

LINEAR MOTORS P10

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The power packages of the LinMot motor family offer the best possible flexibility in the control concept and the stroke range.

Product Description

4

The linear motors of the P10 series are the most powerful motors in the LinMot product family. With their higher performance and peak forces of up to 2700 N, the motors place higher demands on the drive units and servo drives. For this reason, LinMot has developed a completely new concept and relies exclusively on the 3x400VAC technology and servo drives with direct power supply from the grid for this motor series. Depending on the application, the motors can also be operated with rectified 1x230VAC.

The built-in standard encoders ensure better integration of the drives into external control concepts. The motors can thus be controlled by drives of any manufacturer without problems. As with the smaller drives, the motors are equipped with rotatable IP67 plugs. For the different stroke lengths there is a fixed, systematically ordered slider program.



P10-54 Linear Motors

Compact, tubular linear motors with medium power output for dynamic positioning tasks or to replace pneumatics. Optionally equipped with a 1Vpp sin/cos encoder or an A/B incremental encoder, the motors can be controlled by any manufacturer's drives. The P10-54 motors are available in 4 sizes, with peak forces from 350 to 900 N. The extensive selection of sliders produces a closely tiered range of strokes, with a maximum stroke of up to 2000 mm.



P10-70 Linear Motors

The most powerful LinMot motors for dynamic linear motions. They can be actuated by any manufacturer's drives or by the LinMot E1400 Servo Drive. The 70-series motors are available in 5 sizes, with peak forces from 550 to 2700 N. The maximum available stroke is 1770 mm. The motor data, with accelerations from 975 m/s² and a maximum speed of over 7 m/s, leave nothing to be desired in terms of dynamics.

FREELY POSITIONABLE

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

HIGH AND CONTROLLED DYNAMICS

Max. acceleration values over 900 m/s² and travel speeds up to 10 m/s allow cyclical motion sequences of several Hertz.

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

PROCESS STABILITY

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

3X400 VAC TECHNOLOGY

LinMot is using 3x400VAC technology for the first time with this series of motors. This has increased the dynamism of the drives several times over, so that accelerations of well over 900 m/s² can be achieved. The three-phase alternating current allows the motors to be even better integrated in the machine environment and used more effectively as a component.

WORKS WITH THIRD-PARTY DRIVES

The P10 series of motors have been deliberately equipped with standard encoders. The position signals are output by an analog 1Vpp sin/cos sensor or by a digital A/B incremental encoder. Both types can be read by nearly all third-party drives, thus enabling optimal integration in existing control concepts. In addition to the position feedback, the outgoing temperature signals can also be interpreted by other drives without a problem. Either PTC/PT1000 or KTY sensors are installed for this purpose.

PLUGS FOR SENSORS AND POWER

Every designer is familiar with the problem of routing motor cables inside machinery. For this reason, LinMot Series P10 linear motors are available with two separate, robust, rotating plug connections with IP67 protection for signals and for power.

SYNCHRONIZATION

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

OVERLOAD PROTECTION

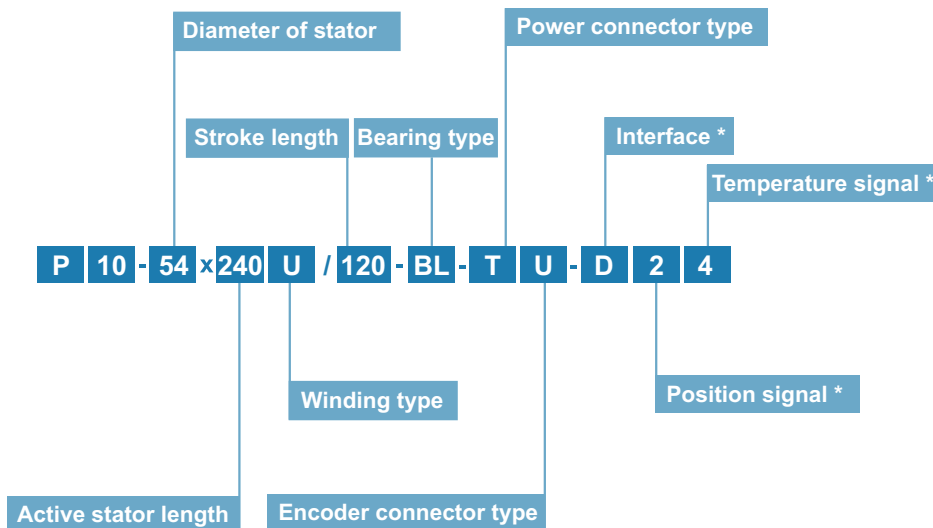
There are no mechanical components for force transfer that could be damaged in a crash or stall condition in a linear motor. Complex, expensive designs to protect gearboxes, gears, and shafts are thus eliminated.

If the linear motor stalls, it acts like a pneumatic cylinder and tries to reach the target position with maximum force. The following error monitor in the drive can, however, immediately recognize a stall condition. Temperature sensors integrated in the stator prevent the drive from overloading in any case.

LONG LIFESPAN

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

Type Code



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

* = Only for motors for 3rd party drives

LINEAR MOTORS P10-54x120U



- ✓ 230VAC and 3 x 400VAC technology
- ✓ Peak forces up to 335 N
- ✓ LinMot Encoder or Incremental Encoder
- ✓ Extremely high dynamic
- ✓ Rotating push-pull TWIN connector for power and encoder cables
- ✓ Can also be controlled by standard third-party servo drives

LINEAR MOTORS P10-54x120U

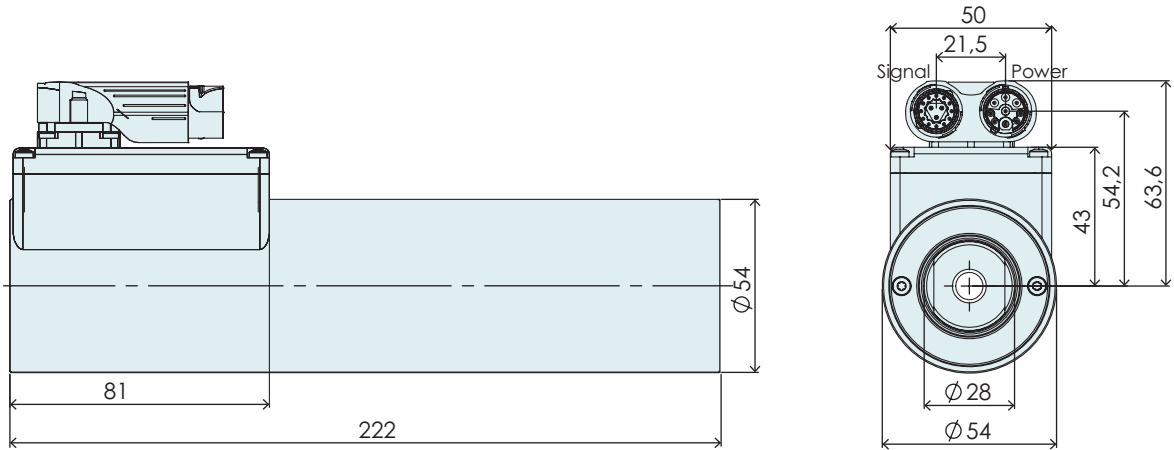
Technical Data	397
Motor Specifications	
P10-54x120U/70	402
P10-54x120U/130	403
P10-54x120U/220	404
P10-54x120U/340	405
P10-54x120U/430	406
P10-54x120U/520	407
P10-54x120U/640	408
P10-54x120U/730	409
P10-54x120U/940	410
P10-54x120U/1120	411
P10-54x120U/1330	412
P10-54x120U/1540	413
P10-54x120U/1720	414
Accessories	415



MOTOR FAMILY P10-54x120U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1720	(67.7)
Force				
Max. Force @ 1x230VAC	N	(lbf)	335	(75.4)
Max. Force @ 3x400VAC	N	(lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	60.8	(13.7)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.3	(289.9)
Position Detection				
Position Resolution	mm	(in)	0.007	(0.0003)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.99 / 1.3 / 1.8	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	49.7	(1.26)
Terminal Resistance 25 °C / 120 °C	Ohm		14 / 19	
Terminal Inductivity	mH		11	
Magnetic Period	mm	(in)	60	(2.35)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1100 / 600 / 310	
Mechanical Data				
Stator Diameter	mm	(in)	54	(2.1)
Stator Length	mm	(in)	222	(8.7)
Stator Mass	g	(lb)	1730	(3.8)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	350 - 2000	(14 - 79)
Slider Mass	g	(lb)	1460 - 9140	(3.21 - 20.1)
IP Code			IP 65	

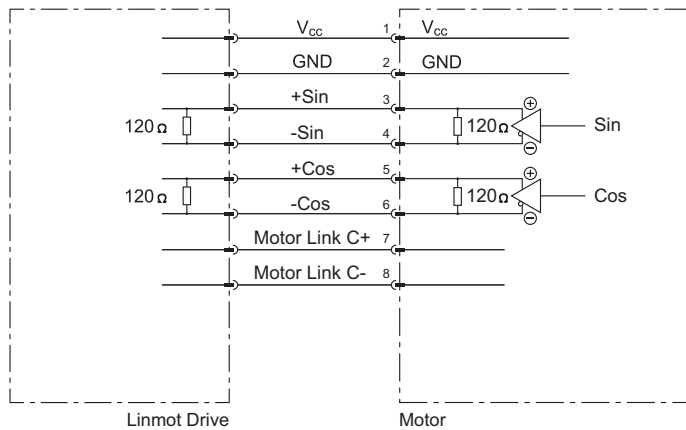
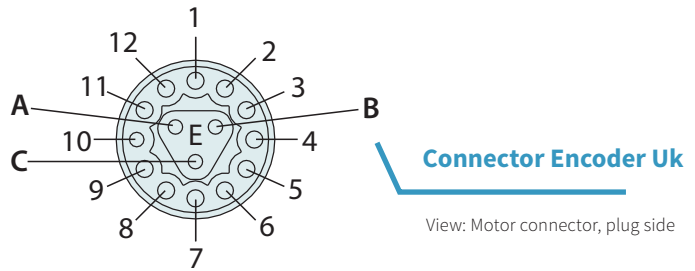
STATOR



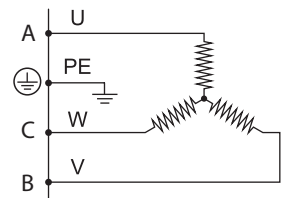
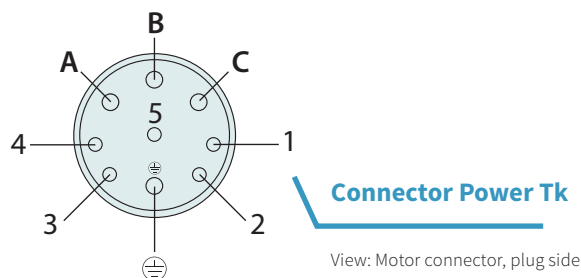
Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782

CONNECTOR PS10-54x120U-BL-TU

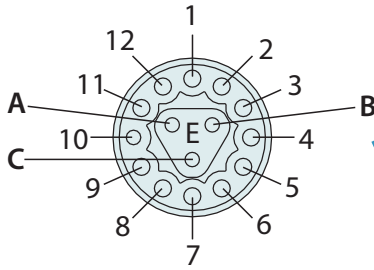
Motor Connector Wiring	Connector Encoder Uk	Wire Color Motor Cable	
+Vcc	Supply	1	red
GND	Supply	2	black
Sin+	Encoder	3	yellow
Sin-	Encoder	4	orange
Cos+	Encoder	5	green
Cos-	Encoder	6	blue
Mot. Link C+	Communication	7	pink
Mot. Link C-	Communication	8	grey
n. c.	n. c.	9	n. c.
n. c.	n. c.	10	n. c.
n. c.	n. c.	11	n. c.
n. c.	n. c.	12	n. c.
n. c.	n. c.	A	n. c.
n. c.	n. c.	B	n. c.
n. c.	n. c.	C	n. c.



Motor Connector Wiring	Connector Power Tk	Wire Color Motor Cable
Phase U	A	red
PE	PE	yellow-green
Phase V	B	blue
Phase W	C	green
n. c.	1	n. c.
n. c.	2	n. c.
n. c.	3	n. c.
n. c.	4	n. c.
n. c.	5	n. c.

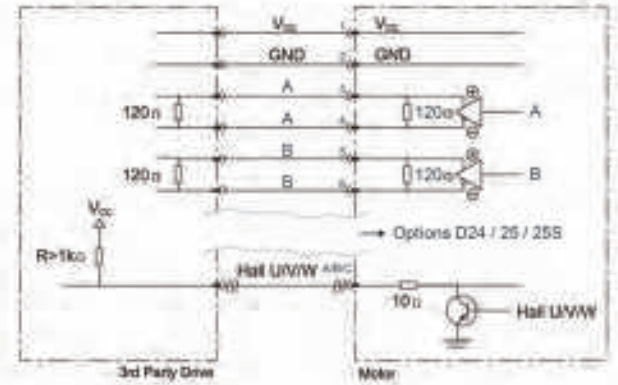


CONNECTOR PS10-54x120U-BL-TU-D24 / 25 / 25S

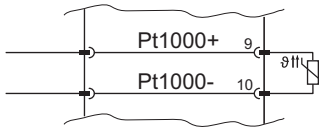


Connector Encoder Uk

View: Motor connector, plug side

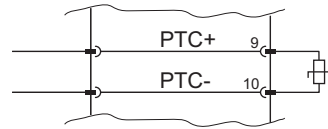


PS10-54x120U-BL-TU-D24



Pt1000 Characteristic emulated

**PS10-54x120U-BL-TU-D25
PS10-54x120U-BL-TU-D25S**



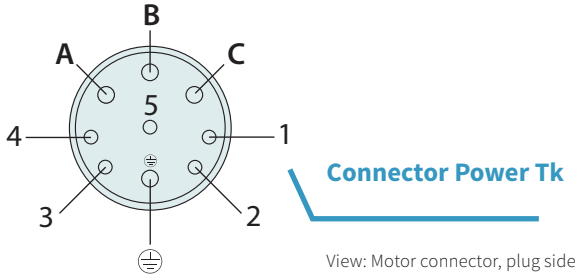
PTC (switching type)
350 Ω / 18 kΩ emulated¹

Motor Connector Wiring				
PS10-54x120U-BL-TU-D24	PS10-54x120U-BL-TU-D25 PS10-54x120U-BL-TU-D25S	Function	Connector Encoder Uk	Wire Color Motor Cable
+Vcc	+Vcc	Supply	1	white
GND	GND	Supply	2	brown
A	A	Encoder	3	grey
/A	/A	Encoder	4	pink
B	B	Encoder	5	blue
/B	/B	Encoder	6	red
-	-	-	7	green (do not connect)
-	-	-	8	yellow (do not connect)
Pt1000+	PTC+	Temp. ²	9	yellow-brown
Pt1000-	PTC-	Temp. ²	10	white-yellow
REF+	REF+	Encoder	11	black
REF-	REF-	Encoder	12	purple
Hall U	Hall U	Encoder	A	grey-red
Hall V	Hall V	Encoder	B	red-blue
Hall W	Hall W	Encoder	C	white-green

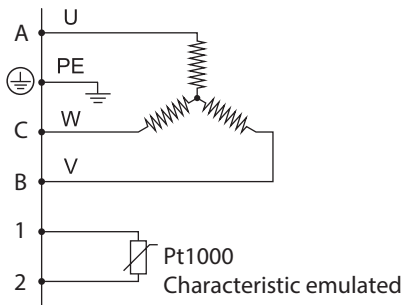
1) under 350 Ω = no fault, over 18 kΩ = Fault

2) The temperature evaluation circuit must be powered from the encoder supply and must be at the same potential.

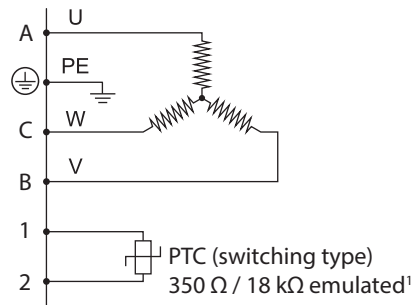
The grounds of the temperature evaluation circuit and the encoder have to be connected. The encoder must have been powered on for at least 50 ms, before valid temperatures can be measured. If the encoder is powered off, 20k Ohms are measured between Pins 9 and 10.



PS10-54x120U-BL-TU-D24



**PS10-54x120U-BL-TU-D25
PS10-54x120U-BL-TU-D25S**



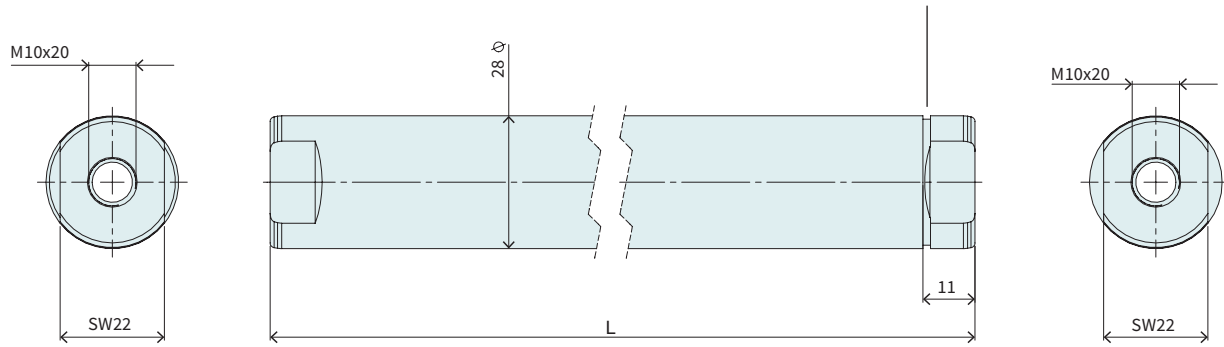
Motor Connector Wiring			
PS10-54x120U-BL-TU-D24	PS10-54x120U-BL-TU-D25 PS10-54x120U-BL-TU-D25S	Connector Power Tk	Wire Color Motor Cable
Phase U	Phase U	A	red
PE	PE	PE	yellow-green
Phase V	Phase V	B	blue
Phase W	Phase W	C	green
Pt1000+	PTC+	1	turquoise
Pt1000-	PTC-	2	grey
n. c.	n. c.	3	n. c.
n. c.	n. c.	4	n. c.
n. c.	n. c.	5	n. c.

1) under 350 Ω = no fault, over 18 Ω = Fault

SLIDER

Slider Standard

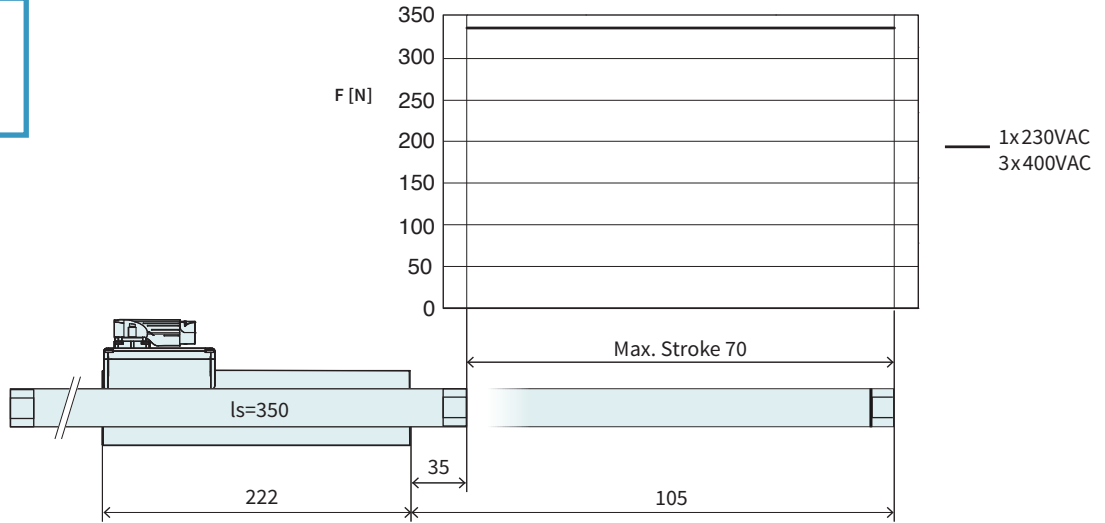
Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.



Slider Standard			
Item	Description	Max. Stroke [mm]	Item-No.
PL01-28x350/270	Slider 'standard'	70	0150-1380
PL01-28x410/330	Slider 'standard'	130	0150-1381
PL01-28x500/420	Slider 'standard'	220	0150-1382
PL01-28x620/540	Slider 'standard'	340	0150-1383
PL01-28x710/630	Slider 'standard'	430	0150-1384
PL01-28x800/720	Slider 'standard'	520	0150-1385
PL01-28x920/840	Slider 'standard'	640	0150-1386
PL01-28x1010/930	Slider 'standard'	730	0150-1387
PL01-28x1220/1140	Slider 'standard'	940	0150-1388
PL01-28x1400/1320	Slider 'standard'	1120	0150-1389
PL01-28x1610/1530	Slider 'standard'	1330	0150-1390
PL01-28x1820/1740	Slider 'standard'	1540	0150-1395
PL01-28x2000/1920	Slider 'standard'	1720	0150-1396

P10-54x120U/70-BL-TU

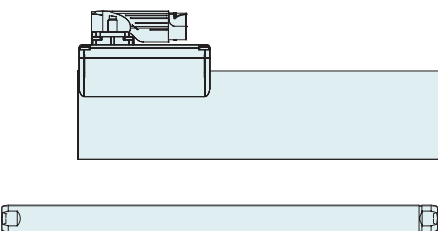
Max. Stroke: 70 mm
Peak Force: 335 N



Dimensions in mm

Technical Data P10-54x120U/70

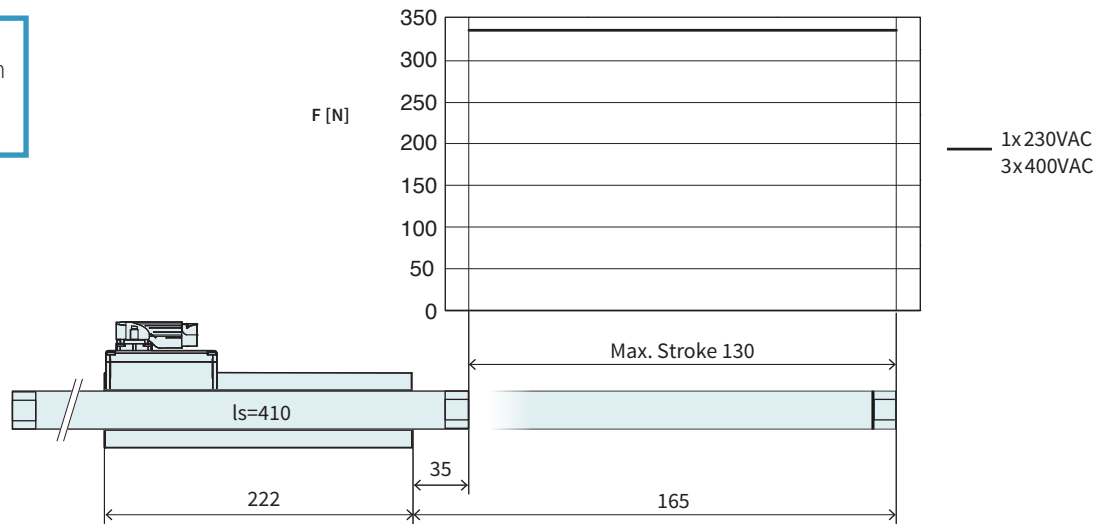
Technical Data P10-54x120U/70			
Stroke			
Max. Stroke	mm (in)	70 (2.75)	
Force			
Max. Force @ 1x230VAC	N (lbf)	335 (75.4)	
Max. Force @ 3x400VAC	N (lbf)	335 (75.4)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	60 / 81 / 110 (14 / 18 / 25)	
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	43 (9.67)	
Force Constant 2	N/A _{rms} (lbf/A _{rms})	60.8 (13.7)	
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.2 (169.9)	
Max. Velocity @ 3x400VAC	m/s (in/s)	7.3 (7.3)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 1.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.99 / 1.3 / 1.8	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1100 / 600 / 310	
Mechanical Data			
Slider Length	mm (in)	350 (14)	
Slider Mass	g (lb)	1460 (3.21)	



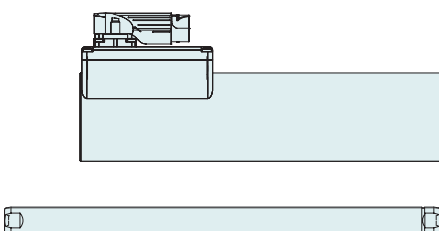
Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x350/270	Slider 'standard'	0150-1380

P10-54x120U/130-BL-TU

Max. Stroke: 130 mm
Peak Force: 335 N



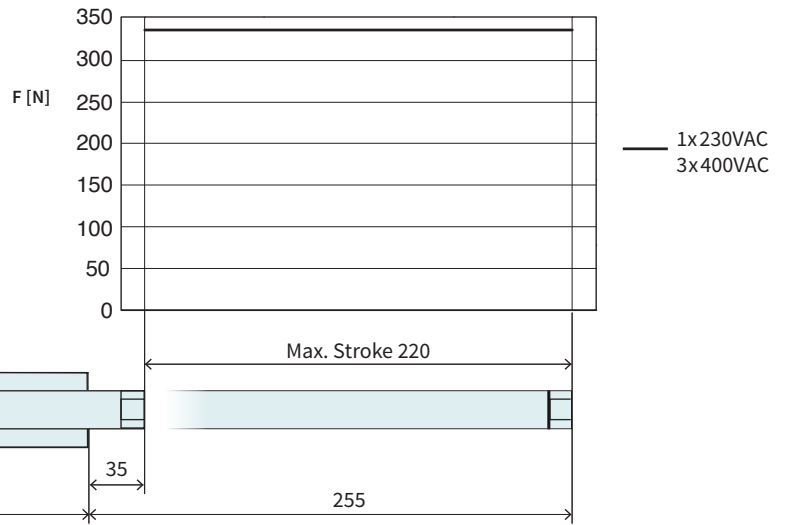
Technical Data P10-54x120U/130				
Stroke				
Max. Stroke	mm	(in)	130	(5.12)
Force				
Max. Force @ 1x230VAC	N	(lbf)	335	(75.4)
Max. Force @ 3x400VAC	N	(lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	60.8	(13.7)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.3	(7.3)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.7	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.99 / 1.3 / 1.8	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1100 / 600 / 310	
Mechanical Data				
Slider Length	mm	(in)	410	(16)
Slider Mass	g	(lb)	1740	(3.83)



Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x410/330	Slider 'standard'	0150-1381

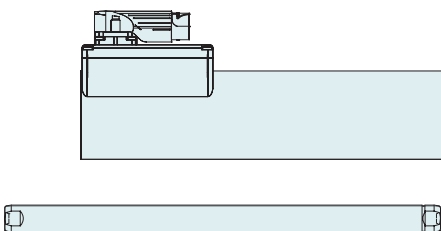
P10-54x120U/220-BL-TU

Max. Stroke: 220 mm
Peak Force: 335 N



Dimensions in mm

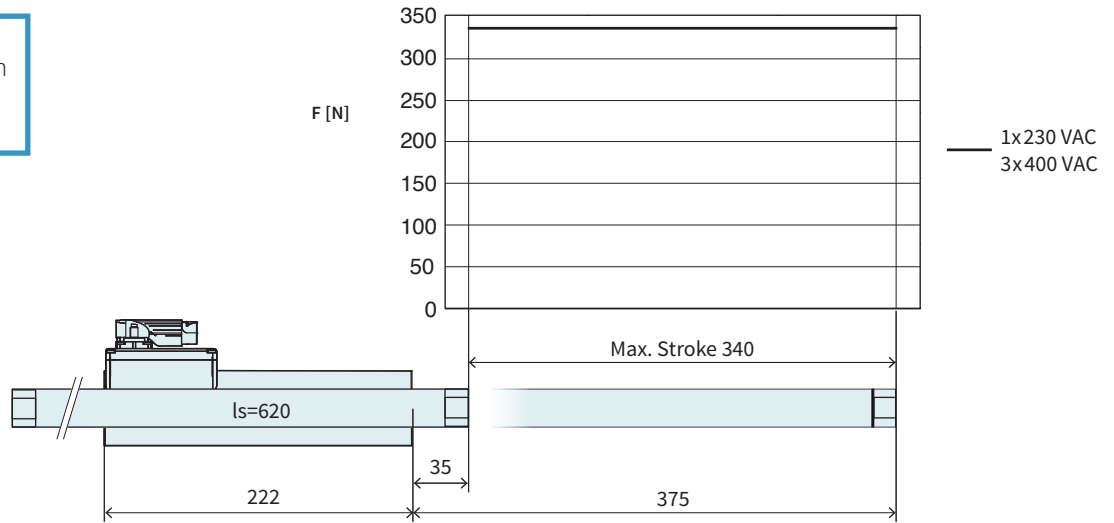
Technical Data P10-54x120U/220			
Stroke			
Max. Stroke	mm (in)	220	(8.65)
Force			
Max. Force @ 1x230VAC	N (lbf)	335	(75.4)
Max. Force @ 3x400VAC	N (lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	60.8	(13.7)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	7.3	(7.3)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.45	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.99 / 1.3 / 1.8	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1100 / 600 / 310	
Mechanical Data			
Slider Length	mm (in)	500	(20)
Slider Mass	g (lb)	2160	(4.75)



Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x500/420	Slider 'standard'	0150-1382

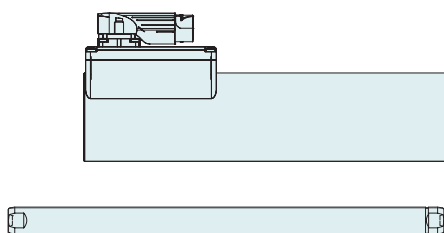
P10-54x120U/340-BL-TU

Max. Stroke: 340 mm
Peak Force: 335 N



Dimensions in mm

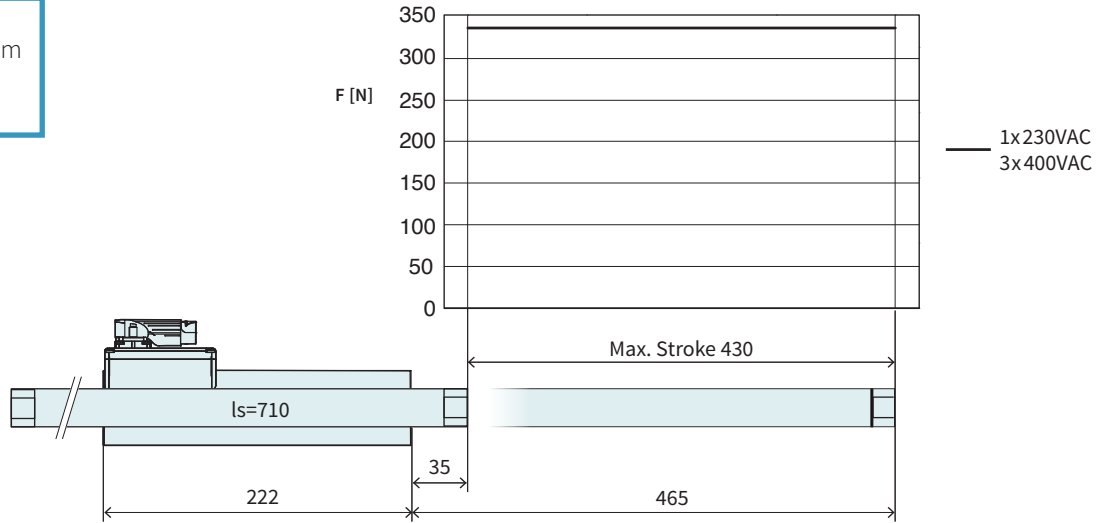
Technical Data P10-54x120U/340			
Stroke			
Max. Stroke	mm (in)		340 (13.4)
Force			
Max. Force @ 1x230VAC	N (lbf)		335 (75.4)
Max. Force @ 3x400VAC	N (lbf)		335 (75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		60 / 81 / 110 (14 / 18 / 25)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		43 (9.67)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		60.8 (13.7)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		4.2 (169.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		7.3 (7.3)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.3
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		7.7 / 5.5
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		7.7 / 5.5
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 1.9 / 2.6
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.99 / 1.3 / 1.8
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.1 / 1.2 / 0.62
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1100 / 600 / 310
Mechanical Data			
Slider Length	mm (in)		620 (24)
Slider Mass	g (lb)		2720 (5.98)



Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x620/540	Slider 'standard'	0150-1383

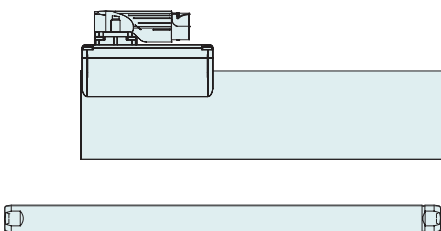
P10-54x120U/430-BL-TU

Max. Stroke: 430 mm
Peak Force: 335 N



Dimensions in mm

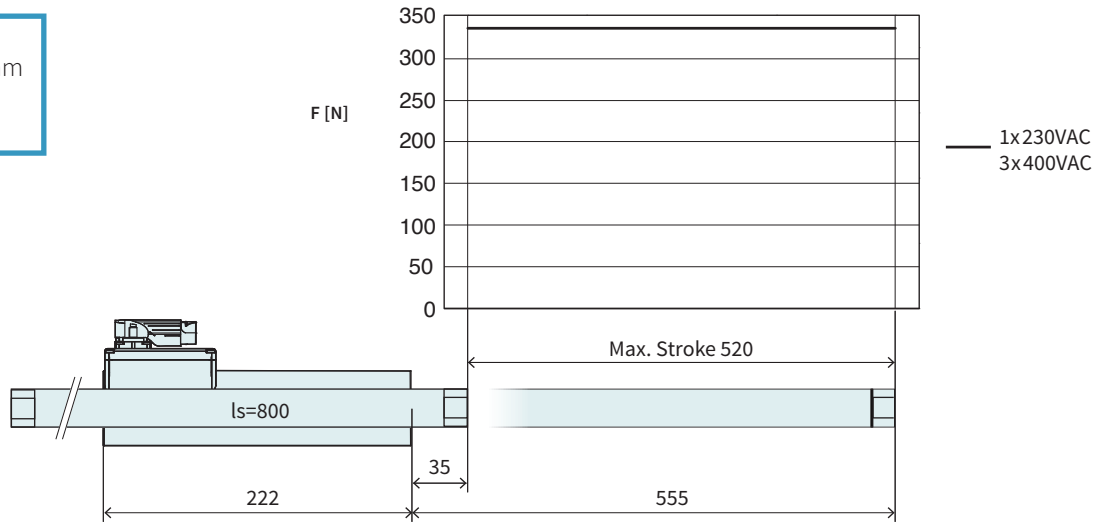
Technical Data P10-54x120U/430			
Stroke			
Max. Stroke	mm (in)	430	(16.89)
Force			
Max. Force @ 1x230VAC	N (lbf)	335	(75.4)
Max. Force @ 3x400VAC	N (lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	60.8	(13.7)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	7.3	(7.3)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.25	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.99 / 1.3 / 1.8	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1100 / 600 / 310	
Mechanical Data			
Slider Length	mm (in)	710	(28)
Slider Mass	g (lb)	3140	(6.91)



Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x710/630	Slider 'standard'	0150-1384

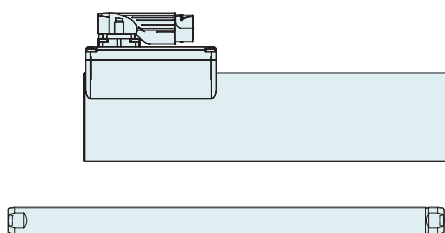
P10-54x120U/520-BL-TU

Max. Stroke: 520 mm
Peak Force: 335 N



Dimensions in mm

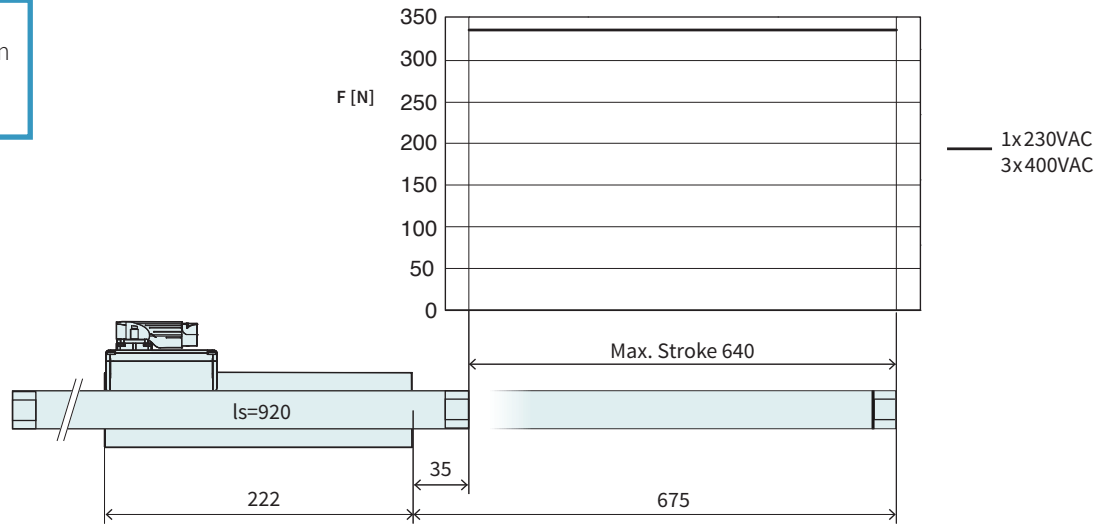
Technical Data P10-54x120U/520			
Stroke			
Max. Stroke	mm (in)	520	(20.49)
Force			
Max. Force @ 1x230VAC	N (lbf)	335	(75.4)
Max. Force @ 3x400VAC	N (lbf)	335	(75.4)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N (lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	60.8	(13.7)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	7.3	(7.3)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.25	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.99 / 1.3 / 1.8	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1100 / 600 / 310	
Mechanical Data			
Slider Length	mm (in)	800	(31)
Slider Mass	g (lb)	3560	(7.83)



Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x800/720	Slider 'standard'	0150-1385

P10-54x120U/640-BL-TU

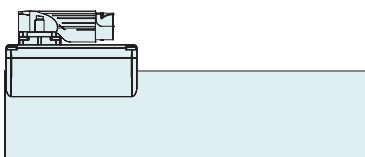
Max. Stroke: 640 mm
Peak Force: 335 N



Dimensions in mm

Technical Data P10-54x120U/640

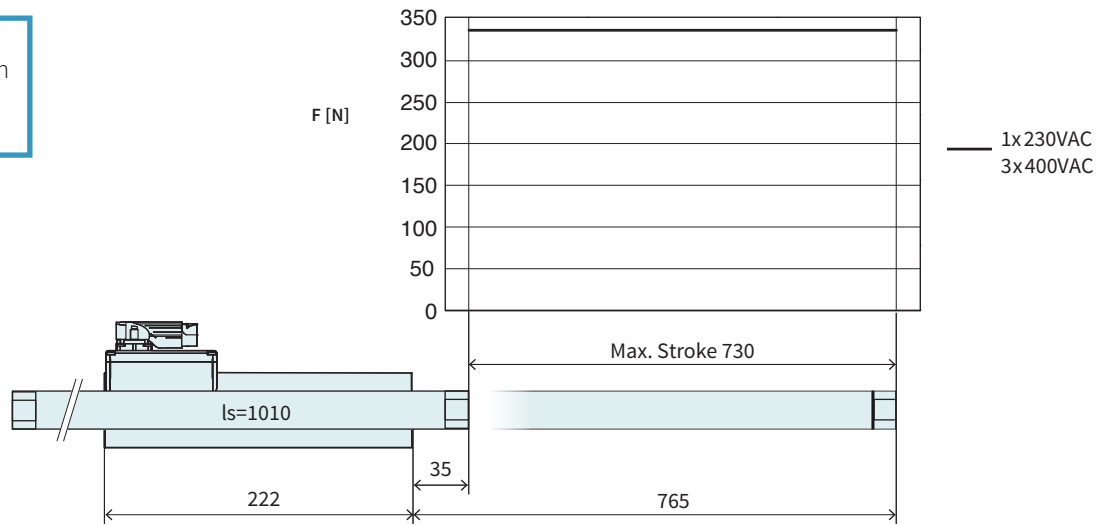
Technical Data P10-54x120U/640			
Stroke			
Max. Stroke	mm (in)	640 (25.19)	
Force			
Max. Force @ 1x230VAC	N (lbf)	335 (75.4)	
Max. Force @ 3x400VAC	N (lbf)	335 (75.4)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	60 / 81 / 110 (14 / 18 / 25)	
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	43 (9.67)	
Force Constant 2	N/A _{rms} (lbf/A _{rms})	60.8 (13.7)	
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.2 (169.9)	
Max. Velocity @ 3x400VAC	m/s (in/s)	7.3 (7.3)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.99 / 1.3 / 1.8	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1100 / 600 / 310	
Mechanical Data			
Slider Length	mm (in)	920 (36)	
Slider Mass	g (lb)	4120 (9.06)	



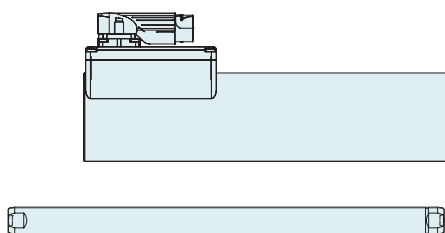
Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x920/840	Slider 'standard'	0150-1386

P10-54x120U/730-BL-TU

Max. Stroke: 730 mm
Peak Force: 335 N



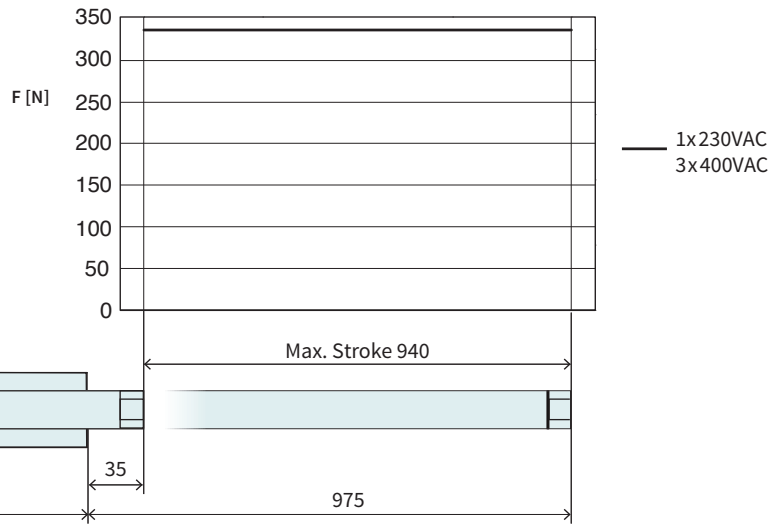
Technical Data P10-54x120U/730				
Stroke				
Max. Stroke	mm	(in)	730	(28.69)
Force				
Max. Force @ 1x230VAC	N	(lbf)	335	(75.4)
Max. Force @ 3x400VAC	N	(lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	60.8	(13.7)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.3	(7.3)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.99 / 1.3 / 1.8	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1100 / 600 / 310	
Mechanical Data				
Slider Length	mm	(in)	1010	(40)
Slider Mass	g	(lb)	4540	(10)



Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x1010/930	Slider 'standard'	0150-1387

P10-54x120U/940-BL-TU

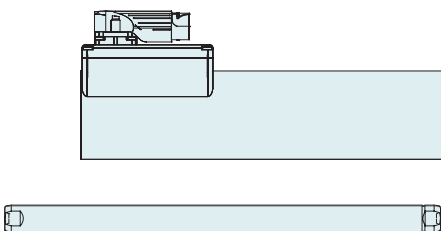
Max. Stroke: 940 mm
Peak Force: 335 N



Dimensions in mm

Technical Data P10-54x120U/940

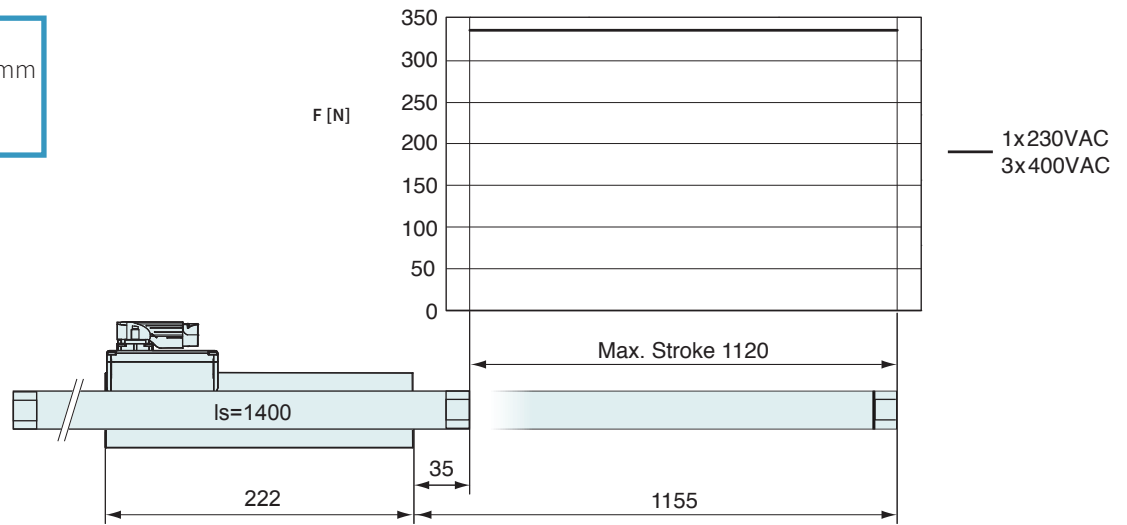
Technical Data P10-54x120U/940			
Stroke			
Max. Stroke	mm (in)	940	(36.99)
Force			
Max. Force @ 1x230VAC	N (lbf)	335	(75.4)
Max. Force @ 3x400VAC	N (lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	60.8	(13.7)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	7.3	(7.3)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.99 / 1.3 / 1.8	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1100 / 600 / 310	
Mechanical Data			
Slider Length	mm (in)	1220	(48)
Slider Mass	g (lb)	5510	(12.12)



Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x1220/1140	Slider 'standard'	0150-1388

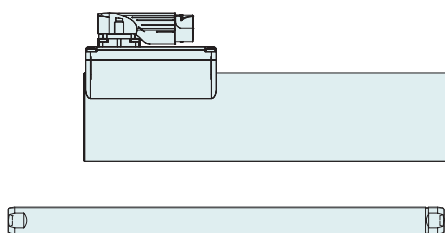
P10-54x120U/1120-BL-TU

Max. Stroke: 1120 mm
Peak Force: 335 N



Dimensions in mm

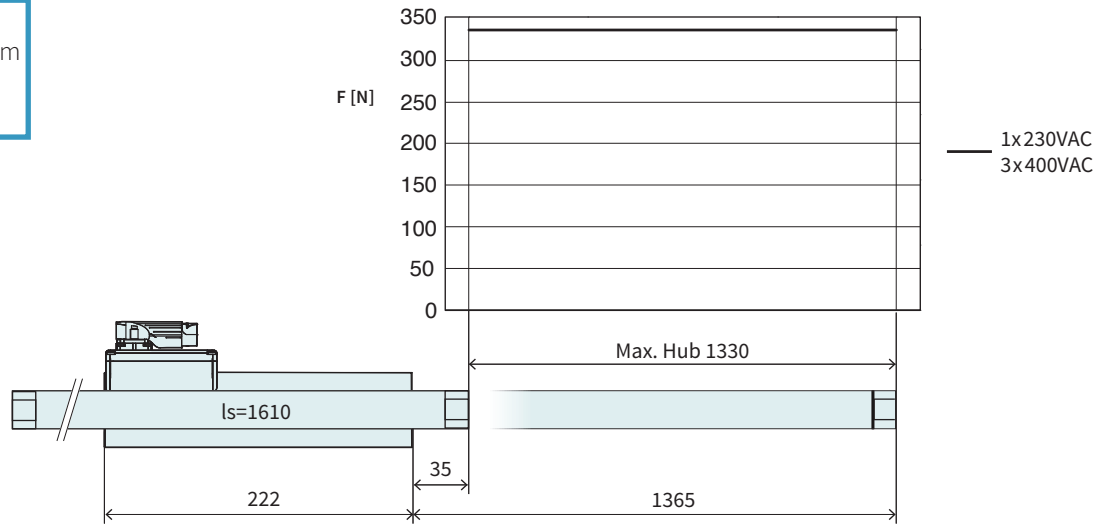
Technical Data P10-54x120U/1120			
Stroke			
Max. Stroke	mm (in)	1120	(44.1)
Force			
Max. Force @ 1x230VAC	N (lbf)	335	(75.4)
Max. Force @ 3x400VAC	N (lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	60.8	(13.7)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	7.3	(7.3)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	±0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.99 / 1.3 / 1.8	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	*K/W	2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1100 / 600 / 310	
Mechanical Data			
Slider Length	mm (in)	1400	(55)
Slider Mass	g (lb)	6350	(13.97)



Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x1400/1320	Slider 'standard'	0150-1389

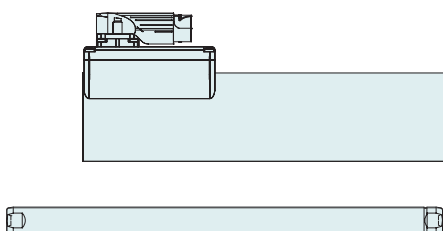
P10-54x120U/1330-BL-TU

Max. Stroke: 1330 mm
Peak Force: 335 N



Dimensions in mm

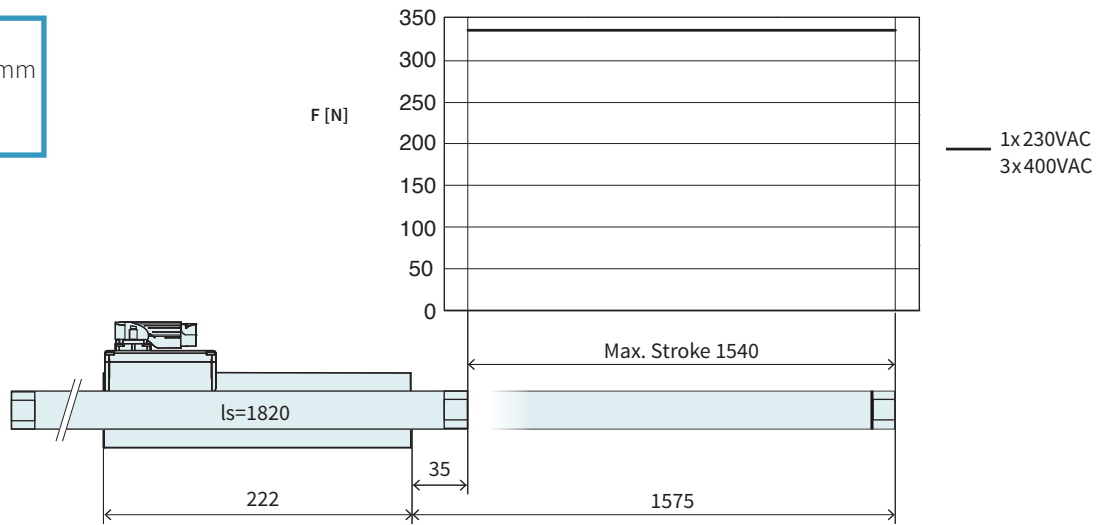
Technical Data P10-54x120U/1330			
Stroke			
Max. Stroke	mm (in)	1330	(52.39)
Force			
Max. Force @ 1x230VAC	N (lbf)	335	(75.4)
Max. Force @ 3x400VAC	N (lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	60.8	(13.7)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	7.3	(7.3)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.99 / 1.3 / 1.8	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1100 / 600 / 310	
Mechanical Data			
Slider Length	mm (in)	1610	(63)
Slider Mass	g (lb)	7330	(16.13)



Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x1610/1530	Slider 'standard'	0150-1390

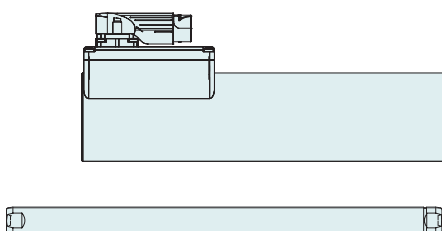
P10-54x120U/1540-BL-TU

Max. Stroke: 1540 mm
Peak Force: 335 N



Dimensions in mm

Technical Data P10-54x120U/1540			
Stroke			
Max. Stroke	mm (in)		1540 (60.6)
Force			
Max. Force @ 1x230VAC	N (lbf)		335 (75.4)
Max. Force @ 3x400VAC	N (lbf)		335 (75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		60 / 81 / 110 (14 / 18 / 25)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		43 (9.67)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		60.8 (13.7)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		4.2 (169.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		7.3 (7.3)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.15
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		7.7 / 5.5
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		7.7 / 5.5
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.4 / 1.9 / 2.6
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.99 / 1.3 / 1.8
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.1 / 1.2 / 0.62
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1100 / 600 / 310
Mechanical Data			
Slider Length	mm (in)		1820 (72)
Slider Mass	g (lb)		8300 (18.26)

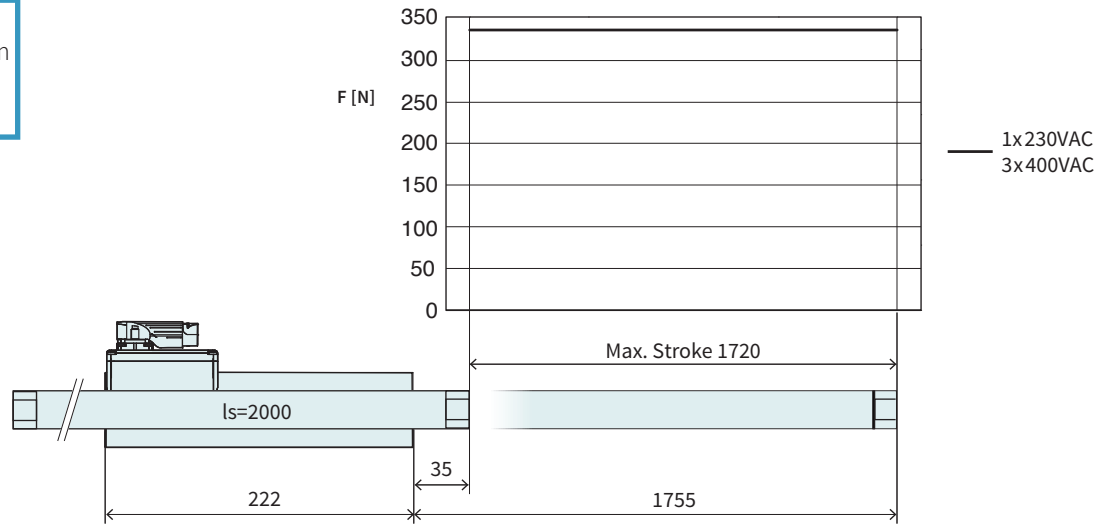


Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x1820/1740	Slider 'standard'	0150-1395

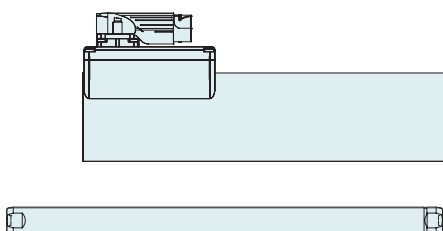
P10-54x120U/1720-BL-TU

Max. Stroke: 1720 mm
Peak Force: 335 N

Dimensions in mm

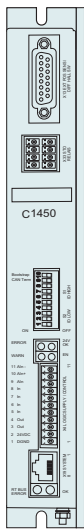


Technical Data P10-54x120U/1720			
Stroke			
Max. Stroke	mm (in)	1720	(67.7)
Force			
Max. Force @ 1x230VAC	N (lbf)	335	(75.4)
Max. Force @ 3x400VAC	N (lbf)	335	(75.4)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	60 / 81 / 110	(14 / 18 / 25)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	43	(9.67)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	60.8	(13.7)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.2	(169.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	7.3	(7.3)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	7.7 / 5.5	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.4 / 1.9 / 2.6	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.99 / 1.3 / 1.8	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.1 / 1.2 / 0.62	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1100 / 600 / 310	
Mechanical Data			
Slider Length	mm (in)	2000	(79)
Slider Mass	g (lb)	9140	(20.11)



Item	Description	Item-No.
PS10-54x120U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2722
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2748
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2752
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2782
PL01-28x2000/1920	Slider 'standard'	0150-1396

Motor Cable

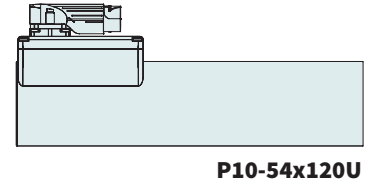
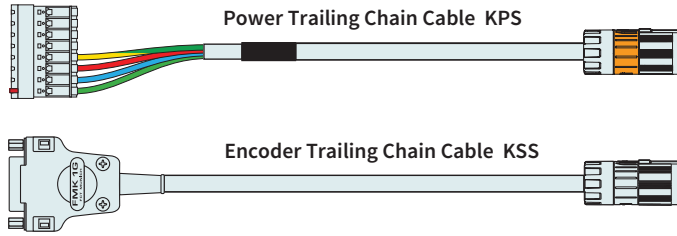


C1400



E1400

B Connector MC10-B/m

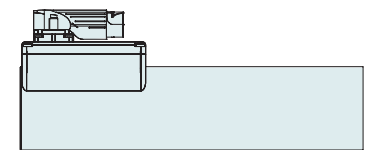
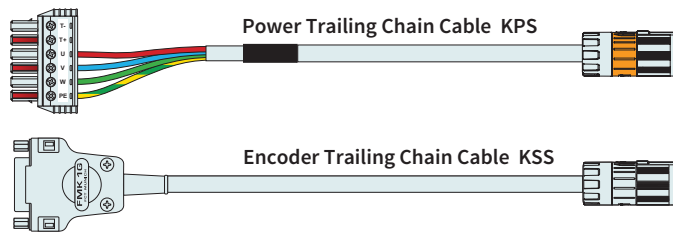


P10-54x120U

D15s Connector MC01-D15s-45°/f

Uk Connector MC10-Uk/f

L Connector MC10-L/m



P10-54x120U

D15s Connector MC01-D15s-45°/f

Uk Connector MC10-Uk/f

Tk Connector MC10-Tk/f

ORDERING INFORMATION

TRAILING CHAIN CABLE FOR LINMOT DRIVES		
Item	Description	Item-No.
KPS07-04/02-L/Tk-3	Power Trailing Chain Cable E1400/P10-54, 3 m	0150-2670
KPS07-04/02-L/Tk-5	Power Trailing Chain Cable E1400/P10-54, 5 m	0150-2671
KPS07-04/02-L/Tk-8	Power Trailing Chain Cable E1400/P10-54, 8 m	0150-2672
KPS07-04/02-L/Tk-12	Power Trailing Chain Cable E1400/P10-54, 12 m	0150-2673
KPS07-04/02-B/Tk-3	Power Trailing Chain Cable C1400/P10-54, 3 m	0150-3648
KPS07-04/02-B/Tk-5	Power Trailing Chain Cable C1400/P10-54, 5 m	0150-3657
KPS07-04/02-B/Tk-8	Power Trailing Chain Cable C1400/P10-54, 8 m	0150-3658
KPS07-04/02-B/Tk-12	Power Trailing Chain Cable C1400/P10-54, 12 m	0150-3659
KSS 05-02/08-D15s/Uk-3	Encoder Trailing Chain Cable D15s/Uk, 3 m	0150-2650
KSS 05-02/08-D15s/Uk-5	Encoder Trailing Chain Cable D15s/Uk, 5 m	0150-2651
KSS 05-02/08-D15s/Uk-8	Encoder Trailing Chain Cable D15s/Uk, 8 m	0150-2652
KSS 05-02/08-D15s/Uk-12	Encoder Trailing Chain Cable D15s/Uk, 12 m	0150-2653

TRAILING CHAIN CABLES FOR THIRD PARTY DRIVES

Item	Description	Item-No.
KPS07-04/02-./Tk-10	Power Trailing Chain Cable.../Tk, 10 m	0150-3626
KPS07-04/02-./Tk-	Power Trailing Chain Cable.../Tk, Custom length	0150-3622
KSS 05-02/13-./Uk-10	Encoder Trailing Chain Cable ./Uk, 10 m	0150-3627
KSS 05-02/13-./Uk-	Encoder Trailing Chain Cable ./Uk, Custom length	0150-3619

CONNECTOR & CABLE (INDIVIDUAL)

Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
MC01-D15/f	Motor Connector D15 (f)	0150-3136
MC10-Tk/f	Connector Power PS10-54	0150-3482
MC10-Uk/f	Connector Encoder PS10-54	0150-3483
KPS07-04/02	Power Trailing Chain Cable P10-54 (per m)	0150-2372
KSS05-02/08	Trailing Chain Cable Encoder LinMot (per m)	0150-2258
KSS05-02/13	Trailing Chain Cable Encoder P10-...-Dxx (per m)	0150-2259

MOTOR FLANGES



Item	Description	Item-No.
PF10-54x140	Flange for PS10-54x120	0150-2733

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



Item	Description	Item-No.
PB10-54x120-L	Bearing kit for PS10-54x120	0150-3671

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P10-54x180U



- ✓ 230VAC and 3 x 400VAC technology
- ✓ Peak forces up to 502 N
- ✓ LinMot Encoder or Incremental Encoder
- ✓ Extremely high dynamic
- ✓ Rotating push-pull TWIN connector for power and encoder cables
- ✓ Can also be controlled by standard third-party servo drives

LINEAR MOTORS P10-54x180U

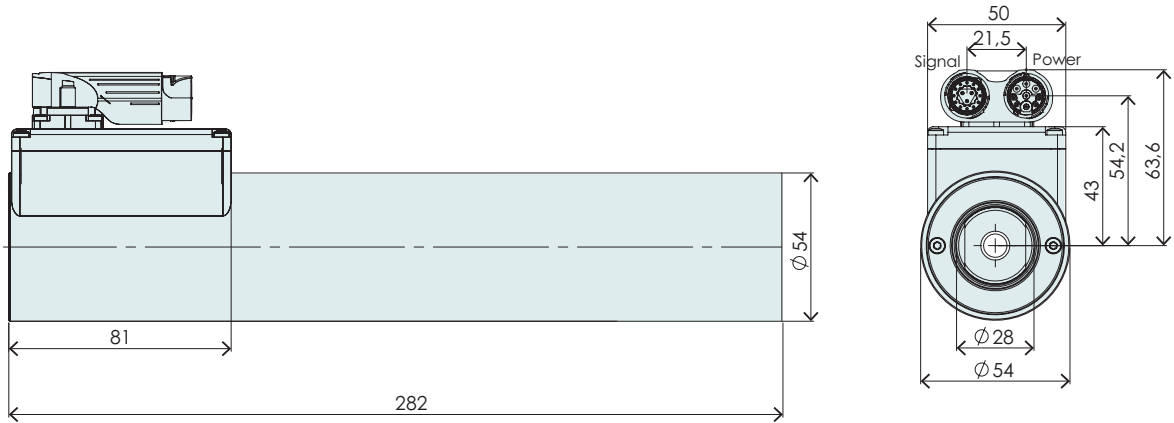
Technical Data	421
Motor Specifications	
P10-54x180U/10	426
P10-54x180U/70	427
P10-54x180U/160	428
P10-54x180U/280	429
P10-54x180U/370	430
P10-54x180U/460	431
P10-54x180U/580	432
P10-54x180U/670	433
P10-54x180U/880	434
P10-54x180U/1060	435
P10-54x180U/1270	436
P10-54x180U/1480	437
P10-54x180U/1660	438
Accessories	439



MOTOR FAMILY P10-54x180U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1660	(65.4)
Force				
Max. Force @ 1x230VAC	N	(lbf)	502	(113)
Max. Force @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(379.9)
Position Detection				
Position Resolution	mm	(in)	0.007	(0.0003)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	38.1	(0.968)
Terminal Resistance 25 °C / 120 °C	Ohm		5.7 / 7.8	
Terminal Inductivity	mH		4.6	
Magnetic Period	mm	(in)	60	(2.35)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Stator Diameter	mm	(in)	54	(2.1)
Stator Length	mm	(in)	282	(11)
Stator Mass	g	(lb)	2220	(4.88)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	350 - 2000	(14 - 79)
Slider Mass	g	(lb)	1460 - 9140	(3.21 - 20.11)
IP Code			IP 65	

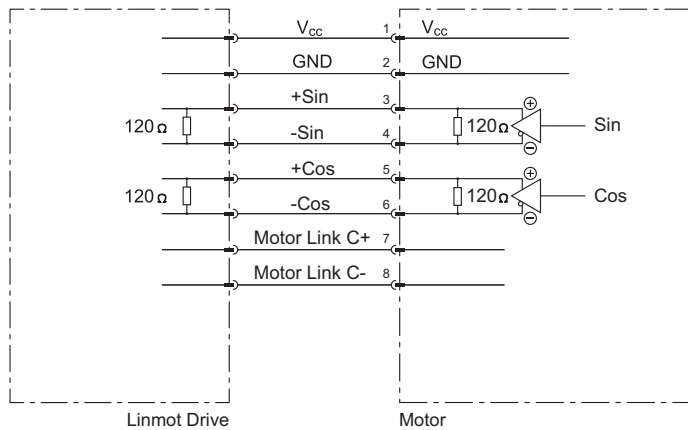
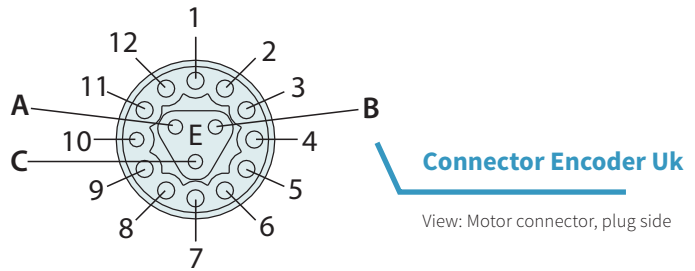
STATOR



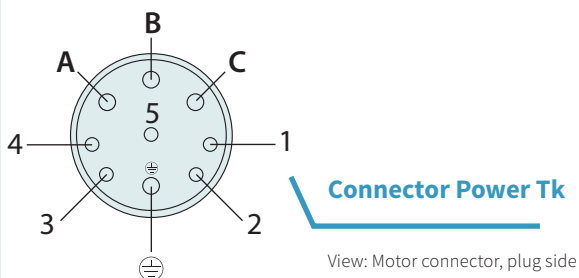
Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x180U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x180U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x180U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783

CONNECTOR PS10-54x180U-BL-TU

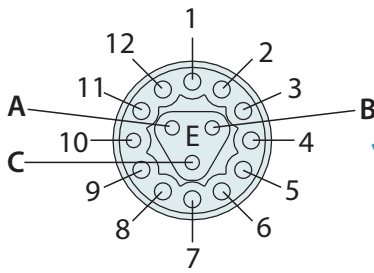
Motor Connector Wiring	Connector Encoder Uk	Wire Color Motor Cable	
+Vcc	Supply	1	red
GND	Supply	2	black
Sin+	Encoder	3	yellow
Sin-	Encoder	4	orange
Cos+	Encoder	5	green
Cos-	Encoder	6	blue
Mot. Link C+	Communication	7	pink
Mot. Link C-	Communication	8	grey
n. c.	n. c.	9	n. c.
n. c.	n. c.	10	n. c.
n. c.	n. c.	11	n. c.
n. c.	n. c.	12	n. c.
n. c.	n. c.	A	n. c.
n. c.	n. c.	B	n. c.
n. c.	n. c.	C	n. c.



