

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**

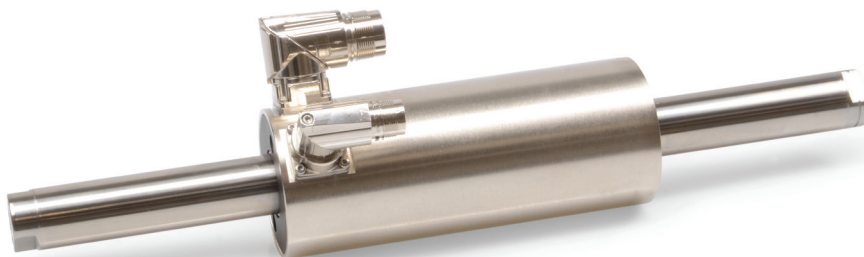
 P10-70x80U/1370 **506**

 P10-70x80U/1570 **507**

 P10-70x80U/1770 **508**

Linear Guides **509**

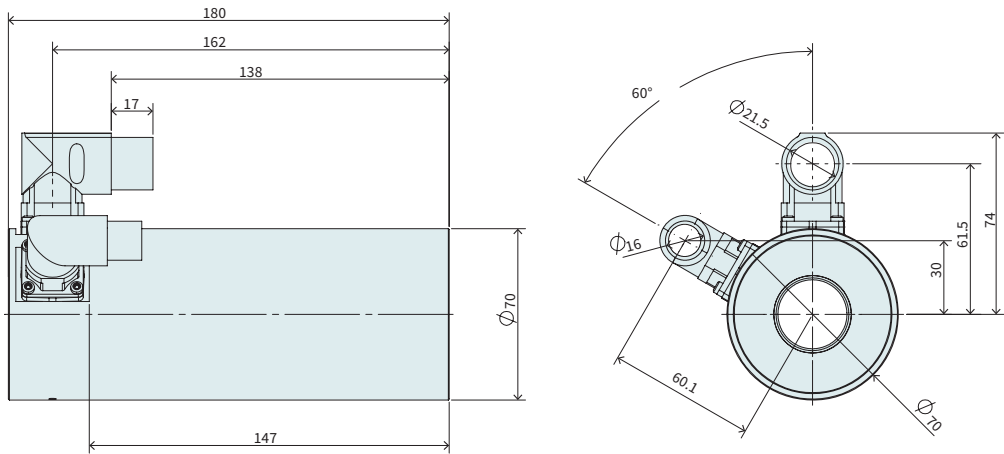
Accessories **511**



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	
Certification				
UL	File-No.		E354430	

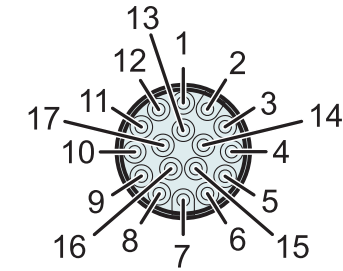
STATOR



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

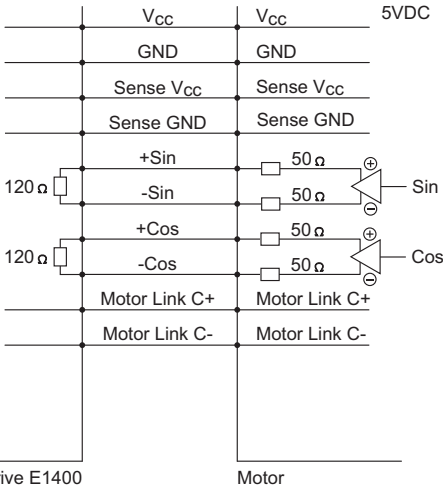
CONNECTOR PS10-70x80U-BL-QJ

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

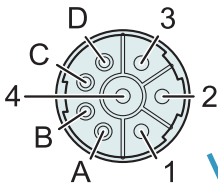


Connector Encoder J

View: Motor connector, plug side

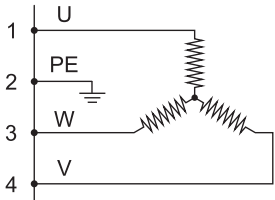


Motor Steckerbelegung	Connector Power Q	Wire Color Motor Cable
Phase U	1	red
PE	2	yellow-green
Phase W	3	green
Phase V	4	blue
n. c.	A	n. c.
n. c.	B	n. c.
n. c.	C	n. c.
n. c.	D	n. c.

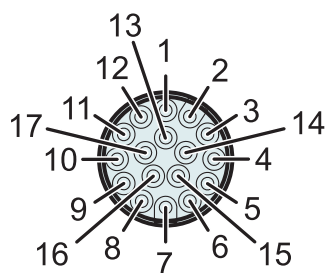


Connector Power Q

View: Motor connector, plug side



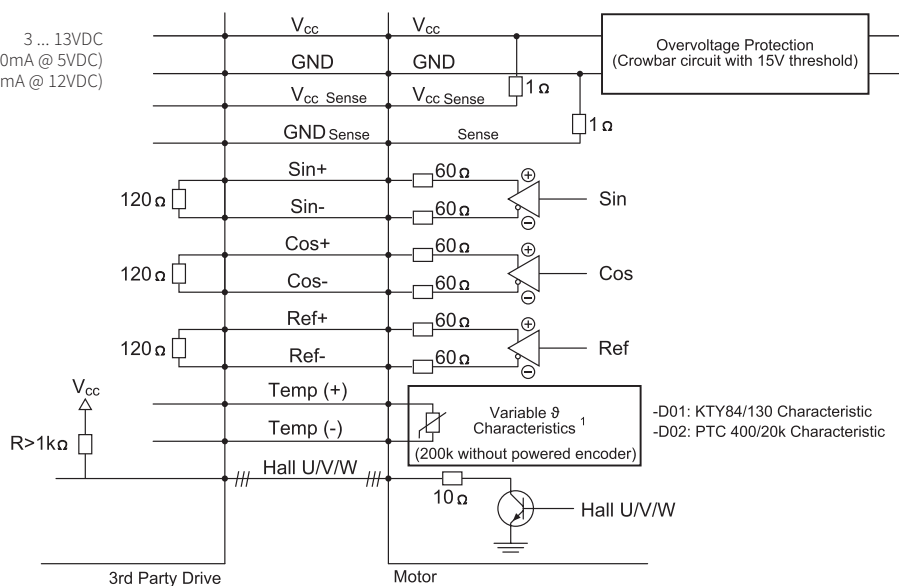
CONNECTOR PS10-70X80U-BL-QJ-D01/02



Connector Encoder J

View: Motor connector, plug side

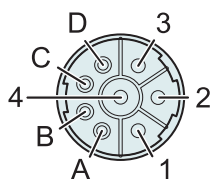
3 ... 13VDC
($I_{max} < 150\text{mA}$ @ 5VDC)
($I_{max} < 80\text{mA}$ @ 12VDC)



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

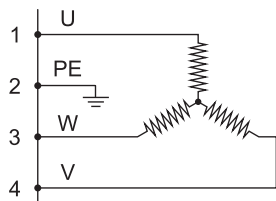
Motor Connector Wiring				
PS10-70x80U-BL-QJ-D01	PS10-70x80U-BL-QJ-D02	Function	Connector Encoder J	Wire Color Motor Cable
3 ... 13VDC	3 ... 13VDC	Supply	1	white
GND	GND	Supply	2	brown
Vcc Sense (optional)	Vcc Sense (optional)	Supply Sense	3	green
GND Sense (optional)	GND Sense (optional)	Supply Sense	4	yellow
Do not connect	Do not connect	-	5	-
Do not connect	Do not connect	-	6	-
Sin+	Sin+	Encoder 1 Vpp	7	grey
Sin-	Sin-	Encoder 1 Vpp	8	pink
Cos+	Cos+	Encoder 1 Vpp	9	blue
Cos-	Cos-	Encoder 1 Vpp	10	red
Ref+	Ref+	Encoder 1 Vpp	11	black
Ref-	Ref-	Encoder 1 Vpp	12	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 16VDC. The maximum current must not exceed 15 mA.



