680-R	->	PS01-23x80-R	0150-1233	& PL01-12x760/710	0150-1366

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/620x680	->	PS01-23x80	0150-1201	& PL01-12x760/710	0150-1366
P01-23x80/620x680-R20	->	PS01-23x80-R20	0150-1241	& PL01-12x760/710	0150-1366

Slider

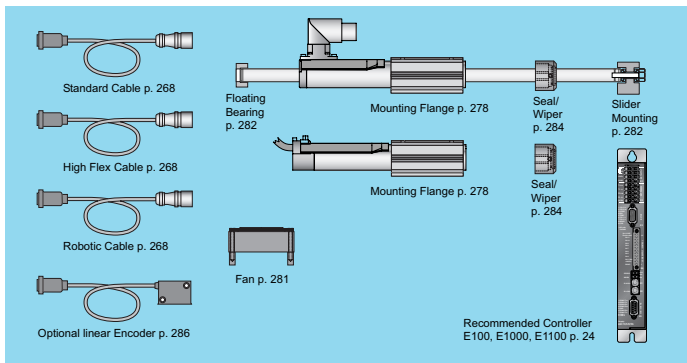


Standard Type	Slider Standard	PL01-12x760/710	0150-1366
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x760/710	on Request
	Hollow Slider Hole Diameter 4.2mm	PL01-12x760/710-L	0150-1392

Connectors

Motor Connector Wiring		Cable Length:	
Line	Color	P01-23...-R P01-23...-R20	P01-23... P01-23...-R20
Ph 1+	red	1	1
Ph 1-	pink	2	6
Ph 2+	blue	3	2
Ph 2-	gray	4	7
+5VDC	white	A	3
GND	inner Shield	B	8
Sine	yellow	C	4
Cosine	green	D	9
Temp.	black	E	5
Shield	outer Shield	Case	Case

Accessories

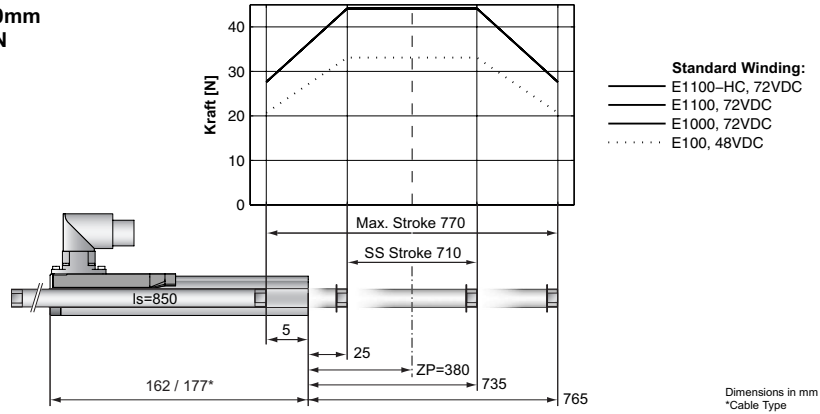


P01-23x80/620x680

P01-23x80/710x770

LinMot®

Max. Stroke: 770mm
Peak Force: 44N

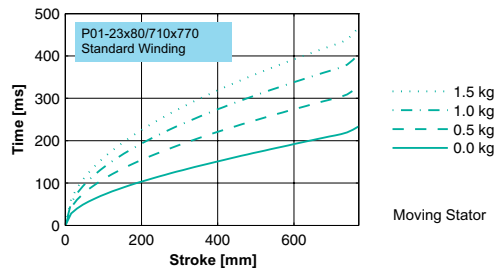


Motor Specification

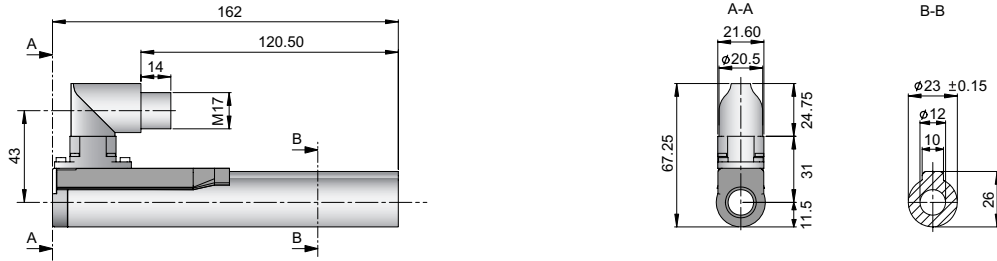
P01-	Connector Type		Cable Type	
	23x80/710x770-R		23x80/710x770 23x80/710x770-R20	
Stroke Max.	mm (in)	770 (30.31)	770 (30.31)	770 (30.31)
Stroke SS	mm (in)	710 (27.95)	710 (27.95)	710 (27.95)
Peak Force E100/1000	N (lbf)	33/44 (7.4/9.9)	33/44 (7.4/9.9)	33/44 (7.4/9.9)
Peak Force E1100/-HC	N (lbf)	44/44 (9.9/9.9)	44/44 (9.9/9.9)	44/44 (9.9/9.9)
Cont. Force	N (lbf)	9 (2.0)	9 (2.0)	9 (2.0)
Cont. Force Fan cooling	N (lbf)	16 (3.6)	16 (3.6)	16 (3.6)
Border Force	%	63	63	63
Force Constant	N/A (lbf/A)	11.0 (2.48)	11.0 (2.48)	11.0 (2.48)
Max. Current @ 72VDC	A	4.0	4.0	4.0
Max. Current @ 48VDC	A	4.0	4.0	4.0
Max. Velocity @ 72VDC	m/s (in/s)	6.0 (236)	6.0 (236)	6.0 (236)
Max. Velocity @ 48VDC	m/s (in/s)	4.0 (157)	4.0 (157)	4.0 (157)
Phase Resist. 25/80 °C	Ohm	10.3/12.5	10.3/12.5	10.3/12.5
Phase Inductance	mH	1.4	1.4	1.4
Thermal Resistance	°K/W	7.0	7.0	7.0
Thermal Time Const.	sec	1600	1600	1600
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	162 (6.38)	177 (6.97)	177 (6.97)
Stator Mass	g (lb)	265 (0.58)	265 (0.58)	265 (0.58)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	850 (33.46)	850 (33.46)	850 (33.46)
Slider Mass	g (lb)	690 (1.52)	690 (1.52)	690 (1.52)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.2	±0.2	±0.2
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-23x80/710x770

Position-Time Diagram

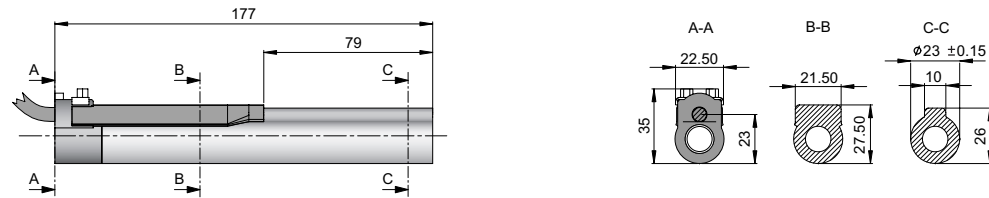


Connector Type



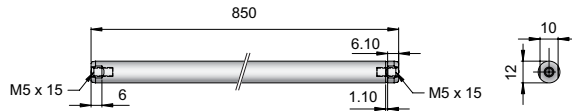
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/710x770-R	->	PS01-23x80-R	0150-1233	& PL01-12x850/800	0150-1365

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x80/710x770	->	PS01-23x80	0150-1201	& PL01-12x850/800	0150-1365
P01-23x80/710x770-R20	->	PS01-23x80-R20	0150-1241	& PL01-12x850/800	0150-1365

Slider

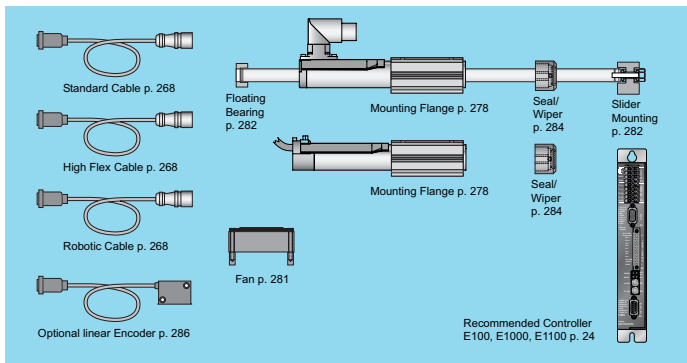


Standard Type	Slider Standard	PL01-12x850/800	0150-1365
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x850/800	on Request
	Hollow Slider Hole Diameter 4.2mm	PL01-12x850/800-L	on Request

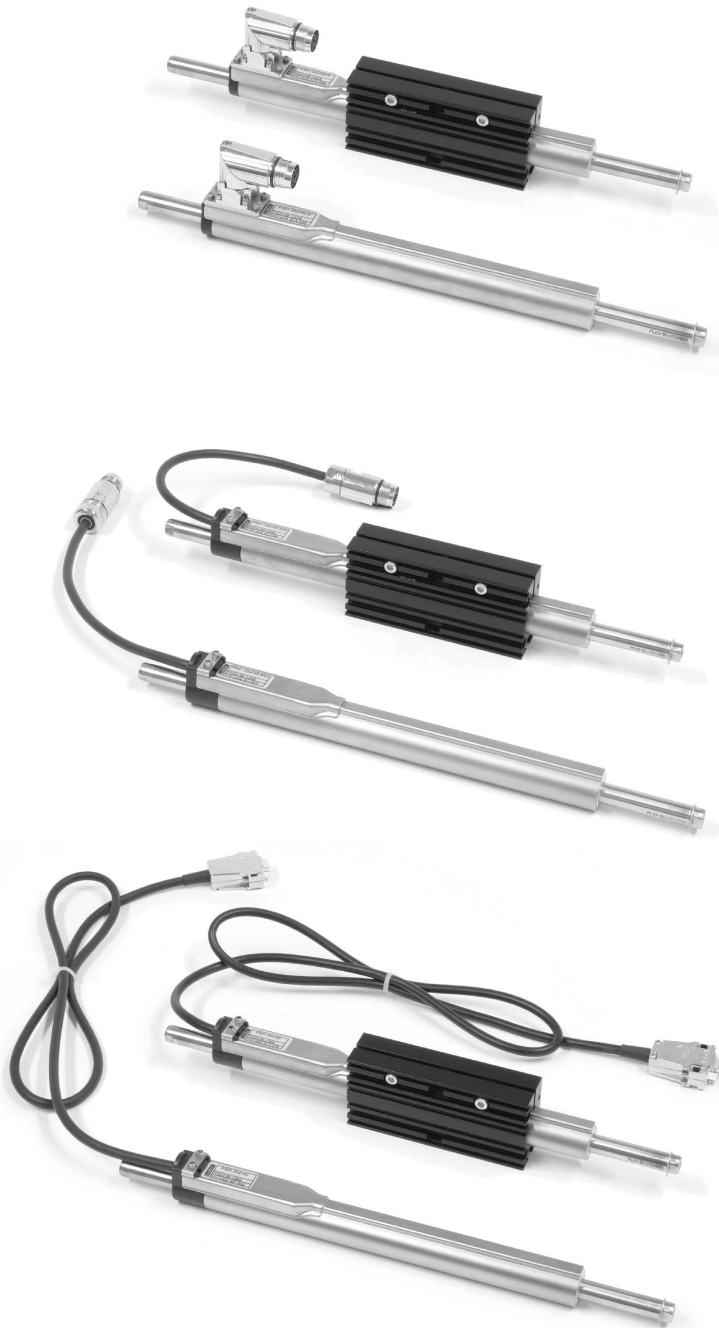
Connectors

Motor Connector Wiring		P01-23...-R P01-23...-R20		P01-23...-R20	
Cable Length:					
P01-23x80/.x... 1.0m					
P01-23x80/.x...-R20 0.2m					
Ph 1+	red	1	1		
Ph 1-	pink	2	6		
Ph 2+	blue	3	2		
Ph 2-	gray	4	7		
+5VDC	white	A	3		
GND	inner Shield	B	8		
Sine	yellow	C	4		
Cosine	green	D	9		
Temp.	black	E	5		
Shield	outer Shield	Case	Case		

Accessoires



P01-23x80/710x770



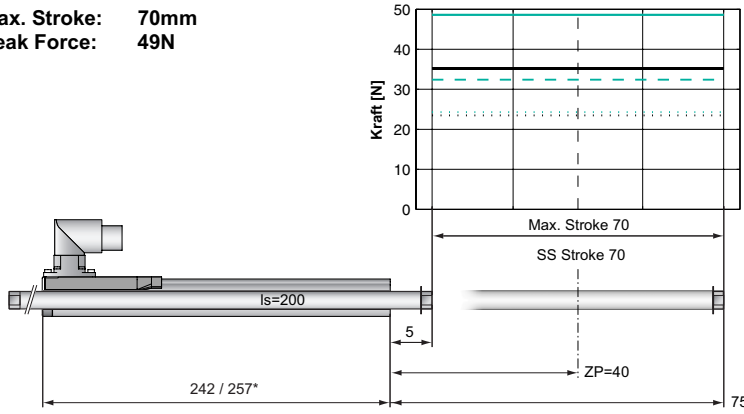
P01-23x160/70x70	168
P01-23x160/40x100	170
P01-23x160/0x140	172
P01-23x160/70x210	174
P01-23x160/130x270	176
P01-23x160/200x340	178
P01-23x160/260x400	180
P01-23x160/360x500	182
P01-23x160/540x680	184
P01-23x160/630x770	186



P01-23x160/70x70

LinMot®

Max. Stroke: 70mm
Peak Force: 49N



Standard Winding:
 — E1100-HC, 72VDC
 — E1100, 72VDC
 — E1000, 72VDC
 E100, 48VDC

Fast Winding:
 — E1100-HC, 72VDC
 - - - E1100, 72VDC
 — E1000, 72VDC
 E100, 48VDC

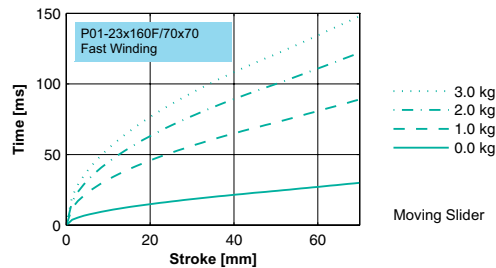
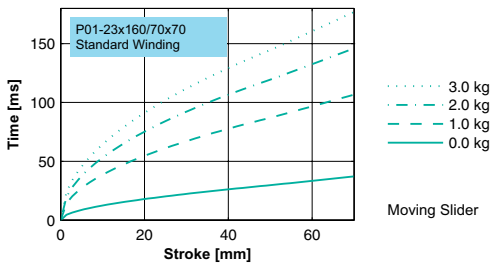
Dimensions in mm
*Cable Type

Motor Specification

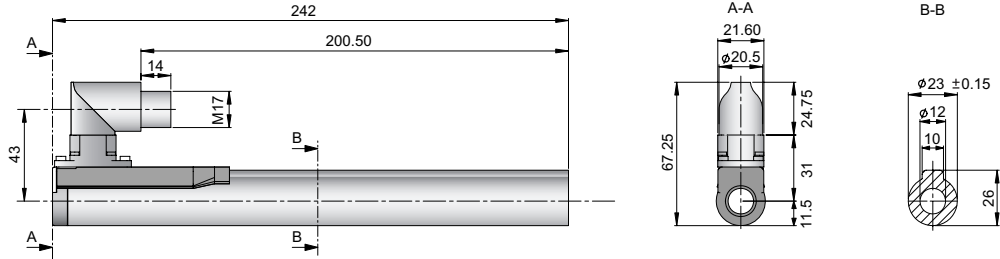
	Connector Type	Cable Type	
		Standard Winding	Fast Winding
	P01-23x160/70x70-R	23x160F/70x70-R	23x160/70x70-R20
Stroke Max.	mm (in)	70 (2.76)	70 (2.76)
Stroke SS	mm (in)	70 (2.76)	70 (2.76)
Peak Force E100/1000	N (lbf)	23/35 (5.3/7.9)	24/49 (5.5/10.9)
Peak Force E1100-HC	N (lbf)	35/35 (7.9/7.9)	32/49 (7.3/10.9)
Cont. Force	N (lbf)	9 (2.0)	9 (2.0)
Cont. Force Fan cooling	N (lbf)	17 (3.8)	17 (3.8)
Border Force	%	100	100
Force Constant	N/A (lbf/A)	12.4 (2.79)	8.1 (1.82)
Max. Current @ 72VDC	A	2.8	6.0
Max. Current @ 48VDC	A	1.9	6.0
Max. Velocity @ 72VDC	m/s (in/s)	5.3 (210)	8.2 (322)
Max. Velocity @ 48VDC	m/s (in/s)	3.6 (140)	5.5 (215)
Phase Resist. 25/80 °C	Ohm	20.6/24.9	9.0/10.9
Phase Inductance	mH	2.7	1.2
Thermal Resistance	°K/W	3.8	3.8
Thermal Time Const.	sec	1800	1800
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	242 (9.53)	242 (9.53)
Stator Mass	g (lb)	450 (0.99)	450 (0.99)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	200 (7.87)	200 (7.87)
Slider Mass	g (lb)	112 (0.25)	112 (0.25)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.6	±0.6
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-23x160/70x70

Position-Time Diagram

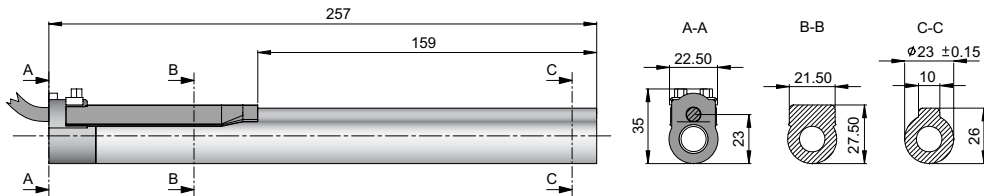


Connector Type



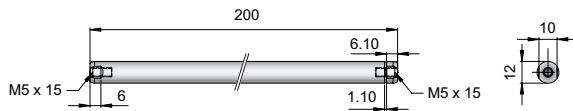
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x160/70x70-R	->	PS01-23x160-R	0150-1234	& PL01-12x200/100	0150-1305
P01-23x160F/70x70-R	->	PS01-23x160F-R	0150-1235	& PL01-12x200/100	0150-1305

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x160/70x70	->	PS01-23x160	0150-1202	& PL01-12x200/100	0150-1305
P01-23x160/70x70-R20	->	PS01-23x160-R20	0150-1242	& PL01-12x200/100	0150-1305
P01-23x160F/70x70-R20	->	PS01-23x160F-R20	0150-1243	& PL01-12x200/100	0150-1305

Slider

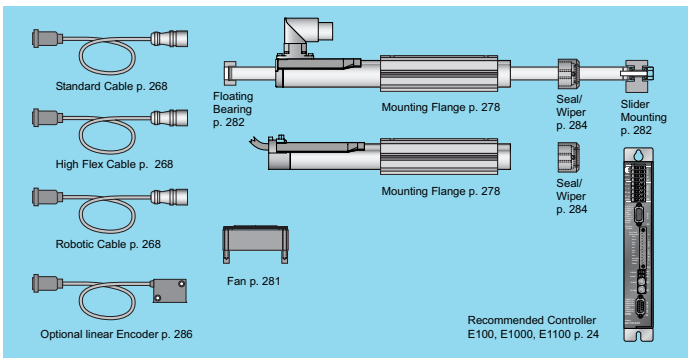


Standard Type	Slider Standard	PL01-12x200/100	0150-1305
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x200/100	0150-1308
	Hollow Slider Hole Diameter 4.2mm	PL02-12x200/100-L	on Request

Connectors

Motor Connector Wiring		P01-23...-R P01-23...-R20		P01-23...	
Cable Length:					
P01-23x160...	1.0m				
P01-23x160...-R20	0.2m				
Ph 1+	red	1	1		
Ph 1-	pink	2	6		
Ph 2+	blue	3	2		
Ph 2-	gray	4	7		
+5VDC	white	A	3		
GND	inner Shield	B	8		
Sine	yellow	C	4		
Cosine	green	D	9		
Temp.	black	E	5		
Shield	outer Shield	Case	Case		

Accessoires

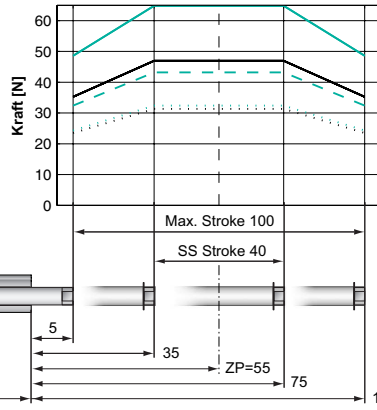
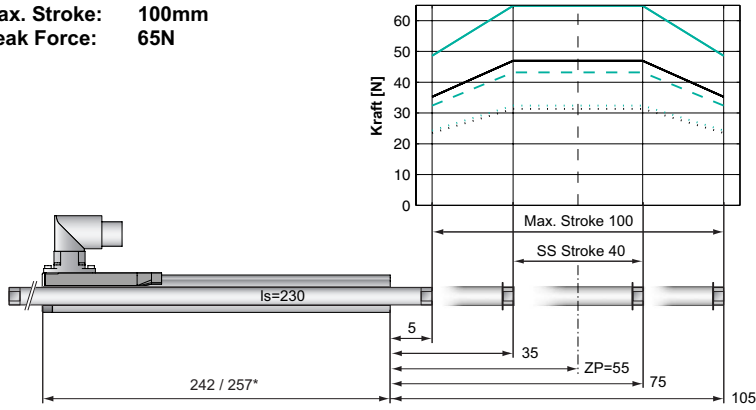


P01-23x160/70x70

P01-23x160/40x100

LinMot®

Max. Stroke: 100mm
Peak Force: 65N



- Standard Winding:**
- E1100-HC, 72VDC
 - E1100, 72VDC
 - E1000, 72VDC
 - E100, 48VDC
- Fast Winding:**
- E1100-HC, 72VDC
 - - - E1100, 72VDC
 - E1000, 72VDC
 - E100, 48VDC

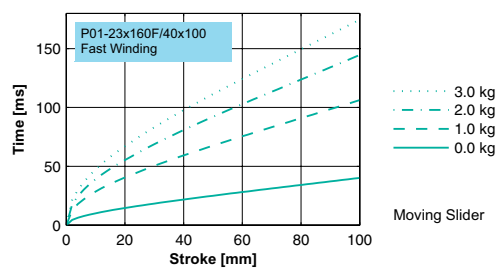
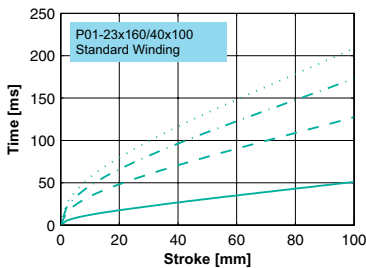
Dimensions in mm
*Cable Type

Motor Specification

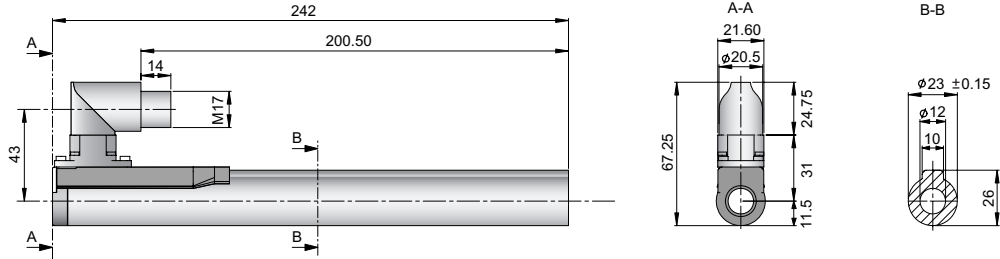
	P01-	Connector Type		Cable Type	
		Standard Winding	Fast Winding	Standard Winding	Fast Winding
		23x160/40x100-R	23x160F/40x100-R	23x160/40x100-R20	23x160F/40x100-R20
Stroke Max.	mm (in)	100 (3.94)	100 (3.94)	100 (3.94)	100 (3.94)
Stroke SS	mm (in)	40 (1.57)	40 (1.57)	40 (1.57)	40 (1.57)
Peak Force E100/1000	N (lbf)	31/47 (7.0/10.6)	32/65 (7.3/14.6)	31/47 (7.0/10.6)	32/65 (7.3/14.6)
Peak Force E1100-HC	N (lbf)	47/47 (10.6/10.6)	43/65 (9.7/14.6)	47/47 (10.6/10.6)	43/65 (9.7/14.6)
Cont. Force	N (lbf)	12 (2.7)	12 (2.7)	12 (2.7)	12 (2.7)
Cont. Force Fan cooling	N (lbf)	23 (5.2)	23 (5.2)	23 (5.2)	23 (5.2)
Border Force	%	75	75	75	75
Force Constant	N/A (lbf/A)	16.6 (3.72)	10.8 (2.43)	16.6 (3.72)	10.8 (2.43)
Max. Current @ 72VDC	A	2.8	6.0	2.8	6.0
Max. Current @ 48VDC	A	1.9	6.0	1.9	6.0
Max. Velocity @ 72VDC	m/s (in/s)	4.0 (157)	6.1 (241)	4.0 (157)	6.1 (241)
Max. Velocity @ 48VDC	m/s (in/s)	2.7 (105)	4.1 (161)	2.7 (105)	4.1 (161)
Phase Resist. 25/80 °C	Ohm	20.6/24.9	9.0/10.9	20.6/24.9	9.0/10.9
Phase Inductance	mH	3.8	3.8	3.8	3.8
Thermal Resistance	°K/W	1800	1800	1800	1800
Thermal Time Const.	sec	87	87	87	87
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	242 (9.53)	242 (9.53)	257 (10.12)	257 (10.12)
Stator Mass	g (lb)	450 (0.99)	450 (0.99)	450 (0.99)	450 (0.99)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	230 (9.06)	230 (9.06)	230 (9.06)	230 (9.06)
Slider Mass	g (lb)	137 (0.30)	137 (0.30)	137 (0.30)	137 (0.30)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.5	±0.5	±0.5	±0.5
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-23x160/40x100

Position-Time Diagram

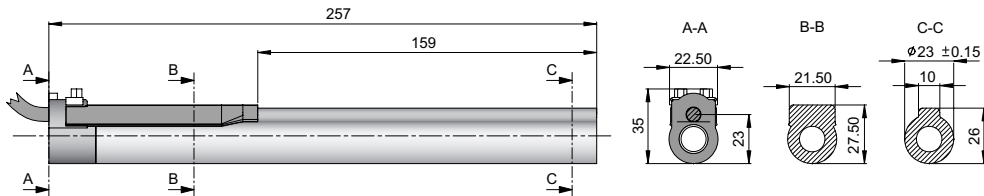


Connector Type



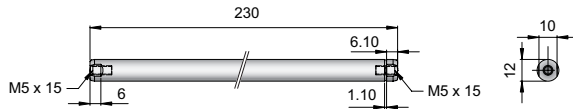
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x160/40x100-R	->	PS01-23x160-R	0150-1234	& PL01-12x230/130	0150-1306
P01-23x160F/40x100-R	->	PS01-23x160F-R	0150-1235	& PL01-12x230/130	0150-1306

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x160/40x100	->	PS01-23x160	0150-1202	& PL01-12x230/130	0150-1306
P01-23x160/40x100-R20	->	PS01-23x160-R20	0150-1242	& PL01-12x230/130	0150-1306
P01-23x160F/40x100-R20	->	PS01-23x160F-R20	0150-1243	& PL01-12x230/130	0150-1306

Slider

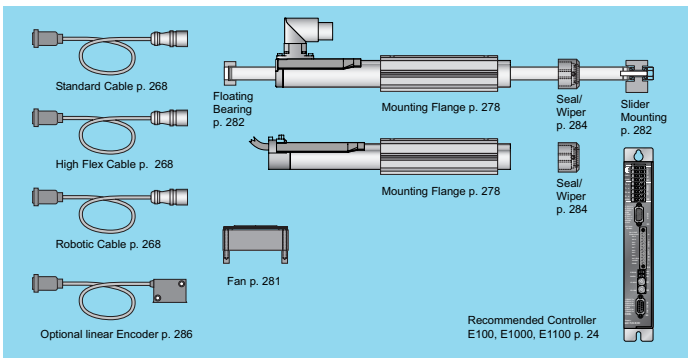


Standard Type	Slider Standard	PL01-12x230/130	0150-1306
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x230/130	0150-1309
	Hollow Slider Hole Diameter 4.2mm	PL01-12x230/130-L	on request

Connectors

Motor Connector Wiring		P01-23...-R		P01-23...-R20		P01-23...	
Cable Length:							
P01-23x160...	1.0m						
P01-23x160...-R20	0.2m						
Ph 1+	red	1	1				
Ph 1-	pink	2	6				
Ph 2+	blue	3	2				
Ph 2-	gray	4	7				
+5VDC	white	A	3				
GND	inner Shield	B	8				
Sine	yellow	C	4				
Cosine	green	D	9				
Temp.	black	E	5				
Shield	outer Shield	Case	Case				

Accessoires

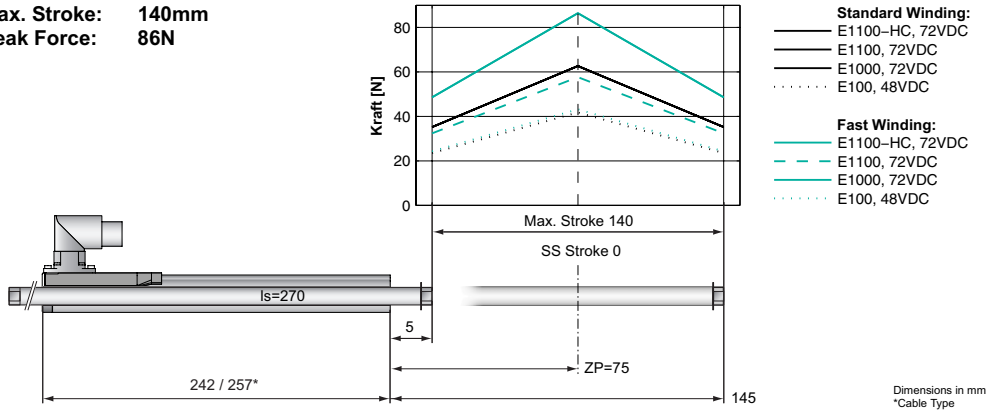


P01-23x160/40x100

P01-23x160/0x140

LinMot®

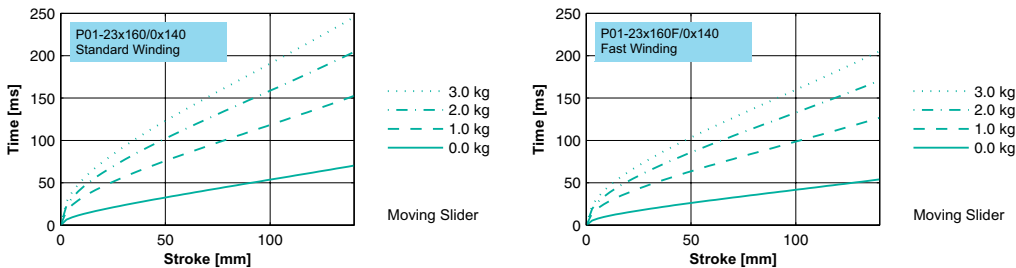
Max. Stroke: 140mm
Peak Force: 86N



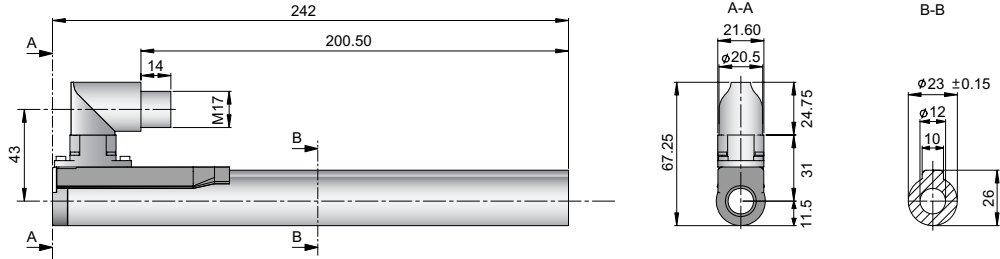
Motor Specification

	P01-	Connector Type		Cable Type	
		Standard Winding	Fast Winding	Standard Winding	Fast Winding
		23x160/0x140-R	23x160F/0x140-R	23x160/0x140-R20	23x160F/0x140-R20
Stroke Max.	mm (in)	140 (5.51)	140 (5.51)	140 (5.51)	140 (5.51)
Stroke SS	mm (in)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
Peak Force E100/1000	N (lbf)	42/63 (9.4/14.1)	43/86 (9.7/19.4)	42/63 (9.4/14.1)	43/86 (9.7/19.4)
Peak Force E1100-HC	N (lbf)	63/63 (14.1/14.1)	58/86 (12.9/19.4)	63/63 (14.1/14.1)	58/86 (12.9/19.4)
Cont. Force	N (lbf)	17 (3.8)	17 (3.8)	17 (3.8)	17 (3.8)
Cont. Force Fan cooling	N (lbf)	31 (7.0)	31 (7.0)	31 (7.0)	31 (7.0)
Border Force	%	56	56	56	56
Force Constant	N/A (lbf/A)	22.1 (4.96)	14.4 (3.24)	22.1 (4.96)	14.4 (3.24)
Max. Current @ 72VDC	A	2.8	6.0	2.8	6.0
Max. Current @ 48VDC	A	1.9	6.0	1.9	6.0
Max. Velocity @ 72VDC	m/s (in/s)	3.0 (118)	4.6 (181)	3.0 (118)	4.6 (181)
Max. Velocity @ 48VDC	m/s (in/s)	2.0 (79)	3.1 (121)	2.0 (79)	3.1 (121)
Phase Resist. 25/80 °C	Ohm	20.6/24.9	9.0/10.9	20.6/24.9	9.0/10.9
Phase Inductance	mH	2.7	1.2	2.7	1.2
Thermal Resistance	°K/W	3.8	3.8	3.8	3.8
Thermal Time Const.	sec	1800	1800	1800	1800
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	242 (9.53)	242 (9.53)	257 (10.12)	257 (10.12)
Stator Mass	g (lb)	450 (0.99)	450 (0.99)	450 (0.99)	450 (0.99)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	270 (10.63)	270 (10.63)	270 (10.63)	270 (10.63)
Slider Mass	g (lb)	171 (0.38)	171 (0.38)	171 (0.38)	171 (0.38)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.3	±0.3	±0.3	±0.3
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

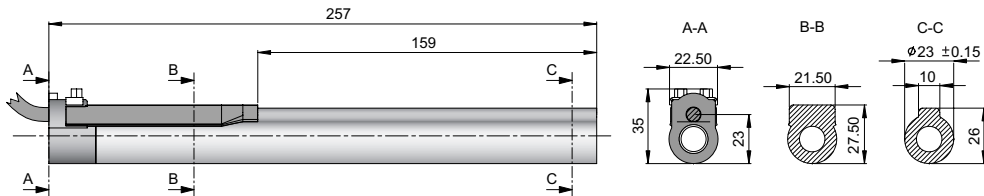


Connector Type



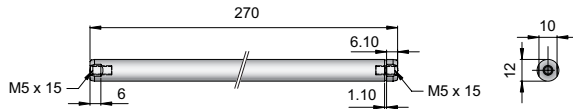
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x160/0x140-R	->	PS01-23x160-R	0150-1234	& PL01-12x270/170	0150-1307
P01-23x160F/0x140-R	->	PS01-23x160F-R	0150-1235	& PL01-12x270/170	0150-1307

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x160/0x140	->	PS01-23x160	0150-1202	& PL01-12x270/170	0150-1307
P01-23x160/0x140-R20	->	PS01-23x160-R20	0150-1242	& PL01-12x270/170	0150-1307
P01-23x160F/0x140-R20	->	PS01-23x160F-R20	0150-1243	& PL01-12x270/170	0150-1307

Slider

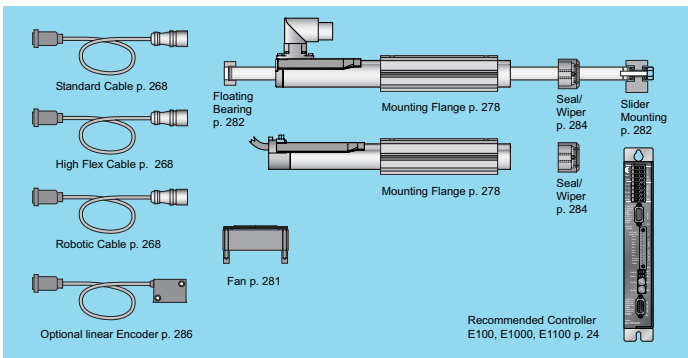


Standard Type	Slider Standard	PL01-12x270/170	0150-1307
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x270/170	0150-1310
	Hollow Slider Hole Diameter 4.2mm	PL01-12x270/170-L	0150-1393

Connectors

Motor Connector Wiring		P01-23...-R P01-23...-R20		P01-23...	
Cable Length:					
P01-23x160...	1.0m				
P01-23x160...-R20	0.2m				
Ph 1+	red	1	1		
Ph 1-	pink	2	6		
Ph 2+	blue	3	2		
Ph 2-	gray	4	7		
+5VDC	white	A	3		
GND	inner Shield	B	8		
Sine	yellow	C	4		
Cosine	green	D	9		
Temp.	black	E	5		
Shield	outer Shield	Case	Case		

Accessoires

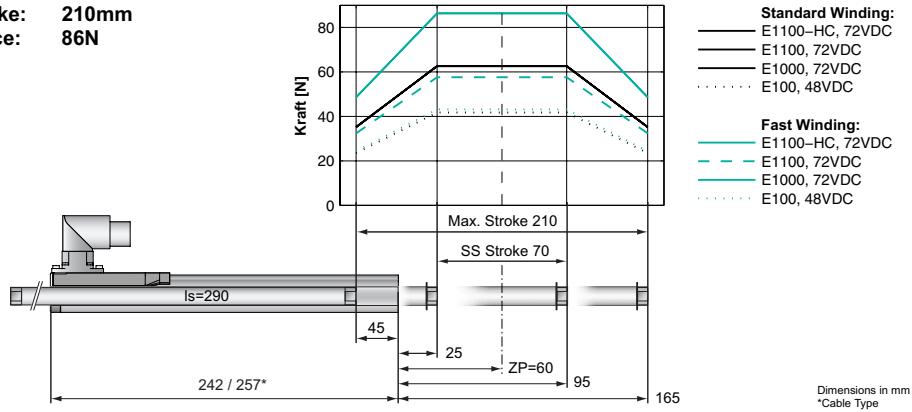


P01-23x160/0x140

P01-23x160/70x210

LinMot®

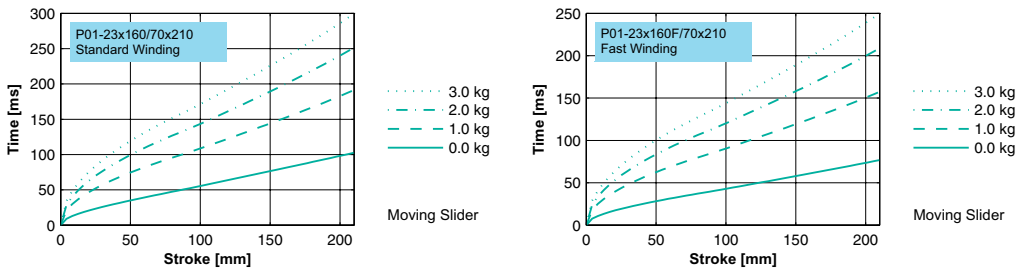
Max. Stroke: 210mm
Peak Force: 86N



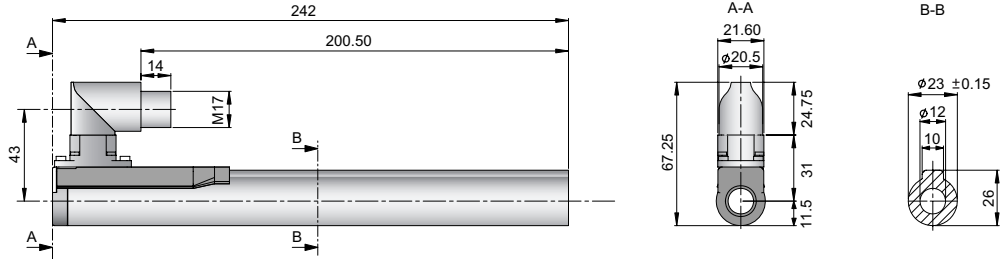
Motor Specification

	P01-	Connector Type		Cable Type	
		Standard Winding	Fast Winding	Standard Winding	Fast Winding
		23x160/70x210-R	23x160F/70x210-R	23x160/70x210-R20	23x160F/70x210-R20
Stroke Max.	mm (in)	210 (8.27)	210 (8.27)	210 (8.27)	210 (8.27)
Stroke SS	mm (in)	70 (2.76)	70 (2.76)	70 (2.76)	70 (2.76)
Peak Force E100/1000	N (lbf)	42/63 (9.4/14.1)	43/86 (9.7/19.4)	42/63 (9.4/14.1)	43/86 (9.7/19.4)
Peak Force E1100-HC	N (lbf)	63/63 (14.1/14.1)	58/86 (12.9/19.4)	63/63 (14.1/14.1)	58/86 (12.9/19.4)
Cont. Force	N (lbf)	17 (3.8)	17 (3.8)	17 (3.8)	17 (3.8)
Cont. Force Fan cooling	N (lbf)	31 (7.0)	31 (7.0)	31 (7.0)	31 (7.0)
Border Force	%	56	56	56	56
Force Constant	N/A (lbf/A)	22.1 (4.96)	14.4 (3.24)	22.1 (4.96)	14.4 (3.24)
Max. Current @ 72VDC	A	2.8	6.0	2.8	6.0
Max. Current @ 48VDC	A	1.9	6.0	1.9	6.0
Max. Velocity @ 72VDC	m/s (in/s)	3.0 (118)	4.6 (181)	3.0 (118)	4.6 (181)
Max. Velocity @ 48VDC	m/s (in/s)	2.0 (79)	3.1 (121)	2.0 (79)	3.1 (121)
Phase Resist. 25/80 °C	Ohm	20.6/24.9	9.0/10.9	20.6/24.9	9.0/10.9
Phase Inductance	mH	2.7	1.2	2.7	1.2
Thermal Resistance	°K/W	3.8	3.8	3.8	3.8
Thermal Time Const.	sec	1800	1800	1800	1800
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	242 (9.53)	242 (9.53)	257 (10.12)	257 (10.12)
Stator Mass	g (lb)	450 (0.99)	450 (0.99)	450 (0.99)	450 (0.99)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	290 (11.42)	290 (11.42)	290 (11.42)	290 (11.42)
Slider Mass	g (lb)	220 (0.49)	220 (0.49)	220 (0.49)	220 (0.49)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.3	±0.3	±0.3	±0.3
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

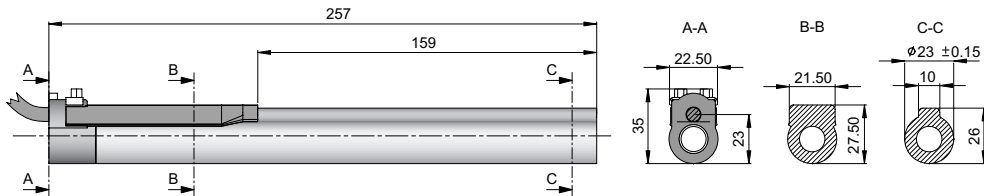


Connector Type



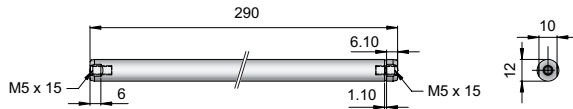
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x160/70x210-R	->	PS01-23x160-R	0150-1234	& PL01-12x290/240	0150-1320
P01-23x160F/70x210-R	->	PS01-23x160F-R	0150-1235	& PL01-12x290/240	0150-1320

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x160/70x210	->	PS01-23x160	0150-1202	& PL01-12x290/240	0150-1320
P01-23x160/70x210-R20	->	PS01-23x160-R20	0150-1242	& PL01-12x290/240	0150-1320
P01-23x160F/70x210-R20	->	PS01-23x160F-R20	0150-1243	& PL01-12x290/240	0150-1320

Slider

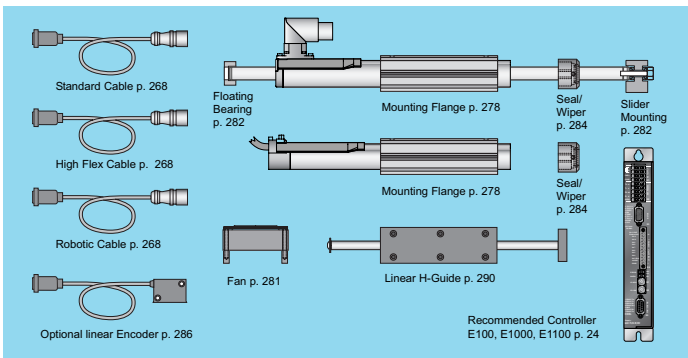


Standard Type	Slider Standard	PL01-12x290/240	0150-1320
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x290/240	0150-1321
	Hollow Slider Hole Diameter 4.2mm	PL01-12x290/240-L	0150-1363

Connectors

Motor Connector Wiring		P01-23...-R P01-23...-R20		P01-23...	
Cable Length:					
P01-23x160...	1.0m				
P01-23x160...-R20	0.2m				
Ph 1+	red	1	1		
Ph 1-	pink	2	6		
Ph 2+	blue	3	2		
Ph 2-	gray	4	7		
+5VDC	white	A	3		
GND	inner Shield	B	8		
Sine	yellow	C	4		
Cosine	green	D	9		
Temp.	black	E	5		
Shield	outer Shield	Case	Case		

Accessoires

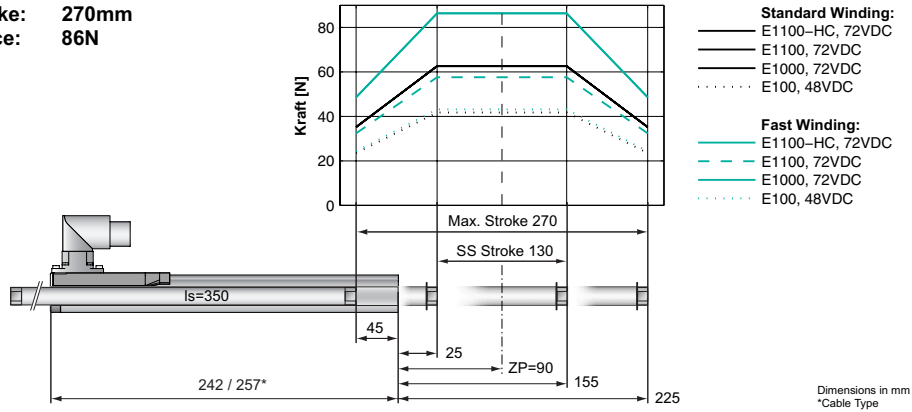


P01-23x160/70x210

P01-23x160/130x270

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Max. Stroke: 270mm
Peak Force: 86N



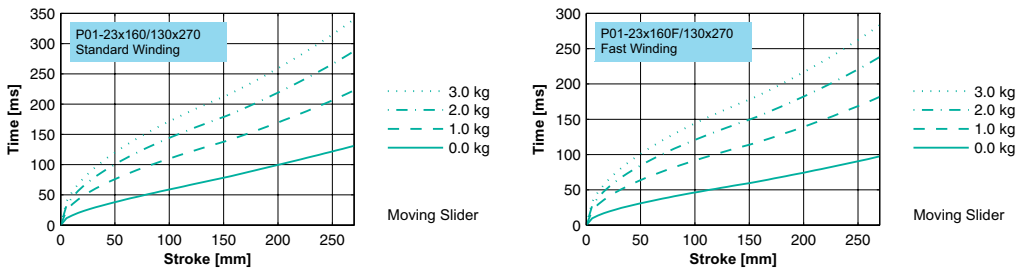
Dimensions in mm
*Cable Type

Motor Specification

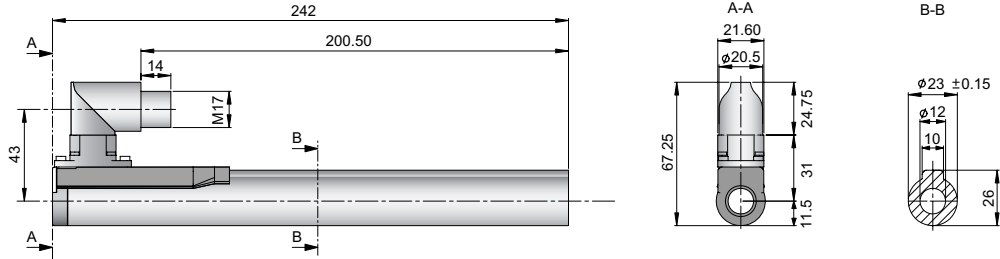
	P01-	Connector Type		Cable Type	
		Standard Winding	Fast Winding	Standard Winding	Fast Winding
		23x160/130x270-R	23x160F/130x270-R	23x160/130x270-R20	23x160F/130x270-R20
Stroke Max.	mm (in)	270 (10.63)	270 (10.63)	270 (10.63)	270 (10.63)
Stroke SS	mm (in)	130 (5.12)	130 (5.12)	130 (5.12)	130 (5.12)
Peak Force E100/1000	N (lbf)	42/63 (9.4/14.1)	43/86 (9.7/19.4)	42/63 (9.4/14.1)	43/86 (9.7/19.4)
Peak Force E1100-HC	N (lbf)	63/63 (14.1/14.1)	58/86 (12.9/19.4)	63/63 (14.1/14.1)	58/86 (12.9/19.4)
Cont. Force	N (lbf)	17 (3.8)	17 (3.8)	17 (3.8)	17 (3.8)
Cont. Force Fan cooling	N (lbf)	31 (7.0)	31 (7.0)	31 (7.0)	31 (7.0)
Border Force	%	56	56	56	56
Force Constant	N/A (lbf/A)	22.1 (4.96)	14.4 (3.24)	22.1 (4.96)	14.4 (3.24)
Max. Current @ 72VDC	A	2.8	6.0	2.8	6.0
Max. Current @ 48VDC	A	1.9	6.0	1.9	6.0
Max. Velocity @ 72VDC	m/s (in/s)	3.0 (118)	4.6 (181)	3.0 (118)	4.6 (181)
Max. Velocity @ 48VDC	m/s (in/s)	2.0 (79)	3.1 (121)	2.0 (79)	3.1 (121)
Phase Resist. 25/80 °C	Ohm	20.6/24.9	9.0/10.9	20.6/24.9	9.0/10.9
Phase Inductance	mH	2.7	1.2	2.7	1.2
Thermal Resistance	°K/W	3.8	3.8	3.8	3.8
Thermal Time Const.	sec	1800	1800	1800	1800
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	242 (9.53)	242 (9.53)	257 (10.12)	257 (10.12)
Stator Mass	g (lb)	450 (0.99)	450 (0.99)	450 (0.99)	450 (0.99)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	350 (13.78)	350 (13.78)	350 (13.78)	350 (13.78)
Slider Mass	g (lb)	271 (0.60)	271 (0.60)	271 (0.60)	271 (0.60)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.3	±0.3	±0.3	±0.3
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-23x160/130x270