Motor Connector Wiring	Connector Power Tk	Wire Color Motor Cable
Phase U	A	red
PE	PE	yellow-green
Phase V	B	blue
Phase W	C	green
n. c.	1	n. c.
n. c.	2	n. c.
n. c.	3	n. c.
n. c.	4	n. c.
n. c.	5	n. c.

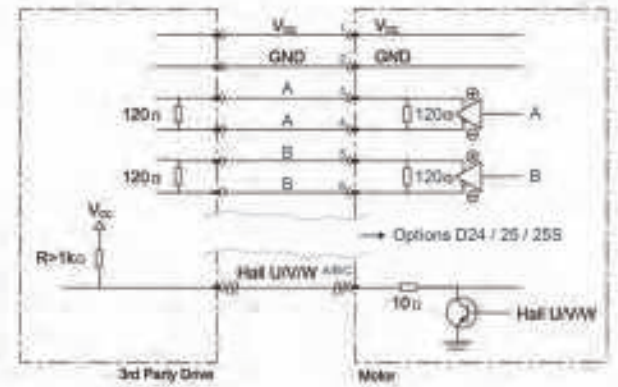


CONNECTOR PS10-54x180U-BL-TU-D24 / 25 / 25S

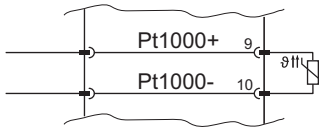


Connector Encoder Uk

View: Motor connector, plug side

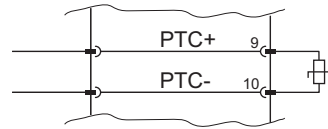


PS10-54x180U-BL-TU-D24



Pt1000 Characteristic emulated

**PS10-54x180U-BL-TU-D25
PS10-54x180U-BL-TU-D25S**



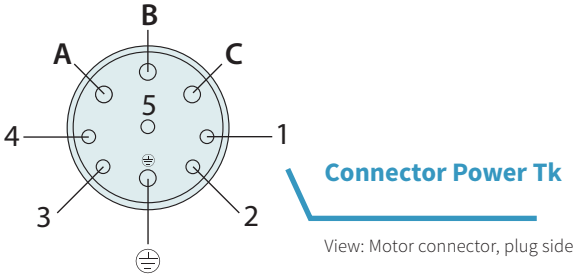
PTC (switching type)
350 Ω / 18 kΩ emulated¹

Motor Connector Wiring				
PS10-54x180U-BL-TU-D24	PS10-54x180U-BL-TU-D25 PS10-54x180U-BL-TU-D25S	Function	Connector Encoder Uk	Wire Color Motor Cable
+Vcc	+Vcc	Supply	1	white
GND	GND	Supply	2	brown
A	A	Encoder	3	grey
/A	/A	Encoder	4	pink
B	B	Encoder	5	blue
/B	/B	Encoder	6	red
-	-	-	7	green (do not connect)
-	-	-	8	yellow (do not connect)
Pt1000+	PTC+	Temp. ²	9	yellow-brown
Pt1000-	PTC-	Temp. ²	10	white-yellow
REF+	REF+	Encoder	11	black
REF-	REF-	Encoder	12	purple
Hall U	Hall U	Encoder	A	grey-red
Hall V	Hall V	Encoder	B	red-blue
Hall W	Hall W	Encoder	C	white-green

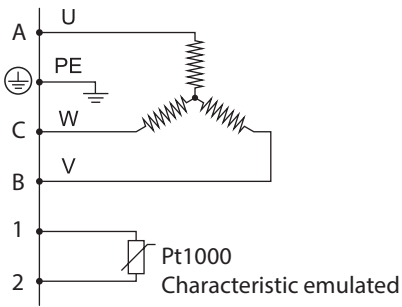
1) under 350 Ω = no fault, over 18 kΩ = Fault

2) The temperature evaluation circuit must be powered from the encoder supply and must be at the same potential.

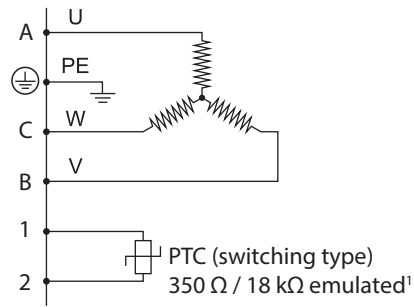
The grounds of the temperature evaluation circuit and the encoder have to be connected. The encoder must have been powered on for at least 50 ms, before valid temperatures can be measured. If the encoder is powered off, 20k Ohms are measured between Pins 9 and 10.



PS10-54x180U-BL-TU-D24



PS10-54x180U-BL-TU-D25
PS10-54x180U-BL-TU-D25S



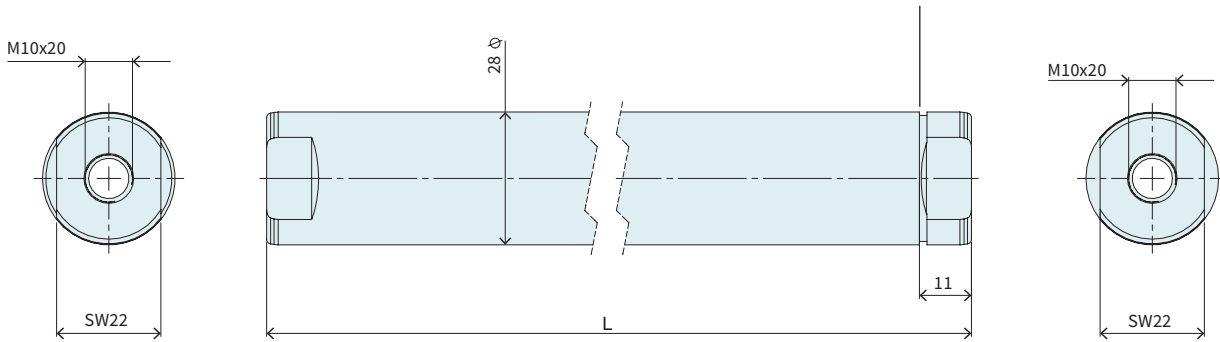
Motor Connector Wiring			
PS10-54x180U-BL-TU-D24	PS10-54x180U-BL-TU-D25 PS10-54x180U-BL-TU-D25S	Connector Power Tk	Wire Color Motor Cable
Phase U	Phase U	A	red
PE	PE	PE	yellow-green
Phase V	Phase V	B	blue
Phase W	Phase W	C	green
Pt1000+	PTC+	1	turquoise
Pt1000-	PTC-	2	grey
n. c.	n. c.	3	n. c.
n. c.	n. c.	4	n. c.
n. c.	n. c.	5	n. c.

1) under 350 Ω = no fault, over 18 Ω = Fault

SLIDER

Slider Standard

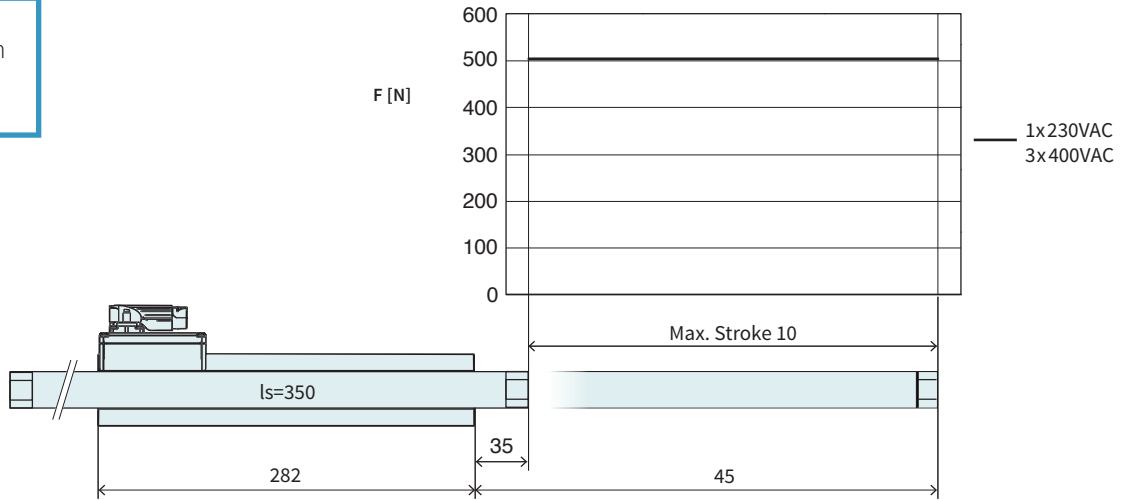
Number of grooves determines the slider type (see chapter 2 / slider) and marks the front end.



Slider Standard			
Item	Description	Max. Stroke [mm]	Item-No.
PL01-28x350/270	Slider 'standard'	10	0150-1380
PL01-28x410/330	Slider 'standard'	70	0150-1381
PL01-28x500/420	Slider 'standard'	160	0150-1382
PL01-28x620/540	Slider 'standard'	280	0150-1383
PL01-28x710/630	Slider 'standard'	370	0150-1384
PL01-28x800/720	Slider 'standard'	460	0150-1385
PL01-28x920/840	Slider 'standard'	580	0150-1386
PL01-28x1010/930	Slider 'standard'	670	0150-1387
PL01-28x1220/1140	Slider 'standard'	880	0150-1388
PL01-28x1400/1320	Slider 'standard'	1060	0150-1389
PL01-28x1610/1530	Slider 'standard'	1270	0150-1390
PL01-28x1820/1740	Slider 'standard'	1480	0150-1395
PL01-28x2000/1920	Slider 'standard'	1660	0150-1396

P10-54x180U/10-BL-TU

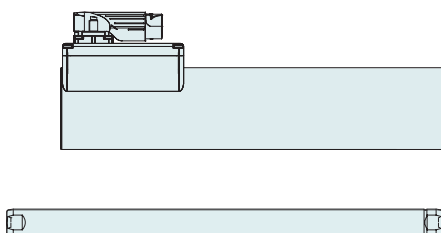
Max. Stroke: 10 mm
Peak Force: 502 N



Dimensions in mm

Technical Data P10-54x180U/10

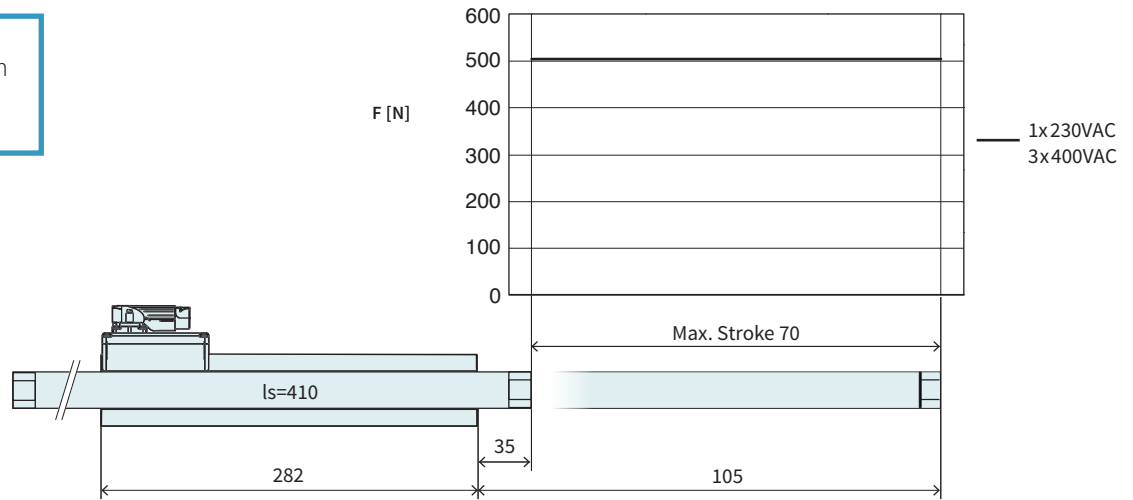
Stroke			
Max. Stroke	mm (in)		10 (0.39)
Force			
Max. Force @ 1x230VAC	N (lbf)		502 (113)
Max. Force @ 3x400VAC	N (lbf)		502 (113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		84 / 110 / 160 (19 / 26 / 36)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		33 (7.42)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		46.7 (10.5)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		5.4 (219.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		9.5 (9.5)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 7.6
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320
Mechanical Data			
Slider Length	mm (in)		350 (14)
Slider Mass	g (lb)		1460 (3.21)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x350/270	Slider 'standard'	0150-1380

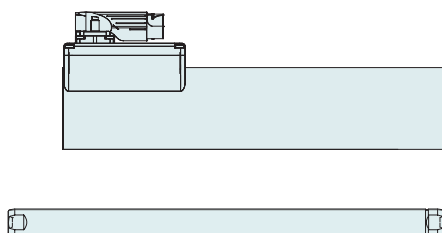
P10-54x180U/70-BL-TU

Max. Stroke: 70 mm
Peak Force: 502 N



Dimensions in mm

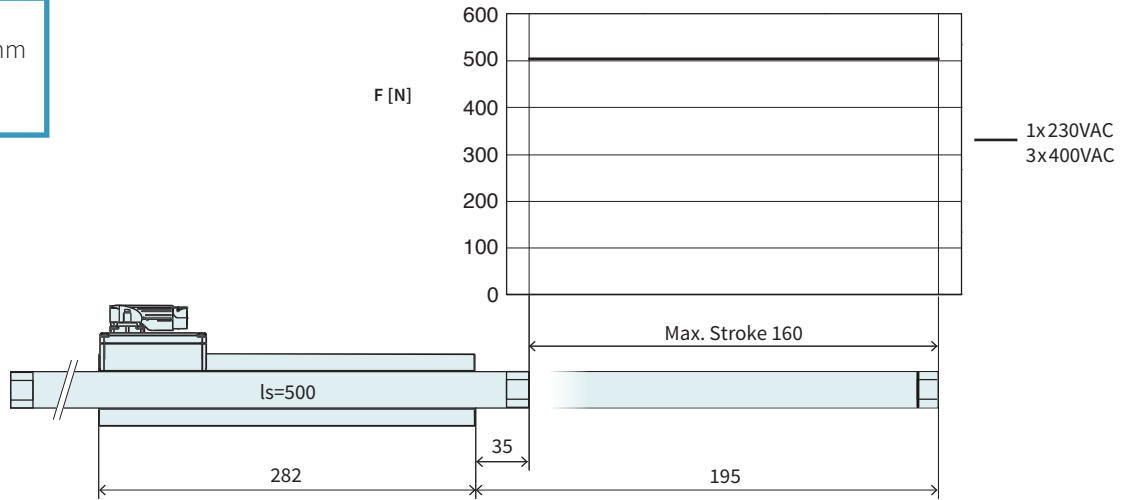
Technical Data P10-54x180U/70				
Stroke				
Max. Stroke	mm	(in)	70	(2.75)
Force				
Max. Force @ 1x230VAC	N	(lbf)	502	(113)
Max. Force @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 1.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	410	(16)
Slider Mass	g	(lb)	1740	(3.83)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x410/330	Slider 'standard'	0150-1381

P10-54x180U/160-BL-TU

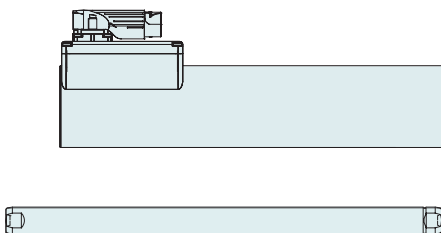
Max. Stroke: 160 mm
Peak Force: 502 N



Dimensions in mm

Technical Data P10-54x180U/160

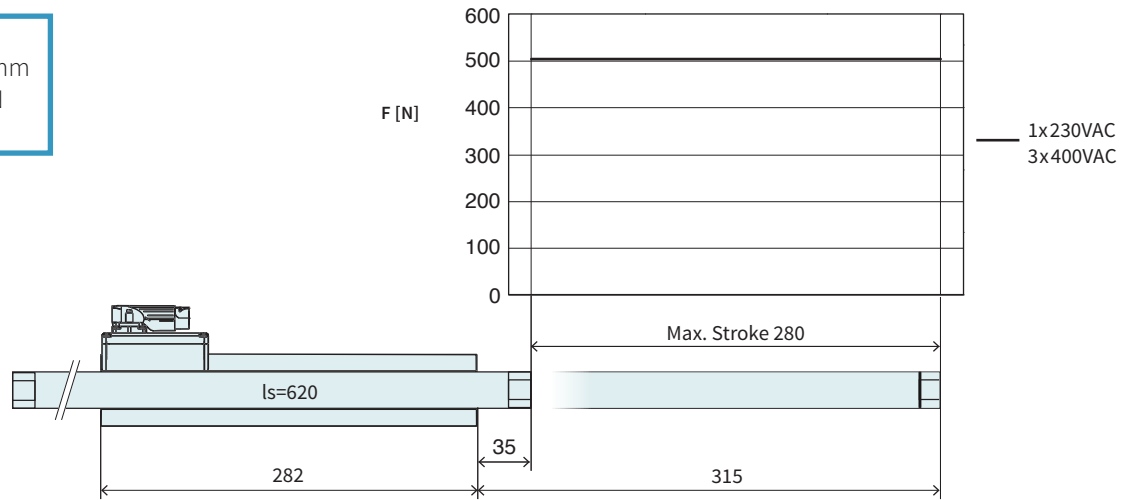
Stroke			
Max. Stroke	mm	(in)	160 (6.29)
Force			
Max. Force @ 1x230VAC	N	(lbf)	502 (113)
Max. Force @ 3x400VAC	N	(lbf)	502 (113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160 (19 / 26 / 36)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33 (7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7 (10.5)
Velocity			
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4 (219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5 (9.5)
Position Detection			
Repeatability	mm	(in)	±0.05 (±0.002)
Linearity	%		± 0.55
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320
Mechanical Data			
Slider Length	mm	(in)	500 (20)
Slider Mass	g	(lb)	2160 (4.75)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x500/420	Slider 'standard'	0150-1382

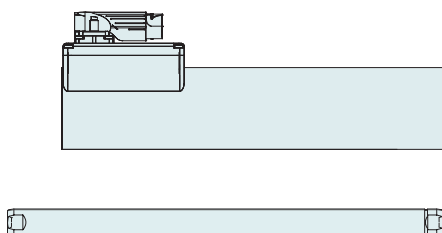
P10-54x180U/280-BL-TU

Max. Stroke: 280 mm
Peak Force: 502 N



Dimensions in mm

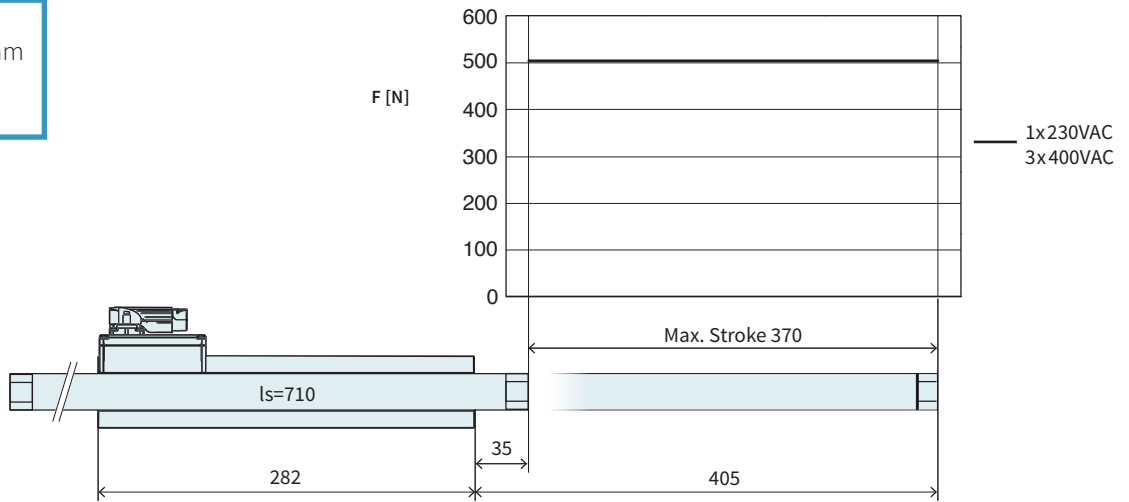
Technical Data P10-54x180U/280			
Stroke			
Max. Stroke	mm (in)	280	(10.99)
Force			
Max. Force @ 1x230VAC	N (lbf)	502	(113)
Max. Force @ 3x400VAC	N (lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	46.7	(10.5)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	9.5	(9.5)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.35	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	1.8 / 2.4 / 3.5	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1200 / 650 / 320	
Mechanical Data			
Slider Length	mm (in)	620	(24)
Slider Mass	g (lb)	2720	(5.98)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x620/540	Slider 'standard'	0150-1383

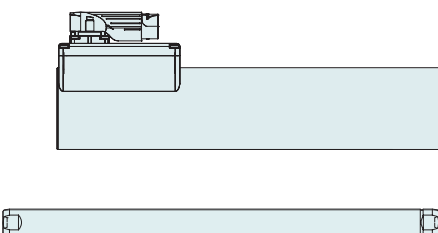
P10-54x180U/370-BL-TU

Max. Stroke: 370 mm
Peak Force: 502 N



Dimensions in mm

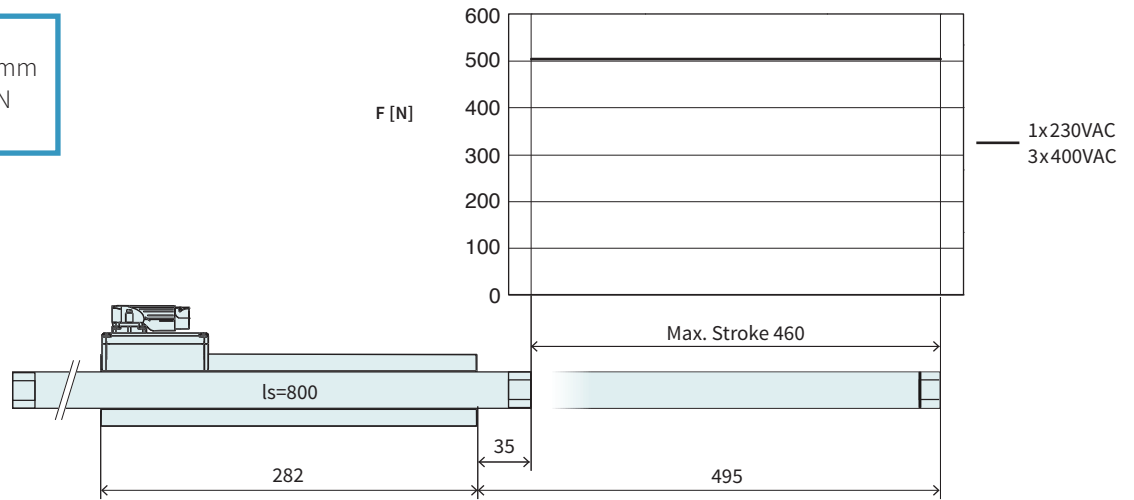
Technical Data P10-54x180U/370			
Stroke			
Max. Stroke	mm (in)		370 (14.59)
Force			
Max. Force @ 1x230VAC	N (lbf)		502 (113)
Max. Force @ 3x400VAC	N (lbf)		502 (113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		84 / 110 / 160 (19 / 26 / 36)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		33 (7.42)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		46.7 (10.5)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		5.4 (219.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		9.5 (9.5)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.3
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	*K/W		1.6 / 0.86 / 0.43
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320
Mechanical Data			
Slider Length	mm (in)		710 (28)
Slider Mass	g (lb)		3140 (6.91)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x710/630	Slider 'standard'	0150-1384

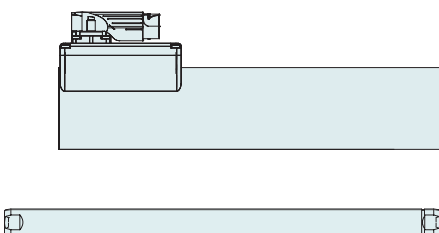
P10-54x180U/460-BL-TU

Max. Stroke: 460 mm
Peak Force: 502 N



Dimensions in mm

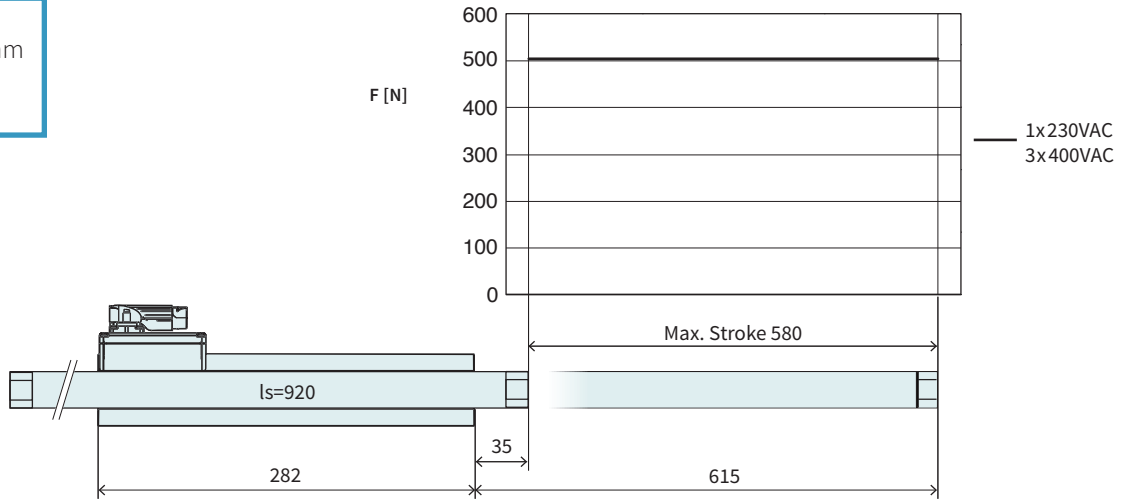
Technical Data P10-54x180U/460			
Stroke			
Max. Stroke	mm (in)		460 (18.1)
Force			
Max. Force @ 1x230VAC	N (lbf)		502 (113)
Max. Force @ 3x400VAC	N (lbf)		502 (113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		84 / 110 / 160 (19 / 26 / 36)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		33 (7.42)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		46.7 (10.5)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		5.4 (219.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		9.5 (9.5)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.25
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320
Mechanical Data			
Slider Length	mm (in)		800 (31)
Slider Mass	g (lb)		3560 (7.83)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x800/720	Slider 'standard'	0150-1385

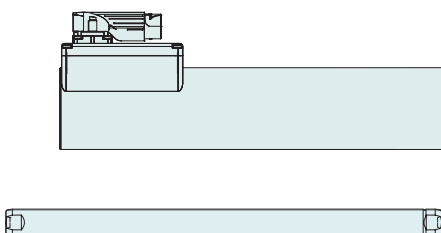
P10-54x180U/580-BL-TU

Max. Stroke: 580 mm
Peak Force: 502 N



Dimensions in mm

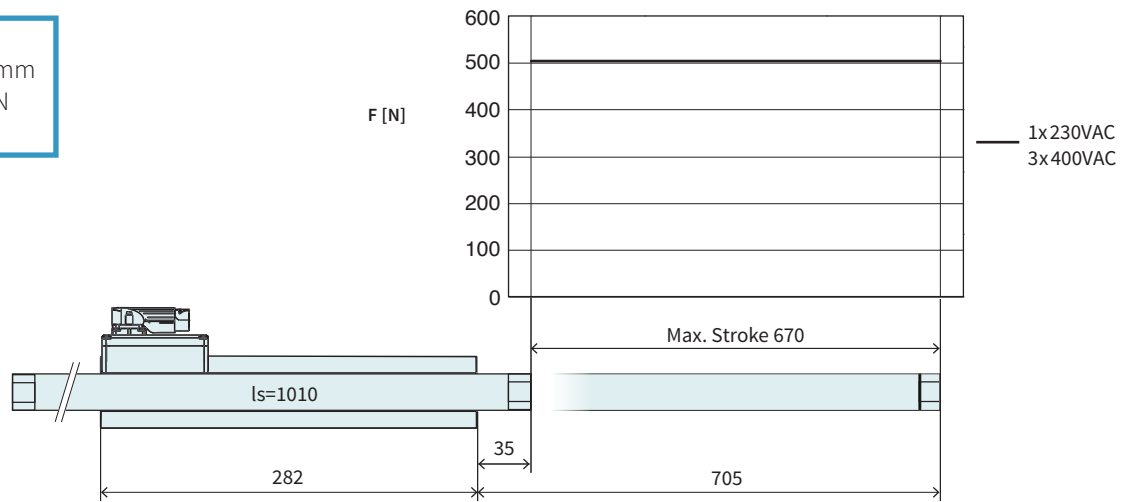
Technical Data P10-54x180U/580			
Stroke			
Max. Stroke	mm (in)	580	(22.8)
Force			
Max. Force @ 1x230VAC	N (lbf)	502	(113)
Max. Force @ 3x400VAC	N (lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	46.7	(10.5)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	9.5	(9.5)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.25	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	1.8 / 2.4 / 3.5	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1200 / 650 / 320	
Mechanical Data			
Slider Length	mm (in)	920	(36)
Slider Mass	g (lb)	4120	(9.06)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x920/840	Slider 'standard'	0150-1386

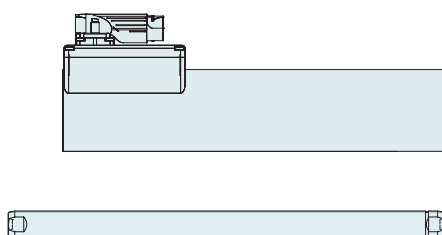
P10-54x180U/670-BL-TU

Max. Stroke: 670 mm
Peak Force: 502 N



Dimensions in mm

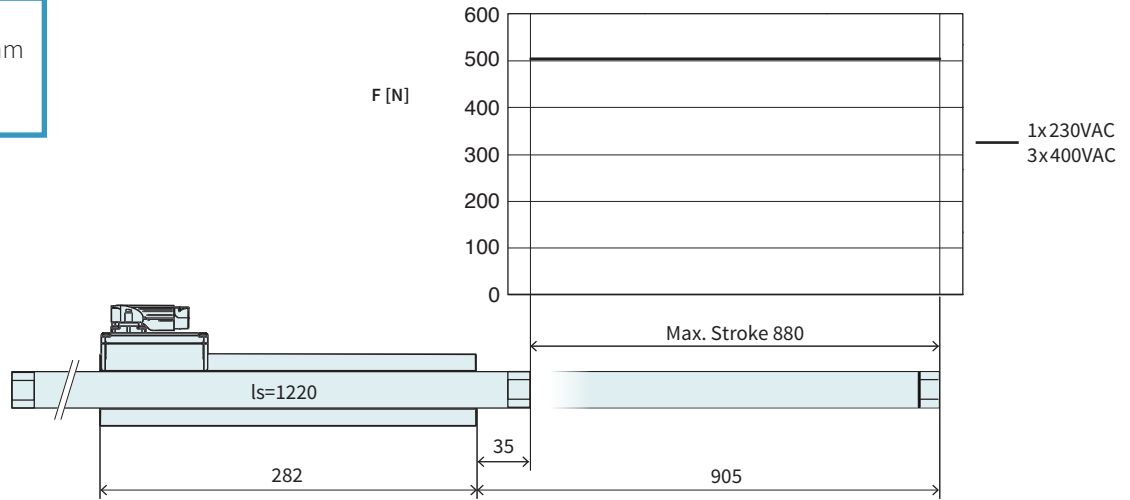
Technical Data P10-54x180U/670				
Stroke				
Max. Stroke	mm	(in)	670	(26.39)
Force				
Max. Force @ 1x230VAC	N	(lbf)	502	(113)
Max. Force @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	1010	(40)
Slider Mass	g	(lb)	4540	(10)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x1010/930	Slider 'standard'	0150-1387

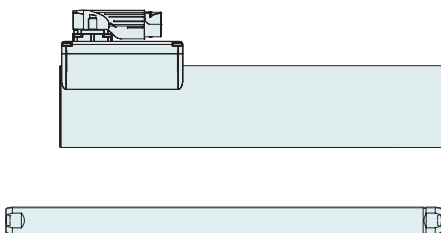
P10-54x180U/880-BL-TU

Max. Stroke: 880 mm
Peak Force: 502 N



Dimensions in mm

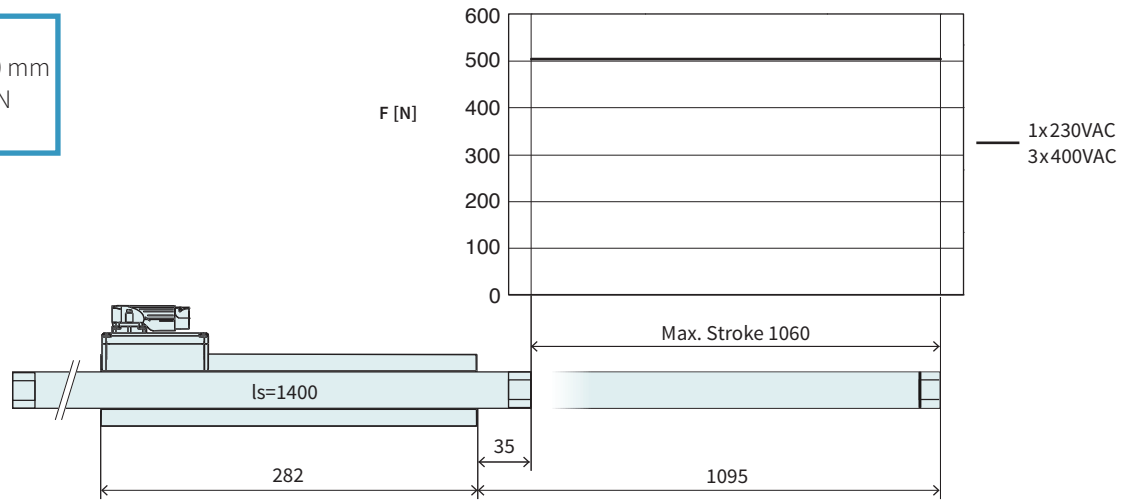
Technical Data P10-54x180U/880			
Stroke			
Max. Stroke	mm (in)		880 (34.6)
Force			
Max. Force @ 1x230VAC	N (lbf)		502 (113)
Max. Force @ 3x400VAC	N (lbf)		502 (113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		84 / 110 / 160 (19 / 26 / 36)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		33 (7.42)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		46.7 (10.5)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		5.4 (219.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		9.5 (9.5)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.2
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320
Mechanical Data			
Slider Length	mm (in)		1220 (48)
Slider Mass	g (lb)		5510 (12.12)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x1220/1140	Slider 'standard'	0150-1388

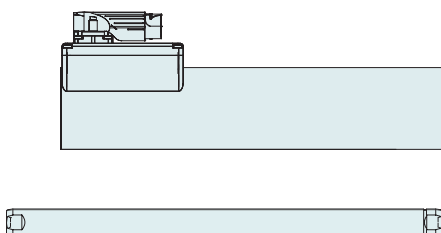
P10-54x180U/1060-BL-TU

Max. Stroke: 1060 mm
Peak Force: 502 N



Dimensions in mm

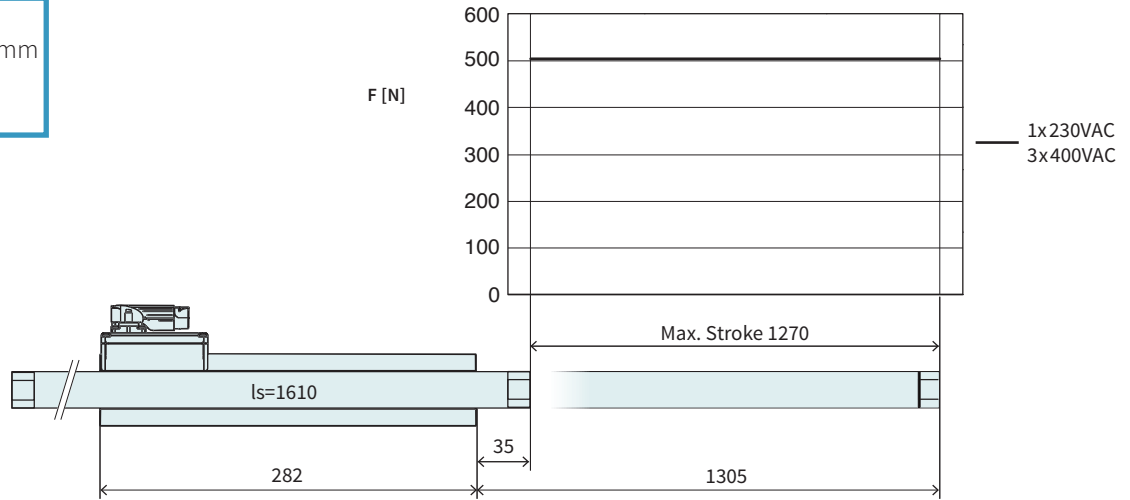
Technical Data P10-54x180U/1060				
Stroke				
Max. Stroke	mm	(in)	1060	(41.7)
Force				
Max. Force @ 1x230VAC	N	(lbf)	502	(113)
Max. Force @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		±0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	1400	(55)
Slider Mass	g	(lb)	6350	(13.97)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x1400/1320	Slider 'standard'	0150-1389

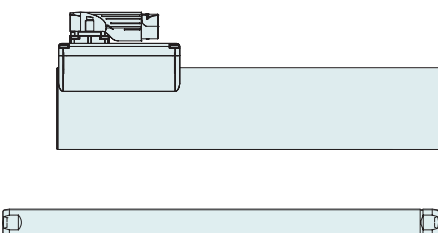
P10-54x180U/1270-BL-TU

Max. Stroke: 1270 mm
Peak Force: 502 N



Dimensions in mm

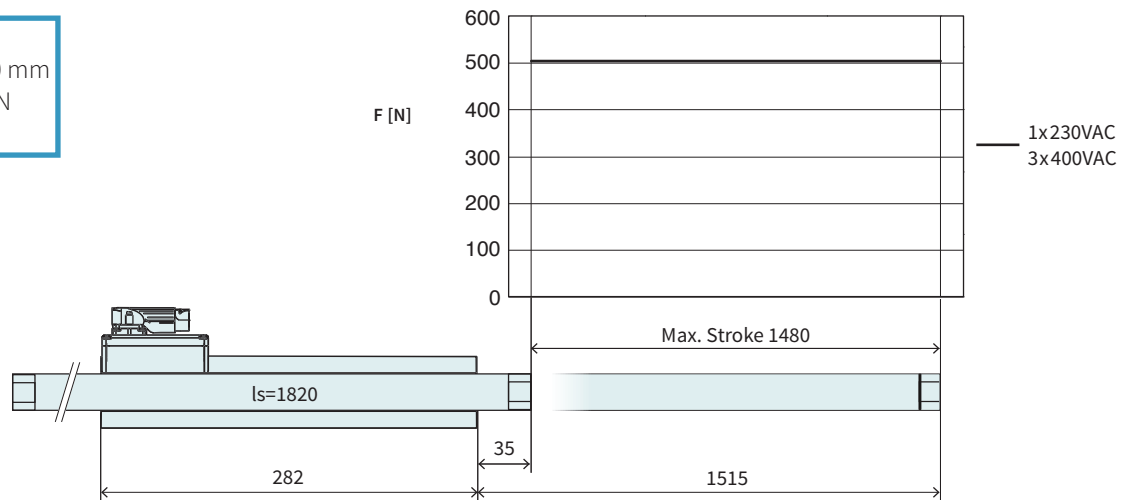
Technical Data P10-54x180U/1270				
Stroke				
Max. Stroke	mm	(in)	1270	(49.99)
Force				
Max. Force @ 1x230VAC	N	(lbf)	502	(113)
Max. Force @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	1610	(63)
Slider Mass	g	(lb)	7330	(16.13)



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x1610/1530	Slider 'standard'	0150-1390

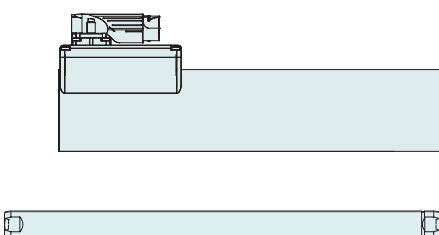
P10-54x180U/1480-BL-TU

Max. Stroke: 1480 mm
Peak Force: 502 N



Dimensions in mm

Technical Data P10-54x180U/1480				
Stroke				
Max. Stroke	mm (in)		1480 (58.29)	
Force				
Max. Force @ 1x230VAC	N (lbf)		502 (113)	
Max. Force @ 3x400VAC	N (lbf)		502 (113)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		84 / 110 / 160 (19 / 26 / 36)	
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})		33 (7.42)	
Force Constant 2	N/A _{rms} (lbf/A _{rms})		46.7 (10.5)	
Velocity				
Max. Velocity @ 1x230VAC	m/s (in/s)		5.4 (219.9)	
Max. Velocity @ 3x400VAC	m/s (in/s)		9.5 (9.5)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		±0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm (in)		1820 (72)	
Slider Mass	g (lb)		8300 (18.26)	

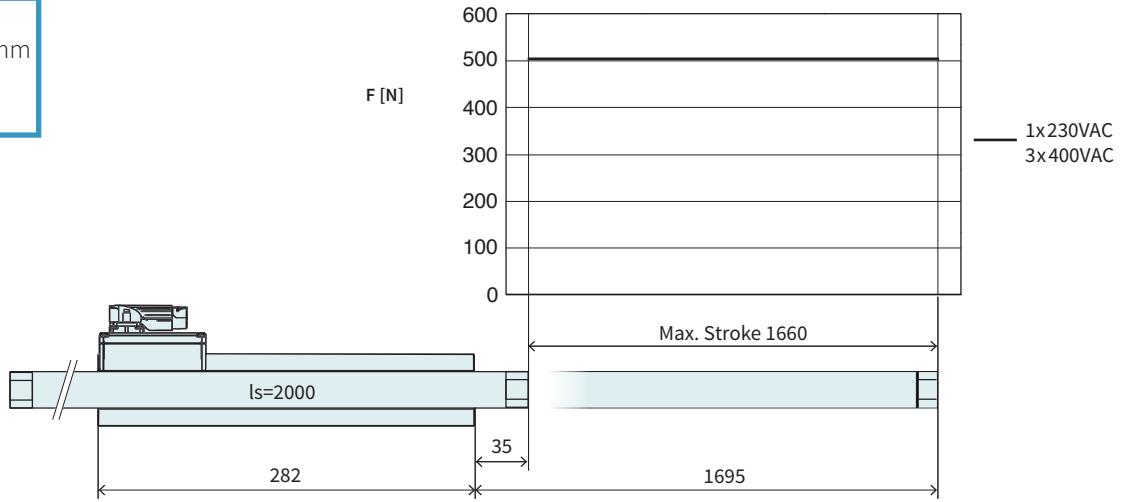


Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x1820/1740	Slider 'standard'	0150-1395

P10-54x180U/1660-BL-TU

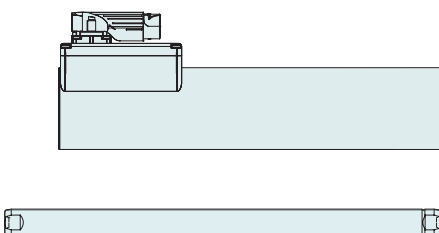
Max. Stroke: 1660 mm
Peak Force: 502 N

4



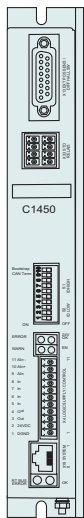
Dimensions in mm

Technical Data P10-54x180U/1660			
Stroke			
Max. Stroke	mm (in)	1660 (65.4)	
Force			
Max. Force @ 1x230VAC	N (lbf)	502 (113)	
Max. Force @ 3x400VAC	N (lbf)	502 (113)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	84 / 110 / 160 (19 / 26 / 36)	
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	33 (7.42)	
Force Constant 2	N/A _{rms} (lbf/A _{rms})	46.7 (10.5)	
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	5.4 (219.9)	
Max. Velocity @ 3x400VAC	m/s (in/s)	9.5 (9.5)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	1.8 / 2.4 / 3.5	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1200 / 650 / 320	
Mechanical Data			
Slider Length	mm (in)	2000 (79)	
Slider Mass	g (lb)	9140 (20.11)	



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x120U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2749
PS10-54x120U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2753
PS10-54x120U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2783
PL01-28x2000/1920	Slider 'standard'	0150-1396

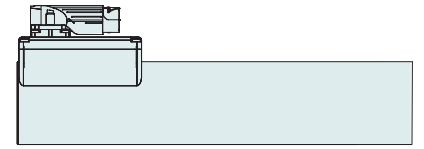
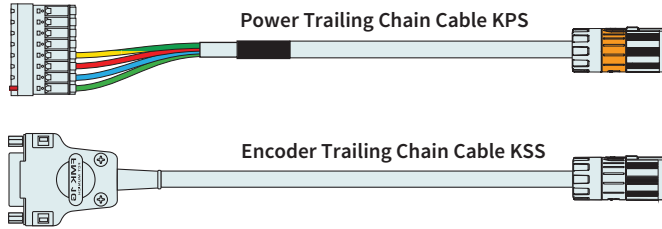
Motor Cable



C1450

B Connector MC10-B/m

Tk Connector MC10-Tk/f



P10-54x180U

D15s Connector MC01-D15s-45°/f

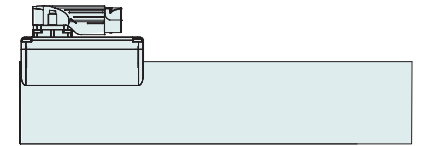
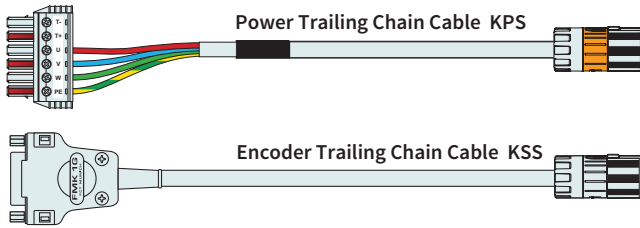
Uk Connector MC10-Uk/f



E1400

L Connector MC10-L/m

Tk Connector MC10-Tk/f



P10-54x180U

D15s Connector MC01-D15s-45°/f

Uk Connector MC10-Uk/f

ORDERING INFORMATION

TRAILING CHAIN CABLE FOR LINMOT DRIVES		
Item	Description	Item-No.
KPS07-04/02-L/Tk-3	Power Trailing Chain Cable E1400/P10-54, 3 m	0150-2670
KPS07-04/02-L/Tk-5	Power Trailing Chain Cable E1400/P10-54, 5 m	0150-2671
KPS07-04/02-L/Tk-8	Power Trailing Chain Cable E1400/P10-54, 8 m	0150-2672
KPS07-04/02-L/Tk-12	Power Trailing Chain Cable E1400/P10-54, 12 m	0150-2673
KPS07-04/02-B/Tk-3	Power Trailing Chain Cable C1400/P10-54, 3 m	0150-3648
KPS07-04/02-B/Tk-5	Power Trailing Chain Cable C1400/P10-54, 5 m	0150-3657
KPS07-04/02-B/Tk-8	Power Trailing Chain Cable C1400/P10-54, 8 m	0150-3658
KPS07-04/02-B/Tk-12	Power Trailing Chain Cable C1400/P10-54, 12 m	0150-3659
KSS 05-02/08-D15s/Uk-3	Encoder Trailing Chain Cable D15s/Uk, 3 m	0150-2650
KSS 05-02/08-D15s/Uk-5	Encoder Trailing Chain Cable D15s/Uk, 5 m	0150-2651
KSS 05-02/08-D15s/Uk-8	Encoder Trailing Chain Cable D15s/Uk, 8 m	0150-2652
KSS 05-02/08-D15s/Uk-12	Encoder Trailing Chain Cable D15s/Uk, 12 m	0150-2653

TRAILING CHAIN CABLES FOR THIRD PARTY DRIVES

Item	Description	Item-No.
KPS07-04/02-./Tk-10	Power Trailing Chain Cable .../Tk, 10 m	0150-3626
KPS07-04/02-./Tk-	Power Trailing Chain Cable .../Tk, Custom length	0150-3622
KSS 05-02/13-./Uk-10	Encoder Trailing Chain Cable ./Uk, 10 m	0150-3627
KSS 05-02/13-./Uk-	Encoder Trailing Chain Cable ./Uk, Custom length	0150-3619

CONNECTOR & CABLE (INDIVIDUAL)

Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
MC01-D15/f	Motor Connector D15 (f)	0150-3136
MC10-Tk/f	Connector Power PS10-54	0150-3482
MC10-Uk/f	Connector Encoder PS10-54	0150-3483
KPS07-04/02	Power Trailing Chain Cable P10-54 (per m)	0150-2372
KSS05-02/08	Trailing Chain Cable Encoder LinMot (per m)	0150-2258
KSS05-02/13	Trailing Chain Cable Encoder P10-...-Dxx (per m)	0150-2259

MOTOR FLANGES



Item	Description	Item-No.
PF10-54x200	Flange for PS10-54x180	0150-2734

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



Item	Description	Item-No.
PB10-54x180-L	Bearing Kit for PS10-54x180	0150-3672

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P10-54x240U



- ✓ 230VAC and 3 x 400VAC technology
- ✓ Peak forces up to 669 N
- ✓ LinMot Encoder or Incremental Encoder
- ✓ Extremely high dynamic
- ✓ Rotating push-pull TWIN connector for power and encoder cables
- ✓ Can also be controlled by standard third-party servo drives

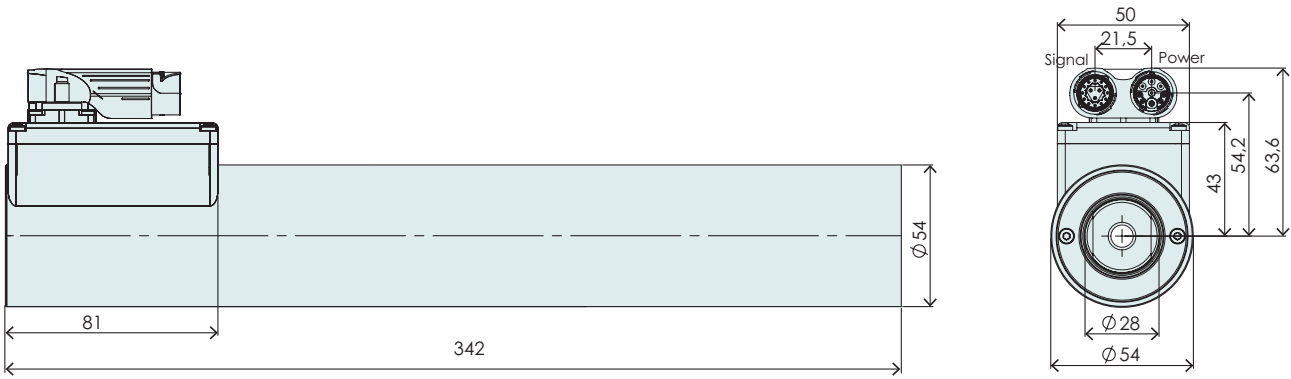
LINEAR MOTORS P10-54x240U**Technical Data** **445****Motor Specifications**P10-54x240U/10 **450**P10-54x240U/100 **451**P10-54x240U/220 **452**P10-54x240U/310 **453**P10-54x240U/400 **454**P10-54x240U/520 **455**P10-54x240U/610 **456**P10-54x240U/820 **457**P10-54x240U/1000 **458**P10-54x240U/1210 **459**P10-54x240U/1420 **460**P10-54x240U/1600 **461****Accessories** **462**



MOTOR FAMILY P10-54x240U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1600	(63)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(279.9)
Position Detection				
Position Resolution	mm	(in)	0.007	(0.0003)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	50.8	(1.29)
Terminal Resistance 25 °C / 120 °C	Ohm		7.5 / 10	
Terminal Inductivity	mH		6	
Magnetic Period	mm	(in)	60	(2.35)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Stator Diameter	mm	(in)	54	(2.1)
Stator Length	mm	(in)	342	(13)
Stator Mass	g	(lb)	2710	(5.96)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	410 - 2000	(16 - 79)
Slider Mass	g	(lb)	1740 - 9140	(3.83 - 20.11)
IP Code			IP 65	

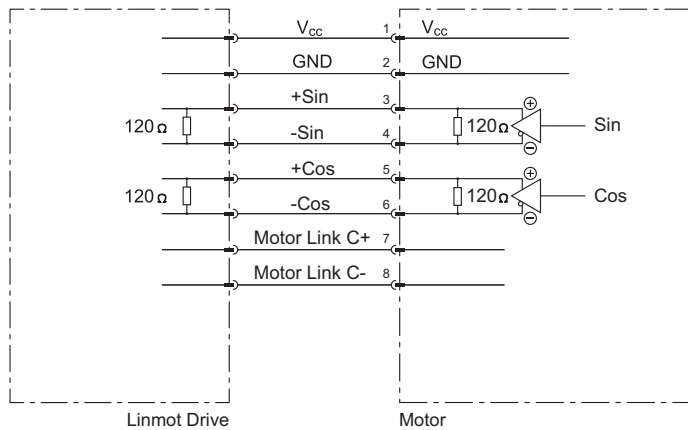
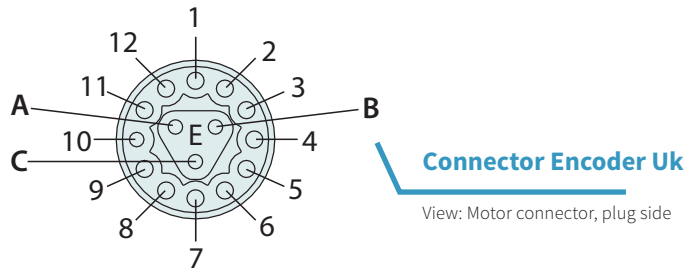
STATOR



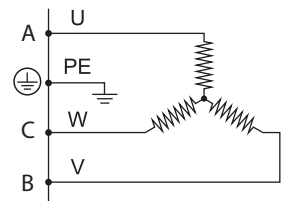
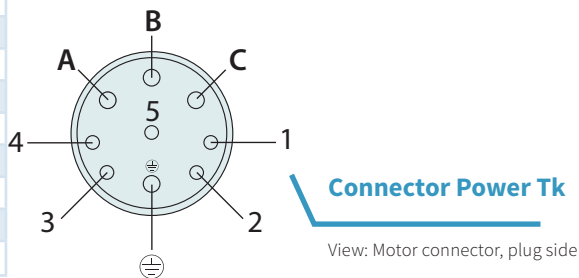
Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784

CONNECTOR PS10-54x240U-BL-TU

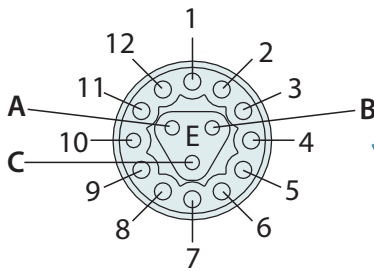
Motor Connector Wiring		Connector Encoder Uk	Wire Color Motor Cable
+Vcc	Supply	1	red
GND	Supply	2	black
Sin+	Encoder	3	yellow
Sin-	Encoder	4	orange
Cos+	Encoder	5	green
Cos-	Encoder	6	blue
Mot. Link C+	Communication	7	pink
Mot. Link C-	Communication	8	grey
n. c.	n. c.	9	n. c.
n. c.	n. c.	10	n. c.
n. c.	n. c.	11	n. c.
n. c.	n. c.	12	n. c.
n. c.	n. c.	A	n. c.
n. c.	n. c.	B	n. c.
n. c.	n. c.	C	n. c.



Motor Steckerbelegung	Connector Power Tk	Wire Color Motor Cable
Phase U	A	red
PE	PE	yellow-green
Phase V	B	blue
Phase W	C	green
n. c.	1	n. c.
n. c.	2	n. c.
n. c.	3	n. c.
n. c.	4	n. c.
n. c.	5	n. c.

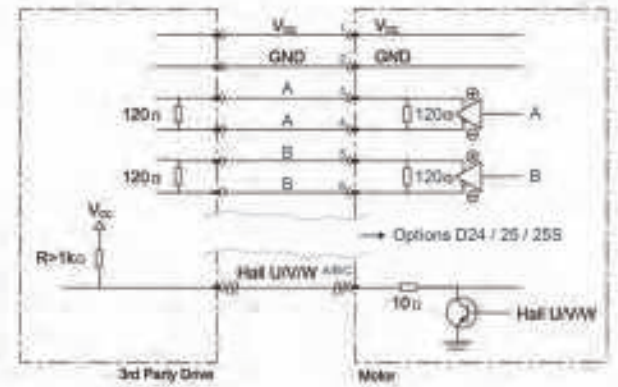


CONNECTOR PS10-54X240U-BL-TU-D24 / 25 / 25S

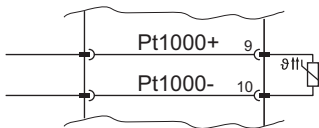


Connector Encoder Uk

View: Motor connector, plug side

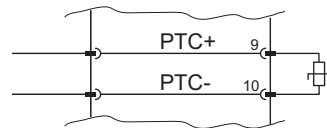


PS10-54x120U-BL-TU-D24



Pt1000 Characteristic emulated

**PS10-54x120U-BL-TU-D25
PS10-54x120U-BL-TU-D25S**



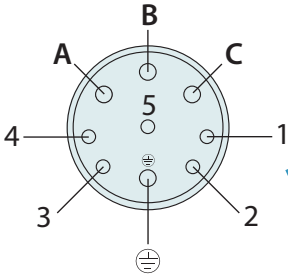
PTC (switching type)
350 Ω / 18 kΩ emulated¹

Motor Connector Wiring				
PS10-54x240U-BL-TU-D24	PS10-54x240U-BL-TU-D25 PS10-54x240U-BL-TU-D25S	Function	Connector Encoder Uk	Wire Color Motor Cable
+Vcc	+Vcc	Supply	1	white
GND	GND	Supply	2	brown
A	A	Encoder	3	grey
/A	/A	Encoder	4	pink
B	B	Encoder	5	blue
/B	/B	Encoder	6	red
-	-	-	7	green (do not connect)
-	-	-	8	yellow (do not connect)
Pt1000+	PTC+	Temp. ²	9	yellow-brown
Pt1000-	PTC-	Temp. ²	10	white-yellow
REF+	REF+	Encoder	11	black
REF-	REF-	Encoder	12	purple
Hall U	Hall U	Encoder	A	grey-red
Hall V	Hall V	Encoder	B	red-blue
Hall W	Hall W	Encoder	C	white-green

1) under 350 Ω = no fault, over 18 kΩ = Fault

2) The temperature evaluation circuit must be powered from the encoder supply and must be at the same potential.