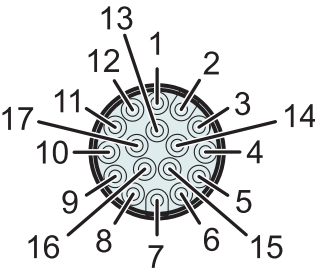
Connector Power Q

View: Motor connector, plug side



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

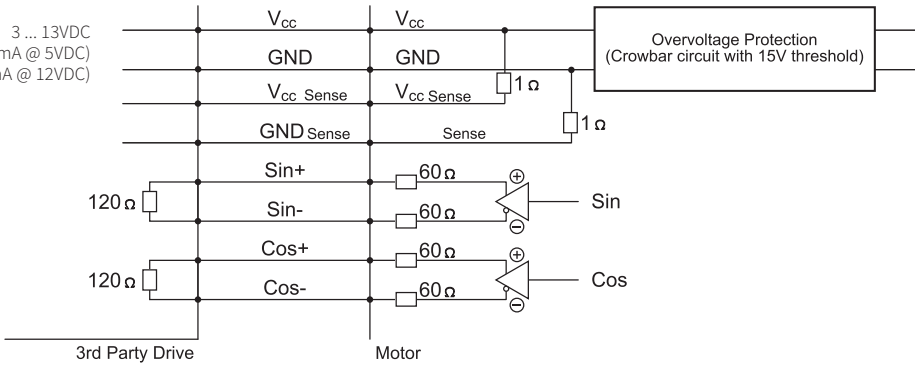
CONNECTOR PS10-70X80U-BL-QJ-D03



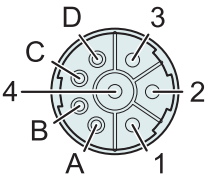
Connector Encoder J

View: Motor connector, plug side

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

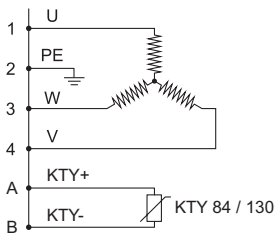


Motor Connector Wiring		Connector Encoder J	Wire Color Motor Cable
3 ... 13 VDC	Supply	1	red
GND	Supply	2	black
Vcc Sense (optional)	Supply Sense	3	white
GND Sense (optional)	Supply Sense	4	brown
Do not connect	–	5	–
Do not connect	–	6	–
Sin+	Encoder 1 Vpp	7	yellow
Sin-	Encoder 1 Vpp	8	orange
Cos+	Encoder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