Position-Time Diagram

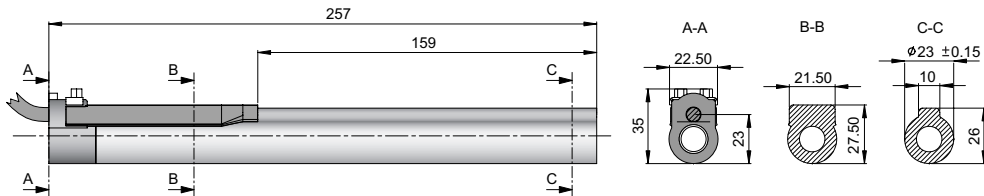


Connector Type



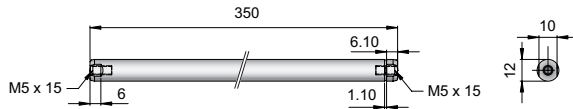
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x160/130x270-R	->	PS01-23x160-R	0150-1234	& PL01-12x350/300	0150-1322
P01-23x160F/130x270-R	->	PS01-23x160F-R	0150-1235	& PL01-12x350/300	0150-1322

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x160/130x270	->	PS01-23x160	0150-1202	& PL01-12x350/300	0150-1322
P01-23x160/130x270-R20	->	PS01-23x160-R20	0150-1242	& PL01-12x350/300	0150-1322
P01-23x160F/130x270-R20	->	PS01-23x160F-R20	0150-1243	& PL01-12x350/300	0150-1322

Slider

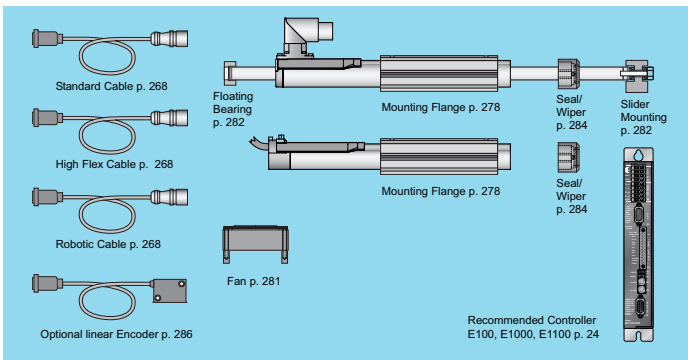


Standard Type	Slider Standard	PL01-12x350/300	0150-1322
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x350/300	0150-1323
	Hollow Slider Hole Diameter 4.2mm	PL01-12x350/300-L	0150-1479

Connectors

Motor Connector Wiring		P01-23...-R		P01-23...-R20		P01-23...	
Cable Length:							
P01-23x160...	1.0m						
P01-23x160...-R20	0.2m						
Ph 1+	red	1	1				
Ph 1-	pink	2	6				
Ph 2+	blue	3	2				
Ph 2-	gray	4	7				
+5VDC	white	A	3				
GND	inner Shield	B	8				
Sine	yellow	C	4				
Cosine	green	D	9				
Temp.	black	E	5				
Shield	outer Shield	Case	Case				

Accessoires

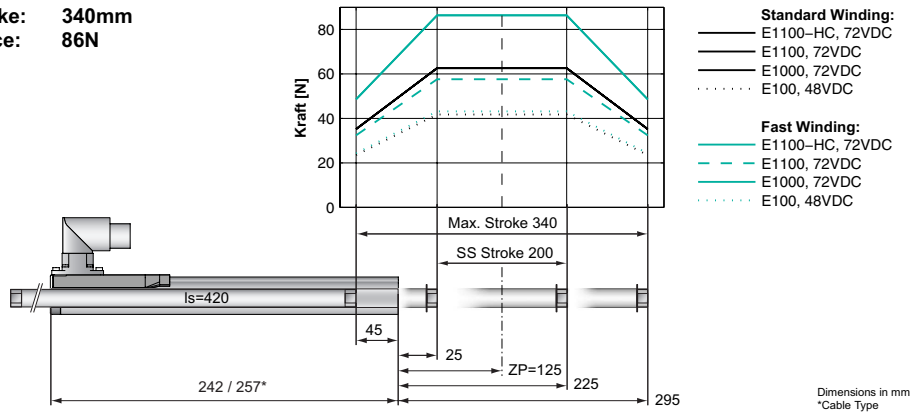


P01-23x160/130x270

P01-23x160/200x340

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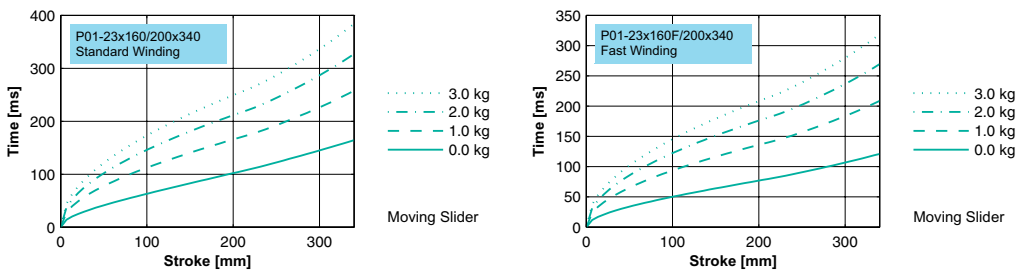
Max. Stroke: 340mm
Peak Force: 86N



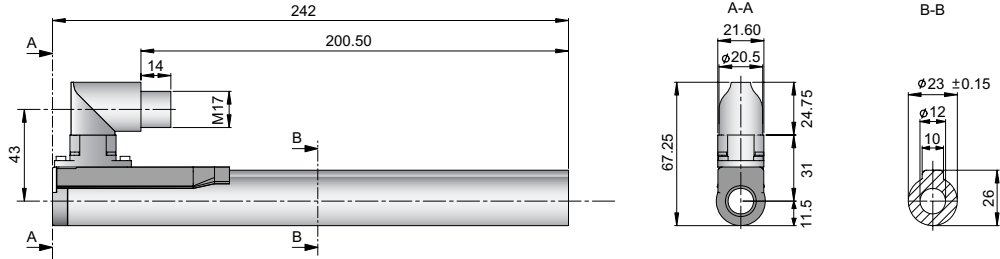
Motor Specification

	Connector Type	Cable Type	
		Standard Winding	Fast Winding
	P01-23x160/200x340-R	23x160F/200x340-R	23x160/200x340-R20
Stroke Max.	mm (in)	340 (13.39)	340 (13.39)
Stroke SS	mm (in)	200 (7.87)	200 (7.87)
Peak Force E100/1000	N (lbf)	42/63 (9.4/14.1)	43/86 (9.7/19.4)
Peak Force E1100-HC	N (lbf)	63/63 (14.1/14.1)	63/63 (14.1/14.1)
Cont. Force	N (lbf)	17 (3.8)	17 (3.8)
Cont. Force Fan cooling	N (lbf)	31 (7.0)	31 (7.0)
Border Force	%	56	56
Force Constant	N/A (lbf/A)	22.1 (4.96)	14.4 (3.24)
Max. Current @ 72VDC	A	2.8	6.0
Max. Current @ 48VDC	A	1.9	6.0
Max. Velocity @ 72VDC	m/s (in/s)	3.0 (118)	4.6 (181)
Max. Velocity @ 48VDC	m/s (in/s)	2.0 (79)	3.1 (121)
Phase Resist. 25/80 °C	Ohm	20.6/24.9	9.0/10.9
Phase Inductance	mH	2.7	1.2
Thermal Resistance	°K/W	3.8	3.8
Thermal Time Const.	sec	1800	1800
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	242 (9.53)	257 (10.12)
Stator Mass	g (lb)	450 (0.99)	450 (0.99)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	420 (16.54)	420 (16.54)
Slider Mass	g (lb)	330 (0.73)	330 (0.73)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.3	±0.3
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

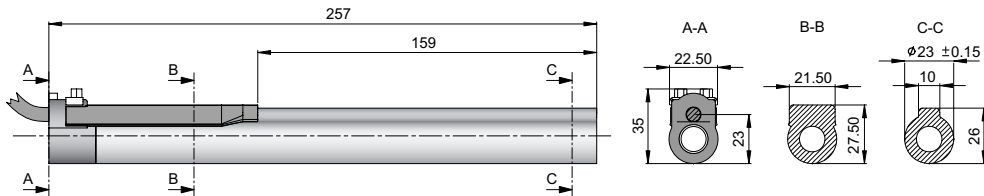


Connector Type



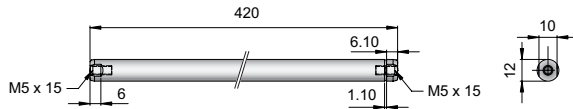
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x160/200x340-R	->	PS01-23x160-R	0150-1234	& PL01-12x420/370	0150-1324
P01-23x160F/200x340-R	->	PS01-23x160F-R	0150-1235	& PL01-12x420/370	0150-1324

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x160/200x340	->	PS01-23x160	0150-1202	& PL01-12x420/370	0150-1324
P01-23x160/200x340-R20	->	PS01-23x160-R20	0150-1242	& PL01-12x420/370	0150-1324
P01-23x160F/200x340-R20	->	PS01-23x160F-R20	0150-1243	& PL01-12x420/370	0150-1324

Slider

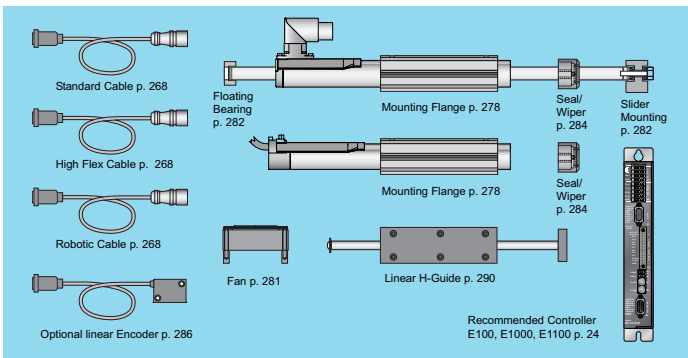


Type	Slider Standard	Slider Type	Art. No.
Standard Type	Slider Standard	PL01-12x420/370	0150-1324
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x420/370	0150-1325
	Hollow Slider Hole Diameter 4.2mm	PL01-12x420/370-L	0150-1394

Connectors

Motor Connector Wiring		Case	
Cable Length:		P01-23...-R	P01-23...-R20
P01-23x160...	1.0m		
P01-23x160...-R20	0.2m		
Ph 1+	red	1	1
Ph 1-	pink	2	6
Ph 2+	blue	3	2
Ph 2-	gray	4	7
+5VDC	white	A	3
GND	inner Shield	B	8
Sine	yellow	C	4
Cosine	green	D	9
Temp.	black	E	5
Shield	outer Shield	Case	Case

Accessoires

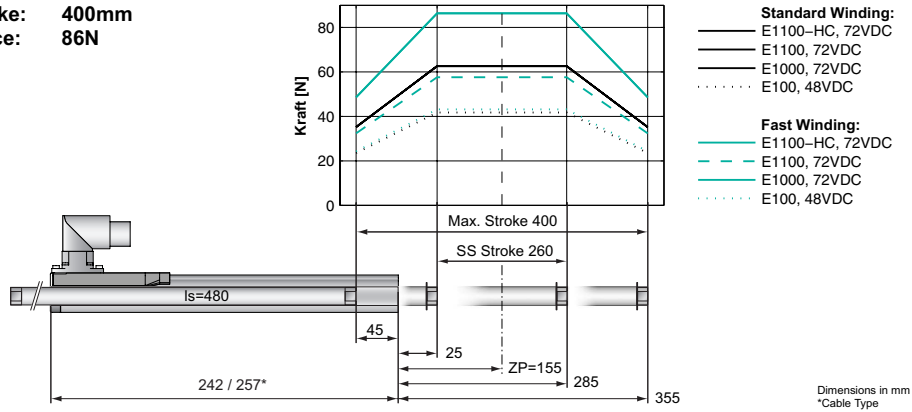


P01-23x160/200x340

P01-23x160/260x400

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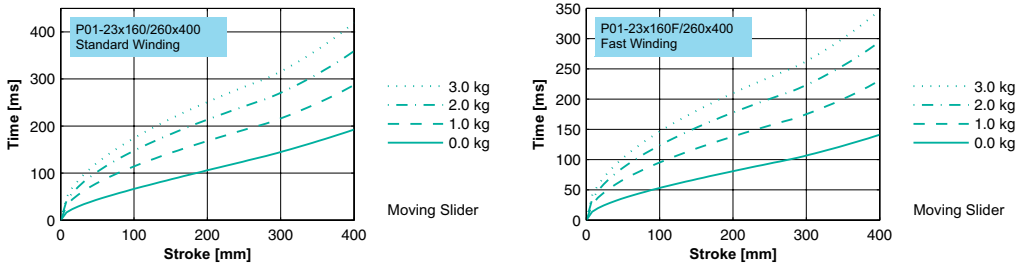
Max. Stroke: 400mm
Peak Force: 86N



Motor Specification

	P01-	Connector Type		Cable Type	
		Standard Winding	Fast Winding	Standard Winding	Fast Winding
		23x160/260x400-R	23x160F/260x400-R	23x160/260x400-R20	23x160F/260x400-R20
Stroke Max.	mm (in)	400 (15.75)	400 (15.75)	400 (15.75)	400 (15.75)
Stroke SS	mm (in)	260 (10.24)	260 (10.24)	260 (10.24)	260 (10.24)
Peak Force E100/1000	N (lbf)	42/63 (9.4/14.1)	43/86 (9.7/19.4)	42/63 (9.4/14.1)	43/86 (9.7/19.4)
Peak Force E1100/-HC	N (lbf)	63/63 (14.1/14.1)	58/86 (12.9/19.4)	63/63 (14.1/14.1)	58/86 (12.9/19.4)
Cont. Force	N (lbf)	17 (3.8)	17 (3.8)	17 (3.8)	17 (3.8)
Cont. Force Fan cooling	N (lbf)	31 (7.0)	31 (7.0)	31 (7.0)	31 (7.0)
Border Force	%	56	56	56	56
Force Constant	N/A (lbf/A)	22.1 (4.96)	14.4 (3.24)	22.1 (4.96)	14.4 (3.24)
Max. Current @ 72VDC	A	2.8	6.0	2.8	6.0
Max. Current @ 48VDC	A	1.9	6.0	1.9	6.0
Max. Velocity @ 72VDC	m/s (in/s)	3.0 (118)	4.6 (181)	3.0 (118)	4.6 (181)
Max. Velocity @ 48VDC	m/s (in/s)	2.0 (79)	3.1 (121)	2.0 (79)	3.1 (121)
Phase Resist. 25/80 °C	Ohm	20.6/24.9	9.0/10.9	20.6/24.9	9.0/10.9
Phase Inductance	mH	2.7	1.2	2.7	1.2
Thermal Resistance	°K/W	3.8	3.8	3.8	3.8
Thermal Time Const.	sec	1800	1800	1800	1800
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	242 (9.53)	242 (9.53)	257 (10.12)	257 (10.12)
Stator Mass	g (lb)	450 (0.99)	450 (0.99)	450 (0.99)	450 (0.99)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	480 (18.90)	480 (18.90)	480 (18.90)	480 (18.90)
Slider Mass	g (lb)	380 (0.84)	380 (0.84)	380 (0.84)	380 (0.84)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.3	±0.3	±0.3	±0.3
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

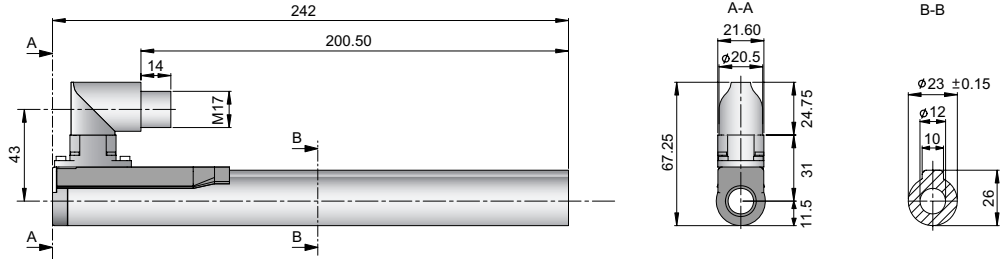


180

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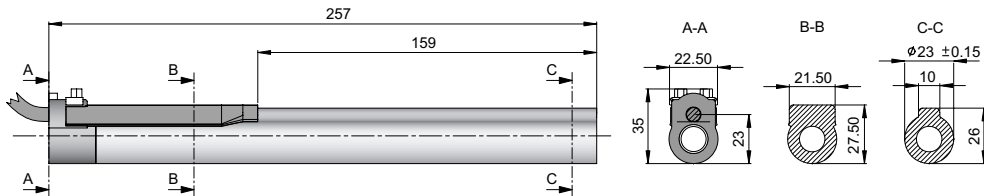
P01-23x160/260x400

Connector Type



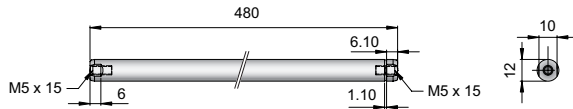
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x160/260x400-R	->	PS01-23x160-R	0150-1234	& PL01-12x480/430	0150-1372
P01-23x160F/260x400-R	->	PS01-23x160F-R	0150-1235	& PL01-12x480/430	0150-1372

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x160/260x400	->	PS01-23x160	0150-1202	& PL01-12x480/430	0150-1372
P01-23x160/260x400-R20	->	PS01-23x160-R20	0150-1242	& PL01-12x480/430	0150-1372
P01-23x160F/260x400-R20	->	PS01-23x160F-R20	0150-1243	& PL01-12x480/430	0150-1372

Slider

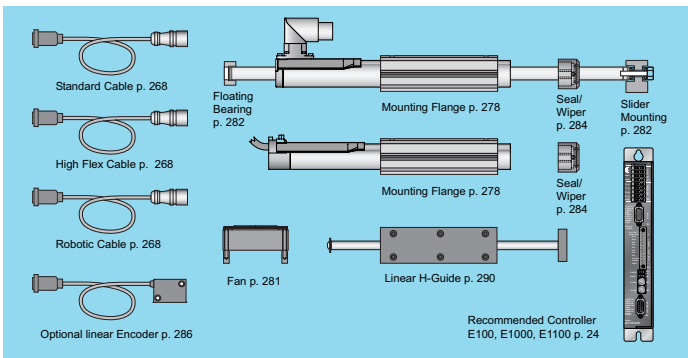


Type	Slider Standard	Slider Heavy Duty	Slider Hollow
Standard Type	Slider Standard	Slider Standard with WC/C-Coating	Hollow Slider
Special Slider	Slider Standard	Slider Heavy Duty	Hollow Slider
	PL01-12x480/430	PL02-12x480/430	PL01-12x480/430-L
	0150-1372	0150-1373	on Request

Connectors

Motor Connector Wiring		Cable Length:		Case	
Wire	Color	P01-23...-R	P01-23...-R20	P01-23...	P01-23...
Ph 1+	red	1	1		
Ph 1-	pink	2	6		
Ph 2+	blue	3	2		
Ph 2-	gray	4	7		
+5VDC	white	A	3		
GND	inner Shield	B	8		
Sine	yellow	C	4		
Cosine	green	D	9		
Temp.	black	E	5		
Shield	outer Shield	Case	Case		

Accessoires

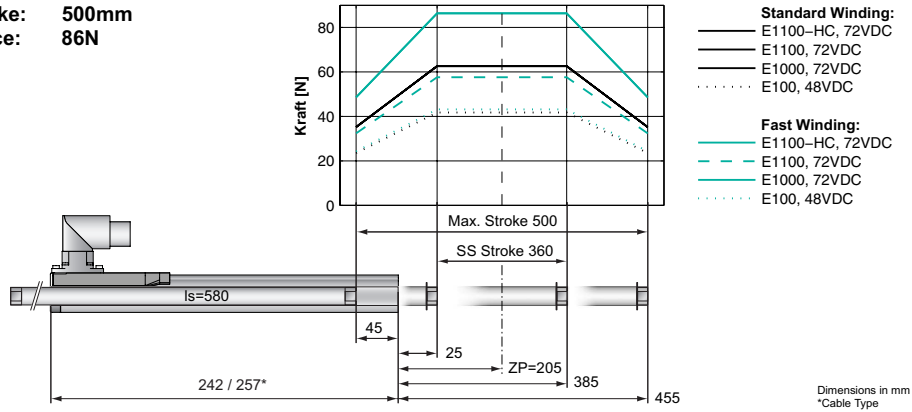


P01-23x160/260x400

P01-23x160/360x500

LinMot®

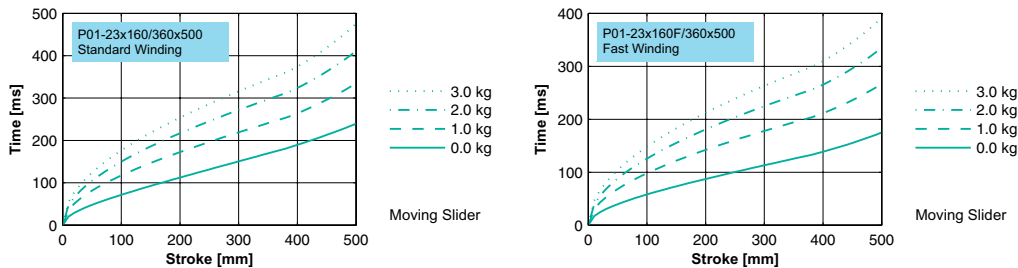
Max. Stroke: 500mm
Peak Force: 86N



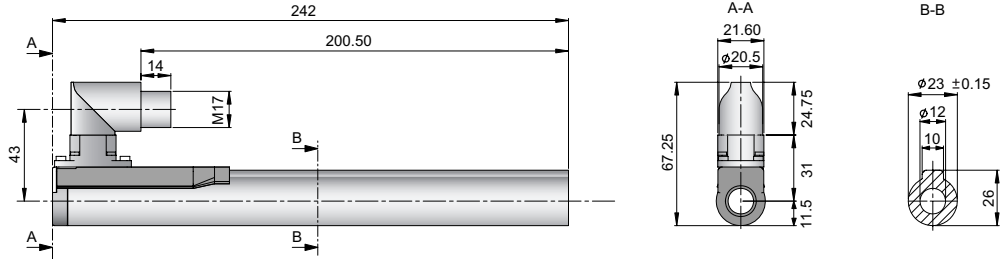
Motor Specification

	P01-	Connector Type		Cable Type	
		Standard Winding	Fast Winding	Standard Winding	Fast Winding
		23x160/360x500-R	23x160F/360x500-R	23x160/360x500-R20	23x160F/360x500-R20
Stroke Max.	mm (in)	500 (19.69)	500 (19.69)	500 (19.69)	500 (19.69)
Stroke SS	mm (in)	360 (14.17)	360 (14.17)	360 (14.17)	360 (14.17)
Peak Force E100/1000	N (lbf)	42/63 (9.4/14.1)	43/86 (9.7/19.4)	42/63 (9.4/14.1)	43/86 (9.7/19.4)
Peak Force E1100-HC	N (lbf)	63/63 (14.1/14.1)	58/86 (12.9/19.4)	63/63 (14.1/14.1)	58/86 (12.9/19.4)
Cont. Force	N (lbf)	17 (3.8)	17 (3.8)	17 (3.8)	17 (3.8)
Cont. Force Fan cooling	N (lbf)	31 (7.0)	31 (7.0)	31 (7.0)	31 (7.0)
Border Force	%	56	56	56	56
Force Constant	N/A (lbf/A)	22.1 (4.96)	14.4 (3.24)	22.1 (4.96)	14.4 (3.24)
Max. Current @ 72VDC	A	2.8	6.0	2.8	6.0
Max. Current @ 48VDC	A	1.9	6.0	1.9	6.0
Max. Velocity @ 72VDC	m/s (in/s)	3.0 (118)	4.6 (181)	3.0 (118)	4.6 (181)
Max. Velocity @ 48VDC	m/s (in/s)	2.0 (79)	3.1 (121)	2.0 (79)	3.1 (121)
Phase Resist. 25/80 °C	Ohm	20.6/24.9	9.0/10.9	20.6/24.9	9.0/10.9
Phase Inductance	mH	2.7	1.2	2.7	1.2
Thermal Resistance	°K/W	3.8	3.8	3.8	3.8
Thermal Time Const.	sec	1800	1800	1800	1800
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	242 (9.53)	242 (9.53)	257 (10.12)	257 (10.12)
Stator Mass	g (lb)	450 (0.99)	450 (0.99)	450 (0.99)	450 (0.99)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	580 (22.83)	580 (22.83)	580 (22.83)	580 (22.83)
Slider Mass	g (lb)	465 (1.03)	465 (1.03)	465 (1.03)	465 (1.03)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.2	±0.2	±0.2	±0.2
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

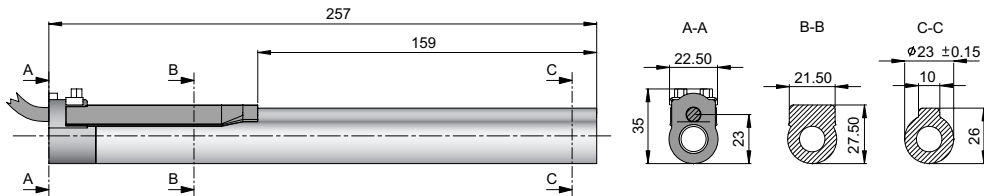


Connector Type



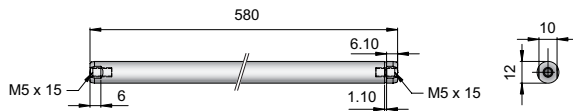
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x160/360x500-R	->	PS01-23x160-R	0150-1234	& PL01-12x580/530	0150-1355
P01-23x160F/360x500-R	->	PS01-23x160F-R	0150-1235	& PL01-12x580/530	0150-1355

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x160/360x500	->	PS01-23x160	0150-1202	& PL01-12x580/530	0150-1355
P01-23x160/360x500-R20	->	PS01-23x160-R20	0150-1242	& PL01-12x580/530	0150-1355
P01-23x160F/360x500-R20	->	PS01-23x160F-R20	0150-1243	& PL01-12x580/530	0150-1355

Slider



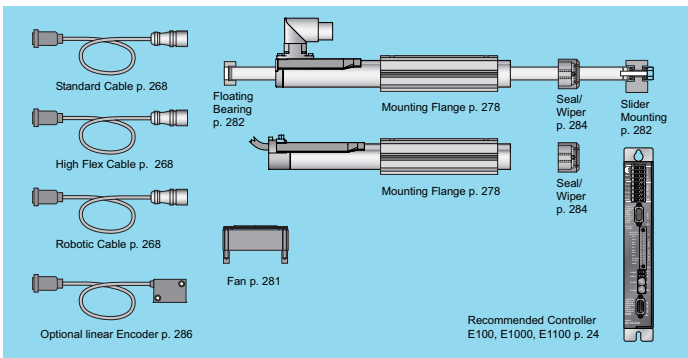
Standard Type	Slider Standard	PL01-12x580/530	0150-1355
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x580/530	0150-1356
	Hollow Slider Hole Diameter 4.2mm	PL01-12x580/530-L	0150-1391

P01-23x160/360x500

Connectors

Motor Connector Wiring		P01-23...-R P01-23...-R20		P01-23...	
Cable Length:					
P01-23x160...	1.0m				
P01-23x160...-R20	0.2m				
Ph 1+	red	1	1		
Ph 1-	pink	2	6		
Ph 2+	blue	3	2		
Ph 2-	gray	4	7		
+5VDC	white	A	3		
GND	inner Shield	B	8		
Sine	yellow	C	4		
Cosine	green	D	9		
Temp.	black	E	5		
Shield	outer Shield	Case	Case		

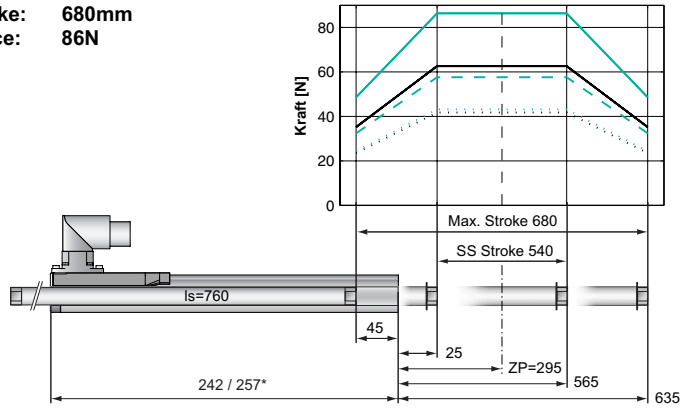
Accessoires



P01-23x160/540x680

LinMot®

Max. Stroke: 680mm
Peak Force: 86N



- Standard Winding:**
 — E1100–HC, 72VDC
 — E1100, 72VDC
 — E1000, 72VDC
 ····· E100, 48VDC
- Fast Winding:**
 — E1100–HC, 72VDC
 - - - E1100, 72VDC
 — E1000, 72VDC
 ····· E100, 48VDC

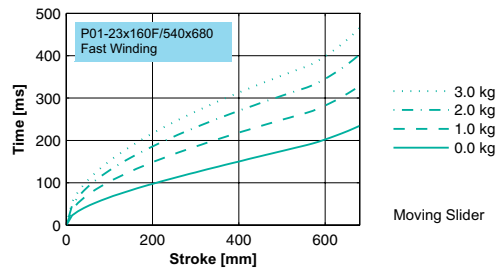
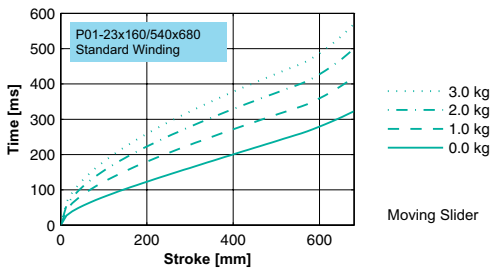
Dimensions in mm
*Cable Type

Motor Specification

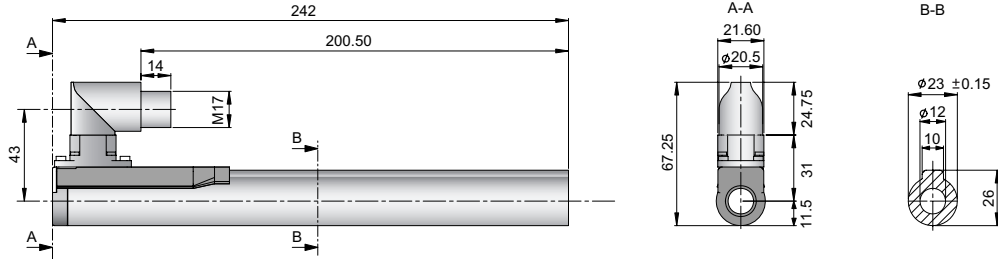
	P01-	Connector Type		Cable Type	
		Standard Winding	Fast Winding	Standard Winding	Fast Winding
		23x160/540x680-R	23x160F/540x680-R	23x160/540x680-R20	23x160F/540x680-R20
Stroke Max.	mm (in)	680 (26.77)	680 (26.77)	680 (26.77)	680 (26.77)
Stroke SS	mm (in)	540 (21.26)	540 (21.26)	540 (21.26)	540 (21.26)
Peak Force E100/1000	N (lbf)	42/63 (9.4/14.1)	43/86 (9.7/19.4)	42/63 (9.4/14.1)	43/86 (9.7/19.4)
Peak Force E1100/HC	N (lbf)	63/63 (14.1/14.1)	58/86 (12.9/19.4)	63/63 (14.1/14.1)	58/86 (12.9/19.4)
Cont. Force	N (lbf)	17 (3.8)	17 (3.8)	17 (3.8)	17 (3.8)
Cont. Force Fan cooling	N (lbf)	31 (7.0)	31 (7.0)	31 (7.0)	31 (7.0)
Border Force	%	56	56	56	56
Force Constant	N/A (lbf/A)	22.1 (4.96)	14.4 (3.24)	22.1 (4.96)	14.4 (3.24)
Max. Current @ 72VDC	A	2.8	6.0	2.8	6.0
Max. Current @ 48VDC	A	1.9	6.0	1.9	6.0
Max. Velocity @ 72VDC	m/s (in/s)	3.0 (118)	4.6 (181)	3.0 (118)	4.6 (181)
Max. Velocity @ 48VDC	m/s (in/s)	2.0 (79)	3.1 (121)	2.0 (79)	3.1 (121)
Phase Resist. 25/80 °C	Ohm	20.6/24.9	9.0/10.9	20.6/24.9	9.0/10.9
Phase Inductance	mH	2.7	1.2	2.7	1.2
Thermal Resistance	°K/W	3.8	3.8	3.8	3.8
Thermal Time Const.	sec	1800	1800	1800	1800
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	242 (9.53)	242 (9.53)	257 (10.12)	257 (10.12)
Stator Mass	g (lb)	450 (0.99)	450 (0.99)	450 (0.99)	450 (0.99)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	760 (29.92)	760 (29.92)	760 (29.92)	760 (29.92)
Slider Mass	g (lb)	615 (1.36)	615 (1.36)	615 (1.36)	615 (1.36)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.2	±0.2	±0.2	±0.2
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-23x160/540x680

Position-Time Diagram

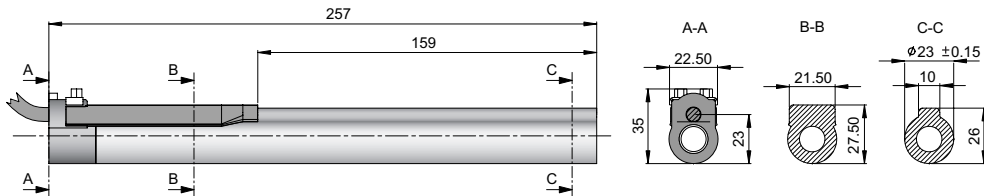


Connector Type



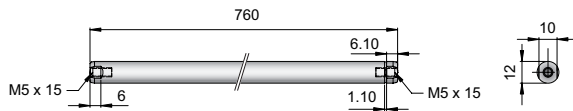
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x160/540x680-R	->	PS01-23x160-R	0150-1234	& PL01-12x760/710	0150-1366
P01-23x160F/540x680-R	->	PS01-23x160F-R	0150-1235	& PL01-12x760/710	0150-1366

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x160/540x680	->	PS01-23x160	0150-1202	& PL01-12x760/710	0150-1366
P01-23x160/540x680-R20	->	PS01-23x160-R20	0150-1242	& PL01-12x760/710	0150-1366
P01-23x160F/540x680-R20	->	PS01-23x160F-R20	0150-1243	& PL01-12x760/710	0150-1366

Slider

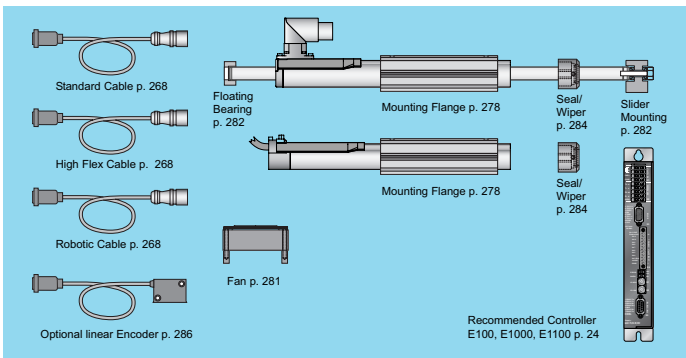


Standard Type	Slider Standard	PL01-12x760/710	0150-1366
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x760/710	on Request
	Hollow Slider Hole Diameter 4.2mm	PL01-12x760/710-L	0150-1392

Connectors

Motor Connector Wiring		P01-23...-R		P01-23...-R20		P01-23...	
Cable Length:							
P01-23x160...	1.0m						
P01-23x160...-R20	0.2m						
Ph 1+	red	1	1				
Ph 1-	pink	2	6				
Ph 2+	blue	3	2				
Ph 2-	gray	4	7				
+5VDC	white	A	3				
GND	inner Shield	B	8				
Sine	yellow	C	4				
Cosine	green	D	9				
Temp.	black	E	5				
Shield	outer Shield	Case	Case				

Accessoires

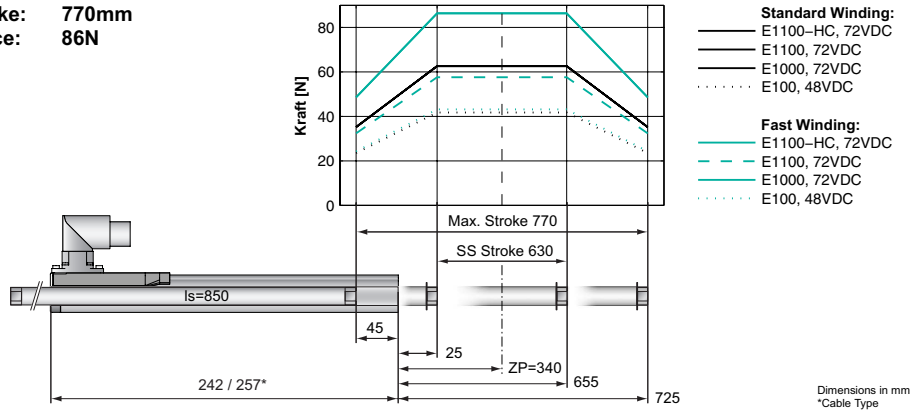


P01-23x160/540x680

P01-23x160/630x770

LinMot®

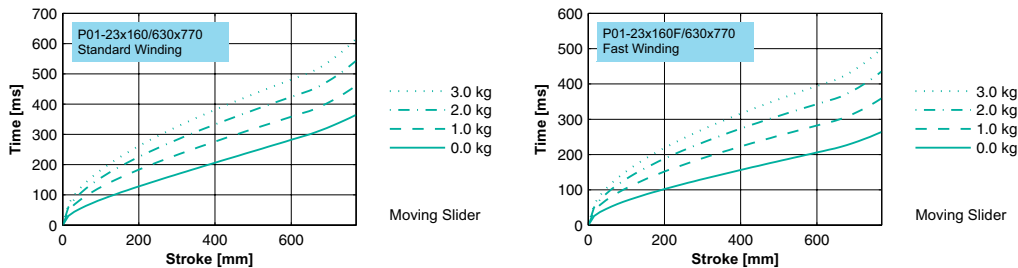
Max. Stroke: 770mm
Peak Force: 86N



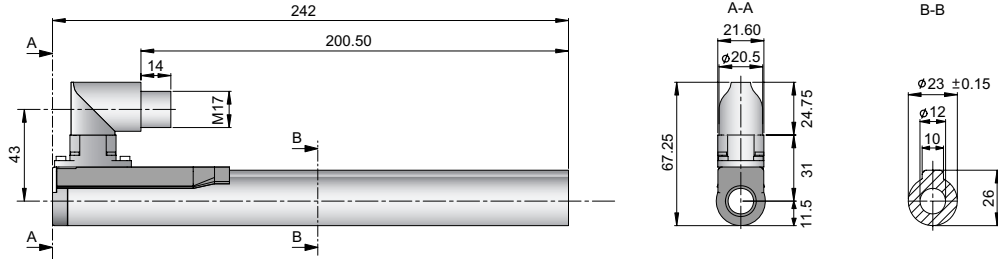
Motor Specification

	Connector Type	Cable Type	
		Standard Winding	Fast Winding
	P01-23x160/630x770-R	23x160F/630x770-R	23x160/630x770-R20
Stroke Max.	mm (in)	770 (30.31)	770 (30.31)
Stroke SS	mm (in)	630 (24.80)	630 (24.80)
Peak Force E100/1000	N (lbf)	42/63 (9.4/14.1)	43/86 (9.7/19.4)
Peak Force E1100-HC	N (lbf)	63/63 (14.1/14.1)	63/63 (14.1/14.1)
Cont. Force	N (lbf)	17 (3.8)	17 (3.8)
Cont. Force Fan cooling	N (lbf)	31 (7.0)	31 (7.0)
Border Force	%	56	56
Force Constant	N/A (lbf/A)	22.1 (4.96)	14.4 (3.24)
Max. Current @ 72VDC	A	2.8	6.0
Max. Current @ 48VDC	A	1.9	6.0
Max. Velocity @ 72VDC	m/s (in/s)	3.0 (118)	4.6 (181)
Max. Velocity @ 48VDC	m/s (in/s)	2.0 (79)	3.1 (121)
Phase Resist. 25/80 °C	Ohm	20.6/24.9	9.0/10.9
Phase Inductance	mH	2.7	1.2
Thermal Resistance	°K/W	3.8	3.8
Thermal Time Const.	sec	1800	1800
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	242 (9.53)	257 (10.12)
Stator Mass	g (lb)	450 (0.99)	450 (0.99)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	850 (33.46)	850 (33.46)
Slider Mass	g (lb)	690 (1.52)	690 (1.52)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.2	±0.2
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

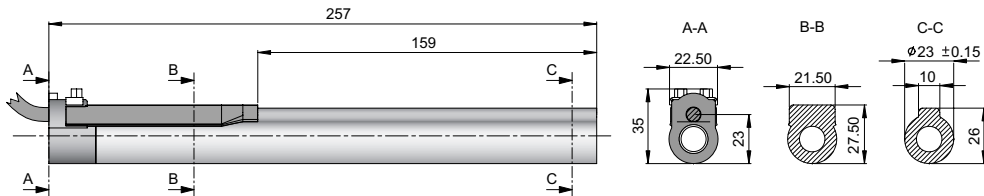


Connector Type



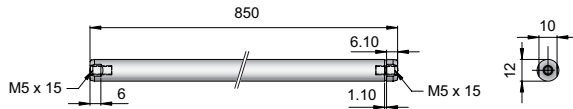
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x160/630x770-R	->	PS01-23x160-R	0150-1234	& PL01-12x850/800	0150-1365
P01-23x160F/630x770-R	->	PS01-23x160F-R	0150-1235	& PL01-12x850/800	0150-1365

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-23x160/630x770	->	PS01-23x160	0150-1202	& PL01-12x850/800	0150-1365
P01-23x160/630x770-R20	->	PS01-23x160-R20	0150-1242	& PL01-12x850/800	0150-1365
P01-23x160F/630x770-R20	->	PS01-23x160F-R20	0150-1243	& PL01-12x850/800	0150-1365

Slider

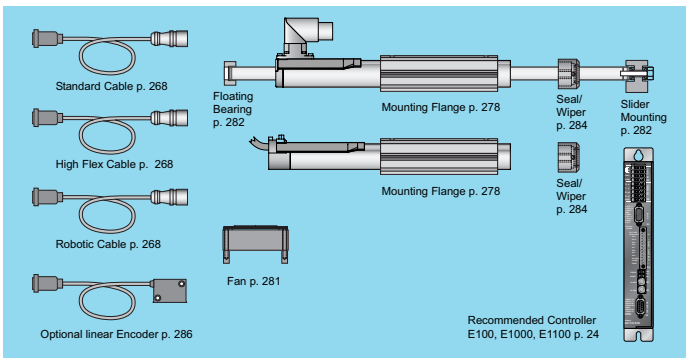


Standard Type	Slider Standard	PL01-12x850/800	0150-1365
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-12x850/800	on Request
	Hollow Slider Hole Diameter 4.2mm	PL01-12x850/800-L	on Request

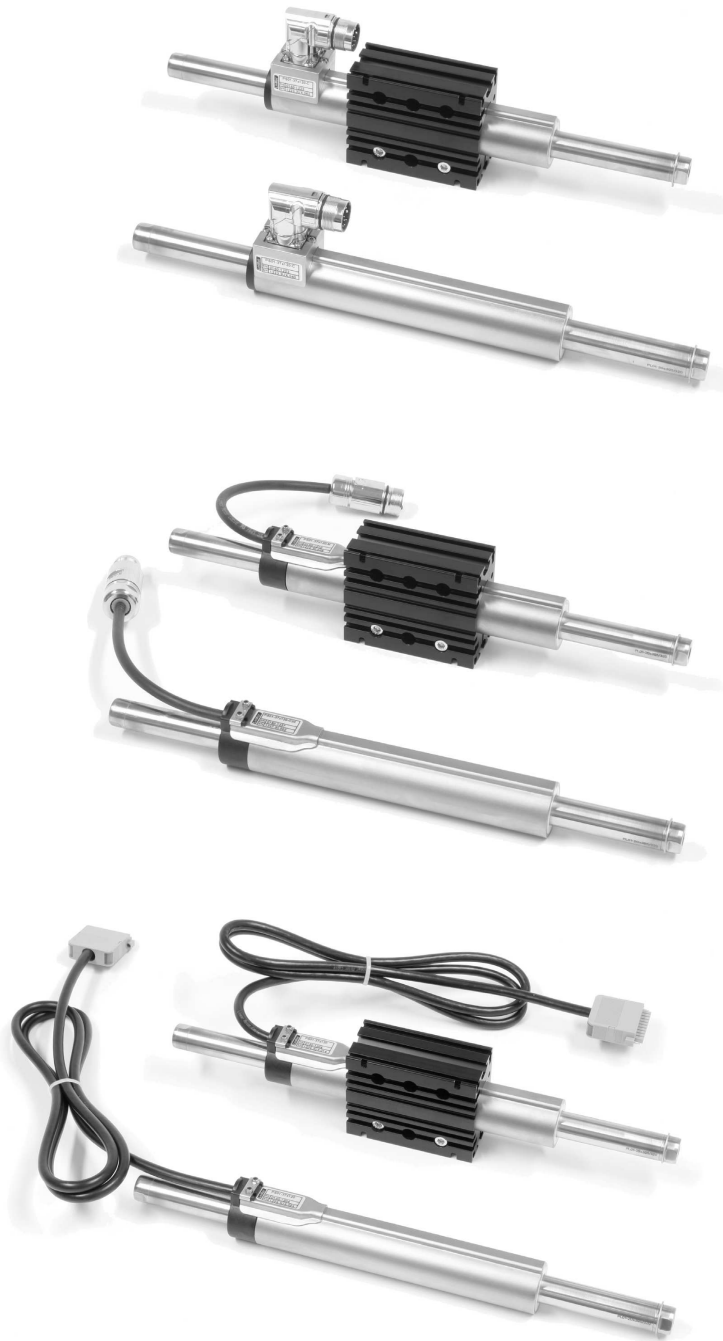
Connectors

Motor Connector Wiring		P01-23...-R P01-23...-R20		P01-23...	
Cable Length:					
P01-23x160...	1.0m				
P01-23x160...-R20	0.2m				
Ph 1+	red	1	1		
Ph 1-	pink	2	6		
Ph 2+	blue	3	2		
Ph 2-	gray	4	7		
+5VDC	white	A	3		
GND	inner Shield	B	8		
Sine	yellow	C	4		
Cosine	green	D	9		
Temp.	black	E	5		
Shield	outer Shield	Case	Case		

Accessoires



P01-23x160/630x770

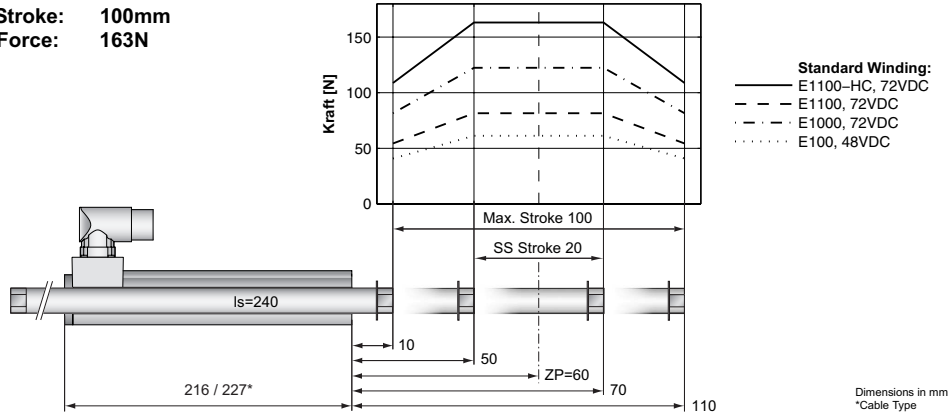


P01-37x120/20x100	190
P01-37x120/80x160	192
P01-37x120/180x260	194
P01-37x120/280x360	196
P01-37x120/380x460	198
P01-37x120/480x560	200
P01-37x120/580x660	202
P01-37x120/680x760	204
P01-37x120/780x860	206
P01-37x120/980x1060	208
P01-37x120/1180x1260	210
P01-37x120/1380x1460	212

P01-37x120/20x100

LinMot®

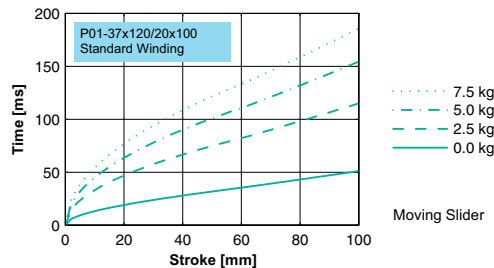
Max. Stroke: 100mm
Peak Force: 163N



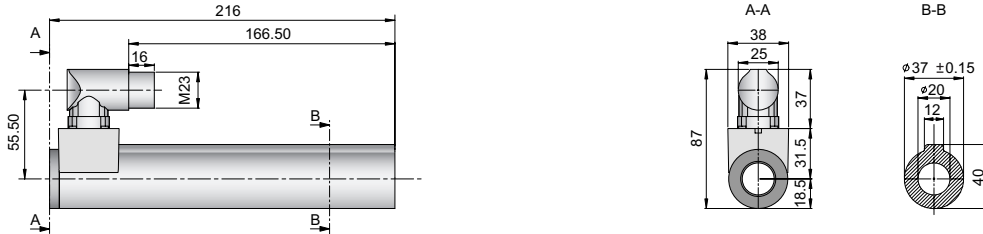
Motor Specification

P01-	Connector Type		Cable Type	
	37x120/20x100-C		37x120/20x100 37x120/20x100-C20	
Stroke Max.	mm (in)	100 (3.94)	100 (3.94)	100 (3.94)
Stroke SS	mm (in)	20 (0.79)	20 (0.79)	20 (0.79)
Peak Force E100/1000	N (lbf)	61/122 (13.8/27.5)	61/122 (13.8/27.5)	61/122 (13.8/27.5)
Peak Force E1100-HC	N (lbf)	82/163 (18.3/36.7)	82/163 (18.3/36.7)	82/163 (18.3/36.7)
Cont. Force	N (lbf)	30 (6.7)	30 (6.7)	30 (6.7)
Cont. Force Fan cooling	N (lbf)	54 (12.1)	54 (12.1)	54 (12.1)
Border Force	%	67	67	67
Force Constant	N/A (lbf/A)	20.4 (4.59)	20.4 (4.59)	20.4 (4.59)
Max. Current @ 72VDC	A	8.0	8.0	8.0
Max. Current @ 48VDC	A	6.0	6.0	6.0
Max. Velocity @ 72VDC	m/s (in/s)	3.2 (128)	3.2 (128)	3.2 (128)
Max. Velocity @ 48VDC	m/s (in/s)	2.2 (85)	2.2 (85)	2.2 (85)
Phase Resist. 25/80 °C	Ohm	6.2/7.5	6.2/7.5	6.2/7.5
Phase Inductance	mH	3.5	3.5	3.5
Thermal Resistance	°K/W	3.6	3.6	3.6
Thermal Time Const.	sec	2800	2800	2800
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)	37 (1.46)
Stator Length	mm (in)	216 (8.50)	227 (8.94)	227 (8.94)
Stator Mass	g (lb)	740 (1.63)	740 (1.63)	740 (1.63)
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)	20 (0.79)
Slider Length	mm (in)	240 (9.45)	240 (9.45)	240 (9.45)
Slider Mass	g (lb)	460 (1.01)	460 (1.01)	460 (1.01)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.4	±0.4	±0.4
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