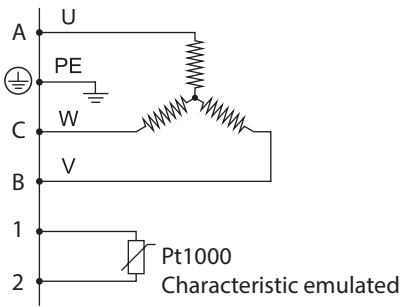
The grounds of the temperature evaluation circuit and the encoder have to be connected. The encoder must have been powered on for at least 50 ms, before valid temperatures can be measured. If the encoder is powered off, 20k Ohms are measured between Pins 9 and 10.



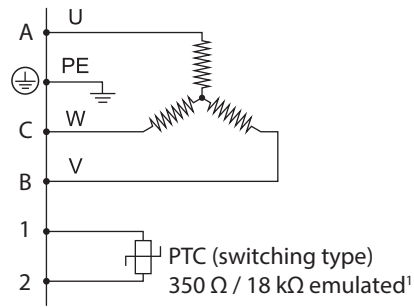
Connector Power Tk

View: Motor connector, plug side

PS10-54x240U-BL-TU-D24



**PS10-54x240U-BL-TU-D25
PS10-54x240U-BL-TU-D25S**



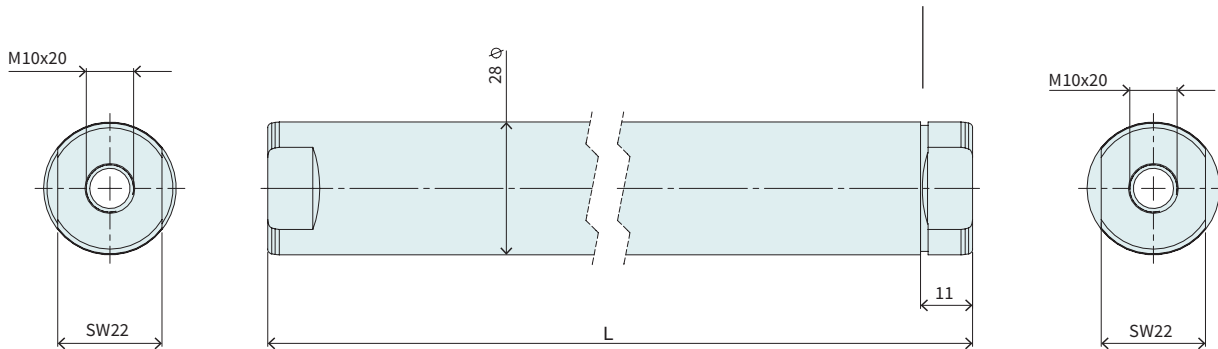
Motor Connector Wiring			
PS10-54x240U-BL-TU-D24	PS10-54x240U-BL-TU-D25 PS10-54x240U-BL-TU-D25S	Connector Power Tk	Wire Color Motor Cable
Phase U	Phase U	A	red
PE	PE	PE	yellow-green
Phase V	Phase V	B	blue
Phase W	Phase W	C	green
Pt1000+	PTC+	1	turquoise
Pt1000-	PTC-	2	grey
n. c.	n. c.	3	n. c.
n. c.	n. c.	4	n. c.
n. c.	n. c.	5	n. c.

1) under 350 Ω = no fault, over 18 Ω = Fault

SLIDER

Slider Standard

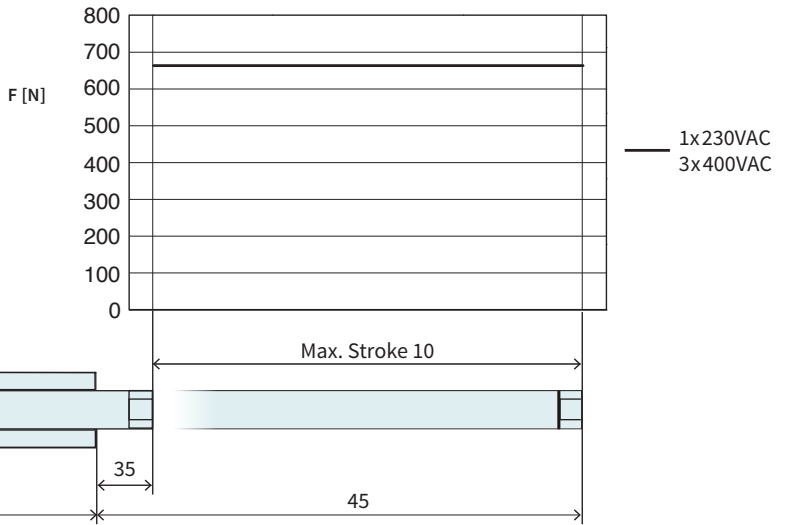
Number of grooves determines the slider type (see chapter 2 / slider) and marks the front end.



Slider Standard			
Item	Description	Max. Stroke [mm]	Item-No.
PL01-28x410/330	Slider 'standard'	10	0150-1381
PL01-28x500/420	Slider 'standard'	100	0150-1382
PL01-28x620/540	Slider 'standard'	220	0150-1383
PL01-28x710/630	Slider 'standard'	310	0150-1384
PL01-28x800/720	Slider 'standard'	400	0150-1385
PL01-28x920/840	Slider 'standard'	520	0150-1386
PL01-28x1010/930	Slider 'standard'	610	0150-1387
PL01-28x1220/1140	Slider 'standard'	820	0150-1388
PL01-28x1400/1320	Slider 'standard'	1000	0150-1389
PL01-28x1610/1530	Slider 'standard'	1210	0150-1390
PL01-28x1820/1740	Slider 'standard'	1420	0150-1395
PL01-28x2000/1920	Slider 'standard'	1600	0150-1396

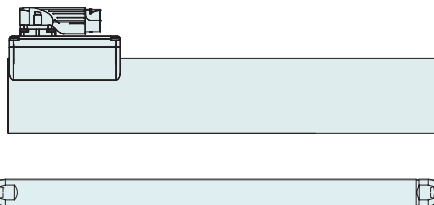
P10-54x240U/10-BL-TU

Max. Stroke: 10 mm
Peak Force: 669 N



Technical Data P10-54x240U/10

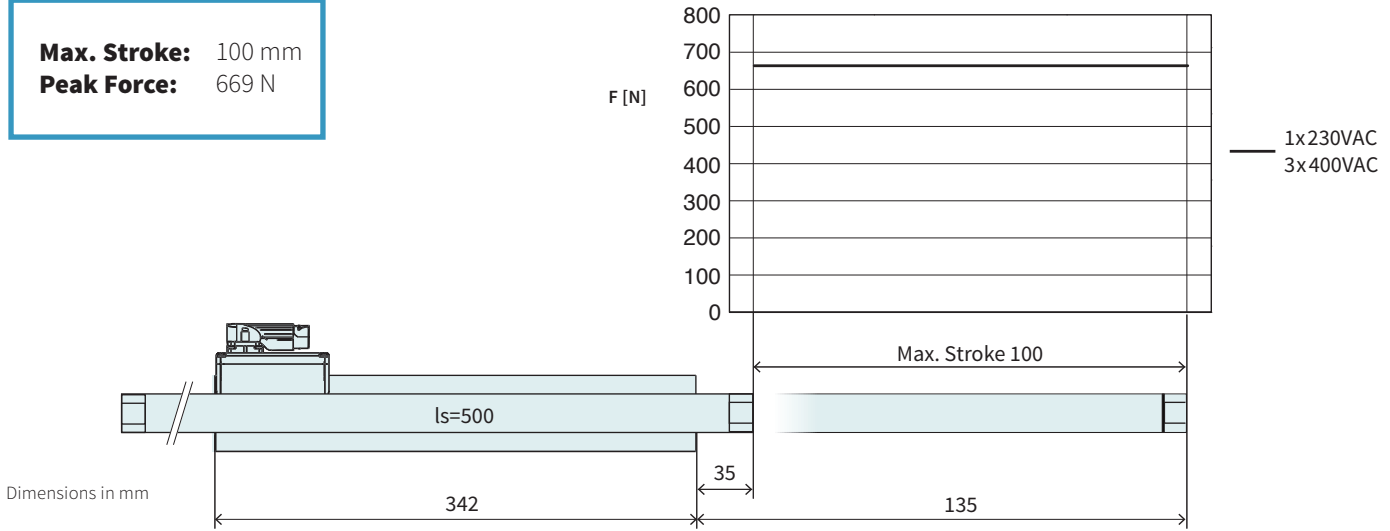
Stroke				
Max. Stroke	mm (in)		10	(0.39)
Force				
Max. Force @ 1x230VAC	N (lbf)		669	(150)
Max. Force @ 3x400VAC	N (lbf)		669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})		44	(9.89)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s (in/s)		4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		7.1	(7.1)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 7.6	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm (in)		410	(16)
Slider Mass	g (lb)		1740	(3.83)



Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PL01-28x410/330	Slider 'standard'	0150-1381

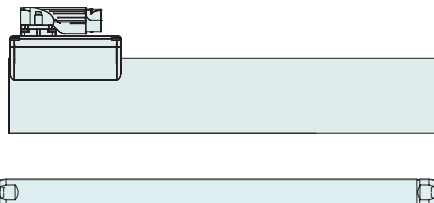
P10-54x240U/100-BL-TU

Max. Stroke: 100 mm
Peak Force: 669 N



Dimensions in mm

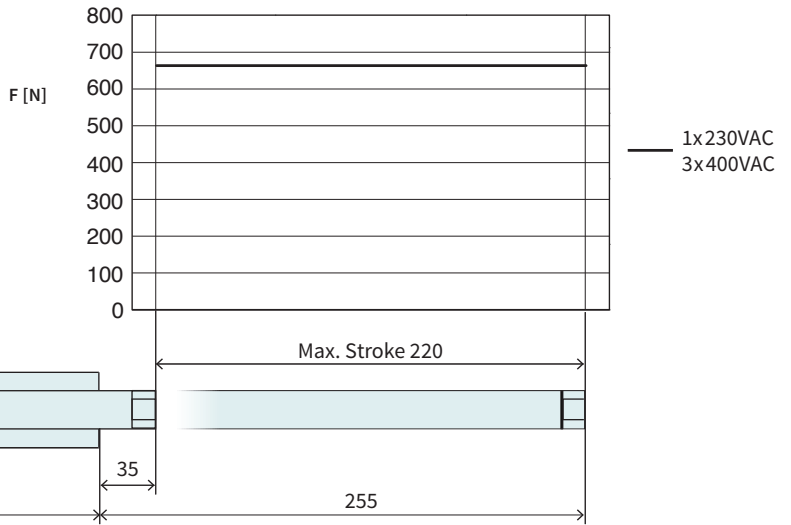
Technical Data P10-54x240U/100				
Stroke				
Max. Stroke	mm	(in)	100	(3.93)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.85	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm	(in)	500	(20)
Slider Mass	g	(lb)	2160	(4.75)



Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PL01-28x500/420	Slider 'standard'	0150-1382

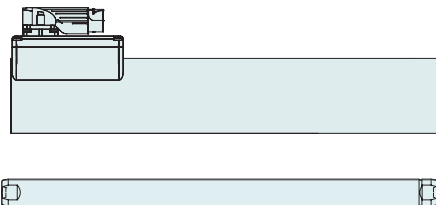
P10-54x240U/220-BL-TU

Max. Stroke: 220 mm
Peak Force: 669 N



Dimensions in mm

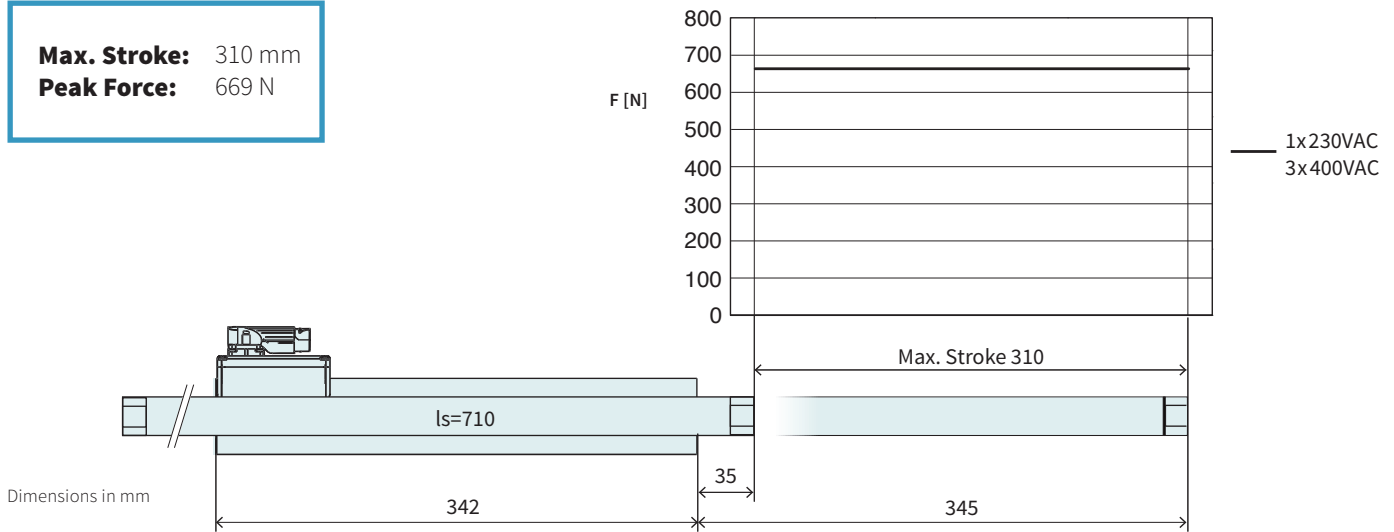
Technical Data P10-54x240U/220				
Stroke				
Max. Stroke	mm (in)		220	(8.65)
Force				
Max. Force @ 1x230VAC	N (lbf)		669	(150)
Max. Force @ 3x400VAC	N (lbf)		669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})		44	(9.89)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s (in/s)		4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		7.1	(7.1)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.45	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm (in)		620	(24)
Slider Mass	g (lb)		2720	(5.98)



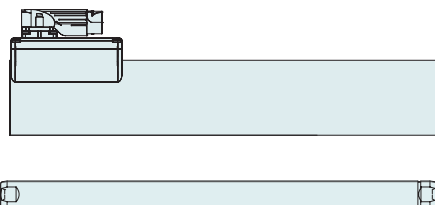
Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PL01-28x620/540	Slider 'standard'	0150-1383

P10-54x240U/310-BL-TU

Max. Stroke: 310 mm
Peak Force: 669 N



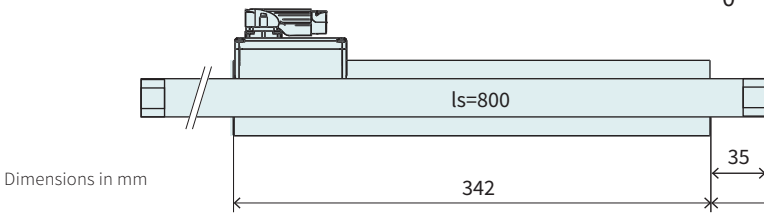
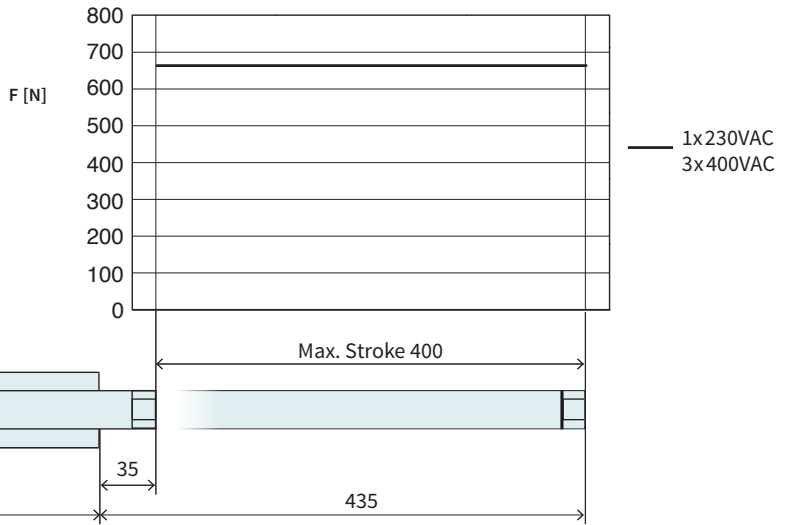
Technical Data P10-54x240U/310				
Stroke				
Max. Stroke	mm	(in)	310	(12.19)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.35	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm	(in)	710	(28)
Slider Mass	g	(lb)	3140	(6.91)



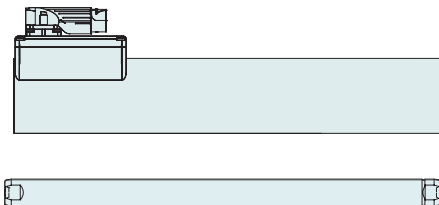
Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder Sum, PTC	0150-2784
PL01-28x710/630	Slider 'standard'	0150-1384

P10-54x240U/400-BL-TU

Max. Stroke: 400 mm
Peak Force: 669 N



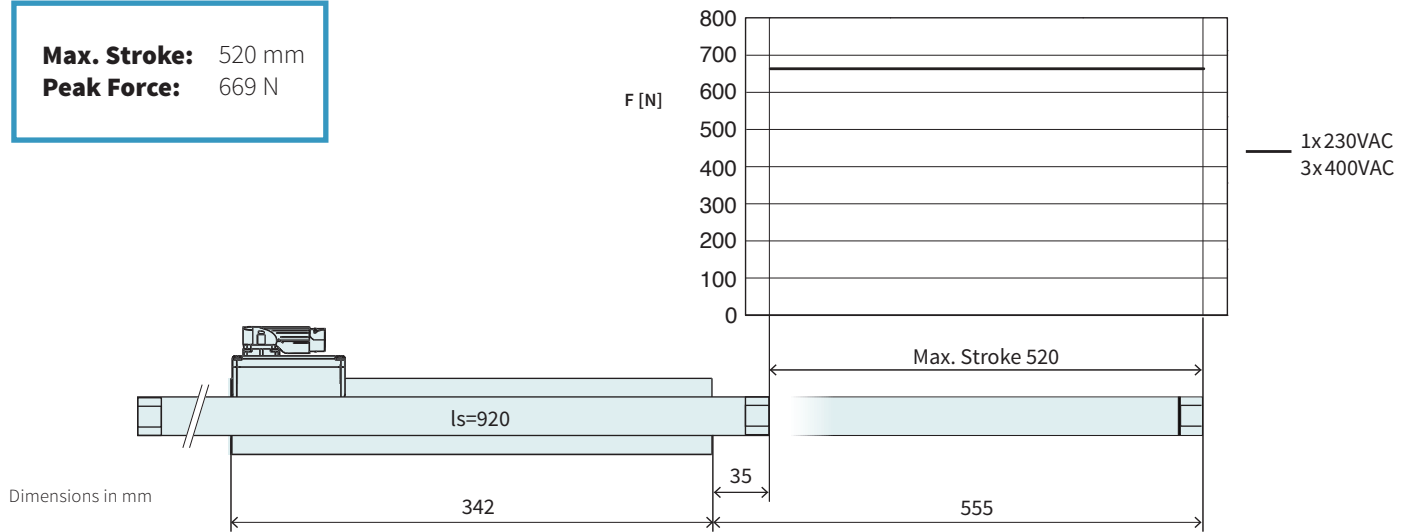
Technical Data P10-54x240U/400				
Stroke				
Max. Stroke	mm (in)		400	(15.69)
Force				
Max. Force @ 1x230VAC	N (lbf)		669	(150)
Max. Force @ 3x400VAC	N (lbf)		669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})		44	(9.89)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s (in/s)		4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		7.1	(7.1)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm (in)		800	(31)
Slider Mass	g (lb)		3560	(7.83)



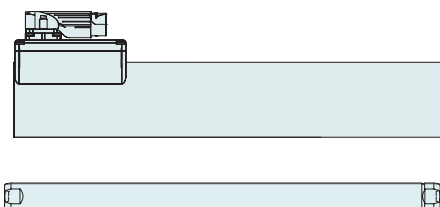
Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PL01-28x800/720	Slider 'standard'	0150-1385

P10-54x240U/520-BL-TU

Max. Stroke: 520 mm
Peak Force: 669 N



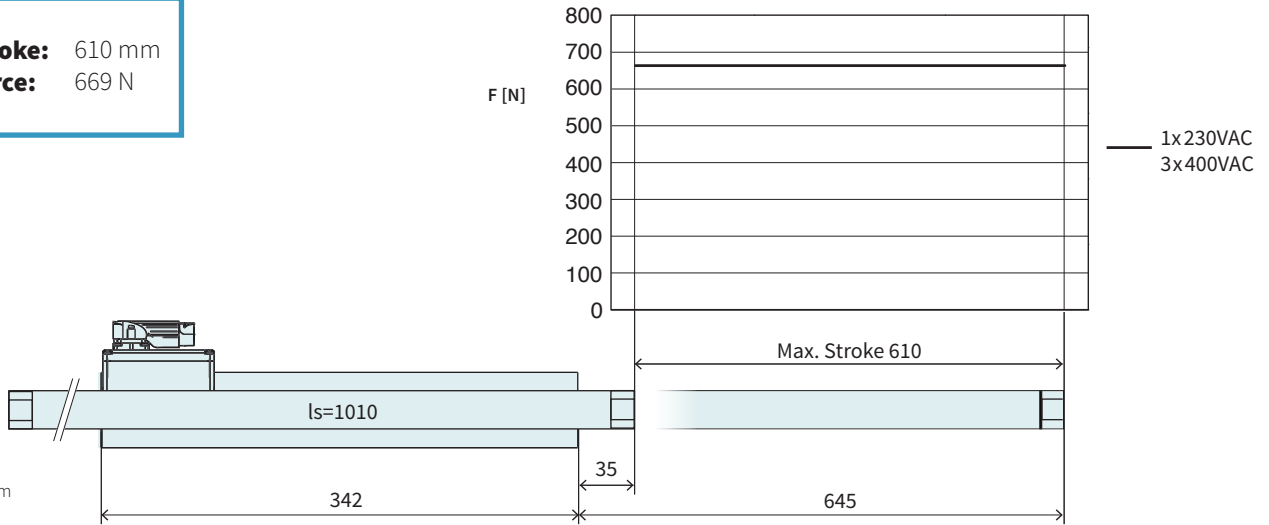
Technical Data P10-54x240U/520				
Stroke				
Max. Stroke	mm	(in)	520	(20.49)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{vms}	(lbf/A _{vms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{vms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{vms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{vms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm	(in)	920	(36)
Slider Mass	g	(lb)	4120	(9.06)



Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PL01-28x920/840	Slider 'standard'	0150-1386

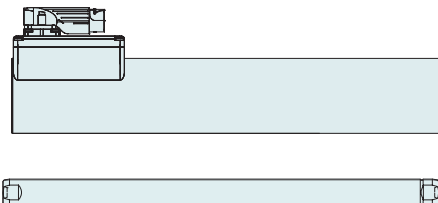
P10-54x240U/610-BL-TU

Max. Stroke: 610 mm
Peak Force: 669 N



Dimensions in mm

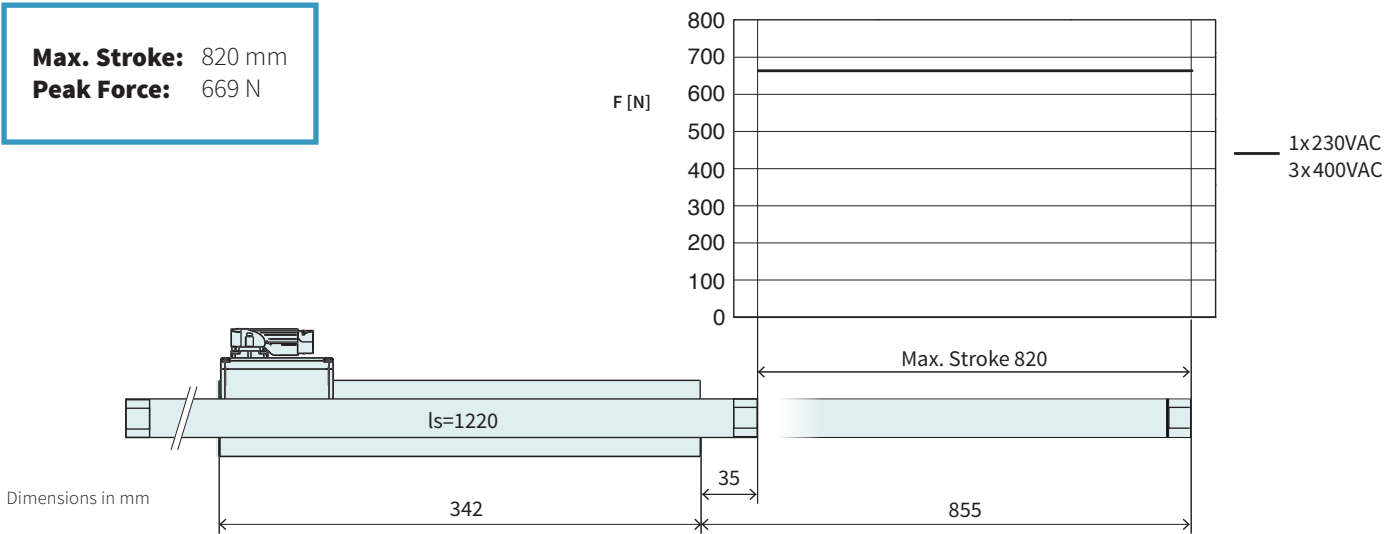
Technical Data P10-54x240U/610				
Stroke				
Max. Stroke	mm	(in)	610	(23.99)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm	(in)	1010	(40)
Slider Mass	g	(lb)	4540	(10)



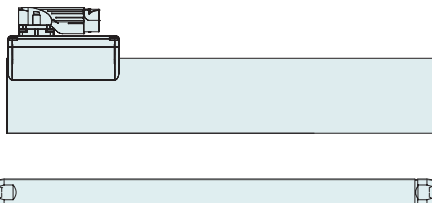
Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PL01-28x1010/930	Slider 'standard'	0150-1387

P10-54x240U/820-BL-TU

Max. Stroke: 820 mm
Peak Force: 669 N



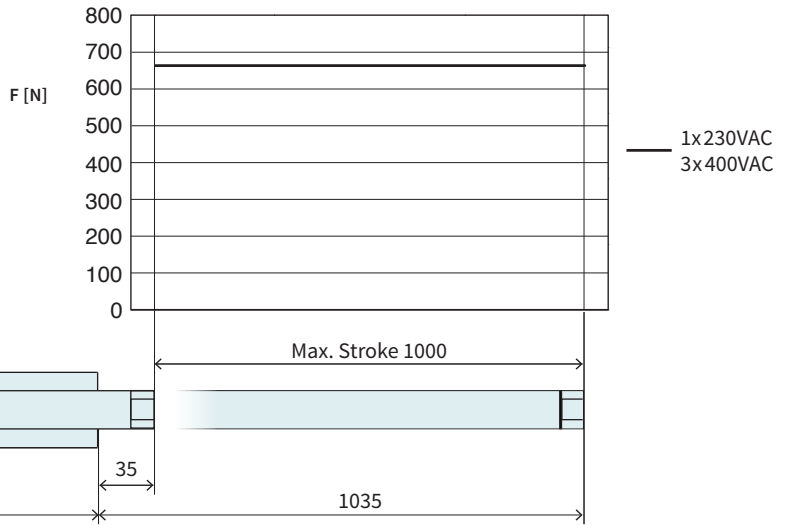
Technical Data P10-54x240U/820				
Stroke				
Max. Stroke	mm	(in)	820	(32.29)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm	(in)	1220	(48)
Slider Mass	g	(lb)	5510	(12.12)



Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PL01-28x1220/1140	Slider 'standard'	0150-1388

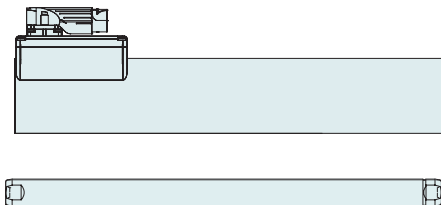
P10-54x240U/1000-BL-TU

Max. Stroke: 1000 mm
Peak Force: 669 N



Dimensions in mm

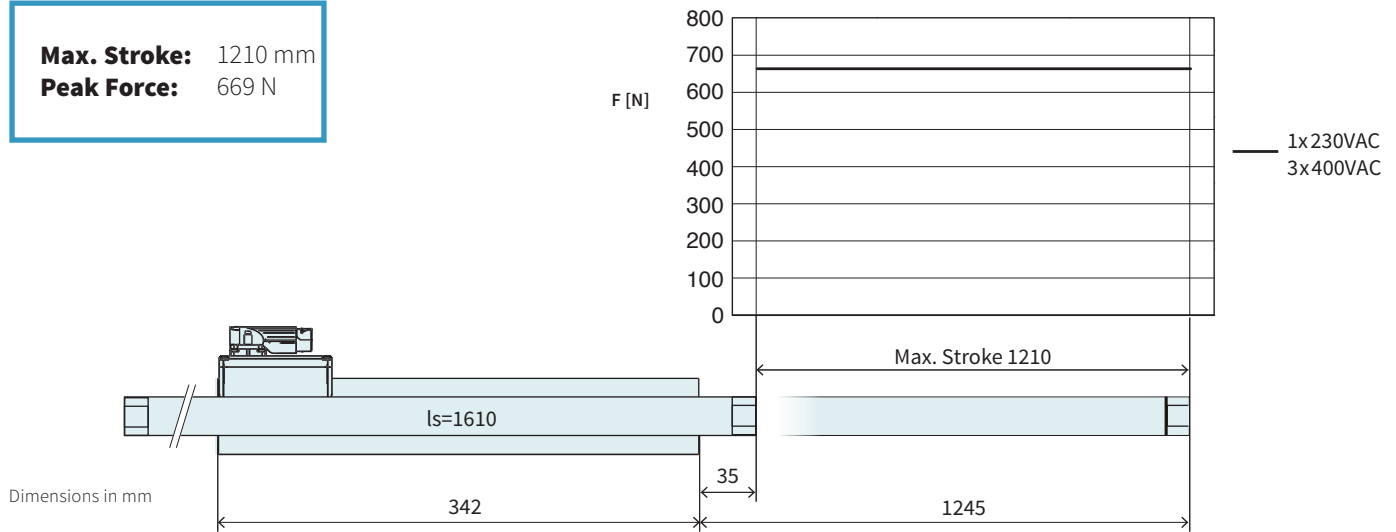
Technical Data P10-54x240U/1000				
Stroke				
Max. Stroke	mm (in)		1000	(39.39)
Force				
Max. Force @ 1x230VAC	N (lbf)		669	(150)
Max. Force @ 3x400VAC	N (lbf)		669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})		44	(9.89)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s (in/s)		4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		7.1	(7.1)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm (in)		1400	(55)
Slider Mass	g (lb)		6350	(13.97)



Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PL01-28x1400/1320	Slider 'standard'	0150-1389

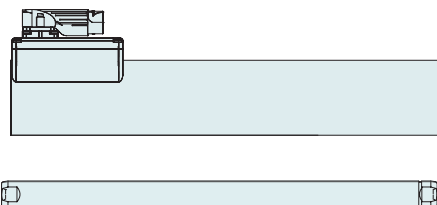
P10-54x240U/1210-BL-TU

Max. Stroke: 1210 mm
Peak Force: 669 N



Dimensions in mm

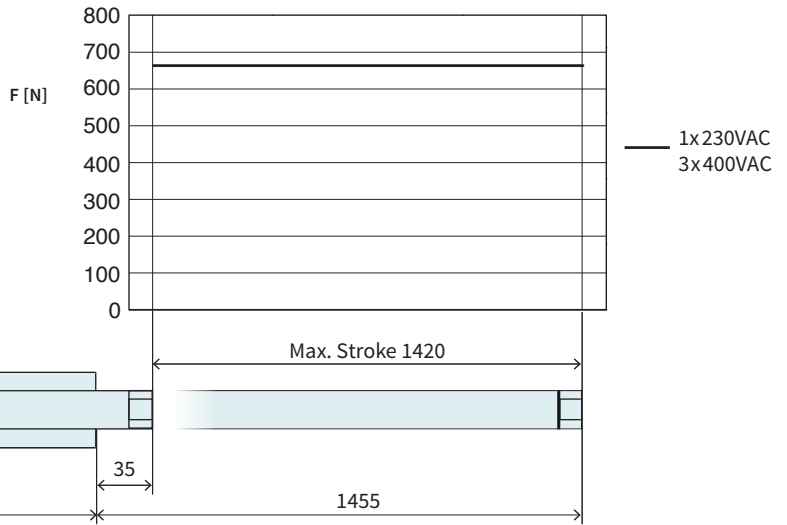
Technical Data P10-54x240U/1210				
Stroke				
Max. Stroke	mm	(in)	1210	(47.6)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{vms}	(lbf/A _{vms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{vms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{vms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{vms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm	(in)	1610	(63)
Slider Mass	g	(lb)	7330	(16.13)



Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder Sum, PTC	0150-2784
PL01-28x1610/1530	Slider 'standard'	0150-1390

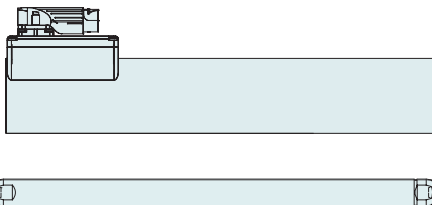
P10-54x240U/1420-BL-TU

Max. Stroke: 1420 mm
Peak Force: 669 N



Dimensions in mm

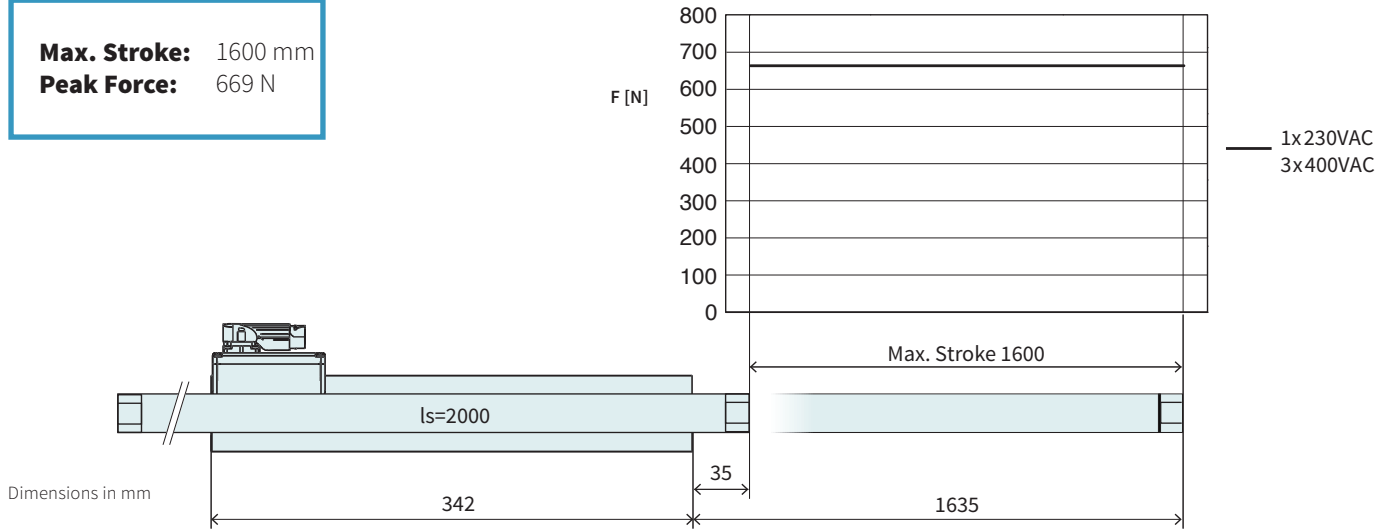
Technical Data P10-54x240U/1420				
Stroke				
Max. Stroke	mm	(in)	1420	(55.89)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm	(in)	1820	(72)
Slider Mass	g	(lb)	8300	(18.26)



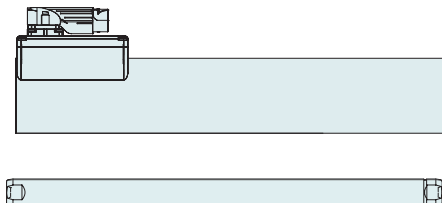
Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PL01-28x1820/1740	Slider 'standard'	0150-1395

P10-54x240U/1600-BL-TU

Max. Stroke: 1600 mm
Peak Force: 669 N



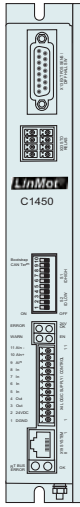
Technical Data P10-54x240U/1600				
Stroke				
Max. Stroke	mm	(in)	1600	(62.99)
Force				
Max. Force @ 1x230VAC	N	(lbf)	669	(150)
Max. Force @ 3x400VAC	N	(lbf)	669	(150)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	110 / 150 / 210	(25 / 34 / 48)
Max. Border Force relative			100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity			± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.5 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.65 / 0.33	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 650 / 330	
Mechanical Data				
Slider Length	mm	(in)	2000	(79)
Slider Mass	g	(lb)	9140	(20.11)



Item	Description	Item-No.
PS10-54x240U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2724
PS10-54x240U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2750
PS10-54x240U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2754
PS10-54x240U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2784
PL01-28x2000/1920	Slider 'standard'	0150-1396

Motor Cable

4



C1400



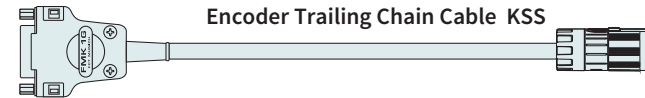
E1400

B Connector MC10-B/m

Tk Connector MC10-Tk/f



Power Trailing Chain Cable KPS



Encoder Trailing Chain Cable KSS



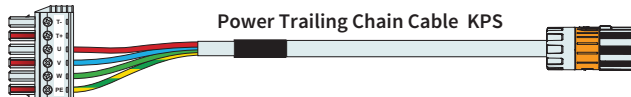
P10-54x240U

D15s Connector MC01-D15s-45°/f

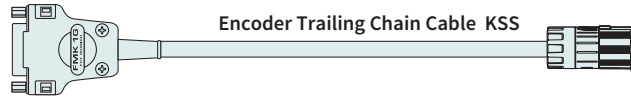
Uk Connector MC10-Uk/f

L Connector MC10-L/m

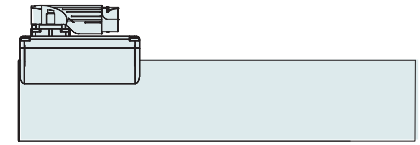
Tk Connector MC10-Tk/f



Power Trailing Chain Cable KPS



Encoder Trailing Chain Cable KSS



P10-54x240U

D15s Connector MC01-D15s-45°/f

Uk Connector MC10-Uk/f

ORDERING INFORMATION

TRAILING CHAIN CABLE FOR LINMOT DRIVES

Item	Description	Item-No.
KPS07-04/02-L/Tk-3	Power Trailing Chain Cable E1400/P10-54, 3 m	0150-2670
KPS07-04/02-L/Tk-5	Power Trailing Chain Cable E1400/P10-54, 5 m	0150-2671
KPS07-04/02-L/Tk-8	Power Trailing Chain Cable E1400/P10-54, 8 m	0150-2672
KPS07-04/02-L/Tk-12	Power Trailing Chain Cable E1400/P10-54, 12 m	0150-2673
KPS07-04/02-B/Tk-3	Power Trailing Chain Cable C1400/P10-54, 3 m	0150-3648
KPS07-04/02-B/Tk-5	Power Trailing Chain Cable C1400/P10-54, 5 m	0150-3657
KPS07-04/02-B/Tk-8	Power Trailing Chain Cable C1400/P10-54, 8 m	0150-3658
KPS07-04/02-B/Tk-12	Power Trailing Chain Cable C1400/P10-54, 12 m	0150-3659
KSS 05-02/08-D15s/Uk-3	Encoder Trailing Chain Cable D15s/Uk, 3 m	0150-2650
KSS 05-02/08-D15s/Uk-5	Encoder Trailing Chain Cable D15s/Uk, 5 m	0150-2651
KSS 05-02/08-D15s/Uk-8	Encoder Trailing Chain Cable D15s/Uk, 8 m	0150-2652
KSS 05-02/08-D15s/Uk-12	Encoder Trailing Chain Cable D15s/Uk, 12 m	0150-2653

TRAILING CHAIN CABLES FOR THIRD PARTY DRIVES

Item	Description	Item-No.
KPS07-04/02-./Tk-10	Power Trailing Chain Cable .../Tk, 10 m	0150-3626
KPS07-04/02-./Tk-	Power Trailing Chain Cable .../Tk, Custom length	0150-3622
KSS 05-02/13-./Uk-10	Encoder Trailing Chain Cable ./Uk, 10 m	0150-3627
KSS 05-02/13-./Uk-	Encoder Trailing Chain Cable ./Uk, Custom length	0150-3619

CONNECTOR & CABLE (INDIVIDUAL)

Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
MC01-D15/f	Motor Connector D15 (f)	0150-3136
MC10-Tk/f	Connector Power PS10-54	0150-3482
MC10-Uk/f	Connector Encoder PS10-54	0150-3483
KPS07-04/02	Power Trailing Chain Cable P10-54 (per m)	0150-2372
KSS05-02/08	Trailing Chain Cable Encoder LinMot (per m)	0150-2258
KSS05-02/13	Trailing Chain Cable Encoder P10-...-Dxx (per m)	0150-2259

MOTOR FLANGES



Item	Description	Item-No.
PF10-54x260	Flange for PS10-54x240	0150-2735

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



Item	Description	Item-No.
PB10-54x240-L	Bearing Kit for PS10-54x240	0150-3673

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P10-54x300U



- ✓ 230VAC and 3 x 400VAC technology
- ✓ Peak forces up to 871 N
- ✓ LinMot Encoder or Incremental Encoder
- ✓ Extremely high dynamic
- ✓ Rotating push-pull TWIN connector for power and encoder cables
- ✓ Can also be controlled by standard third-party servo drives

LINEAR MOTORS P10-54x300U

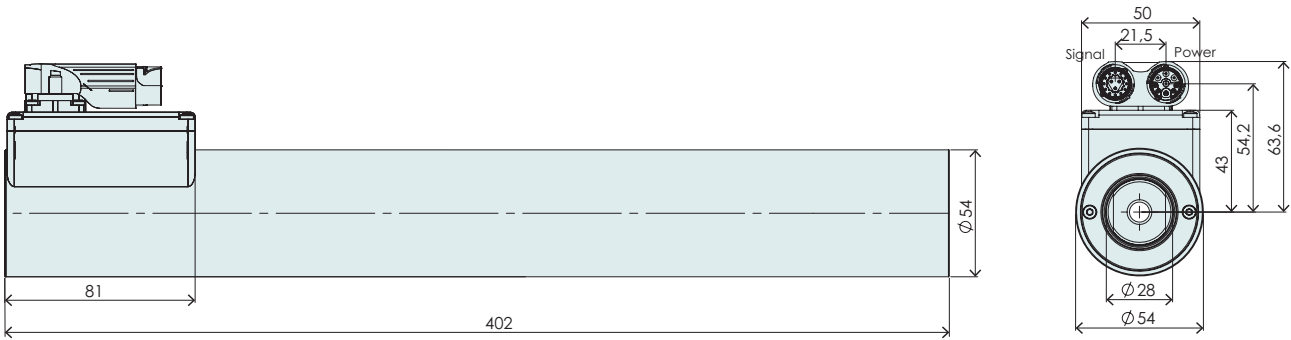
Technical Data	469
Motor Specifications	
P10-54x300U/40	474
P10-54x300U/160	475
P10-54x300U/250	476
P10-54x300U/340	477
P10-54x300U/460	478
P10-54x300U/550	479
P10-54x300U/760	480
P10-54x300U/940	481
P10-54x300U/1150	482
P10-54x300U/1360	483
P10-54x300U/1540	484
Accessories	485



MOTOR FAMILY P10-54x300U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1540	(60.6)
Force				
Max. Force @ 1x230VAC	N	(lbf)	871	(196)
Max. Force @ 3x400VAC	N	(lbf)	871	(196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 190 / 270	(31 / 44 / 61)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(279.9)
Position Detection				
Position Resolution	mm	(in)	0.007	(0.0003)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.2 / 3.1 / 4.4	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	50.8	(1.29)
Terminal Resistance 25 °C / 120 °C	Ohm		5.7 / 7.8	
Terminal Inductivity	mH		4.8	
Magnetic Period	mm	(in)	60	(2.35)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 660 / 340	
Mechanical Data				
Stator Diameter	mm	(in)	54	(2.1)
Stator Length	mm	(in)	402	(16)
Stator Mass	g	(lb)	3200	(7.04)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	500 - 2000	(20 - 79)
Slider Mass	g	(lb)	2160 - 9140	(4.75 - 20.11)
IP Code	IP 65			

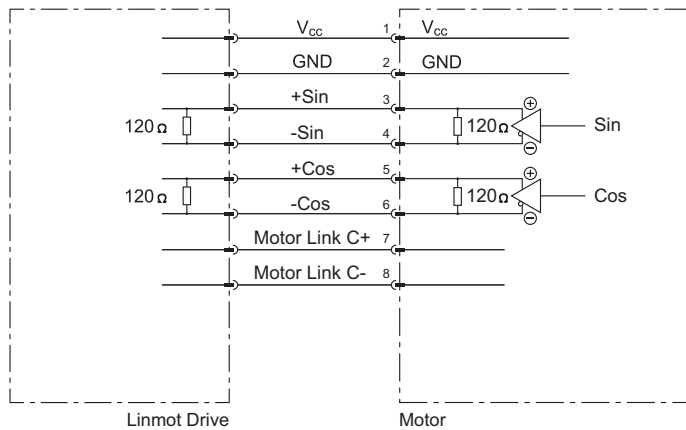
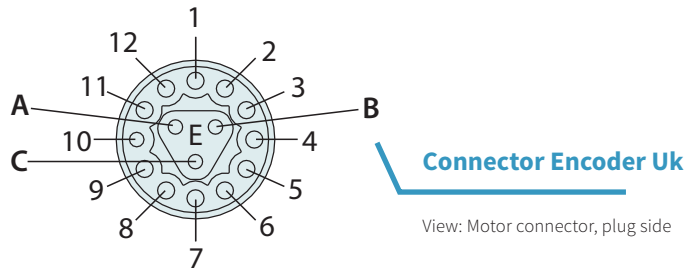
STATOR



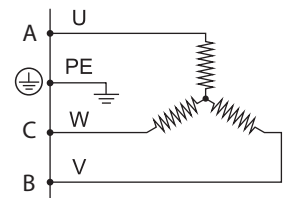
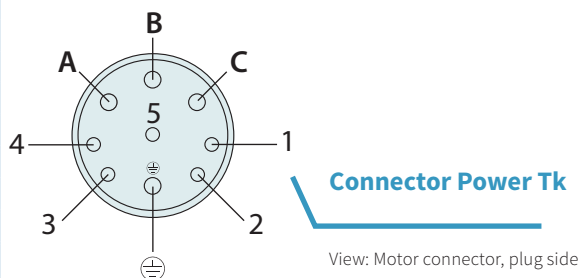
Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785

CONNECTOR PS10-54x240U-BL-TU

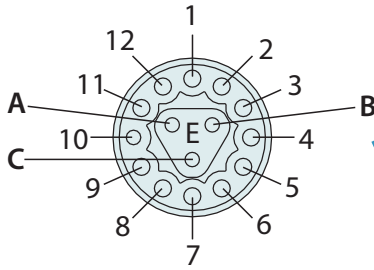
Motor Connector Wiring	Connector Encoder Uk	Wire Color Motor Cable	
+Vcc	Supply	1	red
GND	Supply	2	black
Sin+	Encoder	3	yellow
Sin-	Encoder	4	orange
Cos+	Encoder	5	green
Cos-	Encoder	6	blue
Mot. Link C+	Communication	7	pink
Mot. Link C-	Communication	8	grey
n. c.	n. c.	9	n. c.
n. c.	n. c.	10	n. c.
n. c.	n. c.	11	n. c.
n. c.	n. c.	12	n. c.
n. c.	n. c.	A	n. c.
n. c.	n. c.	B	n. c.
n. c.	n. c.	C	n. c.



Motor Steckerbelegung	Connector Power Tk	Wire Color Motor Cable
Phase U	A	red
PE	PE	yellow-green
Phase V	B	blue
Phase W	C	green
n. c.	1	n. c.
n. c.	2	n. c.
n. c.	3	n. c.
n. c.	4	n. c.
n. c.	5	n. c.

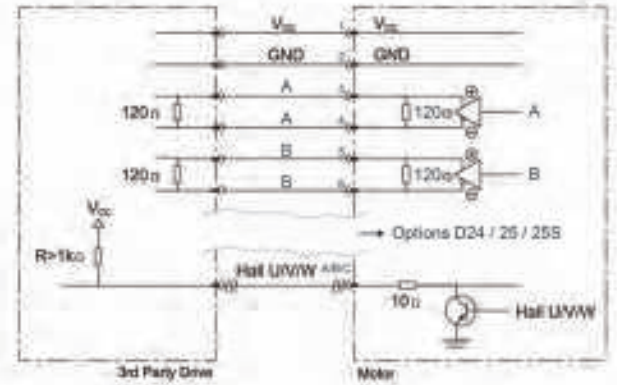


CONNECTOR PS10-54X300U-BL-TU-D24 / 25 / 25S

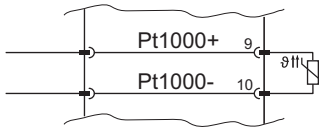


Connector Encoder Uk

View: Motor connector, plug side

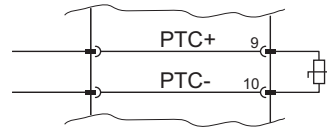


PS10-54x300U-BL-TU-D24



Pt1000 Characteristic emulated

**PS10-54x300U-BL-TU-D25
PS10-54x300U-BL-TU-D25S**



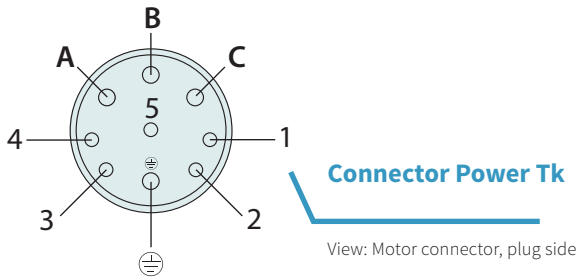
PTC (switching type)
350 Ω / 18 kΩ emulated¹

Motor Connector Wiring				
PS10-54x300U-BL-TU-D24	PS10-54x300U-BL-TU-D25 PS10-54x300U-BL-TU-D25S	Function	Connector Encoder Uk	Wire Color Motor Cable
+Vcc	+Vcc	Supply	1	white
GND	GND	Supply	2	brown
A	A	Encoder	3	grey
/A	/A	Encoder	4	pink
B	B	Encoder	5	blue
/B	/B	Encoder	6	red
-	-	-	7	green (do not connect)
-	-	-	8	yellow (do not connect)
Pt1000+	PTC+	Temp. ²	9	yellow-brown
Pt1000-	PTC-	Temp. ²	10	white-yellow
REF+	REF+	Encoder	11	black
REF-	REF-	Encoder	12	purple
Hall U	Hall U	Encoder	A	grey-red
Hall V	Hall V	Encoder	B	red-blue
Hall W	Hall W	Encoder	C	white-green

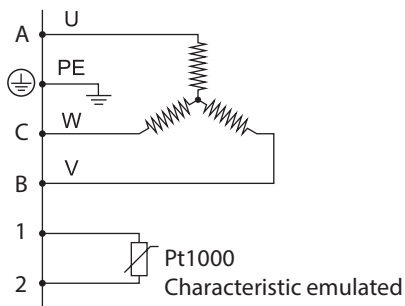
1) under 350 Ω = no fault, over 18 kΩ = Fault

2) The temperature evaluation circuit must be powered from the encoder supply and must be at the same potential.

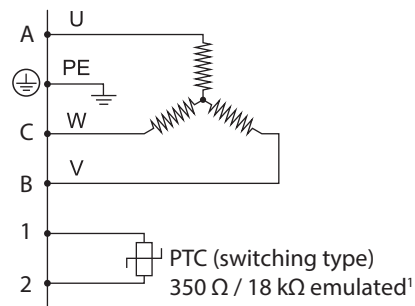
The grounds of the temperature evaluation circuit and the encoder have to be connected. The encoder must have been powered on for at least 50 ms, before valid temperatures can be measured. If the encoder is powered off, 20k Ohms are measured between Pins 9 and 10.



PS10-54x300U-BL-TU-D24



PS10-54x300U-BL-TU-D25
PS10-54x300U-BL-TU-D25S

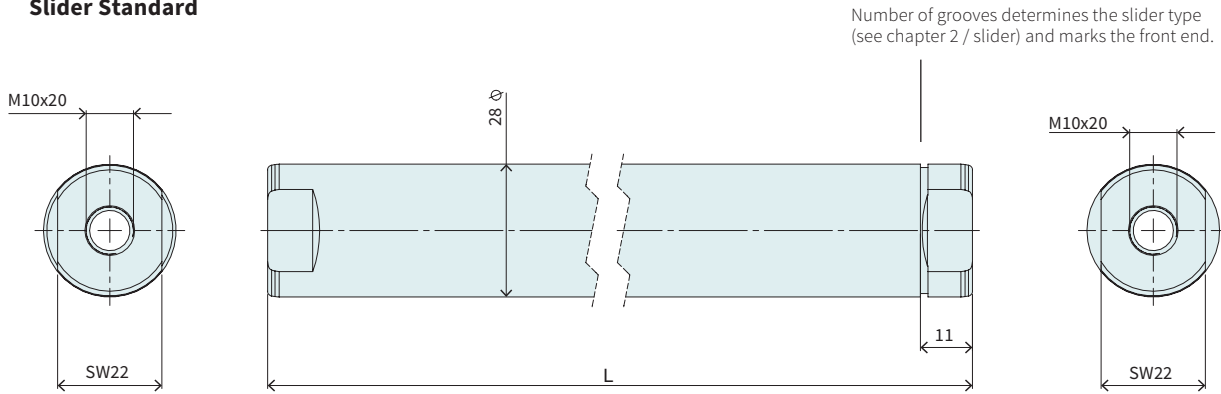


Motor Connector Wiring			
PS10-54x300U-BL-TU-D24	PS10-54x300U-BL-TU-D25 PS10-54x300U-BL-TU-D25S	Connector Power Tk	Wire Color Motor Cable
Phase U	Phase U	A	red
PE	PE	PE	yellow-green
Phase V	Phase V	B	blue
Phase W	Phase W	C	green
Pt1000+	PTC+	1	turquoise
Pt1000-	PTC-	2	grey
n. c.	n. c.	3	n. c.
n. c.	n. c.	4	n. c.
n. c.	n. c.	5	n. c.