Connector Power Q

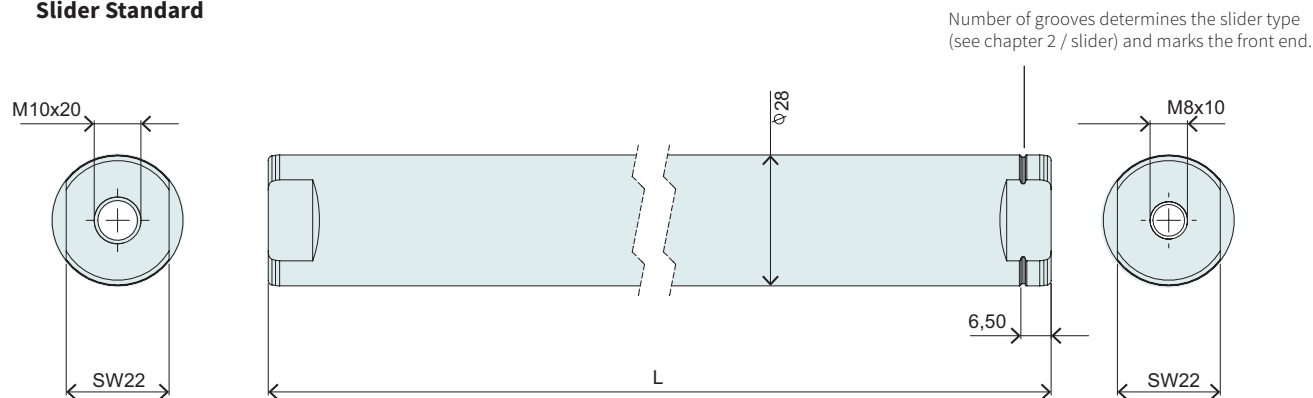
View: Motor connector, plug side



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

SLIDER

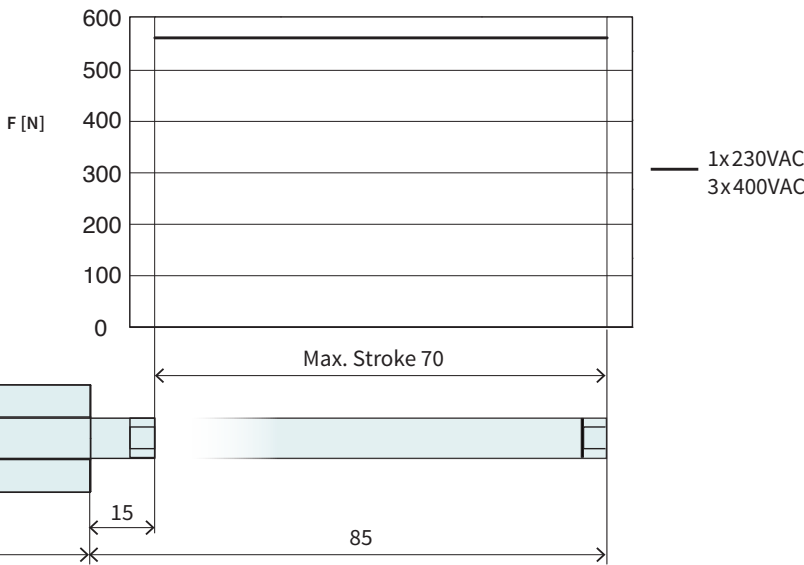
Slider Standard



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

P10-70x80U/70-BL-QJ

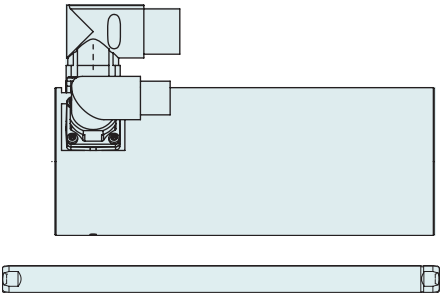
Max. Stroke: 70 mm
Peak Force: 561 N



Dimensions in mm

Technical Data P10-70x80U/70

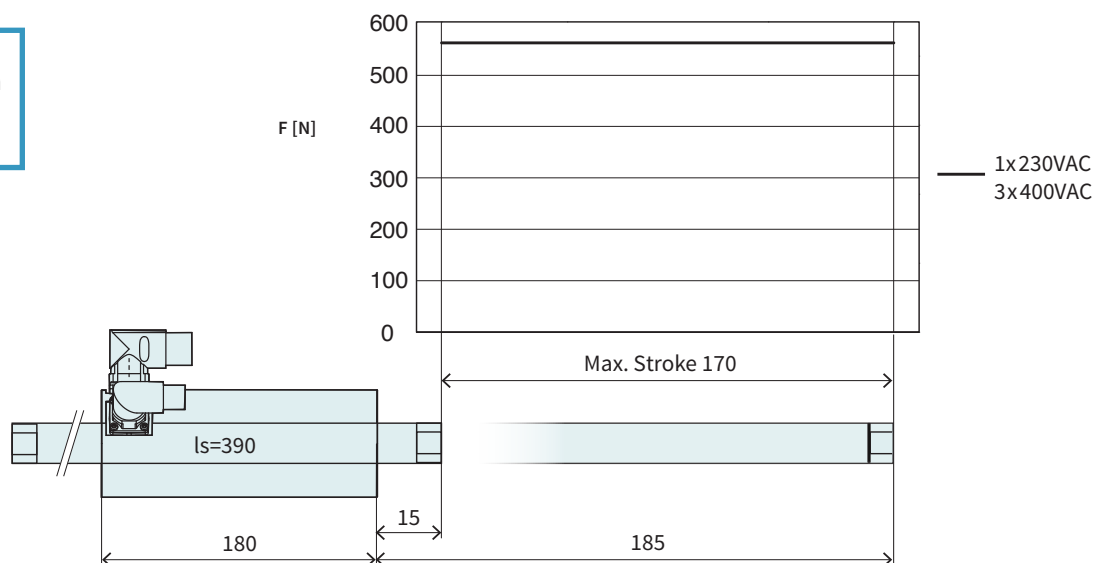
Stroke				
Max. Stroke	mm	(in)	70	(2.75)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)
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

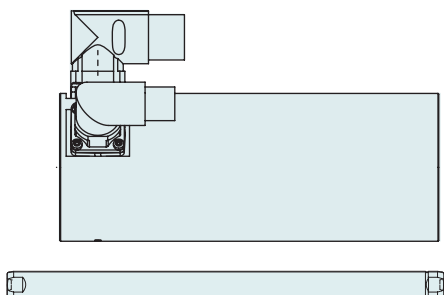
P10-70x80U/170-BL-QJ

Max. Stroke: 170 mm
Peak Force: 561 N



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)

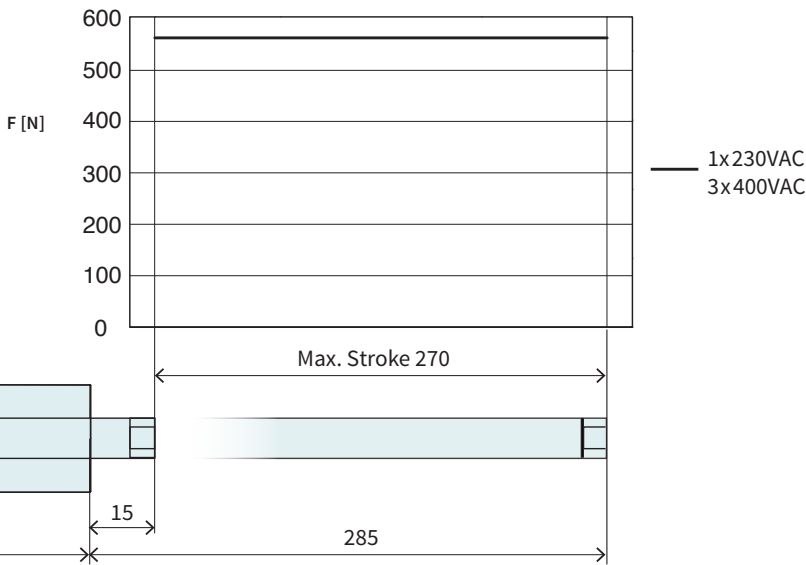


Item	Description	Item-No.
PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
PS10-70x80U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2360
PS10-70x80U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power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

P10-70x80U/270-BL-QJ

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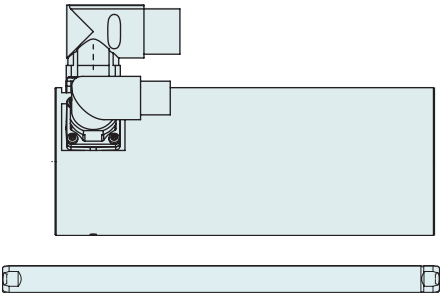
Max. Stroke: 270 mm
Peak Force: 561 N



Dimensions in mm

Technical Data P10-70x80U/270

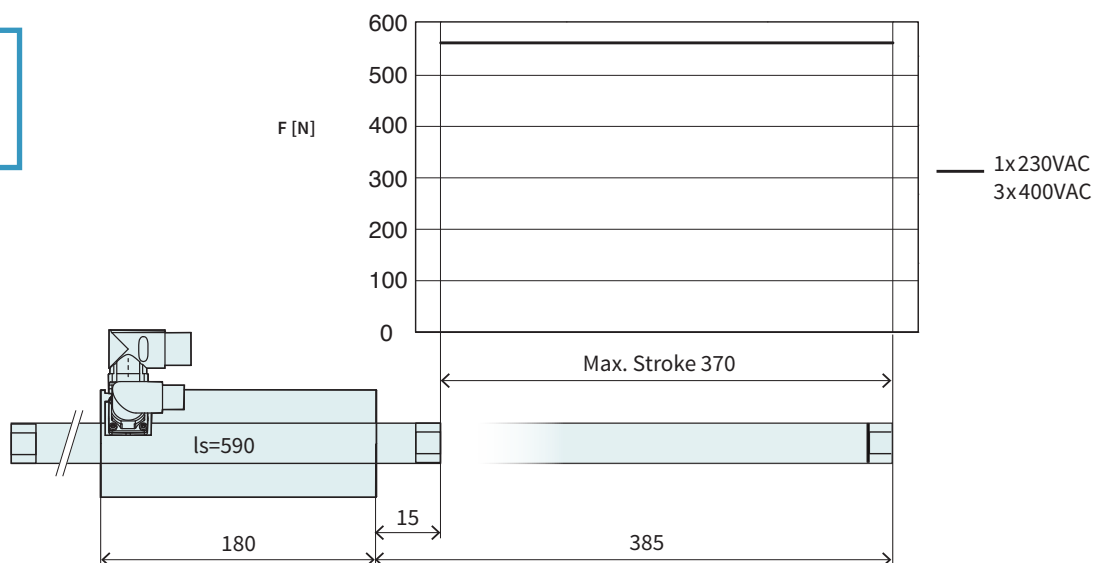
Stroke				
Max. Stroke	mm	(in)	270	(10.59)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)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