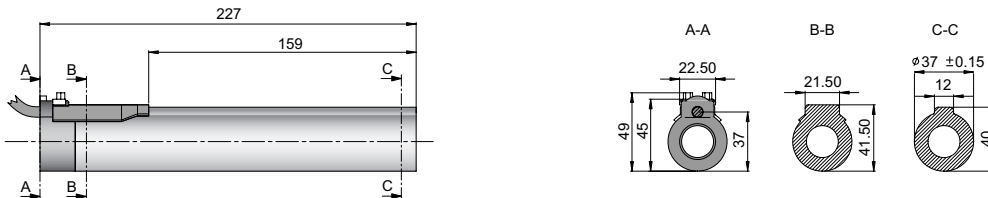


Connector Type



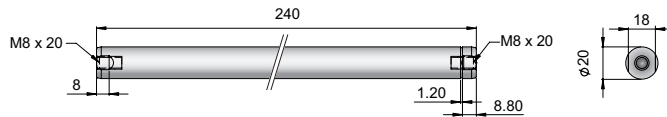
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/20x100-C	->	PS01-37x120-C	0150-1223	& PL01-20x240/160	0150-1346

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/20x100	->	PS01-37x120	0150-1204	& PL01-20x240/160	0150-1346
P01-37x120/20x100-C20	->	PS01-37x120-C20	0150-1237	& PL01-20x240/160	0150-1346

Slider

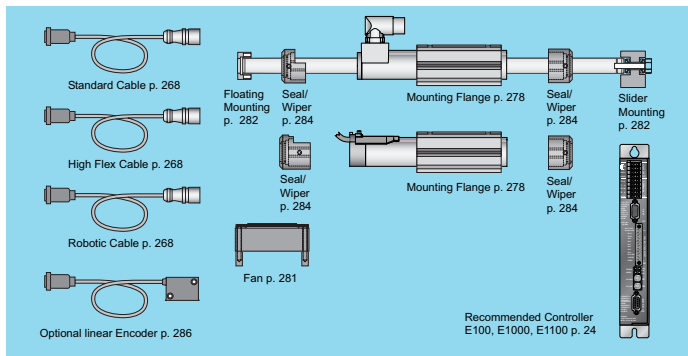


Standard Type	Slider Standard	PL01-20x240/160	0150-1346
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x240/160	0150-1347
	Hollow Slider Hole Diameter 6.5mm	PL01-20x240/160-L	0150-1350
	High Clearance Slider d=19mm, m=415g	PL01-19x240/160	0150-1448

Connectors

Motor Connector Wiring		Cable Length:		P01-37...-C		P01-37...-C20		P01-37...	
Ph 1+	red	A	1	1.5m					
Ph 1-	pink	B	2						
Ph 2+	blue	C	3	0.2m					
Ph 2-	gray	D	4						
+5VDC	white	E	5						
GND	inner Shield	F	6						
Sine	yellow	G	7						
Cosine	green	H	8						
Temp.	black	L	9						
Shield	outer Shield	Case	10						

Accessoires

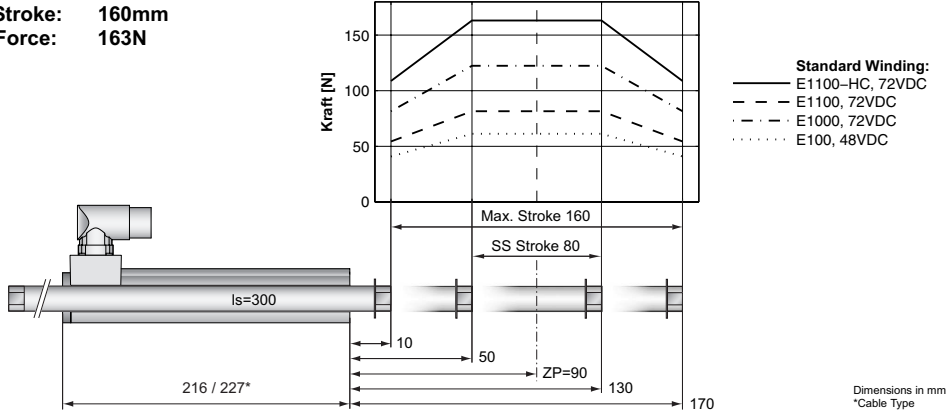


P01-37x120/20x100

P01-37x120/80x160



Max. Stroke: 160mm
Peak Force: 163N

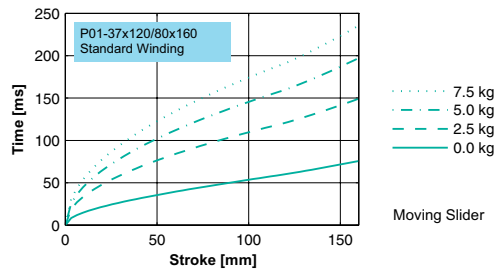


Motor Specification

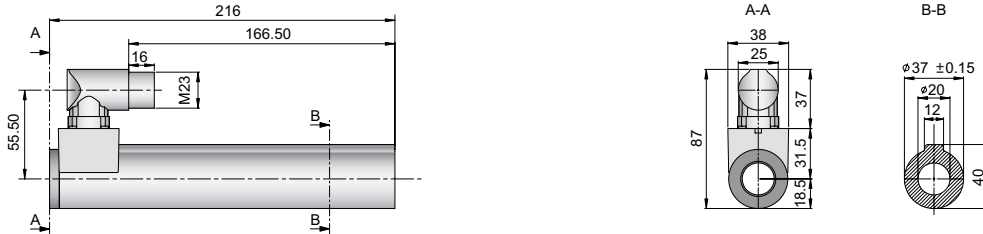
P01-	Connector Type		Cable Type	
	37x120/80x160-C		37x120/80x160 37x120/80x160-C20	
Stroke Max.	mm (in)	160 (6.30)	160 (6.30)	160 (6.30)
Stroke SS	mm (in)	80 (3.15)	80 (3.15)	80 (3.15)
Peak Force E100/1000	N (lbf)	61/122 (13.8/27.5)	61/122 (13.8/27.5)	61/122 (13.8/27.5)
Peak Force E1100-HC	N (lbf)	82/163 (18.3/36.7)	82/163 (18.3/36.7)	82/163 (18.3/36.7)
Cont. Force	N (lbf)	30 (6.7)	30 (6.7)	30 (6.7)
Cont. Force Fan cooling	N (lbf)	54 (12.1)	54 (12.1)	54 (12.1)
Border Force	%	67	67	67
Force Constant	N/A (lbf/A)	20.4 (4.59)	20.4 (4.59)	20.4 (4.59)
Max. Current @ 72VDC	A	8.0	8.0	8.0
Max. Current @ 48VDC	A	6.0	6.0	6.0
Max. Velocity @ 72VDC	m/s (in/s)	3.2 (128)	3.2 (128)	3.2 (128)
Max. Velocity @ 48VDC	m/s (in/s)	2.2 (85)	2.2 (85)	2.2 (85)
Phase Resist. 25/80 °C	Ohm	6.2/7.5	6.2/7.5	6.2/7.5
Phase Inductance	mH	3.5	3.5	3.5
Thermal Resistance	°K/W	3.6	3.6	3.6
Thermal Time Const.	sec	2800	2800	2800
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)	37 (1.46)
Stator Length	mm (in)	216 (8.50)	227 (8.94)	227 (8.94)
Stator Mass	g (lb)	740 (1.63)	740 (1.63)	740 (1.63)
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)	20 (0.79)
Slider Length	mm (in)	300 (11.81)	300 (11.81)	300 (11.81)
Slider Mass	g (lb)	599 (1.32)	599 (1.32)	599 (1.32)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.3	±0.3	±0.3
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-37x120/80x160

Position-Time Diagram

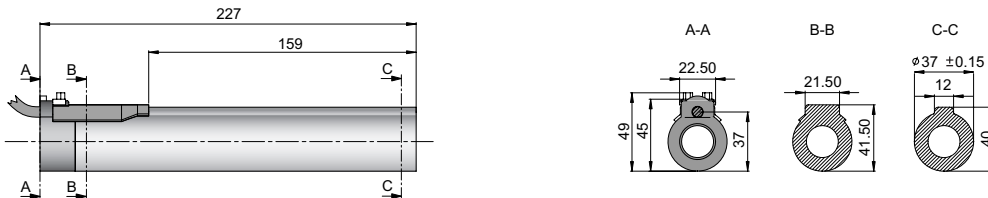


Connector Type



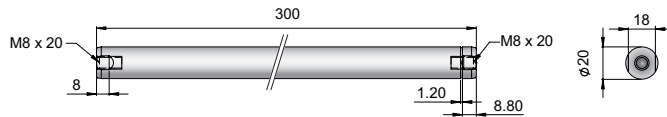
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/80x160-C	->	PS01-37x120-C	0150-1223	& PL01-20x300/220	0150-1348

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/80x160	->	PS01-37x120	0150-1204	& PL01-20x300/220	0150-1348
P01-37x120/80x160-C20	->	PS01-37x120-C20	0150-1237	& PL01-20x300/220	0150-1348

Slider

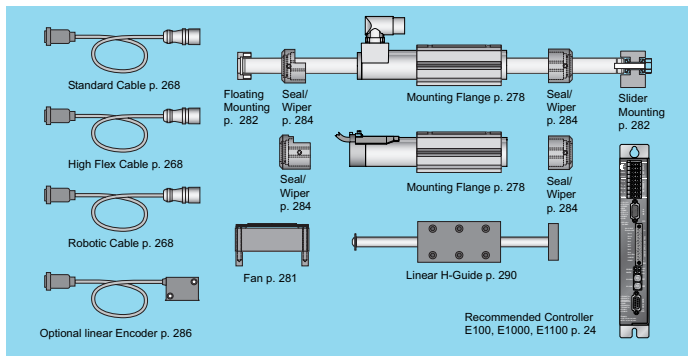


Standard Type	Slider Standard	PL01-20x300/220	0150-1348
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x300/220	0150-1349
	Hollow Slider Hole Diameter 6.5mm	PL01-20x300/220-L	0150-1351
	High Clearance Slider d=19mm, m=541g	PL01-19x300/220	0150-1449

Connectors

Motor Connector Wiring		Cable Length:	P01-37...-C P01-37...-C20	P01-37...
P01-37x120...	1.5m			
P01-37x120...-C20	0.2m			
Ph 1+	red	A	1	
Ph 1-	pink	B	2	
Ph 2+	blue	C	3	
Ph 2-	gray	D	4	
+5VDC	white	E	5	
GND	inner Shield	F	6	
Sine	yellow	G	7	
Cosine	green	H	8	
Temp.	black	L	9	
Shield	outer Shield	Case	10	

Accessoires

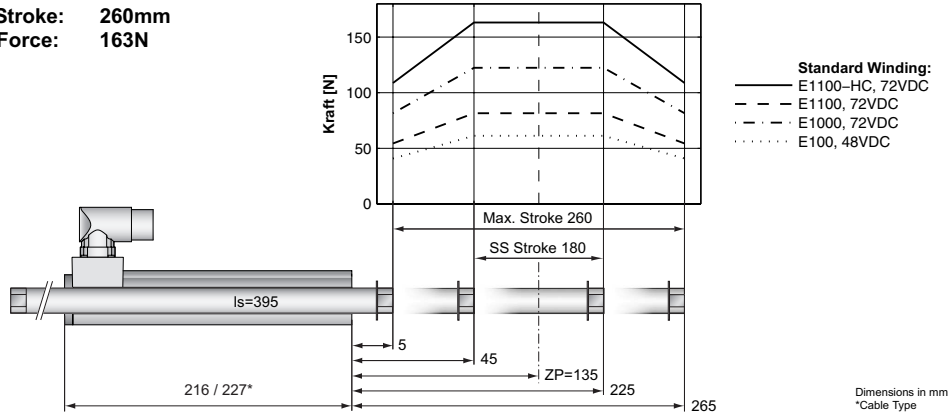


P01-37x120/80x160

P01-37x120/180x260

LinMot®

Max. Stroke: 260mm
Peak Force: 163N



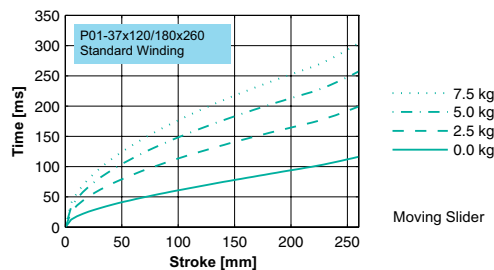
Dimensions in mm
*Cable Type

Motor Specification

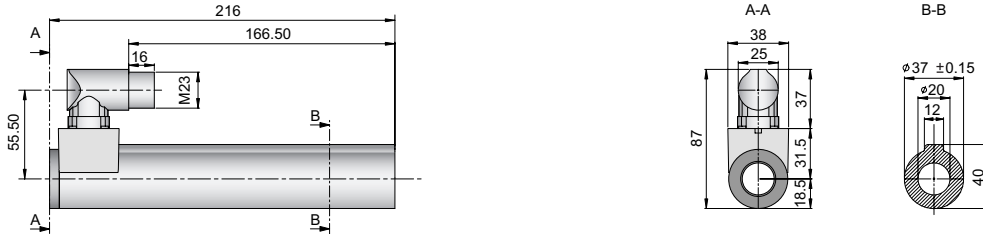
P01-		Connector Type		Cable Type	
		37x120/180x260-C		37x120/180x260 37x120/180x260-C20	
Stroke Max.	mm (in)	260 (10.24)		260 (10.24)	
Stroke SS	mm (in)	180 (7.09)		180 (7.09)	
Peak Force E100/1000	N (lbf)	61/122 (13.8/27.5)		61/122 (13.8/27.5)	
Peak Force E1100-HC	N (lbf)	82/163 (18.3/36.7)		82/163 (18.3/36.7)	
Cont. Force	N (lbf)	30 (6.7)		30 (6.7)	
Cont. Force Fan cooling	N (lbf)	54 (12.1)		54 (12.1)	
Border Force	%	67		67	
Force Constant	N/A (lbf/A)	20.4 (4.59)		20.4 (4.59)	
Max. Current @ 72VDC	A	8.0		8.0	
Max. Current @ 48VDC	A	6.0		6.0	
Max. Velocity @ 72VDC	m/s (in/s)	3.2 (128)		3.2 (128)	
Max. Velocity @ 48VDC	m/s (in/s)	2.2 (85)		2.2 (85)	
Phase Resist. 25/80 °C	Ohm	6.2/7.5		6.2/7.5	
Phase Inductance	mH	3.5		3.5	
Thermal Resistance	°K/W	3.6		3.6	
Thermal Time Const.	sec	2800		2800	
Stator Diameter	mm (in)	37 (1.46)		37 (1.46)	
Stator Length	mm (in)	216 (8.50)		227 (8.94)	
Stator Mass	g (lb)	740 (1.63)		740 (1.63)	
Slider Diameter	mm (in)	20 (0.79)		20 (0.79)	
Slider Length	mm (in)	395 (15.55)		395 (15.55)	
Slider Mass	g (lb)	829 (1.83)		829 (1.83)	
Position Repeatability	mm (in)	±0.05 (±0.0020)		±0.05 (±0.0020)	
Linearity	%	±0.2		±0.2	
Position Rep. with ES	mm (in)	±0.01 (±0.0004)		±0.01 (±0.0004)	
Linearity with ES	mm (in)	±0.01 (±0.0004)		±0.01 (±0.0004)	

P01-37x120/180x260

Position-Time Diagram

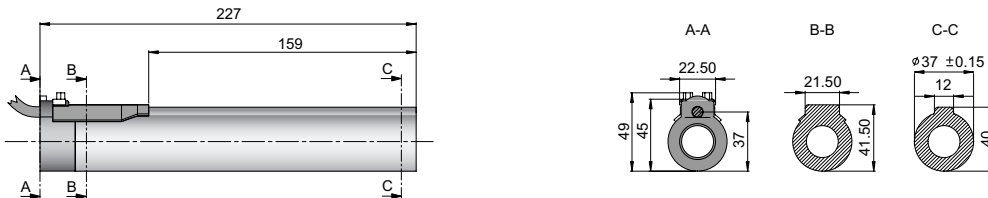


Connector Type



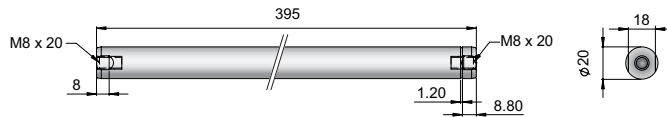
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/180x260-C	->	PS01-37x120-C	0150-1223	& PL01-20x395/320	0150-1318

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/180x260	->	PS01-37x120	0150-1204	& PL01-20x395/320	0150-1318
P01-37x120/180x260-C20	->	PS01-37x120-C20	0150-1237	& PL01-20x395/320	0150-1318

Slider

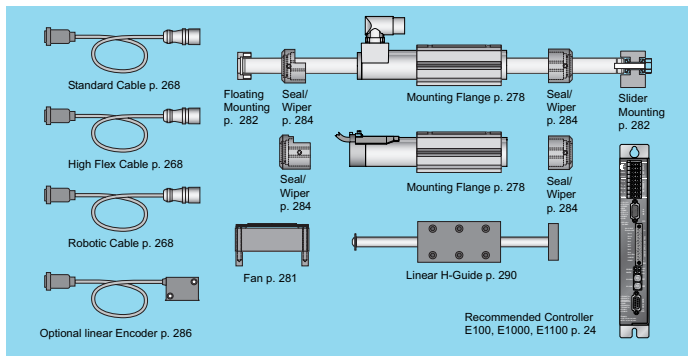


Standard Type	Slider Standard	PL01-20x395/320	0150-1318
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x395/320	0150-1319
	Hollow Slider Hole Diameter 6.5mm	PL01-20x395/320-L	0150-1354
	High Clearance Slider d=19mm, m=748g	PL01-19x395/320	0150-1452

Connectors

Motor Connector Wiring		Cable Length:	P01-37...-C P01-37...-C20	P01-37...
P01-37x120...	1.5m			
P01-37x120...-C20	0.2m			
Ph 1+	red	A	1	
Ph 1-	pink	B	2	
Ph 2+	blue	C	3	
Ph 2-	gray	D	4	
+5VDC	white	E	5	
GND	inner Shield	F	6	
Sine	yellow	G	7	
Cosine	green	H	8	
Temp.	black	L	9	
Shield	outer Shield	Case	10	

Accessoires

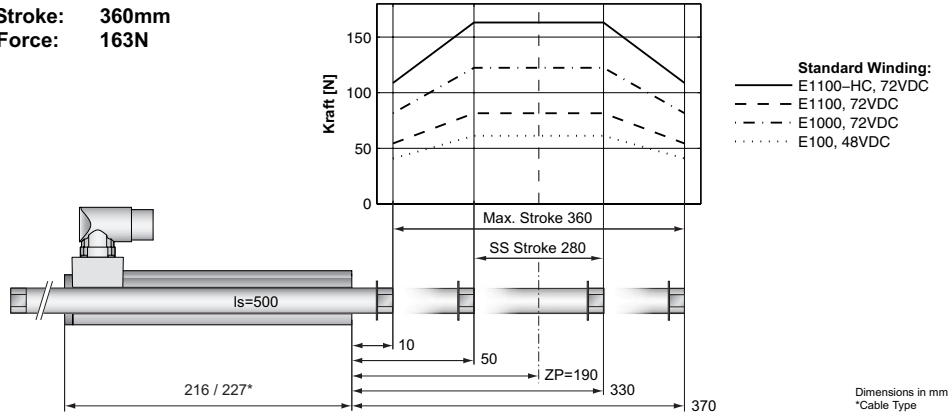


P01-37x120/180x260

P01-37x120/280x360

LinMot®

Max. Stroke: 360mm
Peak Force: 163N



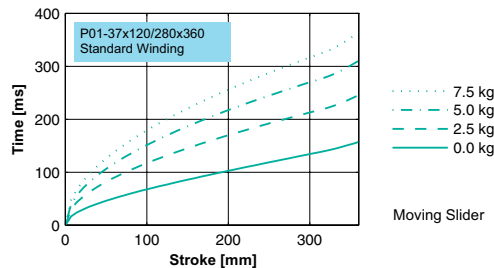
Dimensions in mm
*Cable Type

Motor Specification

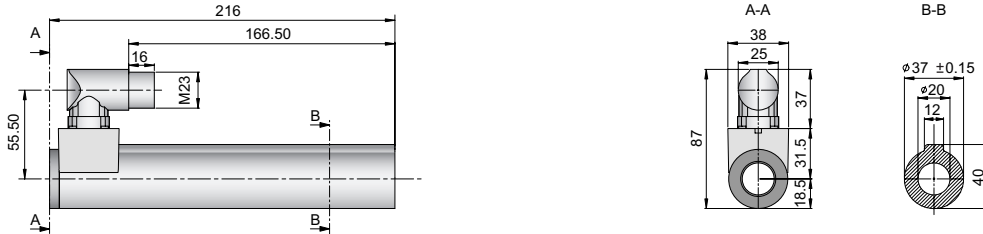
P01-		Connector Type		Cable Type	
		37x120/280x360-C		37x120/280x360 37x120/280x360-C20	
Stroke Max.	mm (in)	360 (14.17)		360 (14.17)	
Stroke SS	mm (in)	280 (11.02)		280 (11.02)	
Peak Force E100/1000	N (lbf)	61/122 (13.8/27.5)		61/122 (13.8/27.5)	
Peak Force E1100/-HC	N (lbf)	82/163 (18.3/36.7)		82/163 (18.3/36.7)	
Cont. Force	N (lbf)	30 (6.7)		30 (6.7)	
Cont. Force Fan cooling	N (lbf)	54 (12.1)		54 (12.1)	
Border Force	%	67		67	
Force Constant	N/A (lbf/A)	20.4 (4.59)		20.4 (4.59)	
Max. Current @ 72VDC	A	8.0		8.0	
Max. Current @ 48VDC	A	6.0		6.0	
Max. Velocity @ 72VDC	m/s (in/s)	3.2 (128)		3.2 (128)	
Max. Velocity @ 48VDC	m/s (in/s)	2.2 (85)		2.2 (85)	
Phase Resist. 25/80 °C	Ohm	6.2/7.5		6.2/7.5	
Phase Inductance	mH	3.5		3.5	
Thermal Resistance	°K/W	3.6		3.6	
Thermal Time Const.	sec	2800		2800	
Stator Diameter	mm (in)	37 (1.46)		37 (1.46)	
Stator Length	mm (in)	216 (8.50)		227 (8.94)	
Stator Mass	g (lb)	740 (1.63)		740 (1.63)	
Slider Diameter	mm (in)	20 (0.79)		20 (0.79)	
Slider Length	mm (in)	500 (19.69)		500 (19.69)	
Slider Mass	g (lb)	1064 (2.35)		1064 (2.35)	
Position Repeatability	mm (in)	±0.05 (±0.0020)		±0.05 (±0.0020)	
Linearity	%	±0.2		±0.2	
Position Rep. with ES	mm (in)	±0.01 (±0.0004)		±0.01 (±0.0004)	
Linearity with ES	mm (in)	±0.01 (±0.0004)		±0.01 (±0.0004)	

P01-37x120/280x360

Position-Time Diagram

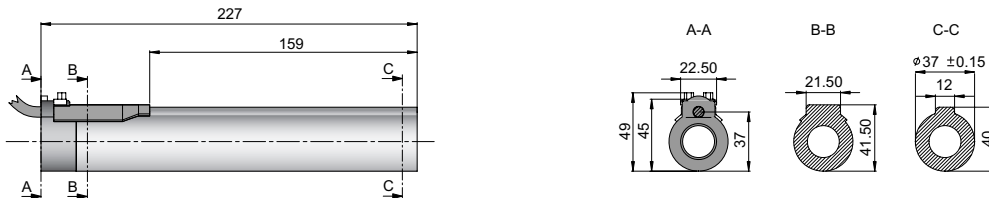


Connector Type



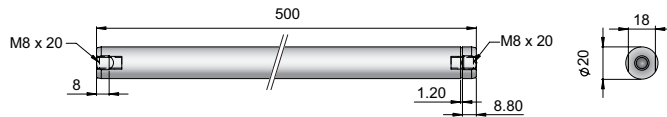
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/280x360-C	->	PS01-37x120-C	0150-1223	& PL01-20x500/420	0150-1328

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/280x360	->	PS01-37x120	0150-1204	& PL01-20x500/420	0150-1328
P01-37x120/280x360-C20	->	PS01-37x120-C20	0150-1237	& PL01-20x500/420	0150-1328

Slider

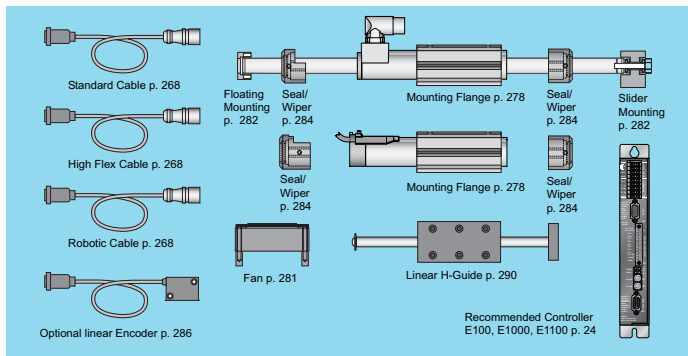


Standard Type	Slider Standard	PL01-20x500/420	0150-1328
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x500/420	0150-1329
	Hollow Slider Hole Diameter 6.5mm	PL01-20x500/420-L	0150-1358
	High Clearance Slider d=19mm, m=960g	PL01-19x500/420	0150-1455

Connectors

Motor Connector Wiring		Cable Length:		P01-37...-C		P01-37...-C20		P01-37...	
Ph 1+	red	A	1						
Ph 1-	pink	B	2						
Ph 2+	blue	C	3						
Ph 2-	gray	D	4						
+5VDC	white	E	5						
GND	inner Shield	F	6						
Sine	yellow	G	7						
Cosine	green	H	8						
Temp.	black	L	9						
Shield	outer Shield	Case	10						

Accessoires

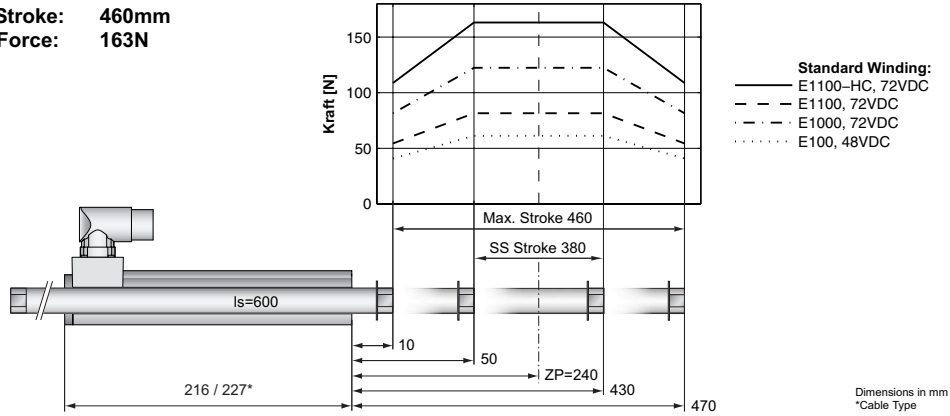


P01-37x120/280x360

P01-37x120/380x460

LinMot®

Max. Stroke: 460mm
Peak Force: 163N



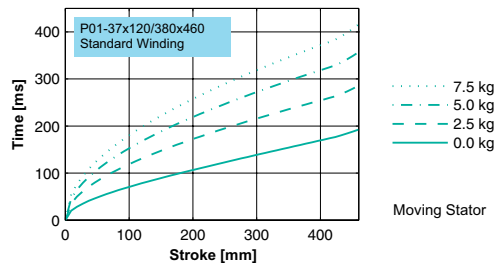
Dimensions in mm
*Cable Type

Motor Specification

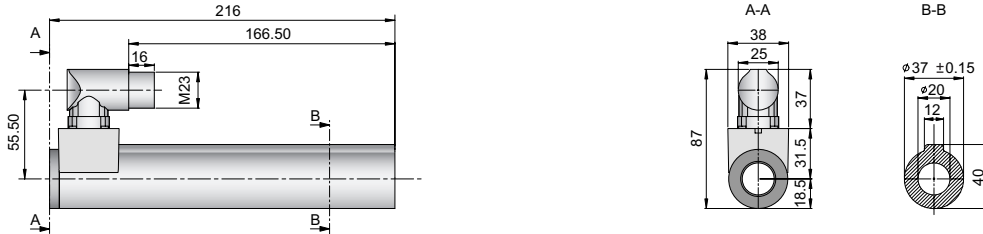
P01-	Connector Type		Cable Type	
	37x120/380x460-C		37x120/380x460 37x120/380x460-C20	
Stroke Max.	mm (in)	460 (18.11)	460 (18.11)	460 (18.11)
Stroke SS	mm (in)	380 (14.96)	380 (14.96)	380 (14.96)
Peak Force E100/1000	N (lbf)	61/122 (13.8/27.5)	61/122 (13.8/27.5)	61/122 (13.8/27.5)
Peak Force E1100/-HC	N (lbf)	82/163 (18.3/36.7)	82/163 (18.3/36.7)	82/163 (18.3/36.7)
Cont. Force	N (lbf)	30 (6.7)	30 (6.7)	30 (6.7)
Cont. Force Fan cooling	N (lbf)	54 (12.1)	54 (12.1)	54 (12.1)
Border Force	%	67	67	67
Force Constant	N/A (lbf/A)	20.4 (4.59)	20.4 (4.59)	20.4 (4.59)
Max. Current @ 72VDC	A	8.0	8.0	8.0
Max. Current @ 48VDC	A	6.0	6.0	6.0
Max. Velocity @ 72VDC	m/s (in/s)	3.2 (128)	3.2 (128)	3.2 (128)
Max. Velocity @ 48VDC	m/s (in/s)	2.2 (85)	2.2 (85)	2.2 (85)
Phase Resist. 25/80 °C	Ohm	6.2/7.5	6.2/7.5	6.2/7.5
Phase Inductance	mH	3.5	3.5	3.5
Thermal Resistance	°K/W	3.6	3.6	3.6
Thermal Time Const.	sec	2800	2800	2800
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)	37 (1.46)
Stator Length	mm (in)	216 (8.50)	227 (8.94)	227 (8.94)
Stator Mass	g (lb)	740 (1.63)	740 (1.63)	740 (1.63)
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)	20 (0.79)
Slider Length	mm (in)	600 (23.62)	600 (23.62)	600 (23.62)
Slider Mass	g (lb)	1297 (2.86)	1297 (2.86)	1297 (2.86)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-37x120/380x460

Position-Time Diagram

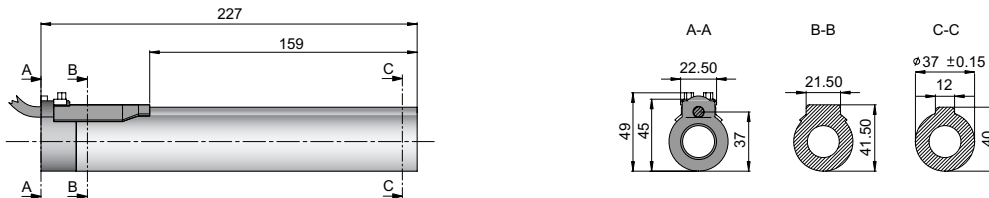


Connector Type



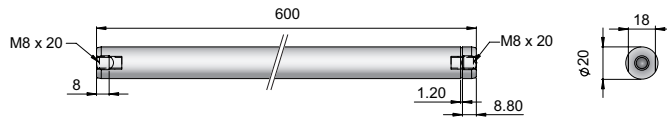
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/380x460-C	->	PS01-37x120-C	0150-1223	& PL01-20x600/520	0150-1330

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/380x460	->	PS01-37x120	0150-1204	& PL01-20x600/520	0150-1330
P01-37x120/380x460-C20	->	PS01-37x120-C20	0150-1237	& PL01-20x600/520	0150-1330

Slider

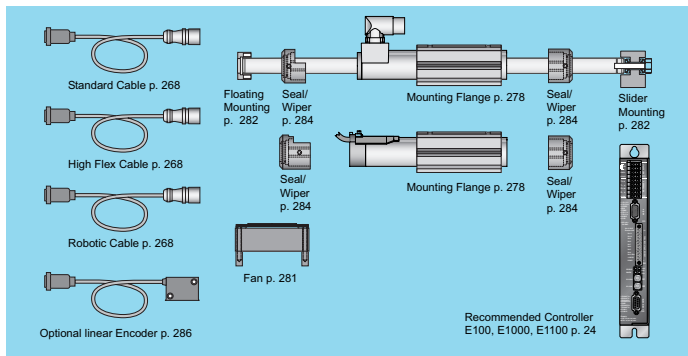


Standard Type	Slider Standard	PL01-20x600/520	0150-1330
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x600/520	0150-1331
	Hollow Slider Hole Diameter 6.5mm	PL01-20x600/520-L	0150-1359
	High Clearance Slider d=19mm, m=1171g	PL01-19x600/520	0150-1456

Connectors

Motor Connector Wiring		Cable Length:		P01-37...-C		P01-37...-C20		P01-37...	
Ph 1+	red	A	1						
Ph 1-	pink	B	2						
Ph 2+	blue	C	3						
Ph 2-	gray	D	4						
+5VDC	white	E	5						
GND	inner Shield	F	6						
Sine	yellow	G	7						
Cosine	green	H	8						
Temp.	black	L	9						
Shield	outer Shield	Case	10						

Accessoires

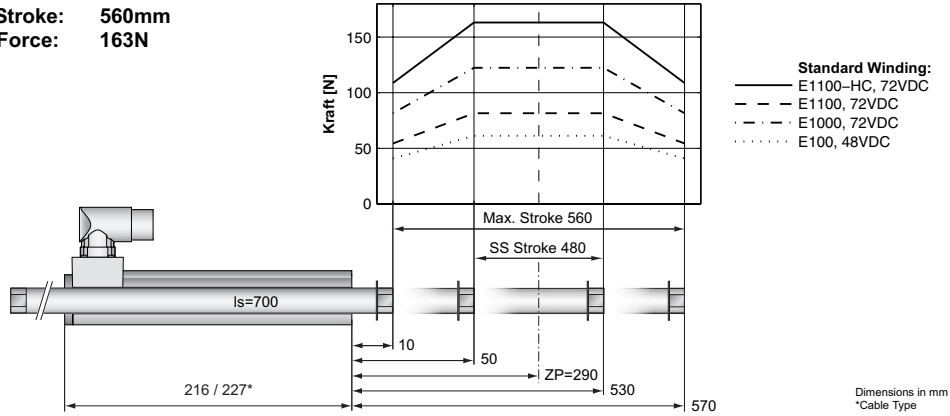


P01-37x120/380x460

P01-37x120/480x560

LinMot®

Max. Stroke: 560mm
Peak Force: 163N

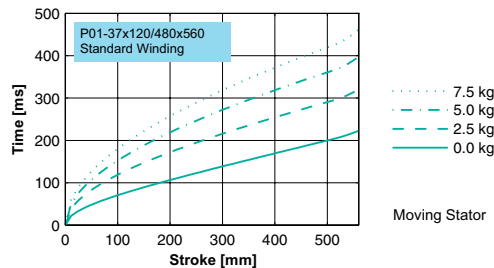


Motor Specification

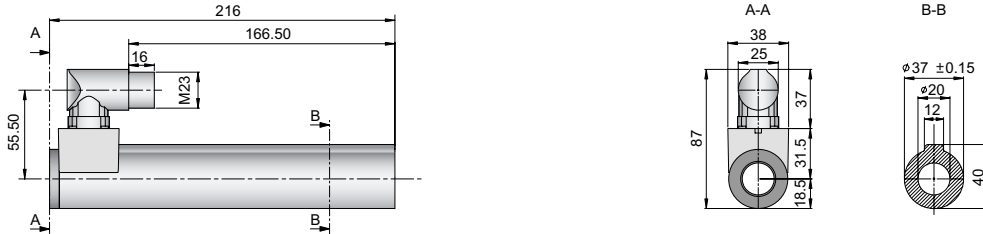
P01-	Connector Type		Cable Type	
	37x120/480x560-C		37x120/480x560 37x120/480x560-C20	
Stroke Max.	mm (in)	560 (22.05)	560 (22.05)	560 (22.05)
Stroke SS	mm (in)	480 (18.90)	480 (18.90)	480 (18.90)
Peak Force E100/1000	N (lbf)	61/122 (13.8/27.5)	61/122 (13.8/27.5)	61/122 (13.8/27.5)
Peak Force E1100/-HC	N (lbf)	82/163 (18.3/36.7)	82/163 (18.3/36.7)	82/163 (18.3/36.7)
Cont. Force	N (lbf)	30 (6.7)	30 (6.7)	30 (6.7)
Cont. Force Fan cooling	N (lbf)	54 (12.1)	54 (12.1)	54 (12.1)
Border Force	%	67	67	67
Force Constant	N/A (lbf/A)	20.4 (4.59)	20.4 (4.59)	20.4 (4.59)
Max. Current @ 72VDC	A	8.0	8.0	8.0
Max. Current @ 48VDC	A	6.0	6.0	6.0
Max. Velocity @ 72VDC	m/s (in/s)	3.2 (128)	3.2 (128)	3.2 (128)
Max. Velocity @ 48VDC	m/s (in/s)	2.2 (85)	2.2 (85)	2.2 (85)
Phase Resist. 25/80 °C	Ohm	6.2/7.5	6.2/7.5	6.2/7.5
Phase Inductance	mH	3.5	3.5	3.5
Thermal Resistance	°K/W	3.6	3.6	3.6
Thermal Time Const.	sec	2800	2800	2800
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)	37 (1.46)
Stator Length	mm (in)	216 (8.50)	227 (8.94)	227 (8.94)
Stator Mass	g (lb)	740 (1.63)	740 (1.63)	740 (1.63)
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)	20 (0.79)
Slider Length	mm (in)	700 (27.56)	700 (27.56)	700 (27.56)
Slider Mass	g (lb)	1529 (3.37)	1529 (3.37)	1529 (3.37)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-37x120/480x560

Position-Time Diagram

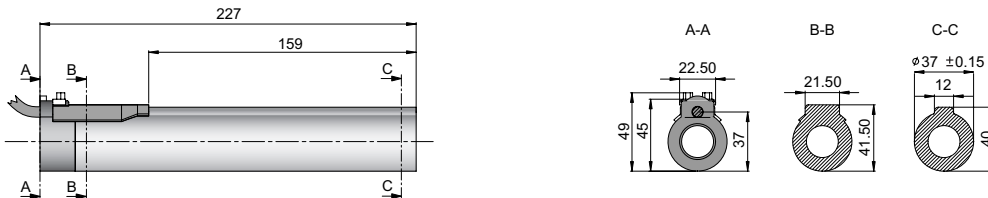


Connector Type



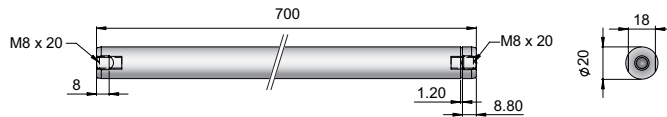
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/480x560-C	->	PS01-37x120-C	0150-1223	& PL01-20x700/620	0150-1332

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/480x560	->	PS01-37x120	0150-1204	& PL01-20x700/620	0150-1332
P01-37x120/480x560-C20	->	PS01-37x120-C20	0150-1237	& PL01-20x700/620	0150-1332

Slider

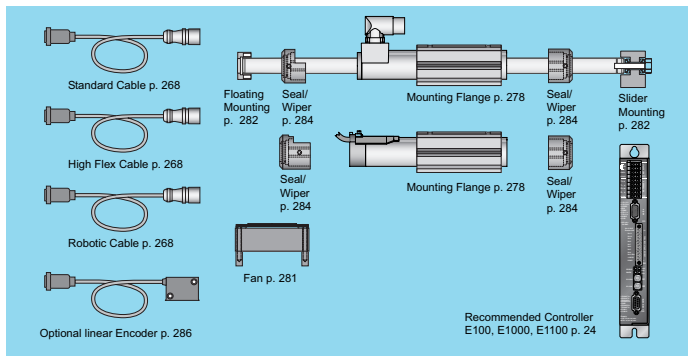


Standard Type	Slider Standard	PL01-20x700/620	0150-1332
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x700/620	0150-1333
	Hollow Slider Hole Diameter 6.5mm	PL01-20x700/620-L	0150-1360
	High Clearance Slider d=19mm, m=1380g	PL01-19x700/620	0150-1457

Connectors

Motor Connector Wiring		Cable Length:		P01-37...-C		P01-37...-C20		P01-37...	
Ph 1+	red	A	1	1.5m					
Ph 1-	pink	B	2	0.2m					
Ph 2+	blue	C	3						
Ph 2-	gray	D	4						
+5VDC	white	E	5						
GND	inner Shield	F	6						
Sine	yellow	G	7						
Cosine	green	H	8						
Temp.	black	L	9						
Shield	outer Shield	Case	10						

Accessoires

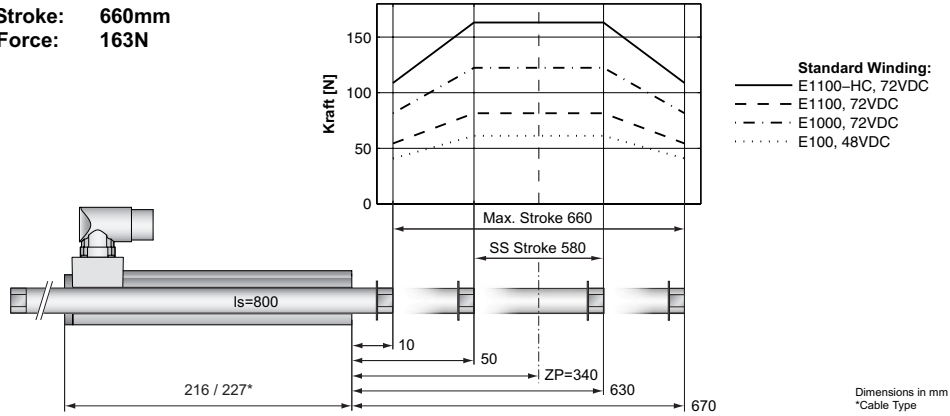


P01-37x120/480x560

P01-37x120/580x660

LinMot®

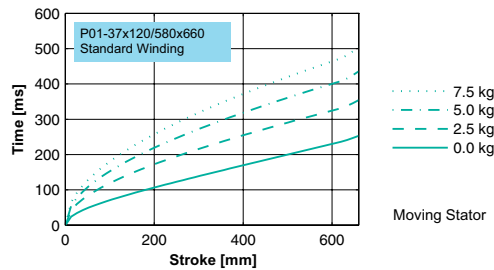
Max. Stroke: 660mm
Peak Force: 163N



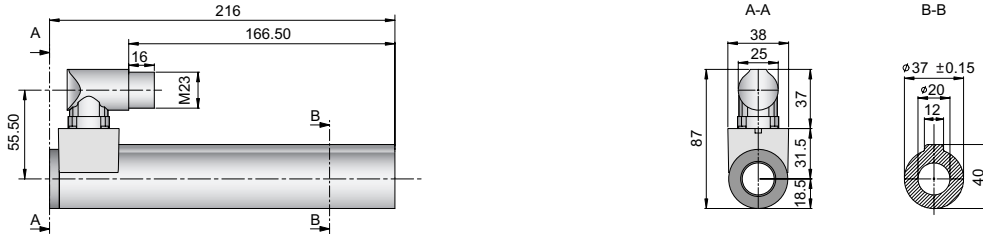
Motor Specification

P01-	Connector Type		Cable Type	
	37x120/580x660-C		37x120/580x660-C20	
Stroke Max.	mm (in)	660 (25.98)	660 (25.98)	
Stroke SS	mm (in)	580 (22.83)	580 (22.83)	
Peak Force E100/1000	N (lbf)	61/122 (13.8/27.5)	61/122 (13.8/27.5)	
Peak Force E1100-HC	N (lbf)	82/163 (18.3/36.7)	82/163 (18.3/36.7)	
Cont. Force	N (lbf)	30 (6.7)	30 (6.7)	
Cont. Force Fan cooling	N (lbf)	54 (12.1)	54 (12.1)	
Border Force	%	67	67	
Force Constant	N/A (lbf/A)	20.4 (4.59)	20.4 (4.59)	
Max. Current @ 72VDC	A	8.0	8.0	
Max. Current @ 48VDC	A	6.0	6.0	
Max. Velocity @ 72VDC	m/s (in/s)	3.2 (128)	3.2 (128)	
Max. Velocity @ 48VDC	m/s (in/s)	2.2 (85)	2.2 (85)	
Phase Resist. 25/80 °C	Ohm	6.2/7.5	6.2/7.5	
Phase Inductance	mH	3.5	3.5	
Thermal Resistance	°K/W	3.6	3.6	
Thermal Time Const.	sec	2800	2800	
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)	
Stator Length	mm (in)	216 (8.50)	227 (8.94)	
Stator Mass	g (lb)	740 (1.63)	740 (1.63)	
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)	
Slider Length	mm (in)	800 (31.50)	800 (31.50)	
Slider Mass	g (lb)	1762 (3.88)	1762 (3.88)	
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	
Linearity	%	±0.1	±0.1	
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	

Position-Time Diagram

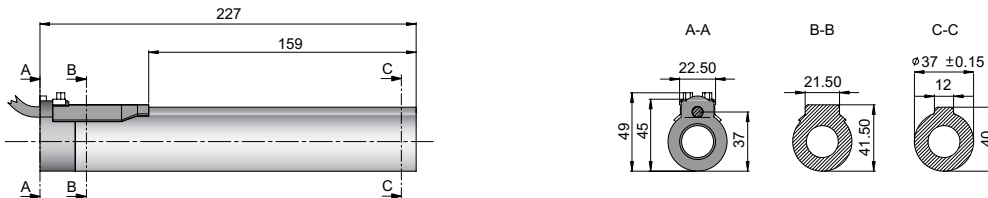


Connector Type



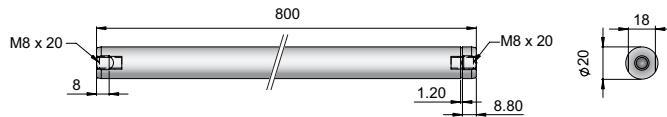
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/580x660-C	->	PS01-37x120-C	0150-1223	& PL01-20x800/720	0150-1334

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/580x660	->	PS01-37x120	0150-1204	& PL01-20x800/720	0150-1334
P01-37x120/580x660-C20	->	PS01-37x120-C20	0150-1237	& PL01-20x800/720	0150-1334

Slider

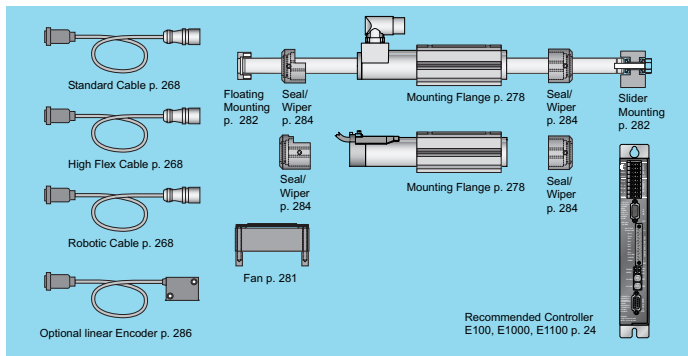


Standard Type	Slider Standard	PL01-20x800/720	0150-1334
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x800/720	0150-1335
	Hollow Slider Hole Diameter 6.5mm	PL01-20x800/720-L	0150-1361
	High Clearance Slider d=19mm, m=1590g	PL01-19x800/720	0150-1458

Connectors

Motor Connector Wiring		Cable Length:		P01-37...-C		P01-37...-C20		P01-37...	
Ph 1+	red	A	1	1.5m					
Ph 1-	pink	B	2	0.2m					
Ph 2+	blue	C	3						
Ph 2-	gray	D	4						
+5VDC	white	E	5						
GND	inner Shield	F	6						
Sine	yellow	G	7						
Cosine	green	H	8						
Temp.	black	L	9						
Shield	outer Shield	Case	10						

Accessoires

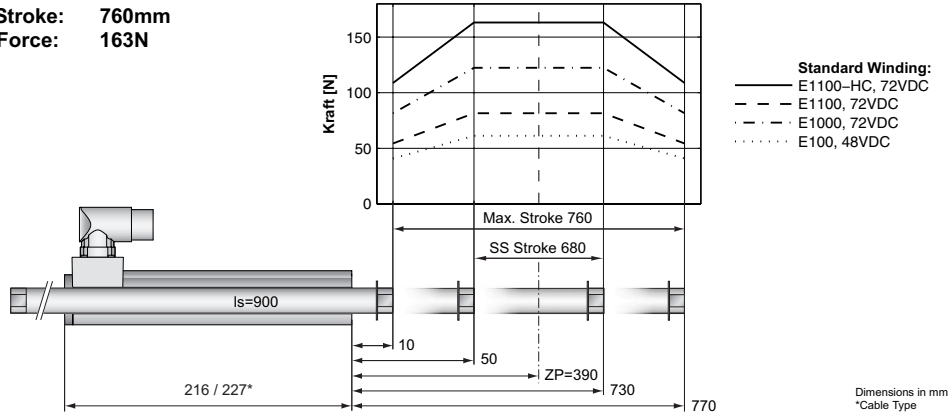


P01-37x120/580x660

P01-37x120/680x760

LinMot®

Max. Stroke: 760mm
Peak Force: 163N

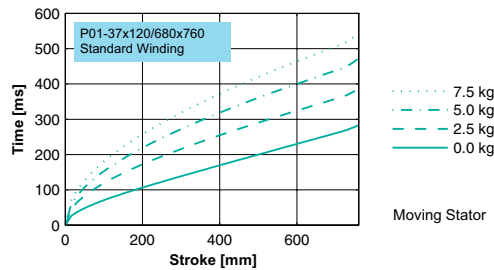


Dimensions in mm
*Cable Type

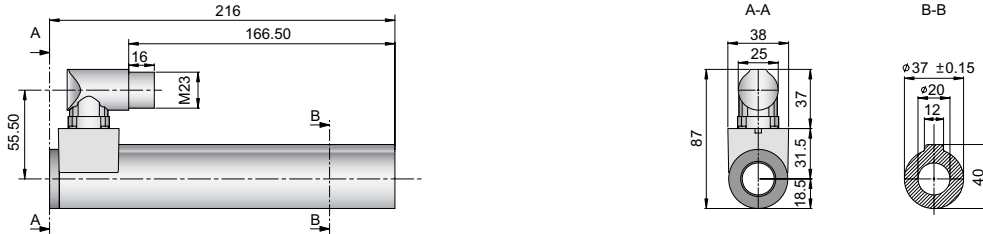
Motor Specification

P01-		Connector Type		Cable Type	
		37x120/680x760-C		37x120/680x760 37x120/680x760-C20	
Stroke Max.	mm (in)	760 (29.92)		760 (29.92)	
Stroke SS	mm (in)	680 (26.77)		680 (26.77)	
Peak Force E100/1000	N (lbf)	61/122 (13.8/27.5)		61/122 (13.8/27.5)	
Peak Force E1100/-HC	N (lbf)	82/163 (18.3/36.7)		82/163 (18.3/36.7)	
Cont. Force	N (lbf)	30 (6.7)		30 (6.7)	
Cont. Force Fan cooling	N (lbf)	54 (12.1)		54 (12.1)	
Border Force	%	67		67	
Force Constant	N/A (lbf/A)	20.4 (4.59)		20.4 (4.59)	
Max. Current @ 72VDC	A	8.0		8.0	
Max. Current @ 48VDC	A	6.0		6.0	
Max. Velocity @ 72VDC	m/s (in/s)	3.2 (128)		3.2 (128)	
Max. Velocity @ 48VDC	m/s (in/s)	2.2 (85)		2.2 (85)	
Phase Resist. 25/80 °C	Ohm	6.2/7.5		6.2/7.5	
Phase Inductance	mH	3.5		3.5	
Thermal Resistance	°K/W	3.6		3.6	
Thermal Time Const.	sec	2800		2800	
Stator Diameter	mm (in)	37 (1.46)		37 (1.46)	
Stator Length	mm (in)	216 (8.50)		227 (8.94)	
Stator Mass	g (lb)	740 (1.63)		740 (1.63)	
Slider Diameter	mm (in)	20 (0.79)		20 (0.79)	
Slider Length	mm (in)	900 (35.43)		900 (35.43)	
Slider Mass	g (lb)	1994 (4.40)		1994 (4.40)	
Position Repeatability	mm (in)	±0.05 (±0.0020)		±0.05 (±0.0020)	
Linearity	%	±0.1		±0.1	
Position Rep. with ES	mm (in)	±0.01 (±0.0004)		±0.01 (±0.0004)	
Linearity with ES	mm (in)	±0.01 (±0.0004)		±0.01 (±0.0004)	