1) under 350 Ω = no fault, over 18 Ω = Fault

SLIDER

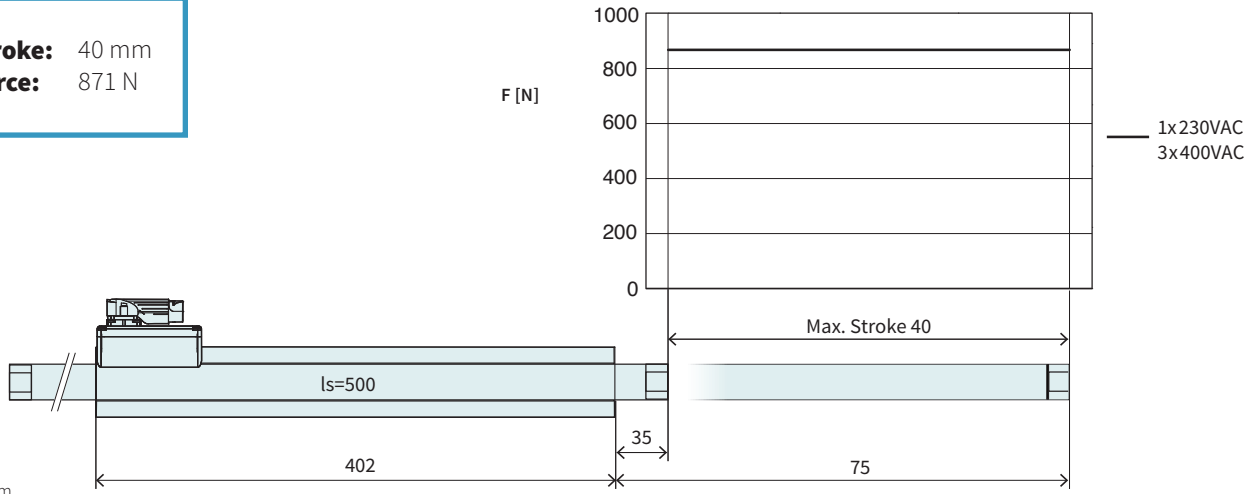
Slider Standard



Slider Standard			
Item	Description	Max. Stroke [mm]	Item-No.
PL01-28x500/420	Slider 'standard'	40	0150-1382
PL01-28x620/540	Slider 'standard'	160	0150-1383
PL01-28x710/630	Slider 'standard'	250	0150-1384
PL01-28x800/720	Slider 'standard'	340	0150-1385
PL01-28x920/840	Slider 'standard'	460	0150-1386
PL01-28x1010/930	Slider 'standard'	550	0150-1387
PL01-28x1220/1140	Slider 'standard'	760	0150-1388
PL01-28x1400/1320	Slider 'standard'	940	0150-1389
PL01-28x1610/1530	Slider 'standard'	1150	0150-1390
PL01-28x1820/1740	Slider 'standard'	1360	0150-1395
PL01-28x2000/1920	Slider 'standard'	1540	0150-1396

P10-54x300U/40-BL-TU

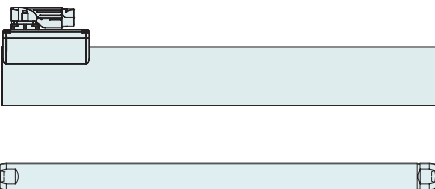
Max. Stroke: 40 mm
Peak Force: 871 N



Dimensions in mm

Technical Data P10-54x300U/40

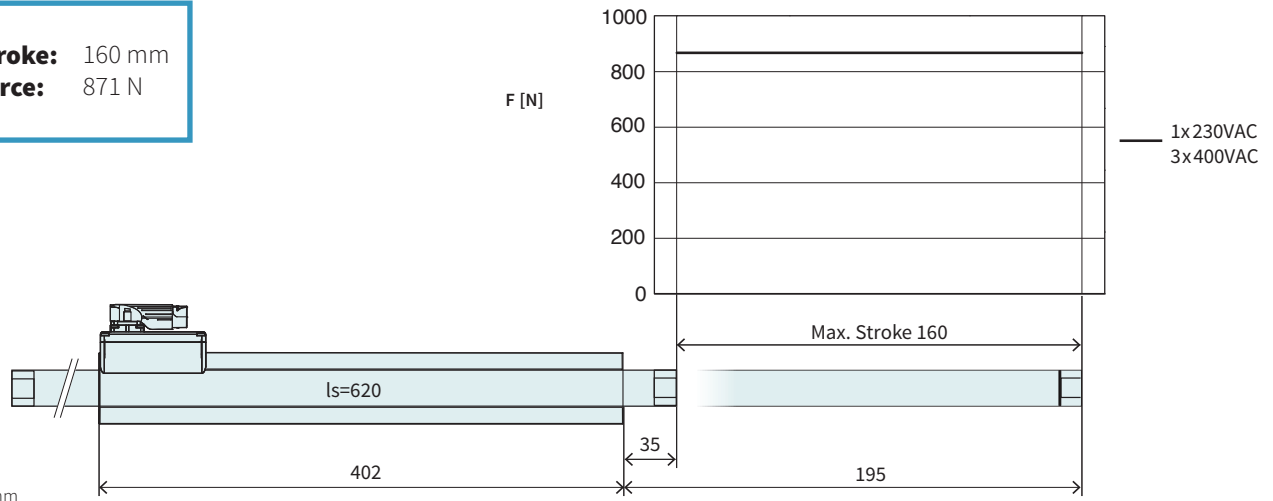
Stroke			
Max. Stroke	mm	(in)	40 (1.57)
Force			
Max. Force @ 1x230VAC	N	(lbf)	871 (196)
Max. Force @ 3x400VAC	N	(lbf)	871 (196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 190 / 270 (31 / 44 / 61)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44 (9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2 (14)
Velocity			
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1 (159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1 (7.1)
Position Detection			
Repeatability	mm	(in)	±0.05 (±0.002)
Linearity	%		± 2
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.7 / 13.9
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.7 / 13.9
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.1 / 4.4 / 6.2
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.2 / 3.1 / 4.4
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.1 / 0.53 / 0.27
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 660 / 340
Mechanical Data			
Slider Length	mm	(in)	500 (20)
Slider Mass	g	(lb)	2160 (4.75)



Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785
PL01-28x500/420	Slider 'standard'	0150-1382

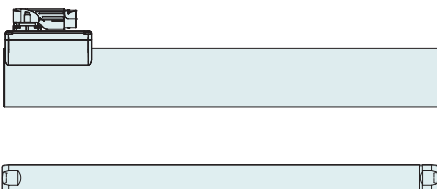
P10-54x300U/160-BL-TU

Max. Stroke: 160 mm
Peak Force: 871 N



Dimensions in mm

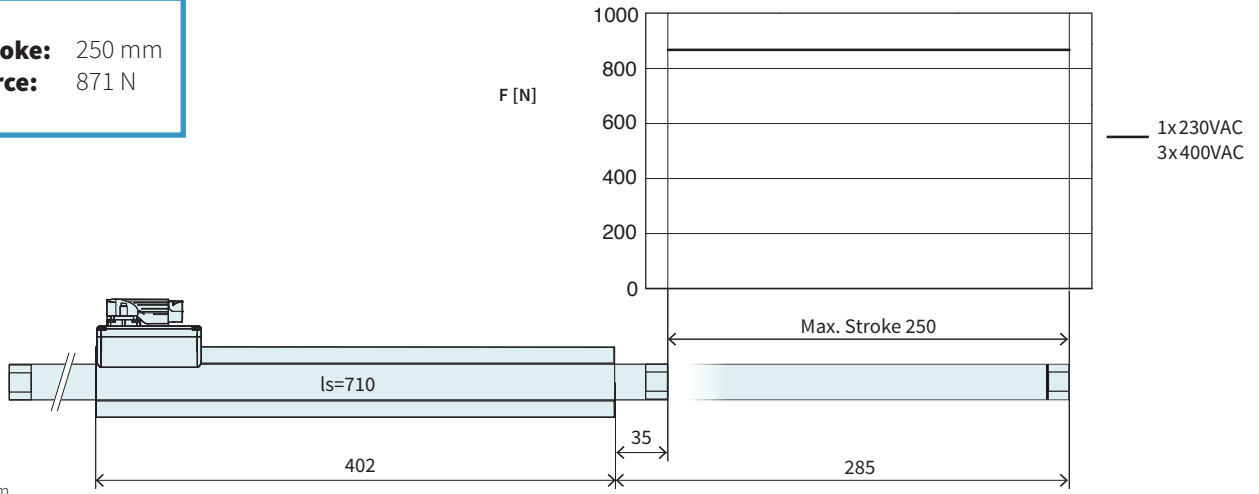
Technical Data P10-54x300U/160			
Stroke			
Max. Stroke	mm (in)		160 (6.29)
Force			
Max. Force @ 1x230VAC	N (lbf)		871 (196)
Max. Force @ 3x400VAC	N (lbf)		871 (196)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N (lbf)		140 / 190 / 270 (31 / 44 / 61)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		44 (9.89)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		62.2 (14)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		4.1 (159.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		7.1 (7.1)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.55
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.7 / 13.9
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.7 / 13.9
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.1 / 4.4 / 6.2
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.2 / 3.1 / 4.4
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.1 / 0.53 / 0.27
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 660 / 340
Mechanical Data			
Slider Length	mm (in)		620 (24)
Slider Mass	g (lb)		2720 (5.98)



Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785
PL01-28x620/540	Slider 'standard'	0150-1383

P10-54x300U/250-BL-TU

Max. Stroke: 250 mm
Peak Force: 871 N



Dimensions in mm

Technical Data P10-54x300U/250

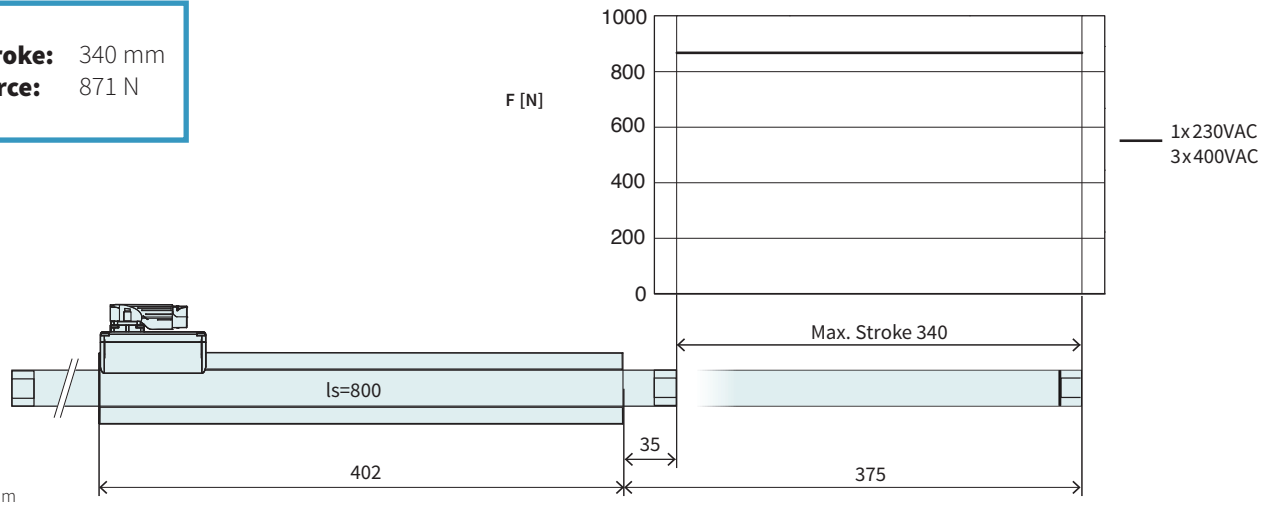
Technical Data P10-54x300U/250			
Stroke			
Max. Stroke	mm (in)	250 (9.83)	
Force			
Max. Force @ 1x230VAC	N (lbf)	871 (196)	
Max. Force @ 3x400VAC	N (lbf)	871 (196)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	140 / 190 / 270 (31 / 44 / 61)	
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	44 (9.89)	
Force Constant 2	N/A _{rms} (lbf/A _{rms})	62.2 (14)	
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.1 (159.9)	
Max. Velocity @ 3x400VAC	m/s (in/s)	7.1 (7.1)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.4	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	19.7 / 13.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.2 / 3.1 / 4.4	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1400 / 660 / 340	
Mechanical Data			
Slider Length	mm (in)	710 (28)	
Slider Mass	g (lb)	3140 (6.91)	



Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785
PL01-28x710/630	Slider 'standard'	0150-1384

P10-54x300U/340-BL-TU

Max. Stroke: 340 mm
Peak Force: 871 N



Dimensions in mm

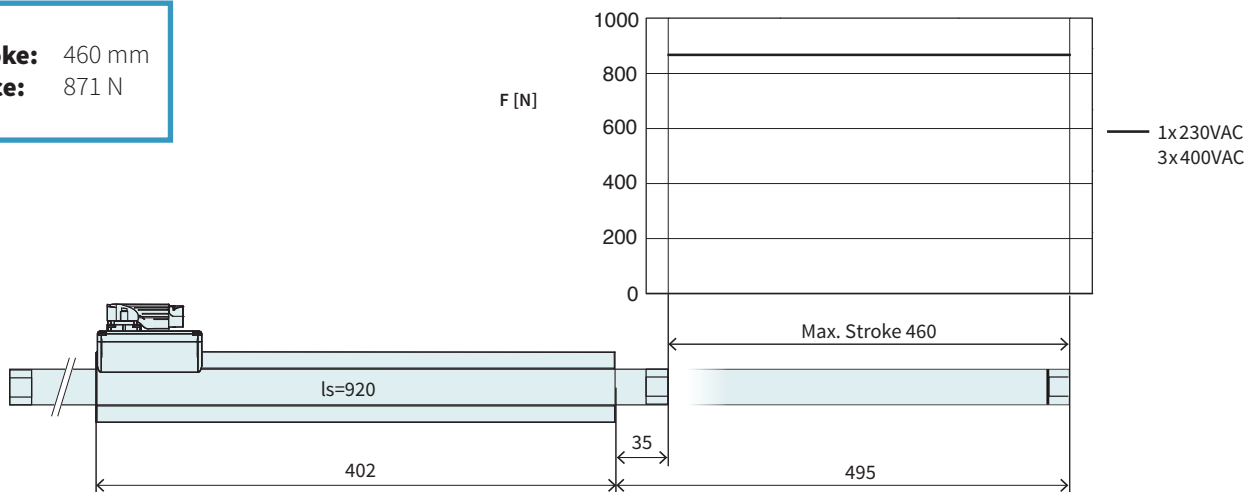
Technical Data P10-54x300U/340			
Stroke			
Max. Stroke	mm (in)		340 (13.4)
Force			
Max. Force @ 1x230VAC	N (lbf)		871 (196)
Max. Force @ 3x400VAC	N (lbf)		871 (196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		140 / 190 / 270 (31 / 44 / 61)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		44 (9.89)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		62.2 (14)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		4.1 (159.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		7.1 (7.1)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.3
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.7 / 13.9
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.7 / 13.9
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.1 / 4.4 / 6.2
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.2 / 3.1 / 4.4
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.1 / 0.53 / 0.27
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 660 / 340
Mechanical Data			
Slider Length	mm (in)		800 (31)
Slider Mass	g (lb)		3560 (7.83)



Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785
PL01-28x800/720	Slider 'standard'	0150-1385

P10-54x300U/460-BL-TU

Max. Stroke: 460 mm
Peak Force: 871 N



Dimensions in mm

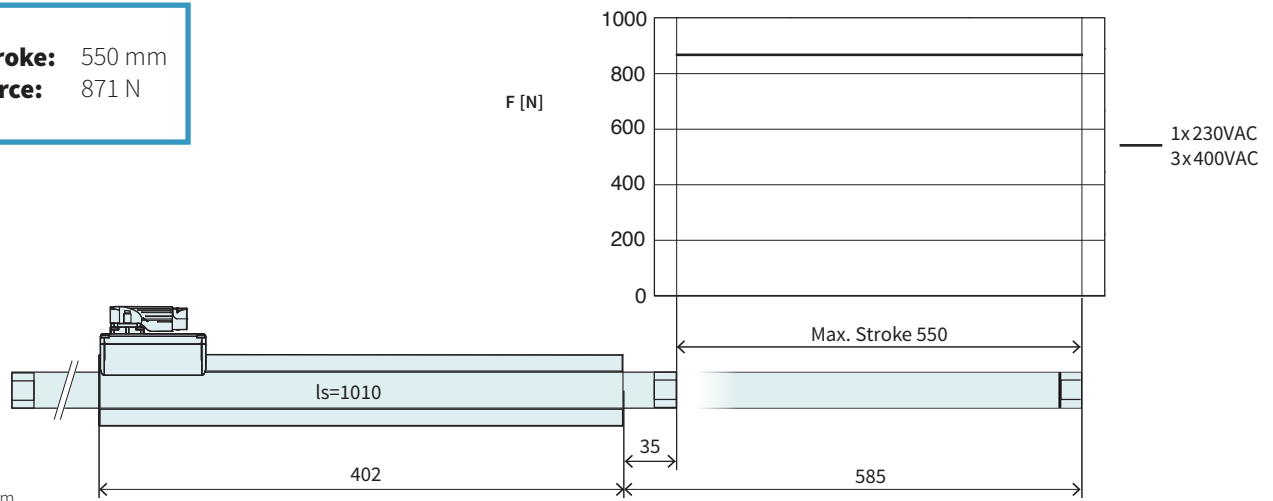
Technical Data P10-54x300U/460				
Stroke				
Max. Stroke	mm	(in)	460	(18.1)
Force				
Max. Force @ 1x230VAC	N	(lbf)	871	(196)
Max. Force @ 3x400VAC	N	(lbf)	871	(196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 190 / 270	(31 / 44 / 61)
Max. Border Force relative			%	
			100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity			%	
			± 0.25	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.2 / 3.1 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 660 / 340	
Mechanical Data				
Slider Length	mm	(in)	920	(36)
Slider Mass	g	(lb)	4120	(9.06)



Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785
PL01-28x920/840	Slider 'standard'	0150-1386

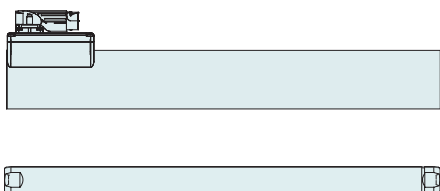
P10-54x300U/550-BL-TU

Max. Stroke: 550 mm
Peak Force: 871 N



Dimensions in mm

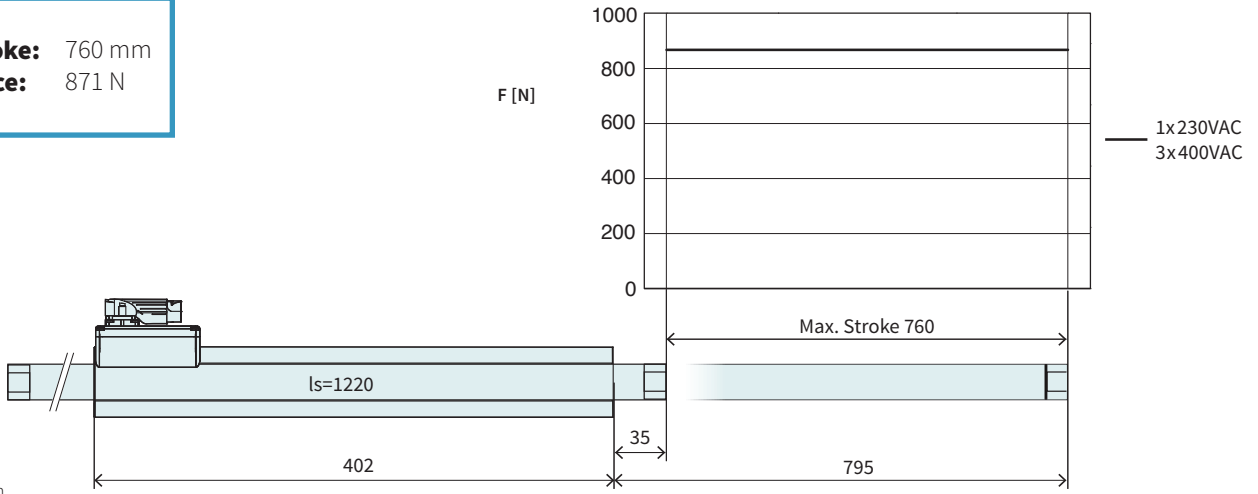
Technical Data P10-54x300U/550			
Stroke			
Max. Stroke	mm (in)	550	(21.69)
Force			
Max. Force @ 1x230VAC	N (lbf)	871	(196)
Max. Force @ 3x400VAC	N (lbf)	871	(196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	140 / 190 / 270	(31 / 44 / 61)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	62.2	(14)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	7.1	(7.1)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.25	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	19.7 / 13.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.2 / 3.1 / 4.4	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1400 / 660 / 340	
Mechanical Data			
Slider Length	mm (in)	1010	(40)
Slider Mass	g (lb)	4540	(10)



Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder Sum, PTC	0150-2785
PL01-28x1010/930	Slider 'standard'	0150-1387

P10-54x300U/760-BL-TU

Max. Stroke: 760 mm
Peak Force: 871 N



Dimensions in mm

Technical Data P10-54x300U/760

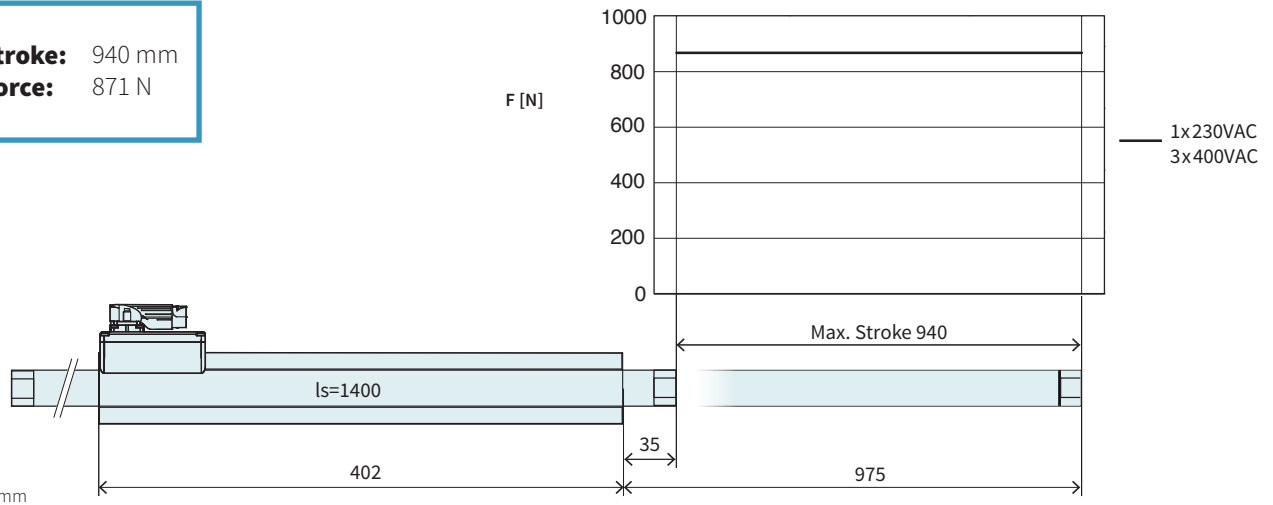
Stroke			
Max. Stroke	mm (in)	760	(29.89)
Force			
Max. Force @ 1x230VAC	N (lbf)	871	(196)
Max. Force @ 3x400VAC	N (lbf)	871	(196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	140 / 190 / 270	(31 / 44 / 61)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	62.2	(14)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	7.1	(7.1)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	19.7 / 13.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.2 / 3.1 / 4.4	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1400 / 660 / 340	
Mechanical Data			
Slider Length	mm (in)	1220	(48)
Slider Mass	g (lb)	5510	(12.12)



Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785
PL01-28x1220/1140	Slider 'standard'	0150-1388

P10-54x300U/940-BL-TU

Max. Stroke: 940 mm
Peak Force: 871 N



Dimensions in mm

Technical Data P10-54x300U/940

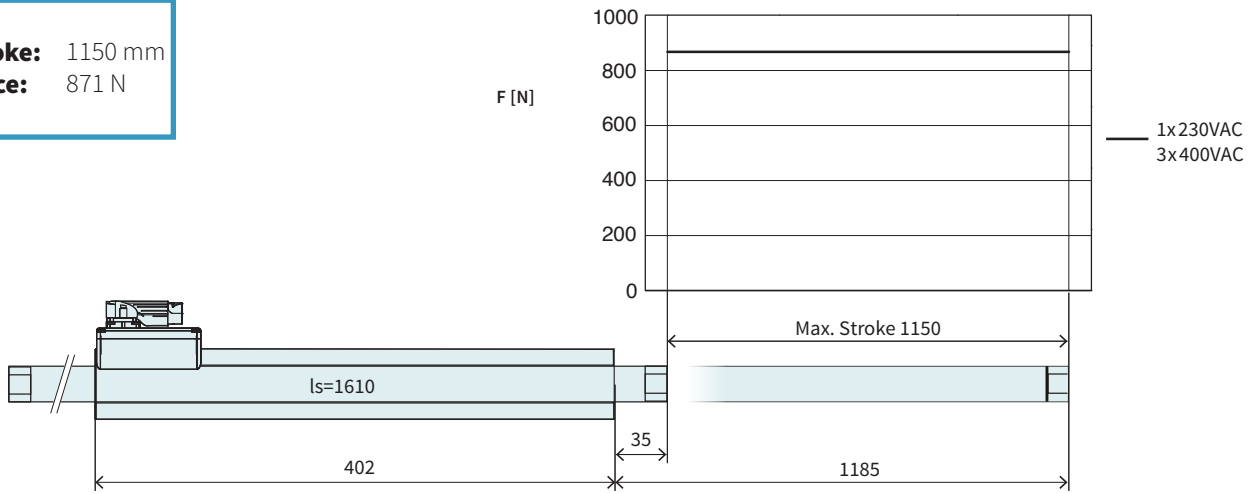
Stroke			
Max. Stroke	mm (in)	940	(36.99)
Force			
Max. Force @ 1x230VAC	N (lbf)	871	(196)
Max. Force @ 3x400VAC	N (lbf)	871	(196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	140 / 190 / 270	(31 / 44 / 61)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	62.2	(14)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	7.1	(7.1)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	19.7 / 13.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.2 / 3.1 / 4.4	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1400 / 660 / 340	
Mechanical Data			
Slider Length	mm (in)	1400	(55)
Slider Mass	g (lb)	6350	(13.97)



Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785
PL01-28x1400/1320	Slider 'standard'	0150-1389

P10-54x300U/1150-BL-TU

Max. Stroke: 1150 mm
Peak Force: 871 N



Dimensions in mm

Technical Data P10-54x300U/1150

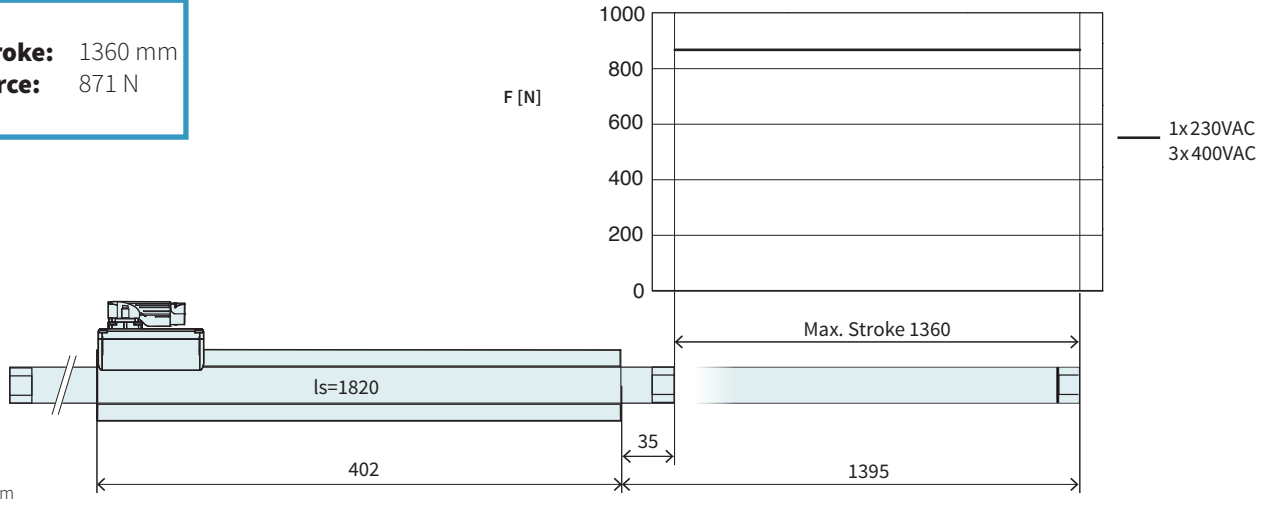
Technical Data P10-54x300U/1150				
Stroke				
Max. Stroke	mm	(in)	1150	(45.29)
Force				
Max. Force @ 1x230VAC	N	(lbf)	871	(196)
Max. Force @ 3x400VAC	N	(lbf)	871	(196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 190 / 270	(31 / 44 / 61)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.2 / 3.1 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 660 / 340	
Mechanical Data				
Slider Length	mm	(in)	1610	(63)
Slider Mass	g	(lb)	7330	(16.13)



Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785
PL01-28x1610/1530	Slider 'standard'	0150-1390

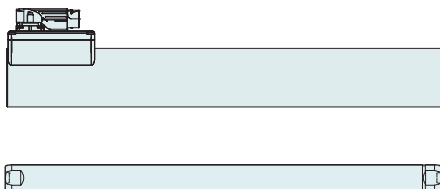
P10-54x300U/1360-BL-TU

Max. Stroke: 1360 mm
Peak Force: 871 N



Dimensions in mm

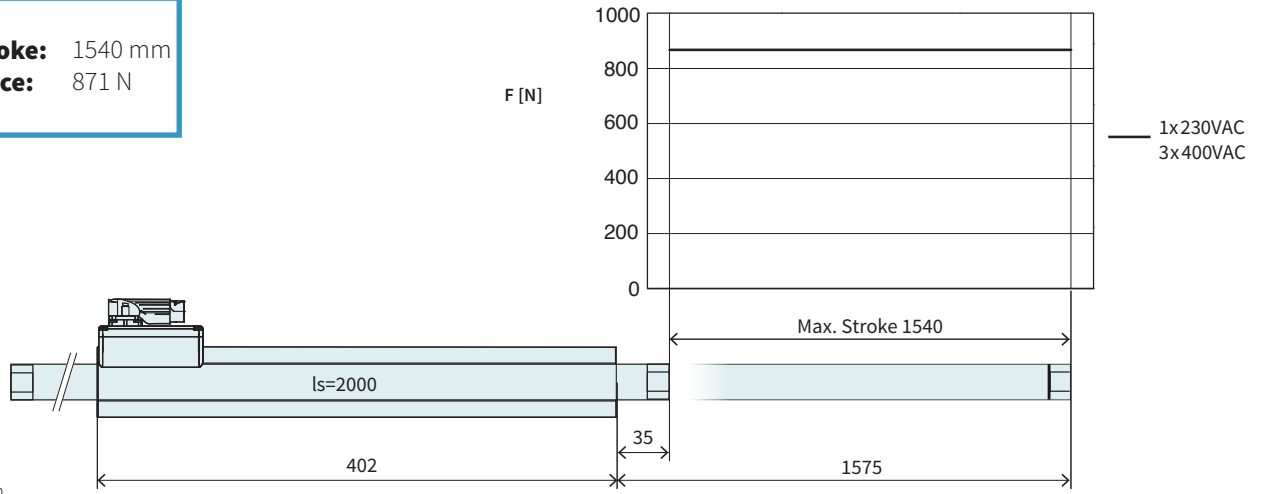
Technical Data P10-54x300U/1360				
Stroke				
Max. Stroke	mm	(in)	1360	(53.49)
Force				
Max. Force @ 1x230VAC	N	(lbf)	871	(196)
Max. Force @ 3x400VAC	N	(lbf)	871	(196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 190 / 270	(31 / 44 / 61)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	44	(9.89)
Force Constant 2	N/A _{vms}	(lbf/A _{vms})	62.2	(14)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1	(159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1	(7.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{vms}		19.7 / 13.9	
Max. Current @ 3x400VAC	A _{pk} / A _{vms}		19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{vms}		2.2 / 3.1 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1400 / 660 / 340	
Mechanical Data				
Slider Length	mm	(in)	1820	(72)
Slider Mass	g	(lb)	8300	(18.26)



Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785
PL01-28x1820/1740	Slider 'standard'	0150-1395

P10-54x300U/1540-BL-TU

Max. Stroke: 1540 mm
Peak Force: 871 N



Dimensions in mm

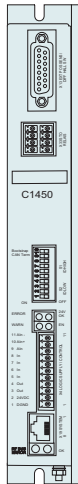
Technical Data P10-54x300U/1540

Stroke			
Max. Stroke	mm	(in)	1540 (60.6)
Force			
Max. Force @ 1x230VAC	N	(lbf)	871 (196)
Max. Force @ 3x400VAC	N	(lbf)	871 (196)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 190 / 270 (31 / 44 / 61)
Max. Border Force relative	%		100
Force Constant 1	N/A_{pk}	(lbf/ A_{pk})	44 (9.89)
Force Constant 2	N/A_{rms}	(lbf/ A_{rms})	62.2 (14)
Velocity			
Max. Velocity @ 1x230VAC	m/s	(in/s)	4.1 (159.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	7.1 (7.1)
Position Detection			
Repeatability	mm	(in)	±0.05 (±0.002)
Linearity	%		± 0.15
Electrical Data			
Max. Current @ 1x230VAC	A_{pk} / A_{rms}	19.7 / 13.9	
Max. Current @ 3x400VAC	A_{pk} / A_{rms}	19.7 / 13.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A_{pk}	3.1 / 4.4 / 6.2	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A_{rms}	2.2 / 3.1 / 4.4	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.1 / 0.53 / 0.27	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1400 / 660 / 340	
Mechanical Data			
Slider Length	mm	(in)	2000 (79)
Slider Mass	g	(lb)	9140 (20.11)



Item	Description	Item-No.
PS10-54x300U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2725
PS10-54x300U-BL-TU-D24	Stator 3x400VAC, A/B Encoder, Pt1000	0150-2751
PS10-54x300U-BL-TU-D25	Stator 3x400VAC, A/B Encoder, PTC	0150-2755
PS10-54x300U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5um, PTC	0150-2785
PL01-28x2000/1920	Slider 'standard'	0150-1396

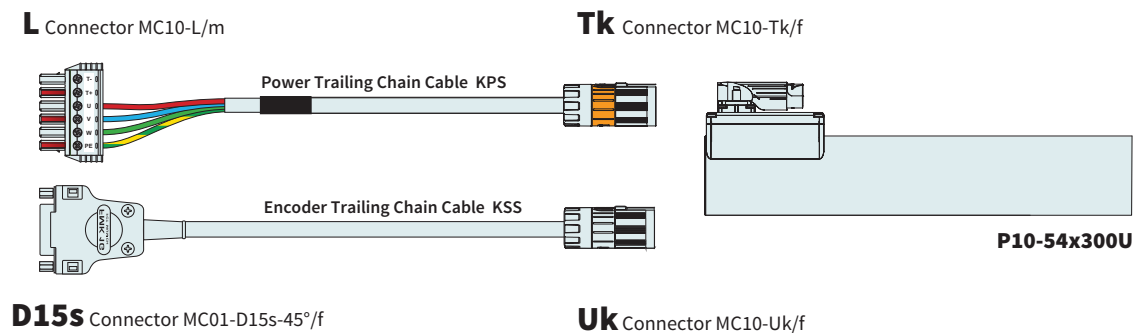
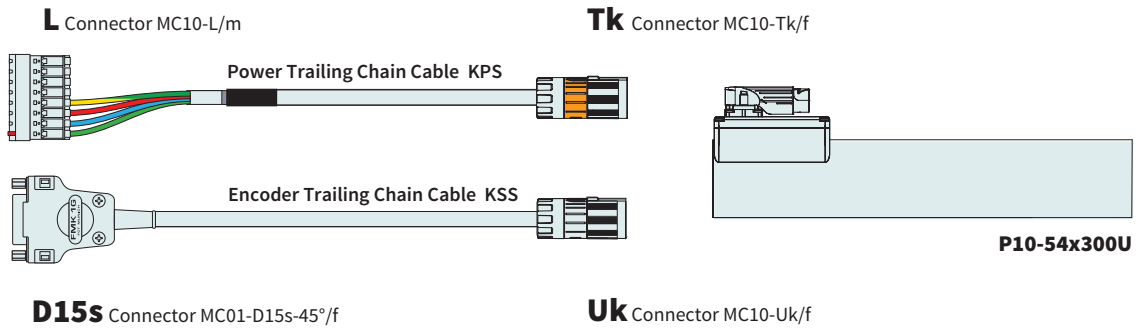
Motor Cable



C1400



E1400



ORDERING INFORMATION

TRAILING CHAIN CABLE FOR LINMOT DRIVES		
Item	Description	Item-No.
KPS07-04/02-L/Tk-3	Power Trailing Chain Cable E1400/P10-54, 3 m	0150-2670
KPS07-04/02-L/Tk-5	Power Trailing Chain Cable E1400/P10-54, 5 m	0150-2671
KPS07-04/02-L/Tk-8	Power Trailing Chain Cable E1400/P10-54, 8 m	0150-2672
KPS07-04/02-L/Tk-12	Power Trailing Chain Cable E1400/P10-54, 12 m	0150-2673
KPS07-04/02-B/Tk-3	Power Trailing Chain Cable C1400/P10-54, 3 m	0150-3648
KPS07-04/02-B/Tk-5	Power Trailing Chain Cable C1400/P10-54, 5 m	0150-3657
KPS07-04/02-B/Tk-8	Power Trailing Chain Cable C1400/P10-54, 8 m	0150-3658
KPS07-04/02-B/Tk-12	Power Trailing Chain Cable C1400/P10-54, 12 m	0150-3659
KSS 05-02/08-D15s/Uk-3	Encoder Trailing Chain Cable D15s/Uk, 3 m	0150-2650
KSS 05-02/08-D15s/Uk-5	Encoder Trailing Chain Cable D15s/Uk, 5 m	0150-2651
KSS 05-02/08-D15s/Uk-8	Encoder Trailing Chain Cable D15s/Uk, 8 m	0150-2652
KSS 05-02/08-D15s/Uk-12	Encoder Trailing Chain Cable D15s/Uk, 12 m	0150-2653

TRAILING CHAIN CABLES FOR THIRD PARTY DRIVES

Item	Description	Item-No.
KPS07-04/02-./Tk-10	Power Trailing Chain Cable .../Tk, 10 m	0150-3626
KPS07-04/02-./Tk-	Power Trailing Chain Cable .../Tk, Custom length	0150-3622
KSS05-02/13-./Uk-10	Encoder Trailing Chain Cable ./Uk, 10 m	0150-3627
KSS05-02/13-./Uk-	Encoder Trailing Chain Cable ./Uk, Custom length	0150-3619

CONNECTOR & CABLE (INDIVIDUAL)

Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
MC01-D15/f	Motor Connector D15 (f)	0150-3136
MC10-Tk/f	Connector Power PS10-54	0150-3482
MC10-Uk/f	Connector Encoder PS10-54	0150-3483
KPS07-04/02	Power Trailing Chain Cable P10-54 (per m)	0150-2372
KSS05-02/08	Trailing Chain Cable Encoder LinMot (per m)	0150-2258
KSS05-02/13	Trailing Chain Cable Encoder P10-...-Dxx (per m)	0150-2259

MOTOR FLANGES



Item	Description	Item-No.
PF10-54x320	Flange for PS10-54x300	0150-2736

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

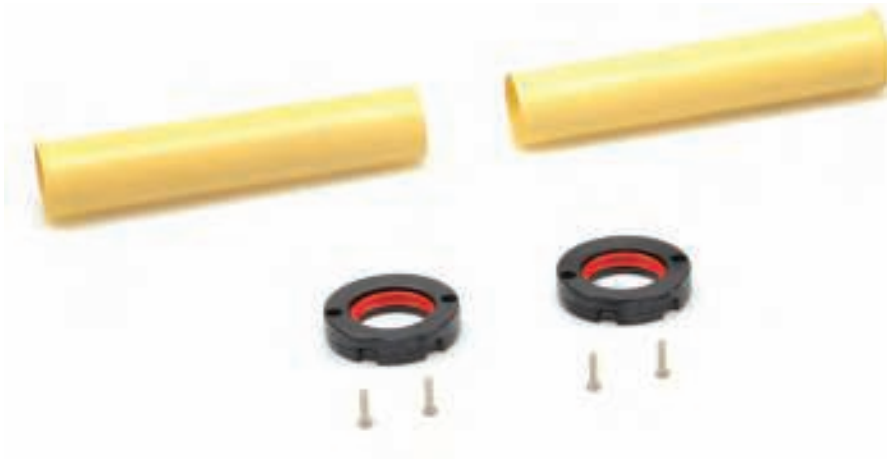
SLIDER MOUNTING



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



Item	Description	Item-No.
PB10-54x300-L	Bearing Kit for PS10-54x300	0150-3674

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P10-70x80U



- ✓ 3 x 400VAC technology
- ✓ Peak forces up to 561 N
- ✓ Extremely high dynamic
- ✓ Separate connector for sensor and power cable
- ✓ Can also be controlled by standard third-party servo drives

LINEAR MOTORS P10-70x80U

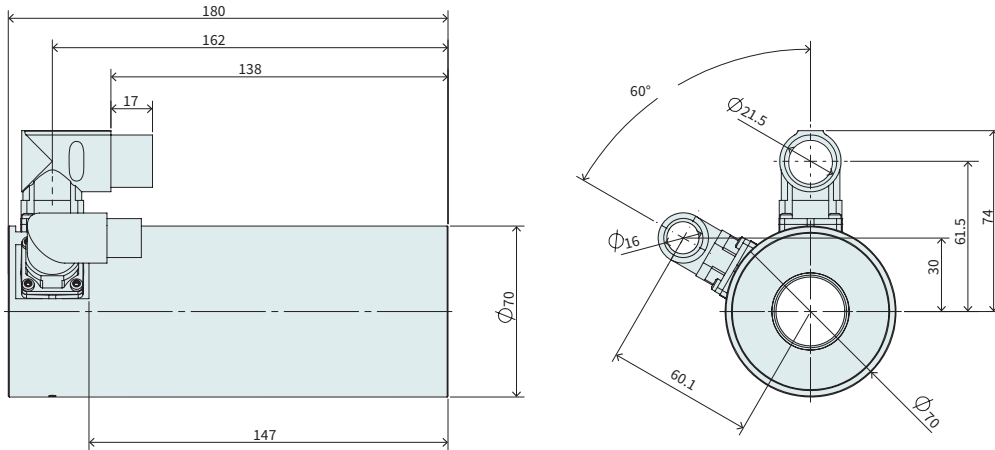
Technical Data	491
Motor Specifications	
P10-70x80U/70	496
P10-70x80U/170	497
P10-70x80U/270	498
P10-70x80U/370	499
P10-70x80U/470	500
P10-70x80U/570	501
P10-70x80U/670	502
P10-70x80U/770	503
P10-70x80U/970	504
P10-70x80U/1170	505
P10-70x80U/1370	506
P10-70x80U/1570	507
P10-70x80U/1770	508
Linear Guides	509
Accessories	511



MOTOR FAMILY P10-70x80U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1770	(69.7)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	72.1	(16.2)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	6.1	(249.9)
Position Detection				
Position Resolution	mm	(in)	0.005	(0.0002)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.93 / 1.4 / 2.5	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	58.9	(1.5)
Terminal Resistance 25 °C / 120 °C	Ohm		13 / 18	
Terminal Inductivity	mH		25	
Magnetic Period	mm	(in)	40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Stator Diameter	mm	(in)	70	(2.8)
Stator Length	mm	(in)	180	(7.1)
Stator Mass	g	(lb)	2850	(6.27)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	290 - 1990	(11 - 78)
Slider Mass	g	(lb)	1360 - 9350	(3 - 20.57)
IP Code			IP 65	

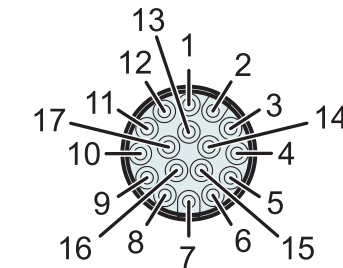
STATOR



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708

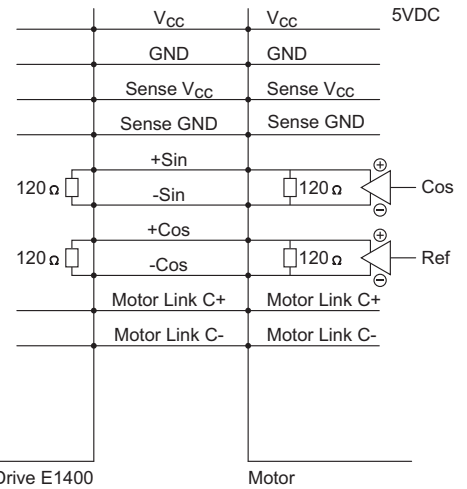
CONNECTOR PS10-70x80U-BL-QJ

Motor Connector Wiring		Connector Encoder J	Wire Color Motor Cable
+5VDC	Supply	1	red
GND	Supply	2	black
Sense +5V	Supply Sense	3	white
Sense GND	Supply Sense	4	brown
Mot. Link C+	Communication	5	pink
Mot. Link C-	Communication	6	grey
Sin+	Encoder	7	yellow
Sin-	Encoder	8	orange
Cos+	Encoder	9	green
Cos-	Encoder	10	blue
n. c.	n. c.	11	n. c.
n. c.	n. c.	12	n. c.
n. c.	n. c.	13	n. c.
n. c.	n. c.	14	n. c.
n. c.	n. c.	15	n. c.
n. c.	n. c.	16	n. c.
n. c.	n. c.	17	n. c.

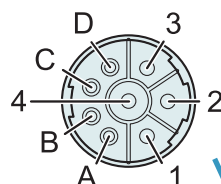


Connector Encoder J

View: Motor connector, plug side

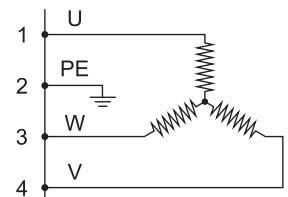


Motor Steckerbelegung	Connector Power Q	Wire Color Motor Cable
Phase U	1	red
PE	2	yellow-green
Phase W	3	green
Phase V	4	blue
n. c.	A	n. c.
n. c.	B	n. c.
n. c.	C	n. c.
n. c.	D	n. c.

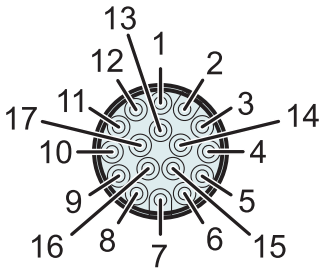


Connector Power Q

View: Motor connector, plug side



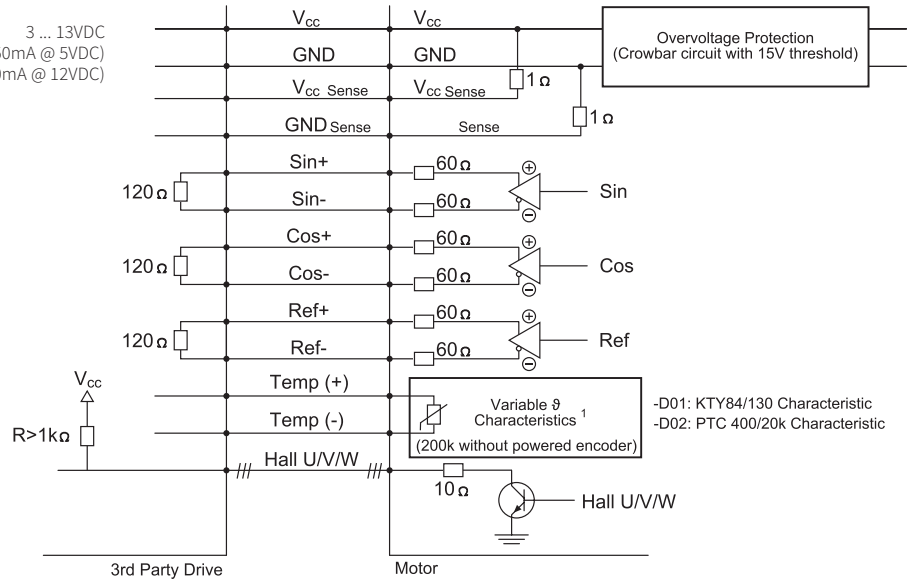
CONNECTOR PS10-70X80U-BL-QJ-D01/02



Connector Encoder J

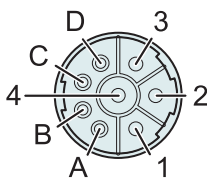
View: Motor connector, plug side

3 ... 13VDC
(Imax < 150mA @ 5VDC)
(Imax < 80mA @ 12VDC)



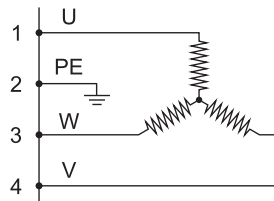
Motor Connector Wiring				
PS10-70x80U-BL-QJ-D01	PS10-70x80U-BL-QJ-D02	Function	Connector Encoder J	Wire Color Motor Cable
3 ... 13VDC	3 ... 13VDC	Supply	1	white
GND	GND	Supply	2	brown
Vcc Sense (optional)	Vcc Sense (optional)	Supply Sense	3	green
GND Sense (optional)	GND Sense (optional)	Supply Sense	4	yellow
Do not connect	Do not connect	-	5	-
Do not connect	Do not connect	-	6	-
Sin+	Sin+	Encoder 1 Vpp	7	grey
Sin-	Sin-	Encoder 1 Vpp	8	pink
Cos+	Cos+	Encoder 1 Vpp	9	blue
Cos-	Cos-	Encoder 1 Vpp	10	red
Ref+	Ref+	Encoder 1 Vpp	11	black
Ref-	Ref-	Encoder 1 Vpp	12	violett
Hall U	Hall U	Encoder (open collector)	13	grey-red
Hall V	Hall V	Encoder (open collector)	14	red-blue
Hall W	Hall W	Encoder (open collector)	15	white-green
Temp+ (KTY84/130 Char.)	Temp+ (PTC 400/20k Char.)	Temperature ¹	16	yellow-brown
Temp- (KTY84/130 Char.)	Temp- (PTC 400/20k Char.)	Temperature ¹	17	white-yellow

1) The temperature evaluation circuit must be powered from the encoder supply and must be at the same potential. The grounds of the temperature evaluation circuit and the encoder have to be connected. The encoder must have been powered on for at least 50 ms, before valid temperatures can be measured. If the encoder is powered off, 200k Ohms are measured between Pins 16 and 17. The maximum voltage between Pin 16 and 17 must not exceed 16 VDC. The maximum current must not exceed 15 mA.



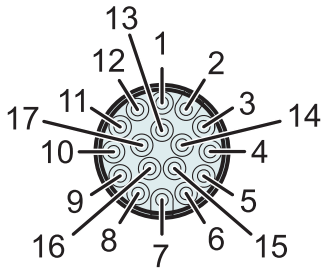
Connector Power Q

View: Motor connector, plug side



Motor Connector Wiring			
PS10-70x80U-BL-QJ-D01	PS10-70x80U-BL-QJ-D02	Connector Power Q	Wire Color Motor Cable
Phase U	Phase U	1	red
PE	PE	2	yellow-green
Phase W	Phase W	3	green
Phase V	Phase V	4	blue
n. c.	n. c.	A	n. c.
n. c.	n. c.	B	n. c.
n. c.	n. c.	C	n. c.
n. c.	n. c.	D	n. c.

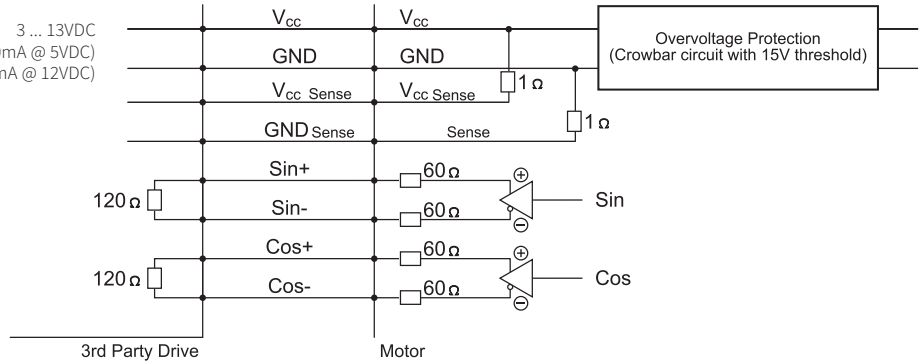
CONNECTOR PS10-70X80U-BL-QJ-D03



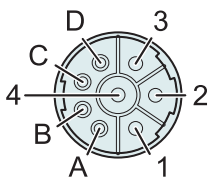
Connector Encoder J

View: Motor connector, plug side

3 ... 13VDC
($I_{max} < 150\text{mA}$ @ 5VDC)
($I_{max} < 80\text{mA}$ @ 12VDC)

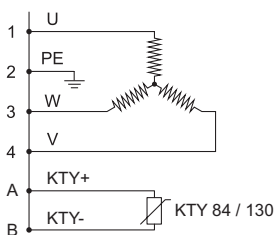


Motor Connector Wiring		Connector Encoder J	Wire Color Motor Cable
3 ... 13VDC	Supply	1	red
GND	Supply	2	black
Vcc Sense (optional)	Supply Sense	3	white
GND Sense (optional)	Supply Sense	4	brown
Do not connect	-	5	-
Do not connect	-	6	-
Sin+	Encoder 1 Vpp	7	yellow
Sin-	Encoder 1 Vpp	8	orange
Cos+	Encoder 1 Vpp	9	green
Cos-	Encoder 1 Vpp	10	blue
n. c.	-	11	n. c.
n. c.	-	12	n. c.
n. c.	-	13	n. c.
Do not connect	-	14	n. c.
n. c.	-	15	n. c.
n. c.	-	16	n. c.
n. c.	-	17	n. c.



Connector Power Q

View: Motor connector, plug side

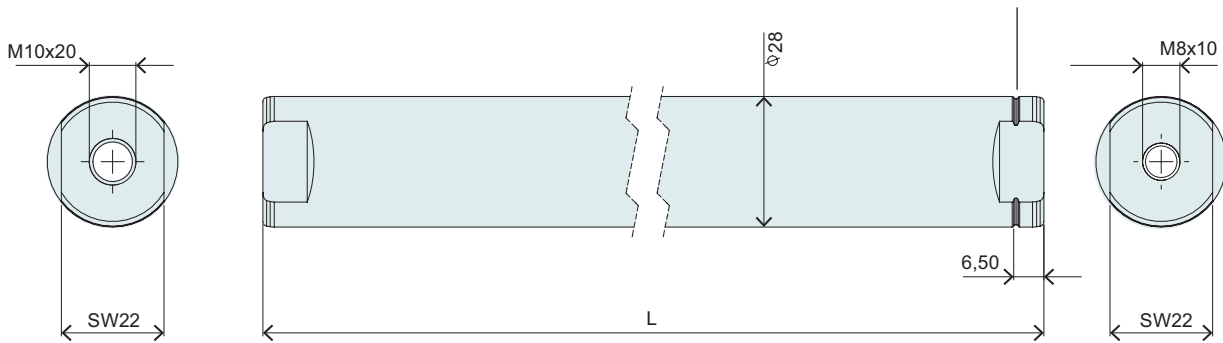


Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red (previously: black 1)
PE	2	yellow-green
Phase W	3	green (previously: black 3)
Phase V	4	blue (previously: black 2)
KTY+	A	purple (previously: black 5)
KTY-	B	grey (previously: black 6)
n. c.	C	yellow (previously: black 7)
n. c.	D	brown (previously: black 8)

SLIDER

Slider Standard

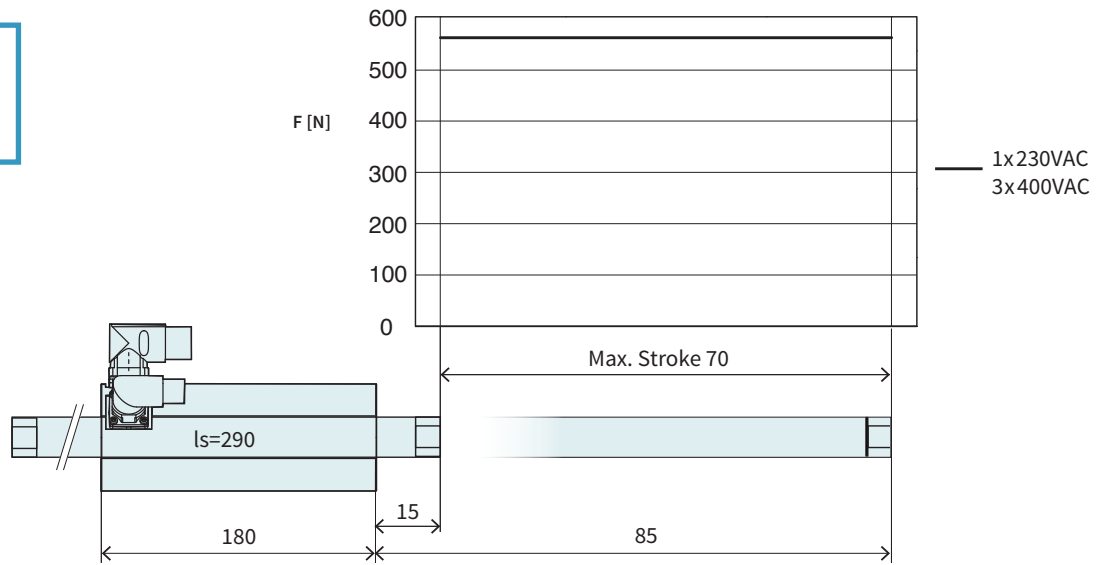
Number of grooves determines the slider type (see chapter 2 / slider) and marks the front end.



Slider Standard			
Item	Description	Max. Stroke [mm]	Item-No.
PL10-28x290/240	Slider for P10-70 'standard'	70	0150-2193
PL10-28x390/340	Slider for P10-70 'standard'	170	0150-2194
PL10-28x490/440	Slider for P10-70 'standard'	270	0150-2195
PL10-28x590/540	Slider for P10-70 'standard'	370	0150-2196
PL10-28x690/640	Slider for P10-70 'standard'	470	0150-2197
PL10-28x790/740	Slider for P10-70 'standard'	570	0150-2198
PL10-28x890/840	Slider for P10-70 'standard'	670	0150-2199
PL10-28x990/940	Slider for P10-70 'standard'	770	0150-2203
PL10-28x1190/1140	Slider for P10-70 'standard'	970	0150-2204
PL10-28x1390/1340	Slider for P10-70 'standard'	1170	0150-2205
PL10-28x1590/1540	Slider for P10-70 'standard'	1370	0150-2206
PL10-28x1790/1740	Slider for P10-70 'standard'	1570	0150-2207
PL10-28x1990/1940	Slider for P10-70 'standard'	1770	0150-2208

P10-70x80U/70-BL-QJ

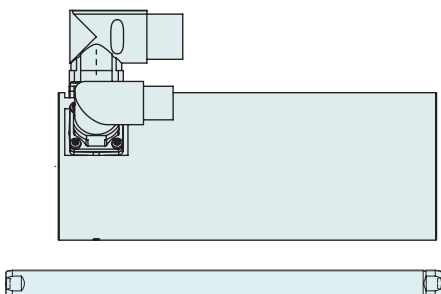
Max. Stroke: 70 mm
Peak Force: 561 N



Dimensions in mm

Technical Data P10-70x80U/70

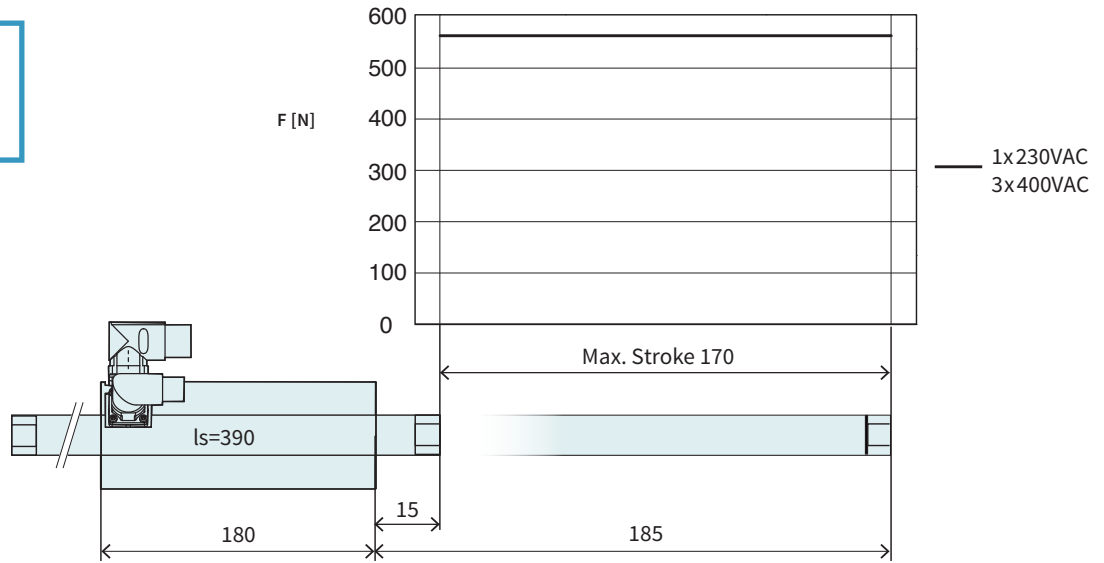
Stroke			
Max. Stroke	mm (in)		70 (2.75)
Force			
Max. Force @ 1x230VAC	N (lbf)		561 (126)
Max. Force @ 3x400VAC	N (lbf)		561 (126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		67 / 100 / 180 (15 / 23 / 41)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		51 (11.5)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		72.1 (16.2)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		3.5 (139.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		6.1 (6.1)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.8
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		10.9 / 7.7
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		10.9 / 7.7
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.93 / 1.4 / 2.5
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / 0.36
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110
Mechanical Data			
Slider Length	mm (in)		290 (11)
Slider Mass	g (lb)		1360 (3)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x290/240	Slider for P10-70 'standard'	0150-2193

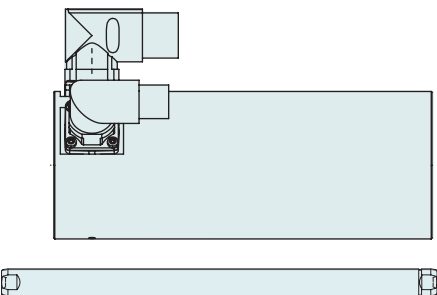
P10-70x80U/170-BL-QJ

Max. Stroke: 170 mm
Peak Force: 561 N



Dimensions in mm

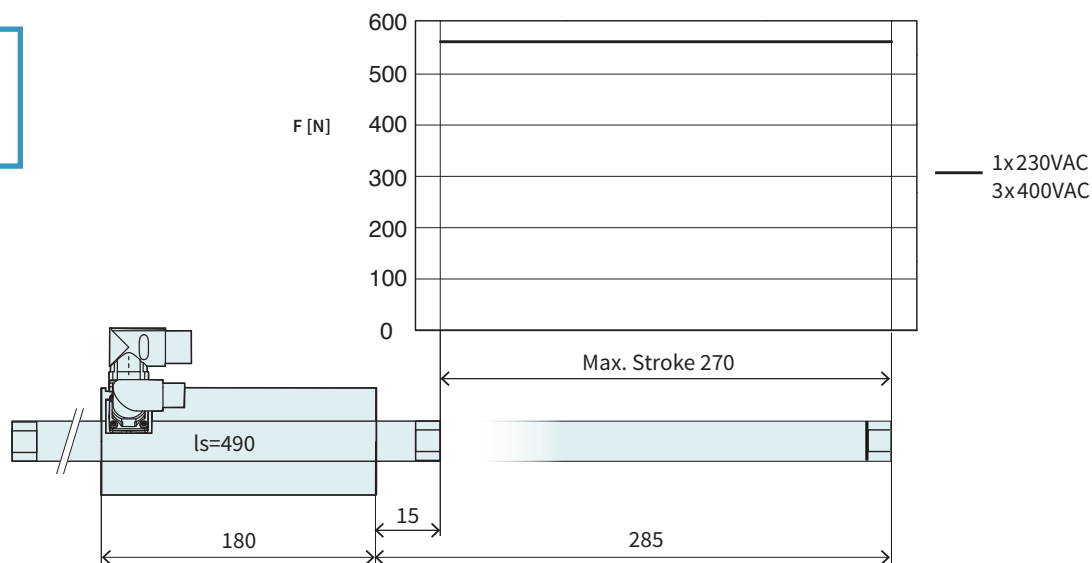
Technical Data P10-70x80U/170				
Stroke				
Max. Stroke	mm	(in)	170	(6.69)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	72.1	(16.2)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	6.1	(6.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.4	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.93 / 1.4 / 2.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	390	(15)
Slider Mass	g	(lb)	1830	(4.03)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x390/340	Slider for P10-70 'standard'	0150-2194

P10-70x80U/270-BL-QJ

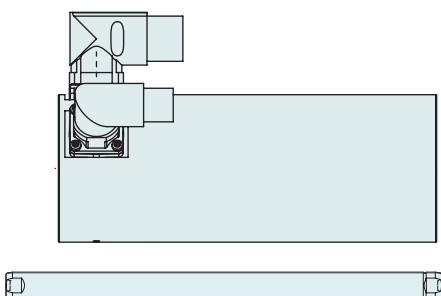
Max. Stroke: 270 mm
Peak Force: 561 N



Dimensions in mm

Technical Data P10-70x80U/270

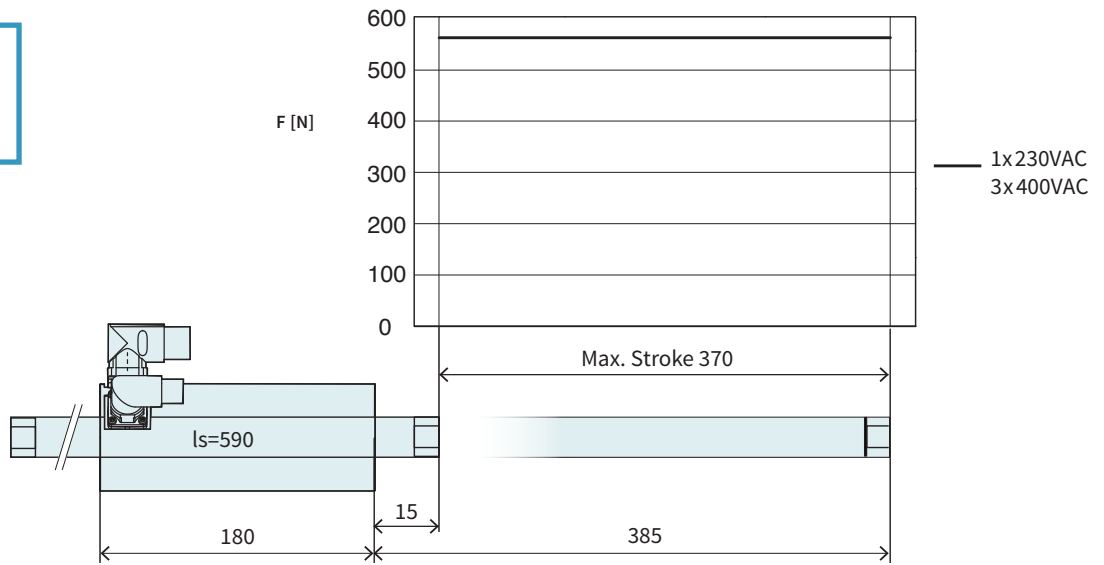
Technical Data P10-70x80U/270			
Stroke			
Max. Stroke	mm (in)		270 (10.59)
Force			
Max. Force @ 1x230VAC	N (lbf)		561 (126)
Max. Force @ 3x400VAC	N (lbf)		561 (126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		67 / 100 / 180 (15 / 23 / 41)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		51 (11.5)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		72.1 (16.2)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		3.5 (139.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		6.1 (6.1)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.3
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		10.9 / 7.7
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		10.9 / 7.7
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.93 / 1.4 / 2.5
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	*K/W		2.6 / 1.1 / 0.36
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110
Mechanical Data			
Slider Length	mm (in)		490 (19)
Slider Mass	g (lb)		2300 (5.06)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x490/440	Slider for P10-70 'standard'	0150-2195