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

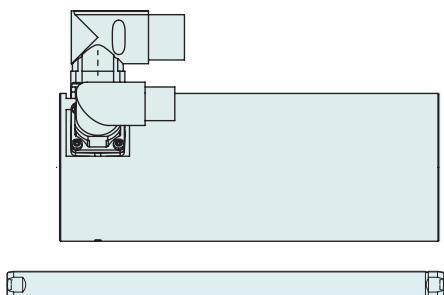
P10-70x80U/370-BL-QJ

Max. Stroke: 370 mm
Peak Force: 561 N



Technical Data P10-70x80U/370

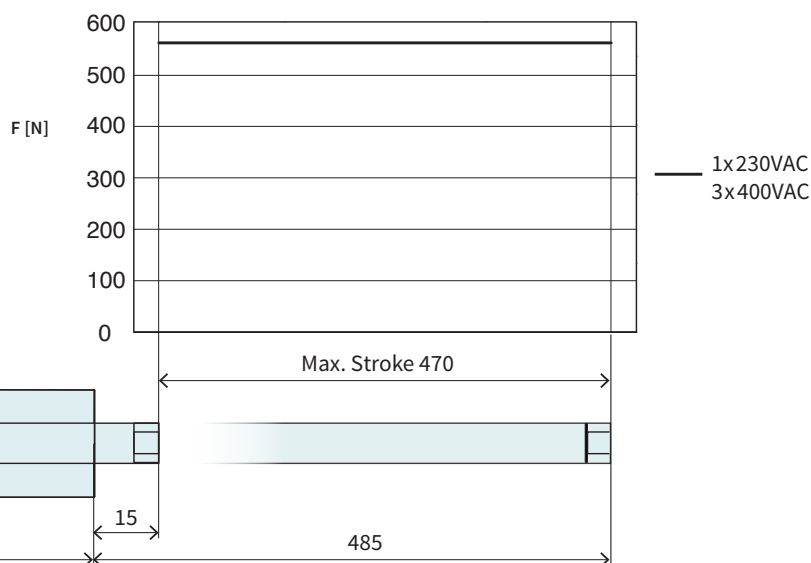
Stroke			
Max. Stroke	mm (in)	370	(14.59)
Force			
Max. Force @ 1x230VAC	N (lbf)	561	(126)
Max. Force @ 3x400VAC	N (lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	51	(11.5)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



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

P10-70x80U/470-BL-QJ

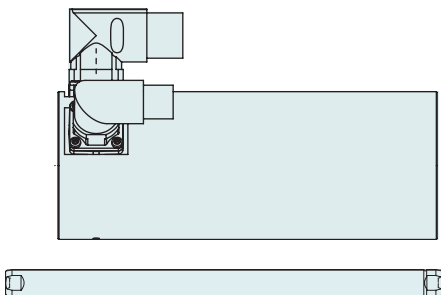
Max. Stroke: 470 mm
Peak Force: 561 N



Dimensions in mm

Technical Data P10-70x80U/470

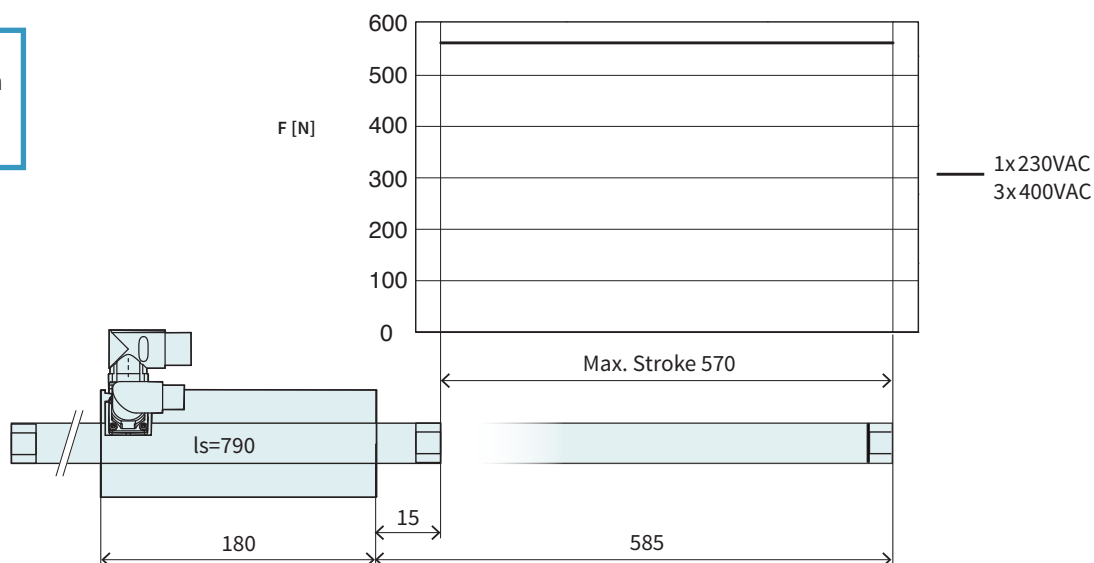
Stroke				
Max. Stroke	mm	(in)	470	(18.49)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)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



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

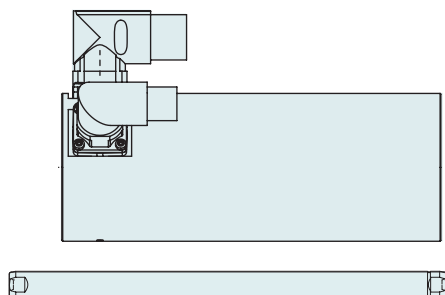
P10-70x80U/570-BL-QJ

Max. Stroke: 570 mm
Peak Force: 561 N



Technical Data P10-70x80U/570

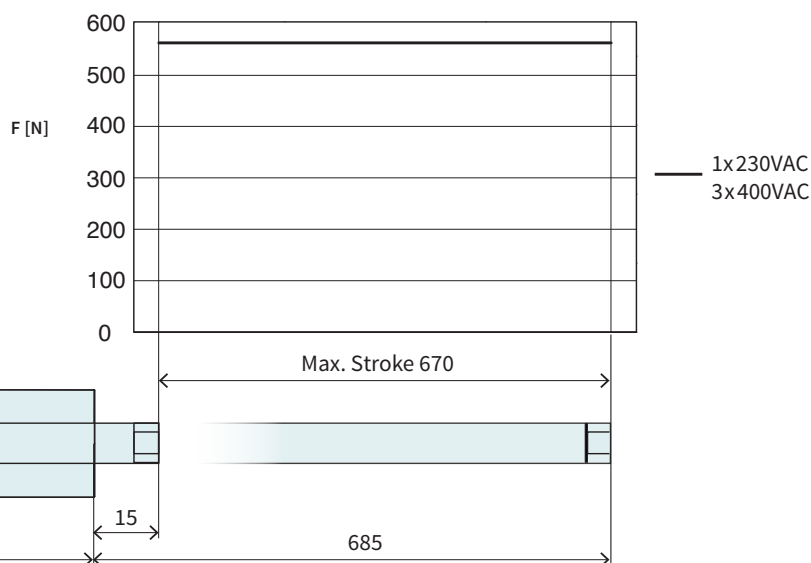
Stroke				
Max. Stroke	mm	(in)	570	(22.39)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)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