Position-Time Diagram

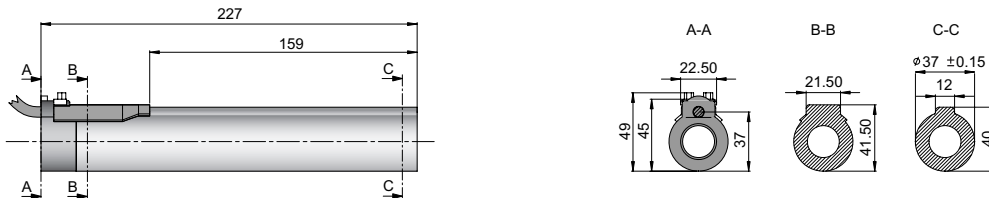


Connector Type



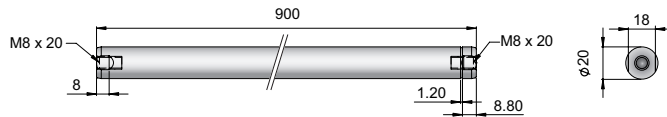
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/680x760-C	->	PS01-37x120-C	0150-1223	& PL01-20x900/820	0150-1336

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/680x760	->	PS01-37x120	0150-1204	& PL01-20x900/820	0150-1336
P01-37x120/680x760-C20	->	PS01-37x120-C20	0150-1237	& PL01-20x900/820	0150-1336

Slider

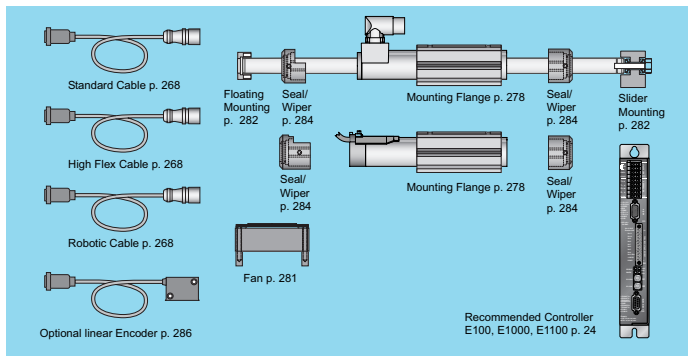


Standard Type	Slider Standard	PL01-20x900/820	0150-1336
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x900/820	0150-1337
	Hollow Slider Hole Diameter 6.5mm	PL01-20x900/820-L	0150-1362
	High Clearance Slider d=19mm	PL01-19x900/820	on request

Connectors

Motor Connector Wiring		Cable Length:		P01-37...-C		P01-37...-C20		P01-37...	
Ph 1+	red	A	1						
Ph 1-	pink	B	2						
Ph 2+	blue	C	3						
Ph 2-	gray	D	4						
+5VDC	white	E	5						
GND	inner Shield	F	6						
Sine	yellow	G	7						
Cosine	green	H	8						
Temp.	black	L	9						
Shield	outer Shield	Case	10						

Accessoires

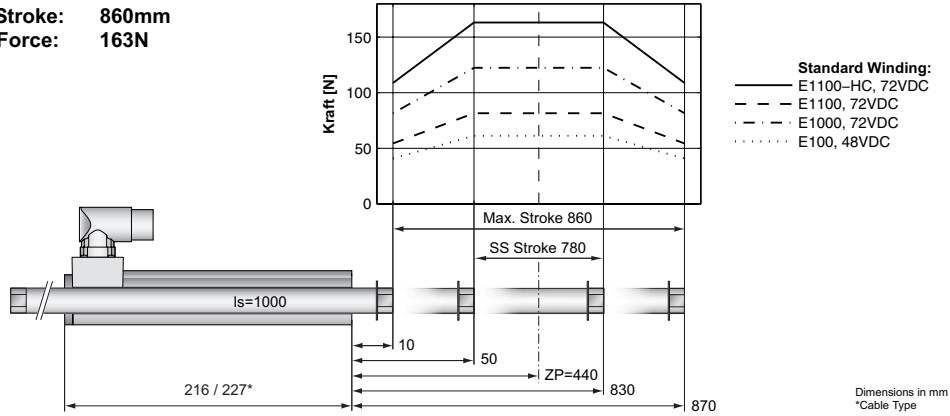


P01-37x120/680x760

P01-37x120/780x860

LinMot®

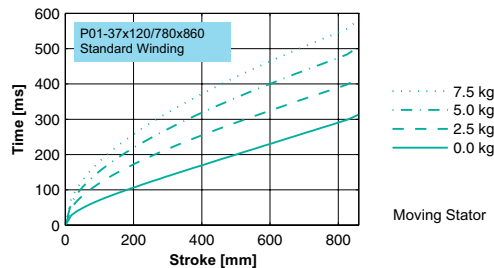
Max. Stroke: 860mm
Peak Force: 163N



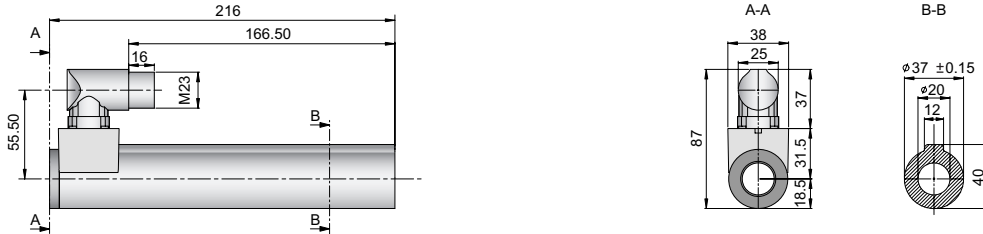
Motor Specification

P01-	Connector Type		Cable Type	
	37x120/780x860-C		37x120/780x860 37x120/780x860-C20	
Stroke Max.	mm (in)	860 (33.86)	860 (33.86)	860 (33.86)
Stroke SS	mm (in)	780 (30.71)	780 (30.71)	780 (30.71)
Peak Force E100/1000	N (lbf)	61/122 (13.8/27.5)	61/122 (13.8/27.5)	61/122 (13.8/27.5)
Peak Force E1100-HC	N (lbf)	82/163 (18.3/36.7)	82/163 (18.3/36.7)	82/163 (18.3/36.7)
Cont. Force	N (lbf)	30 (6.7)	30 (6.7)	30 (6.7)
Cont. Force Fan cooling	N (lbf)	54 (12.1)	54 (12.1)	54 (12.1)
Border Force	%	67	67	67
Force Constant	N/A (lbf/A)	20.4 (4.59)	20.4 (4.59)	20.4 (4.59)
Max. Current @ 72VDC	A	8.0	8.0	8.0
Max. Current @ 48VDC	A	6.0	6.0	6.0
Max. Velocity @ 72VDC	m/s (in/s)	3.2 (128)	3.2 (128)	3.2 (128)
Max. Velocity @ 48VDC	m/s (in/s)	2.2 (85)	2.2 (85)	2.2 (85)
Phase Resist. 25/80 °C	Ohm	6.2/7.5	6.2/7.5	6.2/7.5
Phase Inductance	mH	3.5	3.5	3.5
Thermal Resistance	°K/W	3.6	3.6	3.6
Thermal Time Const.	sec	2800	2800	2800
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)	37 (1.46)
Stator Length	mm (in)	216 (8.50)	227 (8.94)	227 (8.94)
Stator Mass	g (lb)	740 (1.63)	740 (1.63)	740 (1.63)
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)	20 (0.79)
Slider Length	mm (in)	1000 (39.37)	1000 (39.37)	1000 (39.37)
Slider Mass	g (lb)	2227 (4.91)	2227 (4.91)	2227 (4.91)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

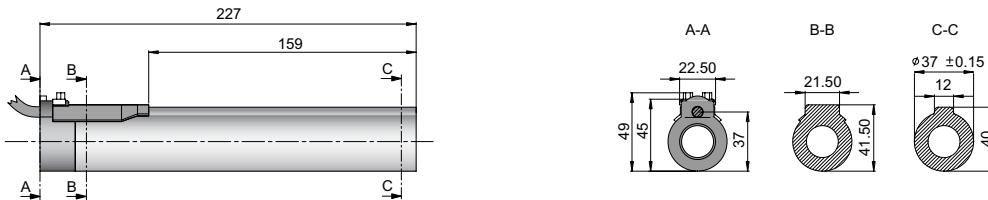


Connector Type



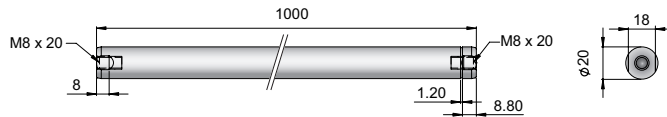
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/780x860-C	->	PS01-37x120-C	0150-1223	& PL01-20x1000/920	0150-1338

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/780x860	->	PS01-37x120	0150-1204	& PL01-20x1000/920	0150-1338
P01-37x120/780x860-C20	->	PS01-37x120-C20	0150-1237	& PL01-20x1000/920	0150-1338

Slider

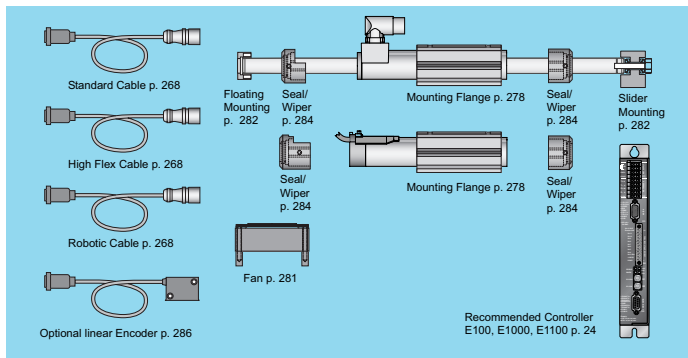


Standard Type	Slider Standard	PL01-20x1000/920	0150-1338
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x1000/920	on Request
	Hollow Slider Hole Diameter 6.5mm	PL01-20x1000/920-L	0150-1364
	High Clearance Slider d=19mm	PL01-19x1000/920	on Request

Connectors

Motor Connector Wiring		Cable Length:		P01-37...-C		P01-37...-C20		P01-37...	
Ph 1+	red	A	1	1.5m					
Ph 1-	pink	B	2	0.2m					
Ph 2+	blue	C	3						
Ph 2-	gray	D	4						
+5VDC	white	E	5						
GND	inner Shield	F	6						
Sine	yellow	G	7						
Cosine	green	H	8						
Temp.	black	L	9						
Shield	outer Shield	Case	10						

Accessoires

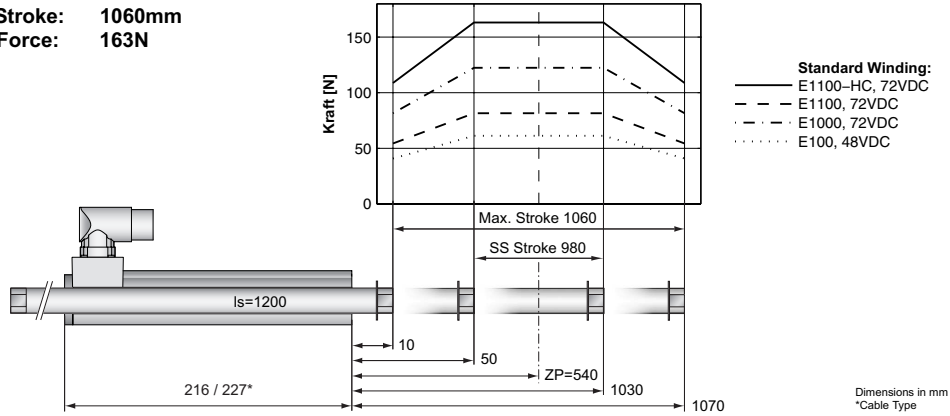


P01-37x120/780x860

P01-37x120/980x1060

LinMot®

Max. Stroke: 1060mm
Peak Force: 163N

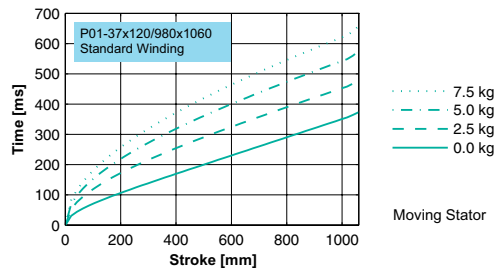


Motor Specification

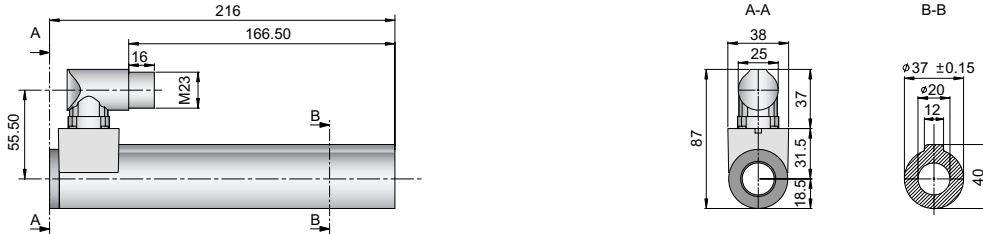
P01-	Connector Type		Cable Type	
	37x120/980x1060-C		37x120/980x1060-C20	
Stroke Max.	mm (in)	1060 (41.73)	1060 (41.73)	1060 (41.73)
Stroke SS	mm (in)	980 (38.58)	980 (38.58)	980 (38.58)
Peak Force E100/1000	N (lbf)	61/122 (13.8/27.5)	61/122 (13.8/27.5)	61/122 (13.8/27.5)
Peak Force E1100-HC	N (lbf)	82/163 (18.3/36.7)	82/163 (18.3/36.7)	82/163 (18.3/36.7)
Cont. Force	N (lbf)	30 (6.7)	30 (6.7)	30 (6.7)
Cont. Force Fan cooling	N (lbf)	54 (12.1)	54 (12.1)	54 (12.1)
Border Force	%	67	67	67
Force Constant	N/A (lbf/A)	20.4 (4.59)	20.4 (4.59)	20.4 (4.59)
Max. Current @ 72VDC	A	8.0	8.0	8.0
Max. Current @ 48VDC	A	6.0	6.0	6.0
Max. Velocity @ 72VDC	m/s (in/s)	3.2 (128)	3.2 (128)	3.2 (128)
Max. Velocity @ 48VDC	m/s (in/s)	2.2 (85)	2.2 (85)	2.2 (85)
Phase Resist. 25/80 °C	Ohm	6.2/7.5	6.2/7.5	6.2/7.5
Phase Inductance	mH	3.5	3.5	3.5
Thermal Resistance	°K/W	3.6	3.6	3.6
Thermal Time Const.	sec	2800	2800	2800
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)	37 (1.46)
Stator Length	mm (in)	216 (8.50)	227 (8.94)	227 (8.94)
Stator Mass	g (lb)	740 (1.63)	740 (1.63)	740 (1.63)
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)	20 (0.79)
Slider Length	mm (in)	1200 (47.24)	1200 (47.24)	1200 (47.24)
Slider Mass	g (lb)	2692 (5.93)	2692 (5.93)	2692 (5.93)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-37x120/980x1060

Position-Time Diagram

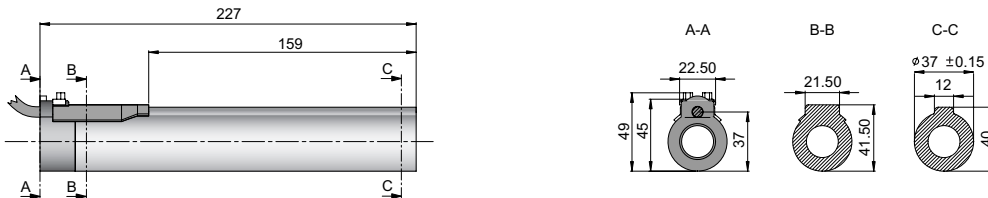


Connector Type



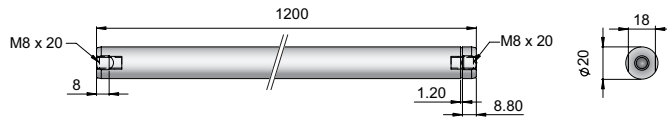
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/980x1060-C	->	PS01-37x120-C	0150-1223	& PL01-20x1200/1120	0150-1340

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/980x1060	->	PS01-37x120	0150-1204	& PL01-20x1200/1120	0150-1340
P01-37x120/980x1060-C20	->	PS01-37x120-C20	0150-1237	& PL01-20x1200/1120	0150-1340

Slider

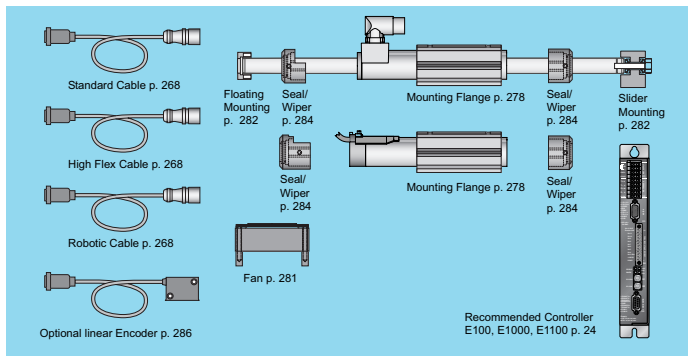


Standard Type	Slider Standard	PL01-20x1200/1120	0150-1340
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x1200/1120	on Request
	Hollow Slider Hole Diameter 6.5mm	PL01-20x1200/1120-L	0150-1376
	High Clearance Slider d=19mm	PL01-19x1200/1120	on Request

Connectors

Motor Connector Wiring		Cable Length:	P01-37...-C P01-37...-C20	P01-37...
P01-37x120...	1.5m			
P01-37x120...-C20	0.2m			
Ph 1+	red	A	1	
Ph 1-	pink	B	2	
Ph 2+	blue	C	3	
Ph 2-	gray	D	4	
+5VDC	white	E	5	
GND	inner Shield	F	6	
Sine	yellow	G	7	
Cosine	green	H	8	
Temp.	black	L	9	
Shield	outer Shield	Case	10	

Accessoires

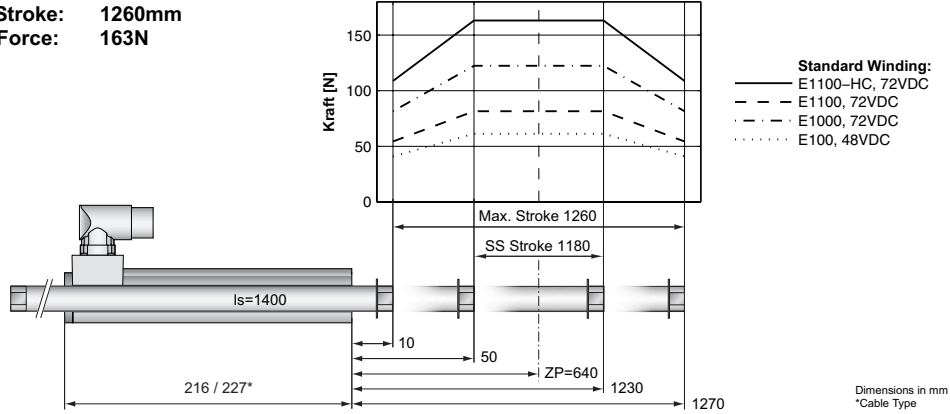


P01-37x120/980x1060

P01-37x120/1180x1260

LinMot®

Max. Stroke: 1260mm
Peak Force: 163N



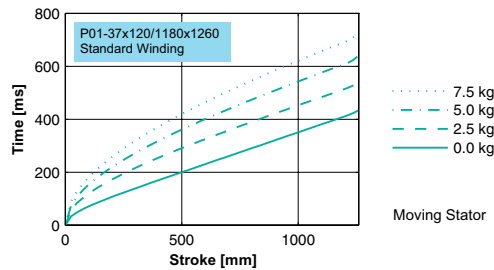
Dimensions in mm
*Cable Type

Motor Specification

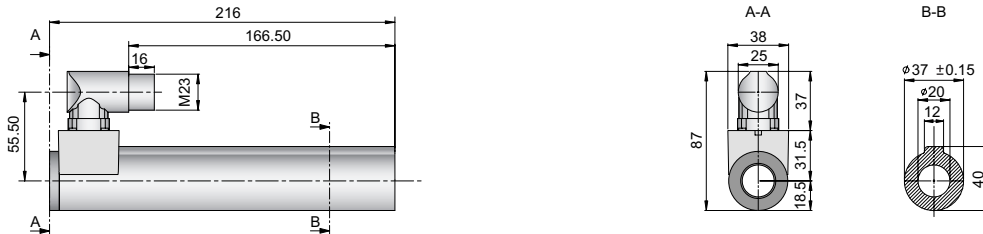
P01-	Connector Type		Cable Type	
	37x120/1180x1260-C		37x120/1180x1260 37x120/1180x1260-C20	
Stroke Max.	mm (in)	1260 (49.61)	1260 (49.61)	1260 (49.61)
Stroke SS	mm (in)	1180 (46.46)	1180 (46.46)	1180 (46.46)
Peak Force E100/1000	N (lbf)	61/122 (13.8/27.5)	61/122 (13.8/27.5)	61/122 (13.8/27.5)
Peak Force E1100/-HC	N (lbf)	82/163 (18.3/36.7)	82/163 (18.3/36.7)	82/163 (18.3/36.7)
Cont. Force	N (lbf)	30 (6.7)	30 (6.7)	30 (6.7)
Cont. Force Fan cooling	N (lbf)	54 (12.1)	54 (12.1)	54 (12.1)
Border Force	%	67	67	67
Force Constant	N/A (lbf/A)	20.4 (4.59)	20.4 (4.59)	20.4 (4.59)
Max. Current @ 72VDC	A	8.0	8.0	8.0
Max. Current @ 48VDC	A	6.0	6.0	6.0
Max. Velocity @ 72VDC	m/s (in/s)	3.2 (128)	3.2 (128)	3.2 (128)
Max. Velocity @ 48VDC	m/s (in/s)	2.2 (85)	2.2 (85)	2.2 (85)
Phase Resist. 25/80 °C	Ohm	6.2/7.5	6.2/7.5	6.2/7.5
Phase Inductance	mH	3.5	3.5	3.5
Thermal Resistance	°K/W	3.6	3.6	3.6
Thermal Time Const.	sec	2800	2800	2800
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)	37 (1.46)
Stator Length	mm (in)	216 (8.50)	227 (8.94)	227 (8.94)
Stator Mass	g (lb)	740 (1.63)	740 (1.63)	740 (1.63)
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)	20 (0.79)
Slider Length	mm (in)	1400 (55.12)	1400 (55.12)	1400 (55.12)
Slider Mass	g (lb)	3157 (6.96)	3157 (6.96)	3157 (6.96)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-37x120/1180x1260

Position-Time Diagram

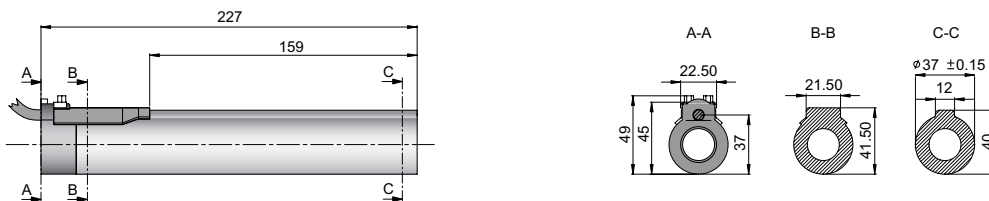


Connector Type



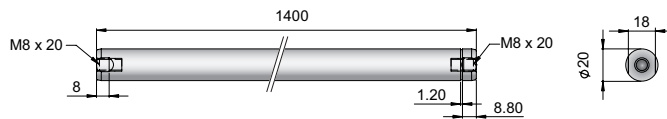
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/1180x1260-C	->	PS01-37x120-C	0150-1223	& PL01-20x1400/1320	0150-1342

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/1180x1260	->	PS01-37x120	0150-1204	& PL01-20x1400/1320	0150-1342
P01-37x120/1180x1260-C20	->	PS01-37x120-C20	0150-1237	& PL01-20x1400/1320	0150-1342

Slider

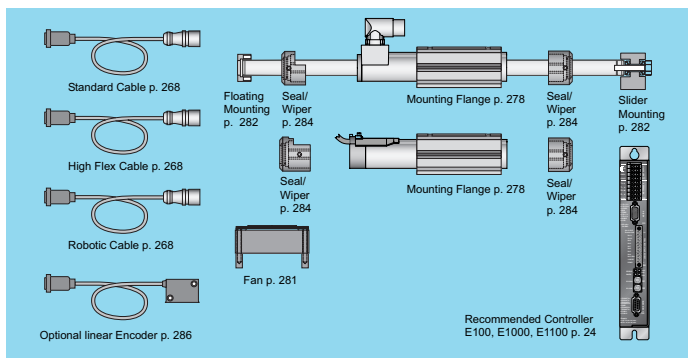


Standard Type	Slider Standard	PL01-20x1400/1320	0150-1342
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x1400/1320	on Request
	Hollow Slider Hole Diameter 6.5mm	PL01-20x1400/1320-L	on Request
	High Clearance Slider d=19mm	PL01-19x1400/1320	on Request

Connectors

Motor Connector Wiring		Cable Length:	P01-37...-C P01-37...-C20	P01-37...
P01-37x120...	1.5m			
P01-37x120...-C20	0.2m			
Ph 1+	red	A	1	
Ph 1-	pink	B	2	
Ph 2+	blue	C	3	
Ph 2-	gray	D	4	
+5VDC	white	E	5	
GND	inner Shield	F	6	
Sine	yellow	G	7	
Cosine	green	H	8	
Temp.	black	L	9	
Shield	outer Shield	Case	10	

Accessoires

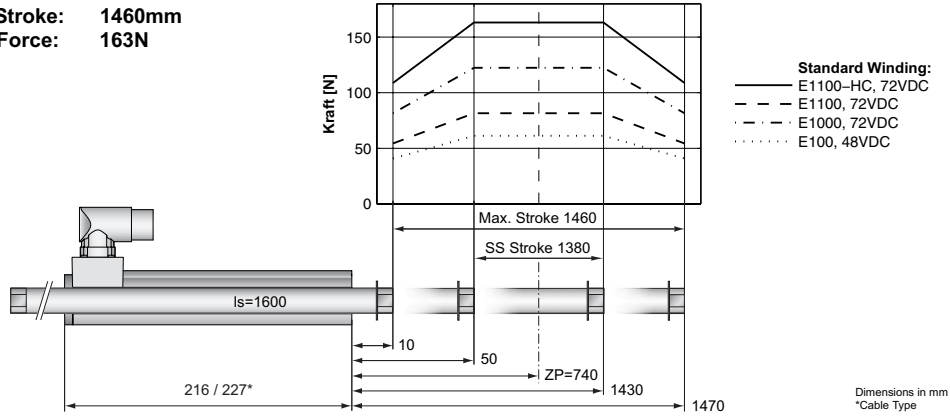


P01-37x120/1180x1260

P01-37x120/1380x1460

LinMot®

Max. Stroke: 1460mm
Peak Force: 163N



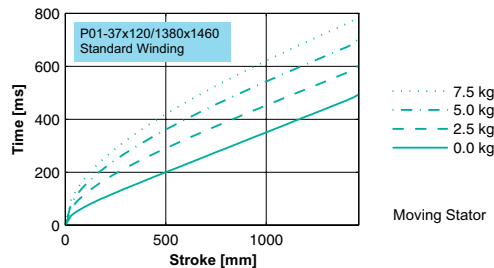
Dimensions in mm
*Cable Type

Motor Specification

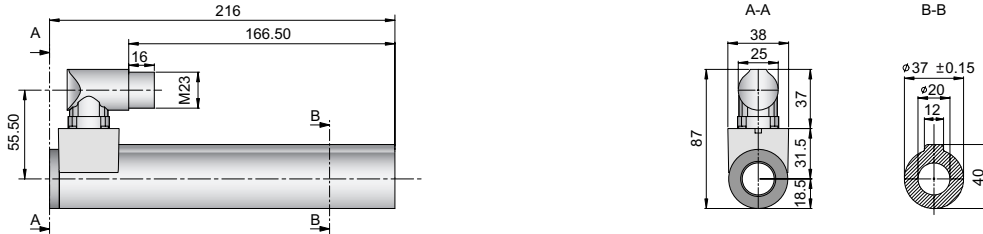
P01-	Connector Type		Cable Type	
	37x120/1380x1460-C		37x120/1380x1460 37x120/1380x1460-C20	
Stroke Max.	mm (in)	1460 (57.48)	1460 (57.48)	1460 (57.48)
Stroke SS	mm (in)	1380 (54.33)	1380 (54.33)	1380 (54.33)
Peak Force E100/1000	N (lbf)	61/122 (13.8/27.5)	61/122 (13.8/27.5)	61/122 (13.8/27.5)
Peak Force E1100/-HC	N (lbf)	82/163 (18.3/36.7)	82/163 (18.3/36.7)	82/163 (18.3/36.7)
Cont. Force	N (lbf)	30 (6.7)	30 (6.7)	30 (6.7)
Cont. Force Fan cooling	N (lbf)	54 (12.1)	54 (12.1)	54 (12.1)
Border Force	%	67	67	67
Force Constant	N/A (lbf/A)	20.4 (4.59)	20.4 (4.59)	20.4 (4.59)
Max. Current @ 72VDC	A	8.0	8.0	8.0
Max. Current @ 48VDC	A	6.0	6.0	6.0
Max. Velocity @ 72VDC	m/s (in/s)	3.2 (128)	3.2 (128)	3.2 (128)
Max. Velocity @ 48VDC	m/s (in/s)	2.2 (85)	2.2 (85)	2.2 (85)
Phase Resist. 25/80 °C	Ohm	6.2/7.5	6.2/7.5	6.2/7.5
Phase Inductance	mH	3.5	3.5	3.5
Thermal Resistance	°K/W	3.6	3.6	3.6
Thermal Time Const.	sec	2800	2800	2800
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)	37 (1.46)
Stator Length	mm (in)	216 (8.50)	227 (8.94)	227 (8.94)
Stator Mass	g (lb)	740 (1.63)	740 (1.63)	740 (1.63)
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)	20 (0.79)
Slider Length	mm (in)	1600 (62.99)	1600 (62.99)	1600 (62.99)
Slider Mass	g (lb)	3622 (7.99)	3622 (7.99)	3622 (7.99)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-37x120/1380x1460

Position-Time Diagram

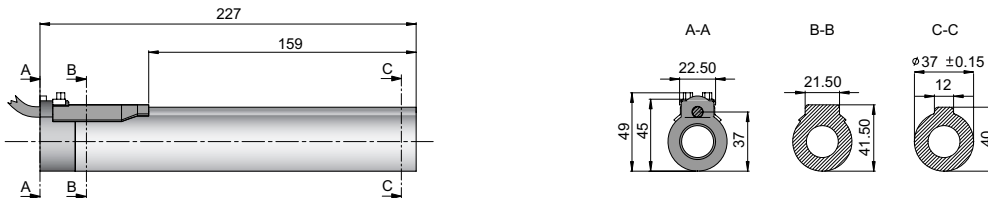


Connector Type



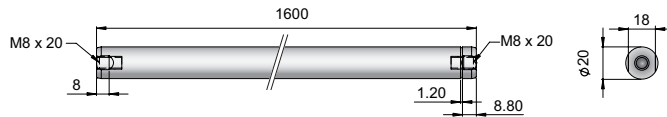
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/1380x1460-C	->	PS01-37x120-C	0150-1223	& PL01-20x1600/1520	0150-1344

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x120/1380x1460	->	PS01-37x120	0150-1204	& PL01-20x1600/1520	0150-1344
P01-37x120/1380x1460-C20	->	PS01-37x120-C20	0150-1237	& PL01-20x1600/1520	0150-1344

Slider

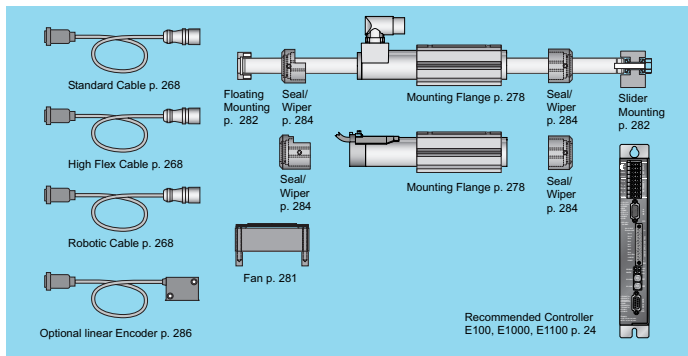


Standard Type	Slider Standard	PL01-20x1600/1520	0150-1344
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x1600/1520	on Request
	Hollow Slider Hole Diameter 6.5mm	PL01-20x1600/1520-L	on Request
	High Clearance Slider d=19mm	PL01-19x1600/1520	on Request

Connectors

Motor Connector Wiring		Cable Length:		P01-37...-C		P01-37...-C20		P01-37...	
Ph 1+	red	A	1						
Ph 1-	pink	B	2						
Ph 2+	blue	C	3						
Ph 2-	gray	D	4						
+5VDC	white	E	5						
GND	inner Shield	F	6						
Sine	yellow	G	7						
Cosine	green	H	8						
Temp.	black	L	9						
Shield	outer Shield	Case	10						

Accessoires



P01-37x120/1380x1460

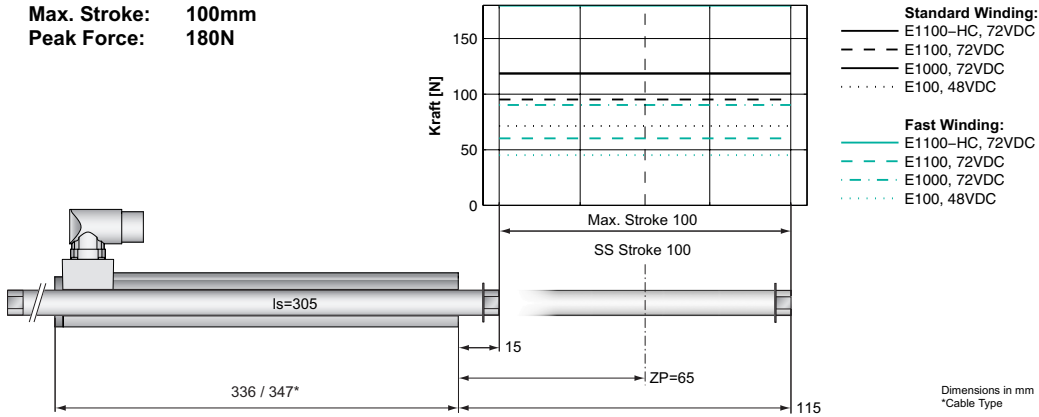


P01-37x240/100x100	216
P01-37x240/40x160	218
P01-37x240/60x260	220
P01-37x240/160x360	222
P01-37x240/260x460	224
P01-37x240/360x560	226
P01-37x240/460x660	228
P01-37x240/560x760	230
P01-37x240/660x860	232
P01-37x240/860x1060	234
P01-37x240/1060x1260	236
P01-37x240/1260x1460	238

P01-37x240/100x100

LinMot®

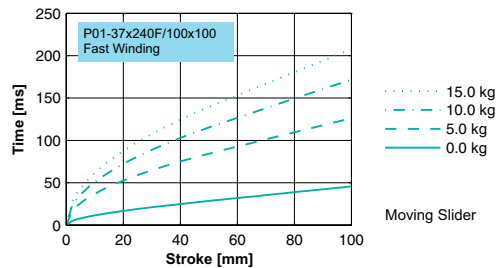
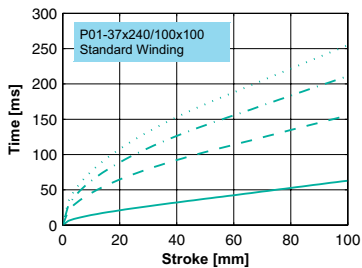
Max. Stroke: 100mm
Peak Force: 180N



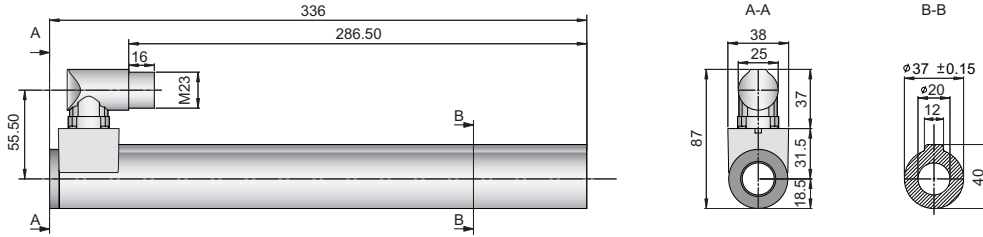
Motor Specification

	Connector Type	Cable Type	
		Standard Winding	Fast Winding
P01-	37x240/100x100-C	37x240F/100x100-C	37x240/100x100-C20
Stroke Max.	mm (in)	100 (3.94)	100 (3.94)
Stroke SS	mm (in)	100 (3.94)	100 (3.94)
Peak Force E100/1000	N (lbf)	71/119 (16.1/26.7)	45/90 (10.2/20.3)
Peak Force E1100-HC	N (lbf)	95/119 (21.4/26.7)	60/180 (13.5/40.4)
Cont. Force	N (lbf)	31 (7.0)	31 (7.0)
Cont. Force Fan cooling	N (lbf)	58 (13.0)	58 (13.0)
Border Force	%	100	100
Force Constant	N/A (lbf/A)	23.8 (5.35)	15.1 (3.38)
Max. Current @ 72VDC	A	5.0	11.9
Max. Current @ 48VDC	A	3.0	7.3
Max. Velocity @ 72VDC	m/s (in/s)	2.8 (110)	4.4 (173)
Max. Velocity @ 48VDC	m/s (in/s)	1.9 (73)	2.9 (116)
Phase Resist. 25/80 °C	Ohm	11.7/14.2	4.9/5.9
Phase Inductance	mH	7.0	2.8
Thermal Resistance	°K/W	2.2	2.2
Thermal Time Const.	sec	3250	3250
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)
Stator Length	mm (in)	336 (13.23)	336 (13.23)
Stator Mass	g (lb)	1385 (3.05)	1385 (3.05)
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)
Slider Length	mm (in)	305 (12.01)	305 (12.01)
Slider Mass	g (lb)	496 (1.09)	496 (1.09)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.4	±0.4
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

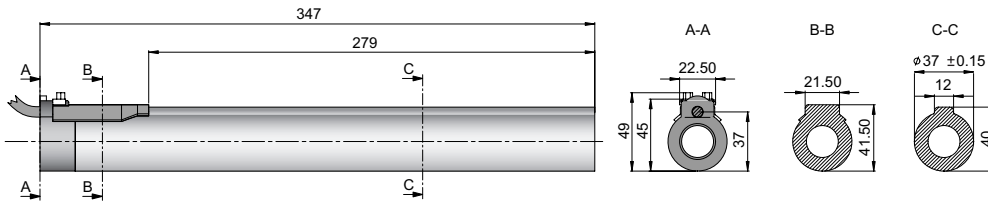


Connector Type



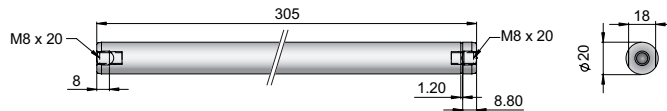
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x240/100x100-C	->	PS01-37x240-C	0150-1224	& PL01-20x305/160	0150-1311
P01-37x240F/100x100-C	->	PS01-37x240F-C	0150-1225	& PL01-20x305/160	0150-1311

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x240/100x100	->	PS01-37x240	0150-1203	& PL01-20x305/160	0150-1311
P01-37x240/100x100-C20	->	PS01-37x240-C20	0150-1238	& PL01-20x305/160	0150-1311
P01-37x240F/100x100-C20	->	PS01-37x240F-C20	0150-1239	& PL01-20x305/160	0150-1311

Slider

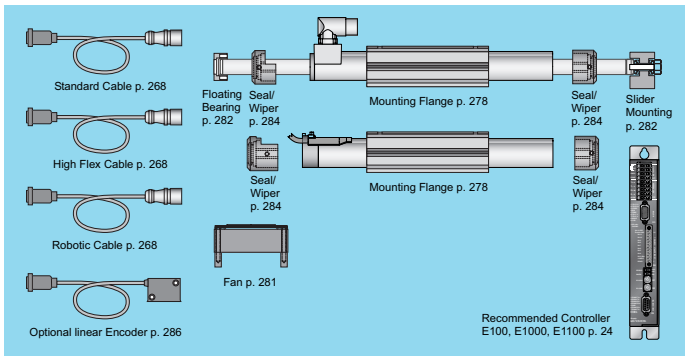


Standard Type	Slider Standard	PL01-20x305/160	0150-1311
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x305/160	0150-1314
	Hollow Slider Hole Diameter 6.5mm	PL01-20x305/160-L	0150-1352
	High Clearance Slider d=19mm, m=448g	PL01-19x305/160	0150-1450

Connectors

Motor Connector Wiring		Cable Length:		P01-37...-C		P01-37...-C20		P01-37...	
Ph 1+	red	A	1	1.5m					
Ph 1-	pink	B	2	0.2m					
Ph 2+	blue	C	3						
Ph 2-	gray	D	4						
+5VDC	white	E	5						
GND	inner Shield	F	6						
Sine	yellow	G	7						
Cosine	green	H	8						
Temp.	black	L	9						
Shield	outer Shield	Case	10						

Accessoires

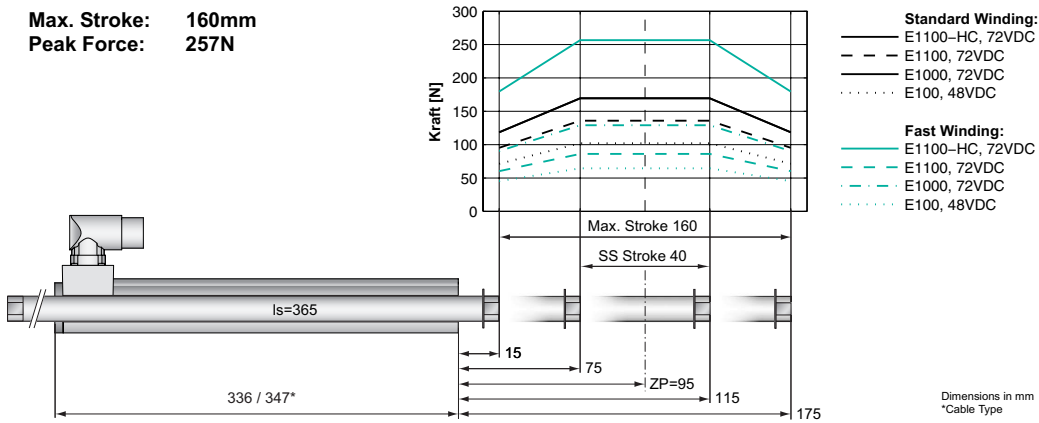


P01-37x240/100x100

P01-37x240/40x160

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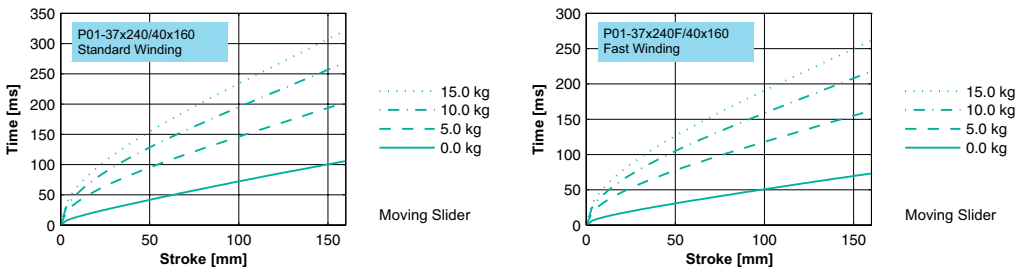
Max. Stroke: 160mm
Peak Force: 257N



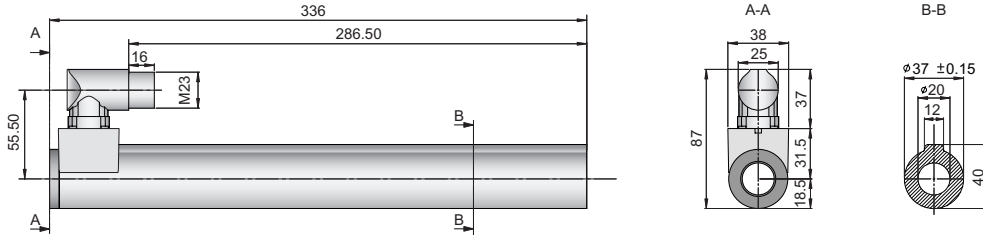
Motor Specification

	P01-	Connector Type		Cable Type	
		Standard Winding	Fast Winding	Standard Winding	Fast Winding
		37x240/40x160-C	37x240F/40x160-C	37x240/40x160-C20	37x240F/40x160-C20
Stroke Max.	mm (in)	160 (6.30)	160 (6.30)	160 (6.30)	160 (6.30)
Stroke SS	mm (in)	40 (1.57)	40 (1.57)	40 (1.57)	40 (1.57)
Peak Force E100/1000	N (lbf)	102/169 (22.9/38.1)	65/129 (14.5/29.0)	102/169 (22.9/38.1)	65/129 (14.5/29.0)
Peak Force E1100/-HC	N (lbf)	136/169 (30.6/38.1)	86/257 (19.3/57.7)	136/169 (30.6/38.1)	86/257 (19.3/57.7)
Cont. Force	N (lbf)	44 (9.9)	44 (9.9)	44 (9.9)	44 (9.9)
Cont. Force Fan cooling	N (lbf)	83 (18.7)	83 (18.7)	83 (18.7)	83 (18.7)
Border Force	%	70	70	70	70
Force Constant	N/A (lbf/A)	34.0 (7.64)	21.5 (4.83)	34.0 (7.64)	21.5 (4.83)
Max. Current @ 72VDC	A	5.0	11.9	5.0	11.9
Max. Current @ 48VDC	A	3.0	7.3	3.0	7.3
Max. Velocity @ 72VDC	m/s (in/s)	1.9 (77)	3.1 (121)	1.9 (77)	3.1 (121)
Max. Velocity @ 48VDC	m/s (in/s)	1.3 (51)	2.1 (81)	1.3 (51)	2.1 (81)
Phase Resist. 25/80 °C	Ohm	11.7/14.2	4.9/5.9	11.7/14.2	4.9/5.9
Phase Inductance	mH	7.0	2.8	7.0	2.8
Thermal Resistance	°K/W	2.2	2.2	2.2	2.2
Thermal Time Const.	sec	3250	3250	3250	3250
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)	37 (1.46)	37 (1.46)
Stator Length	mm (in)	336 (13.23)	336 (13.23)	347 (13.66)	347 (13.66)
Stator Mass	g (lb)	1385 (3.05)	1385 (3.05)	1385 (3.05)	1385 (3.05)
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)	20 (0.79)	20 (0.79)
Slider Length	mm (in)	365 (14.37)	365 (14.37)	365 (14.37)	365 (14.37)
Slider Mass	g (lb)	635 (1.40)	635 (1.40)	635 (1.40)	635 (1.40)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.3	±0.3	±0.3	±0.3
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

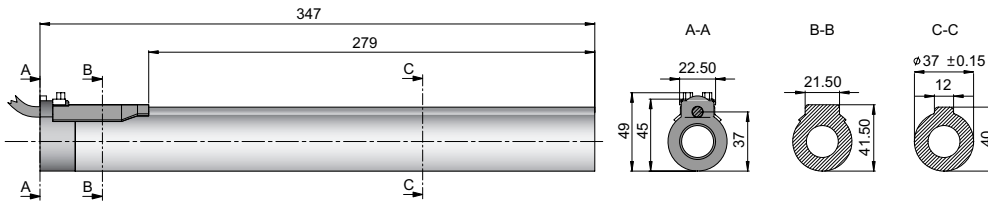


Connector Type



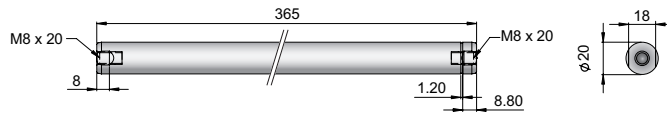
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x240/40x160-C	->	PS01-37x240-C	0150-1224	& PL01-20x365/220	0150-1312
P01-37x240F/40x160-C	->	PS01-37x240F-C	0150-1225	& PL01-20x365/220	0150-1312

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x240/40x160	->	PS01-37x240	0150-1203	& PL01-20x365/220	0150-1312
P01-37x240/40x160-C20	->	PS01-37x240-C20	0150-1238	& PL01-20x365/220	0150-1312
P01-37x240F/40x160-C20	->	PS01-37x240F-C20	0150-1239	& PL01-20x365/220	0150-1312

Slider

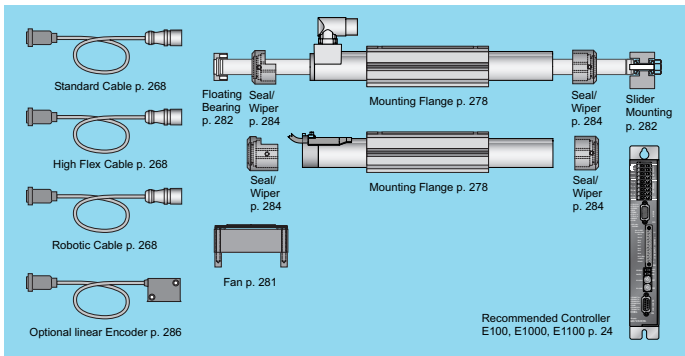


Standard Type	Slider Standard	PL01-20x365/220	0150-1312
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x365/220	0150-1315
	Hollow Slider Hole Diameter 6.5mm	PL01-20x365/220-L	0150-1353
	High Clearance Slider d=19mm, m=573g	PL01-19x365/220	0150-1451

Connectors

Motor Connector Wiring		Cable		Wiring	
Cable Length:		P01-37...-C	P01-37...-C20		
P01-37x240...	1.5m				
P01-37x240...-C20	0.2m				
Ph 1+	red	A	1		
Ph 1-	pink	B	2		
Ph 2+	blue	C	3		
Ph 2-	gray	D	4		
+5VDC	white	E	5		
GND	inner Shield	F	6		
Sine	yellow	G	7		
Cosine	green	H	8		
Temp.	black	L	9		
Shield	outer Shield	Case	10		