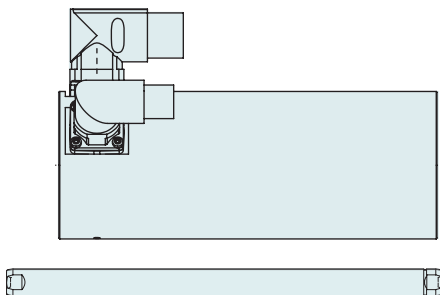
P10-70x80U/370-BL-QJ

Max. Stroke: 370 mm
Peak Force: 561 N



Dimensions in mm

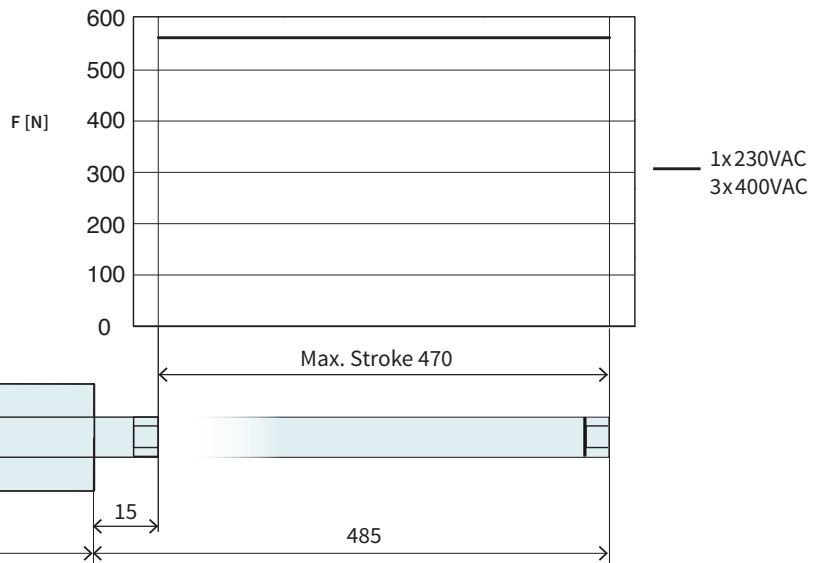
Technical Data P10-70x80U/370				
Stroke				
Max. Stroke	mm	(in)	370	(14.59)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	72.1	(16.2)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	6.1	(6.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.93 / 1.4 / 2.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	590	(23)
Slider Mass	g	(lb)	2770	(6.09)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x590/540	Slider for P10-70 'standard'	0150-2196

P10-70x80U/470-BL-QJ

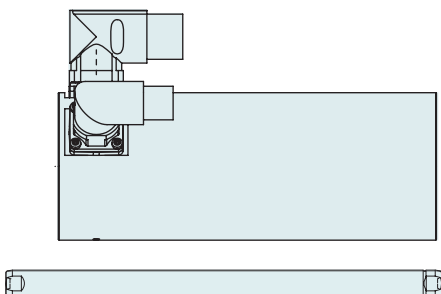
Max. Stroke: 470 mm
Peak Force: 561 N



Dimensions in mm

Technical Data P10-70x80U/470

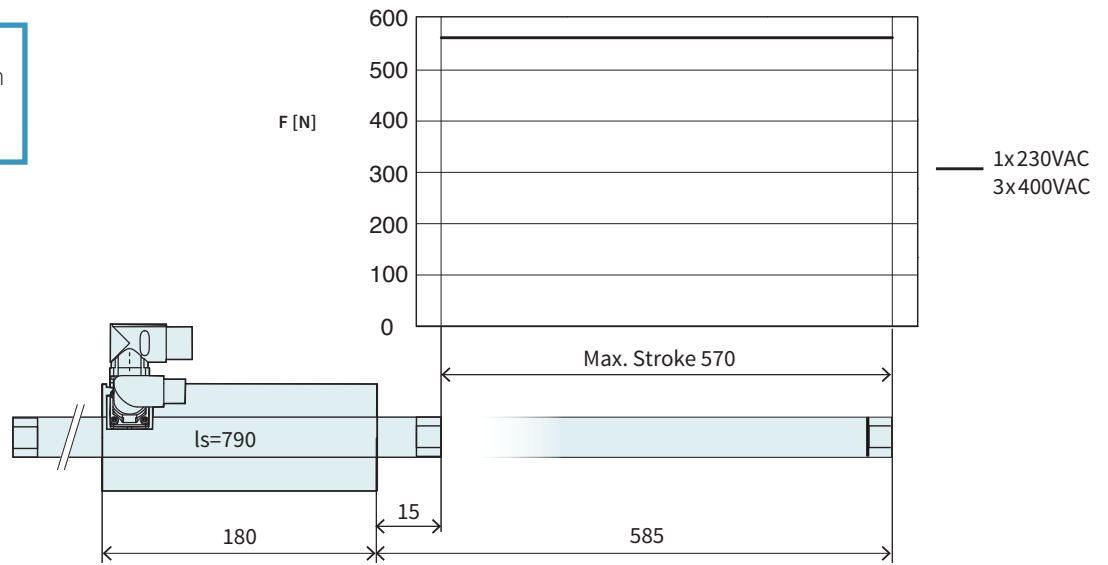
Technical Data P10-70x80U/470			
Stroke			
Max. Stroke	mm (in)	470	(18.49)
Force			
Max. Force @ 1x230VAC	N (lbf)	561	(126)
Max. Force @ 3x400VAC	N (lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	72.1	(16.2)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	6.1	(6.1)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.93 / 1.4 / 2.5	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	690	(27)
Slider Mass	g (lb)	3240	(7.13)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x690/640	Slider for P10-70 'standard'	0150-2197

P10-70x80U/570-BL-QJ

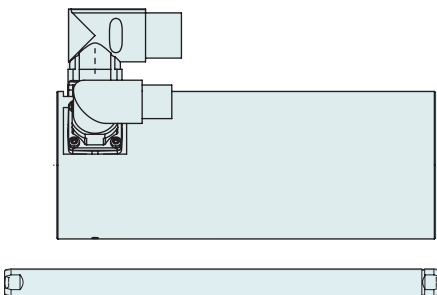
Max. Stroke: 570 mm
Peak Force: 561 N



Dimensions in mm

Technical Data P10-70x80U/570

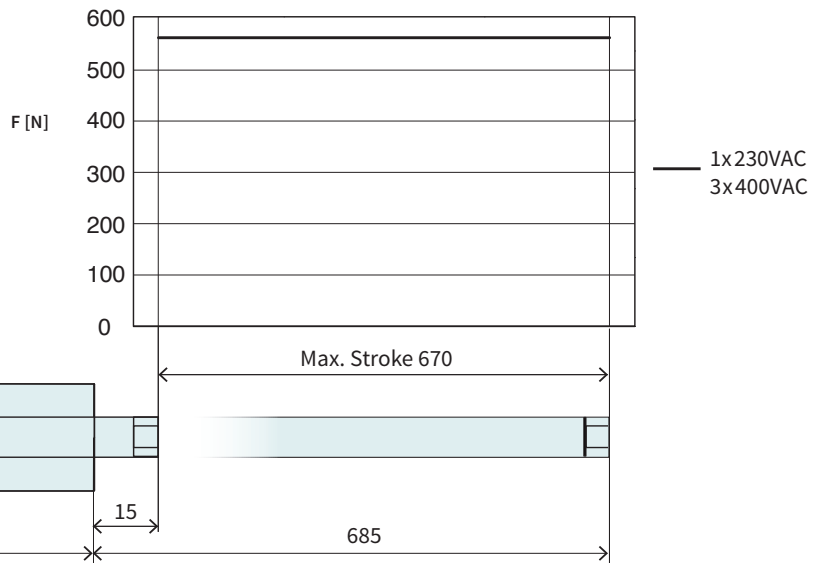
Stroke			
Max. Stroke	mm (in)		570 (22.39)
Force			
Max. Force @ 1x230VAC	N (lbf)		561 (126)
Max. Force @ 3x400VAC	N (lbf)		561 (126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		67 / 100 / 180 (15 / 23 / 41)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		51 (11.5)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		72.1 (16.2)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		3.5 (139.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		6.1 (6.1)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.2
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		10.9 / 7.7
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		10.9 / 7.7
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.93 / 1.4 / 2.5
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / 0.36
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110
Mechanical Data			
Slider Length	mm (in)		790 (31)
Slider Mass	g (lb)		3710 (8.16)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x790/740	Slider for P10-70 'standard'	0150-2198

P10-70x80U/670-BL-QJ

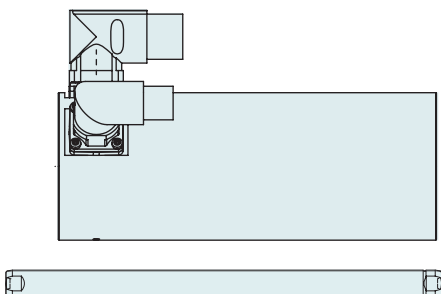
Max. Stroke: 670 mm
Peak Force: 561 N



Dimensions in mm

Technical Data P10-70x80U/670

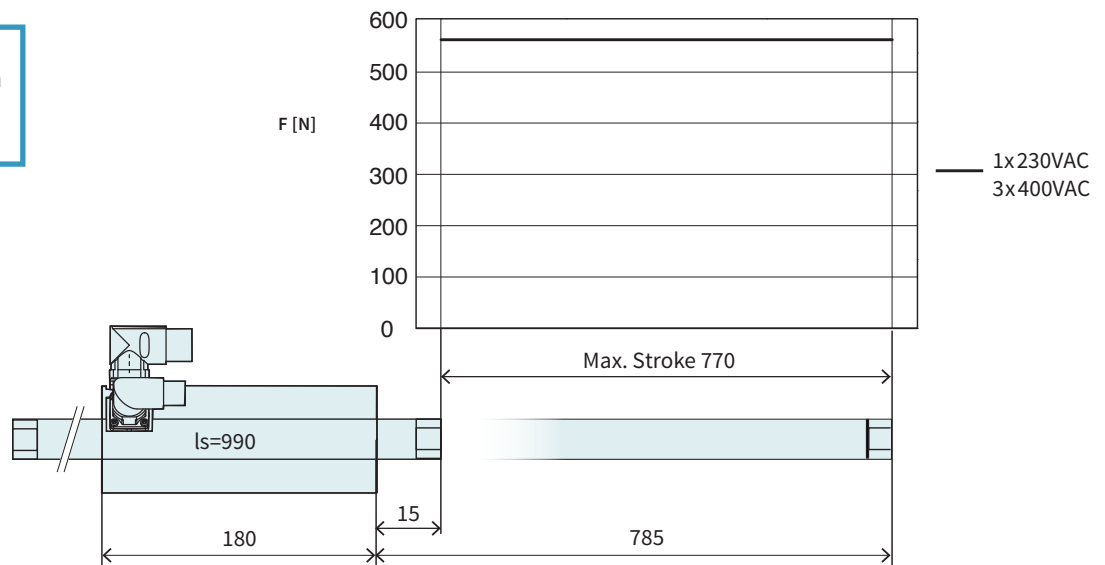
Technical Data P10-70x80U/670			
Stroke			
Max. Stroke	mm (in)	670	(26.39)
Force			
Max. Force @ 1x230VAC	N (lbf)	561	(126)
Max. Force @ 3x400VAC	N (lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	72.1	(16.2)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	6.1	(6.1)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.93 / 1.4 / 2.5	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	890	(35)
Slider Mass	g (lb)	4180	(9.2)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x890/840	Slider for P10-70 'standard'	0150-2199

P10-70x80U/770-BL-QJ

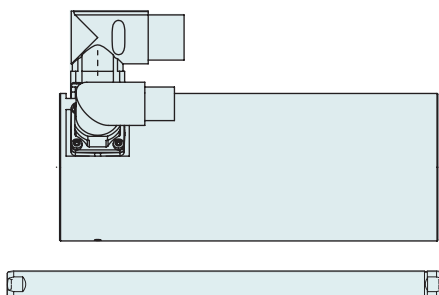
Max. Stroke: 770 mm
Peak Force: 561 N



Dimensions in mm

Technical Data P10-70x80U/770

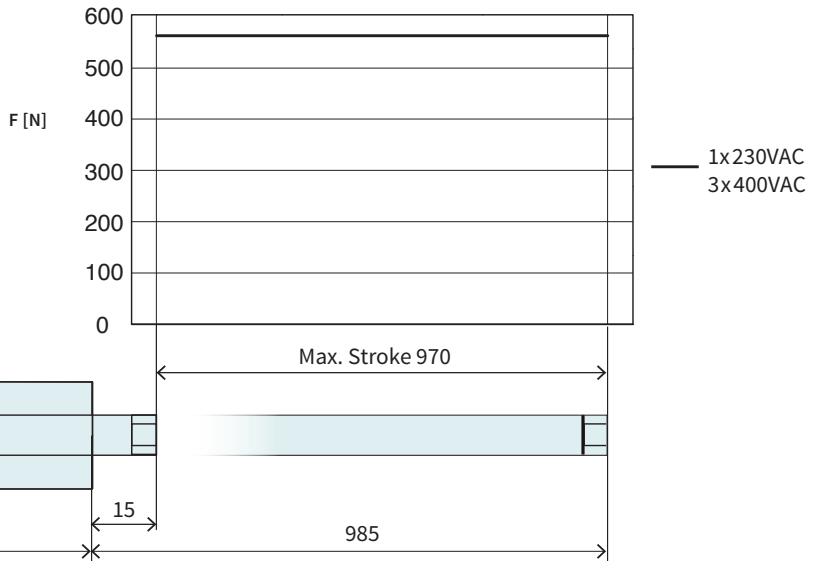
Stroke			
Max. Stroke	mm (in)	770 (30.3)	
Force			
Max. Force @ 1x230VAC	N (lbf)	561 (126)	
Max. Force @ 3x400VAC	N (lbf)	561 (126)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	67 / 100 / 180 (15 / 23 / 41)	
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	51 (11.5)	
Force Constant 2	N/A _{rms} (lbf/A _{rms})	72.1 (16.2)	
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3.5 (139.9)	
Max. Velocity @ 3x400VAC	m/s (in/s)	6.1 (6.1)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.93 / 1.4 / 2.5	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	990 (39)	
Slider Mass	g (lb)	4650 (10.23)	



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x990/940	Slider for P10-70 'standard'	0150-2203

P10-70x80U/970-BL-QJ

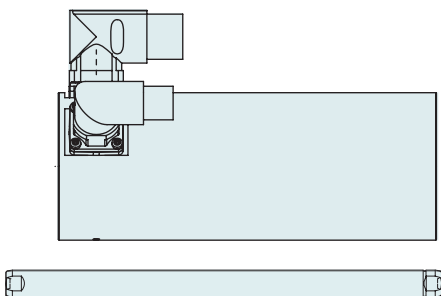
Max. Stroke: 970 mm
Peak Force: 561 N



Dimensions in mm

Technical Data P10-70x80U/970

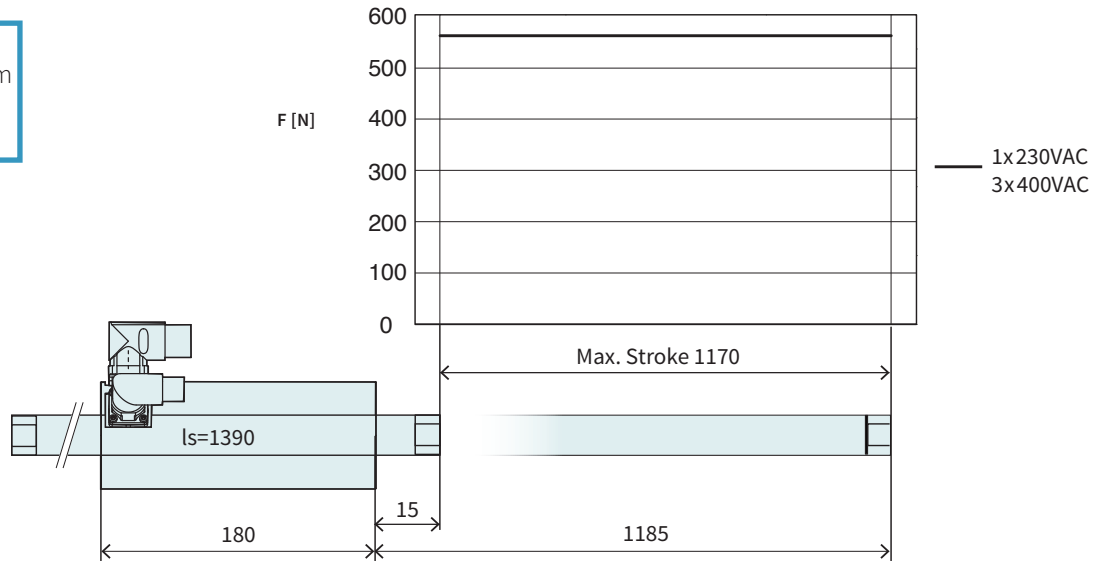
Stroke			
Max. Stroke	mm (in)	970 (38.2)	
Force			
Max. Force @ 1x230VAC	N (lbf)	561 (126)	
Max. Force @ 3x400VAC	N (lbf)	561 (126)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	67 / 100 / 180 (15 / 23 / 41)	
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	51 (11.5)	
Force Constant 2	N/A _{rms} (lbf/A _{rms})	72.1 (16.2)	
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3.5 (139.9)	
Max. Velocity @ 3x400VAC	m/s (in/s)	6.1 (6.1)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.93 / 1.4 / 2.5	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	1190 (47)	
Slider Mass	g (lb)	5590 (12.3)	



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x1190/1140	Slider for P10-70 'standard'	0150-2204

P10-70x80U/1170-BL-QJ

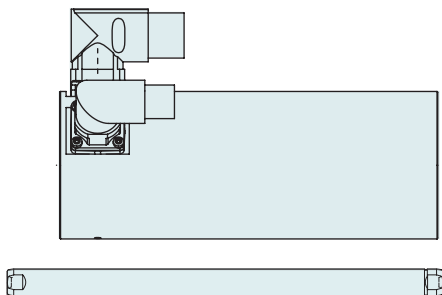
Max. Stroke: 1170 mm
Peak Force: 561 N



Dimensions in mm

Technical Data P10-70x80U/1170

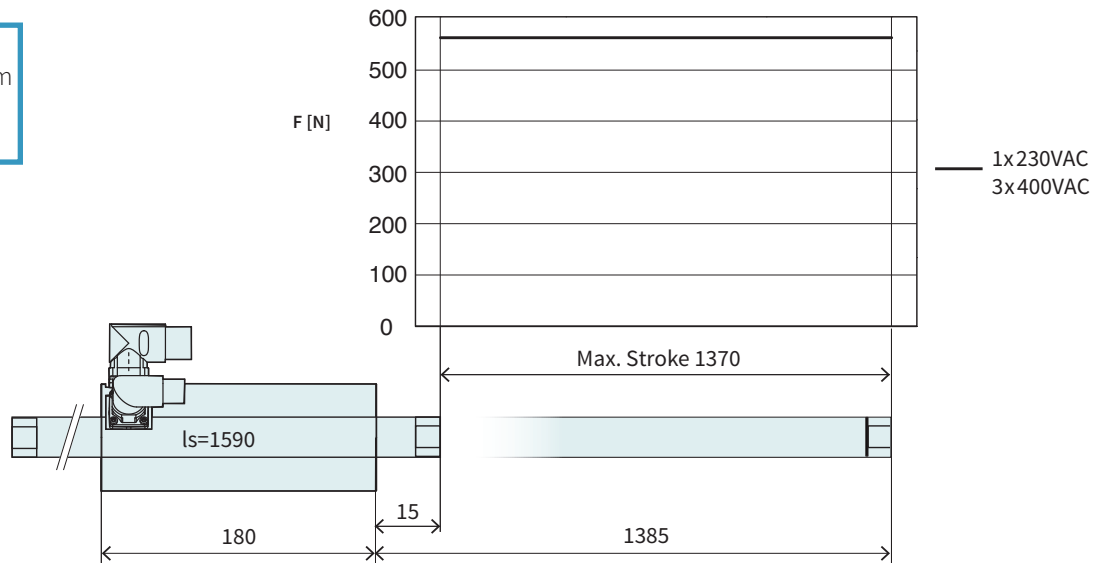
Stroke			
Max. Stroke	mm (in)	1170	(46.1)
Force			
Max. Force @ 1x230VAC	N (lbf)	561	(126)
Max. Force @ 3x400VAC	N (lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	72.1	(16.2)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	6.1	(6.1)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	±0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.93 / 1.4 / 2.5	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	1390	(55)
Slider Mass	g (lb)	6530	(14.37)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x1390/1340	Slider for P10-70 'standard'	0150-2205

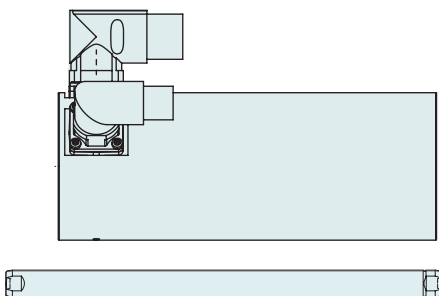
P10-70x80U/1370-BL-QJ

Max. Stroke: 1370 mm
Peak Force: 561 N



Dimensions in mm

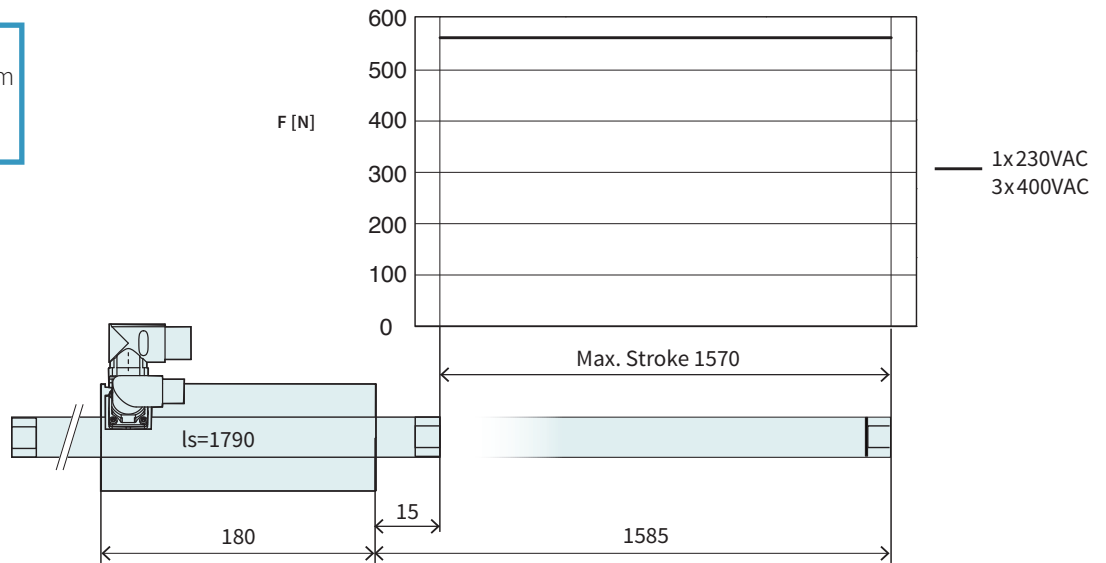
Technical Data P10-70x80U/1370				
Stroke				
Max. Stroke	mm	(in)	1370	(53.89)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	72.1	(16.2)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	6.1	(6.1)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.93 / 1.4 / 2.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	1590	(63)
Slider Mass	g	(lb)	7470	(16.43)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x1590/1540	Slider for P10-70 'standard'	0150-2206

P10-70x80U/1570-BL-QJ

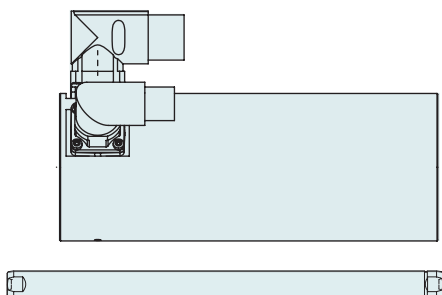
Max. Stroke: 1570 mm
Peak Force: 561 N



Dimensions in mm

Technical Data P10-70x80U/1570

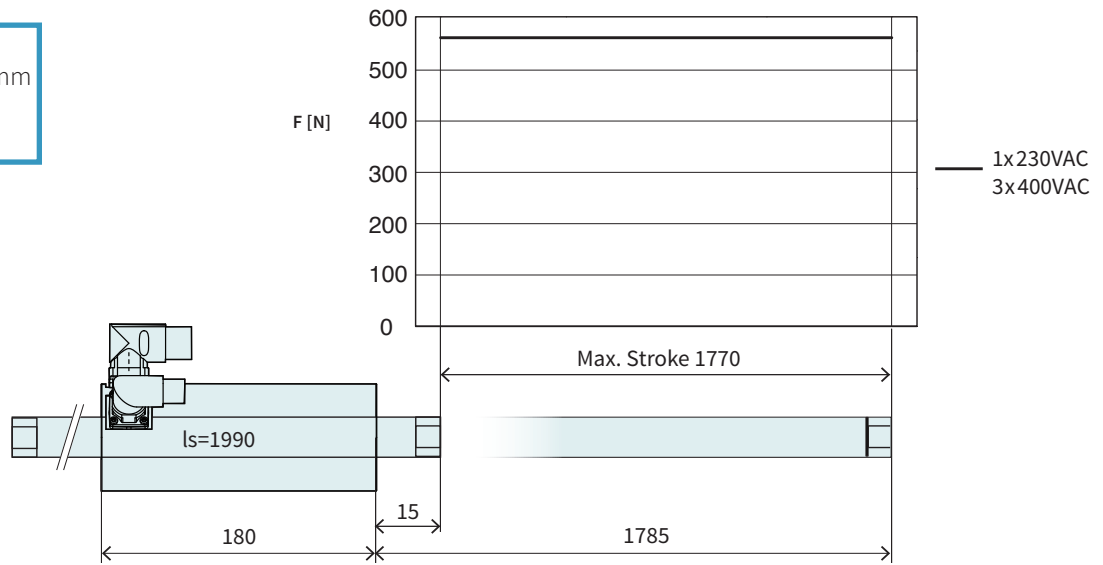
Stroke			
Max. Stroke	mm (in)	1570	(61.79)
Force			
Max. Force @ 1x230VAC	N (lbf)	561	(126)
Max. Force @ 3x400VAC	N (lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	72.1	(16.2)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3.5	(139.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	6.1	(6.1)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	10.9 / 7.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	10.9 / 7.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	1.3 / 2 / 3.5	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	0.93 / 1.4 / 2.5	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	2.6 / 1.1 / 0.36	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	1790	(70)
Slider Mass	g (lb)	8413	(18.51)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x1790/1740	Slider for P10-70 'standard'	0150-2207

P10-70x80U/1770-BL-QJ

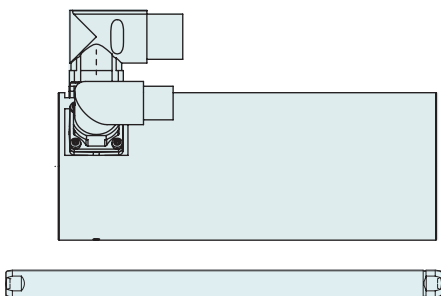
Max. Stroke: 1770 mm
Peak Force: 561 N



Dimensions in mm

Technical Data P10-70x80U/1770

Stroke			
Max. Stroke	mm	(in)	1770 (69.7)
Force			
Max. Force @ 1x230VAC	N	(lbf)	561 (126)
Max. Force @ 3x400VAC	N	(lbf)	561 (126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180 (15 / 23 / 41)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51 (11.5)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	72.1 (16.2)
Velocity			
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.5 (139.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	6.1 (6.1)
Position Detection			
Repeatability	mm	(in)	±0.05 (±0.002)
Linearity	%		± 0.15
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		10.9 / 7.7
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		10.9 / 7.7
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		1.3 / 2 / 3.5
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		0.93 / 1.4 / 2.5
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		2.6 / 1.1 / 0.36
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110
Mechanical Data			
Slider Length	mm	(in)	1990 (78)
Slider Mass	g	(lb)	9350 (20.57)



Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
PL10-28x1990/1940	Slider for P10-70 'standard'	0150-2208

Linear Guides H10



HM10-70x80/70		Linear Module 70x80 with 70 mm Stroke		
→	H-Guide	H10-70x80/70	H-Guide for P10-70x80, Stroke max. 70 mm	0150-5404
	Stator	PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
		PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
		PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
		PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
Slider	PL10-28x290/240	Slider for P10-70 'standard'	0150-2193	
HM10-70x80/170		Linear Module 70x80 with 170 mm Stroke		
→	H-Guide	H10-70x80/170	H-Guide for P10-70x80, Stroke max. 170 mm	0150-5405
	Stator	PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
		PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
		PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
		PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
Slider	PL10-28x390/340	Slider for P10-70 'standard'	0150-2194	
HM10-70x80/270		Linear Module 70x80 with 270 mm Stroke		
→	H-Guide	H10-70x80/270	H-Guide for P10-70x80, Stroke max. 270 mm	0150-5406
	Stator	PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
		PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
		PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
		PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
Slider	PL10-28x590/540	Slider for P10-70 'standard'	0150-2196	

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

HM10-70x80/370 | Linear Module 70x80 with 370 mm Stroke

→	H-Guide	H10-70x80/370	H-Guide for P10-70x80, Stroke max. 370 mm	0150-5407	
	→	Stator	PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
			PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
			PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
			PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
→	Slider	PL10-28x490/440	Slider for P10-70 'standard'	0150-2195	

HM10-70x80/470 | Linear Module 70x80 with 470 mm Stroke

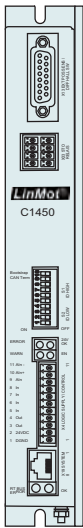
→	H-Guide	H10-70x80/470	H-Guide for P10-70x80, Stroke max. 470 mm	0150-5408	
	→	Stator	PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
			PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
			PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
			PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2708
→	Slider	PL10-28x690/640	Slider for P10-70 'standard'	0150-2196	

Accessories

→	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051
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4

Motor Cable

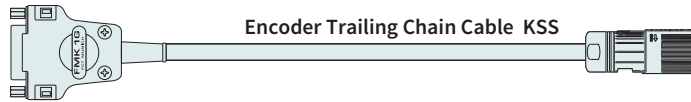
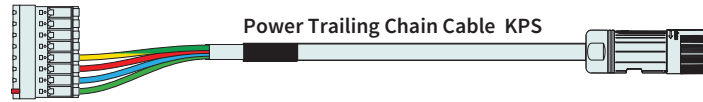


C1450

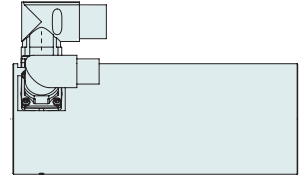


E1400

B Connector MC10-B/m



Q Connector MC10-Q/f

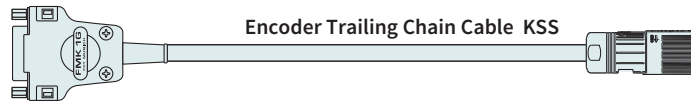
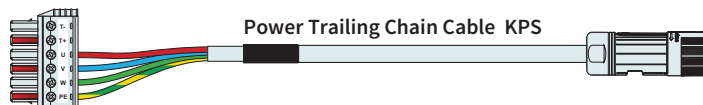


P10-70x80U

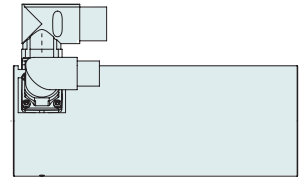
D15 Connector MC01-D15/f

J Connector MC10-J/f

L Connector MC10-L/m



Q Connector MC10-Q/f



P10-70x80U

D15 Connector MC01-D15/f

J Connector MC10-J/f

ORDERING INFORMATION

TRAILING CHAIN CABLE FOR LINMOT DRIVES		
Item	Description	Item-No.
KPS15-04-L/Q-3	Power Trailing Chain Cable E1400/P10-70, 3 m	0150-2266
KPS15-04-L/Q-5	Power Trailing Chain Cable E1400/P10-70, 5 m	0150-2261
KPS15-04-L/Q-8	Power Trailing Chain Cable E1400/P10-70, 8 m	0150-2267
KPS15-04-L/Q-12	Power Trailing Chain Cable E1400/P10-70, 12 m	0150-2268
KPS15-04-L/Q-	Power Trailing Chain Cable L/Q-, Custom length	0150-3388
KPS15-04-B/Q-3	Power Trailing Chain Cable C1400/P10-70, 3 m	0150-3660
KPS15-04-B/Q-5	Power Trailing Chain Cable C1400/P10-70, 5 m	0150-3661
KPS15-04-B/Q-8	Power Trailing Chain Cable C1400/P10-70, 8 m	0150-3662
KPS15-04-B/Q-12	Power Trailing Chain Cable C1400/P10-70, 12 m	0150-3663
KPS15-04-B/Q-	Power Trailing Chain Cable B/Q-, Custom length	0150-3608

KSS 05-02/08-D15/J-3	Encoder Trailing Chain Cable D15/J, 3 m	0150-2263
KSS 05-02/08-D15/J-5	Encoder Trailing Chain Cable D15/J, 5 m	0150-2262
KSS 05-02/08-D15/J-8	Encoder Trailing Chain Cable D15/J, 8 m	0150-2264
KSS 05-02/08-D15/J-12	Encoder Trailing Chain Cable D15/J, 12 m	0150-2265
KSS 05-02/08-D15(f)-45°/J-	Encoder Trailing Chain Cable D15/J-, Custom length	0150-3389

TRAILING CHAIN CABLE FOR STATOR SERIES D01 / D02

Item	Description	Item-No.
KPS15-04-.../Q-10	Power Trailing Chain Cable .../Q, 10 m for D0x	0150-2376
KPS15-04-./Q-	Power Trailing Chain Cable .../Q, for D0x, Custom length	0150-3491
KSS05-02/13-./J-10	Encoder Trailing Chain Cable ./J, 10 m for D0x	0150-2377
KSS05-02/13-./J-	Encoder Trailing Chain Cable ./J, for D0x, Custom length	0150-3492
KPS15-04	Power Trailing Chain Cable P10-70 (per m)	0150-2257
KSS05-02/13	Trailing Chain Cable Encoder P10-...-Dxx (per m)	0150-2259

TRAILING CHAIN CABLE FOR STATOR SERIES D03

Item	Description	Item-No.
KPS15-04/04.../Q-10	Power Trailing Chain Cable .../Q, 10 m for D03	0150-3654
KPS15-04/04-./Q-	Power Trailing Chain Cable .../Q, for D03, Custom length	0150-3579
KSS05-02/06-./J-10	Encoder Trailing Chain Cable ./J, 10 m for D03	0150-3655
KSS05-02/06-./J-	Encoder Trailing Chain Cable ./J, for D03, Custom length	0150-3611
KPS15-04/04	Power Trailing Chain Cable P10-...-Dx3 (per m)	0150-2269
KSS05-02/06	Trailing Chain Cable Encoder P10-...-Dx3 (per m)	0150-2490

CONNECTOR

Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
MC01-D15/f	Motor Connector D15 (f)	0150-3136
MC10-Q/f	Connector Power PS10-70	0150-2268
MC10-J/f	Connector Encoder PS10-70	0150-2269

MOTOR FLANGES



Item	Description	Item-No.
PF10-70x110	Flange for PS10-70x80	0150-2272



Item	Description	Item-No.
PF10-70x110-FC	Flange for PS10-70x80 fluid cooling	0150-2291

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



Item	Description	Item-No.
PB10-70x80-L	Bearing Kit for PS10-70x80	0150-3431

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LUBRICANT RESERVOIR



Item	Description	Item-No.
PA10-70/28	Lubricant reservoir for PS10-70 with lubricating nipple	0150-3543

EXTERNAL POSITION SENSORS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

A series of horizontal dotted lines for taking notes.

LINEAR MOTORS P10-70x160U



- ✓ 3 x 400VAC Technology
- ✓ Peak forces up to 1120 N
- ✓ Extremely high dynamic
- ✓ Separate connector for sensor and power cable
- ✓ Can also be controlled by standard third-party servo drives

LINEAR MOTORS P10-70x160U

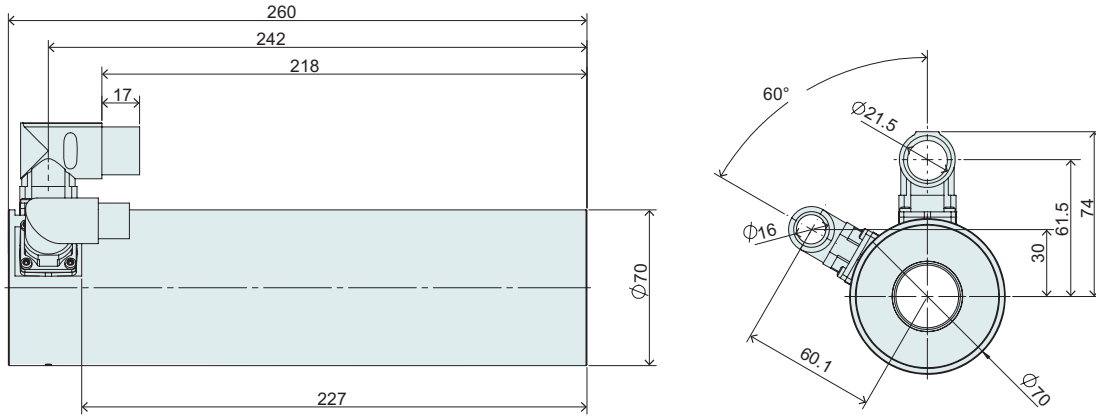
Technical Data	519
Motor Specifications	
P10-70x160U/90	524
P10-70x160U/190	525
P10-70x160U/290	526
P10-70x160U/390	527
P10-70x160U/490	528
P10-70x160U/590	529
P10-70x160U/690	530
P10-70x160U/890	531
P10-70x160U/1090	532
P10-70x160U/1290	533
P10-70x160U/1490	534
P10-70x160U/1690	535
Linear Guides	536
Accessories	538



MOTOR FAMILY P10-70x160U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1690	(66.49)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1120	(252)
Max. Force @ 3x400VAC	N	(lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	56	(12.6)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	79.2	(17.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.6	(219.9)
Position Detection				
Position Resolution	mm	(in)	0.005	(0.0002)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.7 / 2.5 / 4.4	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	64.7	(1.64)
Terminal Resistance 25 °C / 120 °C	Ohm		8.3 / 11	
Terminal Inductivity	mH		16	
Magnetic Period	mm	(in)	40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Stator Diameter	mm	(in)	70	(2.8)
Stator Length	mm	(in)	260	(10)
Stator Mass	g	(lb)	4200	(9.24)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	390 - 1990	(15 - 78)
Slider Mass	g	(lb)	1830 - 9350	(4.03 - 20.57)
IP Code			IP 65	

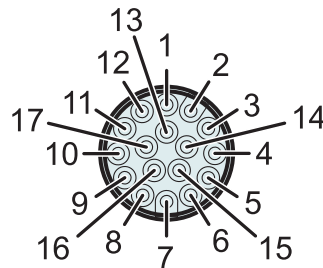
STATOR



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709

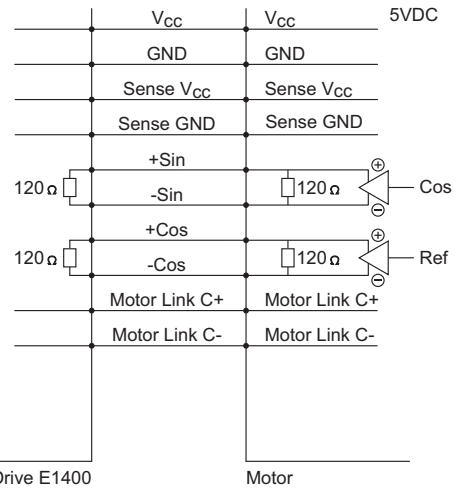
CONNECTOR PS10-70x160U-BL-QJ

Motor Connector Wiring	Connector Encoder J	Wire Color Motor Cable	
+5 VDC	Supply	1	red
GND	Supply	2	black
Sense +5V	Supply Sense	3	white
Sense GND	Supply Sense	4	brown
Mot. Link C+	Communication	5	pink
Mot. Link C-	Communication	6	grey
Sin+	Encoder	7	yellow
Sin-	Encoder	8	orange
Cos+	Encoder	9	green
Cos-	Encoder	10	blue
n. c.	n. c.	11	n. c.
n. c.	n. c.	12	n. c.
n. c.	n. c.	13	n. c.
n. c.	n. c.	14	n. c.
n. c.	n. c.	15	n. c.
n. c.	n. c.	16	n. c.
n. c.	n. c.	17	n. c.

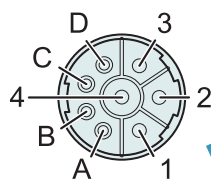


Connector Encoder J

View: Motor connector, plug side

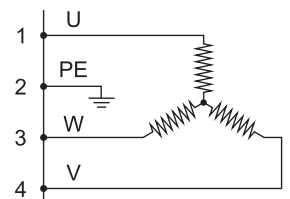


Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red
PE	2	yellow-green
Phase W	3	green
Phase V	4	blue
n. c.	A	n. c.
n. c.	B	n. c.
n. c.	C	n. c.
n. c.	D	n. c.

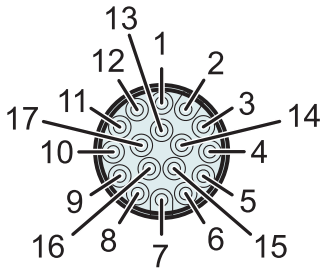


Connector Power Q

View: Motor connector, plug side



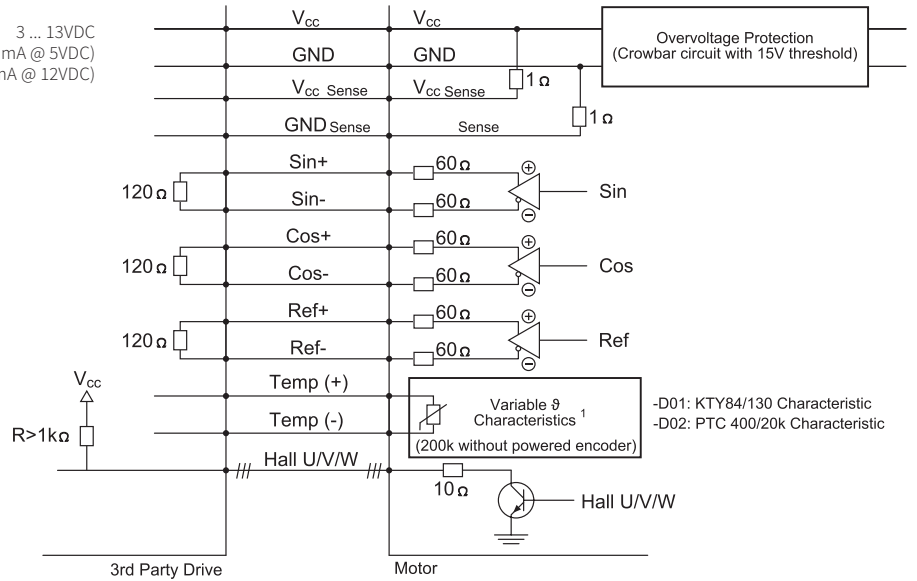
CONNECTOR PS10-70x160U-BL-QJ-D01/02



Connector Encoder J

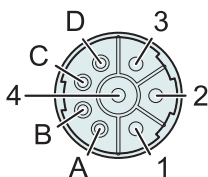
View: Motor connector, plug side

3 ... 13VDC
(I_{max} < 150mA @ 5VDC)
(I_{max} < 80mA @ 12VDC)



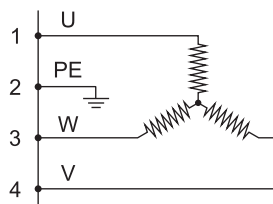
Motor Connector Wiring				
PS10-70x160U-BL-QJ-D01	PS10-70x160U-BL-QJ-D02	Function	Connector Encoder J	Wire Color Motor Cable
3 ... 13 VDC	3 ... 13 VDC	Supply	1	white
GND	GND	Supply	2	brown
Vcc Sense (optional)	Vcc Sense (optional)	Supply Sense	3	green
GND Sense (optional)	GND Sense (optional)	Supply Sense	4	yellow
Do not connect	Do not connect	-	5	-
Do not connect	Do not connect	-	6	-
Sin+	Sin+	Encoder 1 Vpp	7	grey
Sin-	Sin-	Encoder 1 Vpp	8	pink
Cos+	Cos+	Encoder 1 Vpp	9	blue
Cos-	Cos-	Encoder 1 Vpp	10	red
Ref+	Ref+	Encoder 1 Vpp	11	black
Ref-	Ref-	Encoder 1 Vpp	12	violett
Hall U	Hall U	Encoder (open collector)	13	grey-red
Hall V	Hall V	Encoder (open collector)	14	red-blue
Hall W	Hall W	Encoder (open collector)	15	white-green
Temp+ (KTY84/130 Char.)	Temp+ (PTC 400/20k Char.)	Temperature ¹	16	yellow-brown
Temp- (KTY84/130 Char.)	Temp- (PTC 400/20k Char.)	Temperature ¹	17	white-yellow

1) The temperature evaluation circuit must be powered from the encoder supply and must be at the same potential. The grounds of the temperature evaluation circuit and the encoder have to be connected. The encoder must have been powered on for at least 50 ms, before valid temperatures can be measured. If the encoder is powered off, 200k Ohms are measured between Pins 16 and 17. The maximum voltage between Pin 16 and 17 must not exceed 16 VDC. The maximum current must not exceed 15 mA.



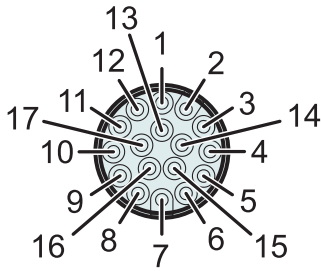
Connector Power Q

View: Motor connector, plug side



Motor Connector Wiring			
PS10-70x160U-BL-QJ-D01	PS10-70x160U-BL-QJ-D02	Connector Power Q	Wire Color Motor Cable
Phase U	Phase U	1	red
PE	PE	2	yellow-green
Phase W	Phase W	3	green
Phase V	Phase V	4	blue
n. c.	n. c.	A	n. c.
n. c.	n. c.	B	n. c.
n. c.	n. c.	C	n. c.
n. c.	n. c.	D	n. c.

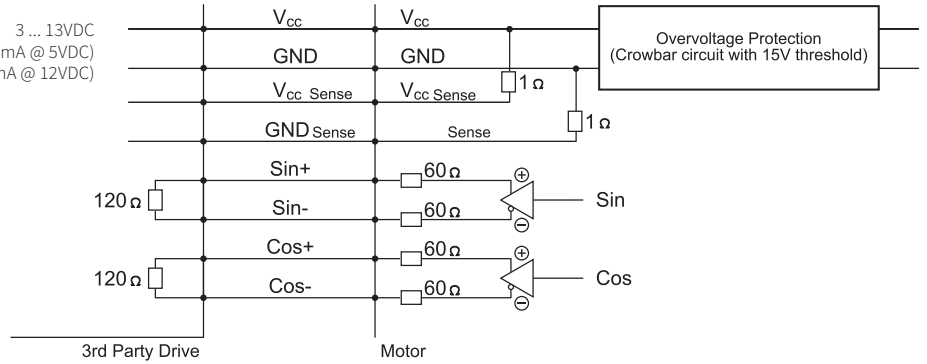
CONNECTOR PS10-70x160U-BL-QJ-D03



Connector Encoder J

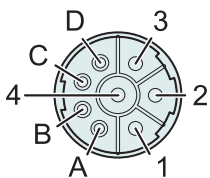
View: Motor connector, plug side

3 ... 13VDC
($I_{max} < 150\text{mA}$ @ 5VDC)
($I_{max} < 80\text{mA}$ @ 12VDC)

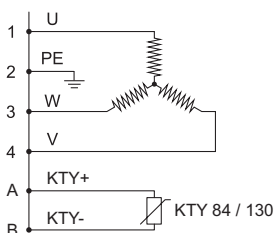


Motor Connector Wiring		Connector Encoder J	Wire Color Motor Cable
3 ... 13VDC	Supply	1	red
GND	Supply	2	black
Vcc Sense (optional)	Supply Sense	3	white
GND Sense (optional)	Supply Sense	4	brown
Do not connect	-	5	-
Do not connect	-	6	-
Sin+	Encoder 1 Vpp	7	yellow
Sin-	Encoder 1 Vpp	8	orange
Cos+	Encoder 1 Vpp	9	green
Cos-	Encoder 1 Vpp	10	blue
n. c.	-	11	n. c.
n. c.	-	12	n. c.
n. c.	-	13	n. c.
Do not connect	-	14	n. c.
n. c.	-	15	n. c.
n. c.	-	16	n. c.
n. c.	-	17	n. c.

Connector Power Q



View: Motor connector, plug side

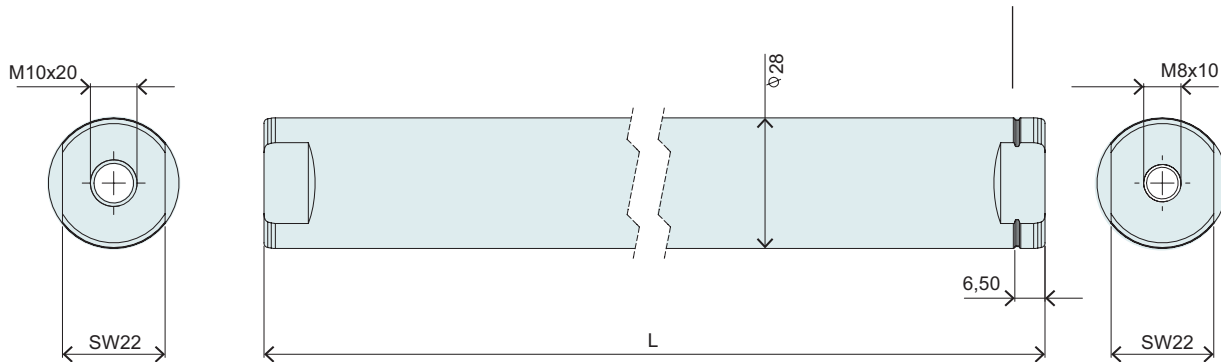


Motor Connector Wiring	Lesitungsstecker Q	Wire Color Motor Cable
Phase U	1	red (previously: black 1)
PE	2	yellow-green
Phase W	3	green (previously: black 3)
Phase V	4	blue (previously: black 2)
KTY+	A	purple (previously: black 5)
KTY-	B	grey (previously: black 6)
n. c.	C	yellow (previously: black 7)
n. c.	D	brown (previously: black 8)

SLIDER

Slider Standard

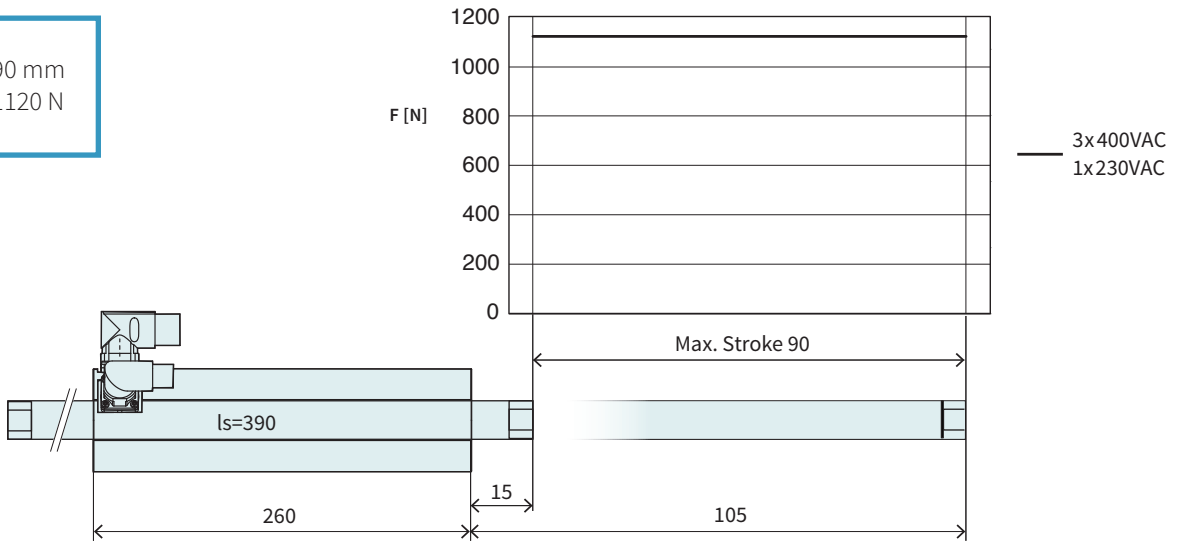
Number of grooves determines the slider type (see chapter 2 / slider) and marks the front end.



Slider Standard			
Item	Description	Max. Stroke [mm]	Item-No.
PL10-28x390/340	Slider for P10-70 'standard'	70	0150-2194
PL10-28x490/440	Slider for P10-70 'standard'	170	0150-2195
PL10-28x590/540	Slider for P10-70 'standard'	270	0150-2196
PL10-28x690/640	Slider for P10-70 'standard'	370	0150-2197
PL10-28x790/740	Slider for P10-70 'standard'	470	0150-2198
PL10-28x890/840	Slider for P10-70 'standard'	570	0150-2199
PL10-28x990/940	Slider for P10-70 'standard'	670	0150-2203
PL10-28x1190/1140	Slider for P10-70 'standard'	770	0150-2204
PL10-28x1390/1340	Slider for P10-70 'standard'	970	0150-2205
PL10-28x1590/1540	Slider for P10-70 'standard'	1170	0150-2206
PL10-28x1790/1740	Slider for P10-70 'standard'	1370	0150-2207
PL10-28x1990/1940	Slider for P10-70 'standard'	1570	0150-2208

P10-70x160U/90-BL-QJ

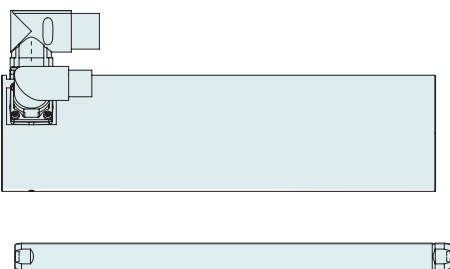
Max. Stroke: 90 mm
Peak Force: 1120 N



Dimensions in mm

Technical Data P10-70x160U/90

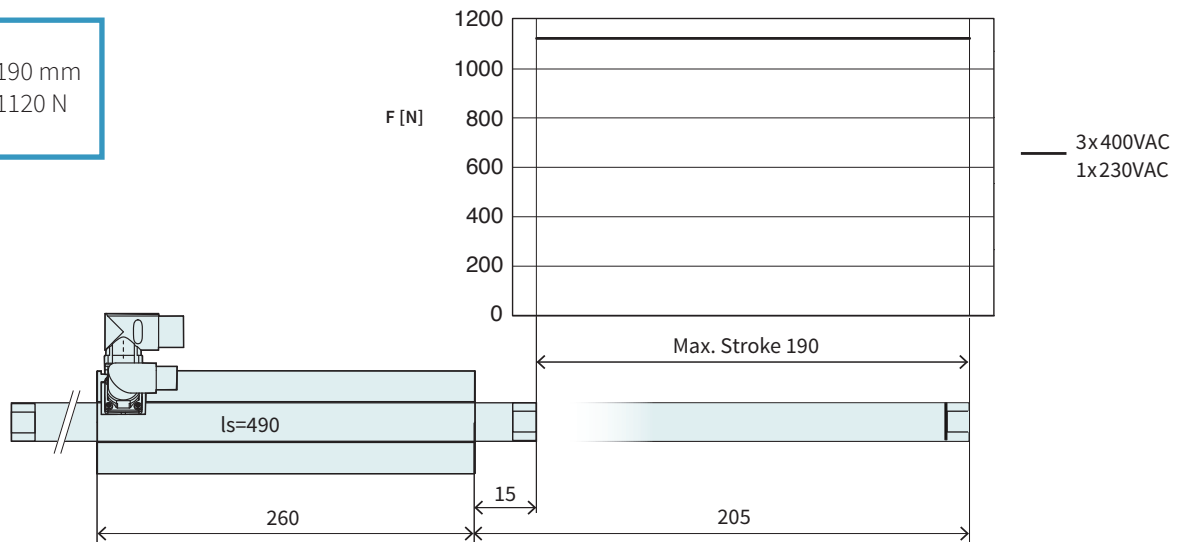
Technical Data P10-70x160U/90			
Stroke			
Max. Stroke	mm (in)	90 (3.53)	
Force			
Max. Force @ 1x230VAC	N (lbf)	1120 (252)	
Max. Force @ 3x400VAC	N (lbf)	1120 (252)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	130 / 200 / 350 (29 / 45 / 79)	
Max. Border Force relative	%	100	
Force Constant 1	N/A_{pk} (lbf/ A_{pk})	56 (12.6)	
Force Constant 2	N/A_{rms} (lbf/ A_{rms})	79.2 (17.8)	
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3.2 (129.9)	
Max. Velocity @ 3x400VAC	m/s (in/s)	5.6 (5.6)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.65	
Electrical Data			
Max. Current @ 1x230VAC	A_{pk} / A_{rms}	19.9 / 14	
Max. Current @ 3x400VAC	A_{pk} / A_{rms}	19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A_{pk}	2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A_{rms}	1.7 / 2.5 / 4.4	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	390 (15)	
Slider Mass	g (lb)	1830 (4.03)	



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x390/340	Slider for P10-70 'standard'	0150-2194

P10-70x160U/190-BL-QJ

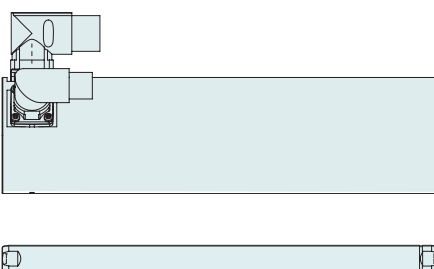
Max. Stroke: 190 mm
Peak Force: 1120 N



Dimensions in mm

Technical Data P10-70x160U/190

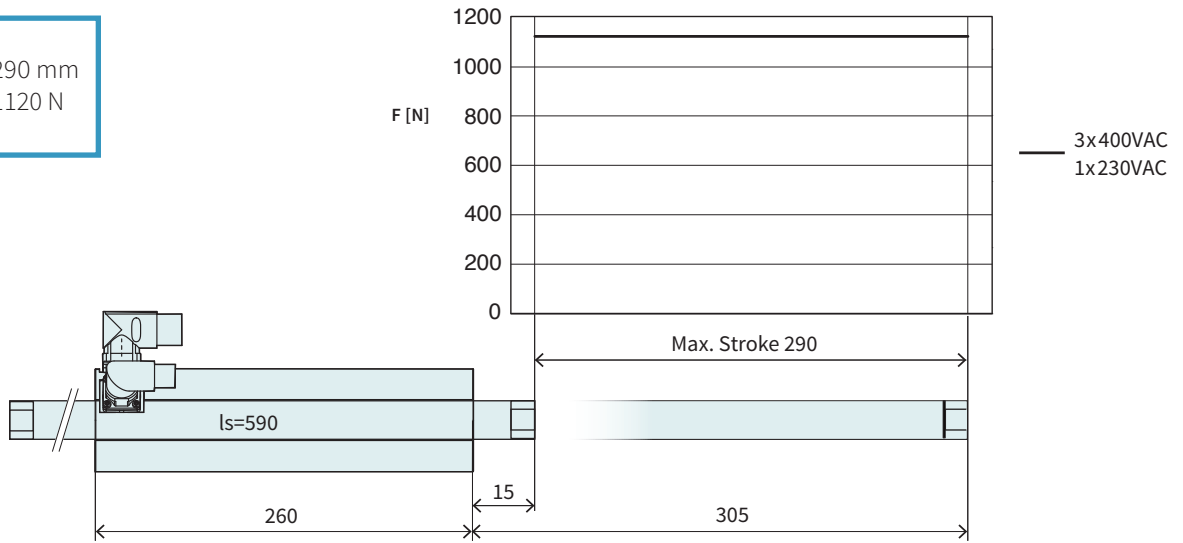
Stroke			
Max. Stroke	mm (in)	190	(7.48)
Force			
Max. Force @ 1x230VAC	N (lbf)	1120	(252)
Max. Force @ 3x400VAC	N (lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	56	(12.6)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	79.2	(17.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	5.6	(5.6)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.35	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	1.7 / 2.5 / 4.4	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	490	(19)
Slider Mass	g (lb)	2300	(5.06)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x490/440	Slider for P10-70 'standard'	0150-2195

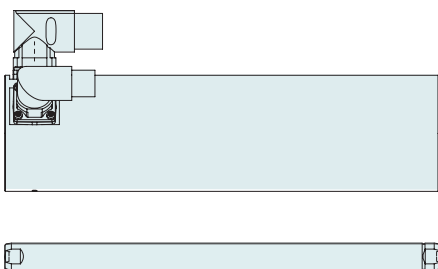
P10-70x160U/290-BL-QJ

Max. Stroke: 290 mm
Peak Force: 1120 N



Dimensions in mm

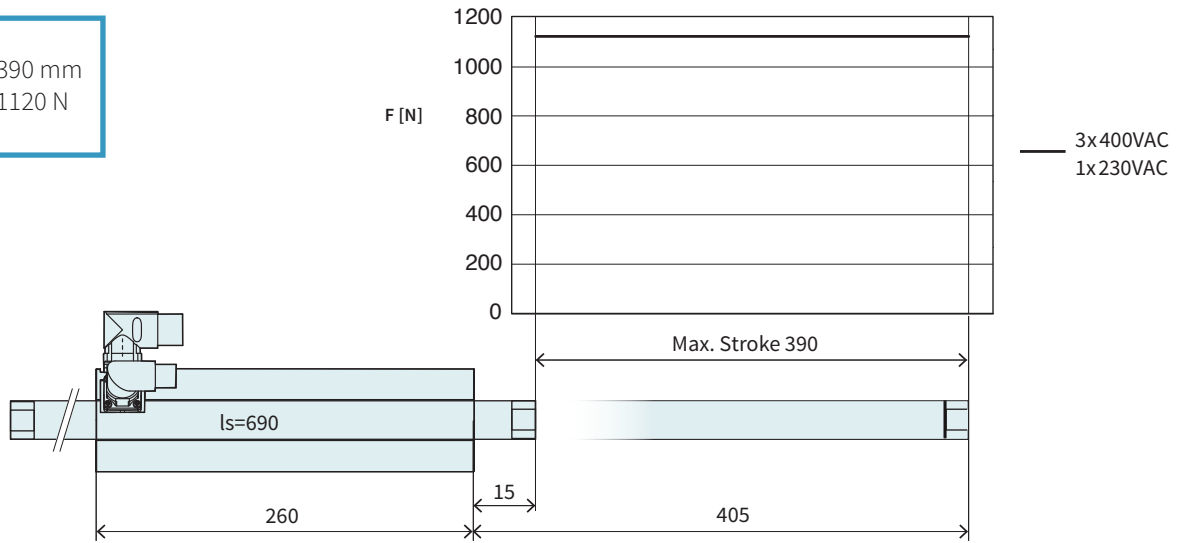
Technical Data P10-70x160U/290			
Stroke			
Max. Stroke	mm (in)		290 (11.4)
Force			
Max. Force @ 1x230VAC	N (lbf)		1120 (252)
Max. Force @ 3x400VAC	N (lbf)		1120 (252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		130 / 200 / 350 (29 / 45 / 79)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		56 (12.6)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		79.2 (17.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		3.2 (129.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		5.6 (5.6)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.25
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.9 / 14
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.9 / 14
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.3 / 3.6 / 6.3
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.7 / 2.5 / 4.4
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.56 / 0.18
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110
Mechanical Data			
Slider Length	mm (in)		590 (23)
Slider Mass	g (lb)		2770 (6.09)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x590/540	Slider for P10-70 'standard'	0150-2196