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

P10-70x80U/670-BL-QJ

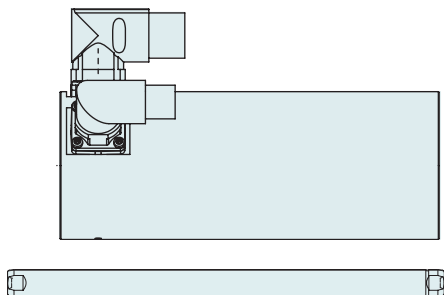
Max. Stroke: 670 mm
Peak Force: 561 N



Dimensions in mm

Technical Data P10-70x80U/670

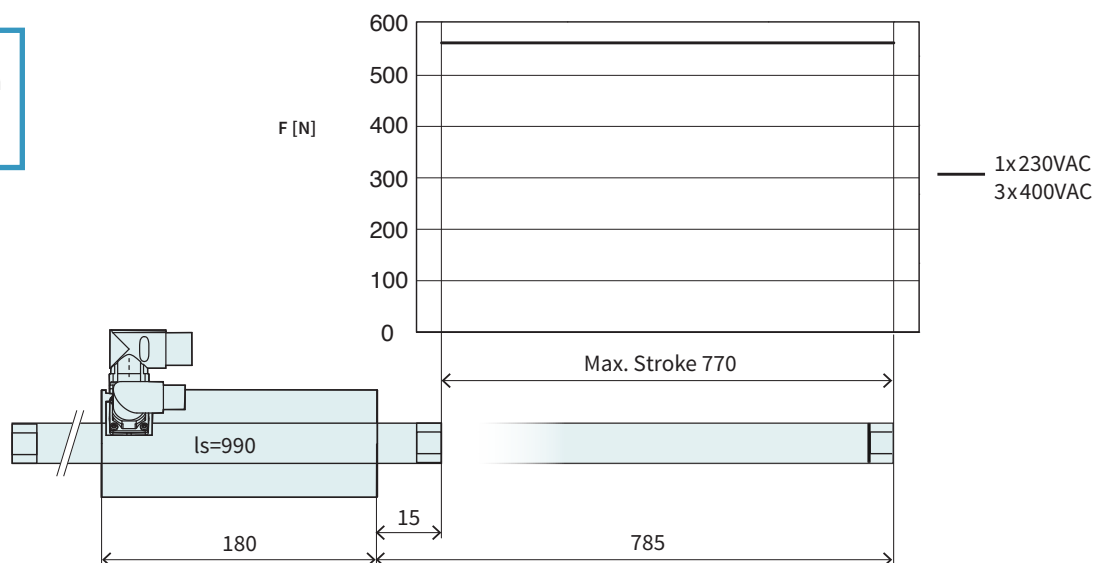
Stroke				
Max. Stroke	mm	(in)	670	(26.39)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)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



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

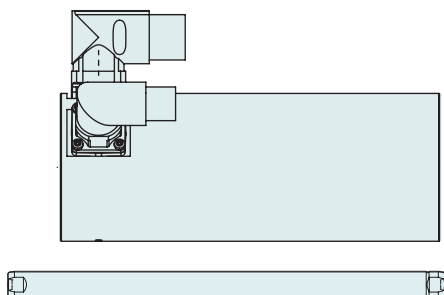
P10-70x80U/770-BL-QJ

Max. Stroke: 770 mm
Peak Force: 561 N



Technical Data P10-70x80U/770

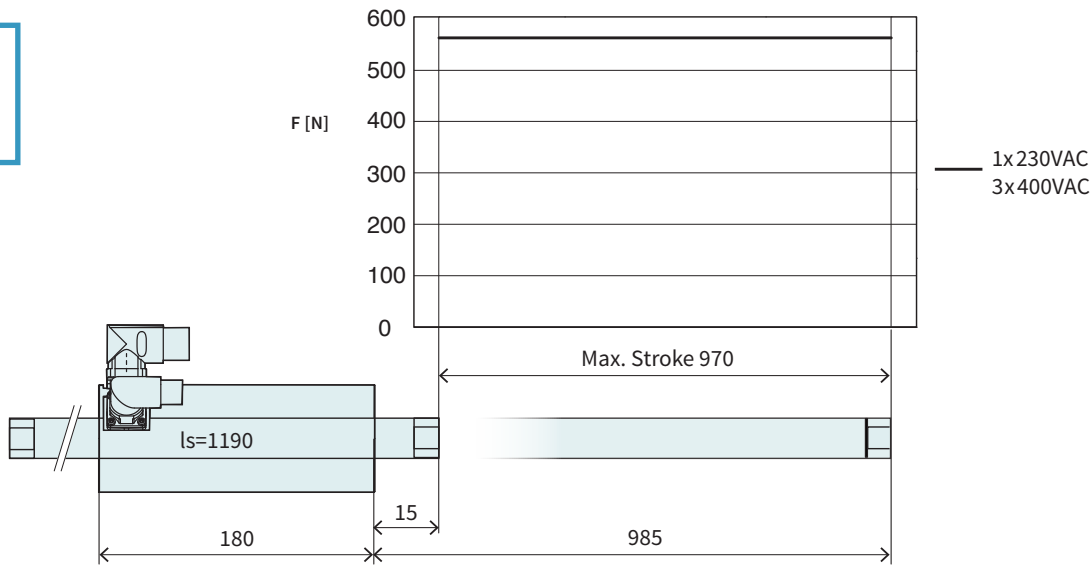
Stroke			
Max. Stroke	mm (in)	770	(30.3)
Force			
Max. Force @ 1x230VAC	N (lbf)	561	(126)
Max. Force @ 3x400VAC	N (lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	51	(11.5)
Force Constant 2	N/A _{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