Accessoires

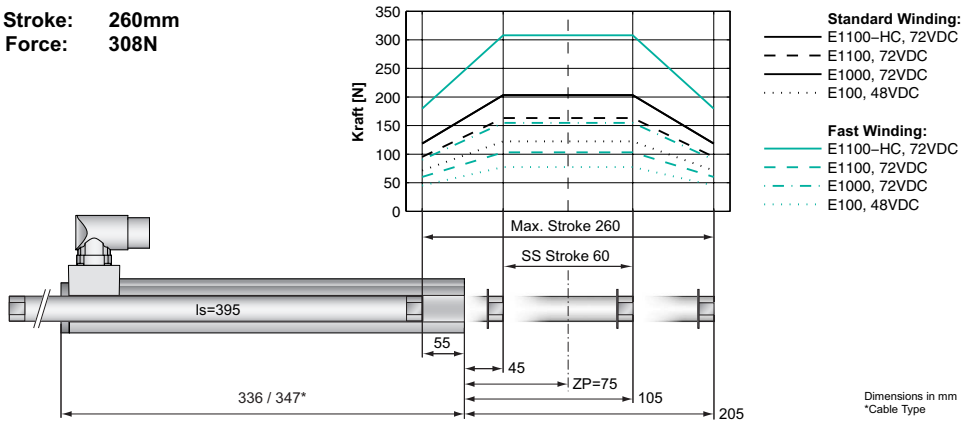


P01-37x240/40x160

P01-37x240/60x260

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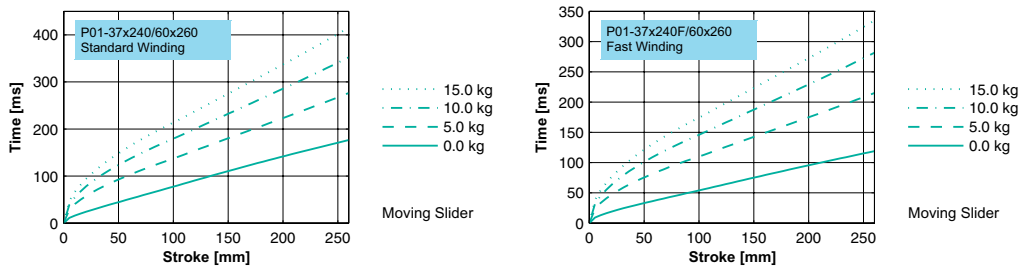
Max. Stroke: 260mm
Peak Force: 308N



Motor Specification

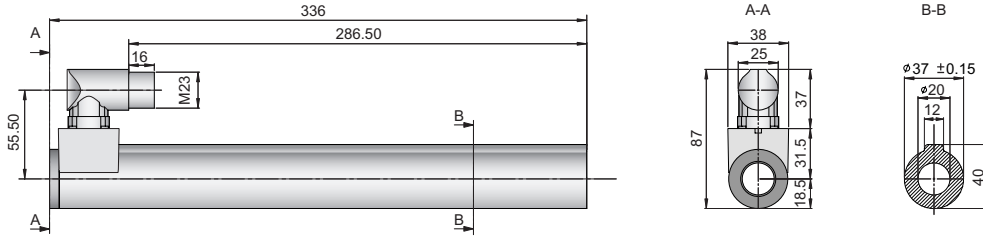
	P01-	Connector Type		Cable Type	
		Standard Winding	Fast Winding	Standard Winding	Fast Winding
Stroke Max.	mm (in)	260 (10.24)	260 (10.24)	260 (10.24)	260 (10.24)
Stroke SS	mm (in)	60 (2.36)	60 (2.36)	60 (2.36)	60 (2.36)
Peak Force E100/1000	N (lbf)	122/203 (27.5/45.7)	77/155 (17.4/34.8)	122/203 (27.5/45.7)	77/155 (17.4/34.8)
Peak Force E1100/-HC	N (lbf)	163/203 (36.7/45.7)	103/308 (23.2/69.2)	163/203 (36.7/45.7)	103/308 (23.2/69.2)
Cont. Force	N (lbf)	55 (12.4)	55 (12.4)	55 (12.4)	55 (12.4)
Cont. Force Fan cooling	N (lbf)	100 (22.5)	100 (22.5)	100 (22.5)	100 (22.5)
Border Force	%	58	58	58	58
Force Constant	N/A (lbf/A)	40.8 (9.17)	25.8 (5.80)	40.8 (9.17)	25.8 (5.80)
Max. Current @ 72VDC	A	5.0	11.9	5.0	11.9
Max. Current @ 48VDC	A	3.0	7.3	3.0	7.3
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (64)	2.6 (101)	1.6 (64)	2.6 (101)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (43)	1.7 (67)	1.1 (43)	1.7 (67)
Phase Resist. 25/80 °C	Ohm	11.7/14.2	4.9/5.9	11.7/14.2	4.9/5.9
Phase Inductance	mH	7.0	2.8	7.0	2.8
Thermal Resistance	°K/W	2.2	2.2	2.2	2.2
Thermal Time Const.	sec	3250	3250	3250	3250
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)	37 (1.46)	37 (1.46)
Stator Length	mm (in)	336 (13.23)	336 (13.23)	347 (13.66)	347 (13.66)
Stator Mass	g (lb)	1385 (3.05)	1385 (3.05)	1385 (3.05)	1385 (3.05)
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)	20 (0.79)	20 (0.79)
Slider Length	mm (in)	395 (15.55)	395 (15.55)	395 (15.55)	395 (15.55)
Slider Mass	g (lb)	829 (1.83)	829 (1.83)	829 (1.83)	829 (1.83)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.2	±0.2	±0.2	±0.2
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram



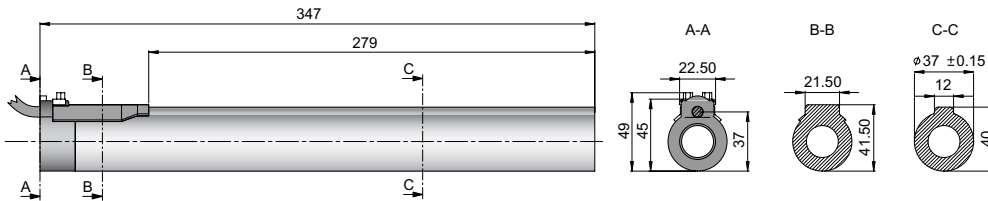
P01-37x240/60x260

Connector Type



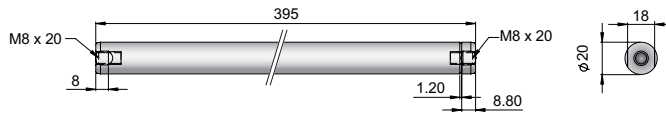
Linear Motor		Stator		Slider		
Type	Art. No.	Type	Art. No.	Type	Art. No.	
P01-37x240/60x260-C	->	PS01-37x240-C	0150-1224	&	PL01-20x395/320	0150-1318
P01-37x240F/60x260-C	->	PS01-37x240F-C	0150-1225	&	PL01-20x395/320	0150-1318

Cable Type



Linear Motor		Stator		Slider		
Type	Art. No.	Type	Art. No.	Type	Art. No.	
P01-37x240/60x260	->	PS01-37x240	0150-1203	&	PL01-20x395/320	0150-1318
P01-37x240/60x260-C20	->	PS01-37x240-C20	0150-1238	&	PL01-20x395/320	0150-1318
P01-37x240F/60x260-C20	->	PS01-37x240F-C20	0150-1239	&	PL01-20x395/320	0150-1318

Slider

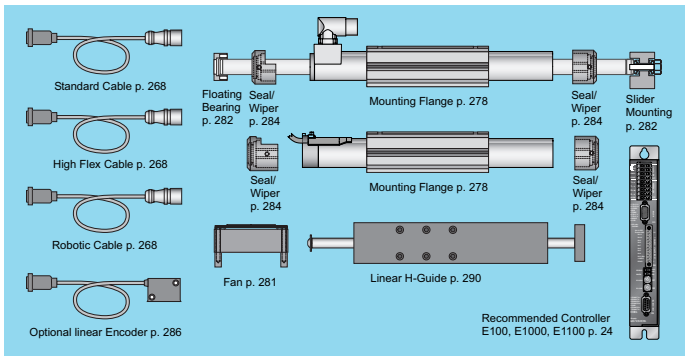


Standard Type	Slider Standard	PL01-20x395/320	0150-1318
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x395/320	0150-1319
	Hollow Slider Hole Diameter 6.5mm	PL01-20x395/320-L	0150-1354
	High Clearance Slider d=19mm, m=748g	PL01-19x395/320	0150-1452

Connectors

Motor Connector Wiring		Cable Length:		P01-37...-C		P01-37...-C20		P01-37...	
Ph 1+	red	A	1	1.5m					
Ph 1-	pink	B	2	0.2m					
Ph 2+	blue	C	3						
Ph 2-	gray	D	4						
+5VDC	white	E	5						
GND	inner Shield	F	6						
Sine	yellow	G	7						
Cosine	green	H	8						
Temp.	black	L	9						
Shield	outer Shield	Case	10						

Accessoires

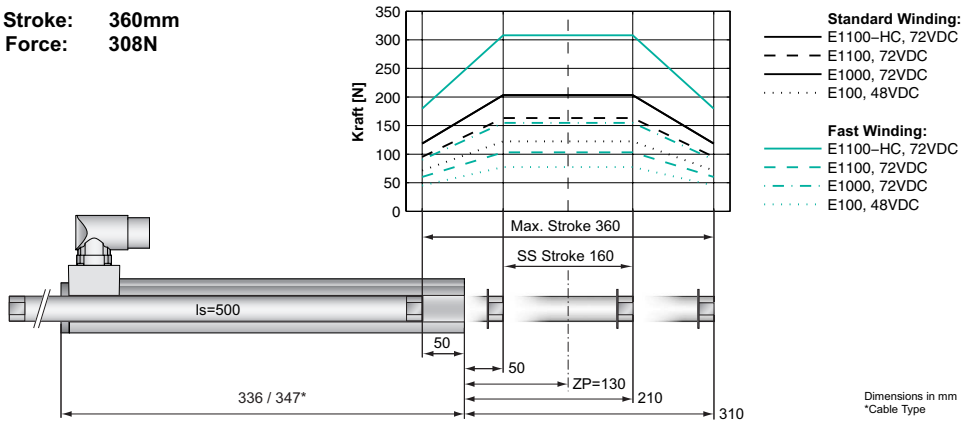


P01-37x240/60x260

P01-37x240/160x360

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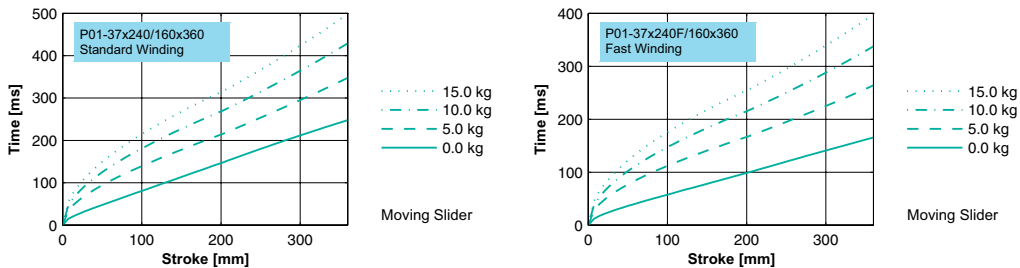
Max. Stroke: 360mm
Peak Force: 308N



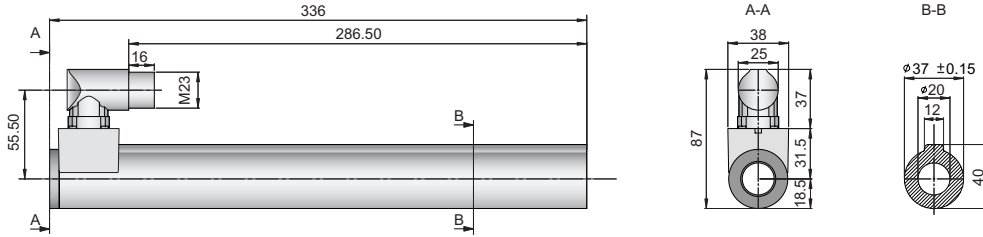
Motor Specification

	Connector Type	Cable Type	
		Standard Winding	Fast Winding
	P01-37x240/160x360-C	37x240F/160x360-C	37x240/160x360-C20
Stroke Max.	mm (in)	360 (14.17)	360 (14.17)
Stroke SS	mm (in)	160 (6.30)	160 (6.30)
Peak Force E100/1000	N (lbf)	122/203 (27.5/45.7)	77/155 (17.4/34.8)
Peak Force E1100-HC	N (lbf)	163/203 (36.7/45.7)	103/308 (23.2/69.2)
Cont. Force	N (lbf)	55 (12.4)	55 (12.4)
Cont. Force Fan cooling	N (lbf)	100 (22.5)	100 (22.5)
Border Force	%	58	58
Force Constant	N/A (lbf/A)	40.8 (9.17)	25.8 (5.80)
Max. Current @ 72VDC	A	5.0	11.9
Max. Current @ 48VDC	A	3.0	7.3
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (64)	2.6 (101)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (43)	1.7 (67)
Phase Resist. 25/80 °C	Ohm	11.7/14.2	4.9/5.9
Phase Inductance	mH	7.0	2.8
Thermal Resistance	°K/W	2.2	2.2
Thermal Time Const.	sec	3250	3250
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)
Stator Length	mm (in)	336 (13.23)	336 (13.23)
Stator Mass	g (lb)	1385 (3.05)	1385 (3.05)
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)
Slider Length	mm (in)	500 (19.69)	500 (19.69)
Slider Mass	g (lb)	1064 (2.35)	1064 (2.35)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.2	±0.2
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

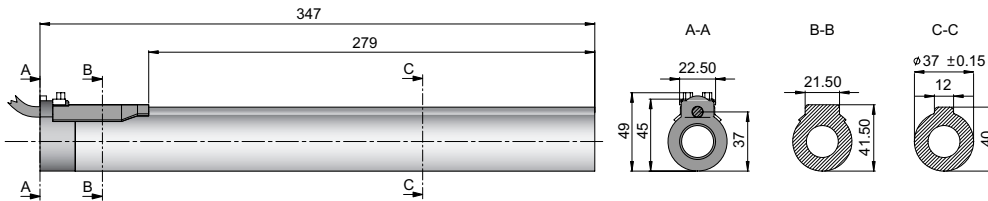


Connector Type



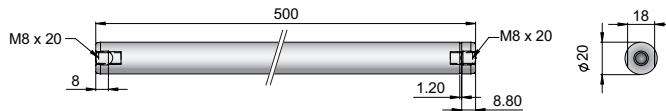
Linear Motor		Stator		Slider		
Type	Art. No.	Type	Art. No.	Type	Art. No.	
P01-37x240/160x360-C	->	PS01-37x240-C	0150-1224	&	PL01-20x500/420	0150-1328
P01-37x240F/160x360-C	->	PS01-37x240F-C	0150-1225	&	PL01-20x500/420	0150-1328

Cable Type



Linear Motor		Stator		Slider		
Type	Art. No.	Type	Art. No.	Type	Art. No.	
P01-37x240/160x360	->	PS01-37x240	0150-1203	&	PL01-20x500/420	0150-1328
P01-37x240/160x360-C20	->	PS01-37x240-C20	0150-1238	&	PL01-20x500/420	0150-1328
P01-37x240F/160x360-C20	->	PS01-37x240F-C20	0150-1239	&	PL01-20x500/420	0150-1328

Slider

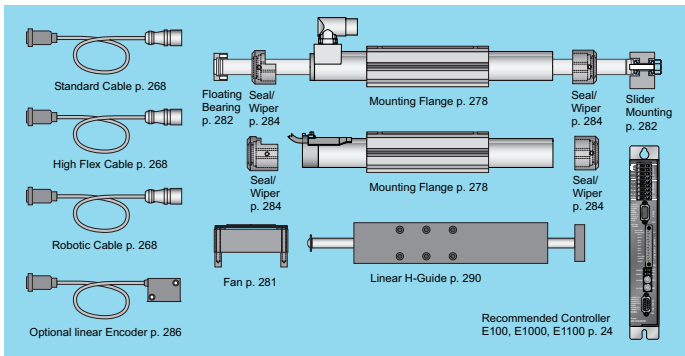


Standard Type	Slider Standard	PL01-20x500/420	0150-1328
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x500/420	0150-1329
	Hollow Slider Hole Diameter 6.5mm	PL01-20x500/420-L	0150-1358
	High Clearance Slider d=19mm, m=960g	PL01-19x500/420	0150-1455

Connectors

Motor Connector Wiring		Cable Length:		P01-37...-C		P01-37...-C20		P01-37...	
Ph 1+	red	A	1	1.5m					
Ph 1-	pink	B	2	0.2m					
Ph 2+	blue	C	3						
Ph 2-	gray	D	4						
+5VDC	white	E	5						
GND	inner Shield	F	6						
Sine	yellow	G	7						
Cosine	green	H	8						
Temp.	black	L	9						
Shield	outer Shield	Case	10						

Accessoires

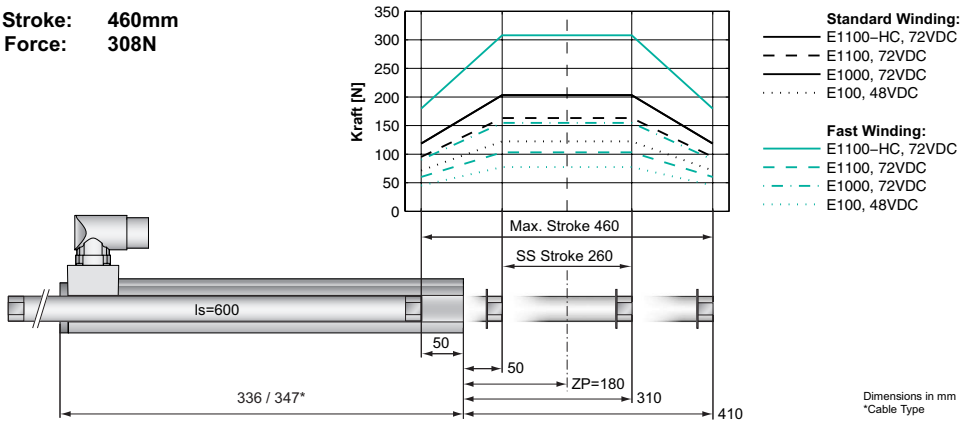


P01-37x240/160x360

P01-37x240/260x460

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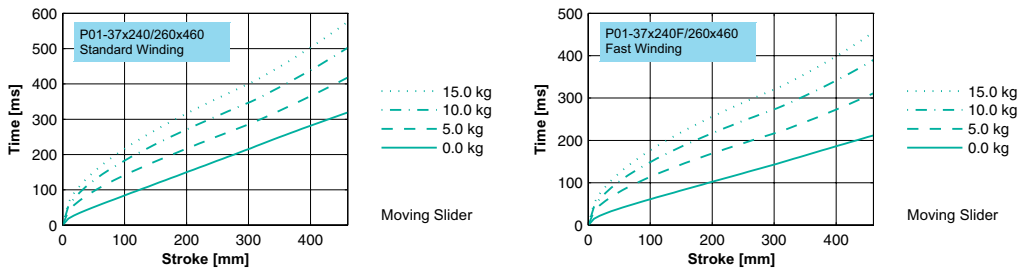
Max. Stroke: 460mm
Peak Force: 308N



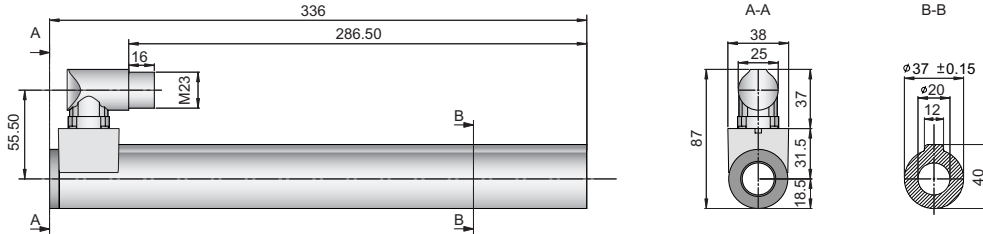
Motor Specification

	Connector Type	Cable Type	
		Standard Winding	Fast Winding
P01:	37x240/260x460-C	37x240F/260x460-C	37x240/260x460-C20
Stroke Max.	mm (in)	460 (18.11)	460 (18.11)
Stroke SS	mm (in)	260 (10.24)	260 (10.24)
Peak Force E100/1000	N (lbf)	122/203 (27.5/45.7)	77/155 (17.4/34.8)
Peak Force E1100/-HC	N (lbf)	163/203 (36.7/45.7)	103/308 (23.2/69.2)
Cont. Force	N (lbf)	55 (12.4)	55 (12.4)
Cont. Force Fan cooling	N (lbf)	100 (22.5)	100 (22.5)
Border Force	%	58	58
Force Constant	N/A (lbf/A)	40.8 (9.17)	25.8 (5.80)
Max. Current @ 72VDC	A	5.0	11.9
Max. Current @ 48VDC	A	3.0	7.3
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (64)	2.6 (101)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (43)	1.7 (67)
Phase Resist. 25/80 °C	Ohm	11.7/14.2	4.9/5.9
Phase Inductance	mH	7.0	2.8
Thermal Resistance	°K/W	2.2	2.2
Thermal Time Const.	sec	3250	3250
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)
Stator Length	mm (in)	336 (13.23)	347 (13.66)
Stator Mass	g (lb)	1385 (3.05)	1385 (3.05)
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)
Slider Length	mm (in)	600 (23.62)	600 (23.62)
Slider Mass	g (lb)	1297 (2.86)	1297 (2.86)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

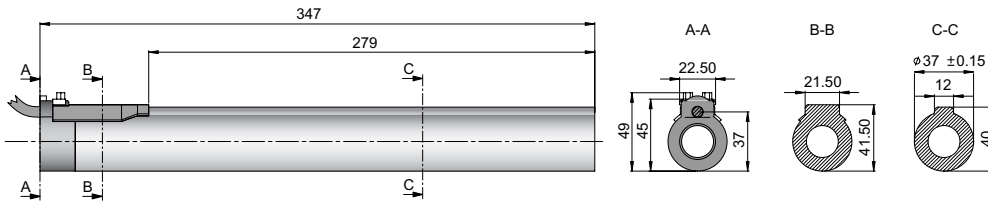


Connector Type



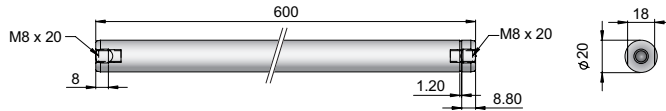
Linear Motor		Stator		Slider		
Type	Art. No.	Type	Art. No.	Type	Art. No.	
P01-37x240/260x460-C	->	PS01-37x240-C	0150-1224	&	PL01-20x600/520	0150-1330
P01-37x240F/260x460-C	->	PS01-37x240F-C	0150-1225	&	PL01-20x600/520	0150-1330

Cable Type



Linear Motor		Stator		Slider		
Type	Art. No.	Type	Art. No.	Type	Art. No.	
P01-37x240/260x460	->	PS01-37x240	0150-1203	&	PL01-20x600/520	0150-1330
P01-37x240/260x460-C20	->	PS01-37x240-C20	0150-1238	&	PL01-20x600/520	0150-1330
P01-37x240F/260x460-C20	->	PS01-37x240F-C20	0150-1239	&	PL01-20x600/520	0150-1330

Slider

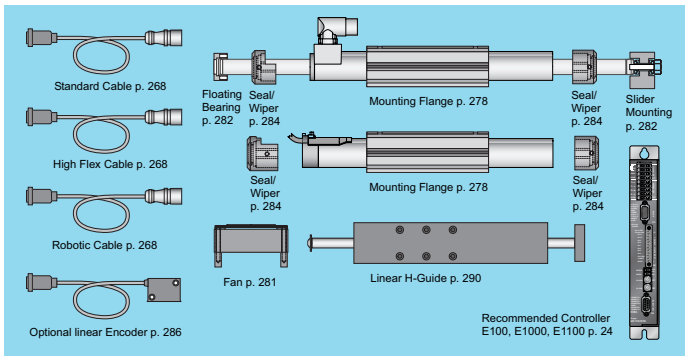


Standard Type	Slider Standard	PL01-20x600/520	0150-1330
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x600/520	0150-1331
	Hollow Slider Hole Diameter 6.5mm	PL01-20x600/520-L	0150-1359
	High Clearance Slider d=19mm, m=1171g	PL01-19x600/520	0150-1456

Connectors

Motor Connector Wiring		Cable Length:		P01-37...-C		P01-37...-C20		P01-37...	
Ph 1+	red	A	1	1.5m					
Ph 1-	pink	B	2	0.2m					
Ph 2+	blue	C	3						
Ph 2-	gray	D	4						
+5VDC	white	E	5						
GND	inner Shield	F	6						
Sine	yellow	G	7						
Cosine	green	H	8						
Temp.	black	L	9						
Shield	outer Shield	Case	10						

Accessoires

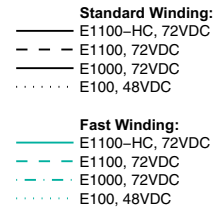
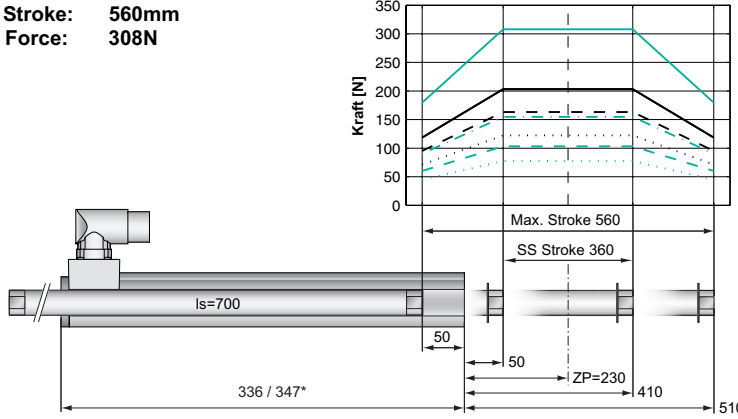


P01-37x240/260x460

P01-37x240/360x560

LinMot®

Max. Stroke: 560mm
Peak Force: 308N

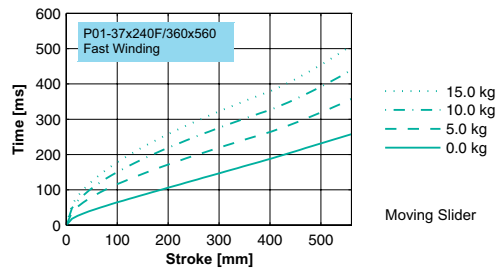
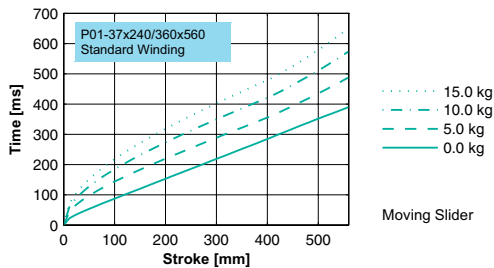


Dimensions in mm
*Cable Type

Motor Specification

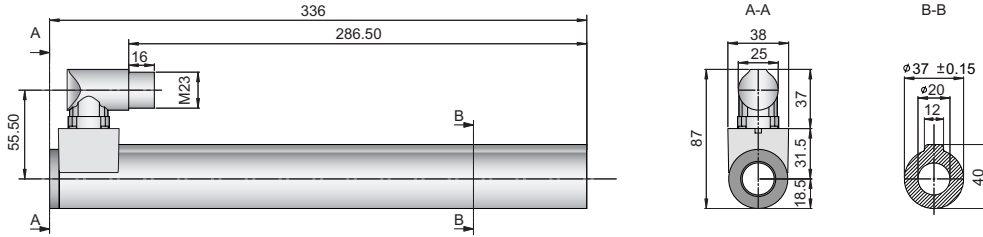
	Connector Type	Cable Type	
		Standard Winding	Fast Winding
	P01-37x240/360x560-C	37x240F/360x560-C	37x240/360x560-C20
Stroke Max.	mm (in)	560 (22.05)	560 (22.05)
Stroke SS	mm (in)	360 (14.17)	360 (14.17)
Peak Force E100/1000	N (lbf)	122/203 (27.5/45.7)	77/155 (17.4/34.8)
Peak Force E1100-HC	N (lbf)	163/203 (36.7/45.7)	103/308 (23.2/69.2)
Cont. Force	N (lbf)	55 (12.4)	55 (12.4)
Cont. Force Fan cooling	N (lbf)	100 (22.5)	100 (22.5)
Border Force	%	58	58
Force Constant	N/A (lbf/A)	40.8 (9.17)	25.8 (5.80)
Max. Current @ 72VDC	A	5.0	11.9
Max. Current @ 48VDC	A	3.0	7.3
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (64)	2.6 (101)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (43)	1.7 (67)
Phase Resist. 25/80 °C	Ohm	11.7/14.2	4.9/5.9
Phase Inductance	mH	7.0	2.8
Thermal Resistance	°K/W	2.2	2.2
Thermal Time Const.	sec	3250	3250
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)
Stator Length	mm (in)	336 (13.23)	347 (13.66)
Stator Mass	g (lb)	1385 (3.05)	1385 (3.05)
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)
Slider Length	mm (in)	700 (27.56)	700 (27.56)
Slider Mass	g (lb)	1529 (3.37)	1529 (3.37)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram



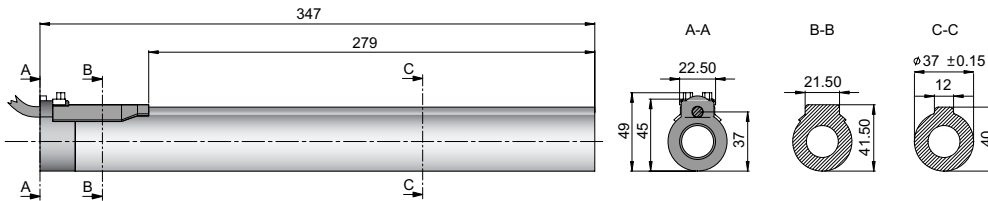
P01-37x240/360x560

Connector Type



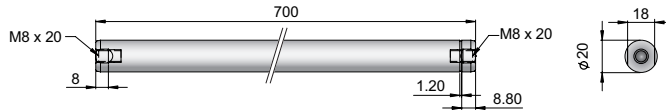
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x240/360x560-C	->	PS01-37x240-C	0150-1224	& PL01-20x700/620	0150-1332
P01-37x240F/360x560-C	->	PS01-37x240F-C	0150-1225	& PL01-20x700/620	0150-1332

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x240/360x560	->	PS01-37x240	0150-1203	& PL01-20x700/620	0150-1332
P01-37x240/360x560-C20	->	PS01-37x240-C20	0150-1238	& PL01-20x700/620	0150-1332
P01-37x240F/360x560-C20	->	PS01-37x240F-C20	0150-1239	& PL01-20x700/620	0150-1332

Slider

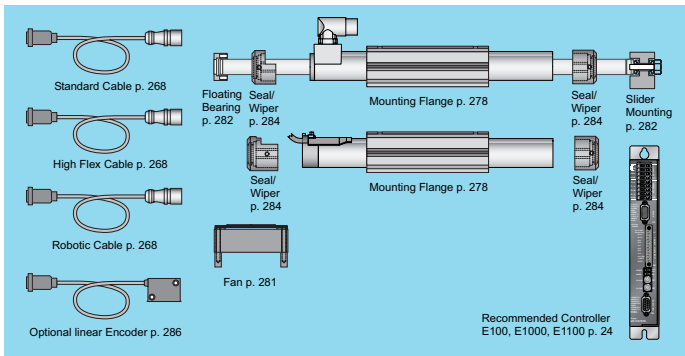


Standard Type	Slider Standard	PL01-20x700/620	0150-1332
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x700/620	0150-1333
	Hollow Slider Hole Diameter 6.5mm	PL01-20x700/620-L	0150-1360
	High Clearance Slider d=19mm, m=1380g	PL01-19x700/620	0150-1457

Connectors

Motor Connector Wiring		Cable Length:		P01-37...-C		P01-37...-C20		P01-37...	
Ph 1+	red	A	1	1.5m					
Ph 1-	pink	B	2						
Ph 2+	blue	C	3						
Ph 2-	gray	D	4						
+5VDC	white	E	5						
GND	inner Shield	F	6						
Sine	yellow	G	7						
Cosine	green	H	8						
Temp.	black	L	9						
Shield	outer Shield	Case	10						

Accessories

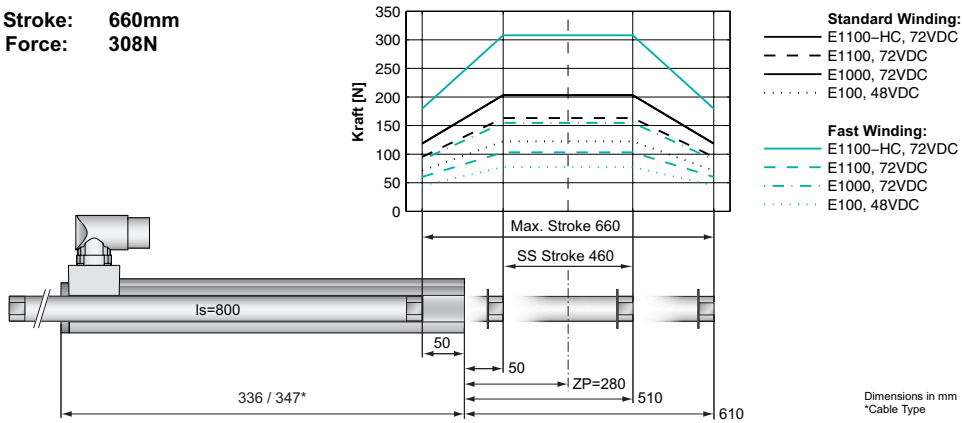


P01-37x240/360x560

P01-37x240/460x660

LinMot®

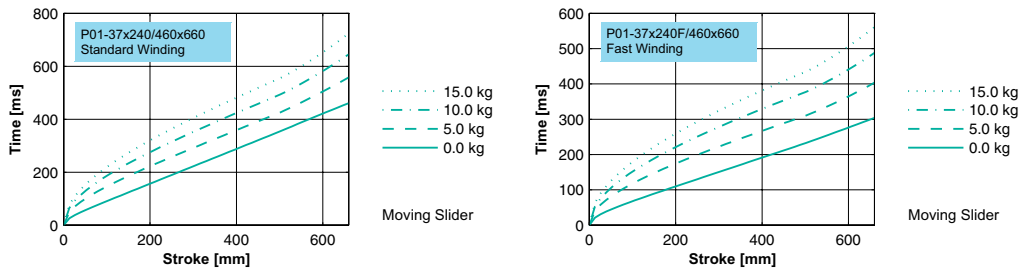
Max. Stroke: 660mm
Peak Force: 308N



Motor Specification

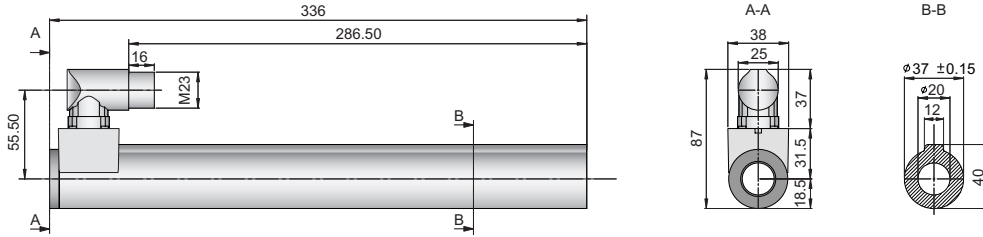
	Connector Type	Cable Type	
		Standard Winding	Fast Winding
P01:	37x240/460x660-C	37x240F/460x660-C	37x240/460x660-C20
Stroke Max.	mm (in)	660 (25.98)	660 (25.98)
Stroke SS	mm (in)	460 (18.11)	460 (18.11)
Peak Force E100/1000	N (lbf)	122/203 (27.5/45.7)	77/155 (17.4/34.8)
Peak Force E1100-HC	N (lbf)	163/203 (36.7/45.7)	103/308 (23.2/69.2)
Cont. Force	N (lbf)	55 (12.4)	55 (12.4)
Cont. Force Fan cooling	N (lbf)	100 (22.5)	100 (22.5)
Border Force	%	58	58
Force Constant	N/A (lbf/A)	40.8 (9.17)	25.8 (5.80)
Max. Current @ 72VDC	A	5.0	11.9
Max. Current @ 48VDC	A	3.0	7.3
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (64)	2.6 (101)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (43)	1.7 (67)
Phase Resist. 25/80 °C	Ohm	11.7/14.2	4.9/5.9
Phase Inductance	mH	7.0	2.8
Thermal Resistance	°K/W	2.2	2.2
Thermal Time Const.	sec	3250	3250
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)
Stator Length	mm (in)	336 (13.23)	347 (13.66)
Stator Mass	g (lb)	1385 (3.05)	1385 (3.05)
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)
Slider Length	mm (in)	800 (31.50)	800 (31.50)
Slider Mass	g (lb)	1762 (3.88)	1762 (3.88)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram



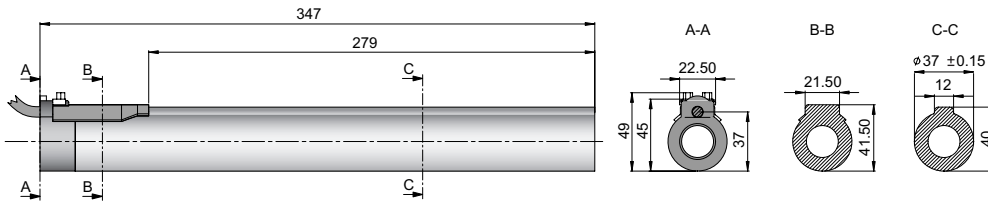
P01-37x240/460x660

Connector Type



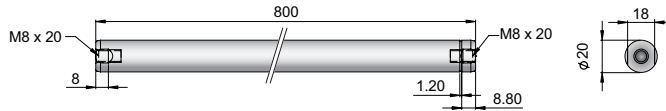
Linear Motor		Stator		Slider		
Type	Art. No.	Type	Art. No.	Type	Art. No.	
P01-37x240/460x660-C	->	PS01-37x240-C	0150-1224	&	PL01-20x800/720	0150-1334
P01-37x240F/460x660-C	->	PS01-37x240F-C	0150-1225	&	PL01-20x800/720	0150-1334

Cable Type



Linear Motor		Stator		Slider		
Type	Art. No.	Type	Art. No.	Type	Art. No.	
P01-37x240/460x660	->	PS01-37x240	0150-1203	&	PL01-20x800/720	0150-1334
P01-37x240/460x660-C20	->	PS01-37x240-C20	0150-1238	&	PL01-20x800/720	0150-1334
P01-37x240F/460x660-C20	->	PS01-37x240F-C20	0150-1239	&	PL01-20x800/720	0150-1334

Slider

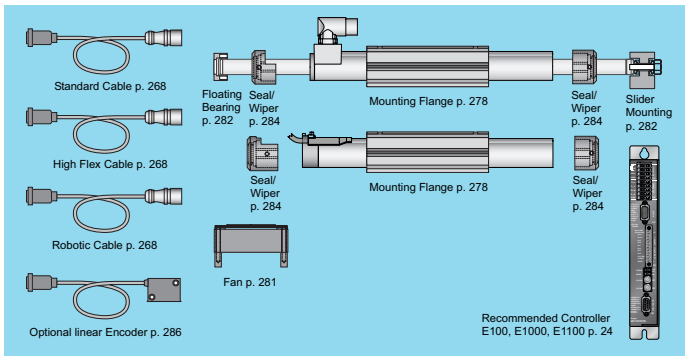


Standard Type	Slider Standard	PL01-20x800/720	0150-1334
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x800/720	0150-1335
	Hollow Slider Hole Diameter 6.5mm	PL01-20x800/720-L	0150-1361
	High Clearance Slider d=19mm, m=1590g	PL01-19x800/720	0150-1458

Connectors

Motor Connector Wiring		Cable Length:		P01-37...-C		P01-37...-C20		P01-37...	
Ph 1+	red	A	1	1.5m					
Ph 1-	pink	B	2	0.2m					
Ph 2+	blue	C	3						
Ph 2-	gray	D	4						
+5VDC	white	E	5						
GND	inner Shield	F	6						
Sine	yellow	G	7						
Cosine	green	H	8						
Temp.	black	L	9						
Shield	outer Shield	Case	10						

Accessories

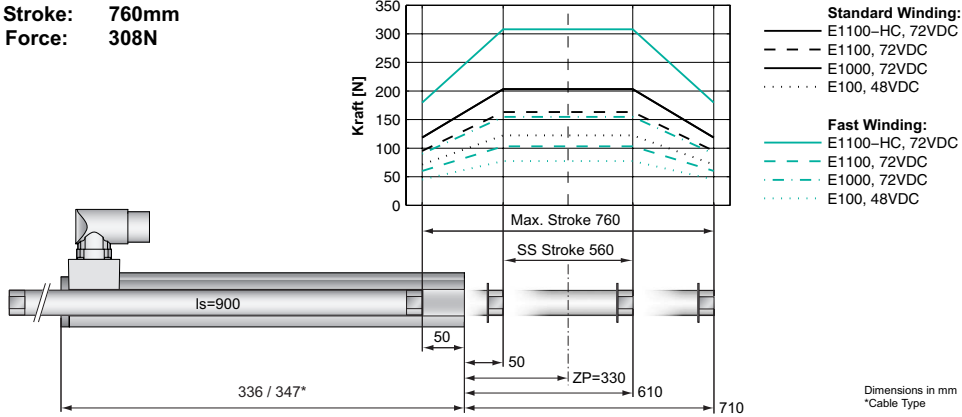


P01-37x240/460x660

P01-37x240/560x760

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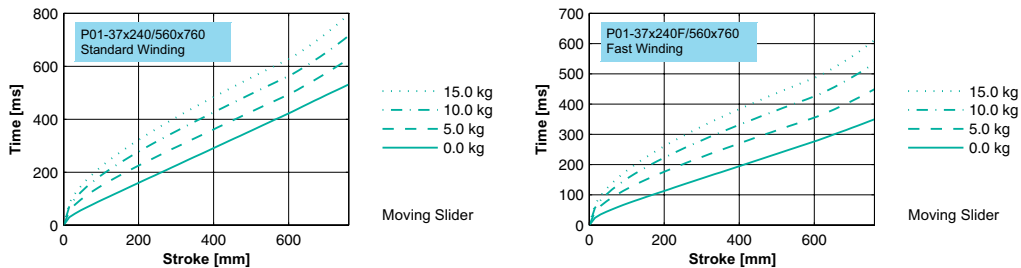
Max. Stroke: 760mm
Peak Force: 308N



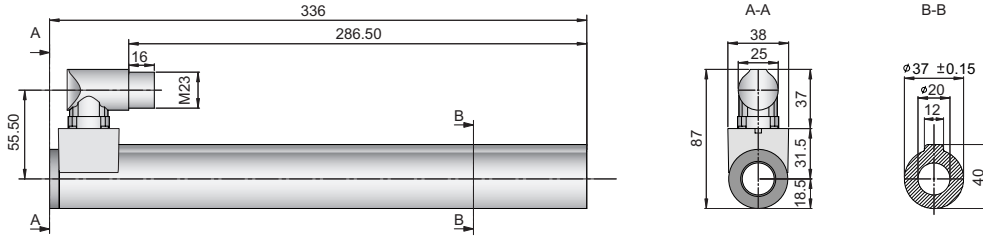
Motor Specification

	Connector Type	Cable Type	
		Standard Winding	Fast Winding
	P01-37x240/560x760-C	37x240F/560x760-C	37x240/560x760-C20
Stroke Max.	mm (in)	760 (29.92)	760 (29.92)
Stroke SS	mm (in)	560 (22.05)	560 (22.05)
Peak Force E100/1000	N (lbf)	122/203 (27.5/45.7)	77/155 (17.4/34.8)
Peak Force E1100-HC	N (lbf)	163/203 (36.7/45.7)	103/308 (23.2/69.2)
Cont. Force	N (lbf)	55 (12.4)	55 (12.4)
Cont. Force Fan cooling	N (lbf)	100 (22.5)	100 (22.5)
Border Force	%	58	58
Force Constant	N/A (lbf/A)	40.8 (9.17)	25.8 (5.80)
Max. Current @ 72VDC	A	5.0	11.9
Max. Current @ 48VDC	A	3.0	7.3
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (64)	2.6 (101)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (43)	1.7 (67)
Phase Resist. 25/80 °C	Ohm	11.7/14.2	4.9/5.9
Phase Inductance	mH	7.0	2.8
Thermal Resistance	°K/W	2.2	2.2
Thermal Time Const.	sec	3250	3250
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)
Stator Length	mm (in)	336 (13.23)	347 (13.66)
Stator Mass	g (lb)	1385 (3.05)	1385 (3.05)
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)
Slider Length	mm (in)	900 (35.43)	900 (35.43)
Slider Mass	g (lb)	1994 (4.40)	1994 (4.40)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

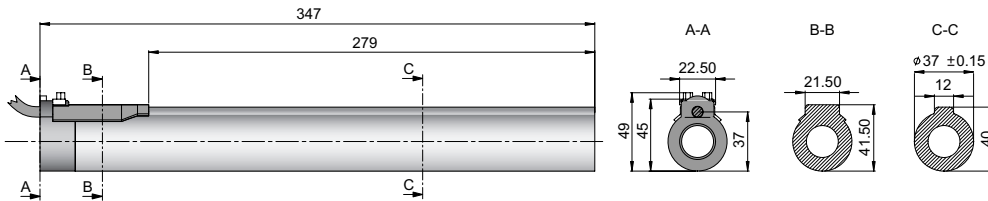


Connector Type



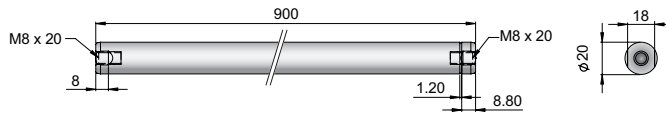
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x240/560x760-C	->	PS01-37x240-C	0150-1224	& PL01-20x900/820	0150-1336
P01-37x240F/560x760-C	->	PS01-37x240F-C	0150-1225	& PL01-20x900/820	0150-1336

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x240/560x760	->	PS01-37x240	0150-1203	& PL01-20x900/820	0150-1336
P01-37x240/560x760-C20	->	PS01-37x240-C20	0150-1238	& PL01-20x900/820	0150-1336
P01-37x240F/560x760-C20	->	PS01-37x240F-C20	0150-1239	& PL01-20x900/820	0150-1336

Slider

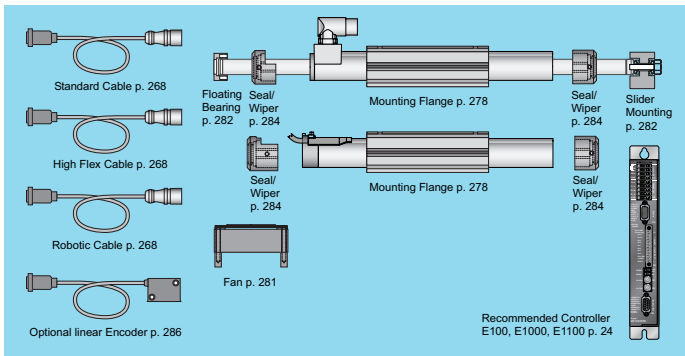


Standard Type	Slider Standard	PL01-20x900/820	0150-1336
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x900/820	0150-1337
	Hollow Slider Hole Diameter 6.5mm	PL01-20x900/820-L	0150-1362
	High Clearance Slider d=19mm	PL01-19x900/820	on request

Connectors

Motor Connector Wiring		Cable Length:		P01-37...-C		P01-37...-C20		P01-37...	
Ph 1+	red	A	1	1.5m					
Ph 1-	pink	B	2	0.2m					
Ph 2+	blue	C	3						
Ph 2-	gray	D	4						
+5VDC	white	E	5						
GND	inner Shield	F	6						
Sine	yellow	G	7						
Cosine	green	H	8						
Temp.	black	L	9						
Shield	outer Shield	Case	10						

Accessoires

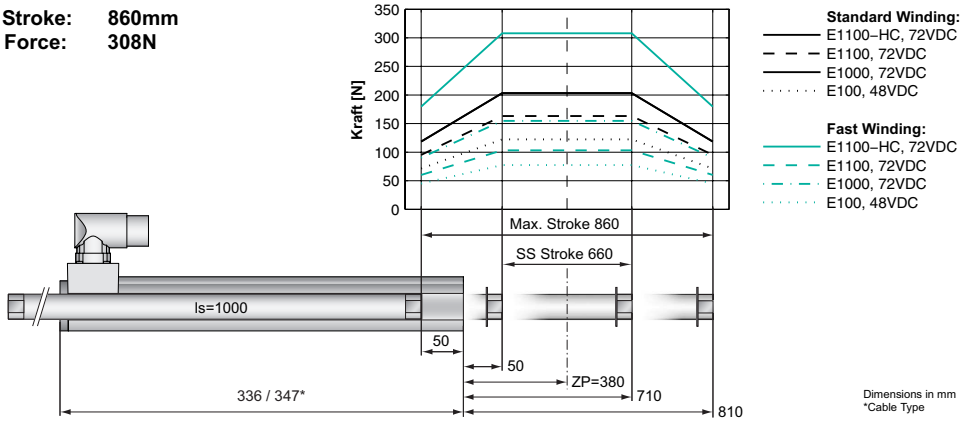


P01-37x240/560x760

P01-37x240/660x860

LinMot®

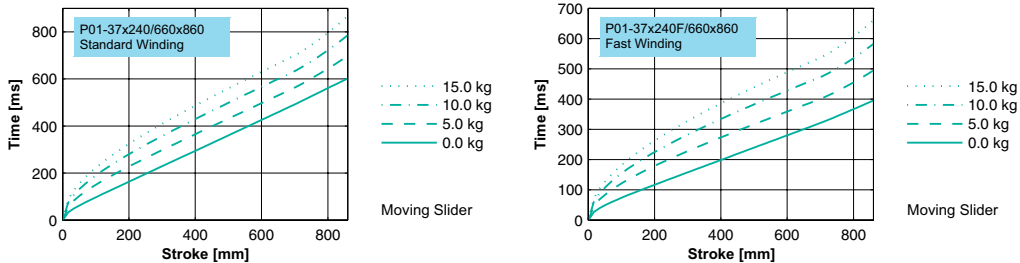
Max. Stroke: 860mm
Peak Force: 308N



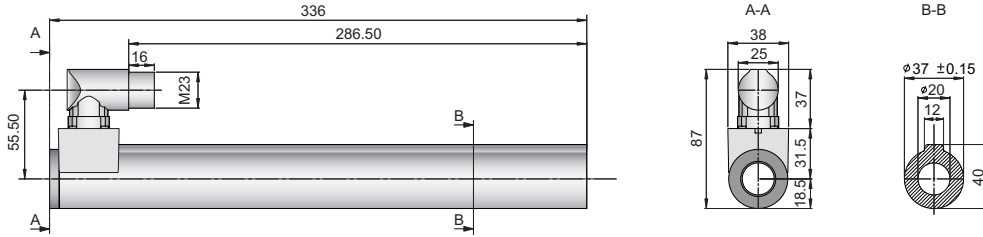
Motor Specification

	Connector Type	Cable Type	
		Standard Winding	Fast Winding
P01:	37x240/660x860-C	37x240F/660x860-C	37x240/660x860-C20
Stroke Max.	mm (in)	860 (33.86)	860 (33.86)
Stroke SS	mm (in)	660 (25.98)	660 (25.98)
Peak Force E100/1000	N (lbf)	122/203 (27.5/45.7)	77/155 (17.4/34.8)
Peak Force E1100/-HC	N (lbf)	163/203 (36.7/45.7)	103/308 (23.2/69.2)
Cont. Force	N (lbf)	55 (12.4)	55 (12.4)
Cont. Force Fan cooling	N (lbf)	100 (22.5)	100 (22.5)
Border Force	%	58	58
Force Constant	N/A (lbf/A)	40.8 (9.17)	25.8 (5.80)
Max. Current @ 72VDC	A	5.0	11.9
Max. Current @ 48VDC	A	3.0	7.3
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (64)	2.6 (101)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (43)	1.7 (67)
Phase Resist. 25/80 °C	Ohm	11.7/14.2	4.9/5.9
Phase Inductance	mH	7.0	2.8
Thermal Resistance	°K/W	2.2	2.2
Thermal Time Const.	sec	3250	3250
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)
Stator Length	mm (in)	336 (13.23)	336 (13.23)
Stator Mass	g (lb)	1385 (3.05)	1385 (3.05)
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)
Slider Length	mm (in)	1000 (39.37)	1000 (39.37)
Slider Mass	g (lb)	2227 (4.91)	2227 (4.91)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