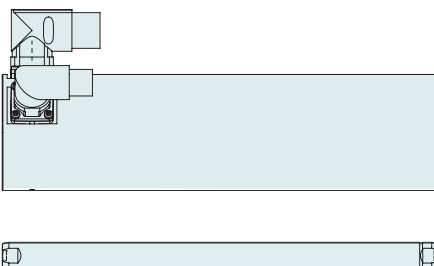
P10-70x160U/390-BL-QJ

Max. Stroke: 390 mm
Peak Force: 1120 N



Dimensions in mm

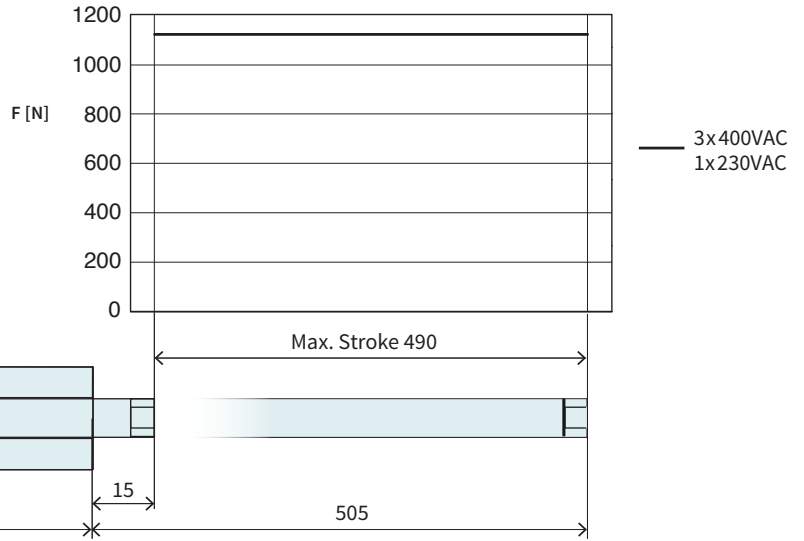
Technical Data P10-70x160U/390			
Stroke			
Max. Stroke	mm (in)		390 (15.4)
Force			
Max. Force @ 1x230VAC	N (lbf)		1120 (252)
Max. Force @ 3x400VAC	N (lbf)		1120 (252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		130 / 200 / 350 (29 / 45 / 79)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		56 (12.6)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		79.2 (17.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		3.2 (129.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		5.6 (5.6)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.25
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.9 / 14
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.9 / 14
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.3 / 3.6 / 6.3
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.7 / 2.5 / 4.4
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.56 / 0.18
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110
Mechanical Data			
Slider Length	mm (in)		690 (27)
Slider Mass	g (lb)		3240 (7.13)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x690/640	Slider for P10-70 'standard'	0150-2197

P10-70x160U/490-BL-QJ

Max. Stroke: 490 mm
Peak Force: 1120 N



Dimensions in mm

Technical Data P10-70x160U/490

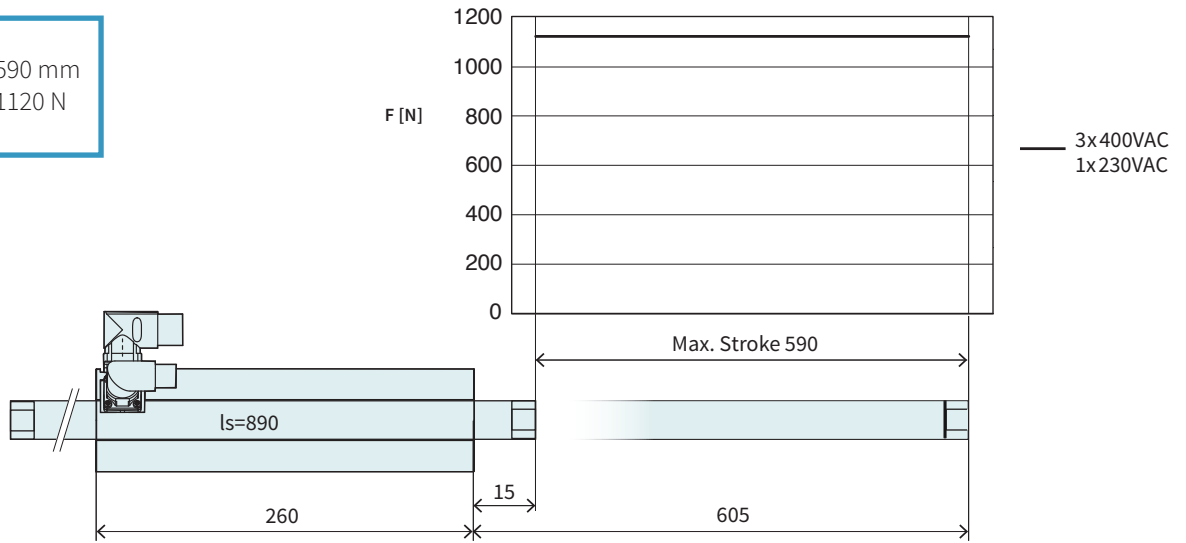
Stroke			
Max. Stroke	mm (in)		490 (19.3)
Force			
Max. Force @ 1x230VAC	N (lbf)		1120 (252)
Max. Force @ 3x400VAC	N (lbf)		1120 (252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		130 / 200 / 350 (29 / 45 / 79)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		56 (12.6)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		79.2 (17.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		3.2 (129.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		5.6 (5.6)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.2
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.9 / 14
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.9 / 14
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.3 / 3.6 / 6.3
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.7 / 2.5 / 4.4
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.56 / 0.18
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110
Mechanical Data			
Slider Length	mm (in)		790 (31)
Slider Mass	g (lb)		3710 (8.16)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x790/740	Slider for P10-70 'standard'	0150-2198

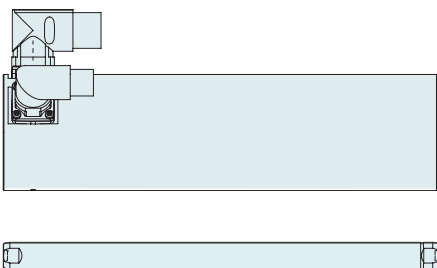
P10-70x160U/590-BL-QJ

Max. Stroke: 590 mm
Peak Force: 1120 N



Dimensions in mm

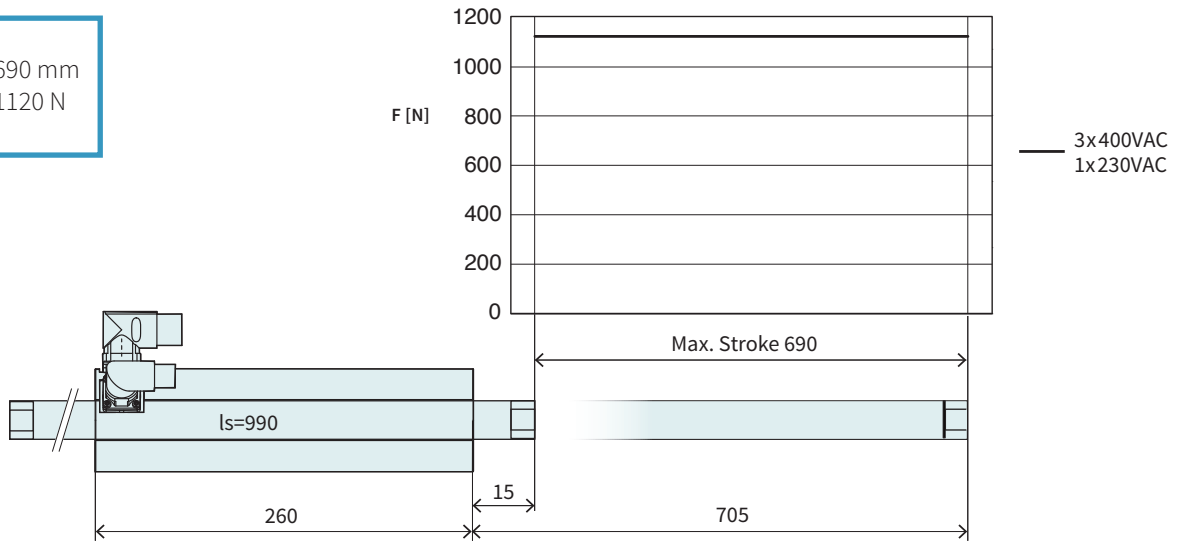
Technical Data P10-70x160U/590			
Stroke			
Max. Stroke	mm (in)	590	(23.19)
Force			
Max. Force @ 1x230VAC	N (lbf)	1120	(252)
Max. Force @ 3x400VAC	N (lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	56	(12.6)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	79.2	(17.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	5.6	(5.6)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	1.7 / 2.5 / 4.4	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	890	(35)
Slider Mass	g (lb)	4180	(9.2)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x890/840	Slider for P10-70 'standard'	0150-2199

P10-70x160U/690-BL-QJ

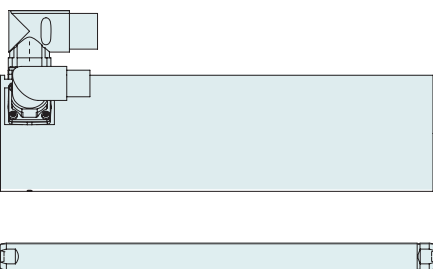
Max. Stroke: 690 mm
Peak Force: 1120 N



Dimensions in mm

Technical Data P10-70x160U/690

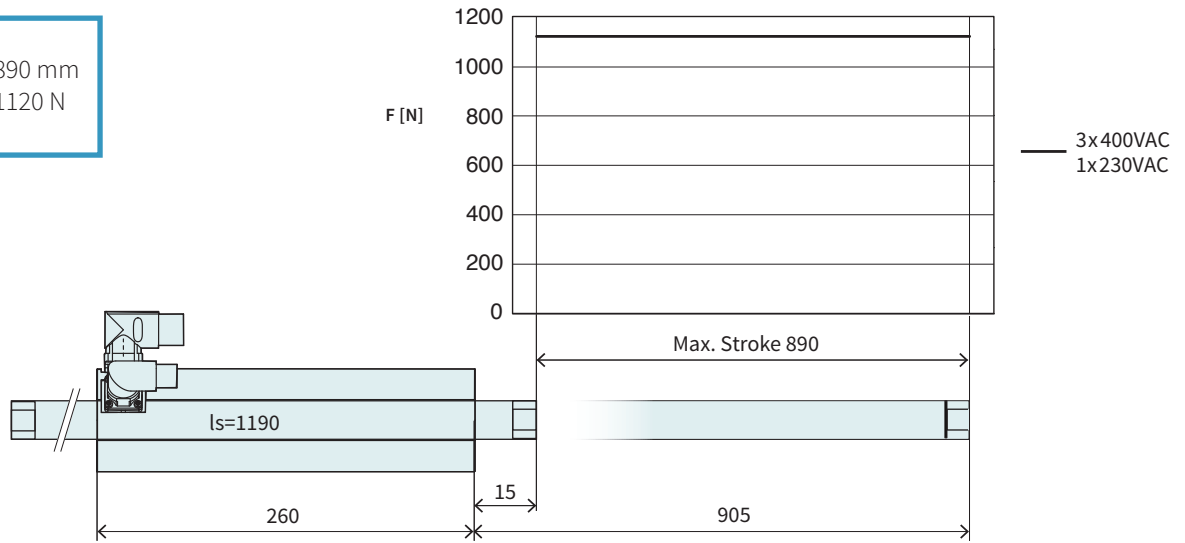
Stroke			
Max. Stroke	mm	(in)	690 (27.19)
Force			
Max. Force @ 1x230VAC	N	(lbf)	1120 (252)
Max. Force @ 3x400VAC	N	(lbf)	1120 (252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / 200 / 350 (29 / 45 / 79)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	56 (12.6)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	79.2 (17.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.2 (129.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.6 (5.6)
Position Detection			
Repeatability	mm	(in)	±0.05 (±0.002)
Linearity	%		± 0.15
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	1.7 / 2.5 / 4.4	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm	(in)	990 (39)
Slider Mass	g	(lb)	4650 (10.23)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x990/940	Slider for P10-70 'standard'	0150-2203

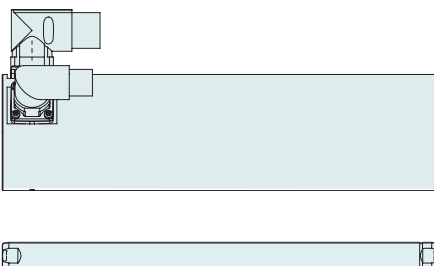
P10-70x160U/890-BL-QJ

Max. Stroke: 890 mm
Peak Force: 1120 N



Dimensions in mm

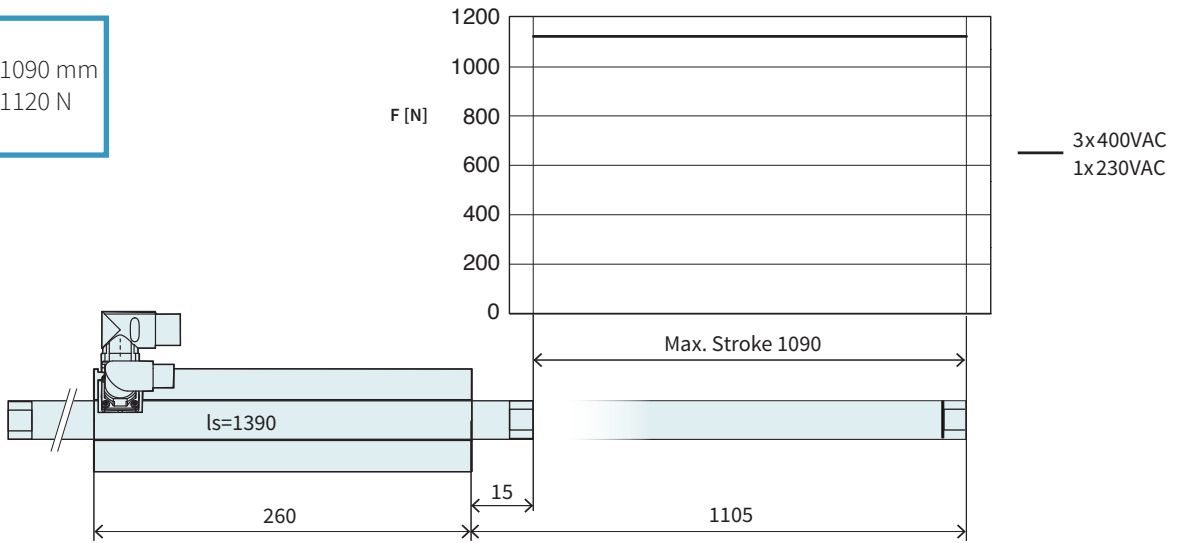
Technical Data P10-70x160U/890			
Stroke			
Max. Stroke	mm (in)	890	(34.99)
Force			
Max. Force @ 1x230VAC	N (lbf)	1120	(252)
Max. Force @ 3x400VAC	N (lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	56	(12.6)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	79.2	(17.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	5.6	(5.6)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	1.7 / 2.5 / 4.4	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	1190	(47)
Slider Mass	g (lb)	5590	(12.3)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x1190/1140	Slider for P10-70 'standard'	0150-2204

P10-70x160U/1090-BL-QJ

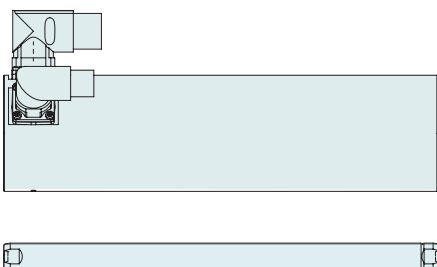
Max. Stroke: 1090 mm
Peak Force: 1120 N



Dimensions in mm

Technical Data P10-70x160U/1090

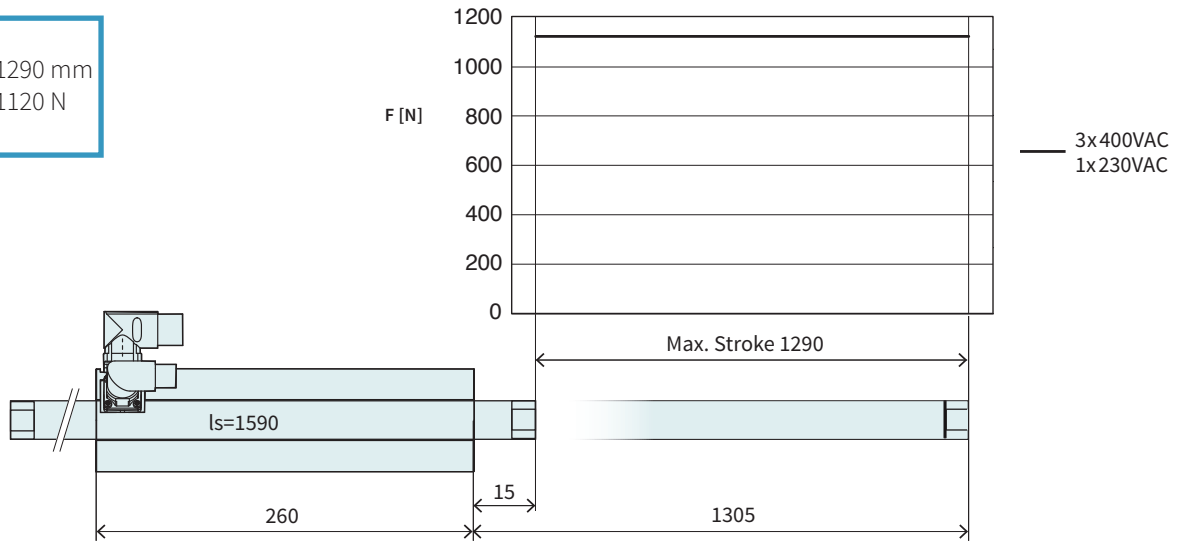
Stroke			
Max. Stroke	mm (in)	1090	(42.89)
Force			
Max. Force @ 1x230VAC	N (lbf)	1120	(252)
Max. Force @ 3x400VAC	N (lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	56	(12.6)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	79.2	(17.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	5.6	(5.6)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	1.7 / 2.5 / 4.4	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	1390	(55)
Slider Mass	g (lb)	6530	(14.37)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x1390/1340	Slider for P10-70 'standard'	0150-2205

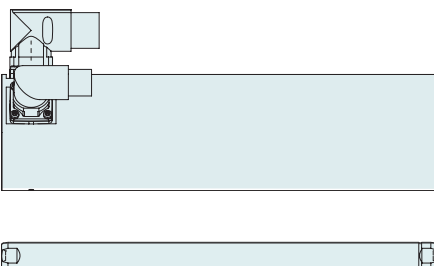
P10-70x160U/1290-BL-QJ

Max. Stroke: 1290 mm
Peak Force: 1120 N



Dimensions in mm

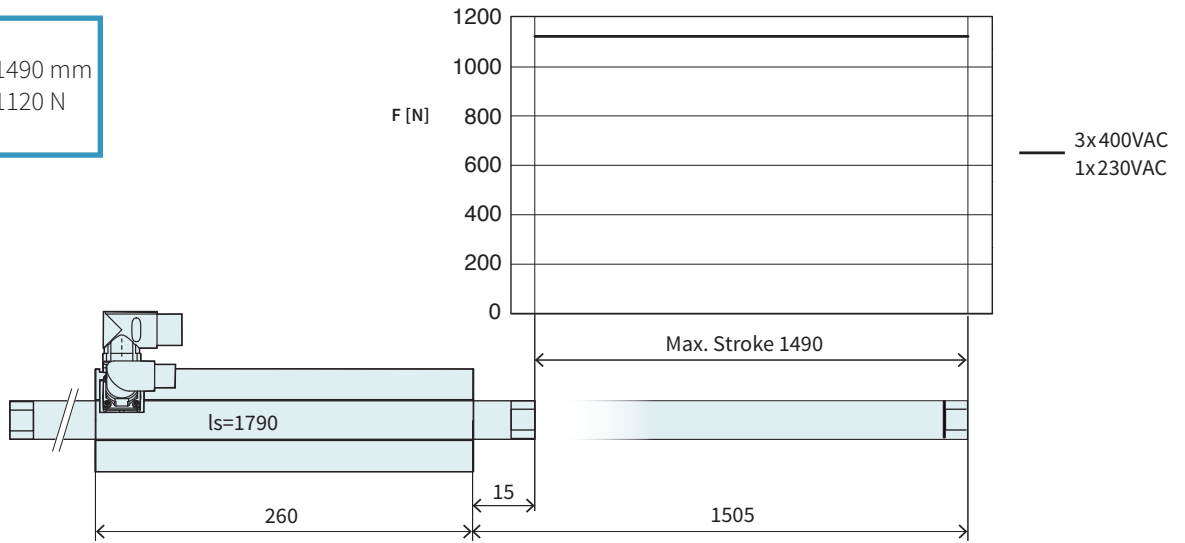
Technical Data P10-70x160U/1290			
Stroke			
Max. Stroke	mm (in)		1290 (50.79)
Force			
Max. Force @ 1x230VAC	N (lbf)		1120 (252)
Max. Force @ 3x400VAC	N (lbf)		1120 (252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		130 / 200 / 350 (29 / 45 / 79)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		56 (12.6)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		79.2 (17.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		3.2 (129.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		5.6 (5.6)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.15
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.9 / 14
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.9 / 14
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.3 / 3.6 / 6.3
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.7 / 2.5 / 4.4
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.56 / 0.18
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110
Mechanical Data			
Slider Length	mm (in)		1590 (63)
Slider Mass	g (lb)		7470 (16.43)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x1590/1540	Slider for P10-70 'standard'	0150-2206

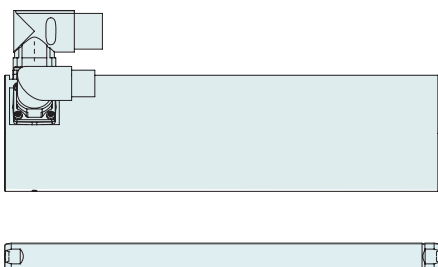
P10-70x160U/1490-BL-QJ

Max. Stroke: 1490 mm
Peak Force: 1120 N



Dimensions in mm

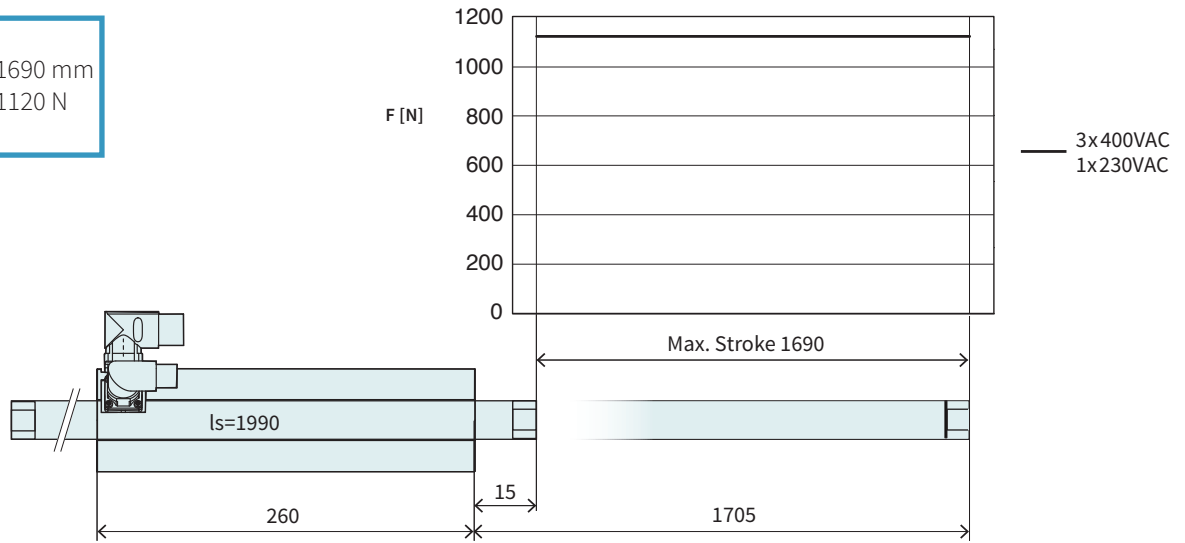
Technical Data P10-70x160U/1490			
Stroke			
Max. Stroke	mm (in)	1490	(58.7)
Force			
Max. Force @ 1x230VAC	N (lbf)	1120	(252)
Max. Force @ 3x400VAC	N (lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%	100	
Force Constant 1	N/A_{pk} (lbf/ A_{pk})	56	(12.6)
Force Constant 2	N/A_{rms} (lbf/ A_{rms})	79.2	(17.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	5.6	(5.6)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A_{pk} / A_{rms}	19.9 / 14	
Max. Current @ 3x400VAC	A_{pk} / A_{rms}	19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A_{pk}	2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A_{rms}	1.7 / 2.5 / 4.4	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	1790	(70)
Slider Mass	g (lb)	8413	(18.51)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x1790/1740	Slider for P10-70 'standard'	0150-2207

P10-70x160U/1690-BL-QJ

Max. Stroke: 1690 mm
Peak Force: 1120 N



Technical Data P10-70x160U/1690			
Stroke			
Max. Stroke	mm (in)	1690	(66.49)
Force			
Max. Force @ 1x230VAC	N (lbf)	1120	(252)
Max. Force @ 3x400VAC	N (lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	56	(12.6)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	79.2	(17.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	5.6	(5.6)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	1.7 / 2.5 / 4.4	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	1990	(78)
Slider Mass	g (lb)	9350	(20.57)



Item	Description	Item-No.
PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
PL10-28x1990/1940	Slider for P10-70 'standard'	0150-2208

Linear Guides H10

4



HM10-70x160/90 | Linear Module 70x160 with 90 mm Stroke

→	H-Guide	H10-70x160/90	H-Guide for P10-70x160, Stroke max. 90 mm	0150-5409	
	→	Stator	PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
			PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
			PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
			PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
→	Slider	PL10-28x390/340	Slider for P10-70 'standard'	0150-2194	

HM10-70x160/190 | Linear Module 70x160 with 190 mm Stroke

→	H-Guide	H10-70x160/190	H-Guide for P10-70x160, Stroke max. 190 mm	0150-5410	
	→	Stator	PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
			PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
			PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
			PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
→	Slider	PL10-28x490/440	Slider for P10-70 'standard'	0150-2195	

HM10-70x160/290 | Linear Module 70x160 with 290 mm Stroke

→	H-Guide	H10-70x160/290	H-Guide for P10-70x160, Stroke max. 290 mm	0150-5411	
	→	Stator	PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
			PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
			PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
			PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
→	Slider	PL10-28x590/540	Slider for P10-70 'standard'	0150-2196	

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

HM10-70x160/390		Linear Module 70x160 with 390 mm Stroke		
→	H-Guide	H10-70x160/390	H-Guide for P10-70x160, Stroke max. 390 mm	0150-5412
	Stator	PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
		PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
		PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
		PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
Slider	PL10-28x690/640	Slider for P10-70 'standard'	0150-2197	
HM10-70x160/490		Linear Module 70x160 with 490 mm Stroke		
→	H-Guide	H10-70x160/490	H-Guide for P10-70x160, Stroke max. 490 mm	0150-5413
	Stator	PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
		PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
		PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
		PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
Slider	PL10-28x790/740	Slider for P10-70 'standard'	0150-2198	
Accessories				
→	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

4

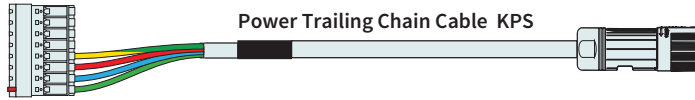
Motor Cable

4



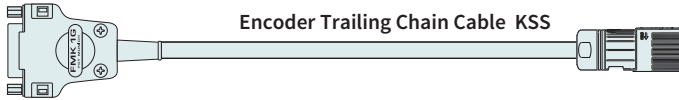
C1400

B Connector MC10-B/m

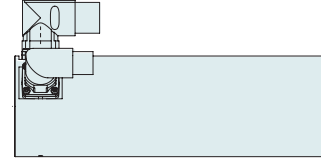


Power Trailing Chain Cable KPS

Q Connector MC10-Q/f



Encoder Trailing Chain Cable KSS



P10-70x160U

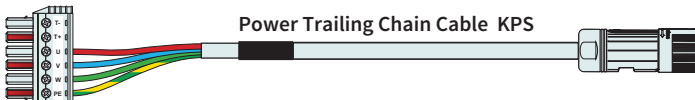
D15 Connector MC01-D15/f

J Connector MC10-J/f



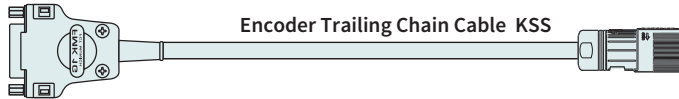
E1400

L Connector MC10-L/m



Power Trailing Chain Cable KPS

Q Connector MC10-Q/f



Encoder Trailing Chain Cable KSS



P10-70x160U

D15 Connector MC01-D15/f

J Connector MC10-J/f

ORDERING INFORMATION

TRAILING CHAIN CABLE FOR LINMOT DRIVES

Item	Description	Item-No.
KPS15-04-L/Q-3	Power Trailing Chain Cable E1400/P10-70, 3 m	0150-2266
KPS15-04-L/Q-5	Power Trailing Chain Cable E1400/P10-70, 5 m	0150-2261
KPS15-04-L/Q-8	Power Trailing Chain Cable E1400/P10-70, 8 m	0150-2267
KPS15-04-L/Q-12	Power Trailing Chain Cable E1400/P10-70, 12 m	0150-2268
KPS15-04-L/Q-	Power Trailing Chain Cable L/Q-, Custom length	0150-3388
KPS15-04-B/Q-3	Power Trailing Chain Cable C1400/P10-70, 3 m	0150-3660
KPS15-04-B/Q-5	Power Trailing Chain Cable C1400/P10-70, 5 m	0150-3661
KPS15-04-B/Q-8	Power Trailing Chain Cable C1400/P10-70, 8 m	0150-3662
KPS15-04-B/Q-12	Power Trailing Chain Cable C1400/P10-70, 12 m	0150-3663
KPS15-04-B/Q-	Power Trailing Chain Cable B/Q-, Custom length	0150-3608

TRAILING CHAIN CABLE FOR LINMOT DRIVES

Item	Description	Item-No.
KSS 05-02/08-D15/J-3	Encoder Trailing Chain Cable D15/J, 3 m	0150-2263
KSS 05-02/08-D15/J-5	Encoder Trailing Chain Cable D15/J, 5 m	0150-2262
KSS 05-02/08-D15/J-8	Encoder Trailing Chain Cable D15/J, 8 m	0150-2264
KSS 05-02/08-D15/J-12	Encoder Trailing Chain Cable D15/J, 12 m	0150-2265
KSS 05-02/08-D15(f)-45°/J-	Encoder Trailing Chain Cable D15/J-, Custom length	0150-3389

TRAILING CHAIN CABLE FOR STATOR SERIES D01 / D02

Item	Description	Item-No.
KPS15-04-.../Q-10	Power Trailing Chain Cable .../Q, 10 m for D0x	0150-2376
KPS15-04-.../Q-	Power Trailing Chain Cable .../Q, for D0x, Custom length	0150-3491
KSS05-02/13-.../J-10	Encoder Trailing Chain Cable ./J, 10 m for D0x	0150-2377
KSS05-02/13-.../J-	Encoder Trailing Chain Cable ./J, for D0x, Custom length	0150-3492
KPS15-04	Power Trailing Chain Cable P10-70 (per m)	0150-2257
KSS05-02/13	Trailing Chain Cable Encoder P10-...-Dxx (per m)	0150-2259

TRAILING CHAIN CABLE FOR STATOR SERIES D03

Item	Description	Item-No.
KPS15-04/04-.../Q-10	Power Trailing Chain Cable .../Q, 10 m for D03	0150-3654
KPS15-04/04-.../Q-	Power Trailing Chain Cable .../Q, for D03, Custom length	0150-3579
KSS05-02/06-.../J-10	Encoder Trailing Chain Cable ./J, 10 m for D03	0150-3655
KSS05-02/06-.../J-	Encoder Trailing Chain Cable ./J, for D03, Custom length	0150-3611
KPS15-04/04	Power Trailing Chain Cable P10-...-Dx3 (per m)	0150-2269
KSS05-02/06	Trailing Chain Cable Encoder P10-...-Dx3 (per m)	0150-2490

CONNECTOR

Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
MC01-D15/f	Motor Connector D15 (f)	0150-3136
MC10-Q/f	Connector Power PS10-70	0150-2268
MC10-J/f	Connector Encoder PS10-70	0150-2269

MOTOR FLANGES

4



Item	Description	Item-No.
PF10-70x190	Flange for PS10-70x160	0150-2273



Item	Description	Item-No.
PF10-70x190-FC	Flange for PS10-70x160 fluid cooling	0150-2292

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



Item	Description	Item-No.
PB10-70x160-L	Bearing Kit for PS10-70x160	0150-3432

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LUBRICANT RESERVOIR



Item	Description	Item-No.
PA10-70/28	Lubricant reservoir for PS10-70 with lubricating nipple	0150-3543

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P10-70x240U



- ✓ 3 x 400VAC Technology
- ✓ Peak forces up to 1650 N
- ✓ Extremely high dynamic
- ✓ Separate connector for sensor and power cable
- ✓ Can also be controlled by standard third-party servo drives

LINEAR MOTORS P10-70x240U

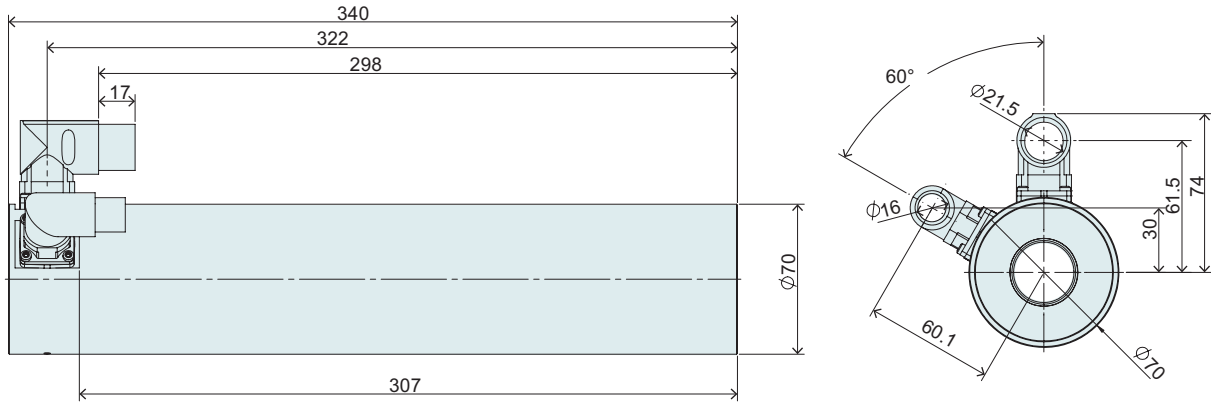
Technical Data	545
Motor Specifications	
P10-70x240U/10	550
P10-70x240U/110	551
P10-70x240U/210	552
P10-70x240U/310	553
P10-70x240U/410	554
P10-70x240U/510	555
P10-70x240U/610	556
P10-70x240U/810	557
P10-70x240U/1010	558
P10-70x240U/1210	559
P10-70x240U/1410	560
P10-70x240U/1610	561
Linear Guides	562
Accessories	564



MOTOR FAMILY P10-70x240U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1610	(63.39)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1650	(371)
Max. Force @ 3x400VAC	N	(lbf)	1650	(371)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	83.4	(18.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.4	(209.9)
Position Detection				
Position Resolution	mm	(in)	0.005	(0.0002)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.3 / 3.5 / 6.1	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	68.1	(1.73)
Terminal Resistance 25 °C / 120 °C	Ohm		6.3 / 8.6	
Terminal Inductivity	mH		12	
Magnetic Period	mm	(in)	40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 510 / 110	
Mechanical Data				
Stator Diameter	mm	(in)	70	(2.8)
Stator Length	mm	(in)	340	(13)
Stator Mass	g	(lb)	5550	(12.21)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	390 - 1990	(15 - 78)
Slider Mass	g	(lb)	1830 - 9350	(4.03 - 20.57)
IP Code			IP 65	

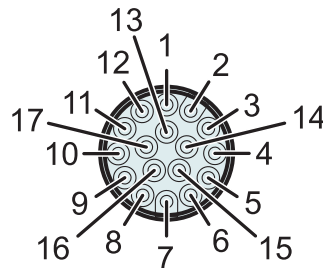
STATOR



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710

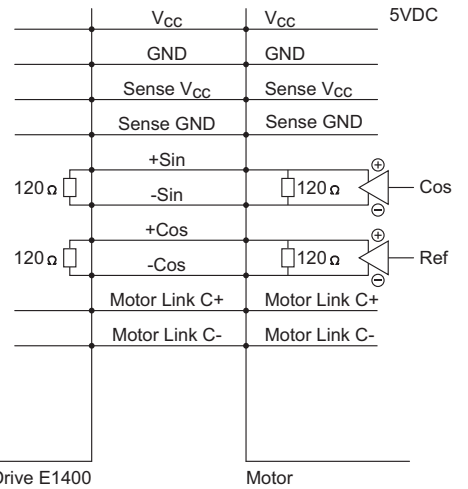
CONNECTOR PS10-70x240U-BL-QJ

Motor Connector Wiring	Connector Encoder J	Wire Color Motor Cable	
+5 VDC	Supply	1	red
GND	Supply	2	black
Sense +5V	Supply Sense	3	white
Sense GND	Supply Sense	4	brown
Mot. Link C+	Communication	5	pink
Mot. Link C-	Communication	6	grey
Sin+	Encoder	7	yellow
Sin-	Encoder	8	orange
Cos+	Encoder	9	green
Cos-	Encoder	10	blue
n. c.	n. c.	11	n. c.
n. c.	n. c.	12	n. c.
n. c.	n. c.	13	n. c.
n. c.	n. c.	14	n. c.
n. c.	n. c.	15	n. c.
n. c.	n. c.	16	n. c.
n. c.	n. c.	17	n. c.



Connector Encoder J

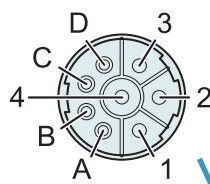
View: Motor connector, plug side



LinMot Drive E1400

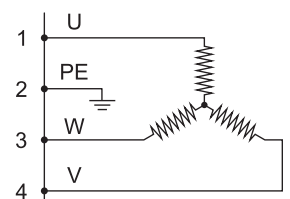
Motor

Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red
PE	2	yellow-green
Phase W	3	green
Phase V	4	blue
n. c.	A	n. c.
n. c.	B	n. c.
n. c.	C	n. c.
n. c.	D	n. c.

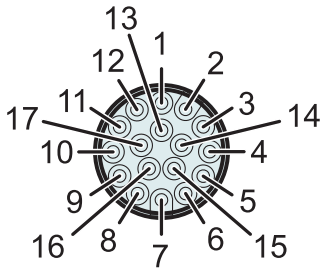


Connector Power Q

View: Motor connector, plug side



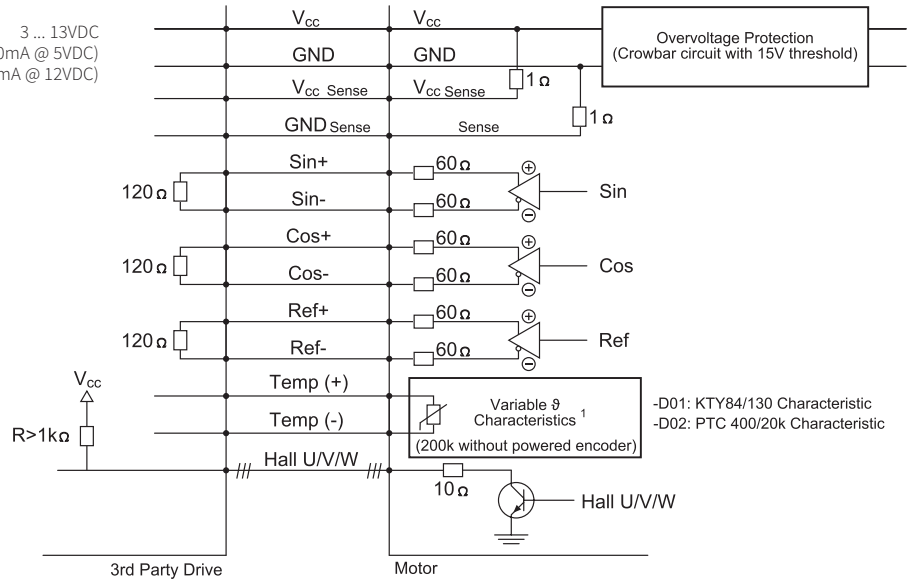
CONNECTOR PS10-70x240U-BL-QJ-D01/02



Connector Encoder J

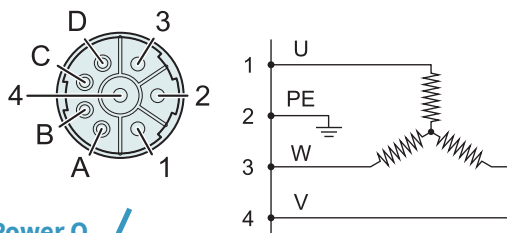
View: Motor connector, plug side

3 ... 13VDC
(I_{max} < 150mA @ 5VDC)
(I_{max} < 80mA @ 12VDC)



Motor Connector Wiring		Function	Connector Encoder J	Wire Color Motor Cable
PS10-70x240U-BL-QJ-D01	PS10-70x240U-BL-QJ-D02			
3 ... 13 VDC	3 ... 13 VDC	Supply	1	Motor Cable
GND	GND	Supply	2	brown
Vcc Sense (optional)	Vcc Sense (optional)	Supply Sense	3	green
GND Sense (optional)	GND Sense (optional)	Supply Sense	4	yellow
Do not connect	Do not connect	-	5	-
Do not connect	Do not connect	-	6	-
Sin+	Sin+	Encoder 1 Vpp	7	grey
Sin-	Sin-	Encoder 1 Vpp	8	pink
Cos+	Cos+	Encoder 1 Vpp	9	blue
Cos-	Cos-	Encoder 1 Vpp	10	red
Ref+	Ref+	Encoder 1 Vpp	11	black
Ref-	Ref-	Encoder 1 Vpp	12	violett
Hall U	Hall U	Encoder (open collector)	13	grey-red
Hall V	Hall V	Encoder (open collector)	14	red-blue
Hall W	Hall W	Encoder (open collector)	15	white-green
Temp+ (KTY84/130 Char.)	Temp+ (PTC 400/20k Char.)	Temperature ¹	16	yellow-brown
Temp- (KTY84/130 Char.)	Temp- (PTC 400/20k Char.)	Temperature ¹	17	white-yellow

1) The temperature evaluation circuit must be powered from the encoder supply and must be at the same potential. The grounds of the temperature evaluation circuit and the encoder have to be connected. The encoder must have been powered on for at least 50 ms, before valid temperatures can be measured. If the encoder is powered off, 200k Ohms are measured between Pins 16 and 17. The maximum voltage between Pin 16 and 17 must not exceed 16 VDC. The maximum current must not exceed 15 mA.

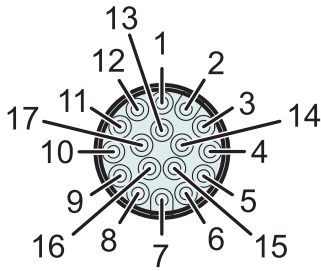


Connector Power Q

View: Motor connector, plug side

Motor Connector Wiring		Connector Power Q	Wire Color Motor Cable
PS10-70x240U-BL-QJ-D01	PS10-70x240U-BL-QJ-D02		
Phase U	Phase U	1	red
PE	PE	2	yellow-green
Phase W	Phase W	3	green
Phase V	Phase V	4	blue
n. c.	n. c.	A	n. c.
n. c.	n. c.	B	n. c.
n. c.	n. c.	C	n. c.
n. c.	n. c.	D	n. c.

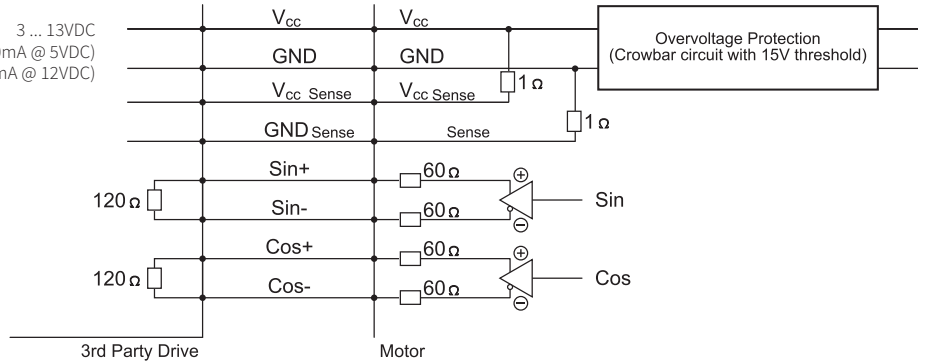
CONNECTOR PS10-70x240U-BL-QJ-D03



Connector Encoder J

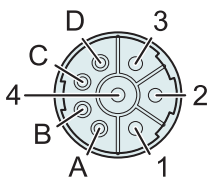
View: Motor connector, plug side

3 ... 13VDC
($I_{max} < 150\text{mA}$ @ 5VDC)
($I_{max} < 80\text{mA}$ @ 12VDC)

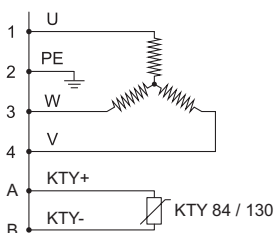


Motor Connector Wiring		Connector Encoder J	Wire Color Motor Cable
3 ... 13VDC	Supply	1	red
GND	Supply	2	black
Vcc Sense (optional)	Supply Sense	3	white
GND Sense (optional)	Supply Sense	4	brown
Do not connect	-	5	-
Do not connect	-	6	-
Sin+	Encoder 1 Vpp	7	yellow
Sin-	Encoder 1 Vpp	8	orange
Cos+	Encoder 1 Vpp	9	green
Cos-	Encoder 1 Vpp	10	blue
n. c.	-	11	n. c.
n. c.	-	12	n. c.
n. c.	-	13	n. c.
Do not connect	-	14	n. c.
n. c.	-	15	n. c.
n. c.	-	16	n. c.
n. c.	-	17	n. c.

Connector Power Q



View: Motor connector, plug side

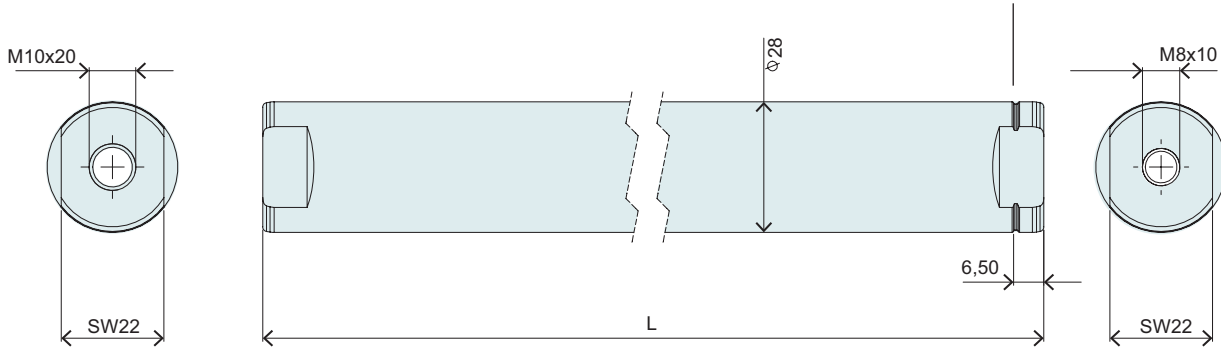


Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red (previously: black 1)
PE	2	yellow-green
Phase W	3	green (previously: black 3)
Phase V	4	blue (previously: black 2)
KTY+	A	purple (previously: black 5)
KTY-	B	grey (previously: black 6)
n. c.	C	yellow (previously: black 7)
n. c.	D	brown (previously: black 8)

SLIDER

Slider Standard

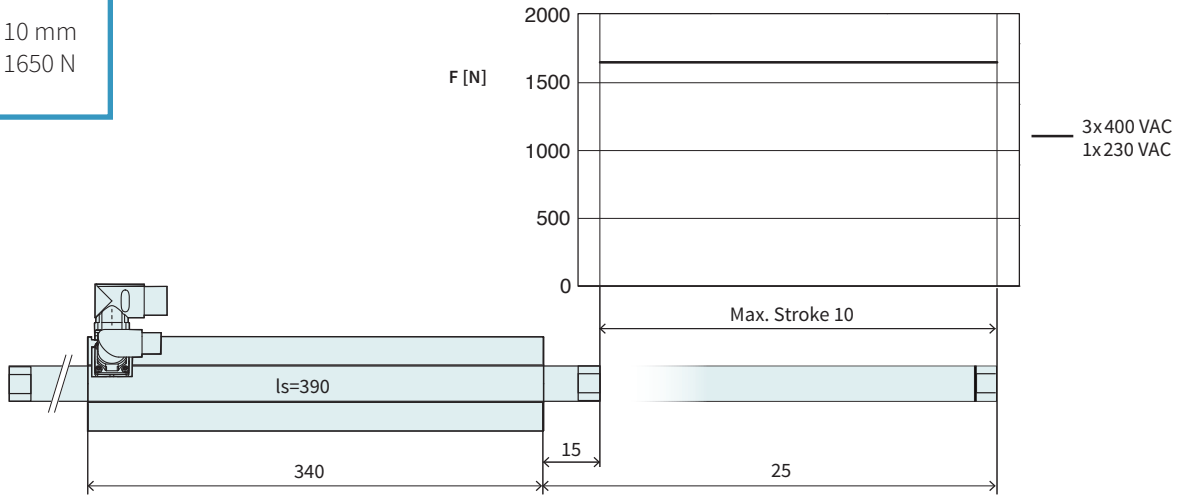
Number of grooves determines the slider type (see chapter 2 / slider) and marks the front end.



Slider Standard			
Item	Description	Max. Stroke [mm]	Item-No.
PL10-28x390/340	Slider for P10-70 'standard'	10	0150-2194
PL10-28x490/440	Slider for P10-70 'standard'	110	0150-2195
PL10-28x590/540	Slider for P10-70 'standard'	210	0150-2196
PL10-28x690/640	Slider for P10-70 'standard'	310	0150-2197
PL10-28x790/740	Slider for P10-70 'standard'	410	0150-2198
PL10-28x890/840	Slider for P10-70 'standard'	510	0150-2199
PL10-28x990/940	Slider for P10-70 'standard'	610	0150-2203
PL10-28x1190/1140	Slider for P10-70 'standard'	810	0150-2204
PL10-28x1390/1340	Slider for P10-70 'standard'	1010	0150-2205
PL10-28x1590/1540	Slider for P10-70 'standard'	1210	0150-2206
PL10-28x1790/1740	Slider for P10-70 'standard'	1410	0150-2207
PL10-28x1990/1940	Slider for P10-70 'standard'	1610	0150-2208

P10-70x240U/10-BL-QJ

Max. Stroke: 10 mm
Peak Force: 1650 N



Dimensions in mm

Technical Data P10-70x240U/10

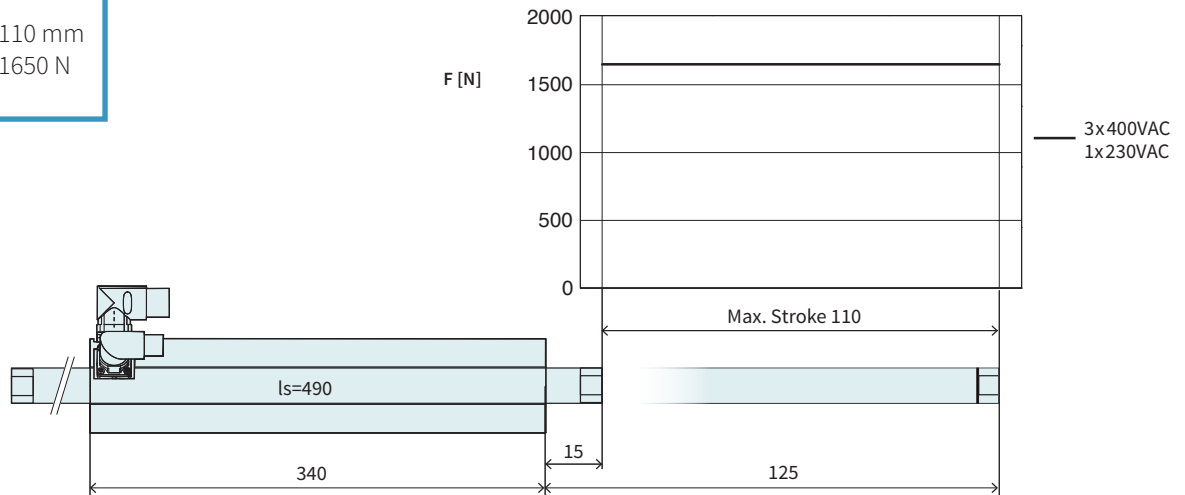
Technical Data P10-70x240U/10			
Stroke			
Max. Stroke	mm (in)		10 (0.39)
Force			
Max. Force @ 1x230VAC	N (lbf)		1650 (371)
Max. Force @ 3x400VAC	N (lbf)		1650 (371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		190 / 290 / 510 (43 / 66 / 120)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		59 (13.3)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		83.4 (18.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		3 (119.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		5.4 (5.4)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 5.1
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		27.9 / 19.7
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		27.9 / 19.7
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.3 / 5 / 8.7
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.3 / 3.5 / 6.1
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.87 / 0.38 / 0.12
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 510 / 110
Mechanical Data			
Slider Length	mm (in)		390 (15)
Slider Mass	g (lb)		1830 (4.03)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x390/340	Slider for P10-70 'standard'	0150-2194

P10-70x240U/110-BL-QJ

Max. Stroke: 110 mm
Peak Force: 1650 N



Dimensions in mm

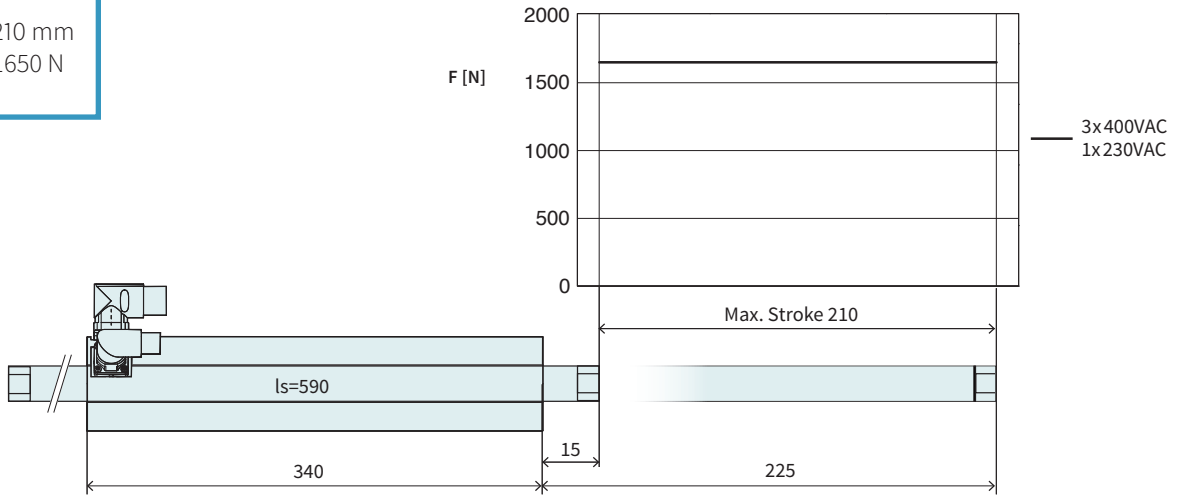
Technical Data P10-70x240U/110			
Stroke			
Max. Stroke	mm (in)	110	(4.32)
Force			
Max. Force @ 1x230VAC	N (lbf)	1650	(371)
Max. Force @ 3x400VAC	N (lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	83.4	(18.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	5.4	(5.4)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.55	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.3 / 3.5 / 6.1	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 510 / 110	
Mechanical Data			
Slider Length	mm (in)	490	(19)
Slider Mass	g (lb)	2300	(5.06)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x490/440	Slider for P10-70 'standard'	0150-2195

P10-70x240U/210-BL-QJ

Max. Stroke: 210 mm
Peak Force: 1650 N



Dimensions in mm

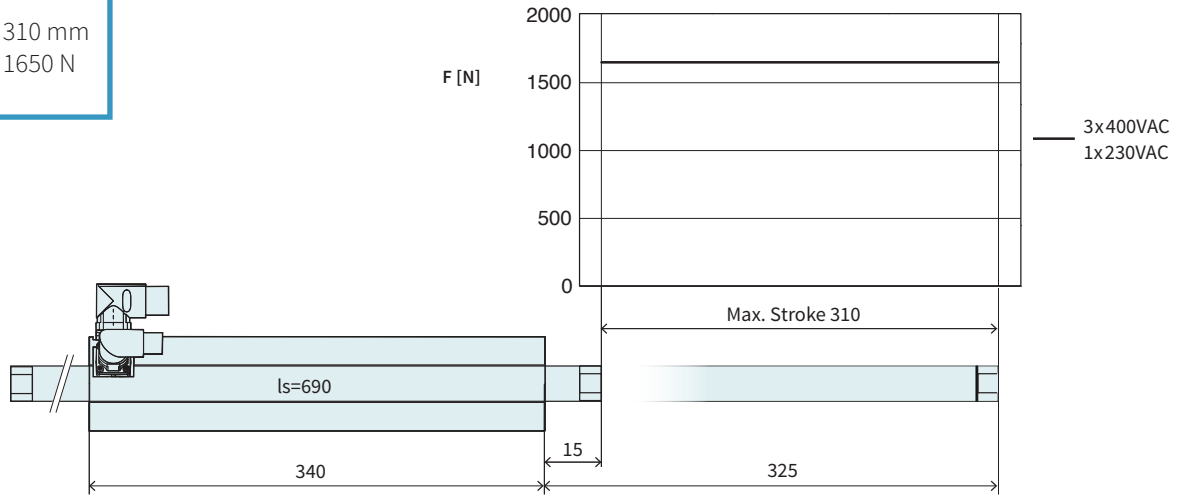
Technical Data P10-70x240U/210				
Stroke				
Max. Stroke	mm	(in)	210	(8.26)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1650	(371)
Max. Force @ 3x400VAC	N	(lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%		100	
Force Constant 1	N/A_{pk}	(lbf/ A_{pk})	59	(13.3)
Force Constant 2	N/A_{rms}	(lbf/ A_{rms})	83.4	(18.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.4	(5.4)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.35	
Electrical Data				
Max. Current @ 1x230VAC	A_{pk} / A_{rms}		27.9 / 19.7	
Max. Current @ 3x400VAC	A_{pk} / A_{rms}		27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A_{pk}		3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A_{rms}		2.3 / 3.5 / 6.1	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 510 / 110	
Mechanical Data				
Slider Length	mm	(in)	590	(23)
Slider Mass	g	(lb)	2770	(6.09)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x590/540	Slider for P10-70 'standard'	0150-2196

P10-70x240U/310-BL-QJ

Max. Stroke: 310 mm
Peak Force: 1650 N



Dimensions in mm

Technical Data P10-70x240U/310

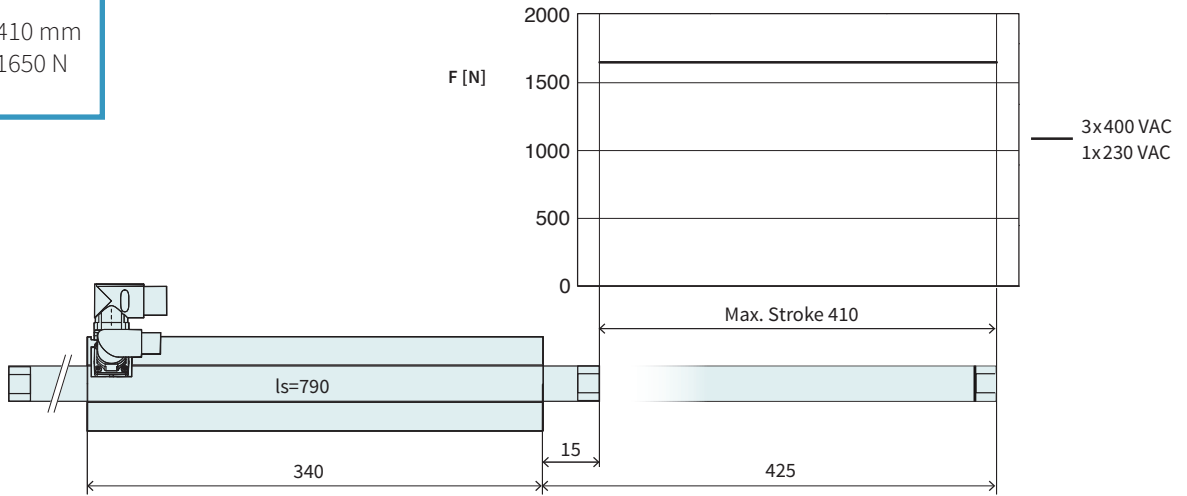
Stroke			
Max. Stroke	mm (in)	310 (12.19)	
Force			
Max. Force @ 1x230VAC	N (lbf)	1650 (371)	
Max. Force @ 3x400VAC	N (lbf)	1650 (371)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	190 / 290 / 510 (43 / 66 / 120)	
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	59 (13.3)	
Force Constant 2	N/A _{rms} (lbf/A _{rms})	83.4 (18.8)	
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3 (119.9)	
Max. Velocity @ 3x400VAC	m/s (in/s)	5.4 (5.4)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.25	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.3 / 3.5 / 6.1	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 510 / 110	
Mechanical Data			
Slider Length	mm (in)	690 (27)	
Slider Mass	g (lb)	3240 (7.13)	



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x690/640	Slider for P10-70 'standard'	0150-2197