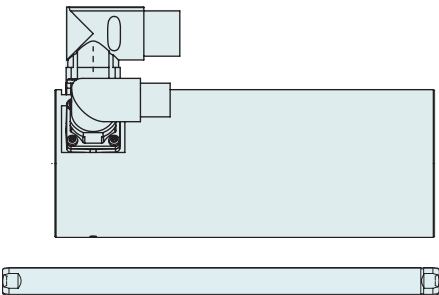
Max. Stroke: 970 mm
Peak Force: 561 N



Dimensions in mm

Technical Data P10-70x80U/970

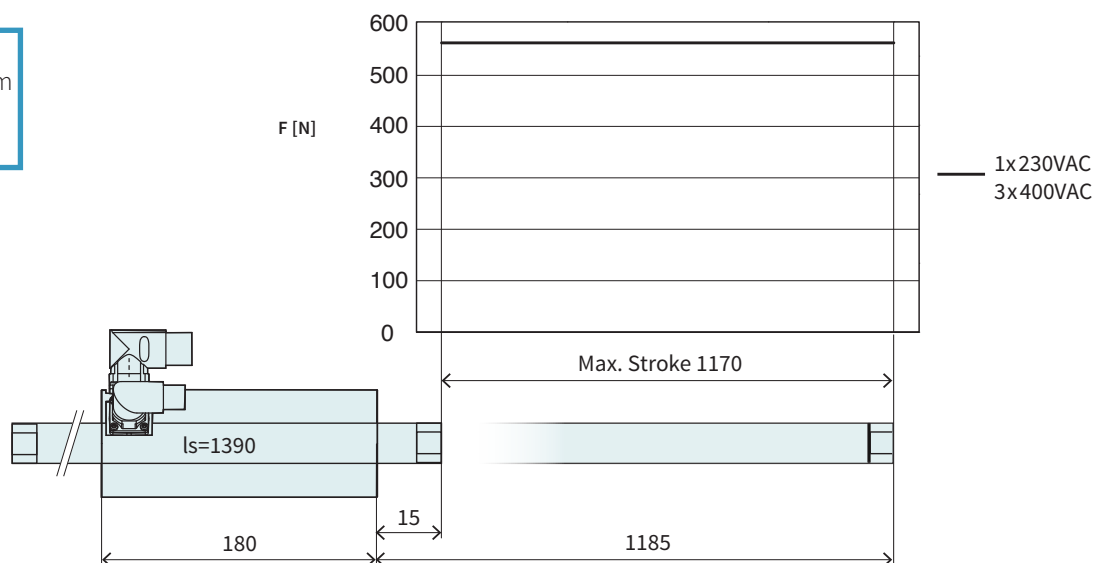
Stroke				
Max. Stroke	mm	(in)	970	(38.2)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)
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

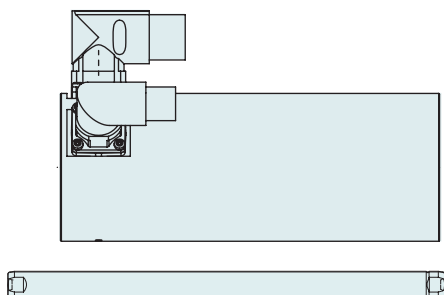
P10-70x80U/1170-BL-QJ

Max. Stroke: 1170 mm
Peak Force: 561 N



Technical Data P10-70x80U/1170

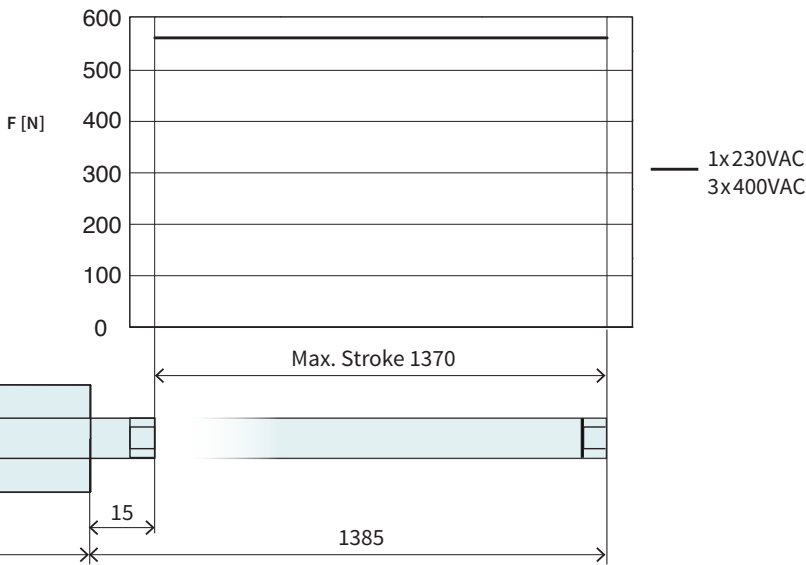
Stroke			
Max. Stroke	mm (in)	1170	(46.1)
Force			
Max. Force @ 1x230VAC	N (lbf)	561	(126)
Max. Force @ 3x400VAC	N (lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%	100	
Force Constant 1	N/A_{pk} (lbf/ A_{pk})	51	(11.5)
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

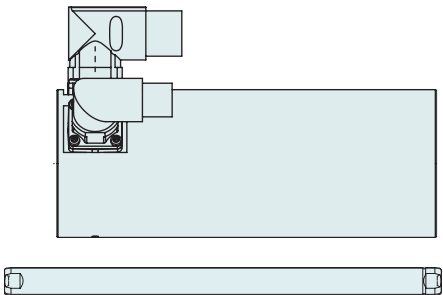
Max. Stroke: 1370 mm
Peak Force: 561 N



Dimensions in mm

Technical Data P10-70x80U/1370

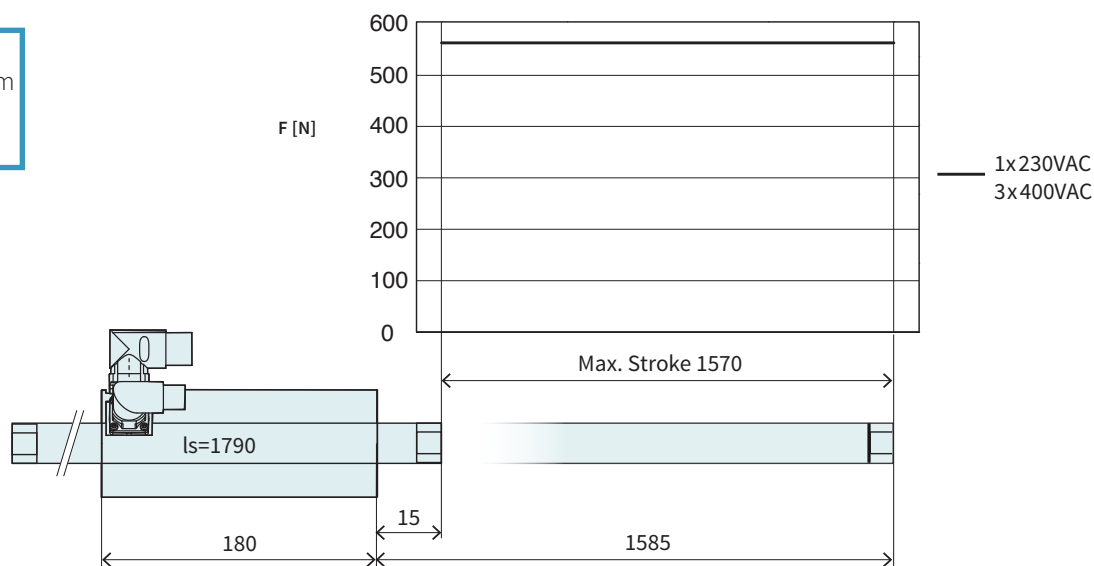
Stroke				
Max. Stroke	mm	(in)	1370	(53.89)
Force				
Max. Force @ 1x230VAC	N	(lbf)	561	(126)
Max. Force @ 3x400VAC	N	(lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	51	(11.5)
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