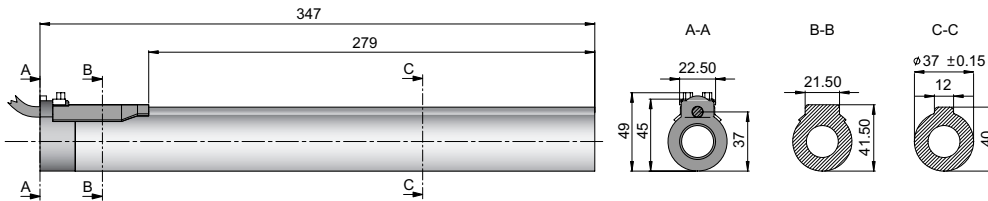


Connector Type



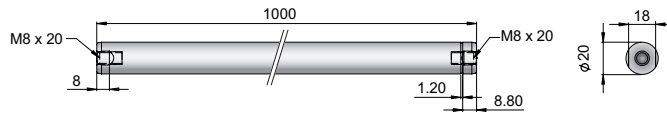
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x240/660x860-C	->	PS01-37x240-C	0150-1224	& PL01-20x1000/920	0150-1338
P01-37x240F/660x860-C	->	PS01-37x240F-C	0150-1225	& PL01-20x1000/920	0150-1338

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x240/660x860	->	PS01-37x240	0150-1203	& PL01-20x1000/920	0150-1338
P01-37x240/660x860-C20	->	PS01-37x240-C20	0150-1238	& PL01-20x1000/920	0150-1338
P01-37x240F/660x860-C20	->	PS01-37x240F-C20	0150-1239	& PL01-20x1000/920	0150-1338

Slider

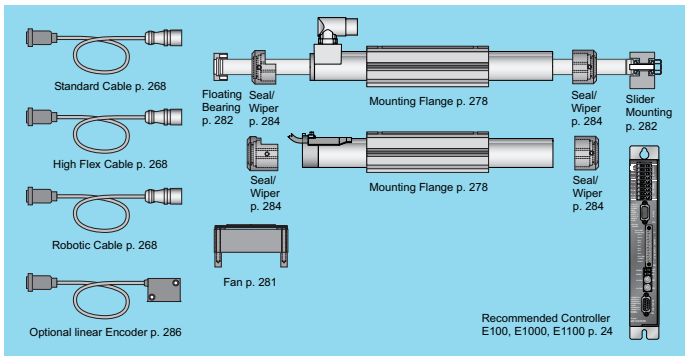


Standard Type	Slider Standard	PL01-20x1000/920	0150-1338
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x1000/920	on Request
	Hollow Slider Hole Diameter 6.5mm	PL01-20x1000/920-L	0150-1364
	High Clearance Slider d=19mm	PL01-19x1000/920	on Request

Connectors

Motor Connector Wiring		Cable Length:		P01-37...-C		P01-37...-C20		P01-37...	
P01-37x240...	1.5m	A	1						
P01-37x240...-C20	0.2m	B	2						
Ph 1+	red	C	3						
Ph 1-	pink	D	4						
Ph 2+	blue	E	5						
Ph 2-	gray	F	6						
+5VDC	white	G	7						
GND	inner Shield	H	8						
Sine	yellow	L	9						
Cosine	green	Case	10						
Temp.	black								
Shield	outer Shield								

Accessoires

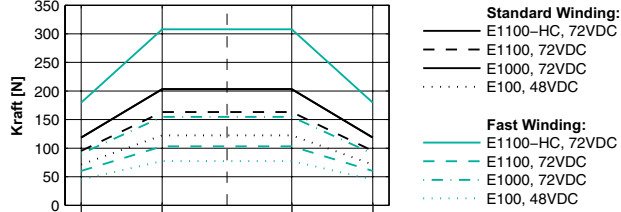
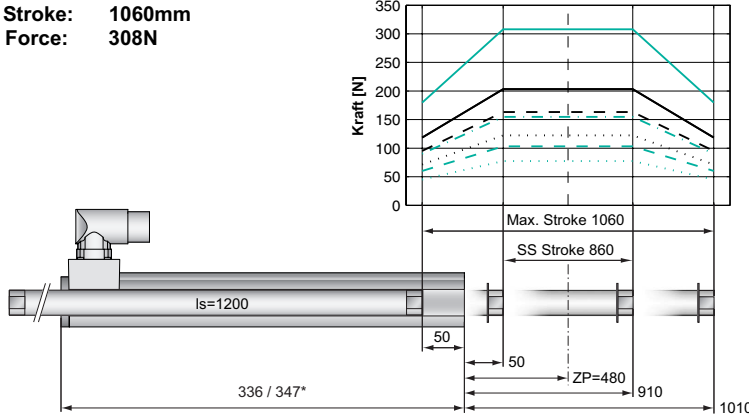


P01-37x240/660x860

P01-37x240/860x1060

LinMot®

Max. Stroke: 1060mm
Peak Force: 308N

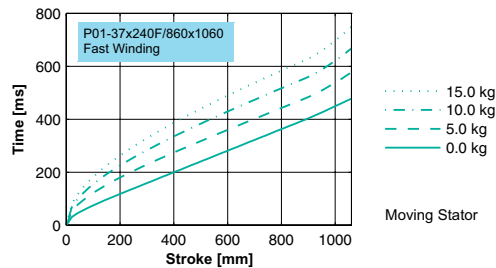
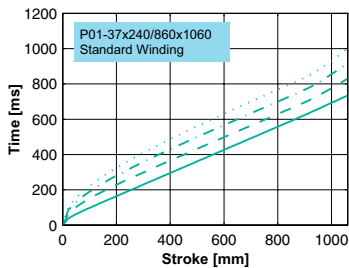


Motor Specification

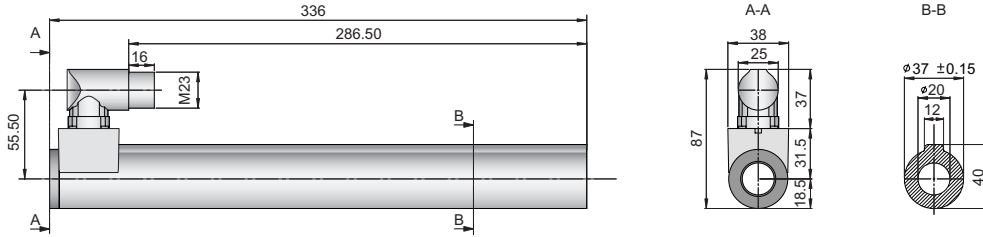
	P01:	Connector Type		Cable Type	
		Standard Winding	Fast Winding	Standard Winding	Fast Winding
		37x240/860x1060-C	37x240F/860x1060-C	37x240/860x1060-C20	37x240F/860x1060-C20
Stroke Max.	mm (in)	1060 (41.73)	1060 (41.73)	1060 (41.73)	1060 (41.73)
Stroke SS	mm (in)	860 (33.86)	860 (33.86)	860 (33.86)	860 (33.86)
Peak Force E100/1000	N (lbf)	122/203 (27.5/45.7)	77/155 (17.4/34.8)	122/203 (27.5/45.7)	77/155 (17.4/34.8)
Peak Force E1100-HC	N (lbf)	163/203 (36.7/45.7)	103/308 (23.2/69.2)	163/203 (36.7/45.7)	103/308 (23.2/69.2)
Cont. Force	N (lbf)	55 (12.4)	55 (12.4)	55 (12.4)	55 (12.4)
Cont. Force Fan cooling	N (lbf)	100 (22.5)	100 (22.5)	100 (22.5)	100 (22.5)
Border Force	%	58	58	58	58
Force Constant	N/A (lbf/A)	40.8 (9.17)	25.8 (5.80)	40.8 (9.17)	25.8 (5.80)
Max. Current @ 72VDC	A	5.0	11.9	5.0	11.9
Max. Current @ 48VDC	A	3.0	7.3	3.0	7.3
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (64)	2.6 (101)	1.6 (64)	2.6 (101)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (43)	1.7 (67)	1.1 (43)	1.7 (67)
Phase Resist. 25/80 °C	Ohm	11.7/14.2	4.9/5.9	11.7/14.2	4.9/5.9
Phase Inductance	mH	7.0	2.8	7.0	2.8
Thermal Resistance	°K/W	2.2	2.2	2.2	2.2
Thermal Time Const.	sec	3250	3250	3250	3250
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)	37 (1.46)	37 (1.46)
Stator Length	mm (in)	336 (13.23)	336 (13.23)	347 (13.66)	347 (13.66)
Stator Mass	g (lb)	1385 (3.05)	1385 (3.05)	1385 (3.05)	1385 (3.05)
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)	20 (0.79)	20 (0.79)
Slider Length	mm (in)	1200 (47.24)	1200 (47.24)	1200 (47.24)	1200 (47.24)
Slider Mass	g (lb)	2692 (5.93)	2692 (5.93)	2692 (5.93)	2692 (5.93)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-37x240/860x1060

Position-Time Diagram

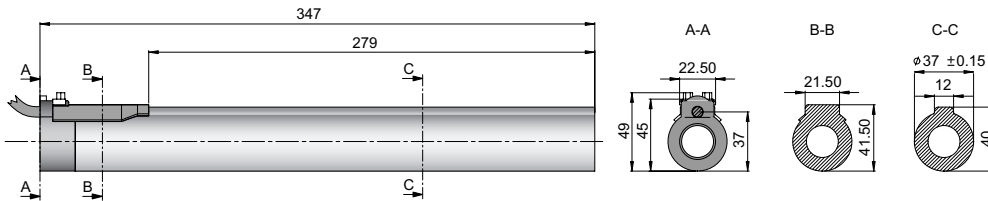


Connector Type



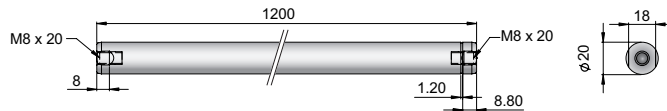
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x240/860x1060-C	->	PS01-37x240-C	0150-1224	& PL01-20x1200/1120	0150-1340
P01-37x240F/860x1060-C	->	PS01-37x240F-C	0150-1225	& PL01-20x1200/1120	0150-1340

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x240/860x1060	->	PS01-37x240	0150-1203	& PL01-20x1200/1120	0150-1340
P01-37x240/860x1060-C20	->	PS01-37x240-C20	0150-1238	& PL01-20x1200/1120	0150-1340
P01-37x240F/860x1060-C20	->	PS01-37x240F-C20	0150-1239	& PL01-20x1200/1120	0150-1340

Slider

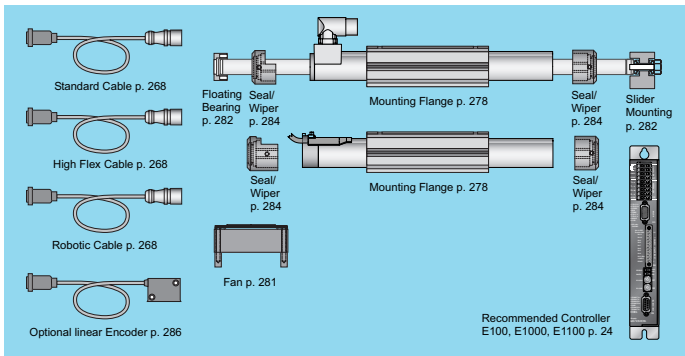


Standard Type	Slider Standard	PL01-20x1200/1120	0150-1340
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x1200/1120	on Request
	Hollow Slider Hole Diameter 6.5mm	PL01-20x1200/1120-L	0150-1376
	High Clearance Slider d=19mm	PL01-19x1200/1120	on Request

Connectors

Motor Connector Wiring		Cable		Wiring	
Cable Length:		P01-37...-C	P01-37...-C20	P01-37...	
P01-37x240...	1.5m				
P01-37x240...-C20	0.2m				
Ph 1+	red	A	1		
Ph 1-	pink	B	2		
Ph 2+	blue	C	3		
Ph 2-	gray	D	4		
+5VDC	white	E	5		
GND	inner Shield	F	6		
Sine	yellow	G	7		
Cosine	green	H	8		
Temp.	black	L	9		
Shield	outer Shield	Case	10		

Accessoires

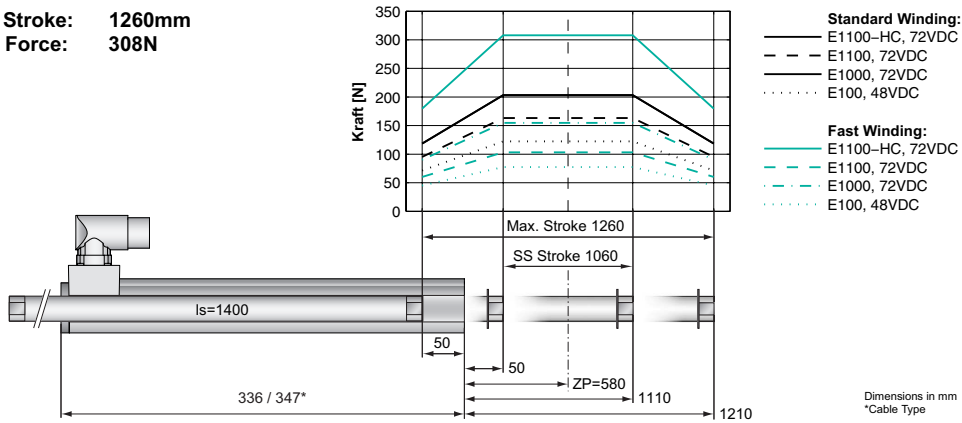


P01-37x240/860x1060

P01-37x240/1060x1260

LinMot®

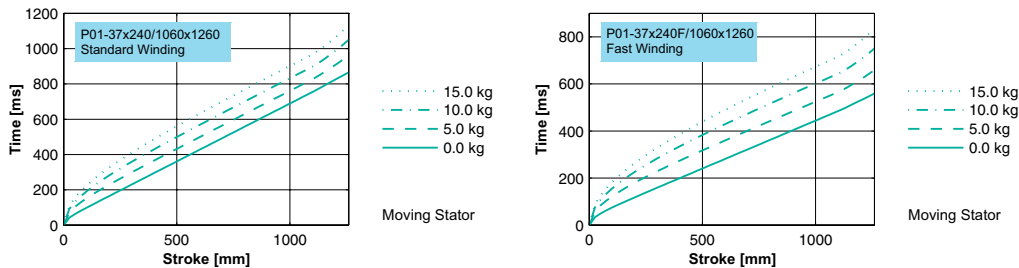
Max. Stroke: 1260mm
Peak Force: 308N



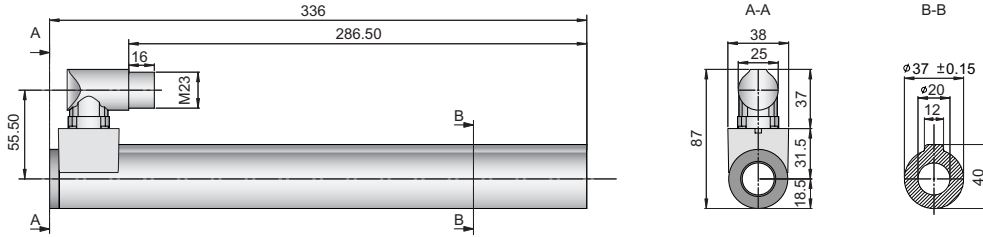
Motor Specification

	P01	Connector Type		Cable Type	
		Standard Winding	Fast Winding	Standard Winding	Fast Winding
Stroke Max.	mm (in)	1260 (49.61)	1260 (49.61)	1260 (49.61)	1260 (49.61)
Stroke SS	mm (in)	1060 (41.73)	1060 (41.73)	1060 (41.73)	1060 (41.73)
Peak Force E100/1000	N (lbf)	122/203 (27.5/45.7)	77/155 (17.4/34.8)	122/203 (27.5/45.7)	77/155 (17.4/34.8)
Peak Force E1100-HC	N (lbf)	163/203 (36.7/45.7)	103/308 (23.2/69.2)	163/203 (36.7/45.7)	103/308 (23.2/69.2)
Cont. Force	N (lbf)	55 (12.4)	55 (12.4)	55 (12.4)	55 (12.4)
Cont. Force Fan cooling	N (lbf)	100 (22.5)	100 (22.5)	100 (22.5)	100 (22.5)
Border Force	%	58	58	58	58
Force Constant	N/A (lbf/A)	40.8 (9.17)	25.8 (5.80)	40.8 (9.17)	25.8 (5.80)
Max. Current @ 72VDC	A	5.0	11.9	5.0	11.9
Max. Current @ 48VDC	A	3.0	7.3	3.0	7.3
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (64)	2.6 (101)	1.6 (64)	2.6 (101)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (43)	1.7 (67)	1.1 (43)	1.7 (67)
Phase Resist. 25/80 °C	Ohm	11.7/14.2	4.9/5.9	11.7/14.2	4.9/5.9
Phase Inductance	mH	7.0	2.8	7.0	2.8
Thermal Resistance	°K/W	2.2	2.2	2.2	2.2
Thermal Time Const.	sec	3250	3250	3250	3250
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)	37 (1.46)	37 (1.46)
Stator Length	mm (in)	336 (13.23)	336 (13.23)	347 (13.66)	347 (13.66)
Stator Mass	g (lb)	1385 (3.05)	1385 (3.05)	1385 (3.05)	1385 (3.05)
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)	20 (0.79)	20 (0.79)
Slider Length	mm (in)	1400 (55.12)	1400 (55.12)	1400 (55.12)	1400 (55.12)
Slider Mass	g (lb)	3157 (6.96)	3157 (6.96)	3157 (6.96)	3157 (6.96)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

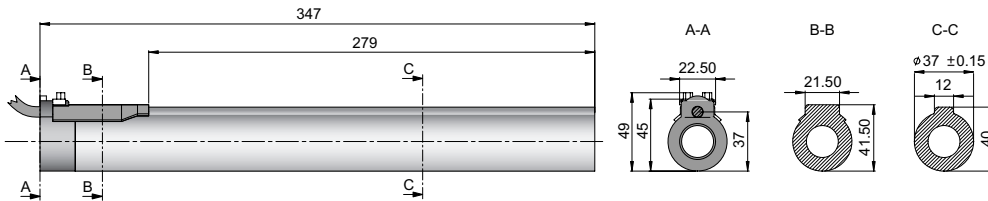


Connector Type



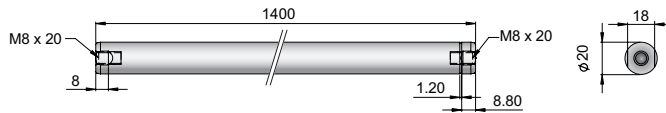
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x240/1060x1260-C	->	PS01-37x240-C	0150-1224	& PL01-20x1400/1320	0150-1342
P01-37x240F/1060x1260-C	->	PS01-37x240F-C	0150-1225	& PL01-20x1400/1320	0150-1342

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x240/1060x1260	->	PS01-37x240	0150-1203	& PL01-20x1400/1320	0150-1342
P01-37x240/1060x1260-C20	->	PS01-37x240-C20	0150-1238	& PL01-20x1400/1320	0150-1342
P01-37x240F/1060x1260-C20	->	PS01-37x240F-C20	0150-1239	& PL01-20x1400/1320	0150-1342

Slider

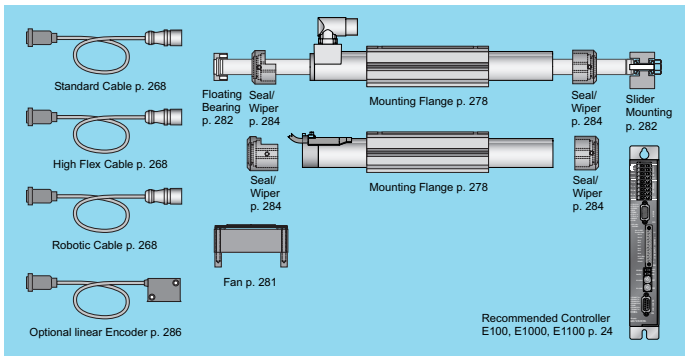


Standard Type	Slider Standard	PL01-20x1400/1320	0150-1342
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x1400/1320	on Request
	Hollow Slider Hole Diameter 6.5mm	PL01-20x1400/1320-L	on Request
	High Clearance Slider d=19mm	PL01-19x1400/1320	on Request

Connectors

Motor Connector Wiring		Cable		Wiring	
Cable Length:		P01-37...-C	P01-37...-C20		
P01-37x240...	1.5m				
P01-37x240...-C20	0.2m				
Ph 1+	red	A	1		
Ph 1-	pink	B	2		
Ph 2+	blue	C	3		
Ph 2-	gray	D	4		
+5VDC	white	E	5		
GND	inner Shield	F	6		
Sine	yellow	G	7		
Cosine	green	H	8		
Temp.	black	L	9		
Shield	outer Shield	Case	10		

Accessoires

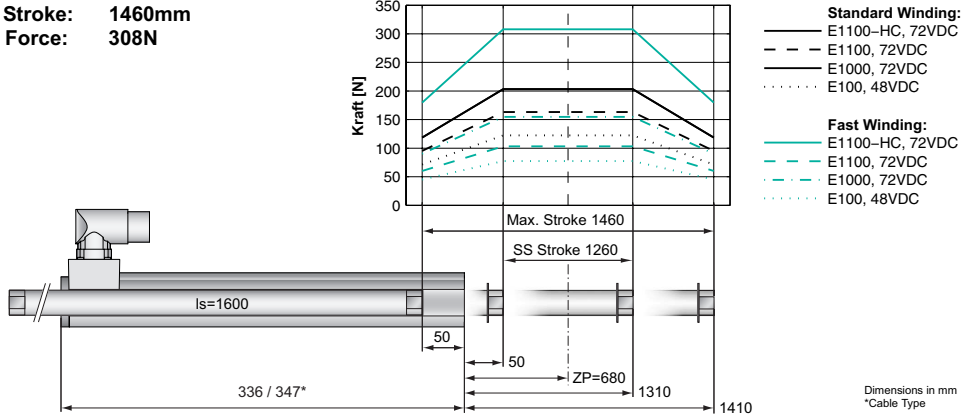


P01-37x240/1060x1260

P01-37x240/1260x1460

LinMot®

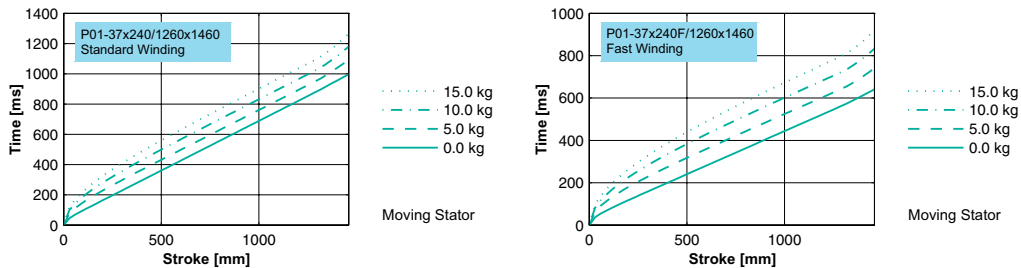
Max. Stroke: 1460mm
Peak Force: 308N



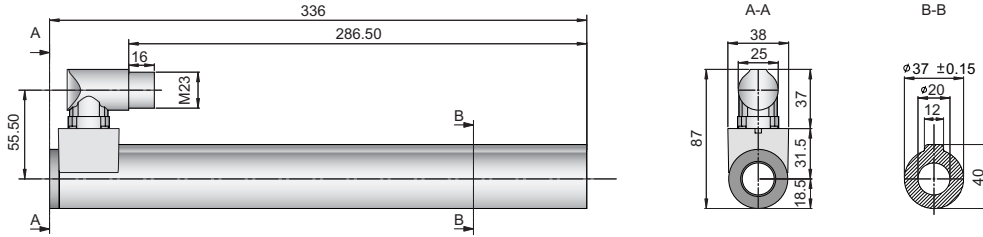
Motor Specification

	Connector Type	Cable Type	
		Standard Winding	Fast Winding
P01-	37x240/1260x1460-C	37x240F/1260x1460-C	37x240/1260x1460-C20
Stroke Max.	mm (in)	1460 (57.48)	1460 (57.48)
Stroke SS	mm (in)	1260 (49.61)	1260 (49.61)
Peak Force E100/1000	N (lbf)	122/203 (27.5/45.7)	77/155 (17.4/34.8)
Peak Force E1100/-HC	N (lbf)	163/203 (36.7/45.7)	103/308 (23.2/69.2)
Cont. Force	N (lbf)	55 (12.4)	55 (12.4)
Cont. Force Fan cooling	N (lbf)	100 (22.5)	100 (22.5)
Border Force	%	58	58
Force Constant	N/A (lbf/A)	40.8 (9.17)	25.8 (5.80)
Max. Current @ 72VDC	A	5.0	11.9
Max. Current @ 48VDC	A	3.0	7.3
Max. Velocity @ 72VDC	m/s (in/s)	1.6 (64)	2.6 (101)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (43)	1.7 (67)
Phase Resist. 25/80 °C	Ohm	11.7/14.2	4.9/5.9
Phase Inductance	mH	7.0	2.8
Thermal Resistance	°K/W	2.2	2.2
Thermal Time Const.	sec	3250	3250
Stator Diameter	mm (in)	37 (1.46)	37 (1.46)
Stator Length	mm (in)	336 (13.23)	336 (13.23)
Stator Mass	g (lb)	1385 (3.05)	1385 (3.05)
Slider Diameter	mm (in)	20 (0.79)	20 (0.79)
Slider Length	mm (in)	1600 (62.99)	1600 (62.99)
Slider Mass	g (lb)	3622 (7.99)	3622 (7.99)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

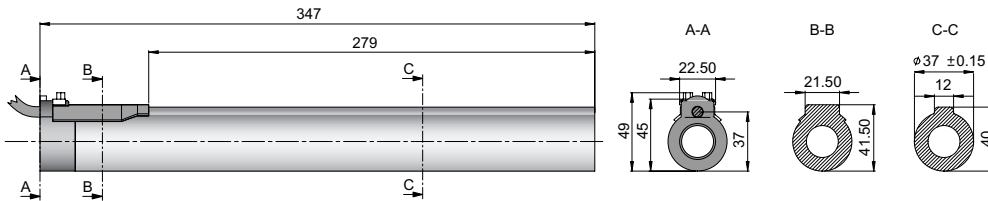


Connector Type



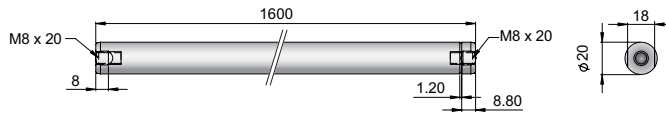
Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x240/1260x1460-C	->	PS01-37x240-C	0150-1224	& PL01-20x1600/1520	0150-1344
P01-37x240F/1260x1460-C	->	PS01-37x240F-C	0150-1225	& PL01-20x1600/1520	0150-1344

Cable Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-37x240/1260x1460	->	PS01-37x240	0150-1203	& PL01-20x1600/1520	0150-1344
P01-37x240/1260x1460-C20	->	PS01-37x240-C20	0150-1238	& PL01-20x1600/1520	0150-1344
P01-37x240F/1260x1460-C20	->	PS01-37x240F-C20	0150-1239	& PL01-20x1600/1520	0150-1344

Slider

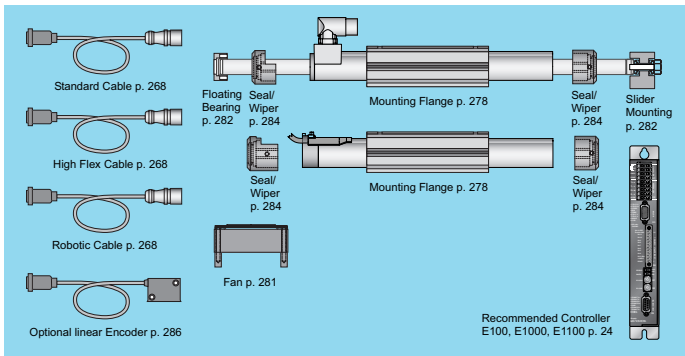


Standard Type	Slider Standard	PL01-20x1600/1520	0150-1344
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-20x1600/1520	on Request
	Hollow Slider Hole Diameter 6.5mm	PL01-20x1600/1520-L	on Request
	High Clearance Slider d=19mm	PL01-19x1600/1520	on Request

Connectors

Motor Connector Wiring		Cable Length:		P01-37...-C		P01-37...-C20		P01-37...	
Ph 1+	red	A	1	1.5m					
Ph 1-	pink	B	2	0.2m					
Ph 2+	blue	C	3						
Ph 2-	gray	D	4						
+5VDC	white	E	5						
GND	inner Shield	F	6						
Sine	yellow	G	7						
Cosine	green	H	8						
Temp.	black	L	9						
Shield	outer Shield	Case	10						

Accessoires



P01-37x240/1260x1460

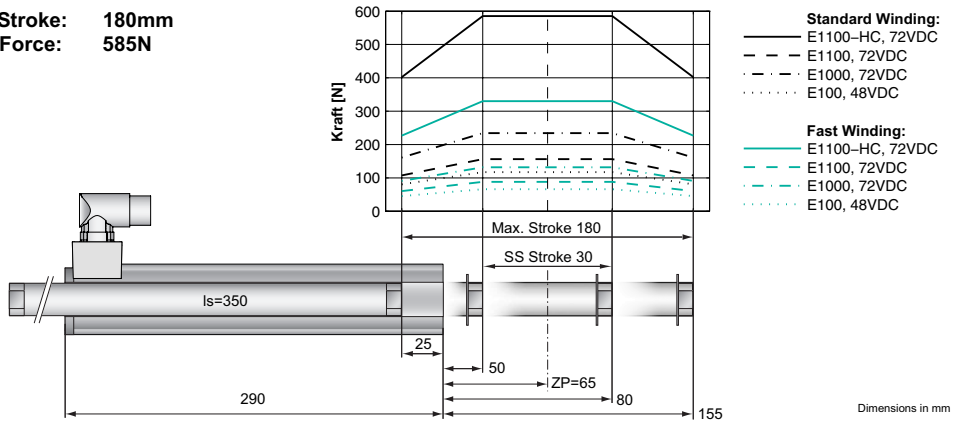


P01-48x240/30x180	242
P01-48x240/90x240	244
P01-48x240/180x330	246
P01-48x240/300x450	248
P01-48x240/390x540	250
P01-48x240/480x630	252
P01-48x240/600x750	254
P01-48x240/690x840	256
P01-48x240/900x1050	258
P01-48x240/1080x1230	260
P01-48x240/1290x1440	262

P01-48x240/30x180

LinMot®

Max. Stroke: 180mm
Peak Force: 585N

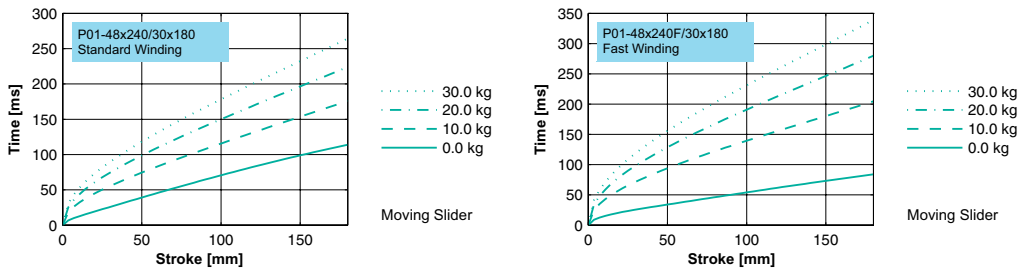


Motor Specification

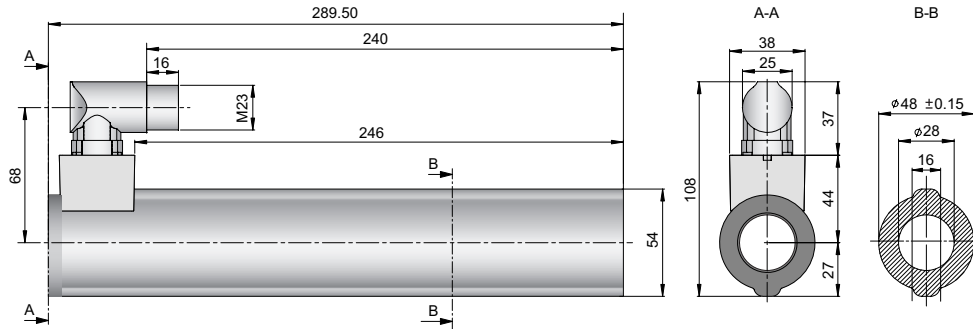
P01-		Standard Winding	Fast Winding
		48x240/30x180-C	48x240F/30x180-C
Stroke Max.	mm (in)	180 (7.09)	180 (7.09)
Stroke SS	mm (in)	30 (1.18)	30 (1.18)
Peak Force E100/1000	N (lbf)	117/234 (26.3/52.6)	66/132 (14.8/29.7)
Peak Force E1100/-HC	N (lbf)	156/585 (35.1/131.5)	88/330 (19.8/74.2)
Cont. Force	N (lbf)	145 (32.6)	145 (32.6)
Cont. Force Fan cooling	N (lbf)	257 (57.8)	257 (57.8)
Border Force	%	69	69
Force Constant	N/A (lbf/A)	39.0 (8.77)	22.0 (4.95)
Max. Current @ 72VDC	A	15.0	15.0
Max. Current @ 48VDC	A	11.5	15.0
Max. Velocity @ 72VDC	m/s (in/s)	1.7 (67)	3.0 (119)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (45)	2.0 (79)
Phase Resist. 25/80 °C	Ohm	3.1/3.7	1.0/1.2
Phase Inductance	mH	3.1	1.0
Thermal Resistance	°K/W	1.1	1.1
Thermal Time Const.	sec	3000	3000
Stator Diameter	mm (in)	48 (1.89)	48 (1.89)
Stator Length	mm (in)	290 (11.40)	290 (11.40)
Stator Mass	g (lb)	1930 (4.25)	1930 (4.25)
Slider Diameter	mm (in)	28 (1.10)	28 (1.10)
Slider Length	mm (in)	350 (13.78)	350 (13.78)
Slider Mass	g (lb)	1460 (3.22)	1460 (3.22)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.3	±0.3
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

P01-48x240/30x180

Position-Time Diagram

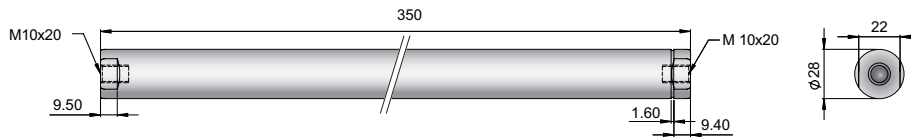


Connector Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-48x240/30x180-C	-->	PS01-48x240-C	0150-1219	& PL01-28x350/270	0150-1380
P01-48x240F/30x180-C	-->	PS01-48x240F-C	0150-1220	& PL01-28x350/270	0150-1380

Slider



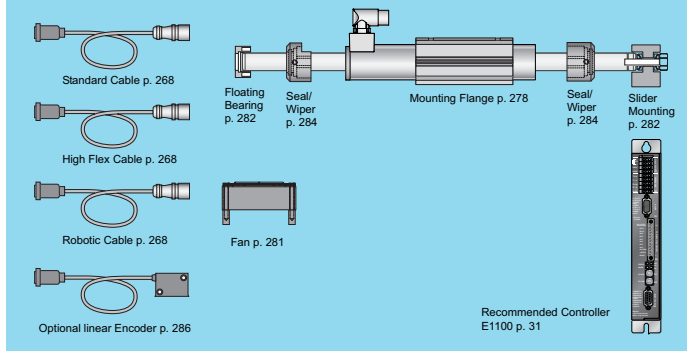
Standard Type	Slider Standard	PL01-28x350/270	0150-1380
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-28x350/270	0150-1411
	Hollow Slider Hole Diameter 8.5mm	PL01-28x350/270-L	0150-1475
	High Clearance Slider d=27mm, m=1360g	PL01-27x350/270	0150-1467

P01-48x240/30x180

Connectors

Motor Connector Wiring		P01-48...-C
Ph 1+	red	
Ph 1-	pink	B
Ph 2+	blue	C
Ph 2-	gray	D
+5VDC	white	E
GND	inner Shield	F
Sine	yellow	G
Cosine	green	H
Temp.	black	L
Shield	outer Shield	Case

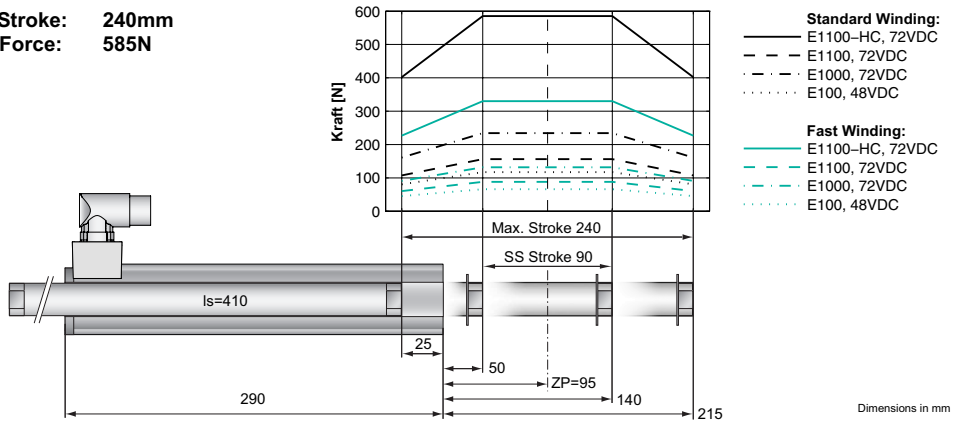
Accessoires



P01-48x240/90x240

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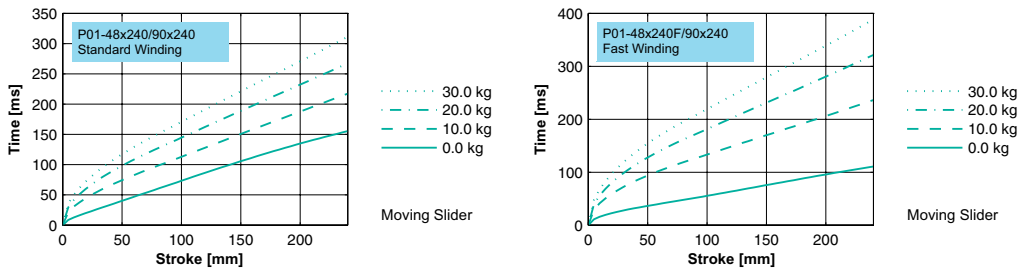
Max. Stroke: 240mm
Peak Force: 585N



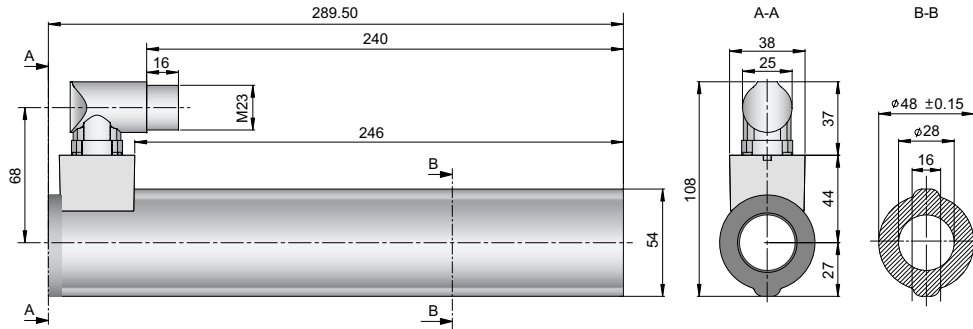
Motor Specification

P01-		Standard Winding	Fast Winding
		48x240/90x240-C	48x240F/90x240-C
Stroke Max.	mm (in)	240 (9.45)	240 (9.45)
Stroke SS	mm (in)	90 (3.54)	90 (3.54)
Peak Force E100/1000	N (lbf)	117/234 (26.3/52.6)	66/132 (14.8/29.7)
Peak Force E1100/-HC	N (lbf)	156/585 (35.1/131.5)	88/330 (19.8/74.2)
Cont. Force	N (lbf)	145 (32.6)	145 (32.6)
Cont. Force Fan cooling	N (lbf)	257 (57.8)	257 (57.8)
Border Force	%	69	69
Force Constant	N/A (lbf/A)	39.0 (8.77)	22.0 (4.95)
Max. Current @ 72VDC	A	15.0	15.0
Max. Current @ 48VDC	A	11.5	15.0
Max. Velocity @ 72VDC	m/s (in/s)	1.7 (67)	3.0 (119)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (45)	2.0 (79)
Phase Resist. 25/80 °C	Ohm	3.1/3.7	1.0/1.2
Phase Inductance	mH	3.1	1.0
Thermal Resistance	°K/W	1.1	1.1
Thermal Time Const.	sec	3000	3000
Stator Diameter	mm (in)	48 (1.89)	48 (1.89)
Stator Length	mm (in)	290 (11.40)	290 (11.40)
Stator Mass	g (lb)	1930 (4.25)	1930 (4.25)
Slider Diameter	mm (in)	28 (1.10)	28 (1.10)
Slider Length	mm (in)	410 (16.14)	410 (16.14)
Slider Mass	g (lb)	1740 (3.84)	1740 (3.84)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.2	±0.2
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

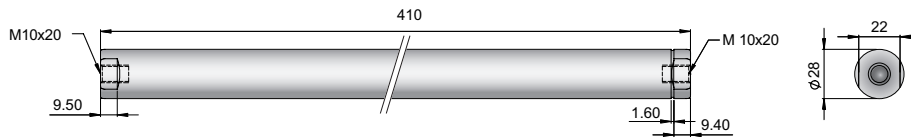


Connector Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-48x240/90x240-C	-->	PS01-48x240-C	0150-1219	& PL01-28x410/330	0150-1381
P01-48x240F/90x240-C	-->	PS01-48x240F-C	0150-1220	& PL01-28x410/330	0150-1381

Slider



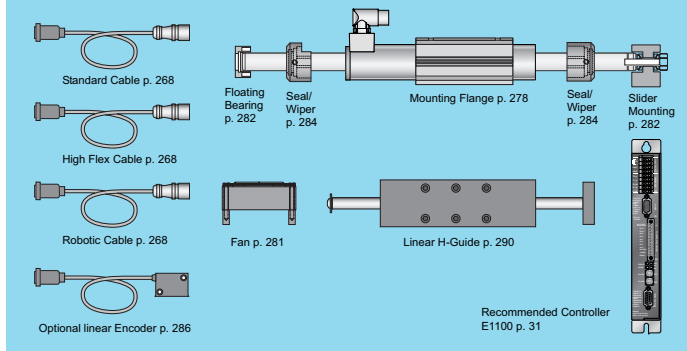
Standard Type	Slider Standard	PL01-28x410/330	0150-1381
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-28x410/330	0150-1412
	Hollow Slider Hole Diameter 8.5mm	PL01-28x410/330-L	0150-1476
	High Clearance Slider d=27mm, m=1620g	PL01-27x410/330	0150-1468

P01-48x240/90x240

Connectors

Motor Connector Wiring		P01-48...-C
Ph 1+	red	
Ph 1-	pink	B
Ph 2+	blue	C
Ph 2-	gray	D
+5VDC	white	E
GND	inner Shield	F
Sine	yellow	G
Cosine	green	H
Temp.	black	L
Shield	outer Shield	Case

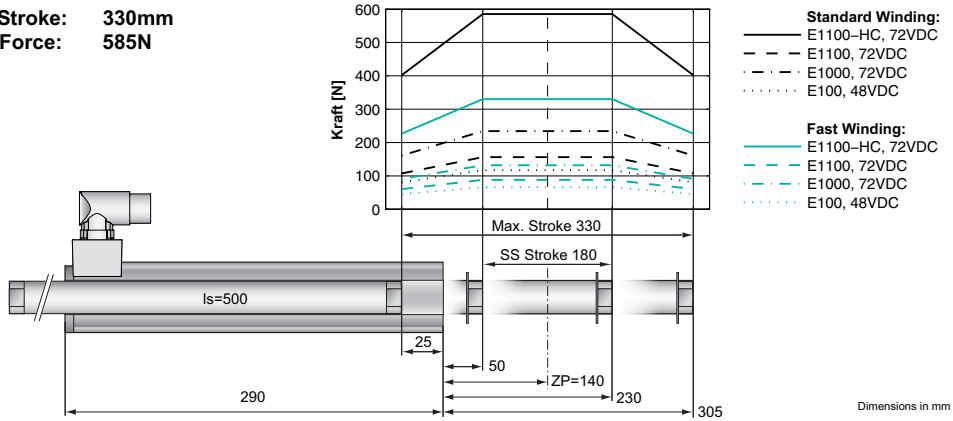
Accessoires



P01-48x240/180x330

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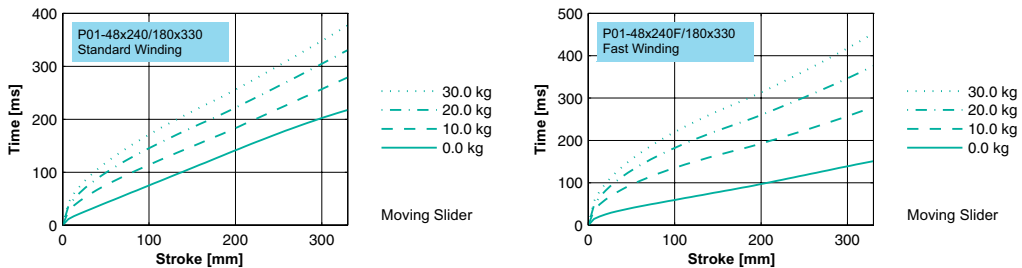
Max. Stroke: 330mm
Peak Force: 585N



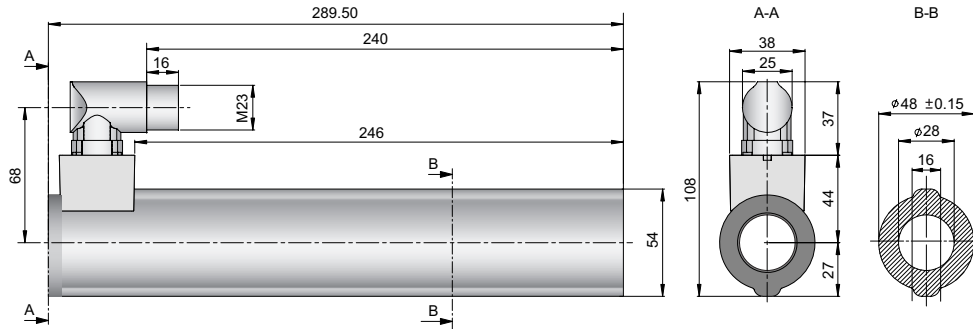
Motor Specification

P01-		Standard Winding	Fast Winding
		48x240/180x330-C	48x240F/180x330-C
Stroke Max.	mm (in)	330 (12.99)	330 (12.99)
Stroke SS	mm (in)	180 (7.09)	180 (7.09)
Peak Force E100/1000	N (lbf)	117/234 (26.3/52.6)	66/132 (14.8/29.7)
Peak Force E1100/-HC	N (lbf)	156/585 (35.1/131.5)	88/330 (19.8/74.2)
Cont. Force	N (lbf)	145 (32.6)	145 (32.6)
Cont. Force Fan cooling	N (lbf)	257 (57.8)	257 (57.8)
Border Force	%	69	69
Force Constant	N/A (lbf/A)	39.0 (8.77)	22.0 (4.95)
Max. Current @ 72VDC	A	15.0	15.0
Max. Current @ 48VDC	A	11.5	15.0
Max. Velocity @ 72VDC	m/s (in/s)	1.7 (67)	3.0 (119)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (45)	2.0 (79)
Phase Resist. 25/80 °C	Ohm	3.1/3.7	1.0/1.2
Phase Inductance	mH	3.1	1.0
Thermal Resistance	°K/W	1.1	1.1
Thermal Time Const.	sec	3000	3000
Stator Diameter	mm (in)	48 (1.89)	48 (1.89)
Stator Length	mm (in)	290 (11.40)	290 (11.40)
Stator Mass	g (lb)	1930 (4.25)	1930 (4.25)
Slider Diameter	mm (in)	28 (1.10)	28 (1.10)
Slider Length	mm (in)	500 (19.69)	500 (19.69)
Slider Mass	g (lb)	2160 (4.76)	2160 (4.76)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

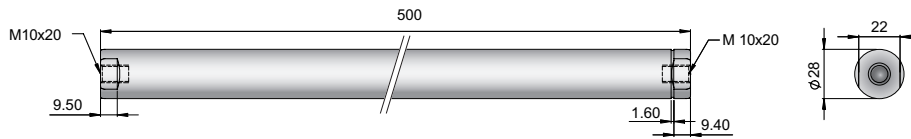


Connector Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-48x240/180x330-C	->	PS01-48x240-C	0150-1219	& PL01-28x500/420	0150-1382
P01-48x240F/180x330-C	->	PS01-48x240F-C	0150-1220	& PL01-28x500/420	0150-1382

Slider



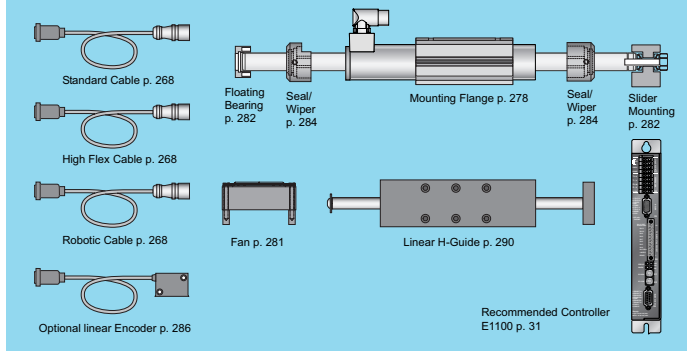
Standard Type	Slider Standard	PL01-28x500/420	0150-1382
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-28x500/420	0150-1413
	Hollow Slider Hole Diameter 8.5mm	PL01-28x500/420-L	0150-1480
	High Clearance Slider d=27mm, m=2010g	PL01-27x500/420	0150-1469