P10-70x240U/410-BL-QJ

Max. Stroke: 410 mm
Peak Force: 1650 N



Dimensions in mm

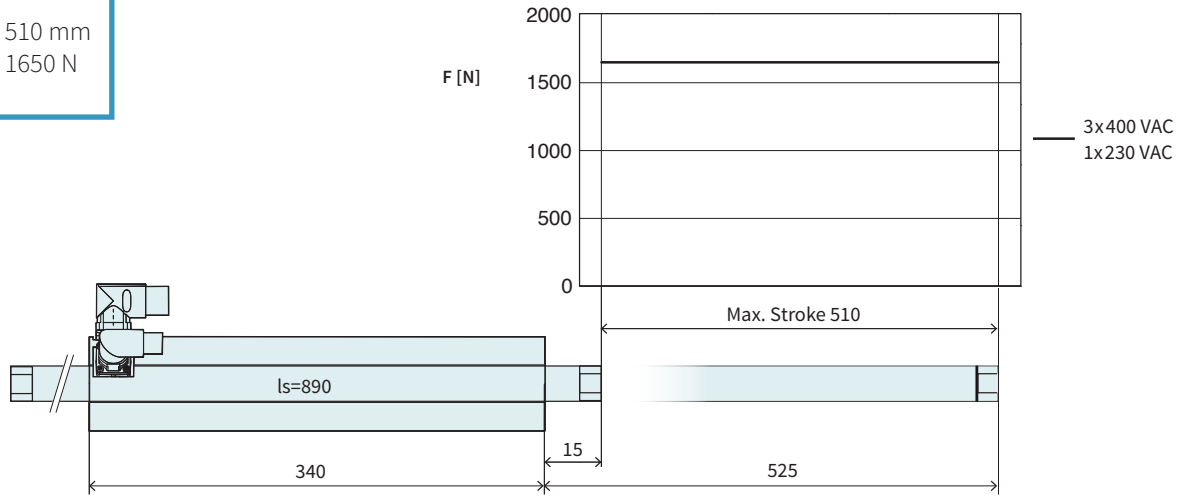
Technical Data P10-70x240U/410			
Stroke			
Max. Stroke	mm (in)		410 (16.1)
Force			
Max. Force @ 1x230VAC	N (lbf)		1650 (371)
Max. Force @ 3x400VAC	N (lbf)		1650 (371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		190 / 290 / 510 (43 / 66 / 120)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		59 (13.3)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		83.4 (18.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		3 (119.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		5.4 (5.4)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.2
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		27.9 / 19.7
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		27.9 / 19.7
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.3 / 5 / 8.7
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.3 / 3.5 / 6.1
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.87 / 0.38 / 0.12
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 510 / 110
Mechanical Data			
Slider Length	mm (in)		790 (31)
Slider Mass	g (lb)		3710 (8.16)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x790/740	Slider for P10-70 'standard'	0150-2198

P10-70x240U/510-BL-QJ

Max. Stroke: 510 mm
Peak Force: 1650 N



Dimensions in mm

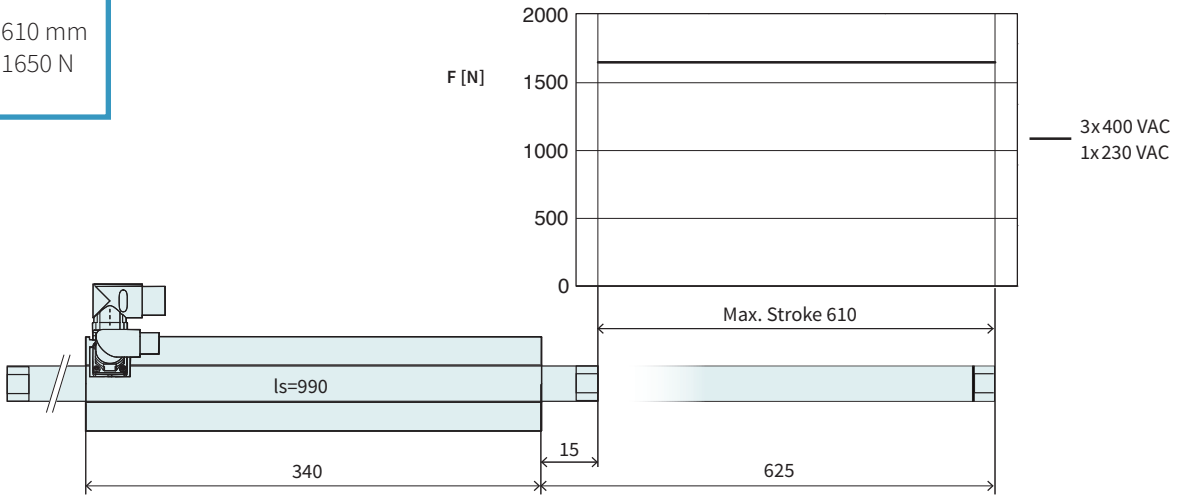
Technical Data P10-70x240U/510			
Stroke			
Max. Stroke	mm (in)	510	(20.1)
Force			
Max. Force @ 1x230VAC	N (lbf)	1650	(371)
Max. Force @ 3x400VAC	N (lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	83.4	(18.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	5.4	(5.4)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.3 / 3.5 / 6.1	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 510 / 110	
Mechanical Data			
Slider Length	mm (in)	890	(35)
Slider Mass	g (lb)	4180	(9.2)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x890/840	Slider for P10-70 'standard'	0150-2199

P10-70x240U/610-BL-QJ

Max. Stroke: 610 mm
Peak Force: 1650 N



Dimensions in mm

Technical Data P10-70x240U/610

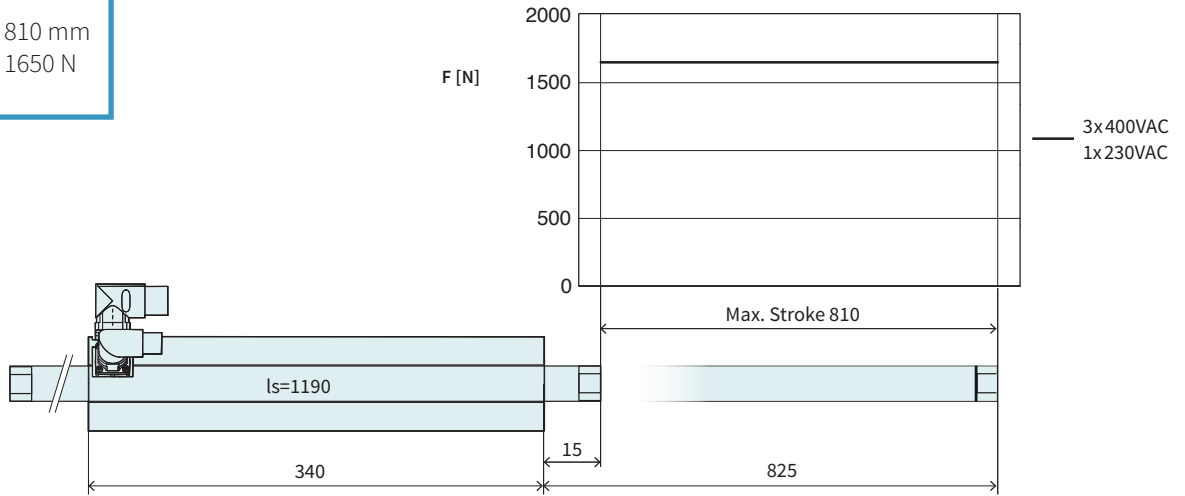
Stroke			
Max. Stroke	mm	(in)	610 (23.99)
Force			
Max. Force @ 1x230VAC	N	(lbf)	1650 (371)
Max. Force @ 3x400VAC	N	(lbf)	1650 (371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 290 / 510 (43 / 66 / 120)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	59 (13.3)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	83.4 (18.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s	(in/s)	3 (119.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.4 (5.4)
Position Detection			
Repeatability	mm	(in)	±0.05 (±0.002)
Linearity	%		± 0.2
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		27.9 / 19.7
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		27.9 / 19.7
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.3 / 5 / 8.7
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.3 / 3.5 / 6.1
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.87 / 0.38 / 0.12
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 510 / 110
Mechanical Data			
Slider Length	mm	(in)	990 (39)
Slider Mass	g	(lb)	4650 (10.23)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x990/940	Slider for P10-70 'standard'	0150-2203

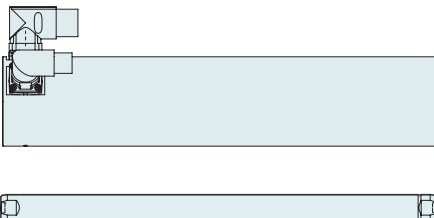
P10-70x240U/810-BL-QJ

Max. Stroke: 810 mm
Peak Force: 1650 N



Dimensions in mm

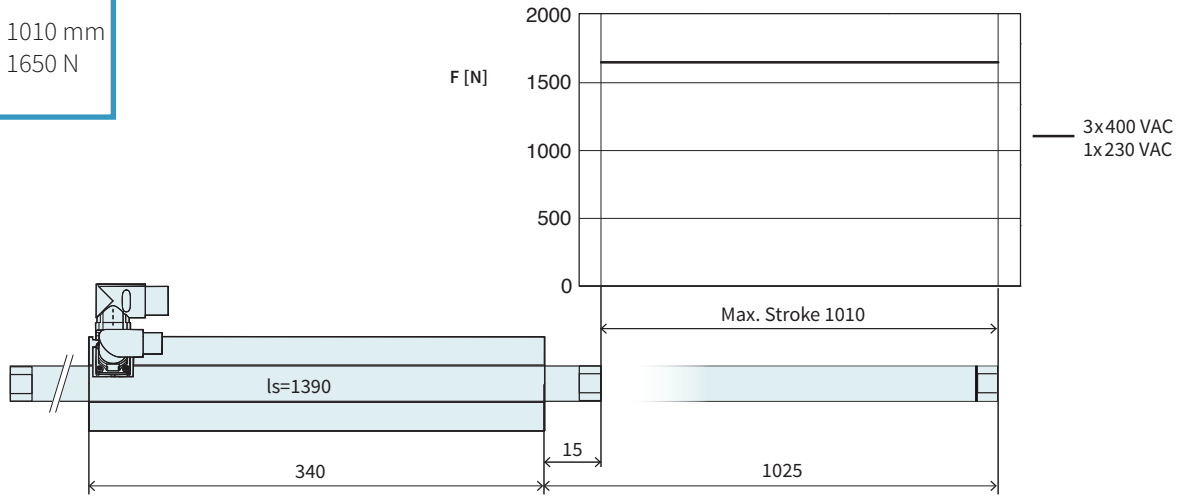
Technical Data P10-70x240U/810			
Stroke			
Max. Stroke	mm (in)	810	(31.89)
Force			
Max. Force @ 1x230VAC	N (lbf)	1650	(371)
Max. Force @ 3x400VAC	N (lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	83.4	(18.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	5.4	(5.4)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.3 / 3.5 / 6.1	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 510 / 110	
Mechanical Data			
Slider Length	mm (in)	1190	(47)
Slider Mass	g (lb)	5590	(12.3)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x1190/1140	Slider for P10-70 'standard'	0150-2204

P10-70x240U/1010-BL-QJ

Max. Stroke: 1010 mm
Peak Force: 1650 N



Dimensions in mm

Technical Data P10-70x240U/1010

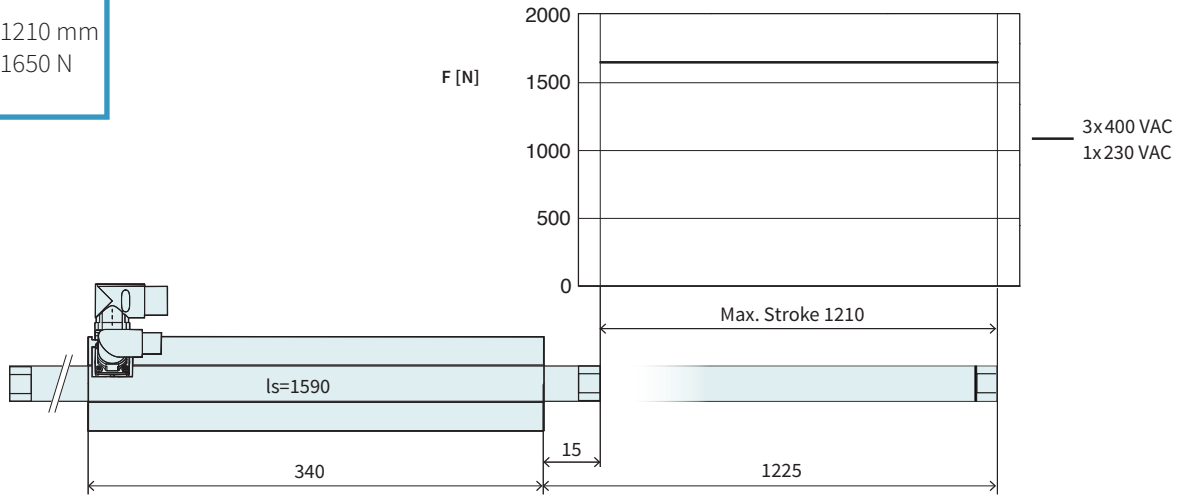
Technical Data P10-70x240U/1010				
Stroke				
Max. Stroke	mm	(in)	1010	(39.79)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1650	(371)
Max. Force @ 3x400VAC	N	(lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	83.4	(18.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.4	(5.4)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.3 / 3.5 / 6.1	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	*K/W		0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 510 / 110	
Mechanical Data				
Slider Length	mm	(in)	1390	(55)
Slider Mass	g	(lb)	6530	(14.37)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x1390/1340	Slider for P10-70 'standard'	0150-2205

P10-70x240U/1210-BL-QJ

Max. Stroke: 1210 mm
Peak Force: 1650 N



Dimensions in mm

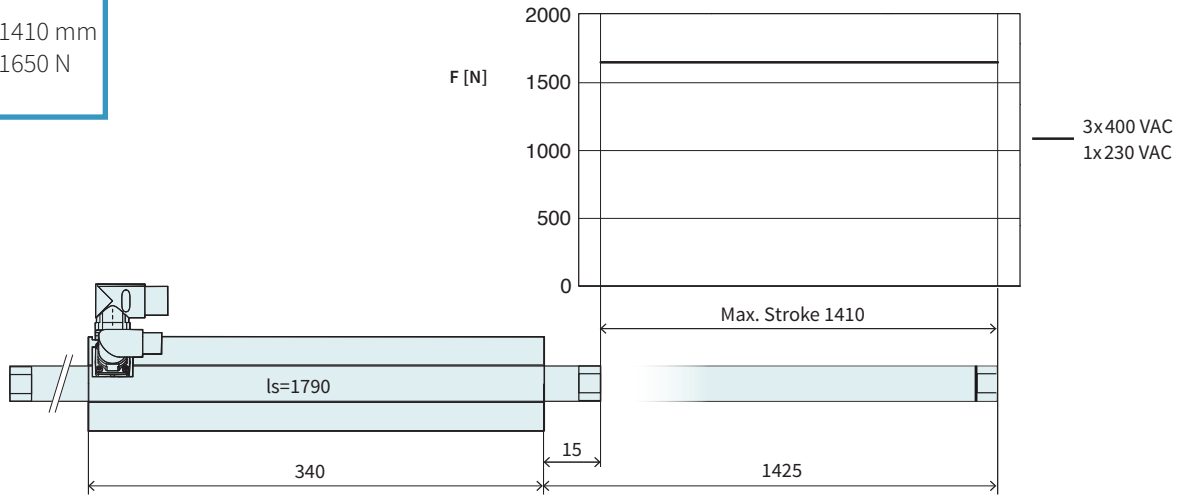
Technical Data P10-70x240U/1210				
Stroke				
Max. Stroke	mm	(in)	1210	(47.6)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1650	(371)
Max. Force @ 3x400VAC	N	(lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	83.4	(18.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.4	(5.4)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.3 / 3.5 / 6.1	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 510 / 110	
Mechanical Data				
Slider Length	mm	(in)	1590	(63)
Slider Mass	g	(lb)	7470	(16.43)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x1590/1540	Slider for P10-70 'standard'	0150-2206

P10-70x240U/1410-BL-QJ

Max. Stroke: 1410 mm
Peak Force: 1650 N



Dimensions in mm

Technical Data P10-70x240U/1410

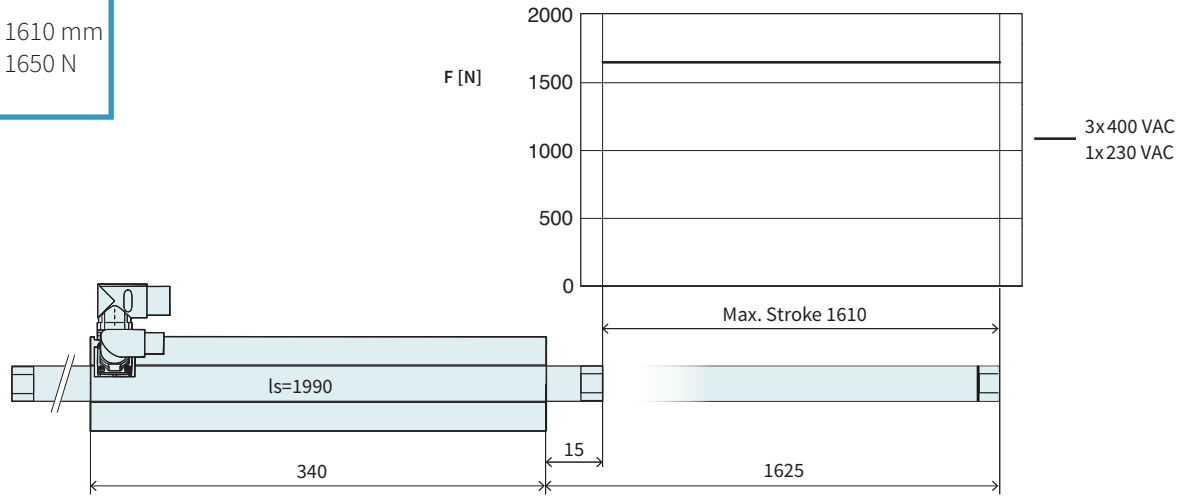
Stroke				
Max. Stroke	mm	(in)	1410	(55.49)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1650	(371)
Max. Force @ 3x400VAC	N	(lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	83.4	(18.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.4	(5.4)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.3 / 3.5 / 6.1	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	*K/W		0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 510 / 110	
Mechanical Data				
Slider Length	mm	(in)	1790	(70)
Slider Mass	g	(lb)	8413	(18.51)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x1790/1740	Slider for P10-70 'standard'	0150-2207

P10-70x240U/1610-BL-QJ

Max. Stroke: 1610 mm
Peak Force: 1650 N



Dimensions in mm

Technical Data P10-70x240U/1610			
Stroke			
Max. Stroke	mm (in)	1610	(63.39)
Force			
Max. Force @ 1x230VAC	N (lbf)	1650	(371)
Max. Force @ 3x400VAC	N (lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	83.4	(18.8)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	5.4	(5.4)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	±0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.3 / 3.5 / 6.1	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 510 / 110	
Mechanical Data			
Slider Length	mm (in)	1990	(78)
Slider Mass	g (lb)	9350	(20.57)



Item	Description	Item-No.
PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
PL10-28x1990/1940	Slider for P10-70 'standard'	0150-2208

Linear Guides H10

4



HM10-70x240/110 | Linear Module 70x240 with 110 mm Stroke

→	H-Guide	H10-70x240/110	H-Guide for P10-70x240, Stroke max. 110 mm	0150-5185	
	→	Stator	PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
			PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
			PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
			PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
→	Slider	PL10-28x490/440	Slider for P10-70 'standard'	0150-2195	

HM10-70x240/210 | Linear Module 70x240 with 210 mm Stroke

→	H-Guide	H10-70x240/210	H-Guide for P10-70x240, Stroke max. 210 mm	0150-5400	
	→	Stator	PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
			PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
			PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
			PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
→	Slider	PL10-28x590/540	Slider for P10-70 'standard'	0150-2196	

HM10-70x240/310 | Linear Module 70x240 with 310 mm Stroke

→	H-Guide	H10-70x240/310	H-Guide for P10-70x240, Stroke max. 310 mm	0150-5401	
	→	Stator	PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
			PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
			PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
			PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
→	Slider	PL10-28x690/640	Slider for P10-70 'standard'	0150-2197	

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

HM10-70x240/410		Linear Module 70x240 with 410 mm Stroke		
→	H-Guide	H10-70x240/410	H-Guide for P10-70x240, Stroke max. 410 mm	0150-5402
	Stator	PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
		PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
		PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
		PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
Slider	PL10-28x790/740	Slider for P10-70 'standard'	0150-2198	
HM10-70x240/510		Linear Module 70x240 with 510 mm Stroke		
→	H-Guide	H10-70x240/510	H-Guide for P10-70x240, Stroke max. 510 mm	0150-5403
	Stator	PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
		PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
		PS10-70x240U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2362
		PS10-70x240U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2710
Slider	PL10-28x890/840	Slider for P10-70 'standard'	0150-2199	
Accessories				
→	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

4

Motor Cable

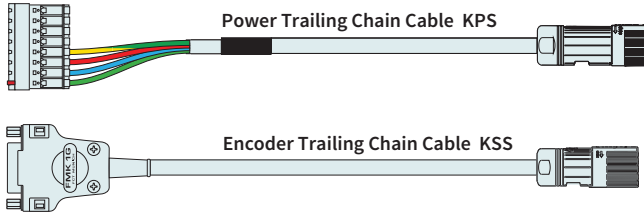
4



C1400

B Connector MC10-B/m

Q Connector MC10-Q/f



P10-70x240U

D15 Connector MC01-D15/f

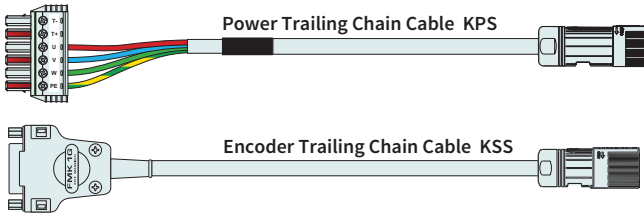
J Connector MC10-J/f



E1400

L Connector MC10-L/m

Q Connector MC10-Q/f



P10-70x240U

D15 Connector MC01-D15/f

J Connector MC10-J/f

ORDERING INFORMATION

TRAILING CHAIN CABLE FOR LINMOT DRIVES

Item	Description	Item-No.
KPS15-04-L/Q-3	Power Trailing Chain Cable E1400/P10-70, 3 m	0150-2266
KPS15-04-L/Q-5	Power Trailing Chain Cable E1400/P10-70, 5 m	0150-2261
KPS15-04-L/Q-8	Power Trailing Chain Cable E1400/P10-70, 8 m	0150-2267
KPS15-04-L/Q-12	Power Trailing Chain Cable E1400/P10-70, 12 m	0150-2268
KPS15-04-L/Q-	Power Trailing Chain Cable L/Q-, Custom length	0150-3388
KPS15-04-B/Q-3	Power Trailing Chain Cable C1400/P10-70, 3 m	0150-3660
KPS15-04-B/Q-5	Power Trailing Chain Cable C1400/P10-70, 5 m	0150-3661
KPS15-04-B/Q-8	Power Trailing Chain Cable C1400/P10-70, 8 m	0150-3662
KPS15-04-B/Q-12	Power Trailing Chain Cable C1400/P10-70, 12 m	0150-3663
KPS15-04-B/Q-	Power Trailing Chain Cable B/Q-, Custom length	0150-3608

TRAILING CHAIN CABLE FOR LINMOT DRIVES

Item	Description	Item-No.
KSS 05-02/08-D15/J-3	Encoder Trailing Chain Cable D15/J, 3 m	0150-2263
KSS 05-02/08-D15/J-5	Encoder Trailing Chain Cable D15/J, 5 m	0150-2262
KSS 05-02/08-D15/J-8	Encoder Trailing Chain Cable D15/J, 8 m	0150-2264
KSS 05-02/08-D15/J-12	Encoder Trailing Chain Cable D15/J, 12 m	0150-2265
KSS 05-02/08-D15(f)-45°/J-	Encoder Trailing Chain Cable D15/J-, Custom length	0150-3389

TRAILING CHAIN CABLE FOR STATOR SERIES D03

Item	Description	Item-No.
KPS15-04/04..../Q-10	Power Trailing Chain Cable .../Q, 10 m for D03	0150-3654
KPS15-04/04-./Q-	Power Trailing Chain Cable .../Q, for D03, Custom length	0150-3579
KSS05-02/06-./J-10	Encoder Trailing Chain Cable ./J, 10 m for D03	0150-3655
KSS05-02/06-./J-	Encoder Trailing Chain Cable ./J, for D03, Custom length	0150-3611
KPS15-04/04	Power Trailing Chain Cable P10-...-Dx3 (per m)	0150-2269
KSS05-02/06	Trailing Chain Cable Encoder P10-...-Dx3 (per m)	0150-2490

CONNECTOR

Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
MC01-D15/f	Motor Connector D15 (f)	0150-3136
MC10-Q/f	Connector Power PS10-70	0150-2268
MC10-J/f	Connector Encoder PS10-70	0150-2269

MOTOR FLANGES

4



Item	Description	Item-No.
PF10-70x270	Flange for PS10-70x240	0150-2274



Item	Description	Item-No.
PF10-70x270-FC	Flange for PS10-70x240 fluid cooling	0150-2293

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



Item	Description	Item-No.
PB10-70x240-L	Bearing Kit for PS10-70x240	0150-3433

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LUBRICANT RESERVOIR



Item	Description	Item-No.
PA10-70/28	Lubricant reservoir for PS10-70 with lubricating nipple	0150-3543

EXTERNAL POSITION SENSORS

4



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P10-70x320U



- ✓ 3 x 400VAC Technology
- ✓ Peak forces up to 2180 N
- ✓ Extremely high dynamic
- ✓ Separate connector for sensor and power cable
- ✓ Can also be controlled by standard third-party servo drives

LINEAR MOTORS P10-70x320U

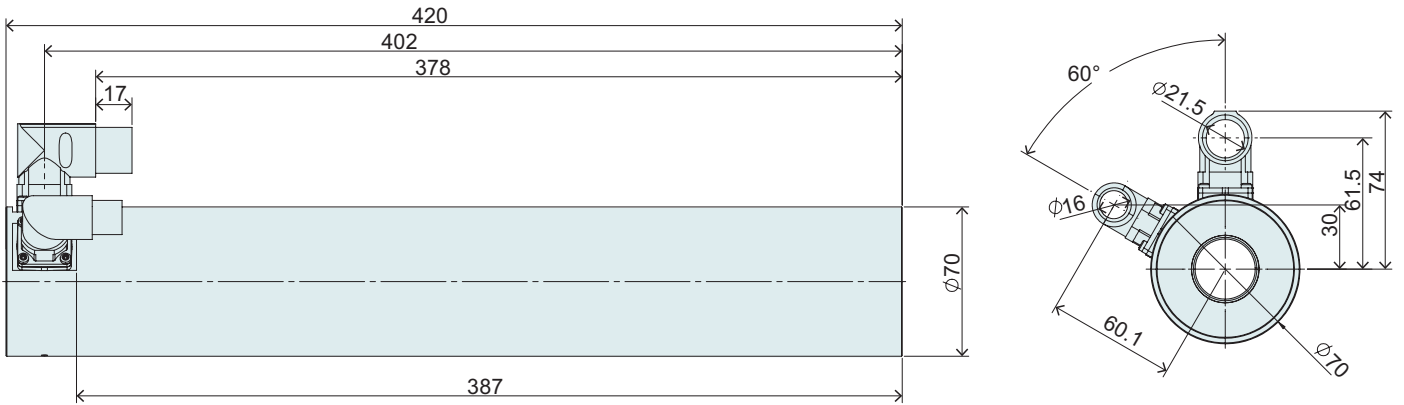
Technical Data	571
Motor Specifications	
P10-70x320U/30	576
P10-70x320U/130	577
P10-70x320U/230	578
P10-70x320U/330	579
P10-70x320U/430	580
P10-70x320U/530	581
P10-70x320U/730	582
P10-70x320U/930	583
P10-70x320U/1130	584
P10-70x320U/1330	585
P10-70x320U/1530	586
Linear Guides	587
Accessories	589



MOTOR FAMILY P10-70x320U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1530	(60.2)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	64	(14.4)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	90.5	(20.3)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.8	(109.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	4.9	(199.9)
Position Detection				
Position Resolution	mm	(in)	0.005	(0.0002)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		33.7 / 23.8	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4.1 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.7	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	73.9	(1.88)
Terminal Resistance 25 °C / 120 °C	Ohm		5.5 / 7.5	
Terminal Inductivity	mH		10	
Magnetic Period	mm	(in)	40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.65 / 0.28 / 0.09	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Stator Diameter	mm	(in)	70	(2.8)
Stator Length	mm	(in)	420	(17)
Stator Mass	g	(lb)	6900	(15.18)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	490 - 1990	(19 - 78)
Slider Mass	g	(lb)	2300 - 9350	(5.06 - 20.57)
IP Code			IP 65	

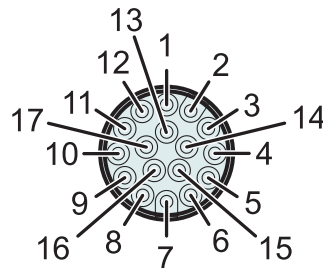
STATOR



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711

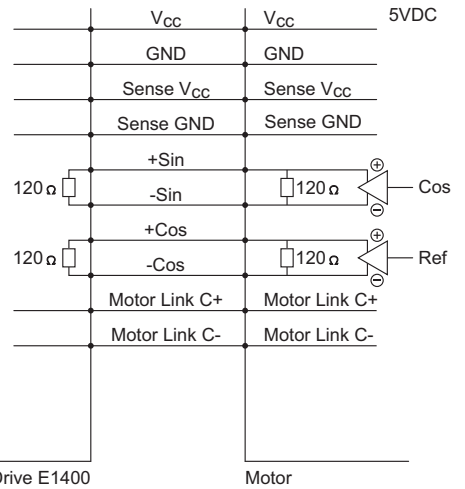
CONNECTOR PS10-70x320U-BL-QJ

Motor Connector Wiring	Connector Encoder J	Wire Color Motor Cable	
+5 VDC	Supply	1	red
GND	Supply	2	black
Sense +5V	Supply Sense	3	white
Sense GND	Supply Sense	4	brown
Mot. Link C+	Communication	5	pink
Mot. Link C-	Communication	6	grey
Sin+	Encoder	7	yellow
Sin-	Encoder	8	orange
Cos+	Encoder	9	green
Cos-	Encoder	10	blue
n. c.	n. c.	11	n. c.
n. c.	n. c.	12	n. c.
n. c.	n. c.	13	n. c.
n. c.	n. c.	14	n. c.
n. c.	n. c.	15	n. c.
n. c.	n. c.	16	n. c.
n. c.	n. c.	17	n. c.



Connector Encoder J

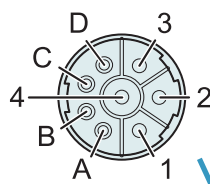
View: Motor connector, plug side



LinMot Drive E1400

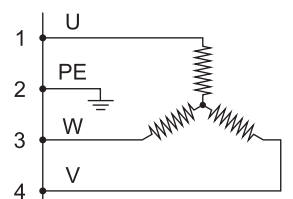
Motor

Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red
PE	2	yellow-green
Phase W	3	green
Phase V	4	blue
n. c.	A	n. c.
n. c.	B	n. c.
n. c.	C	n. c.
n. c.	D	n. c.

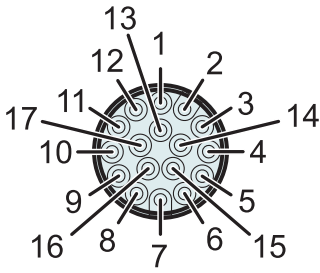


Connector Power Q

View: Motor connector, plug side



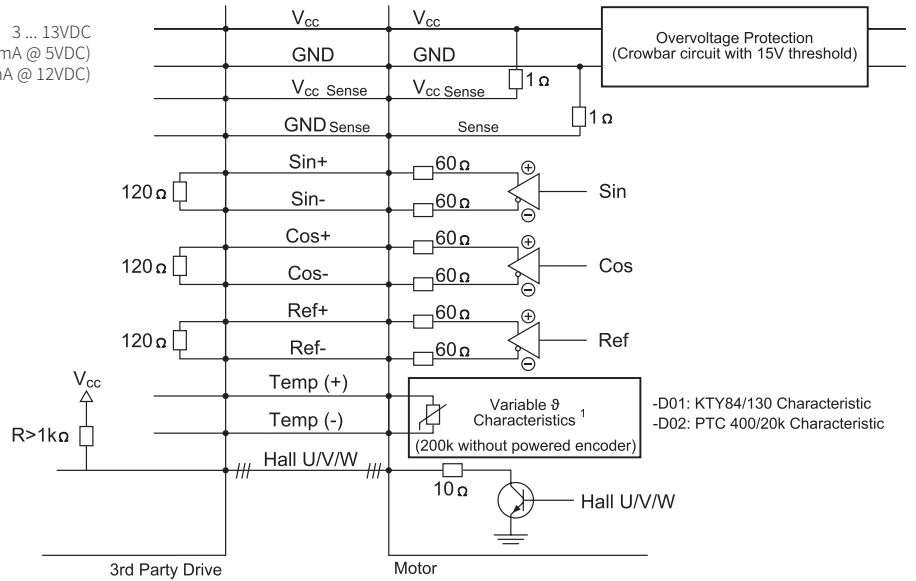
CONNECTOR PS10-70x320U-BL-QJ-D01/02



Connector Encoder J

View: Motor connector, plug side

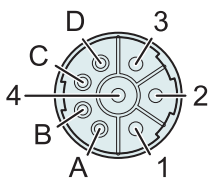
3 ... 13VDC
(I_{max} < 150mA @ 5VDC)
(I_{max} < 80mA @ 12VDC)



-D01: KTY84/130 Characteristic
-D02: PTC 400/20k Characteristic

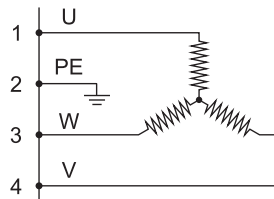
Motor Connector Wiring				
PS10-70x320U-BL-QJ-D01	PS10-70x320U-BL-QJ-D02	Function	Connector Encoder J	Wire Color Motor Cable
3 ... 13 VDC	3 ... 13 VDC	Supply	1	white
GND	GND	Supply	2	brown
Vcc Sense (optional)	Vcc Sense (optional)	Supply Sense	3	green
GND Sense (optional)	GND Sense (optional)	Supply Sense	4	yellow
Do not connect	Do not connect	-	5	-
Do not connect	Do not connect	-	6	-
Sin+	Sin+	Encoder 1 Vpp	7	grey
Sin-	Sin-	Encoder 1 Vpp	8	pink
Cos+	Cos+	Encoder 1 Vpp	9	blue
Cos-	Cos-	Encoder 1 Vpp	10	red
Ref+	Ref+	Encoder 1 Vpp	11	black
Ref-	Ref-	Encoder 1 Vpp	12	violett
Hall U	Hall U	Encoder (open collector)	13	grey-red
Hall V	Hall V	Encoder (open collector)	14	red-blue
Hall W	Hall W	Encoder (open collector)	15	white-green
Temp+ (KTY84/130 Char.)	Temp+ (PTC 400/20k Char.)	Temperature ¹	16	yellow-brown
Temp- (KTY84/130 Char.)	Temp- (PTC 400/20k Char.)	Temperature ¹	17	white-yellow

1) The temperature evaluation circuit must be powered from the encoder supply and must be at the same potential. The grounds of the temperature evaluation circuit and the encoder have to be connected. The encoder must have been powered on for at least 50 ms, before valid temperatures can be measured. If the encoder is powered off, 200k Ohms are measured between Pins 16 and 17. The maximum voltage between Pin 16 and 17 must not exceed 16 VDC. The maximum current must not exceed 15 mA.



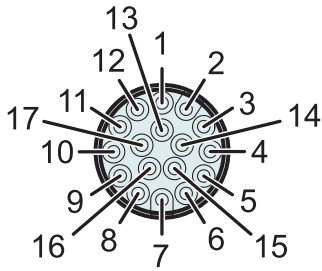
Connector Power Q

View: Motor connector, plug side



Motor Connector Wiring			
PS10-70x320U-BL-QJ-D01	PS10-70x320U-BL-QJ-D02	Connector Power Q	Wire Color Motor Cable
Phase U	Phase U	1	red
PE	PE	2	yellow-green
Phase W	Phase W	3	green
Phase V	Phase V	4	blue
n. c.	n. c.	A	n. c.
n. c.	n. c.	B	n. c.
n. c.	n. c.	C	n. c.
n. c.	n. c.	D	n. c.

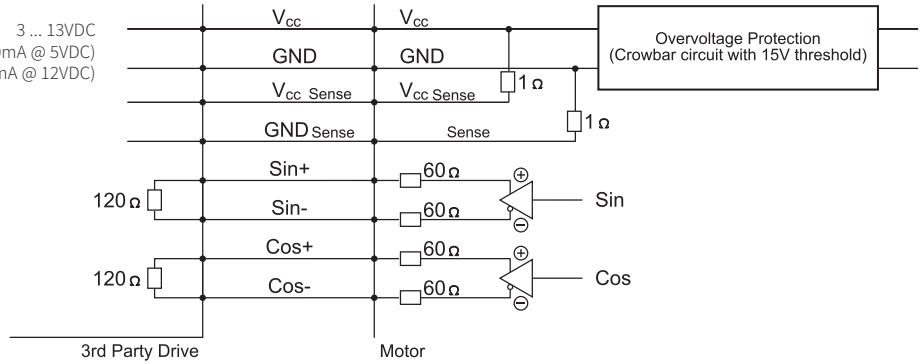
CONNECTOR PS10-70X320U-BL-QJ-D03



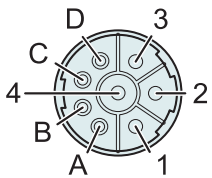
Connector Encoder J

View: Motor connector, plug side

3 ... 13VDC
($I_{max} < 150\text{mA}$ @ 5VDC)
($I_{max} < 80\text{mA}$ @ 12VDC)

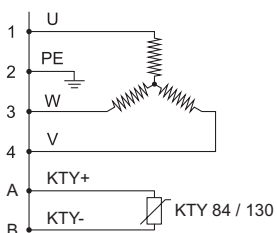


Motor Connector Wiring		Connector Encoder J	Wire Color Motor Cable
3 ... 13VDC	Supply	1	red
GND	Supply	2	black
Vcc Sense (optional)	Supply Sense	3	white
GND Sense (optional)	Supply Sense	4	brown
Do not connect	-	5	-
Do not connect	-	6	-
Sin+	Encoder 1 Vpp	7	yellow
Sin-	Encoder 1 Vpp	8	orange
Cos+	Encoder 1 Vpp	9	green
Cos-	Encoder 1 Vpp	10	blue
n. c.	-	11	n. c.
n. c.	-	12	n. c.
n. c.	-	13	n. c.
Do not connect	-	14	n. c.
n. c.	-	15	n. c.
n. c.	-	16	n. c.
n. c.	-	17	n. c.



Connector Power Q

View: Motor connector, plug side

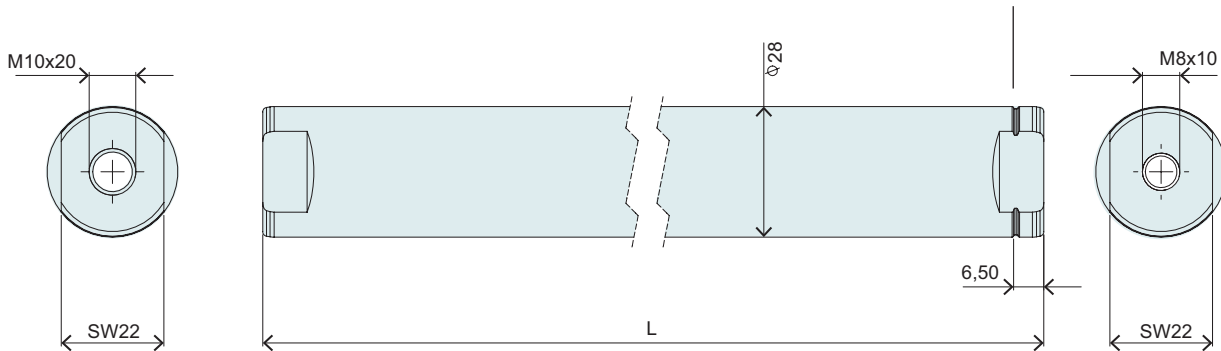


Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red (previously: black 1)
PE	2	yellow-green
Phase W	3	green (previously: black 3)
Phase V	4	blue (previously: black 2)
KTY +	A	purple (previously: black 5)
KTY -	B	grey (previously: black 6)
n. c.	C	yellow (previously: black 7)
n. c.	D	brown (previously: black 8)

SLIDER

Slider Standard

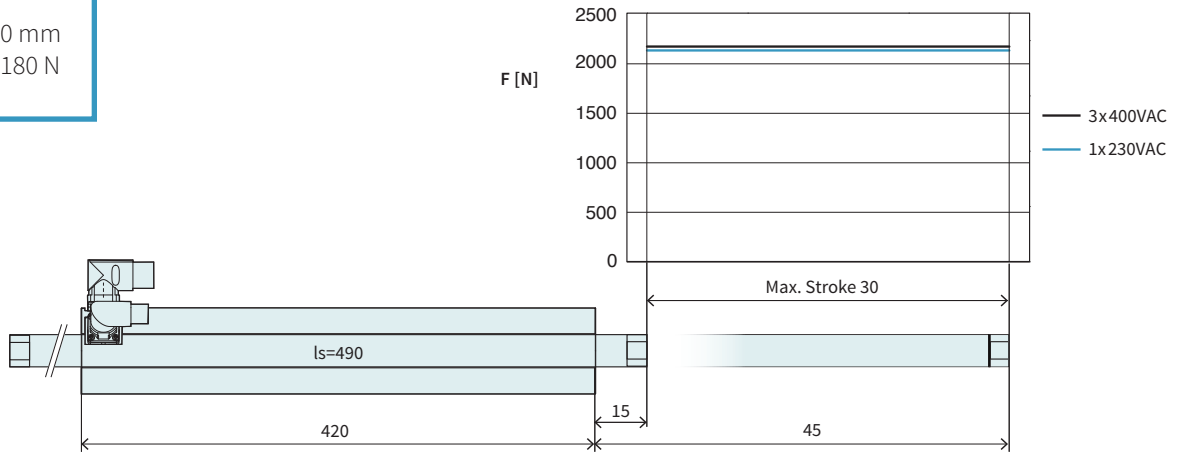
Number of grooves determines the slider type (see chapter 2 / slider) and marks the front end.



Slider Standard			
Item	Description	Max. Stroke [mm]	Item-No.
PL10-28x490/440	Slider for P10-70 'standard'	30	0150-2195
PL10-28x590/540	Slider for P10-70 'standard'	130	0150-2196
PL10-28x690/640	Slider for P10-70 'standard'	230	0150-2197
PL10-28x790/740	Slider for P10-70 'standard'	330	0150-2198
PL10-28x890/840	Slider for P10-70 'standard'	430	0150-2199
PL10-28x990/940	Slider for P10-70 'standard'	530	0150-2203
PL10-28x1190/1140	Slider for P10-70 'standard'	730	0150-2204
PL10-28x1390/1340	Slider for P10-70 'standard'	930	0150-2205
PL10-28x1590/1540	Slider for P10-70 'standard'	1130	0150-2206
PL10-28x1790/1740	Slider for P10-70 'standard'	1330	0150-2207
PL10-28x1990/1940	Slider for P10-70 'standard'	1530	0150-2208

P10-70x320U/30-BL-QJ

Max. Stroke: 30 mm
Peak Force: 2180 N



Dimensions in mm

Technical Data P10-70x320U/30

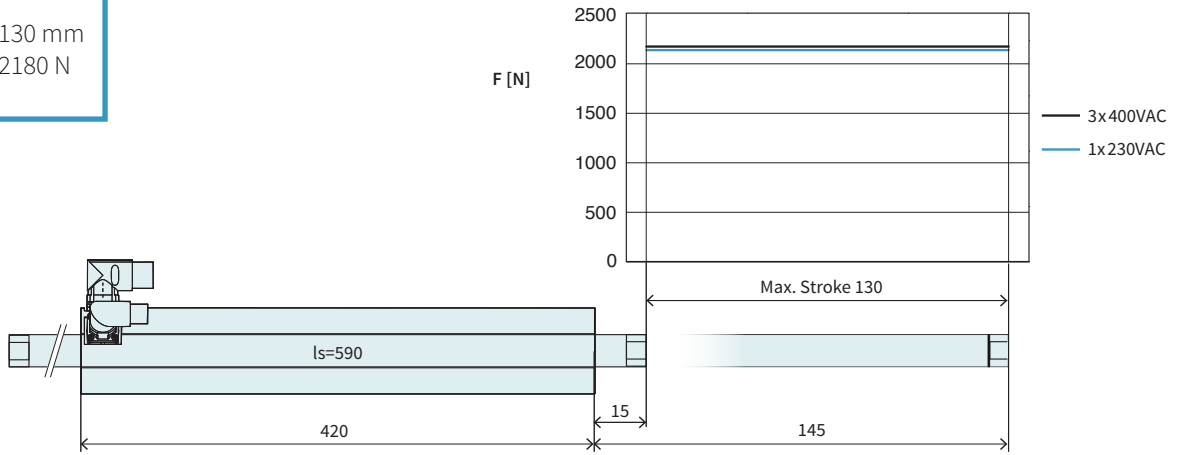
Stroke			
Max. Stroke	mm (in)	30 (1.17)	
Force			
Max. Force @ 1x230VAC	N (lbf)	2170	(487)
Max. Force @ 3x400VAC	N (lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	260 / 400 / 700 (58 / 89 / 160)	
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	64	(14.4)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	90.5	(20.3)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	2.8	(109.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	4.9	(4.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 1.75	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	33.7 / 23.8	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	4.1 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.9 / 4.4 / 7.7	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.65 / 0.28 / 0.09	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	490	(19)
Slider Mass	g (lb)	2300	(5.06)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x490/440	Slider for P10-70 'standard'	0150-2195

P10-70x320U/130-BL-QJ

Max. Stroke: 130 mm
Peak Force: 2180 N



Dimensions in mm

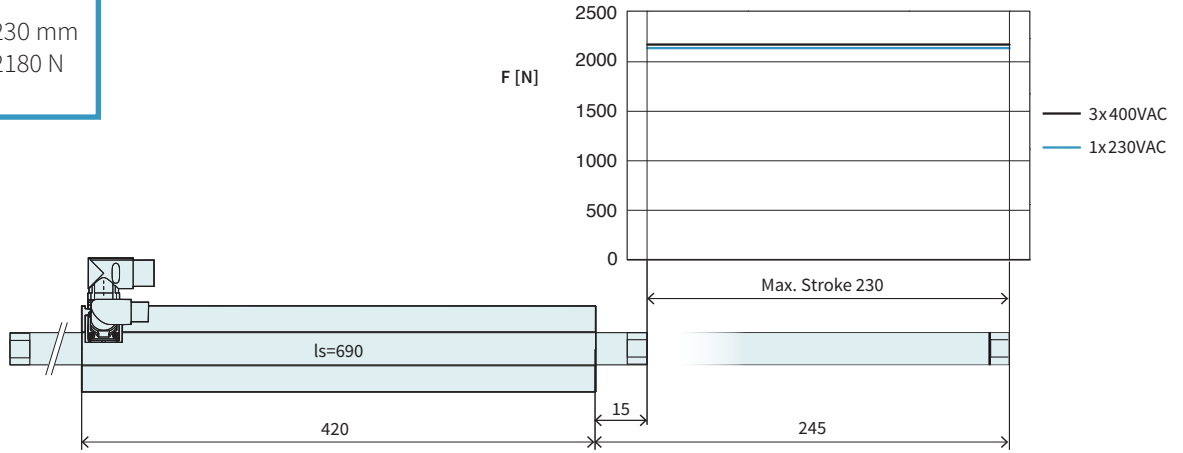
Technical Data P10-70x320U/130			
Stroke			
Max. Stroke	mm (in)	130	(5.12)
Force			
Max. Force @ 1x230VAC	N (lbf)	2170	(487)
Max. Force @ 3x400VAC	N (lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	64	(14.4)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	90.5	(20.3)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	2.8	(109.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	4.9	(4.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.5	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	33.7 / 23.8	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	4.1 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.9 / 4.4 / 7.7	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.65 / 0.28 / 0.09	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	590	(23)
Slider Mass	g (lb)	2770	(6.09)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x590/540	Slider for P10-70 'standard'	0150-2196

P10-70x320U/230-BL-QJ

Max. Stroke: 230 mm
Peak Force: 2180 N



Dimensions in mm

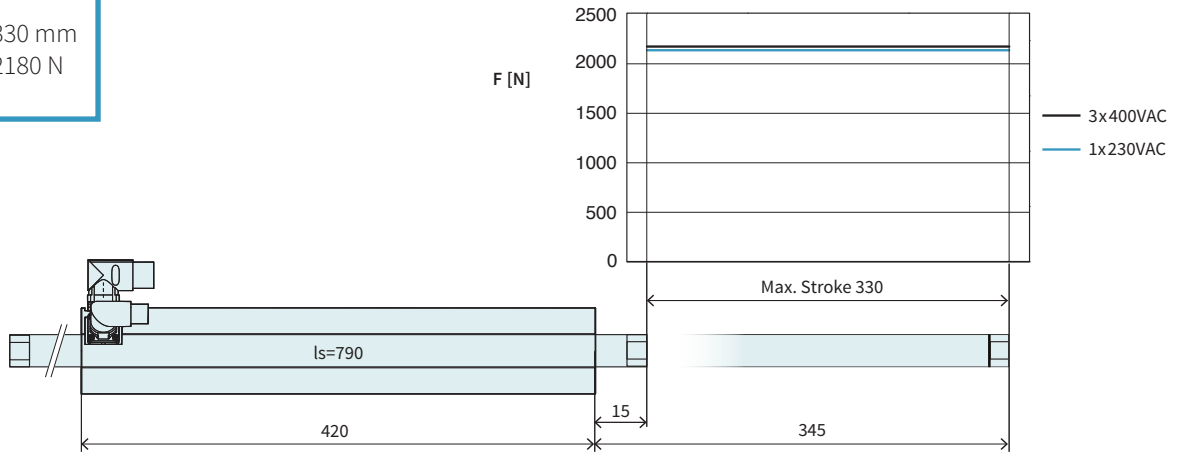
Technical Data P10-70x320U/230			
Stroke			
Max. Stroke	mm (in)		230 (9.06)
Force			
Max. Force @ 1x230VAC	N (lbf)		2170 (487)
Max. Force @ 3x400VAC	N (lbf)		2180 (489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		260 / 400 / 700 (58 / 89 / 160)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		64 (14.4)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		90.5 (20.3)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		2.8 (109.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		4.9 (4.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.3
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		33.7 / 23.8
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4.1 / 6.2 / 11
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.7
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.65 / 0.28 / 0.09
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110
Mechanical Data			
Slider Length	mm (in)		690 (27)
Slider Mass	g (lb)		3240 (7.13)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x690/640	Slider for P10-70 'standard'	0150-2197

P10-70x320U/330-BL-QJ

Max. Stroke: 330 mm
Peak Force: 2180 N



Dimensions in mm

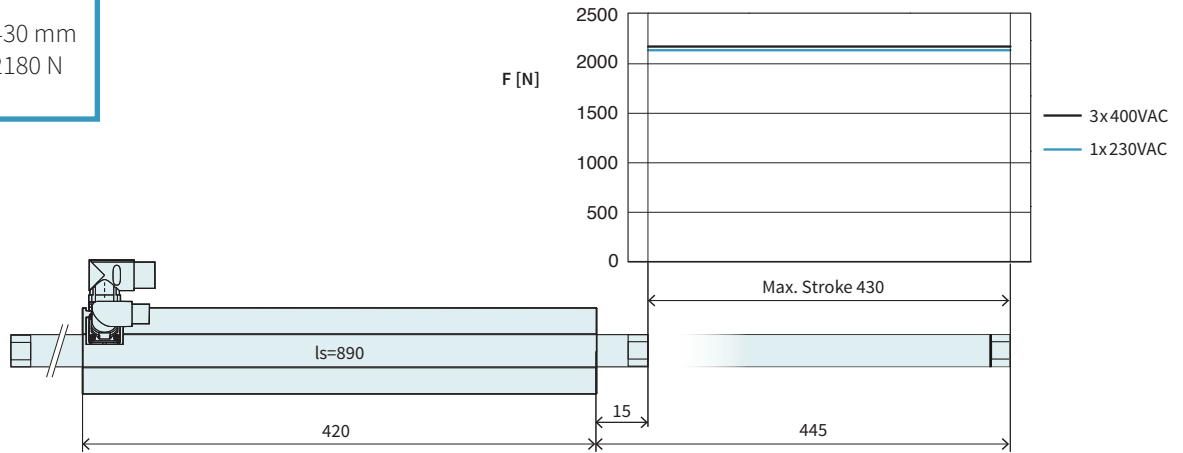
Technical Data P10-70x320U/330			
Stroke			
Max. Stroke	mm (in)		330 (12.99)
Force			
Max. Force @ 1x230VAC	N (lbf)		2170 (487)
Max. Force @ 3x400VAC	N (lbf)		2180 (489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		260 / 400 / 700 (58 / 89 / 160)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		64 (14.4)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		90.5 (20.3)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		2.8 (109.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		4.9 (4.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.25
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		33.7 / 23.8
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4.1 / 6.2 / 11
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.7
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.65 / 0.28 / 0.09
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110
Mechanical Data			
Slider Length	mm (in)		790 (31)
Slider Mass	g (lb)		3710 (8.16)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x790/740	Slider for P10-70 'standard'	0150-2198

P10-70x320U/430-BL-QJ

Max. Stroke: 430 mm
Peak Force: 2180 N



Dimensions in mm

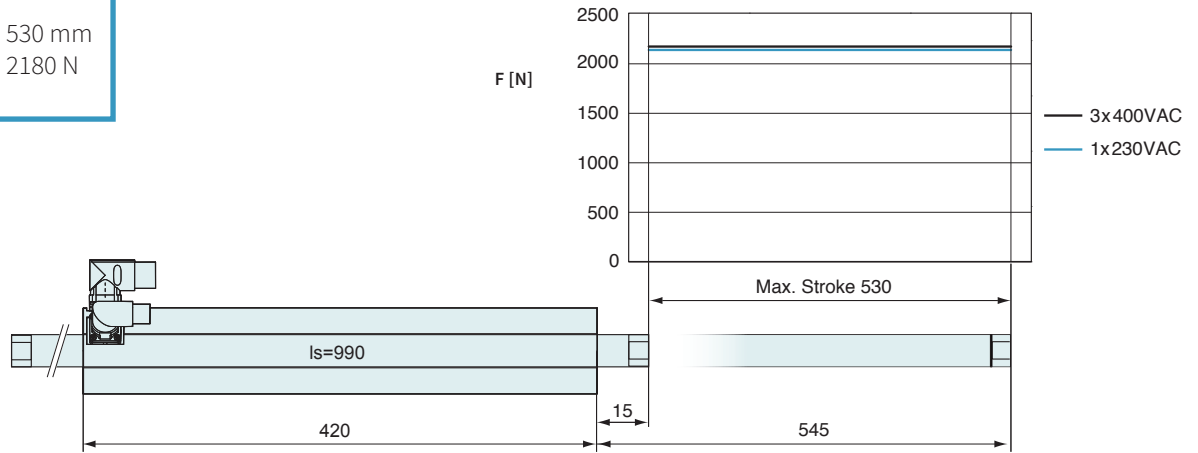
Technical Data P10-70x320U/430			
Stroke			
Max. Stroke	mm (in)		430 (16.89)
Force			
Max. Force @ 1x230VAC	N (lbf)		2170 (487)
Max. Force @ 3x400VAC	N (lbf)		2180 (489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		260 / 400 / 700 (58 / 89 / 160)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		64 (14.4)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		90.5 (20.3)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		2.8 (109.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		4.9 (4.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.2
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		33.7 / 23.8
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4.1 / 6.2 / 11
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.7
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.65 / 0.28 / 0.09
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110
Mechanical Data			
Slider Length	mm (in)		890 (35)
Slider Mass	g (lb)		4180 (9.2)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x890/840	Slider for P10-70 'standard'	0150-2199

P10-70x320U/530-BL-QJ

Max. Stroke: 530 mm
Peak Force: 2180 N



Dimensions in mm

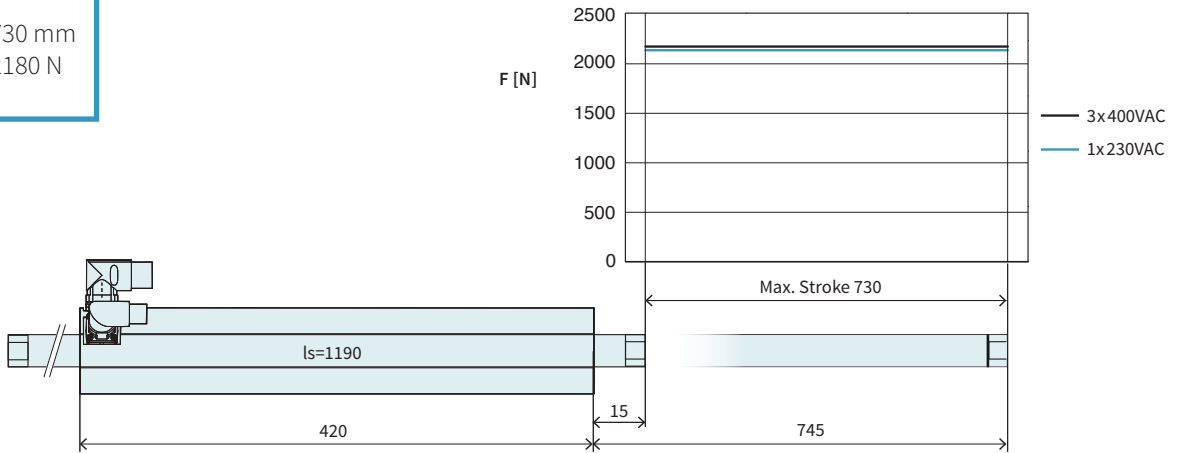
Technical Data P10-70x320U/530			
Stroke			
Max. Stroke	mm (in)	530	(20.89)
Force			
Max. Force @ 1x230VAC	N (lbf)	2170	(487)
Max. Force @ 3x400VAC	N (lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%	100	
Force Constant 1	N/A_{pk} (lbf/ A_{pk})	64	(14.4)
Force Constant 2	N/A_{rms} (lbf/ A_{rms})	90.5	(20.3)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	2.8	(109.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	4.9	(4.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 1x230VAC	A_{pk} / A_{rms}	33.7 / 23.8	
Max. Current @ 3x400VAC	A_{pk} / A_{rms}	33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A_{pk}	4.1 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A_{rms}	2.9 / 4.4 / 7.7	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.65 / 0.28 / 0.09	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	990	(39)
Slider Mass	g (lb)	4650	(10.23)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x990/940	Slider for P10-70 'standard'	0150-2203

P10-70x320U/730-BL-QJ

Max. Stroke: 730 mm
Peak Force: 2180 N



Dimensions in mm

Technical Data P10-70x320U/730

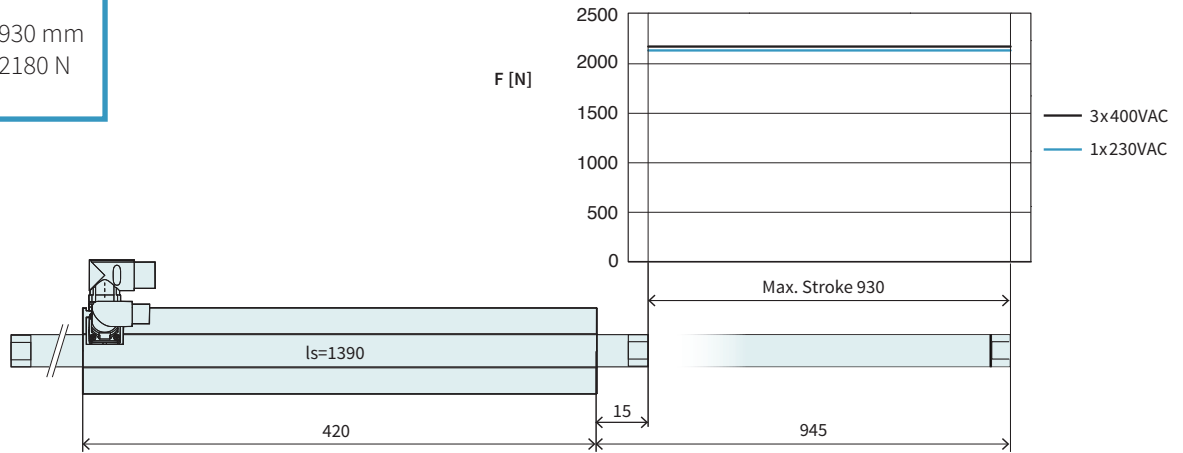
Technical Data P10-70x320U/730			
Stroke			
Max. Stroke	mm (in)	730	(28.69)
Force			
Max. Force @ 1x230VAC	N (lbf)	2170	(487)
Max. Force @ 3x400VAC	N (lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%	100	
Force Constant 1	N/A_{pk} (lbf/ A_{pk})	64	(14.4)
Force Constant 2	N/A_{rms} (lbf/ A_{rms})	90.5	(20.3)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	2.8	(109.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	4.9	(4.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A_{pk} / A_{rms}	33.7 / 23.8	
Max. Current @ 3x400VAC	A_{pk} / A_{rms}	33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A_{pk}	4.1 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A_{rms}	2.9 / 4.4 / 7.7	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.65 / 0.28 / 0.09	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	1190	(47)
Slider Mass	g (lb)	5590	(12.3)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x1190/1140	Slider for P10-70 'standard'	0150-2204