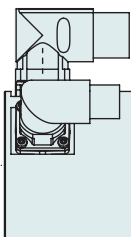
Max. Stroke: 1570 mm
Peak Force: 561 N



Dimensions in mm

Technical Data P10-70x80U/1570

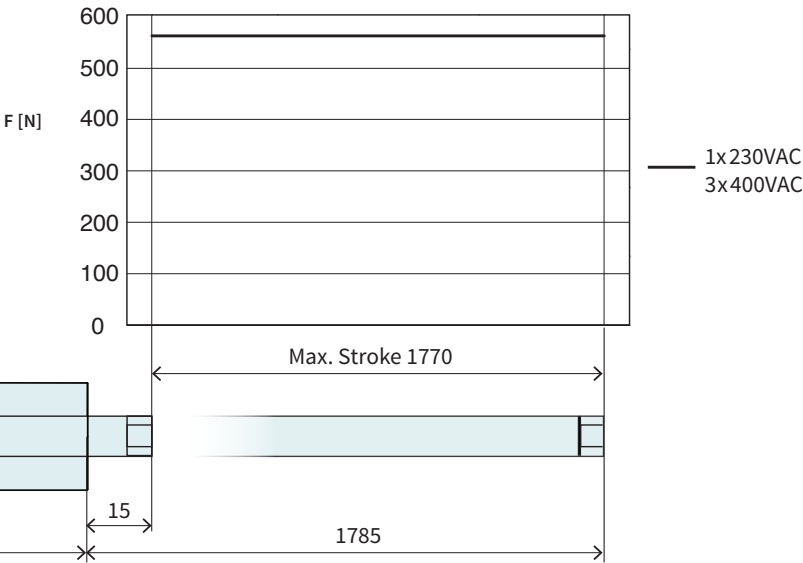
Stroke			
Max. Stroke	mm (in)	1570	(61.79)
Force			
Max. Force @ 1x230VAC	N (lbf)	561	(126)
Max. Force @ 3x400VAC	N (lbf)	561	(126)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	67 / 100 / 180	(15 / 23 / 41)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	51	(11.5)
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

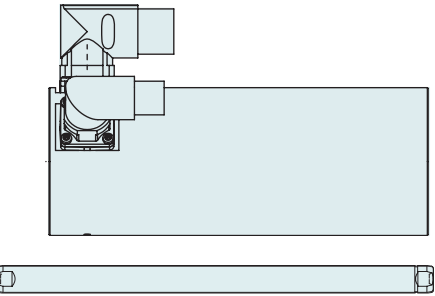
P10-70x80U/1770-BL-QJ

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



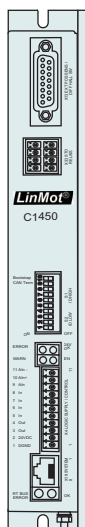
HM10-70x80/70	Linear Module 70x80 with 70 mm Stroke			
→	H-Guide	H10-70x80/70	H-Guide for P10-70x80, Stroke max. 70 mm	0150-5404
	Stator	PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
		PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
		PS10-70x80U-BL-QJ-D02	Stator 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".

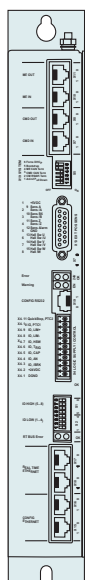
HM10-70x80/370		Linear Module 70x80 with 370 mm Stroke			
	→	H-Guide	H10-70x80/370	H-Guide for P10-70x80, Stroke max. 370 mm	0150-5407
	→	Stator	PS10-70x80U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1291
			PS10-70x80U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2282
			PS10-70x80U-BL-QJ-D02	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

Motor Cable

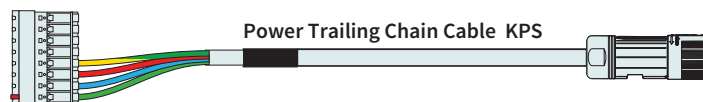
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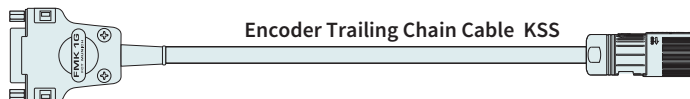
C1400



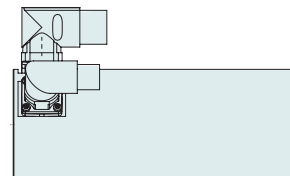
E1400

B Connector MC10-B/m

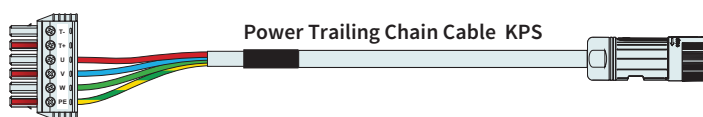
Power Trailing Chain Cable KPS



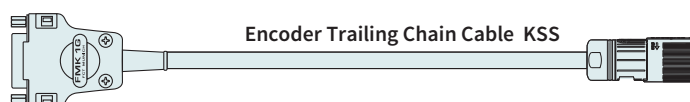
Encoder Trailing Chain Cable KSS

Q Connector MC10-Q/f

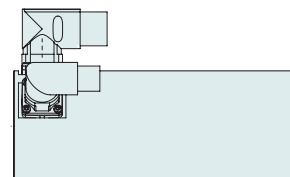
P10-70x80U

D15 Connector MC01-D15/f**J** Connector MC10-J/f**L** Connector MC10-L/m

Power Trailing Chain Cable KPS



Encoder Trailing Chain Cable KSS

Q Connector MC10-Q/f

P10-70x80U

D15 Connector MC01-D15/f**J** Connector MC10-J/f

ORDERING INFORMATION

TRAILING CHAIN CABLE FOR LINMOT DRIVES

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

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

TRAILING CHAIN CABLE FOR STATOR SERIES D01 / D02

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

TRAILING CHAIN CABLE FOR STATOR SERIES D03

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

CONNECTOR

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

MOTOR FLANGES



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



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

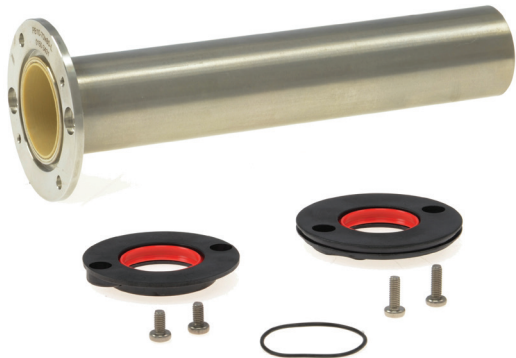
SLIDER MOUNTING



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



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

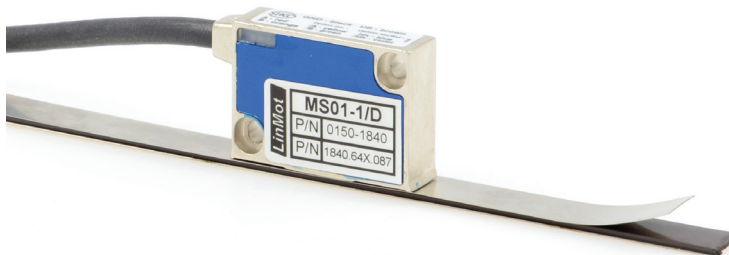
FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LUBRICANT RESERVOIR