P01-48x240/180x330

Connectors

Motor Connector Wiring		P01-48...-C
Ph 1+	red	
Ph 1-	pink	B
Ph 2+	blue	C
Ph 2-	gray	D
+5VDC	white	E
GND	inner Shield	F
Sine	yellow	G
Cosine	green	H
Temp.	black	L
Shield	outer Shield	Case

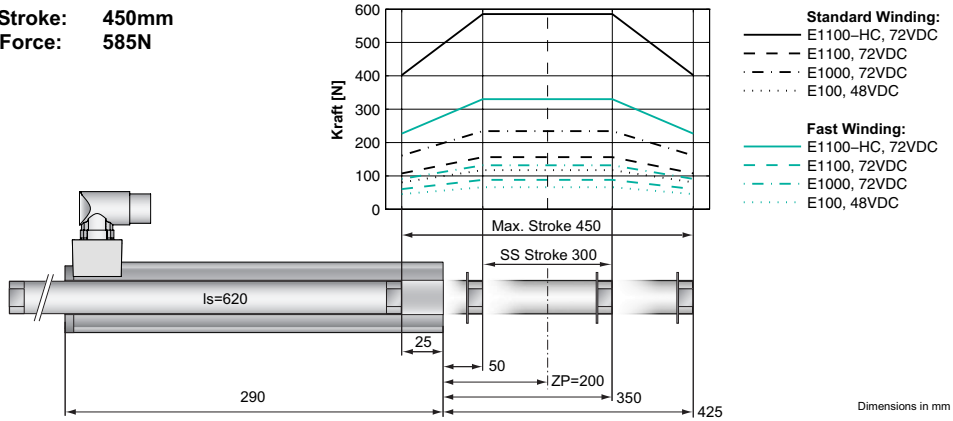
Accessoires



P01-48x240/300x450

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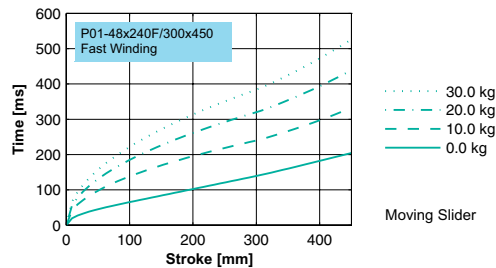
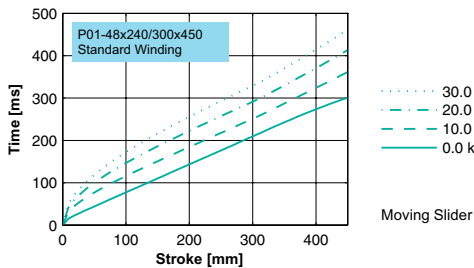
Max. Stroke: 450mm
Peak Force: 585N



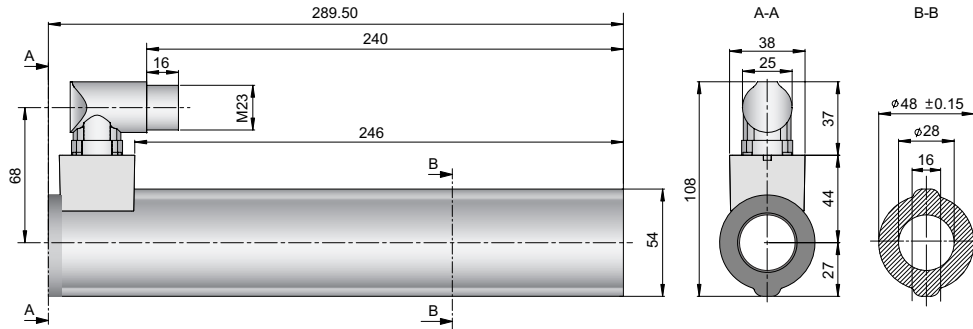
Motor Specification

P01-		Standard Winding	Fast Winding
		48x240/300x450-C	48x240F/300x450-C
Stroke Max.	mm (in)	450 (17.72)	450 (17.72)
Stroke SS	mm (in)	300 (11.81)	300 (11.81)
Peak Force E100/1000	N (lbf)	117/234 (26.3/52.6)	66/132 (14.8/29.7)
Peak Force E1100/-HC	N (lbf)	156/585 (35.1/131.5)	88/330 (19.8/74.2)
Cont. Force	N (lbf)	145 (32.6)	145 (32.6)
Cont. Force Fan cooling	N (lbf)	257 (57.8)	257 (57.8)
Border Force	%	69	69
Force Constant	N/A (lbf/A)	39.0 (8.77)	22.0 (4.95)
Max. Current @ 72VDC	A	15.0	15.0
Max. Current @ 48VDC	A	11.5	15.0
Max. Velocity @ 72VDC	m/s (in/s)	1.7 (67)	3.0 (119)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (45)	2.0 (79)
Phase Resist. 25/80 °C	Ohm	3.1/3.7	1.0/1.2
Phase Inductance	mH	3.1	1.0
Thermal Resistance	°K/W	1.1	1.1
Thermal Time Const.	sec	3000	3000
Stator Diameter	mm (in)	48 (1.89)	48 (1.89)
Stator Length	mm (in)	290 (11.40)	290 (11.40)
Stator Mass	g (lb)	1930 (4.25)	1930 (4.25)
Slider Diameter	mm (in)	28 (1.10)	28 (1.10)
Slider Length	mm (in)	620 (24.41)	620 (24.41)
Slider Mass	g (lb)	2720 (6.00)	2720 (6.00)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

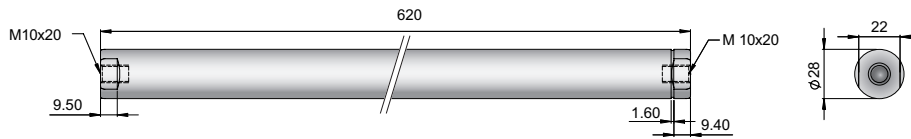


Connector Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-48x240/300x450-C	-->	PS01-48x240-C	0150-1219	& PL01-28x620/540	0150-1383
P01-48x240F/300x450-C	-->	PS01-48x240F-C	0150-1220	& PL01-28x620/540	0150-1383

Slider



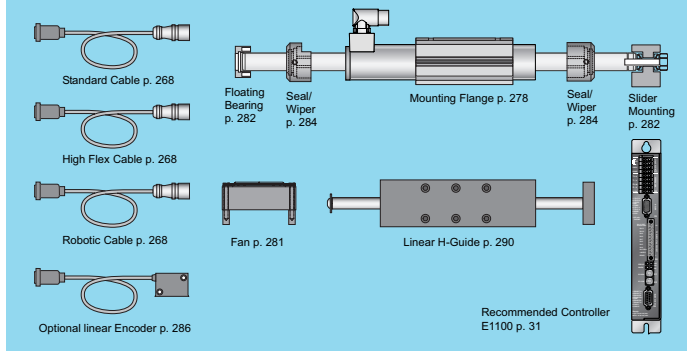
Standard Type	Slider Standard	PL01-28x620/540	0150-1383
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-28x620/540	0150-1414
	Hollow Slider Hole Diameter 8.5mm	PL01-28x620/540-L	0150-1481
	High Clearance Slider d=27mm, m=2530g	PL01-27x620/540	0150-1470

P01-48x240/300x450

Connectors

Motor Connector Wiring		P01-48...-C
Ph 1+	red	
Ph 1-	pink	B
Ph 2+	blue	C
Ph 2-	gray	D
+5VDC	white	E
GND	inner Shield	F
Sine	yellow	G
Cosine	green	H
Temp.	black	L
Shield	outer Shield	Case

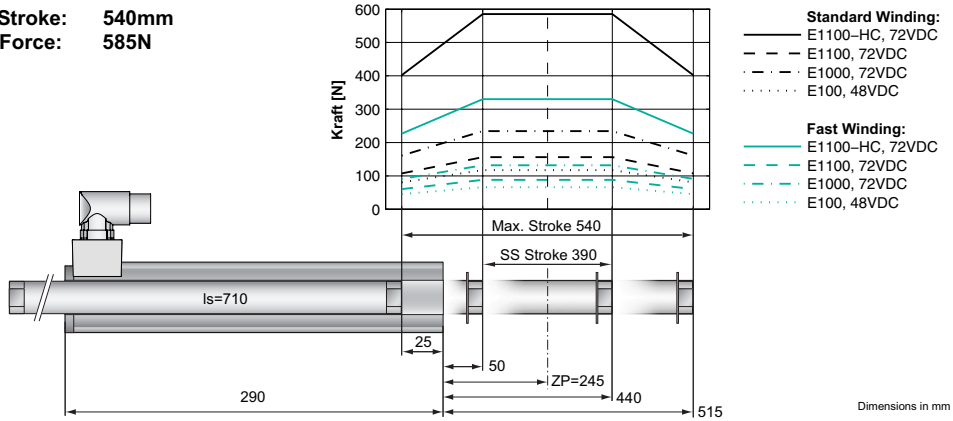
Accessoires



P01-48x240/390x540

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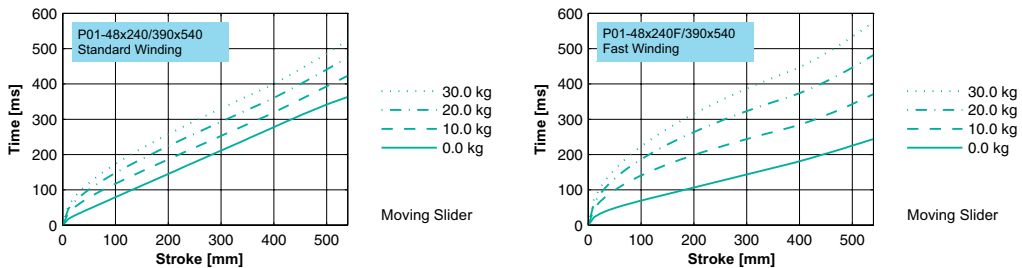
Max. Stroke: 540mm
Peak Force: 585N



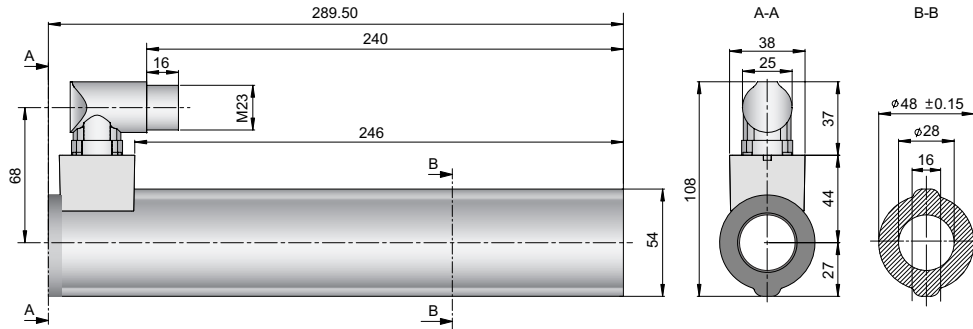
Motor Specification

P01-		Standard Winding	Fast Winding
		48x240/390x540-C	48x240F/390x540-C
Stroke Max.	mm (in)	540 (21.26)	540 (21.26)
Stroke SS	mm (in)	390 (15.35)	390 (15.35)
Peak Force E100/1000	N (lbf)	117/234 (26.3/52.6)	66/132 (14.8/29.7)
Peak Force E1100/-HC	N (lbf)	156/585 (35.1/131.5)	88/330 (19.8/74.2)
Cont. Force	N (lbf)	145 (32.6)	145 (32.6)
Cont. Force Fan cooling	N (lbf)	257 (57.8)	257 (57.8)
Border Force	%	69	69
Force Constant	N/A (lbf/A)	39.0 (8.77)	22.0 (4.95)
Max. Current @ 72VDC	A	15.0	15.0
Max. Current @ 48VDC	A	11.5	15.0
Max. Velocity @ 72VDC	m/s (in/s)	1.7 (67)	3.0 (119)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (45)	2.0 (79)
Phase Resist. 25/80 °C	Ohm	3.1/3.7	1.0/1.2
Phase Inductance	mH	3.1	1.0
Thermal Resistance	°K/W	1.1	1.1
Thermal Time Const.	sec	3000	3000
Stator Diameter	mm (in)	48 (1.89)	48 (1.89)
Stator Length	mm (in)	290 (11.40)	290 (11.40)
Stator Mass	g (lb)	1930 (4.25)	1930 (4.25)
Slider Diameter	mm (in)	28 (1.10)	28 (1.10)
Slider Length	mm (in)	710 (27.95)	710 (27.95)
Slider Mass	g (lb)	3140 (6.92)	3140 (6.92)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

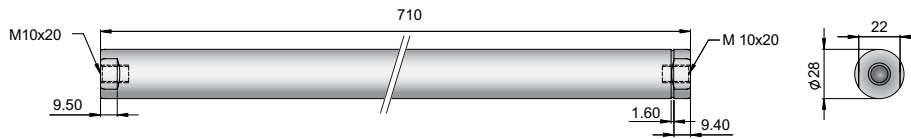


Connector Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-48x240/390x540-C	-->	PS01-48x240-C	0150-1219	& PL01-28x710/630	0150-1384
P01-48x240F/390x540-C	-->	PS01-48x240F-C	0150-1220	& PL01-28x710/630	0150-1384

Slider



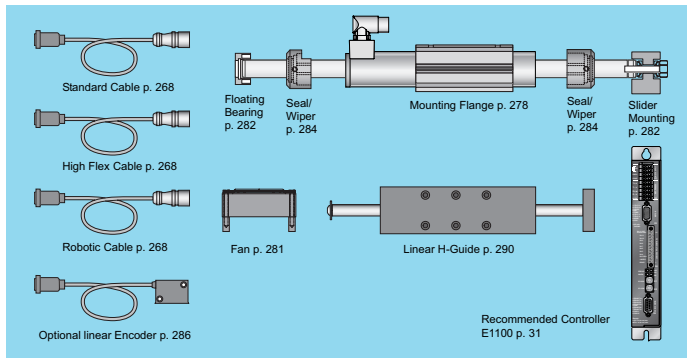
Standard Type	Slider Standard	PL01-28x710/630	0150-1384
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-28x710/630	0150-1415
	Hollow Slider Hole Diameter 8.5mm	PL01-28x710/630-L	0150-1482
	High Clearance Slider d=27mm, m=2920g	PL01-27x710/630	0150-1471

P01-48x240/390x540

Connectors

Motor Connector Wiring		P01-48...-C
Ph 1+	red	
Ph 1-	pink	B
Ph 2+	blue	C
Ph 2-	gray	D
+5VDC	white	E
GND	inner Shield	F
Sine	yellow	G
Cosine	green	H
Temp.	black	L
Shield	outer Shield	Case

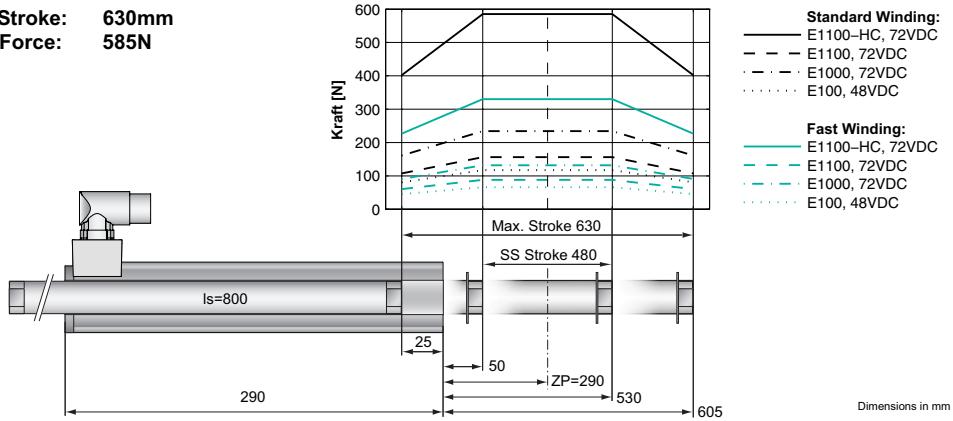
Accessoires



P01-48x240/480x630

LinMot®

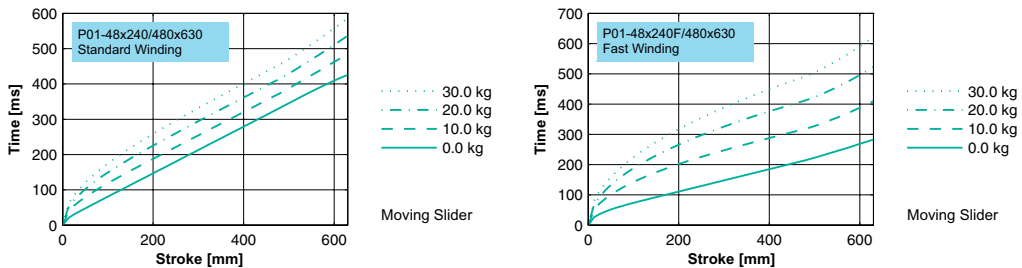
Max. Stroke: 630mm
Peak Force: 585N



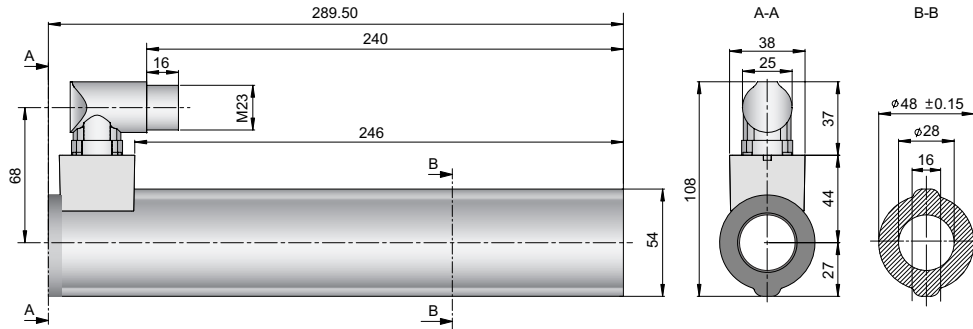
Motor Specification

P01-		Standard Winding	Fast Winding
		48x240/480x630-C	48x240F/480x630-C
Stroke Max.	mm (in)	630 (24.80)	630 (24.80)
Stroke SS	mm (in)	480 (18.90)	480 (18.90)
Peak Force E100/1000	N (lbf)	117/234 (26.3/52.6)	66/132 (14.8/29.7)
Peak Force E1100/-HC	N (lbf)	156/585 (35.1/131.5)	88/330 (19.8/74.2)
Cont. Force	N (lbf)	145 (32.6)	145 (32.6)
Cont. Force Fan cooling	N (lbf)	257 (57.8)	257 (57.8)
Border Force	%	69	69
Force Constant	N/A (lbf/A)	39.0 (8.77)	22.0 (4.95)
Max. Current @ 72VDC	A	15.0	15.0
Max. Current @ 48VDC	A	11.5	15.0
Max. Velocity @ 72VDC	m/s (in/s)	1.7 (67)	3.0 (119)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (45)	2.0 (79)
Phase Resist. 25/80 °C	Ohm	3.1/3.7	1.0/1.2
Phase Inductance	mH	3.1	1.0
Thermal Resistance	°K/W	1.1	1.1
Thermal Time Const.	sec	3000	3000
Stator Diameter	mm (in)	48 (1.89)	48 (1.89)
Stator Length	mm (in)	290 (11.40)	290 (11.40)
Stator Mass	g (lb)	1930 (4.25)	1930 (4.25)
Slider Diameter	mm (in)	28 (1.10)	28 (1.10)
Slider Length	mm (in)	800 (31.50)	800 (31.50)
Slider Mass	g (lb)	3560 (7.85)	3560 (7.85)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

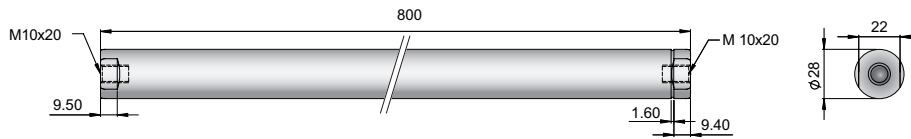


Connector Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-48x240/480x630-C	->	PS01-48x240-C	0150-1219	& PL01-28x800/720	0150-1385
P01-48x240F/480x630-C	->	PS01-48x240F-C	0150-1220	& PL01-28x800/720	0150-1385

Slider



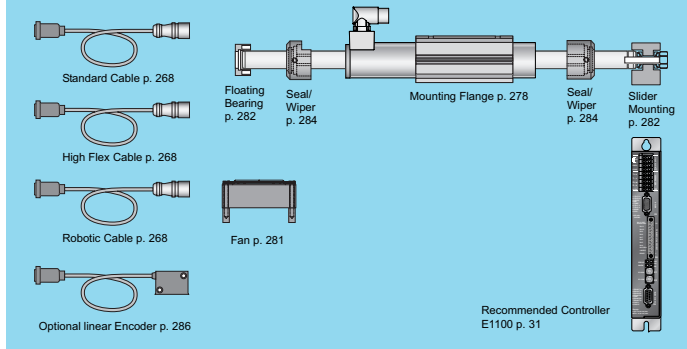
Standard Type	Slider Standard	PL01-28x800/720	0150-1385
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-28x800/720	0150-1416
	Hollow Slider Hole Diameter 8.5mm	PL01-28x800/720-L	0150-1483
	High Clearance Slider d=27mm, m=3310g	PL01-27x800/720	0150-1472

P01-48x240/480x630

Connectors

Motor Connector Wiring		P01-48...-C
Ph 1+	red	A
Ph 1-	pink	B
Ph 2+	blue	C
Ph 2-	gray	D
+5VDC	white	E
GND	inner Shield	F
Sine	yellow	G
Cosine	green	H
Temp.	black	L
Shield	outer Shield	Case

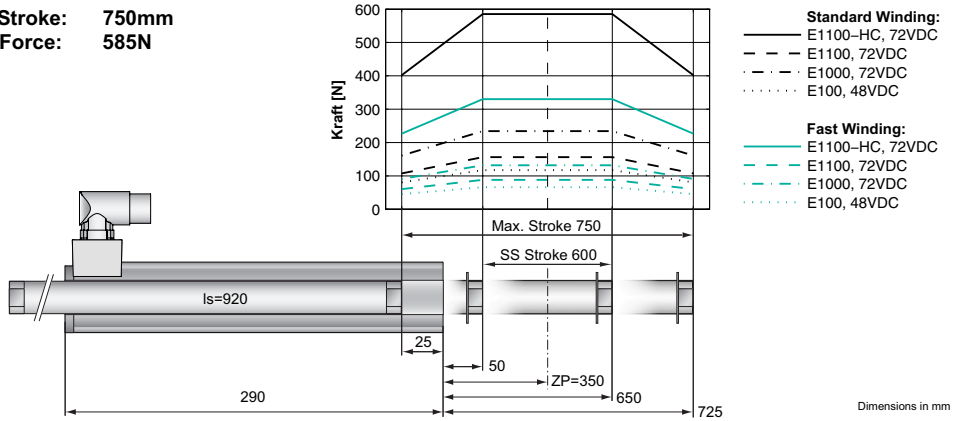
Accessoires



P01-48x240/600x750

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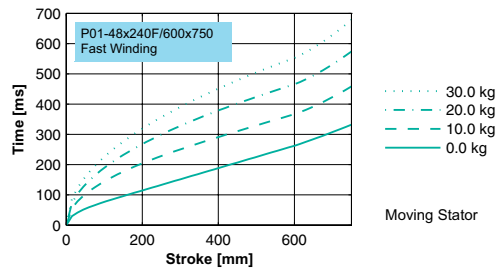
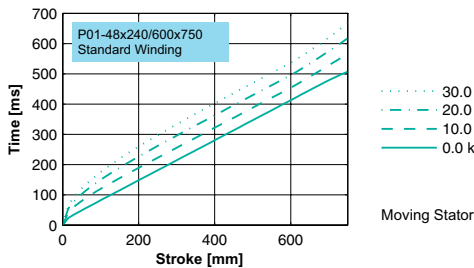
Max. Stroke: 750mm
Peak Force: 585N



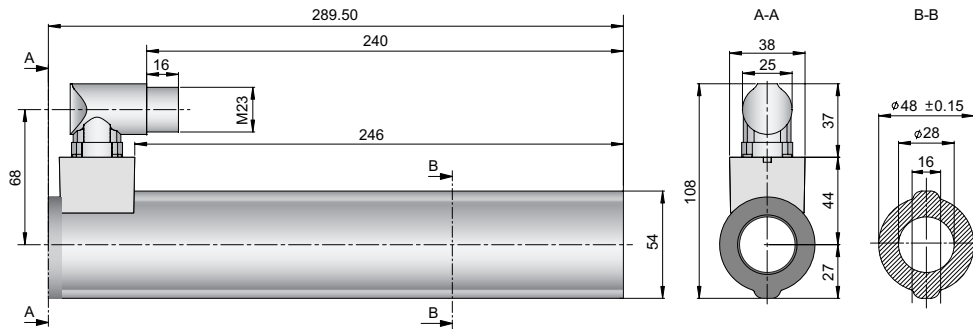
Motor Specification

P01-		Standard Winding	Fast Winding
		48x240/600x750-C	48x240F/600x750-C
Stroke Max.	mm (in)	750 (29.53)	750 (29.53)
Stroke SS	mm (in)	600 (23.62)	600 (23.62)
Peak Force E100/1000	N (lbf)	117/234 (26.3/52.6)	66/132 (14.8/29.7)
Peak Force E1100/-HC	N (lbf)	156/585 (35.1/131.5)	88/330 (19.8/74.2)
Cont. Force	N (lbf)	145 (32.6)	145 (32.6)
Cont. Force Fan cooling	N (lbf)	257 (57.8)	257 (57.8)
Border Force	%	69	69
Force Constant	N/A (lbf/A)	39.0 (8.77)	22.0 (4.95)
Max. Current @ 72VDC	A	15.0	15.0
Max. Current @ 48VDC	A	11.5	15.0
Max. Velocity @ 72VDC	m/s (in/s)	1.7 (67)	3.0 (119)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (45)	2.0 (79)
Phase Resist. 25/80 °C	Ohm	3.1/3.7	1.0/1.2
Phase Inductance	mH	3.1	1.0
Thermal Resistance	°K/W	1.1	1.1
Thermal Time Const.	sec	3000	3000
Stator Diameter	mm (in)	48 (1.89)	48 (1.89)
Stator Length	mm (in)	290 (11.40)	290 (11.40)
Stator Mass	g (lb)	1930 (4.25)	1930 (4.25)
Slider Diameter	mm (in)	28 (1.10)	28 (1.10)
Slider Length	mm (in)	920 (36.22)	920 (36.22)
Slider Mass	g (lb)	4120 (9.08)	4120 (9.08)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

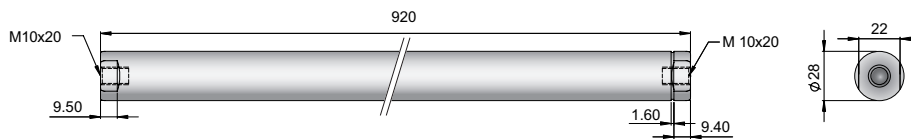


Connector Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-48x240/600x750-C	-->	PS01-48x240-C	0150-1219	& PL01-28x920/840	0150-1386
P01-48x240F/600x750-C	-->	PS01-48x240F-C	0150-1220	& PL01-28x920/840	0150-1386

Slider



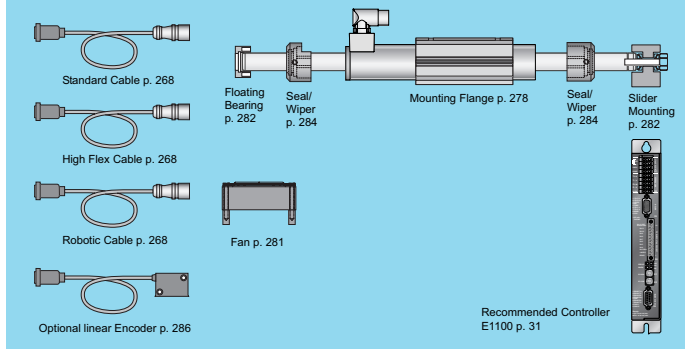
Standard Type	Slider Standard	PL01-28x920/840	0150-1386
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-28x920/840	0150-1417
	Hollow Slider Hole Diameter 8.5mm	PL01-28x920/840-L	0150-1484
	High Clearance Slider d=27mm, m=3830g	PL01-27x920/840	0150-1447

P01-48x240/600x750

Connectors

Motor Connector Wiring		P01-48...-C
Ph 1+	red	A
Ph 1-	pink	B
Ph 2+	blue	C
Ph 2-	gray	D
+5VDC	white	E
GND	inner Shield	F
Sine	yellow	G
Cosine	green	H
Temp.	black	L
Shield	outer Shield	Case

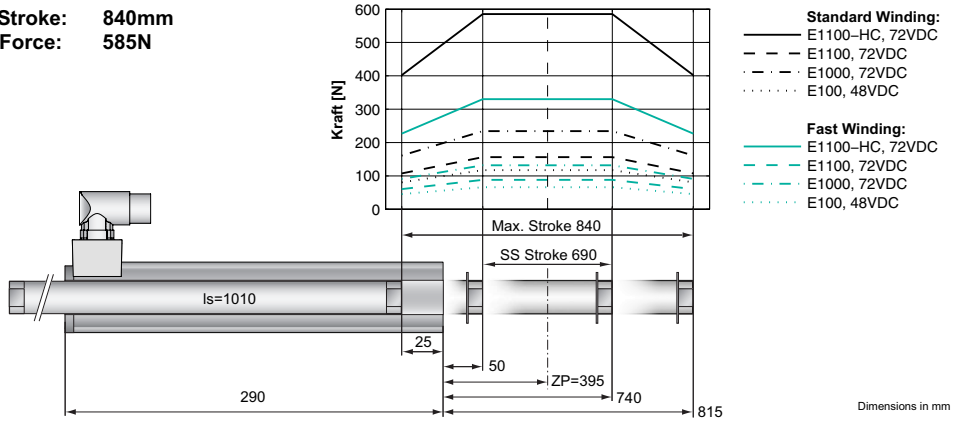
Accessoires



P01-48x240/690x840

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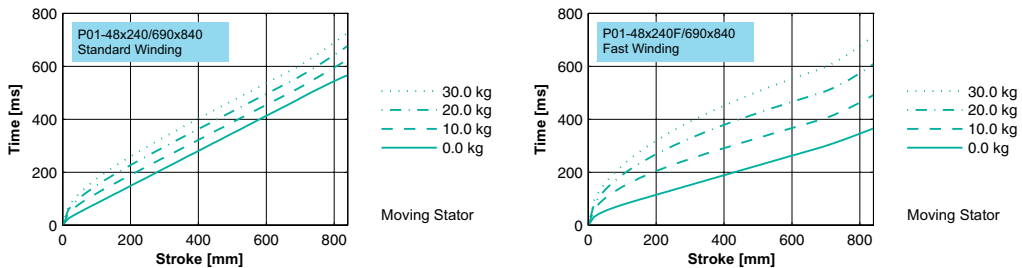
Max. Stroke: 840mm
Peak Force: 585N



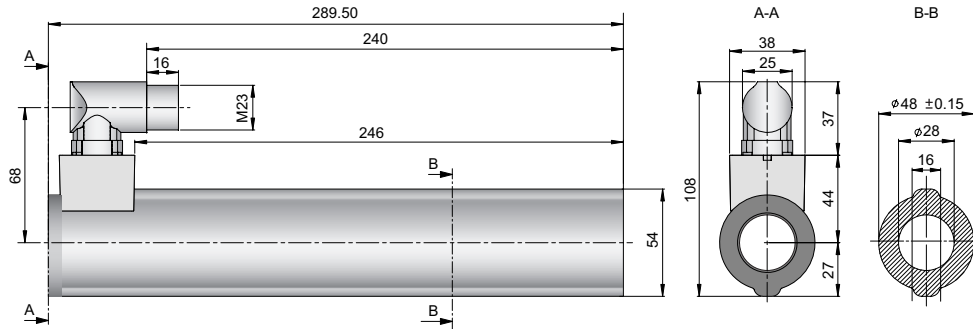
Motor Specification

P01-		Standard Winding	Fast Winding
		48x240/690x840-C	48x240F/690x840-C
Stroke Max.	mm (in)	840 (33.07)	840 (33.07)
Stroke SS	mm (in)	690 (27.17)	690 (27.17)
Peak Force E100/1000	N (lbf)	117/234 (26.3/52.6)	66/132 (14.8/29.7)
Peak Force E1100/-HC	N (lbf)	156/585 (35.1/131.5)	88/330 (19.8/74.2)
Cont. Force	N (lbf)	145 (32.6)	145 (32.6)
Cont. Force Fan cooling	N (lbf)	257 (57.8)	257 (57.8)
Border Force	%	69	69
Force Constant	N/A (lbf/A)	39.0 (8.77)	22.0 (4.95)
Max. Current @ 72VDC	A	15.0	15.0
Max. Current @ 48VDC	A	11.5	15.0
Max. Velocity @ 72VDC	m/s (in/s)	1.7 (67)	3.0 (119)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (45)	2.0 (79)
Phase Resist. 25/80 °C	Ohm	3.1/3.7	1.0/1.2
Phase Inductance	mH	3.1	1.0
Thermal Resistance	°K/W	1.1	1.1
Thermal Time Const.	sec	3000	3000
Stator Diameter	mm (in)	48 (1.89)	48 (1.89)
Stator Length	mm (in)	290 (11.40)	290 (11.40)
Stator Mass	g (lb)	1930 (4.25)	1930 (4.25)
Slider Diameter	mm (in)	28 (1.10)	28 (1.10)
Slider Length	mm (in)	1010 (39.76)	1010 (39.76)
Slider Mass	g (lb)	4540 (10.01)	4540 (10.01)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

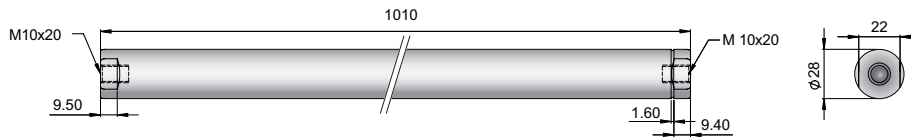


Connector Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-48x240/690x840-C	->	PS01-48x240-C	0150-1219	& PL01-28x1010/930	0150-1387
P01-48x240F/690x840-C	->	PS01-48x240F-C	0150-1220	& PL01-28x1010/930	0150-1387

Slider



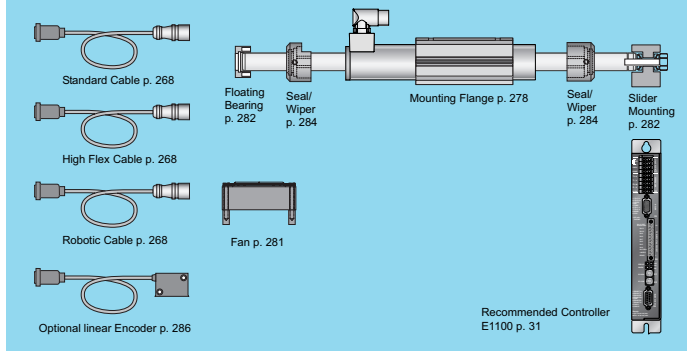
Standard Type	Slider Standard	PL01-28x1010/930	0150-1387
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-28x1010/930	on request
	Hollow Slider Hole Diameter 8.5mm	PL01-28x1010/930-L	on Request
	High Clearance Slider d=27mm, m=4220g	PL01-27x1010/930	0150-1473

P01-48x240/690x840

Connectors

Motor Connector Wiring		P01-48...-C
Ph 1+	red	A
Ph 1-	pink	B
Ph 2+	blue	C
Ph 2-	gray	D
+5VDC	white	E
GND	inner Shield	F
Sine	yellow	G
Cosine	green	H
Temp.	black	L
Shield	outer Shield	Case

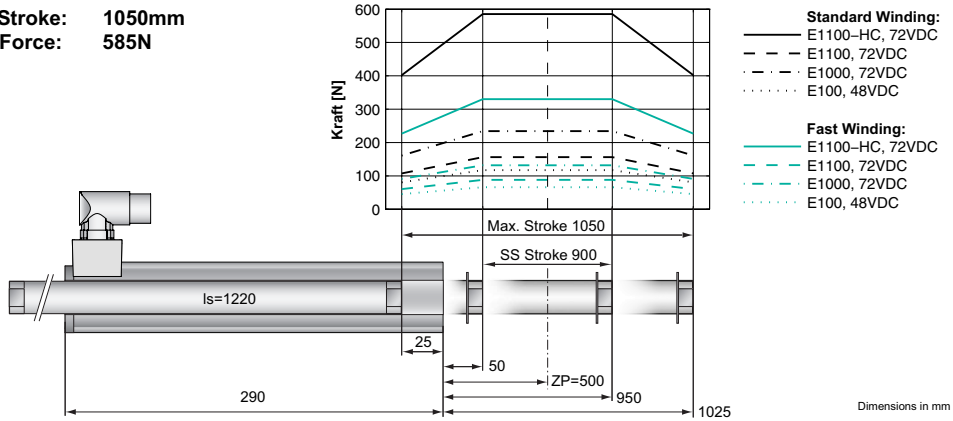
Accessoires



P01-48x240/900x1050

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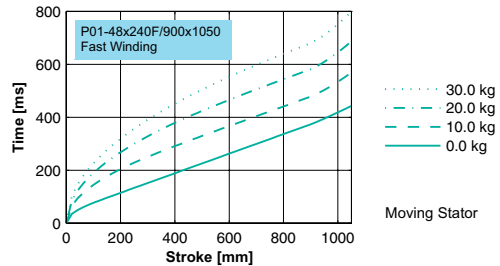
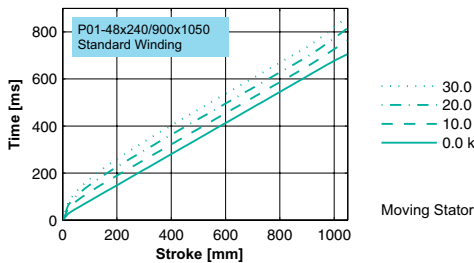
Max. Stroke: 1050mm
Peak Force: 585N



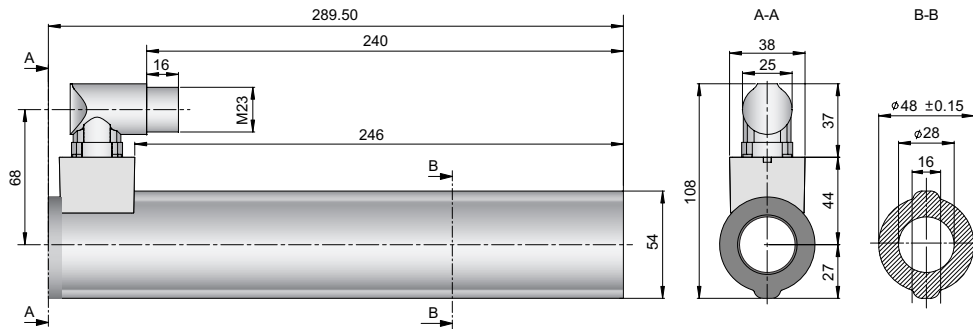
Motor Specification

P01-		Standard Winding	Fast Winding
		48x240/900x1050-C	48x240F/900x1050-C
Stroke Max.	mm (in)	1050 (41.34)	1050 (41.34)
Stroke SS	mm (in)	900 (35.43)	900 (35.43)
Peak Force E100/1000	N (lbf)	117/234 (26.3/52.6)	66/132 (14.8/29.7)
Peak Force E1100/-HC	N (lbf)	156/585 (35.1/131.5)	88/330 (19.8/74.2)
Cont. Force	N (lbf)	145 (32.6)	145 (32.6)
Cont. Force Fan cooling	N (lbf)	257 (57.8)	257 (57.8)
Border Force	%	69	69
Force Constant	N/A (lbf/A)	39.0 (8.77)	22.0 (4.95)
Max. Current @ 72VDC	A	15.0	15.0
Max. Current @ 48VDC	A	11.5	15.0
Max. Velocity @ 72VDC	m/s (in/s)	1.7 (67)	3.0 (119)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (45)	2.0 (79)
Phase Resist. 25/80 °C	Ohm	3.1/3.7	1.0/1.2
Phase Inductance	mH	3.1	1.0
Thermal Resistance	°K/W	1.1	1.1
Thermal Time Const.	sec	3000	3000
Stator Diameter	mm (in)	48 (1.89)	48 (1.89)
Stator Length	mm (in)	290 (11.40)	290 (11.40)
Stator Mass	g (lb)	1930 (4.25)	1930 (4.25)
Slider Diameter	mm (in)	28 (1.10)	28 (1.10)
Slider Length	mm (in)	1220 (48.03)	1220 (48.03)
Slider Mass	g (lb)	5510 (12.15)	5510 (12.15)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

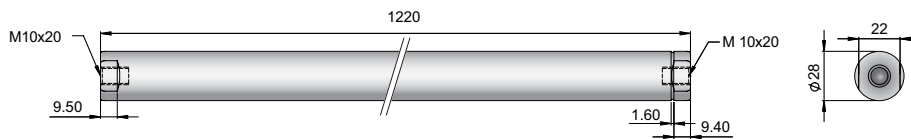


Connector Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-48x240/900x1050-C	-->	PS01-48x240-C	0150-1219	& PL01-28x1220/1140	0150-1388
P01-48x240F/900x1050-C	-->	PS01-48x240F-C	0150-1220	& PL01-28x1220/1140	0150-1388

Slider



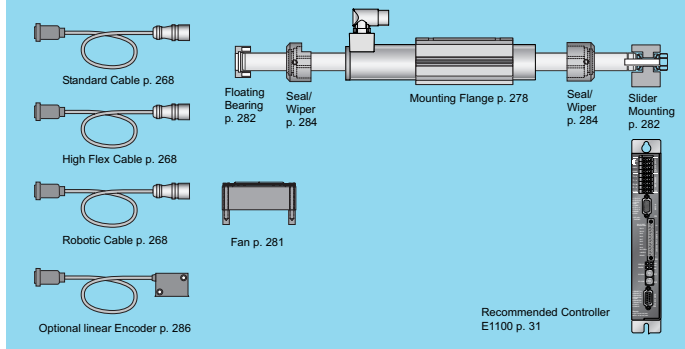
Standard Type	Slider Standard	PL01-28x1220/1140	0150-1388
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-28x1220/1140	on Request
	Hollow Slider Hole Diameter 8.5mm	PL01-28x1220/1140-L	on Request
	High Clearance Slider d=27mm	PL01-27x1220/1140	on Request

P01-48x240/900x1050

Connectors

Motor Connector Wiring		P01-48...-C
Ph 1+	red	A
Ph 1-	pink	B
Ph 2+	blue	C
Ph 2-	gray	D
+5VDC	white	E
GND	inner Shield	F
Sine	yellow	G
Cosine	green	H
Temp.	black	L
Shield	outer Shield	Case

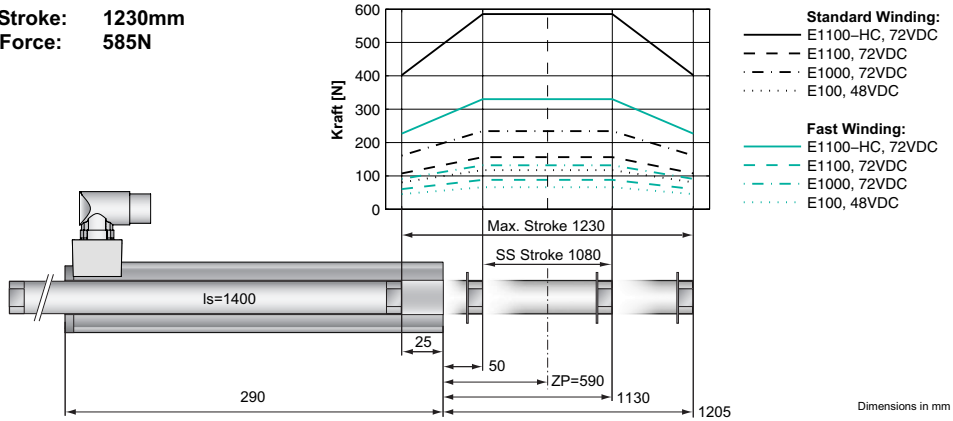
Accessoires



P01-48x240/1080x1230

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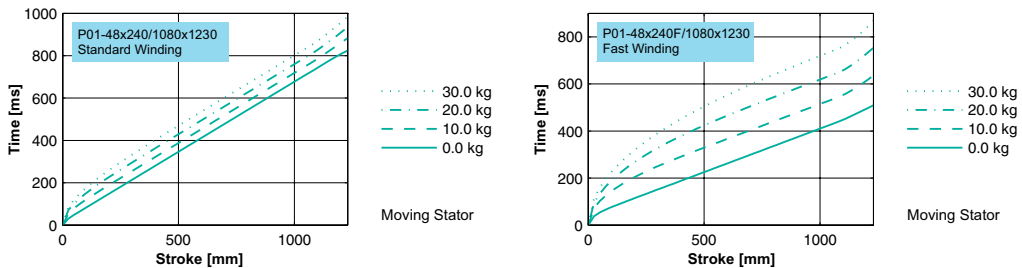
Max. Stroke: 1230mm
Peak Force: 585N



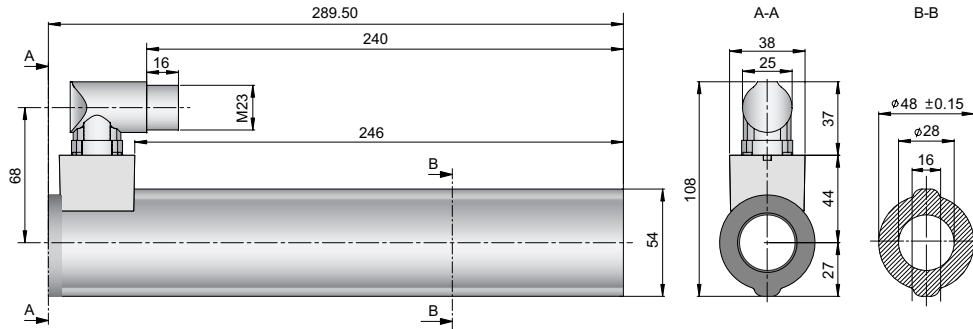
Motor Specification

P01-		Standard Winding	Fast Winding
		48x240/1080x1230-C	48x240F/1080x1230-C
Stroke Max.	mm (in)	1230 (48.43)	1230 (48.43)
Stroke SS	mm (in)	1080 (42.52)	1080 (42.52)
Peak Force E100/1000	N (lbf)	117/234 (26.3/52.6)	66/132 (14.8/29.7)
Peak Force E1100/-HC	N (lbf)	156/585 (35.1/131.5)	88/330 (19.8/74.2)
Cont. Force	N (lbf)	145 (32.6)	145 (32.6)
Cont. Force Fan cooling	N (lbf)	257 (57.8)	257 (57.8)
Border Force	%	69	69
Force Constant	N/A (lbf/A)	39.0 (8.77)	22.0 (4.95)
Max. Current @ 72VDC	A	15.0	15.0
Max. Current @ 48VDC	A	11.5	15.0
Max. Velocity @ 72VDC	m/s (in/s)	1.7 (67)	3.0 (119)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (45)	2.0 (79)
Phase Resist. 25/80 °C	Ohm	3.1/3.7	1.0/1.2
Phase Inductance	mH	3.1	1.0
Thermal Resistance	°K/W	1.1	1.1
Thermal Time Const.	sec	3000	3000
Stator Diameter	mm (in)	48 (1.89)	48 (1.89)
Stator Length	mm (in)	290 (11.40)	290 (11.40)
Stator Mass	g (lb)	1930 (4.25)	1930 (4.25)
Slider Diameter	mm (in)	28 (1.10)	28 (1.10)
Slider Length	mm (in)	1400 (55.12)	1400 (55.12)
Slider Mass	g (lb)	6350 (14.00)	6350 (14.00)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

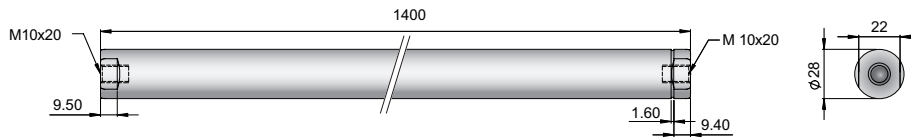


Connector Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-48x240/1080x1230-C	-->	PS01-48x240-C	0150-1219	& PL01-28x1400/1320	0150-1389
P01-48x240F/1080x1230-C	-->	PS01-48x240F-C	0150-1220	& PL01-28x1400/1320	0150-1389

Slider



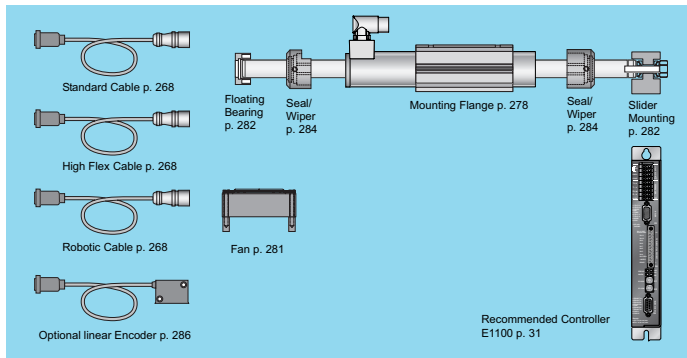
Standard Type	Slider Standard	PL01-28x1400/1320	0150-1389
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-28x1400/1320	on Request
	Hollow Slider Hole Diameter 8.5mm	PL01-28x1400/1320-L	on Request
	High Clearance Slider d=27mm	PL01-27x1400/1320	on Request

P01-48x240/1080x1230

Connectors

Motor Connector Wiring		P01-48...-C
Ph 1+	red	A
Ph 1-	pink	B
Ph 2+	blue	C
Ph 2-	gray	D
+5VDC	white	E
GND	inner Shield	F
Sine	yellow	G
Cosine	green	H
Temp.	black	L
Shield	outer Shield	Case

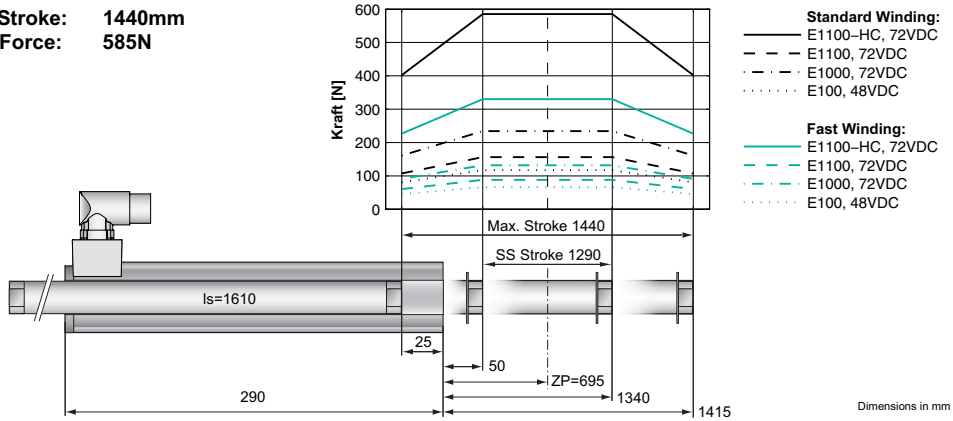
Accessoires



P01-48x240/1290x1440

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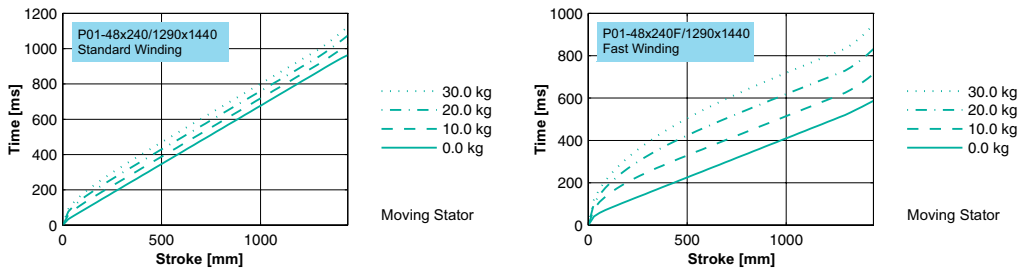
Max. Stroke: 1440mm
Peak Force: 585N



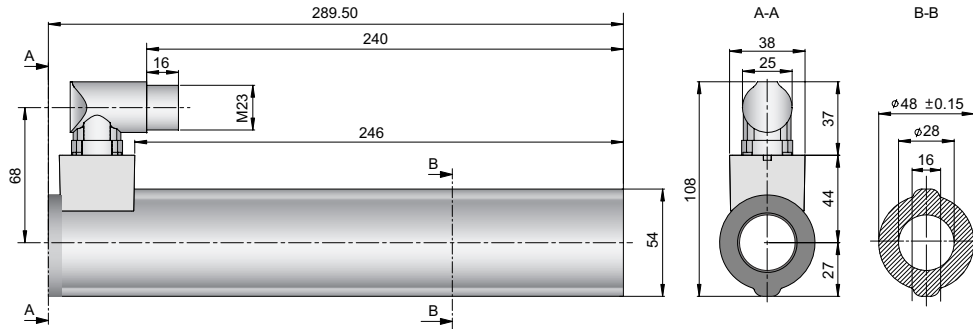
Motor Specification

P01-		Standard Winding	Fast Winding
		48x240/1290x1440-C	48x240F/1290x1440-C
Stroke Max.	mm (in)	1440 (56.69)	1440 (56.69)
Stroke SS	mm (in)	1290 (50.79)	1290 (50.79)
Peak Force E100/1000	N (lbf)	117/234 (26.3/52.6)	66/132 (14.8/29.7)
Peak Force E1100/-HC	N (lbf)	156/585 (35.1/131.5)	88/330 (19.8/74.2)
Cont. Force	N (lbf)	145 (32.6)	145 (32.6)
Cont. Force Fan cooling	N (lbf)	257 (57.8)	257 (57.8)
Border Force	%	69	69
Force Constant	N/A (lbf/A)	39.0 (8.77)	22.0 (4.95)
Max. Current @ 72VDC	A	15.0	15.0
Max. Current @ 48VDC	A	11.5	15.0
Max. Velocity @ 72VDC	m/s (in/s)	1.7 (67)	3.0 (119)
Max. Velocity @ 48VDC	m/s (in/s)	1.1 (45)	2.0 (79)
Phase Resist. 25/80 °C	Ohm	3.1/3.7	1.0/1.2
Phase Inductance	mH	3.1	1.0
Thermal Resistance	°K/W	1.1	1.1
Thermal Time Const.	sec	3000	3000
Stator Diameter	mm (in)	48 (1.89)	48 (1.89)
Stator Length	mm (in)	290 (11.40)	290 (11.40)
Stator Mass	g (lb)	1930 (4.25)	1930 (4.25)
Slider Diameter	mm (in)	28 (1.10)	28 (1.10)
Slider Length	mm (in)	1610 (63.39)	1610 (63.39)
Slider Mass	g (lb)	7330 (16.16)	7330 (16.16)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.1	±0.1
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

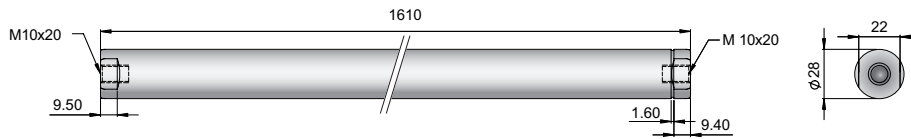


Connector Type



Linear Motor		Stator		Slider	
Type	Art. No.	Type	Art. No.	Type	Art. No.
P01-48x240/1290x1440-C	->	PS01-48x240-C	0150-1219	& PL01-28x1610/1530	0150-1390
P01-48x240F/1290x1440-C	->	PS01-48x240F-C	0150-1220	& PL01-28x1610/1530	0150-1390

Slider



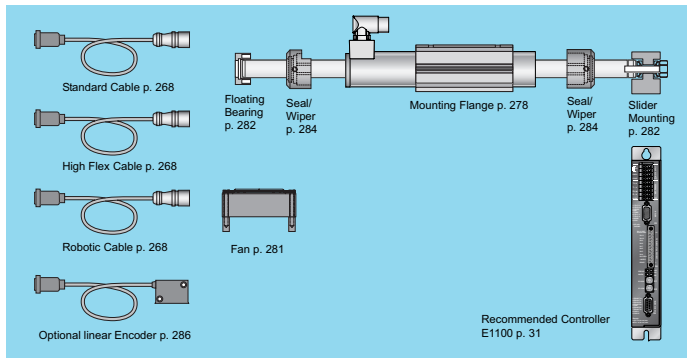
Standard Type	Slider Standard	PL01-28x1610/1530	0150-1390
Special Slider	Heavy Duty Slider with WC/C-Coating	PL02-28x1610/1530	on Request
	Hollow Slider Hole Diameter 8.5mm	PL01-28x1610/1530-L	on Request
	High Clearance Slider d=27mm	PL01-27x1610/1530	on Request

P01-48x240/1290x1440

Connectors

Motor Connector Wiring		P01-48...-C
Ph 1+	red	
Ph 1-	pink	B
Ph 2+	blue	C
Ph 2-	gray	D
+5VDC	white	E
GND	inner Shield	F
Sine	yellow	G
Cosine	green	H
Temp.	black	L
Shield	outer Shield	Case

Accessoires





Motor Cables

268

Motor Flanges

278

Slider Mounts

282

Wipers

284

External Position Sensor

286



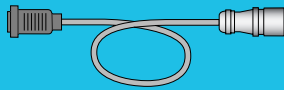
Motor Accessories

An extensive array of accessories, tailored to LinMot P01 linear motors and compatible with the servo controllers, rounds out the LinMot Drive Systems product range.