P10-70x320U/930-BL-QJ

Max. Stroke: 930 mm
Peak Force: 2180 N



Dimensions in mm

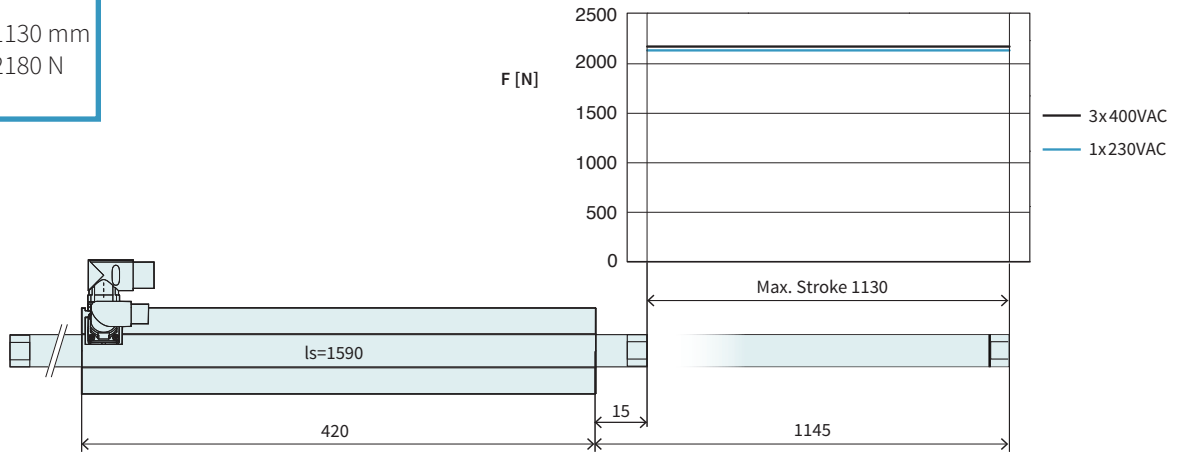
Technical Data P10-70x320U/930			
Stroke			
Max. Stroke	mm (in)	930	(36.6)
Force			
Max. Force @ 1x230VAC	N (lbf)	2170	(487)
Max. Force @ 3x400VAC	N (lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	64	(14.4)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	90.5	(20.3)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	2.8	(109.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	4.9	(4.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	33.7 / 23.8	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	4.1 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.9 / 4.4 / 7.7	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.65 / 0.28 / 0.09	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 110	
Mechanical Data			
Slider Length	mm (in)	1390	(55)
Slider Mass	g (lb)	6530	(14.37)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x1390/1340	Slider for P10-70 'standard'	0150-2205

P10-70x320U/1130-BL-QJ

Max. Stroke: 1130 mm
Peak Force: 2180 N



Dimensions in mm

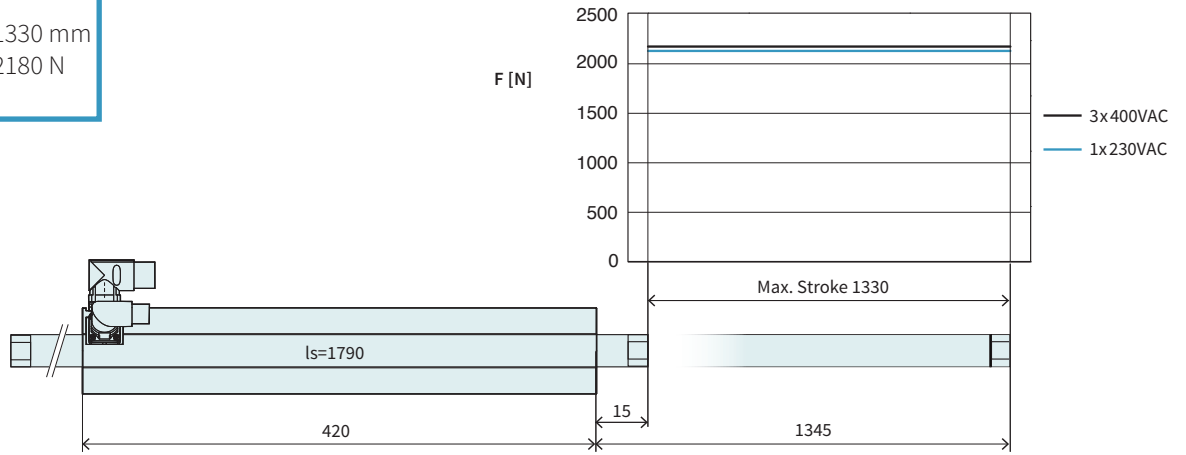
Technical Data P10-70x320U/1130			
Stroke			
Max. Stroke	mm (in)		1130 (44.49)
Force			
Max. Force @ 1x230VAC	N (lbf)		2170 (487)
Max. Force @ 3x400VAC	N (lbf)		2180 (489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		260 / 400 / 700 (58 / 89 / 160)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		64 (14.4)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		90.5 (20.3)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		2.8 (109.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		4.9 (4.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.15
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		33.7 / 23.8
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4.1 / 6.2 / 11
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.7
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.65 / 0.28 / 0.09
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110
Mechanical Data			
Slider Length	mm (in)		1590 (63)
Slider Mass	g (lb)		7470 (16.43)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x1590/1540	Slider for P10-70 'standard'	0150-2206

P10-70x320U/1330-BL-QJ

Max. Stroke: 1330 mm
Peak Force: 2180 N



Dimensions in mm

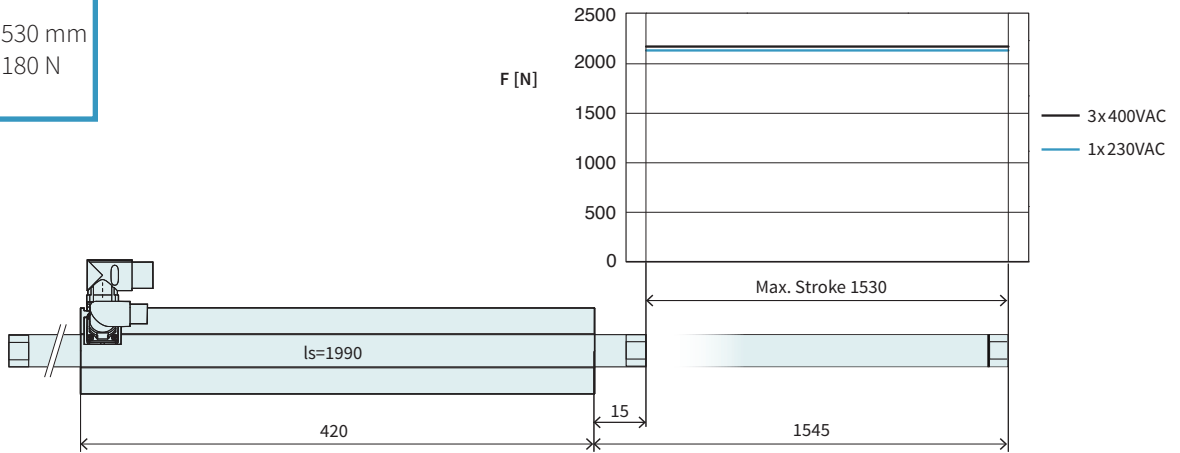
Technical Data P10-70x320U/1330				
Stroke				
Max. Stroke	mm	(in)	1330	(52.39)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	64	(14.4)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	90.5	(20.3)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.8	(109.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	4.9	(4.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		33.7 / 23.8	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4.1 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.7	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.65 / 0.28 / 0.09	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	1790	(70)
Slider Mass	g	(lb)	8413	(18.51)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x1790/1740	Slider for P10-70 'standard'	0150-2207

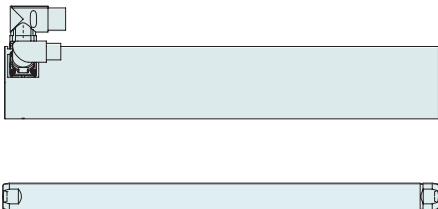
P10-70x320U/1530-BL-QJ

Max. Stroke: 1530 mm
Peak Force: 2180 N



Dimensions in mm

Technical Data P10-70x320U/1530				
Stroke				
Max. Stroke	mm	(in)	1530	(60.2)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative			%	
			100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	64	(14.4)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	90.5	(20.3)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.8	(109.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	4.9	(4.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity			%	
			± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		33.7 / 23.8	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4.1 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.7	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.65 / 0.28 / 0.09	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	1990	(78)
Slider Mass	g	(lb)	9350	(20.57)



Item	Description	Item-No.
PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
PL10-28x1990/1940	Slider for P10-70 'standard'	0150-2208

Linear Guides H10



4

HM10-70x320/130		Linear Module 70x320 with 130 mm Stroke		
→	H-Guide	H10-70x320/130	H-Guide for P10-70x320, Stroke max. 130 mm	0150-5414
	Stator	PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
		PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
		PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
		PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
Slider	PL10-28x590/540	Slider for P10-70 'standard'	0150-2196	

HM10-70x320/230		Linear Module 70x320 with 230 mm Stroke		
→	H-Guide	H10-70x320/230	H-Guide for P10-70x320, Stroke max. 230 mm	0150-5415
	Stator	PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
		PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
		PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
		PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
Slider	PL10-28x690/640	Slider for P10-70 'standard'	0150-2197	

HM10-70x320/330		Linear Module 70x320 with 330 mm Stroke		
→	H-Guide	H10-70x320/330	H-Guide for P10-70x320, Stroke max. 330 mm	0150-5416
	Stator	PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
		PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
		PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
		PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
Slider	PL10-28x790/740	Slider for P10-70 'standard'	0150-2198	

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

4

HM10-70x320/430 | Linear Module 70x320 with 430 mm Stroke

H-Guide	H10-70x320/430	H-Guide for P10-70x320, Stroke max. 430 mm	0150-5417
Stator	PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
	PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
	PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
	PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
Slider	PL10-28x890/840	Slider for P10-70 'standard'	0150-2199

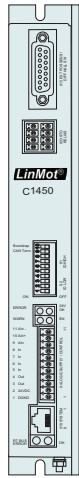
HM10-70x320/530 | Linear Module 70x320 with 530 mm Stroke

H-Guide	H10-70x320/530	H-Guide for P10-70x320, Stroke max. 530 mm	0150-5418
Stator	PS10-70x320U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1284
	PS10-70x320U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2285
	PS10-70x320U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2343
	PS10-70x320U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2711
Slider	PL10-28x990/940	Slider for P10-70 'standard'	0150-2203

Accessories

Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051
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Motor Cable



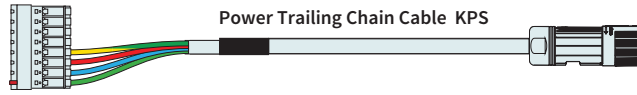
C1400



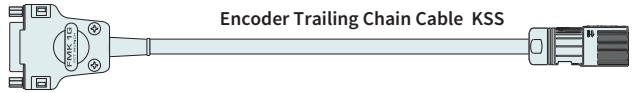
E1400

B Connector MC10-B/m

Q Connector MC10-Q/f



Power Trailing Chain Cable KPS



Encoder Trailing Chain Cable KSS



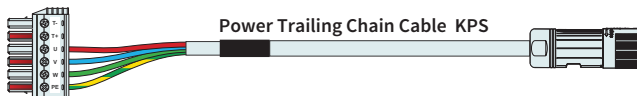
P10-70x320U

D15 Connector MC01-D15/f

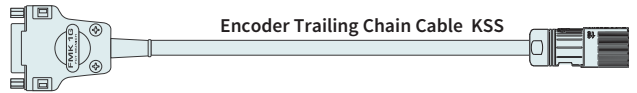
J Connector MC10-J/f

L Connector MC10-L/m

Q Connector MC10-Q/f



Power Trailing Chain Cable KPS



Encoder Trailing Chain Cable KSS



P10-70x320U

D15 Connector MC01-D15/f

J Connector MC10-J/f

ORDERING INFORMATION

TRAILING CHAIN CABLE FOR LINMOT DRIVES		
Item	Description	Item-No.
KPS15-04-L/Q-3	Power Trailing Chain Cable E1400/P10-70, 3 m	0150-2266
KPS15-04-L/Q-5	Power Trailing Chain Cable E1400/P10-70, 5 m	0150-2261
KPS15-04-L/Q-8	Power Trailing Chain Cable E1400/P10-70, 8 m	0150-2267
KPS15-04-L/Q-12	Power Trailing Chain Cable E1400/P10-70, 12 m	0150-2268
KPS15-04-L/Q-	Power Trailing Chain Cable L/Q-, Custom length	0150-3388
KPS15-04-B/Q-3	Power Trailing Chain Cable C1400/P10-70, 3 m	0150-3660
KPS15-04-B/Q-5	Power Trailing Chain Cable C1400/P10-70, 5 m	0150-3661
KPS15-04-B/Q-8	Power Trailing Chain Cable C1400/P10-70, 8 m	0150-3662
KPS15-04-B/Q-12	Power Trailing Chain Cable C1400/P10-70, 12 m	0150-3663
KPS15-04-B/Q-	Power Trailing Chain Cable B/Q-, Custom length	0150-3608

TRAILING CHAIN CABLE FOR LINMOT DRIVES

Item	Description	Item-No.
KSS 05-02/08-D15/J-3	Encoder Trailing Chain Cable D15/J, 3 m	0150-2263
KSS 05-02/08-D15/J-5	Encoder Trailing Chain Cable D15/J, 5 m	0150-2262
KSS 05-02/08-D15/J-8	Encoder Trailing Chain Cable D15/J, 8 m	0150-2264
KSS 05-02/08-D15/J-12	Encoder Trailing Chain Cable D15/J, 12 m	0150-2265
KSS 05-02/08-D15(f)-45°/J-	Encoder Trailing Chain Cable D15/J-, Custom length	0150-3389

TRAILING CHAIN CABLE FOR STATOR SERIES D03

Item	Description	Item-No.
KPS15-04/04.../Q-10	Power Trailing Chain Cable .../Q, 10 m for D03	0150-3654
KPS15-04/04-./Q-	Power Trailing Chain Cable .../Q, for D03, Custom length	0150-3579
KSS05-02/06-./J-10	Encoder Trailing Chain Cable ./J, 10 m for D03	0150-3655
KSS05-02/06-./J-	Encoder Trailing Chain Cable ./J, for D03, Custom length	0150-3611
KPS15-04/04	Power Trailing Chain Cable P10-...-Dx3 (per m)	0150-2269
KSS05-02/06	Trailing Chain Cable Encoder P10-...-Dx3 (per m)	0150-2490

CONNECTOR

Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
MC01-D15/f	Motor Connector D15 (f)	0150-3136
MC10-Q/f	Connector Power PS10-70	0150-2268
MC10-J/f	Connector Encoder PS10-70	0150-2269

MOTOR FLANGES



Item	Description	Item-No.
PF10-70x350	Flange for PS10-70x320	0150-2290



Item	Description	Item-No.
PF10-70x350-FC	Flange for PS10-70x320 fluid cooling	0150-2294

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



Item	Description	Item-No.
PB10-70x320-L	Bearing Kit for PS10-70x320	0150-3434

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LUBRICANT RESERVOIR



Item	Description	Item-No.
PA10-70/28	Lubricant reservoir for PS10-70 with lubricating nipple	0150-3543

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

A series of horizontal dotted lines for taking notes.

LINEAR MOTORS P10-70x400U



- ✓ 3 x 400VAC Technology
- ✓ Peak forces up to 2720 N
- ✓ Extremely high dynamic
- ✓ Separate connector for sensor and power cable
- ✓ Can also be controlled by standard third-party servo drives

LINEAR MOTORS P10-70x400U

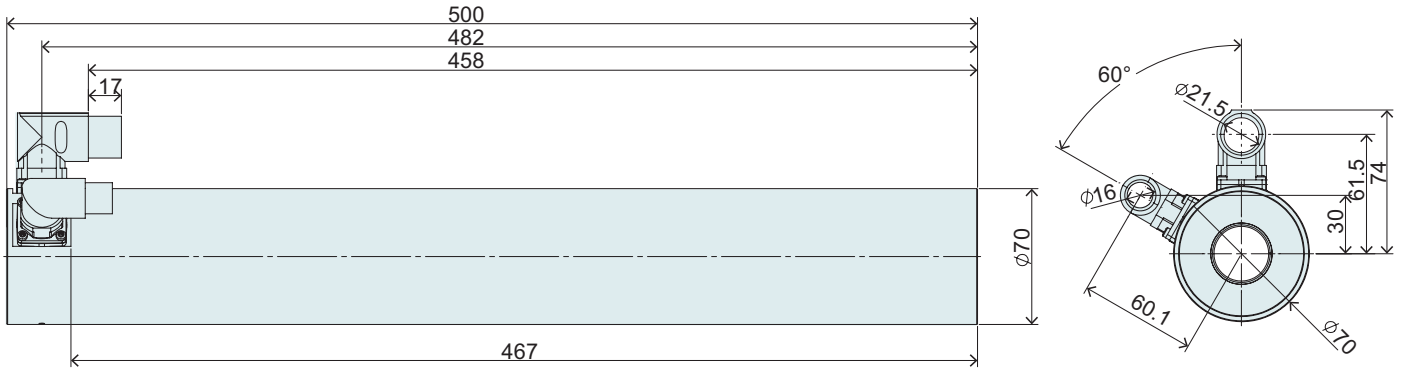
Technical Data	597
Motor Specifications	
P10-70x400U/50	602
P10-70x400U/150	603
P10-70x400U/250	604
P10-70x400U/350	605
P10-70x400U/450	606
P10-70x400U/650	607
P10-70x400U/850	608
P10-70x400U/1050	609
P10-70x400U/1250	610
P10-70x400U/1450	611
Linear Guides	612
Accessories	614



MOTOR FAMILY P10-70x400U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1450	(57.1)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	80	(18)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	113	(25.4)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.2	(89.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	3.9	(159.9)
Position Detection				
Position Resolution	mm	(in)	0.005	(0.0002)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	92.4 (2.35)	
Terminal Resistance 25 °C / 120 °C	Ohm		6.9 / 9.5	
Terminal Inductivity	mH		13	
Magnetic Period	mm	(in)	40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.52 / 0.22 / 0.068	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100	
Mechanical Data				
Stator Diameter	mm	(in)	70	(2.8)
Stator Length	mm	(in)	500	(20)
Stator Mass	g	(lb)	8250	(18.15)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	590 - 1990	(23 - 78)
Slider Mass	g	(lb)	2770 - 9350	(6.09 - 20.57)
IP Code			IP 65	

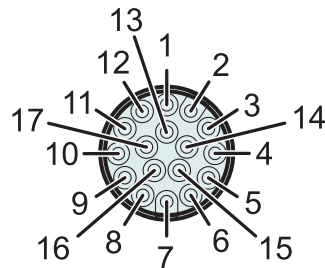
STATOR



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712

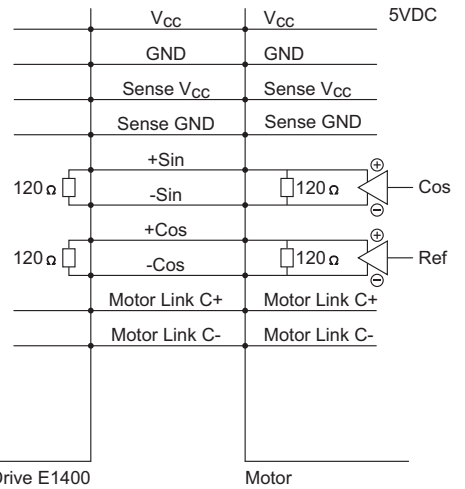
CONNECTOR PS10-70x400U-BL-QJ

Motor Connector Wiring		Connector Encoder J	Wire Color Motor Cable
+5 VDC	Supply	1	red
GND	Supply	2	black
Sense +5V	Supply Sense	3	white
Sense GND	Supply Sense	4	brown
Mot. Link C+	Communication	5	pink
Mot. Link C-	Communication	6	grey
Sin+	Encoder	7	yellow
Sin-	Encoder	8	orange
Cos+	Encoder	9	green
Cos-	Encoder	10	blue
n. c.	n. c.	11	n. c.
n. c.	n. c.	12	n. c.
n. c.	n. c.	13	n. c.
n. c.	n. c.	14	n. c.
n. c.	n. c.	15	n. c.
n. c.	n. c.	16	n. c.
n. c.	n. c.	17	n. c.



Connector Encoder J

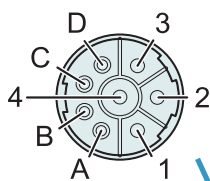
View: Motor connector, plug side



LinMot Drive E1400

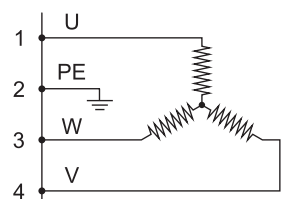
Motor

Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red
PE	2	yellow-green
Phase W	3	green
Phase V	4	blue
n. c.	A	n. c.
n. c.	B	n. c.
n. c.	C	n. c.
n. c.	D	n. c.

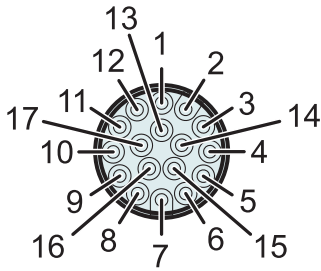


Connector Power Q

View: Motor connector, plug side



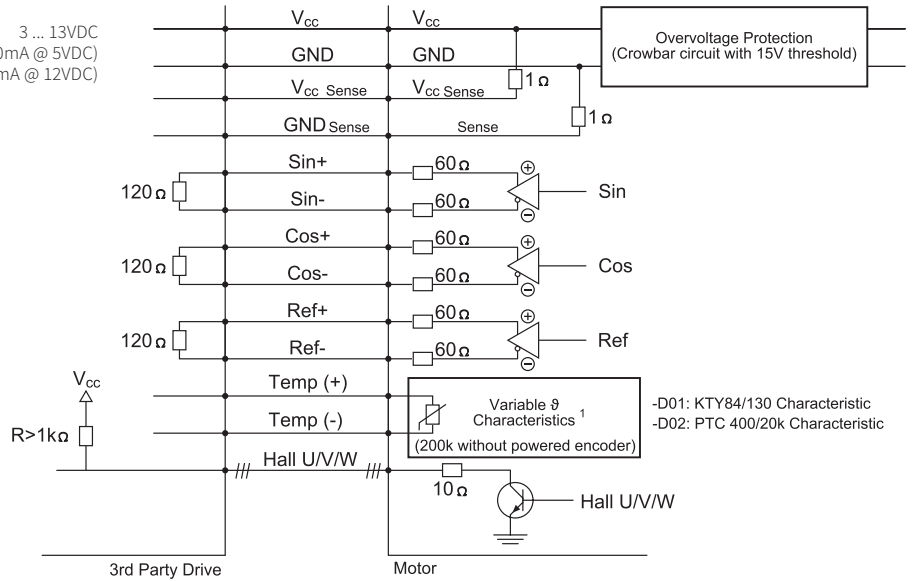
CONNECTOR PS10-70x400U-BL-QJ-D01/02



Connector Encoder J

View: Motor connector, plug side

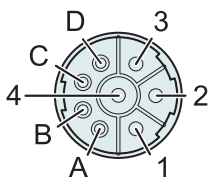
3 ... 13VDC
($I_{max} < 150\text{mA}$ @ 5VDC)
($I_{max} < 80\text{mA}$ @ 12VDC)



-D01: KTY84/130 Characteristic
-D02: PTC 400/20k Characteristic

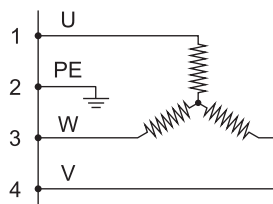
Motor Connector Wiring				
PS10-70x400U-BL-QJ-D01	PS10-70x400U-BL-QJ-D02	Function	Connector Encoder J	Wire Color Motor Cable
3 ... 13 VDC	3 ... 13 VDC	Supply	1	white
GND	GND	Supply	2	brown
Vcc Sense (optional)	Vcc Sense (optional)	Supply Sense	3	green
GND Sense (optional)	GND Sense (optional)	Supply Sense	4	yellow
Do not connect	Do not connect	-	5	-
Do not connect	Do not connect	-	6	-
Sin+	Sin+	Encoder 1 Vpp	7	grey
Sin-	Sin-	Encoder 1 Vpp	8	pink
Cos+	Cos+	Encoder 1 Vpp	9	blue
Cos-	Cos-	Encoder 1 Vpp	10	red
Ref+	Ref+	Encoder 1 Vpp	11	black
Ref-	Ref-	Encoder 1 Vpp	12	violett
Hall U	Hall U	Encoder (open collector)	13	grey-red
Hall V	Hall V	Encoder (open collector)	14	red-blue
Hall W	Hall W	Encoder (open collector)	15	white-green
Temp+ (KTY84/130 Char.)	Temp+ (PTC 400/20k Char.)	Temperature ¹	16	yellow-brown
Temp- (KTY84/130 Char.)	Temp- (PTC 400/20k Char.)	Temperature ¹	17	white-yellow

1) The temperature evaluation circuit must be powered from the encoder supply and must be at the same potential. The grounds of the temperature evaluation circuit and the encoder have to be connected. The encoder must have been powered on for at least 50 ms, before valid temperatures can be measured. If the encoder is powered off, 200k Ohms are measured between Pins 16 and 17. The maximum voltage between Pin 16 and 17 must not exceed 16 VDC. The maximum current must not exceed 15 mA.



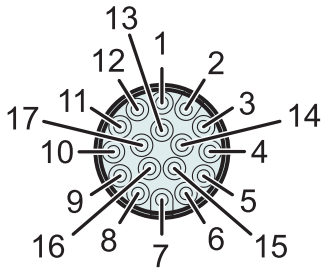
Connector Power Q

View: Motor connector, plug side



Mmotor Steckerbelegung			
PS10-70x400U-BL-QJ-D01	PS10-70x400U-BL-QJ-D02	Wire Color Motor Cable	Connector Power Q
Phase U	Phase U	red	1
PE	PE	yellow-green	2
Phase W	Phase W	green	3
Phase V	Phase V	blue	4
n. c.	n. c.	n. c.	A
n. c.	n. c.	n. c.	B
n. c.	n. c.	n. c.	C
n. c.	n. c.	n. c.	D

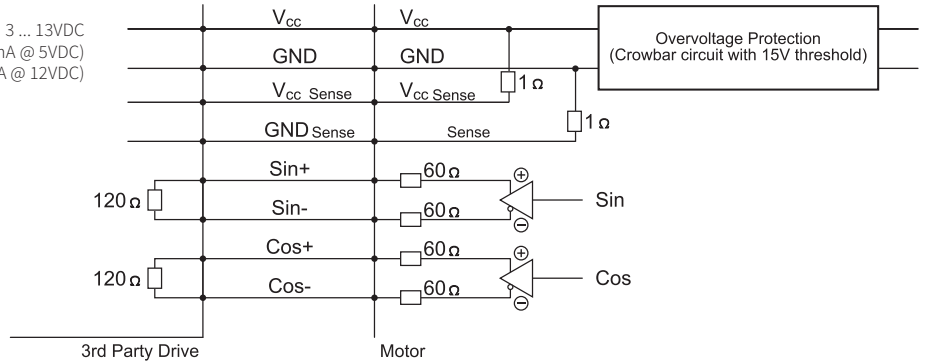
CONNECTOR PS10-70x400U-BL-QJ-D03



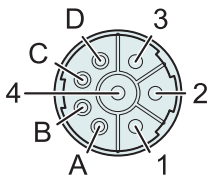
Connector Encoder J

View: Motor connector, plug side

3 ... 13VDC
($I_{max} < 150\text{mA}$ @ 5VDC)
($I_{max} < 80\text{mA}$ @ 12VDC)

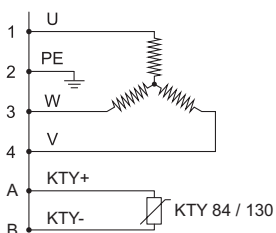


Motor Connector Wiring		Wire Color Motor Cable	Connector Encoder J
3 ... 13VDC	Supply	red	1
GND	Supply	black	2
Vcc Sense (optional)	Supply Sense	white	3
GND Sense (optional)	Supply Sense	brown	4
Do not connect	-	-	5
Do not connect	-	-	6
Sin+	Encoder 1 Vpp	yellow	7
Sin-	Encoder 1 Vpp	orange	8
Cos+	Encoder 1 Vpp	green	9
Cos-	Encoder 1 Vpp	blue	10
n. c.	-	n. c.	11
n. c.	-	n. c.	12
n. c.	-	n. c.	13
Do not connect	-	n. c.	14
n. c.	-	n. c.	15
n. c.	-	n. c.	16
n. c.	-	n. c.	17



Connector Power Q

View: Motor connector, plug side

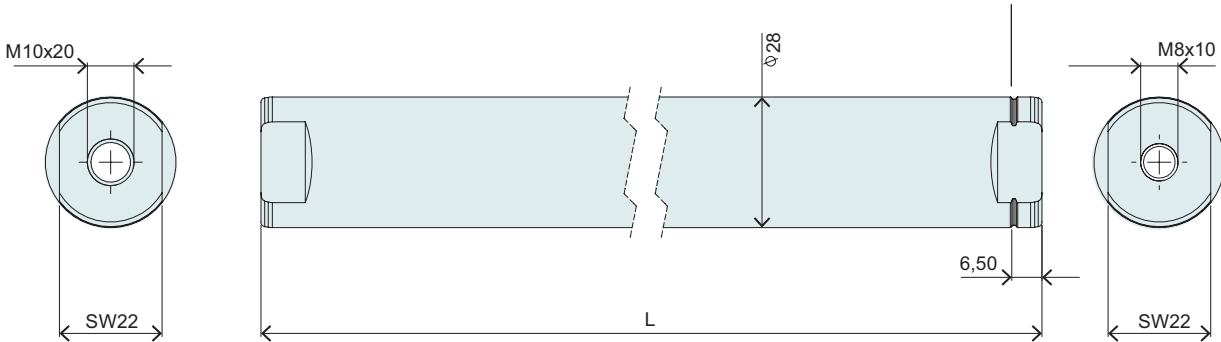


Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red (previously: black 1)
PE	2	yellow-green
Phase W	3	green (previously: black 3)
Phase V	4	blue (previously: black 2)
KTY+	A	purple (previously: black 5)
KTY-	B	grey (previously: black 6)
n. c.	C	yellow (previously: black 7)
n. c.	D	brown (previously: black 8)

SLIDER

Slider Standard

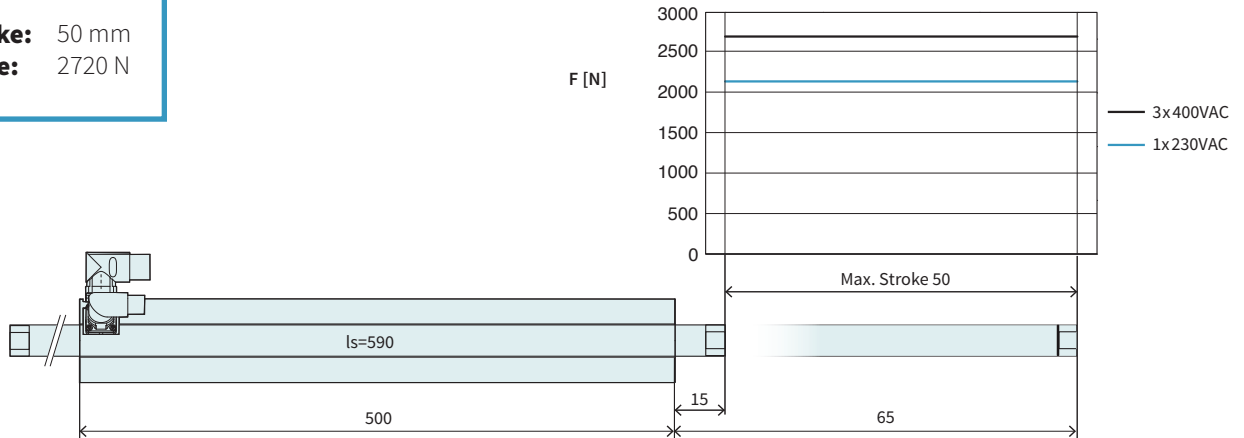
Number of grooves determines the slider type (see chapter 2 / slider) and marks the front end.



Slider Standard			
Item	Description	Max. Stroke [mm]	Item-No.
PL10-28x590/540	Slider for P10-70 'standard'	50	0150-2196
PL10-28x690/640	Slider for P10-70 'standard'	150	0150-2197
PL10-28x790/740	Slider for P10-70 'standard'	250	0150-2198
PL10-28x890/840	Slider for P10-70 'standard'	350	0150-2199
PL10-28x990/940	Slider for P10-70 'standard'	450	0150-2203
PL10-28x1190/1140	Slider for P10-70 'standard'	650	0150-2204
PL10-28x1390/1340	Slider for P10-70 'standard'	850	0150-2205
PL10-28x1590/1540	Slider for P10-70 'standard'	1050	0150-2206
PL10-28x1790/1740	Slider for P10-70 'standard'	1250	0150-2207
PL10-28x1990/1940	Slider for P10-70 'standard'	1450	0150-2208

P10-70x400U/50-BL-QJ

Max. Stroke: 50 mm
Peak Force: 2720 N



Dimensions in mm

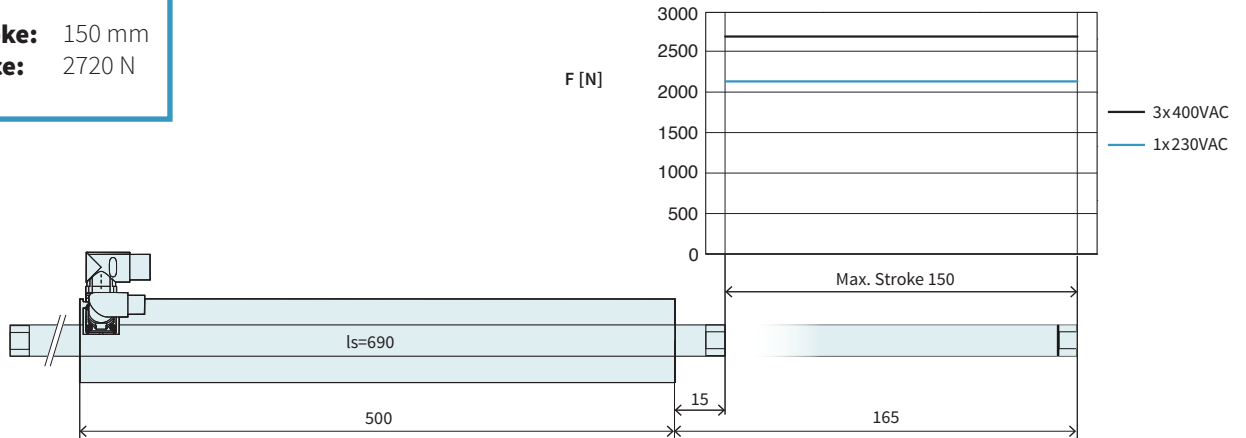
Technical Data P10-70x400U/50			
Stroke			
Max. Stroke	mm (in)	50	(1.96)
Force			
Max. Force @ 1x230VAC	N (lbf)	2150	(483)
Max. Force @ 3x400VAC	N (lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	80	(18)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	113	(25.4)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	2.2	(89.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	3.9	(3.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 1.1	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	26.8 / 18.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	4 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.9 / 4.4 / 7.9	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.52 / 0.22 / 0.068	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 100	
Mechanical Data			
Slider Length	mm (in)	590	(23)
Slider Mass	g (lb)	2770	(6.09)



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PL10-28x590/540	Slider for P10-70 'standard'	0150-2196

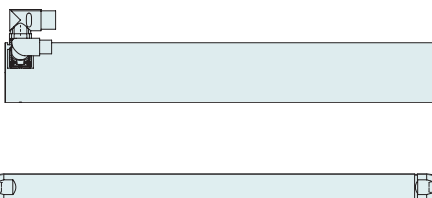
P10-70x400U/150-BL-QJ

Max. Stroke: 150 mm
Peak Force: 2720 N



Dimensions in mm

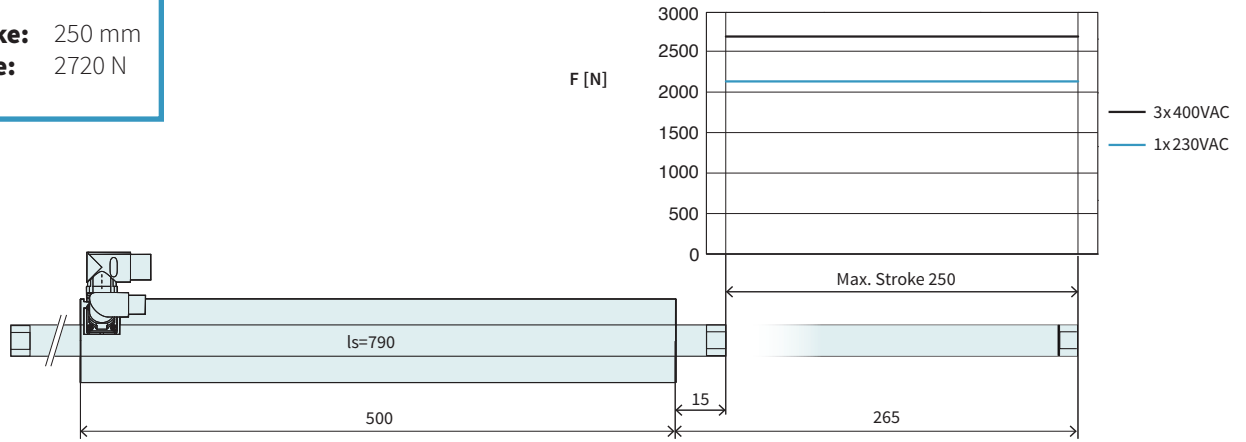
Technical Data P10-70x400U/150			
Stroke			
Max. Stroke	mm (in)		150 (5.91)
Force			
Max. Force @ 1x230VAC	N (lbf)		2150 (483)
Max. Force @ 3x400VAC	N (lbf)		2720 (611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		320 / 500 / 890 (73 / 110 / 200)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		80 (18)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		113 (25.4)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		2.2 (89.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		3.9 (3.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.45
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4 / 6.2 / 11
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.52 / 0.22 / 0.068
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100
Mechanical Data			
Slider Length	mm (in)		690 (27)
Slider Mass	g (lb)		3240 (7.13)



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PL10-28x590/540	Slider for P10-70 'standard'	0150-2196

P10-70x400U/250-BL-QJ

Max. Stroke: 250 mm
Peak Force: 2720 N



Dimensions in mm

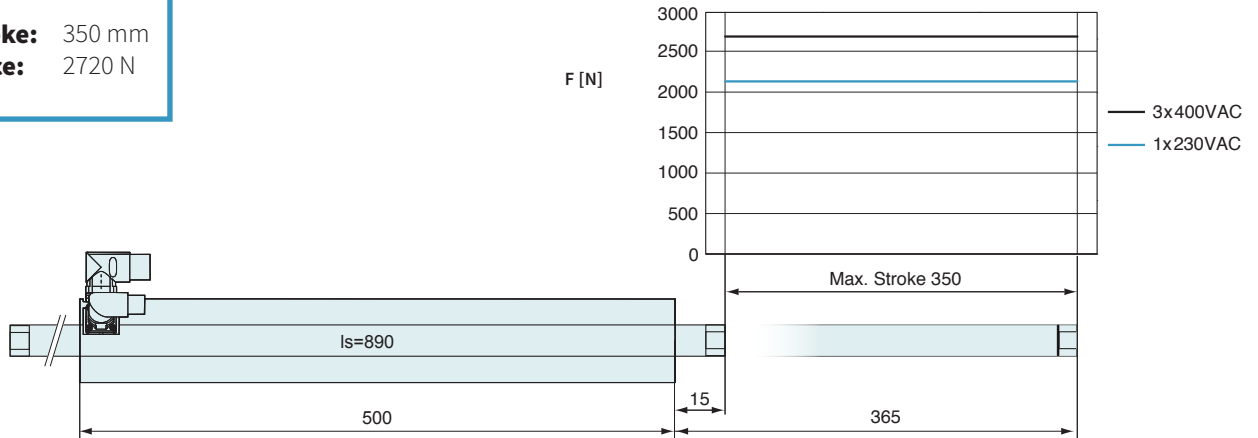
Technical Data P10-70x400U/250			
Stroke			
Max. Stroke	mm	(in)	250 (9.83)
Force			
Max. Force @ 1x230VAC	N	(lbf)	2150 (483)
Max. Force @ 3x400VAC	N	(lbf)	2720 (611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890 (73 / 110 / 200)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	80 (18)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	113 (25.4)
Velocity			
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.2 (89.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	3.9 (3.9)
Position Detection			
Repeatability	mm	(in)	±0.05 (±0.002)
Linearity	%		± 0.3
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4 / 6.2 / 11
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.52 / 0.22 / 0.068
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100
Mechanical Data			
Slider Length	mm	(in)	790 (31)
Slider Mass	g	(lb)	3710 (8.16)



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PL10-28x790/740	Slider for P10-70 'standard'	0150-2198

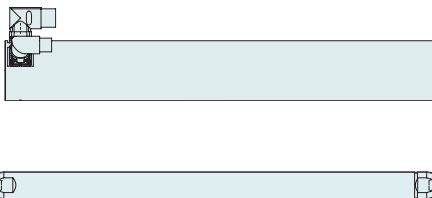
P10-70x400U/350-BL-QJ

Max. Stroke: 350 mm
Peak Force: 2720 N



Dimensions in mm

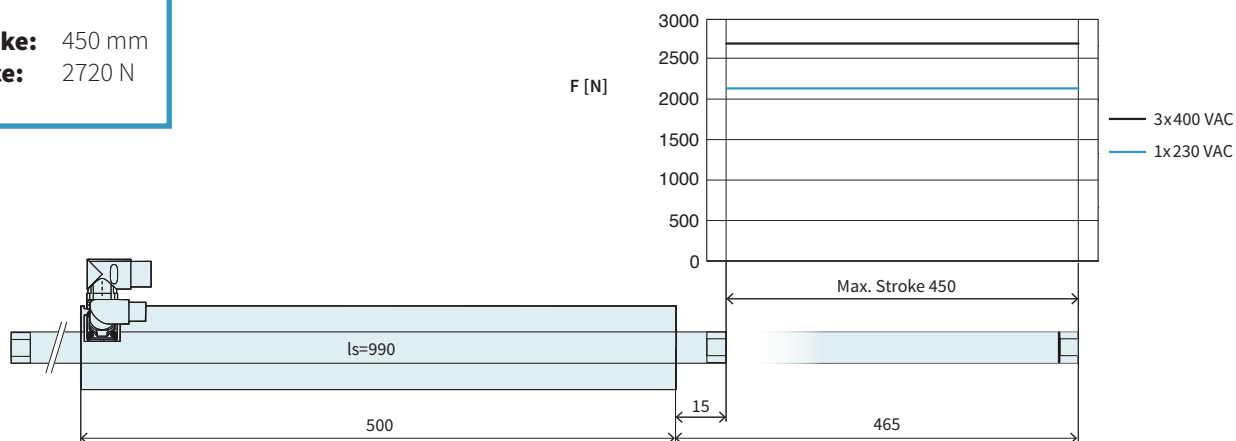
Technical Data P10-70x400U/350			
Stroke			
Max. Stroke	mm (in)		350 (13.8)
Force			
Max. Force @ 1x230VAC	N (lbf)		2150 (483)
Max. Force @ 3x400VAC	N (lbf)		2720 (611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		320 / 500 / 890 (73 / 110 / 200)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		80 (18)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		113 (25.4)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		2.2 (89.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		3.9 (3.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.25
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4 / 6.2 / 11
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.52 / 0.22 / 0.068
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100
Mechanical Data			
Slider Length	mm (in)		890 (35)
Slider Mass	g (lb)		4180 (9.2)



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PL10-28x890/840	Slider for P10-70 'standard'	0150-2199

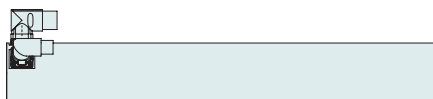
P10-70x400U/450-BL-QJ

Max. Stroke: 450 mm
Peak Force: 2720 N



Dimensions in mm

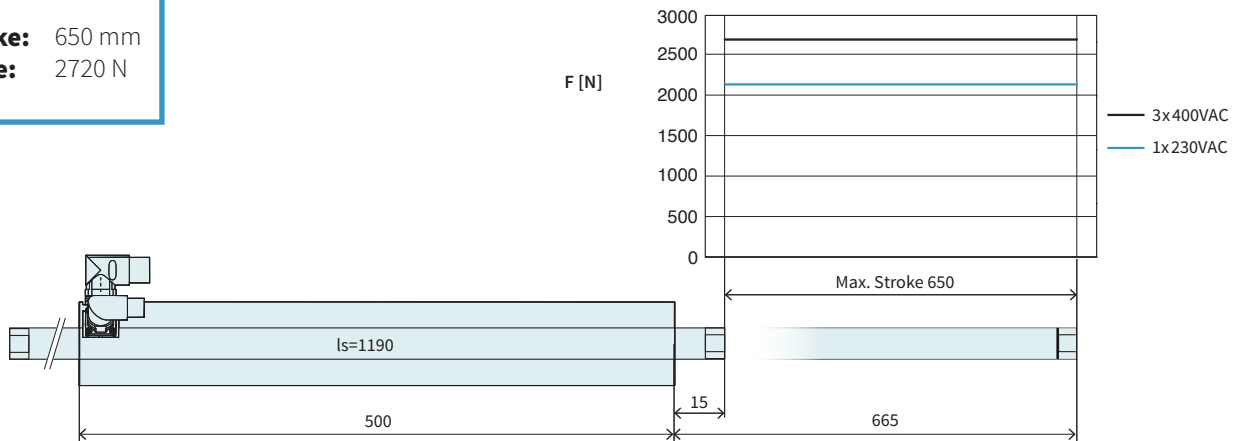
Technical Data P10-70x400U/450			
Stroke			
Max. Stroke	mm (in)		450 (17.69)
Force			
Max. Force @ 1x230VAC	N (lbf)		2150 (483)
Max. Force @ 3x400VAC	N (lbf)		2720 (611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		320 / 500 / 890 (73 / 110 / 200)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		80 (18)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		113 (25.4)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		2.2 (89.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		3.9 (3.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.2
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4 / 6.2 / 11
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.52 / 0.22 / 0.068
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100
Mechanical Data			
Slider Length	mm (in)		990 (39)
Slider Mass	g (lb)		4650 (10.23)



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PL10-28x990/940	Slider for P10-70 'standard'	0150-2203

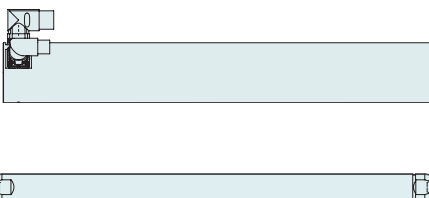
P10-70x400U/650-BL-QJ

Max. Stroke: 650 mm
Peak Force: 2720 N



Dimensions in mm

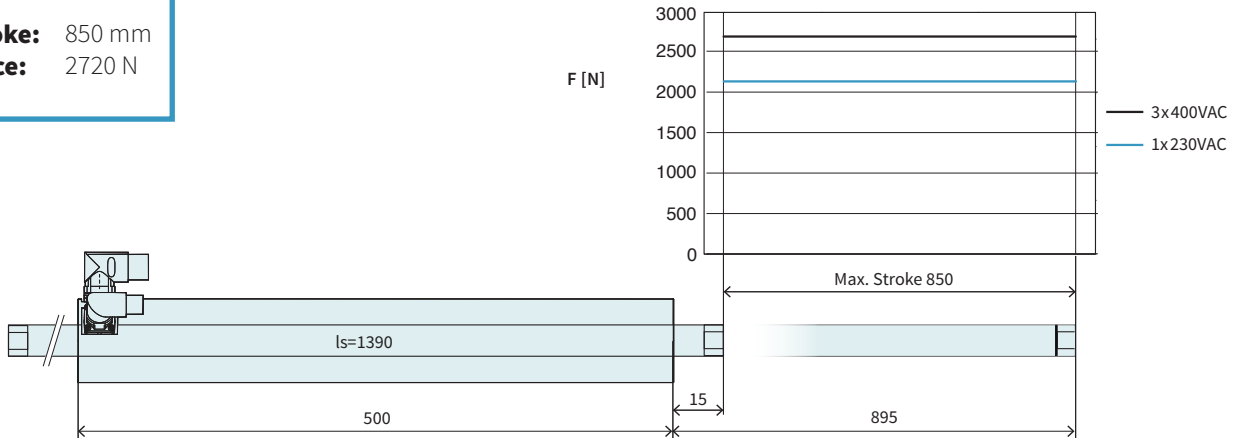
Technical Data P10-70x400U/650				
Stroke				
Max. Stroke	mm	(in)	650	(25.6)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	80	(18)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	113	(25.4)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.2	(89.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	3.9	(3.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.52 / 0.22 / 0.068	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100	
Mechanical Data				
Slider Length	mm	(in)	1190	(47)
Slider Mass	g	(lb)	5590	(12.3)



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PL10-28x1190/1140	Slider for P10-70 'standard'	0150-2204

P10-70x400U/850-BL-QJ

Max. Stroke: 850 mm
Peak Force: 2720 N



Dimensions in mm

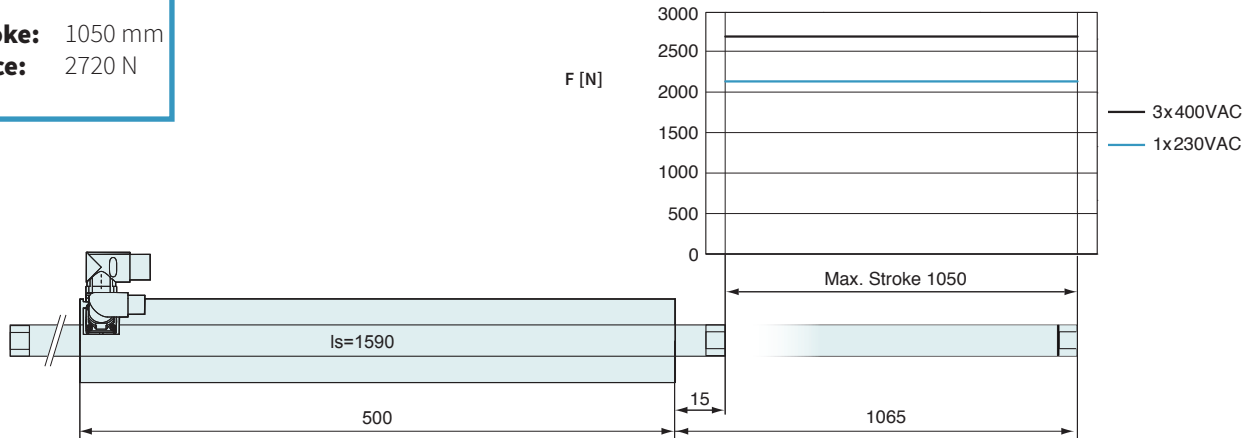
Technical Data P10-70x400U/850				
Stroke				
Max. Stroke	mm	(in)	850	(33.49)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	80	(18)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	113	(25.4)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.2	(89.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	3.9	(3.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	*K/W		0.52 / 0.22 / 0.068	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100	
Mechanical Data				
Slider Length	mm	(in)	1390	(55)
Slider Mass	g	(lb)	6530	(14.37)



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PL10-28x1390/1340	Slider for P10-70 'standard'	0150-2205

P10-70x400U/1050-BL-QJ

Max. Stroke: 1050 mm
Peak Force: 2720 N



Dimensions in mm

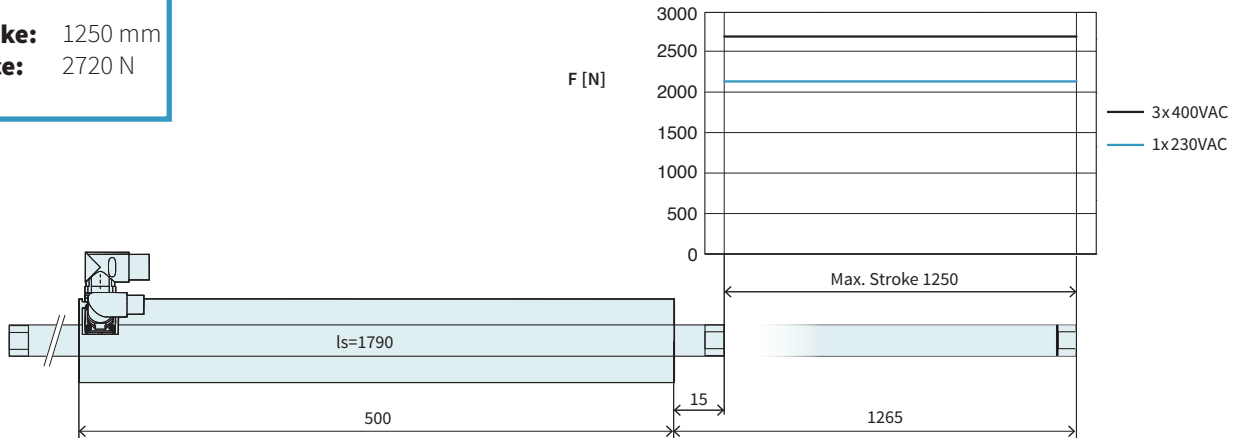
Technical Data P10-70x400U/1050			
Stroke			
Max. Stroke	mm (in)	1050	(41.29)
Force			
Max. Force @ 1x230VAC	N (lbf)	2150	(483)
Max. Force @ 3x400VAC	N (lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	80	(18)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	113	(25.4)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	2.2	(89.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	3.9	(3.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 1x230VAC	A _{pk} / A _{rms}	26.8 / 18.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}	33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	4 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	2.9 / 4.4 / 7.9	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.52 / 0.22 / 0.068	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2100 / 500 / 100	
Mechanical Data			
Slider Length	mm (in)	1590	(63)
Slider Mass	g (lb)	7470	(16.43)



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PL10-28x1590/1540	Slider for P10-70 'standard'	0150-2206

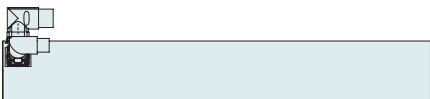
P10-70x400U/1250-BL-QJ

Max. Stroke: 1250 mm
Peak Force: 2720 N



Dimensions in mm

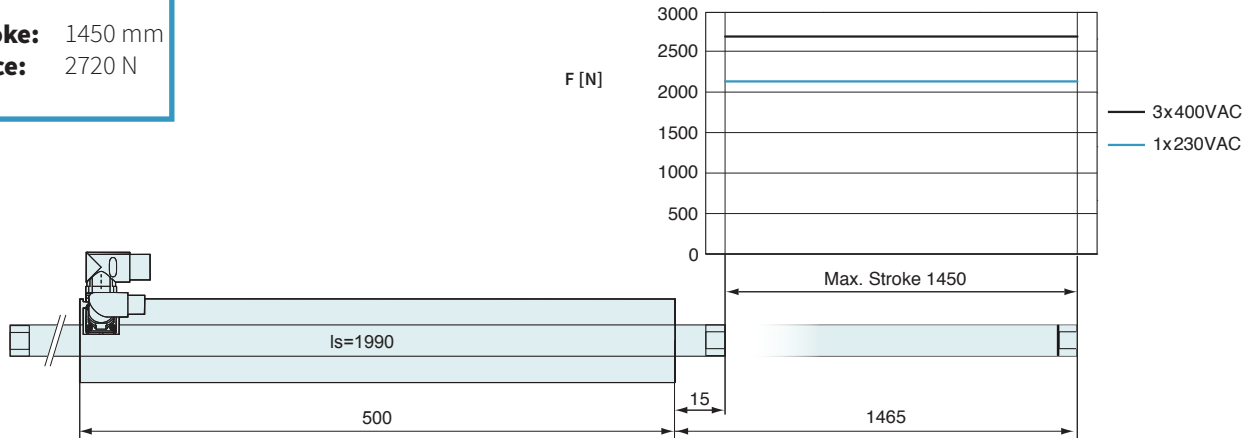
Technical Data P10-70x400U/1250				
Stroke				
Max. Stroke	mm	(in)	1250	(49.2)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	80	(18)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	113	(25.4)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.2	(89.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	3.9	(3.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.52 / 0.22 / 0.068	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100	
Mechanical Data				
Slider Length	mm	(in)	1790	(70)
Slider Mass	g	(lb)	8413	(18.51)



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PL10-28x1790/1740	Slider for P10-70 'standard'	0150-2207

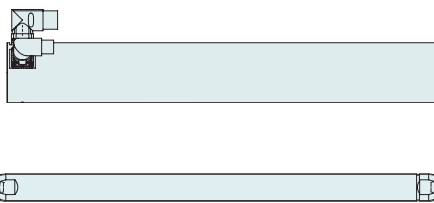
P10-70x400U/1450-BL-QJ

Max. Stroke: 1450 mm
Peak Force: 2720 N



Dimensions in mm

Technical Data P10-70x400U/1450				
Stroke				
Max. Stroke	mm	(in)	1450	(57.1)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	80	(18)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	113	(25.4)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.2	(89.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	3.9	(3.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		4 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.52 / 0.22 / 0.068	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100	
Mechanical Data				
Slider Length	mm	(in)	1990	(78)
Slider Mass	g	(lb)	9350	(20.57)



Item	Description	Item-No.
PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
PL10-28x1990/1940	Slider for P10-70 'standard'	0150-2208

Linear Guides H10

4



HM10-70x400/50		Linear Module 70x400 with 50 mm Stroke			
→	H-Guide	H10-70x400/50	H-Guide for P10-70x400, Stroke max. 50 mm	0150-5419	
	→	Stator	PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
			PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
			PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
			PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
→	Slider	PL10-28x590/540	Slider for P10-70 'standard'	0150-2196	
HM10-70x400/150		Linear Module 70x400 with 150 mm Stroke			
→	H-Guide	H10-70x400/150	H-Guide for P10-70x400, Stroke max. 150 mm	0150-5420	
	→	Stator	PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
			PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
			PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
			PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
→	Slider	PL10-28x690/640	Slider for P10-70 'standard'	0150-2197	
HM10-70x400/250		Linear Module 70x400 with 250 mm Stroke			
→	H-Guide	H10-70x400/250	H-Guide for P10-70x400, Stroke max. 250 mm	0150-5421	
	→	Stator	PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
			PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
			PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
			PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
→	Slider	PL10-28x790/740	Slider for P10-70 'standard'	0150-2198	

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

HM10-70x400/350 | Linear Module 70x400 with 350 mm Stroke

→	H-Guide	H10-70x400/350	H-Guide for P10-70x400, Stroke max. 350 mm	0150-5422	
	→	Stator	PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
			PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
			PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
			PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
→	Slider	PL10-28x890/840	Slider for P10-70 'standard'	0150-2199	

HM10-70x400/450 | Linear Module 70x400 with 450 mm Stroke

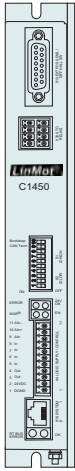
→	H-Guide	H10-70x400/450	H-Guide for P10-70x400, Stroke max. 450 mm	0150-5423	
	→	Stator	PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
			PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
			PS10-70x400U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2363
			PS10-70x400U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2712
→	Slider	PL10-28x990/940	Slider for P10-70 'standard'	0150-2203	

Accessories

→	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051
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Motor Cable

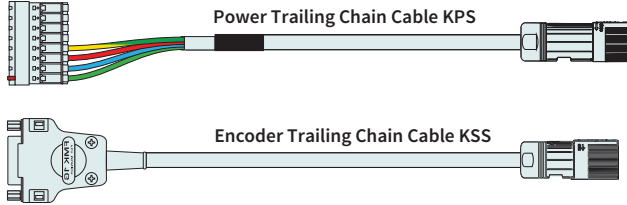
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C1400

B Connector MC10-B/m

Q Connector MC10-Q/f



P10-70x400U

D15 Connector MC01-D15/f

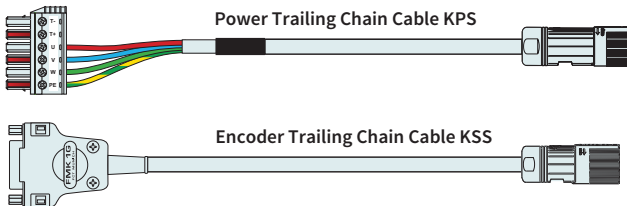
J Connector MC10-J/f



E1400

L Connector MC10-L/m

Q Connector MC10-Q/f



P10-70x400U

D15 Connector MC01-D15/f

J Connector MC10-J/f

ORDERING INFORMATION

TRAILING CHAIN CABLE FOR LINMOT DRIVES

Item	Description	Item-No.
KPS15-04-L/Q-3	Power Trailing Chain Cable E1400/P10-70, 3 m	0150-2266
KPS15-04-L/Q-5	Power Trailing Chain Cable E1400/P10-70, 5 m	0150-2261
KPS15-04-L/Q-8	Power Trailing Chain Cable E1400/P10-70, 8 m	0150-2267
KPS15-04-L/Q-12	Power Trailing Chain Cable E1400/P10-70, 12 m	0150-2268
KPS15-04-L/Q-	Power Trailing Chain Cable L/Q-, Custom length	0150-3388
KPS15-04-B/Q-3	Power Trailing Chain Cable C1400/P10-70, 3 m	0150-3660
KPS15-04-B/Q-5	Power Trailing Chain Cable C1400/P10-70, 5 m	0150-3661
KPS15-04-B/Q-8	Power Trailing Chain Cable C1400/P10-70, 8 m	0150-3662
KPS15-04-B/Q-12	Power Trailing Chain Cable C1400/P10-70, 12 m	0150-3663
KPS15-04-B/Q-	Power Trailing Chain Cable B/Q-, Custom length	0150-3608

TRAILING CHAIN CABLE FOR LINMOT DRIVES

Item	Description	Item-No.
KSS 05-02/08-D15/J-3	Encoder Trailing Chain Cable D15/J, 3 m	0150-2263
KSS 05-02/08-D15/J-5	Encoder Trailing Chain Cable D15/J, 5 m	0150-2262
KSS 05-02/08-D15/J-8	Encoder Trailing Chain Cable D15/J, 8 m	0150-2264
KSS 05-02/08-D15/J-12	Encoder Trailing Chain Cable D15/J, 12 m	0150-2265
KSS 05-02/08-D15(f)-45°/J-	Encoder Trailing Chain Cable D15/J-, Custom length	0150-3389

TRAILING CHAIN CABLE FOR STATOR SERIES D03

Item	Description	Item-No.
KPS15-04/04..../Q-10	Power Trailing Chain Cable .../Q, 10 m for D03	0150-3654
KPS15-04/04-./Q-	Power Trailing Chain Cable .../Q, for D03, Custom length	0150-3579
KSS05-02/06-./J-10	Encoder Trailing Chain Cable ./J, 10 m for D03	0150-3655
KSS05-02/06-./J-	Encoder Trailing Chain Cable ./J, for D03, Custom length	0150-3611
KPS15-04/04	Power Trailing Chain Cable P10-...-Dx3 (per m)	0150-2269
KSS05-02/06	Trailing Chain Cable Encoder P10-...-Dx3 (per m)	0150-2490

CONNECTOR

Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
MC01-D15/f	Motor Connector D15 (f)	0150-3136
MC10-Q/f	Connector Power PS10-70	0150-2268
MC10-J/f	Connector Encoder PS10-70	0150-2269

MOTOR FLANGES

4



Item	Description	Item-No.
PF10-70x430	Flange for PS10-70x400	0150-2276



Item	Description	Item-No.
PF10-70x430-FC	Flange for PS10-70x400 fluid cooling	0150-2295

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



Item	Description	Item-No.
PB10-70x400-L	Bearing Kit for PS10-70x400	0150-3435

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LUBRICANT RESERVOIR



Item	Description	Item-No.
PA10-70/28	Lubricant reservoir for PS10-70 with lubricating nipple	0150-3543

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".