Motor Accessories

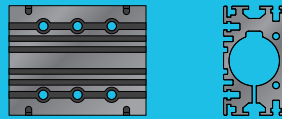
Motor Cable



Pre-fabricated motor cables, or bulk stock in standard, high-flex, and robot versions.

Details Page 268

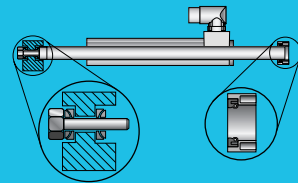
Motor Flanges



Motor flanges for mounting LinMot stators.

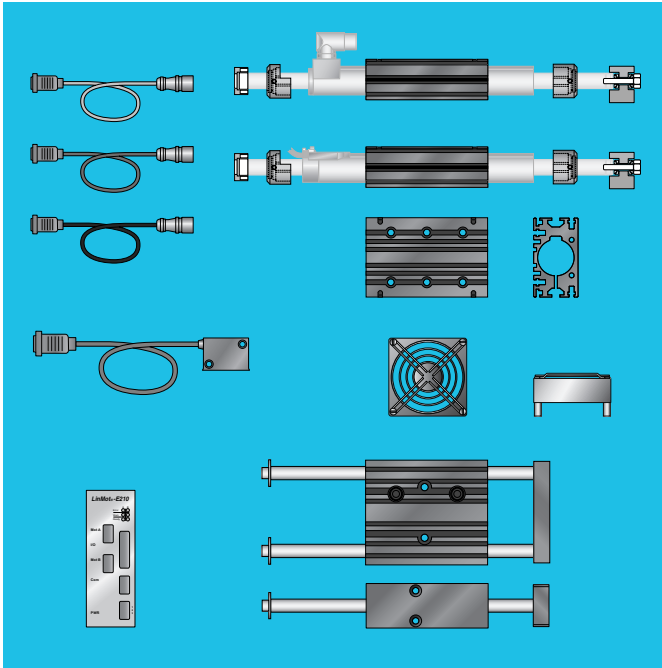
Details Page 278

Slider Mounting Kits



Slider mounting kits, for simple mounting of the slider in "moving slider" or "moving stator" applications.

Details Page 282



LinMot's array of accessories designed for linear motors 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.

Motor Accessories

Option: Fan

With an optional fan, the effective force of the linear motor can be nearly doubled.

Details Page 281

Option: Wipers

Wipers for use in difficult environments. The wipers keep the slider free of grease or contaminants, and protect the stator from dirt.

Details Page 284

Option: External Position Sensor

An external position sensor is available for high-precision applications with extreme requirements for positioning accuracy.

Details Page 286

Motor Cables

Motor cables are available for linear motors with the designation K, KS, and KR for stationary installation, installation in cable chains, and for robot applications.

LinMot motor cables are available in all three versions as bulk goods, as a roll, or as a completely fabricated motor cable with a wide range of plug combinations and any desired length. Standard lengths with the most common connector combinations are also available from stock.



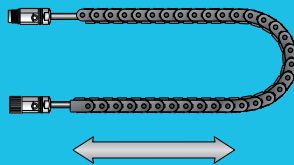
Motor Cables

Standard Motor Cable K



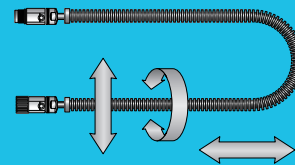
The standard motor cable, type K, is suitable for stationary runs. It is used wherever the motor cable is fixed and is not subject to motion. At exposed locations, the motor cable should be protected from mechanical damage by cable conduits.

High-Flex Motor Cable KS

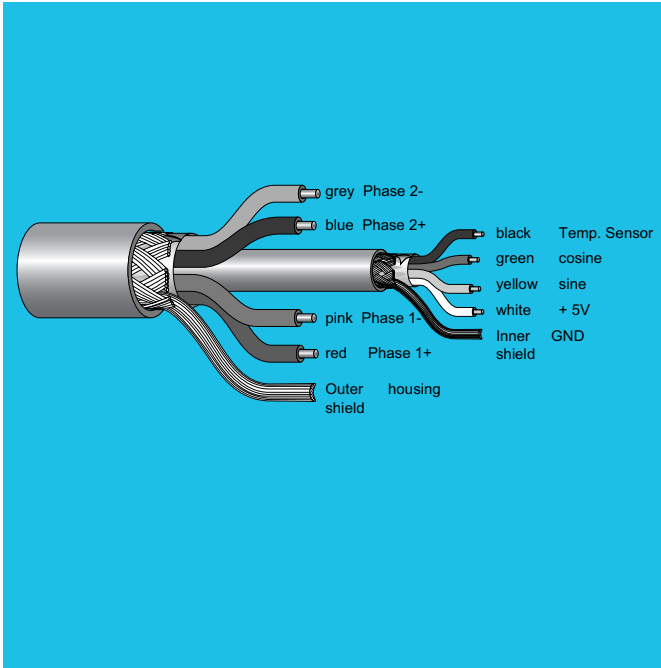


The high-flex motor cable, type KS, is suitable for applications with moving motor cables, where the cable is run inside a cable track, and is subject to roll-up motion. High-Flex cable is supplied without the cable track.

Robot Motor Cable KR



If the motor cable is subject to torsional motion, then the special robot cable, type KR, is used. In order to protect the robot cable from mechanical damage, it should be run in an appropriate cable conduit.

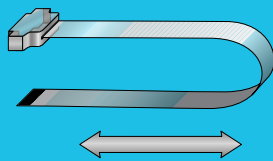


A single motor cable is sufficient to connect the linear motor and servo controller. It contains the motor phases and sensor signals from the position sensors integrated in the motor.

All LinMot motor cables have separate shielding for the motor phases and the sensor signals. This special double shielding ensures fault-free operation of linear motors at up to 50m cable lengths.



Flat Ribbon Cable KF



For the short motor P01-23Sx80, a flat ribbon cable is available with the designation KF. The flat ribbon cable can be subjected to roll-up motion, just as the high-flex cable. Due to its low level of predection, the flat ribbon cable is more suitable for device design than for machine building.

Motor Cable, Bulk Goods

LinMot motor cable is available by the meter in all versions, K, KS, and KR. The cable can be cut to the desired length, or ordered in large quantities on rolls.

LinMot provides all of its motor connectors for customer fabrication of motor cables. Motor cables fabricated by the customer are to be tested with a test voltage of 1500VDC prior to startup.

Fabricated Motor Cable

Fabricated motor cables can be provided with any desired length up to 50m. The motor cable is ordered in the desired length, together with the matching motor connectors (fabricated).

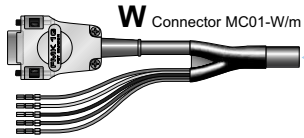
Fabricated motor cables with the most commonly used connector combinations can be ordered from stock in standard lengths.

Fabricated motor cables from LinMot are manufactured exclusively with crimped contacts, and tested under 1500VDC prior to delivery.

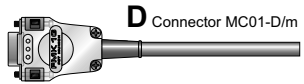
Motor Cables



E1100-HC



W Connector MC01-W/m



D Connector MC01-D/m

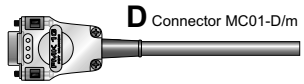
Standard cable K15-04/05

High flex cable KS10-04/05

Robot cable KR10-04/05



E1100

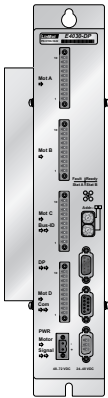


D Connector MC01-D/m

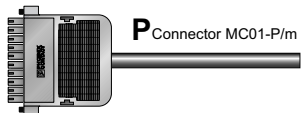
Standard cable K05-04/05

High flex cable KS05-04/05

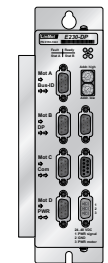
Robot cable KR05-04/05



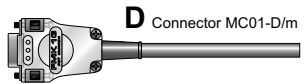
E1000



P Connector MC01-P/m



E100



D Connector MC01-D/m



Not suitable for the following stators:

- PS01-48X240-...
- PS01-48X240F-...
- PS01-37x240F-...



- For the connection between the linear motor and servo controller, only the specially shielded LinMot cables of type K, KS or KR should be used.
- The length of the cable can be up to 50 m between the linear motor and the servo controller.
- 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 controller.
- 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 under voltage.

Ordering Example:

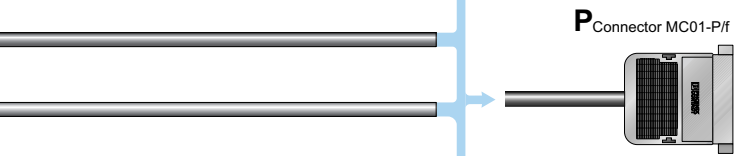
4m high flex cable for servo controller E1100 and linear motor PS01-23x160-R:
- KS05-D/R-4



Connector Type		PS01-48X240-C PS01-48x240F-C
		PS01-37x240F-C
Cable Type		PS01-37X240F-C20



Connector Type		PS01-48X240-C PS01-48X240F-C
		PS01-37X240-C PS01-37X240F-C PS01-37x120-C
Cable Type		PS01-37X240-C20 PS01-37X240F-C20 PS01-37X120-C20



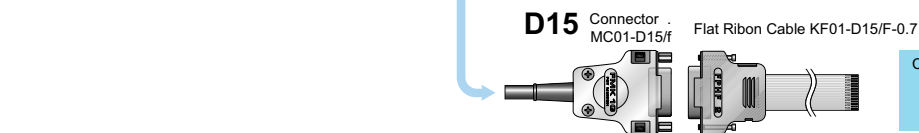
Cable Type		PS01-37x240 PS01-37X120
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Connector Type		PS01-23x160-R PS01-23x160F-R PS01-23x80-R
Cable Type		PS01-23x160-R20 PS01-23x160F-R20 PS01-23x80-R20



Cable Type		PS01-23x160 PS01-23x80
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Connector Type		PS01-23Sx80
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Motor Cables

Fabricated Motor Cables in standard lengths

Item	Description	Part Number
Standard cable		
K05-D/C-2	Standard cable D/C, 2 m	0150-1819
K05-D/C-4	Standard cable D/C, 4 m	0150-1820
K05-D/C-6	Standard cable D/C, 6 m	0150-1821
K05-D/C-8	Standard cable D/C, 8 m	0150-1822
K05-D/D-2	Standard cable D/D, 2 m	0150-1910
K05-D/D-4	Standard cable D/D, 4 m	0150-1911
K05-D/D-6	Standard cable D/D, 6 m	0150-1912
K05-D/D-8	Standard cable D/D, 8 m	0150-1913
K05-D/P-0.25	Standard cable D/P, 0.25m	0150-1921
K05-D/P-2	Standard cable D/P, 2 m	0150-1949
K05-D/P-4	Standard cable D/P, 4 m	0150-1995
K05-D/P-6	Standard cable D/P, 6 m	0150-1994
K05-D/R-2	Standard cable D/R, 2 m	0150-1832
K05-D/R-4	Standard cable D/R, 4 m	0150-1833
K05-D/R-6	Standard cable D/R, 6 m	0150-1834
K05-D/R-8	Standard cable D/R, 8 m	0150-1835
K05-P/C-2	Standard cable P/C, 2 m	0150-1818
K05-P/C-4	Standard cable P/C, 4 m	0150-1804
K05-P/C-6	Standard cable P/C, 6 m	0150-1805
K05-P/C-8	Standard cable P/C, 8 m	0150-1806
K05-P/D-0.4	Standard cable P/D, 0.4 m	0150-1922
K05-P/P-2	Standard cable P/P, 2 m	0150-1915
K05-P/P-4	Standard cable P/P, 4 m	0150-1916
K05-P/P-6	Standard cable P/P, 6 m	0150-1917
K05-P/P-8	Standard cable P/P, 8 m	0150-1918
K05-W/D-0.4	Standard cable W/D, 0.4 m	0150-1947
K05-W/P-0.4	Standard cable W/P, 0.4 m	0150-1948
K15-W/C-2	Standard cable W/C, 2 m	0150-1811
K15-W/C-4	Standard cable W/C, 4 m	0150-1801
K15-W/C-6	Standard cable W/C, 6 m	0150-1802
K15-W/C-8	Standard cable W/C, 8 m	0150-1803
High Flex cable chain cable		
KS05-C/C-2	High Flex cabel C/C, 2m	0150-1827
KS05-C/C-4	High Flex cabel C/C, 4 m	0150-1828
KS05-D/C-2	High Flex cabel D/C, 2 m	0150-1856
KS05-D/C-4	High Flex cabel D/C, 4 m	0150-1823
KS05-D/C-6	High Flex cabel D/C, 6 m	0150-1857
KS05-D/C-8	High Flex cabel D/C, 8 m	0150-1824
KS05-D/D-2	High Flex cabel D/D, 2 m	0150-1988
KS05-D/D-4	High Flex cabel D/D, 4 m	0150-1989
KS05-D/R-2	High Flex cabel D/R, 2 m	0150-1854
KS05-D/R-4	High Flex cabel D/R, 4 m	0150-1836
KS05-D/R-6	High Flex cabel D/R, 6 m	0150-1855
KS05-D/R-8	High Flex cabel D/R, 8 m	0150-1837
KS05-P/C-4	High Flex cabel P/C, 4 m	0150-1809
KS05-P/C-8	High Flex cabel P/C, 8 m	0150-1810
KS05-P/P-2	High Flex cabel P/P, 2 m	0150-1990
KS05-P/P-4	High Flex cabel P/P, 4 m	0150-1991
KS05-R/R-2	High Flex cabel R/R, 2 m	0150-1938
KS05-R/R-4	High Flex cabel R/R, 4 m	0150-1939
KS10-C/C-2	High Flex cabel C/C, 2 m	0150-1816
KS10-C/C-4	High Flex cabel C/C, 4 m	0150-1817
KS10-W/C-4	High Flex cabel W/C, 4 m	0150-1807
KS10-W/C-8	High Flex cabel W/C, 8 m	0150-1808
Cabel for Short Motor PS01-23Sx80		
KF01-D15/F-0.7	Flat Ribbon cable 0.7m for PS01-23Sx80	0150-1937
K05-D/D15-1	Standard cable D/D15,1m (für PS01-23Sx80)	0150-1936

Motor Cables

Fabricated Motor Cables

Connector assembled

Item	Description	Part Number
MC01-R/m-as	R/m-as connector, assembled	0150-3097
MC01-R/f-as	R/f-as connector, assembled	0150-3143
MC01-C/m-as	C/m-as connector, assembled	0150-3099
MC01-C/f-as	C/f-as connector, assembled	0150-3146
MC01-D/m-as	D/m-as connector, assembled	0150-3055
MC01-D/f-as	D/f-as connector, assembled	0150-3142
MC01-P/m-as	P/m-as connector, assembled	0150-3056
MC01-P/f-as	P/f-as connector, assembled	0150-3144
MC01-W/m-as	W/m-as connector, assembled	0150-3147
MC01-D15/f-as	D15/f-as connector, assembled	0150-3073

Cable by the meter

Item	Description	Part Number
K05-04/05	Standard cable per m	0150-1920
K05-04/05-50	Standard cable 50m rolls	0150-1956
K05-04/05-100	Standard cable 100m rolls	0150-1957
K05-04/05-200	Standard cable 200m rolls	0150-1958
K15-04/05	Standard cable per m	0150-1978
K15-04/05-100	Standard cable, 100m rolls	0150-1969
KS05-04/05	High Flex cable per m	0150-1938
KS05-04/05-100	High Flex cable 100 m rolls	0150-1959
KS10-04/05	High Flex cable per m	0150-1977
KS10-04/05-100	High Flex cable, 100m rolls	0150-1968
KR05-04/05	Robot cable (per m)	0150-1846
KR05-04/05-100	Robot cable, 100m rolls	0150-1847
KR10-04/05	Robot cable (per m)	0150-1830
KR10-04/05-100	Robot cable, 100m rolls	0150-1831

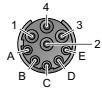
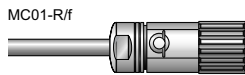
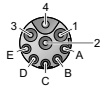
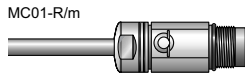
Ordering Example:

44m high-flex motor cable for linear motor P01-48x240 and servo controller E1100-HC

KS10-W/C-4	1 piece	MC01-W/m-as	W/m-as connector, assembled
	1 piece	MC01-C/f-as	C/f-as Connector, assembled
	4 m	KS10-04/05	High-flex cable per meter

Motor Cables

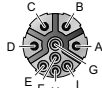
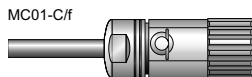
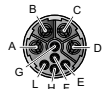
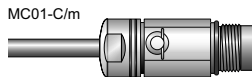
R-Connector



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	Part Number
MC01-R/m	0150-3130
MC01-R/f	0150-3129
MC01-R/m-as (assembled)	0150-3097
MC01-R/f-as (assembled)	0150-3143

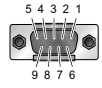
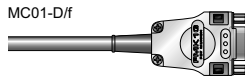
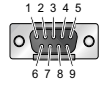
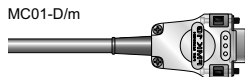
C-Connector



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	Part Number
MC01-C/m	0150-3093
MC01-C/f	0150-3080
MC01-C/m-as (assembled)	0150-3099
MC01-C/f-as (assembled)	0150-3146

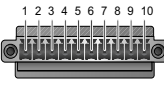
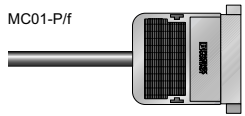
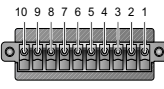
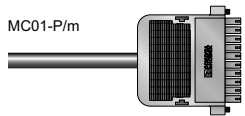
D-Connector



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	Part Number
MC01-D/m	0150-3024
MC01-D/f	0150-3025
MC01-D/m-as (assembled)	0150-3055
MC01-D/f-as (assembled)	0150-3142

P-Connector



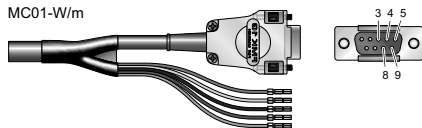
1	Phase 1+	red
2	Phase 1-	pink
3	Phase 2+	blue
4	Phase 2-	grey
5	+5V	white
6	GND	inner shield
7	Sensor sine	yellow
8	Sensor cosine	green
9	Temp. Sensor	black
10	shield	outer shield

Item	Part Number
MC01-P/m	0150-3020
MC01-P/f	0150-3021
MC01-P/m-as (assembled)	0150-3056
MC01-P/f-as (assembled)	0150-3144

Motor connectors

LinMot®

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	Part Number
MC01-W/m	0150-3140
MC01-W/m-as (assembled)	0150-3147

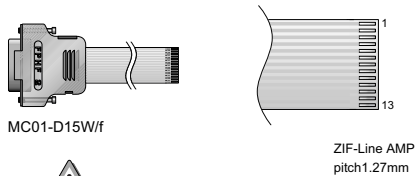
D15-Connector



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	Part Number
MC01-D15/f	0150-3136
MC01-D15/f-as (assembled)	0150-3073

F-Connector

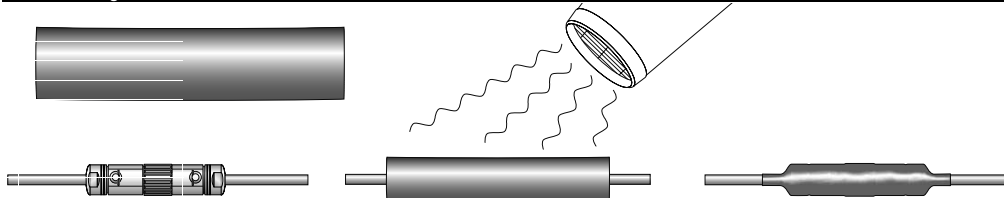


1 & 2	Phase 1+	1 & 2
10 & 11	Phase 1-	10 & 11
3 & 4	Phase 2+	3 & 4
12 & 13	Phase 2-	12 & 13
9	+5V	9
7	GND	7
5	Sensor sine	5
6	Sensor cosine	6
8	Temp. Sensor	8

Item	Part Number
KF01-D15/F-0.7	0150-1937
Flat ribbon cable with D15/m-Connector	

 Plugging in or unplugging the flat ribbon cable under voltage can damage the motor and controller.

Shrink tubing for IP67 connectors



Item	Material	Part Number
MCP01-18 Shrink tubing (with hot glue coating) for additional protection of IP67 connectors	Polyolefin	0150-3089

Motor Connectors

LinMot Cable							
	Standard cable		High Flex cable		Robot cable		Flat ribbon cable
Cable Type	K05-04/05	K15-04/05	KS05-04/05	KS10-04/05	KR05-04/05	KR10-04/05	KF01-D15/F-0.7
Diameter	0.5mm ²	1.5mm ²	0.5mm ²	1.0mm ²	0.5mm ²	1.0mm ²	
Motor phases	(AWG20)	(AWG16)	(AWG20)	(AWG18)	(AWG20)	(AWG18)	
Diameter	0.14mm ²		0.14mm ²		0.14mm ²		
Sensor signals	(AWG26)		(AWG26)		(AWG26)		
Inner isolation material	TPE-U		TPE-E		TPE-E		Polyester
Outer isolation material	PUR		PUR		PUR		
Cable color	black		black		black		pink
Cable diameter	8.2mm (0.31in)	11.2mm (0.44in)	9.5mm (0.38in)	10.8mm (0.42in)	9.7mm (0.38in)	10.9mm (0.43in)	17.8x0.2mm (0.7x0.008in)
Weight	83kg/km	180kg/km	113kg/km	139kg/km	109kg/km	136kg/km	
Approvals	Materials according UL		UL / CSA 300V		UL / CSA 300V		
Minimal bending radius fix installed	25mm (1in)	50mm (2in)	30mm (1.2in)	50mm (2in)	30mm (1.2in)	50mm (2in)	foldable
Minimal bending radius moving	do not use in applications with moving motor cable		60mm (2.4in)	100 mm (4in)	Maximal torsion: ±270° pro 0.5m		25mm
Temperature range	-40° ... +80°C		-40° ... +80°C		-40° ... +80°C		-55° ... +105°C
Available lengths	cable per m cable on rolls 50m, 100m, 200m		cable per m cable on rolls 100m		cable per m cable on rolls 100m		0.7m

Motor Cables

Ordering information							
	Standard cable		High-Flex Kabel		Roboter Kabel		Flat ribbon cable
Cable per m	K05-04/05 0150-1920	K15-04/05 0150-1978	KS05-04/05 0150-1938	KS10-04/05 0150-1977	KR05-04/05 0150-1846	KR10-04/05 0150-1830	
Rolls 50m	K05-04/05-50 0150-1956						
Rolls 100m	K05-04/05-100 0150-1957	K15-04/05-100 0150-1969	KS05-04/05-100 0150-1959	KS10-04/05-100 0150-1968	KR05-04/05-100 0150-1847	KR10-04/05-100 0150-1831	
Rolls 200m	K05-04/05-200 0150-1958						
Single cable 0.7m							KF01-D15/F-0.7 0150-1937

Protection Class IP67



Motor Accessories

Motor Flanges

LinMot PF motor flanges allow simple and rapid mounting of LinMot P linear motors. The clamp plate design allows rapid and simple mounting/dismounting of linear motors, without removing the flange from the motor.

An appropriate flange, with the correct length, is available for each linear motor family. This not only ensures secure mechanical mounting, but also guarantees optimal cooling of the linear motor.



Motor Flanges

Stator Mounting

The same flange is used for stators with cable exits or connector housings. The stator is secured in the flange with clamping screws, so that the stator is clamped over a large area.

When the stator is mounted, the maximum screw torque should be observed and not exceeded.

Clamping over a large area, practically across the entire length of the stator, as well as the cooling fins on the flange, ensure optimal cooling of the linear motor.

Flange Mount Option

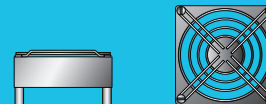
Depending on the application and installation space, the flanges can be mounted horizontally or vertically.

For horizontal installation, the flange is secured using screws in the through holes.

For vertical mounting, it is attached with T-nuts, using the T-slot on the narrow side of the flange.

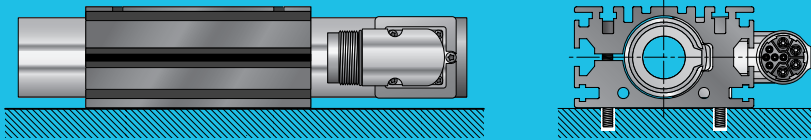
Additional T-slots on the upper side of the flange allow accessories to be mounted easily.

Optional Fan

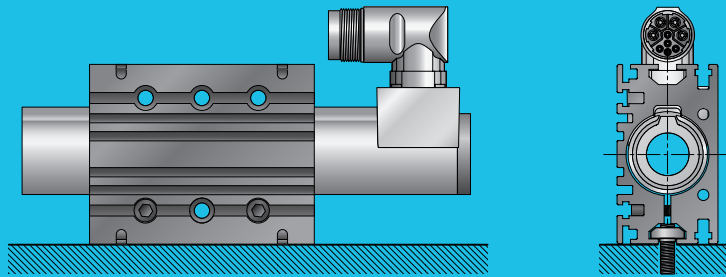


With an optional fan, the effective force of the linear motor can be nearly doubled.

Mounting with Screwholes



Mounting with T-Nut

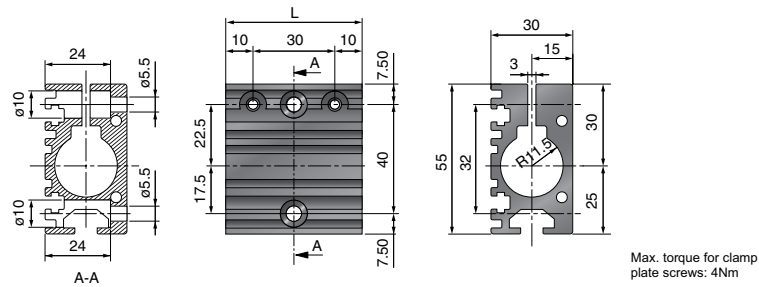


Motor Flanges

Ordering information

Item	Description	Part Number
PF02-23x50	Flange for Linear Motors P01-23x80	0150-2102
PF02-23x120	Flange for Linear Motors P01-23x160	0150-2103
PF02-37x100	Flange for Linear Motors P01-37x120	0150-1998
PF02-37x200	Flange for Linear Motors P01-37x240	0150-1999
PF01-48x120	Flange for Linear Motors P01-48x240	0150-1976
PF01-48x240	Flange for Linear Motors P01-48x240	0150-1975

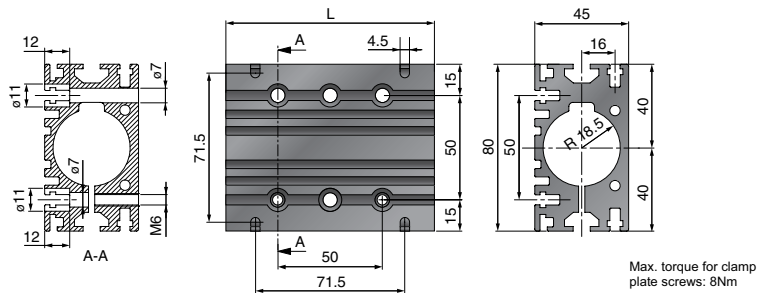
PF02-23



Item	Description	Length [mm]	Weight [g]	Part Number
PF02-23x50	Flange 23x50 mm	50	115	0150-2102
PF02-23x120	Flange 23x120 mm	120	280	0150-2103

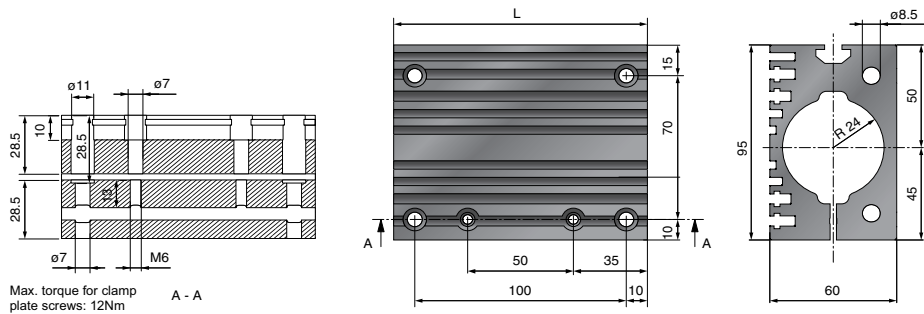
PF02-37

Motor Flanges



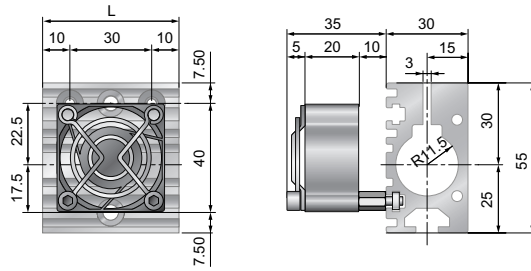
Item	Description	Length [mm]	Weight [g]	Part Number
PF02-37x100	Flange 37x100 mm	100	450	0150-1998
PF02-37x200	Flange 37x200 mm	200	920	0150-1999

PF01-48



Item	Description	Length [mm]	Weight [g]	Part Number
PF01-48x120	Flange 48x120 mm	120	970	0150-1976
PF02-48x240	Flange 48x240 mm	240	1970	0150-1975

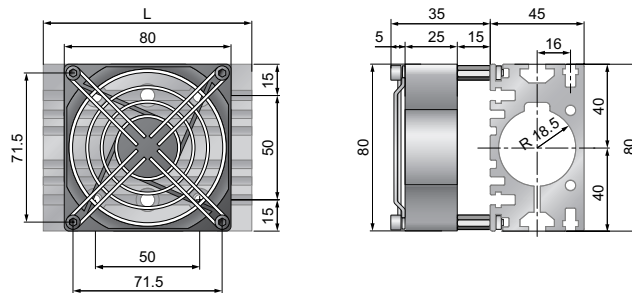
Optional Fan for PF02-23



Fan supply:
24VDC, 70mA
Air flow:
15m³/h

Item	Description	Part Number
HV01-23	Fan kit for H01-23 and PF02-23	0150-5050

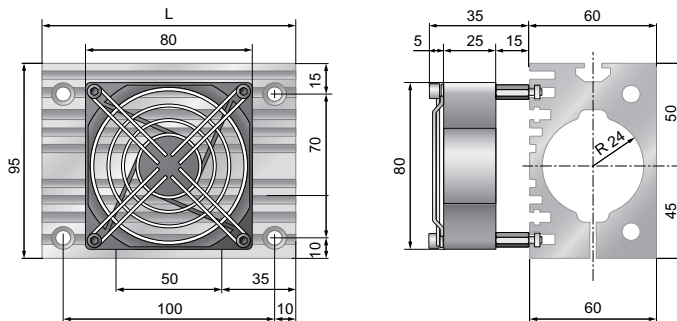
Optional Fan for PF02-37



Fan supply:
24VDC, 120mA
Air flow:
80m³/h

Item	Description	Part Number
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	Part Number
HV01-37/48	Fan kit for H01-48, B01-48 and PF01-48	0150-5051

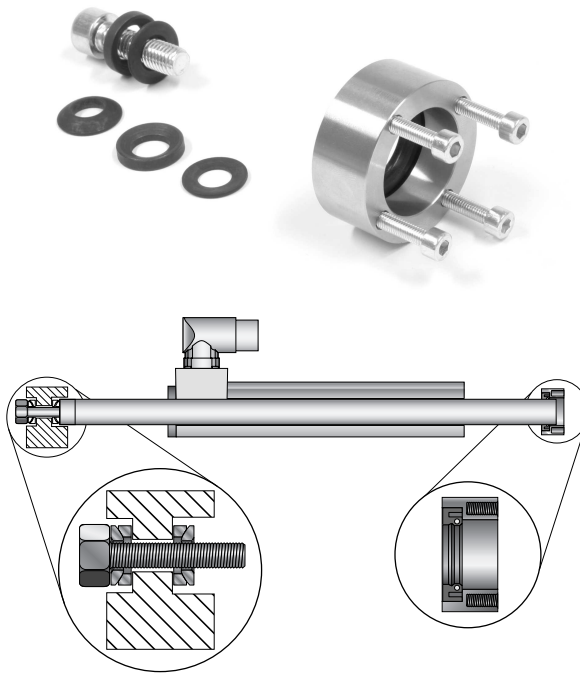
Motor Flanges

Slider Mounts

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.

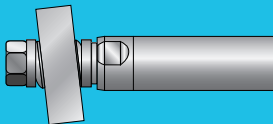
In moving slider applications, the stator is mounted, and the slider is connected to a load that is guided by a linear guide. In order to avoid alignment errors, the slider is attached to the load or guide using fixed bearings, each consisting of two rounded washers and two bevel washers.

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.



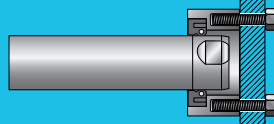
Slider Mounts

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:
Case-hardened steel

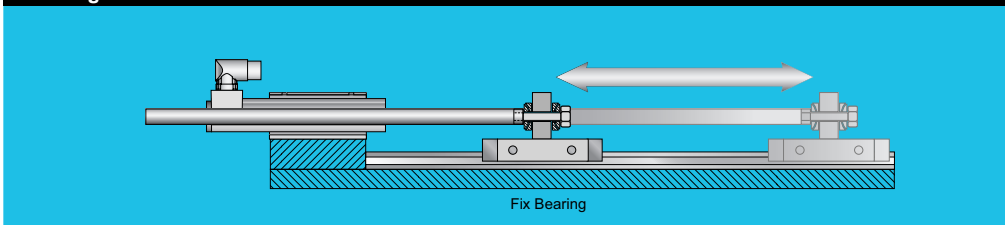


Bearing:
NBR
(Nitrile-Butadiene-Rubber with
DIN17223 spring steel)

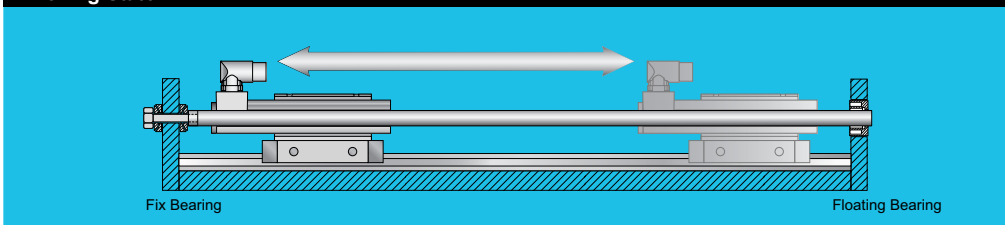


Housing:
Stainless steel 1.4305

Moving Slider



Moving Stator



Dimensions and ordering information

Fix Bearing



DIN 6319 C

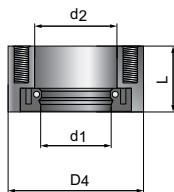
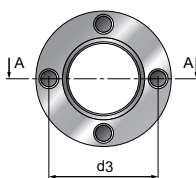


DIN 6319 D



Item	Slider	Lead	d1	d2	d3	h
PLF01-12	12mm	M5	5,2mm (0,20in)	6,0mm (0,24in)	10,5mm (0,41in)	3,2mm (0,13in)
PLF01-20	20mm	M8	8,4mm (0,33in)	9,6mm (0,38in)	17mm (0,67in)	6,7mm (0,26in)
PLF01-28	28mm	M10	10,5mm (0,41in)	12mm (0,47in)	21mm (0,83in)	6,7mm (0,26in)

Floating Bearing



A-A

Item	Slider	Lead	d1	d2	d3	D4	L
PLL02-12	12mm	-	12mm (0,47in)	Gummi- ring (0,26in)	-	22mm (0,87in)	6,6mm (0,26in)
PLL01-20	20mm	M5	20mm (0,79in)	23mm (0,90in)	30mm (1,18in)	37mm (1,46in)	20mm (0,79in)
PLL01-28	28mm	M5	28mm	32mm	40mm	48mm	20mm

Item	Description	Part Number
PLF01-12	Fix bearing for 12mm slider	0150-3085
PLF01-20	Fix bearing for 20mm slider	0150-3083
PLF01-28	Fix bearing for 28mm slider	0150-3087
PLL02-12	Floating bearing for PL01-12 slider	0150-3111
PLL01-20	Floating bearing for PL01-20 slider	0150-3084
PLL01-28	Floating bearing 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

Slider Mounts

Wipers

LinMot stators can be equipped with wipers as an option. Wipers increase the duration of the maintenance interval, and allow simple re-lubrication using the integrated lube nipple and a grease gun. The wipers also keep the slider free of grease or contaminants, and protect the stator from dirt.



Wipers

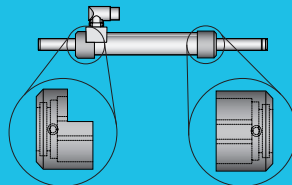
Installation

LinMot stators can be equipped with wipers as an option.

Wipers increase the duration of the maintenance interval, and allow simple re-lubrication using the integrated lube nipple and a grease gun.

The wipers also keep the slider free of grease or contaminants, and protect the stator from dirt.

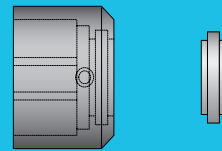
Wipers



Rear Wiper

Front Wiper

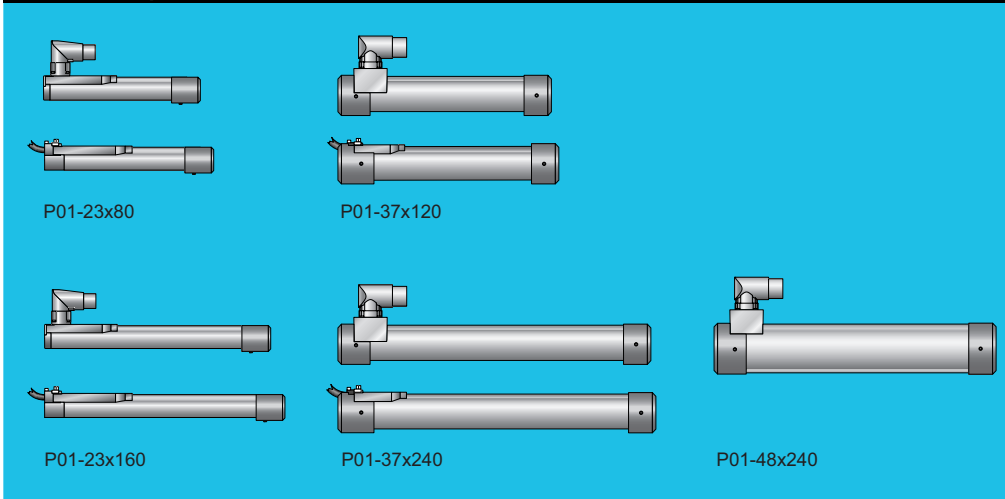
Material



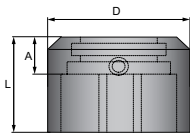
Housing: POM

Wipers: H-PU

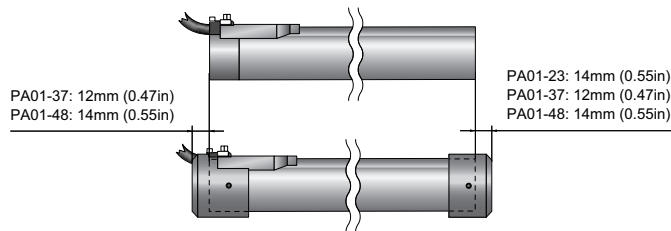
Available Wipers



Dimensions and ordering information



Item	D	L	A	Weight
PA01-23	29mm (1.14in)	33mm (1.30in)	14mm (0.55in)	0.014kg
PA01-37	45mm (1.77in)	32mm (1.26in)	12mm (0.47in)	0.028kg
PA01-37R	45mm (1.77in)	32mm (1.26in)	12mm (0.47in)	0.026kg
PA01-37R Kabel	45mm (1.77in)	40mm (1.57in)	12mm (0.47in)	0.030kg
PA01-48	58mm (2.28in)	32mm (1.26in)	14mm (0.55in)	0.056kg
PA01-48R	58mm (2.28in)	32mm (1.26in)	14mm (0.55in)	0.050kg



Item	Description	Part Number
PA01-23/12-F	Wiper for PS01-23x... (front wiper)	0150-3125
PA01-37/19-F	Wiper for PS01-37x... (front wiper for high clearance sliders)	0150-3225
PA01-37/19-R	Wiper for PS01-37x...(-C rear wiper for high clearance sliders)	0150-3226
PA01-37/19-R cable	Wiper for PS01-37x... (cable rear wiper for high clearance sliders)	0150-3227
PA01-37/20-F	Wiper for PS01-37x... (front wiper)	0150-3126
PA01-37/20-R	Wiper for PS01-37x...(-C rear wiper)	0150-3201
PA01-37/20-R cable	Wiper for PS01-37x...(-cable rear wiper)	0150-3221
PA01-48/27-F	Wiper for PS01-48x... (front wiper for high clearance sliders)	0150-3228
PA01-48/27-R	Wiper for PS01-48x...(-C rear wiper for high clearance sliders)	0150-3229
PA01-48/28-F	Wiper for PS01-48x... (front wiper)	0150-3127
PA01-48/28-R	Wiper for PS01-48x...(-C rear wiper)	0150-3202

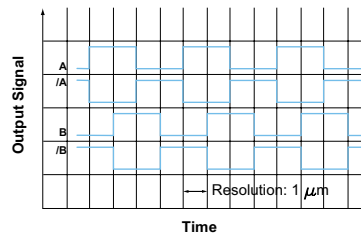
External Position Sensor

Non-contacting measuring position sensors, using magnets with integrated processing electronics and differential encoder outputs for the E1100 series servo controllers.

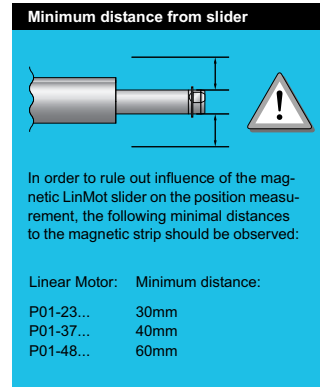
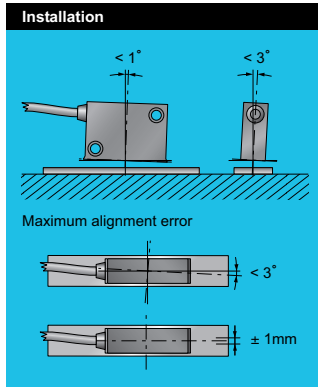
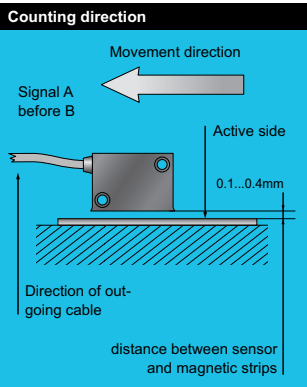
Together with the MB01-1000 magnetic band, the MS01/D position sensor is part of a high-resolution, robust, linear measurement system.

Features:

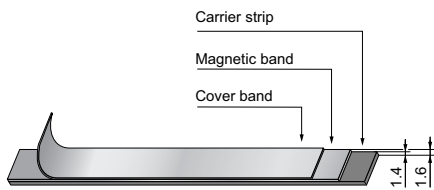
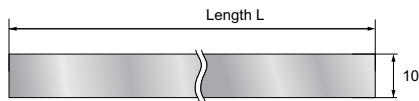
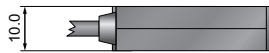
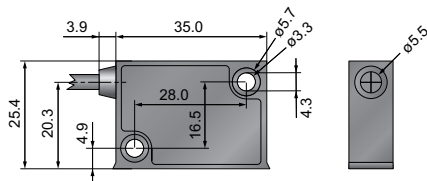
- Simple installation, by sticking on the magnetic band
- IP67 protection class, not sensitive to dust, moisture, or dirt
- Status display with LEDs directly at the sensor head
- Highest precision - Resolution 0.001mm - System accuracy ± 0.01 mm.
- Allows high travel speeds of up to 3 m/s
- Compatible with the E1100 series of LinMot Servo Controllers.



External Position Sensor



Dimensions



Cables

Cable length	2m, High Flex, PUR
Connector type	Dsub-9 (male)

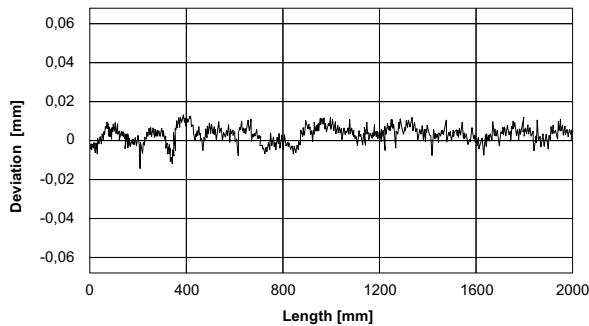
Connector wiring



Pin 1	+5VDC
Pin 2	Channel /A
Pin 3	Channel /B
Pin 5	GND
Pin 6	Channel A
Pin 7	Channel B
Pin 4, 8, 9	n.c.

Technical data

Length	measured length +3.0cm
Width	10mm
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	Part Number
MS01-1/D	Magnet sensor 1 μm , A/B (for 1mm magnetic band)	0150-1840
MB01-1000	Magnetic band, 1mm pole partitioning (per cm)	0150-1963

External Position Sensor



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