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

EXTERNAL POSITION SENSORS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

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LINEAR MOTORS P10-70x160U



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

LINEAR MOTORS P10-70x160U

Technical Data **519**

Motor Specifications

P10-70x160U/90 **524**

P10-70x160U/190 **525**

P10-70x160U/290 **526**

P10-70x160U/390 **527**

P10-70x160U/490 **528**

P10-70x160U/590 **529**

P10-70x160U/690 **530**

P10-70x160U/890 **531**

P10-70x160U/1090 **532**

P10-70x160U/1290 **533**

P10-70x160U/1490 **534**

P10-70x160U/1690 **535**

Linear Guides **536**

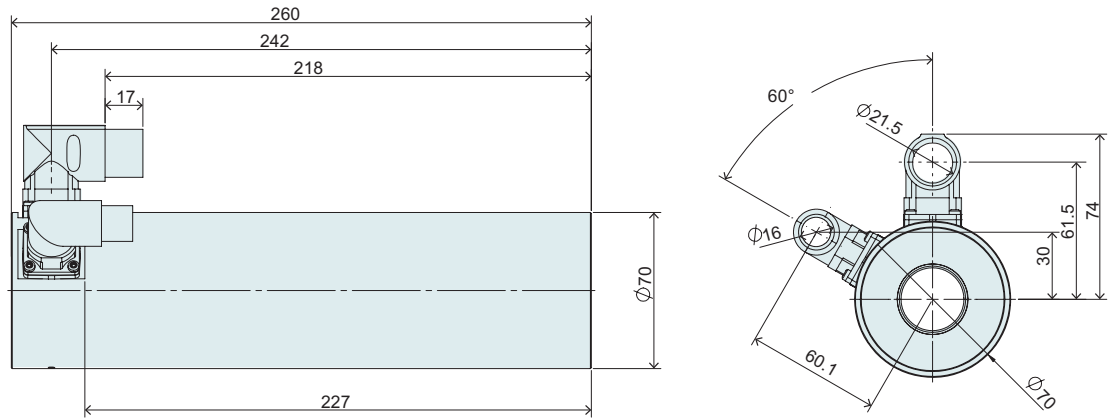
Accessories **538**



MOTOR FAMILY P10-70x160U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1690	(66.49)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1120	(252)
Max. Force @ 3x400VAC	N	(lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	56	(12.6)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	79.2	(17.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.6	(219.9)
Position Detection				
Position Resolution	mm	(in)	0.005	(0.0002)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.7 / 2.5 / 4.4	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	64.7	(1.64)
Terminal Resistance 25 °C / 120 °C	Ohm		8.3 / 11	
Terminal Inductivity	mH		16	
Magnetic Period	mm	(in)	40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Stator Diameter	mm	(in)	70	(2.8)
Stator Length	mm	(in)	260	(10)
Stator Mass	g	(lb)	4200	(9.24)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	390 - 1990	(15 - 78)
Slider Mass	g	(lb)	1830 - 9350	(4.03 - 20.57)
IP Code			IP 65	
Certification				
UL	File-No.		E354430	

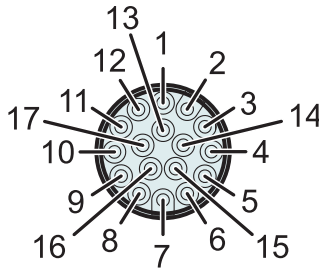
STATOR



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

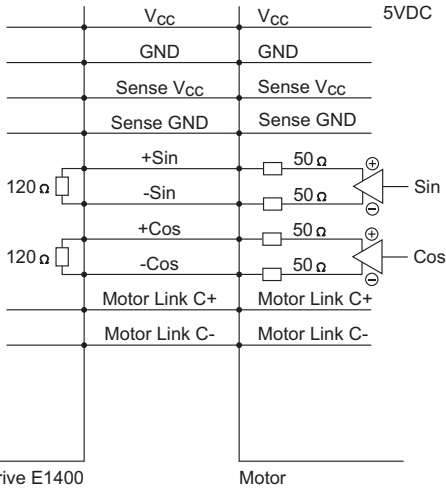
CONNECTOR PS10-70x160U-BL-QJ

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.

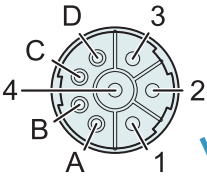


Connector Encoder J

View: Motor connector, plug side

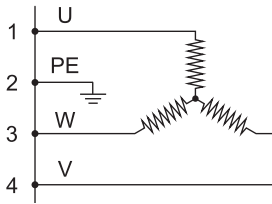


Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red
PE	2	yellow-green
Phase W	3	green
Phase V	4	blue
n. c.	A	n. c.
n. c.	B	n. c.
n. c.	C	n. c.
n. c.	D	n. c.

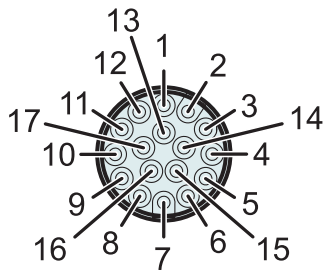


Connector Power Q

View: Motor connector, plug side



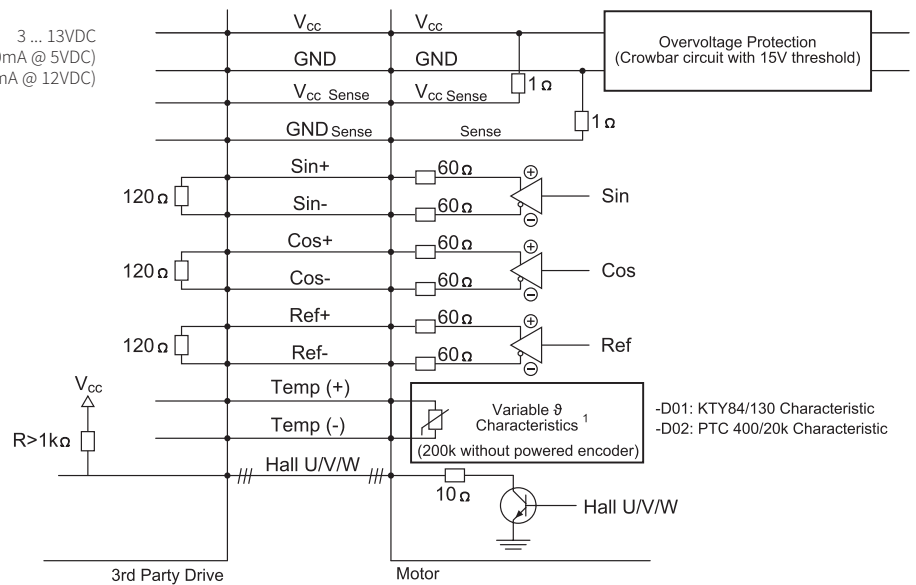
CONNECTOR PS10-70x160U-BL-QJ-D01/02



Connector Encoder J

View: Motor connector, plug side

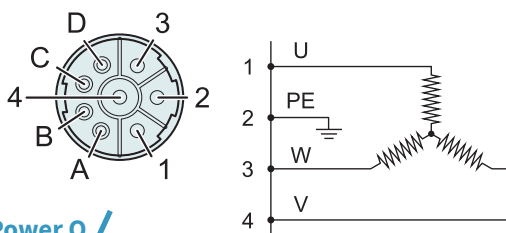
3 ... 13VDC
(Imax < 150mA @ 5VDC)
(Imax < 80mA @ 12VDC)



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

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.

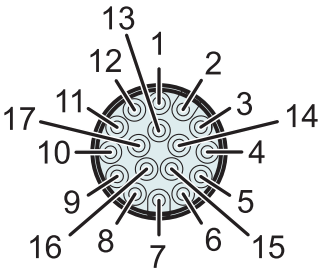


Connector Power Q

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.

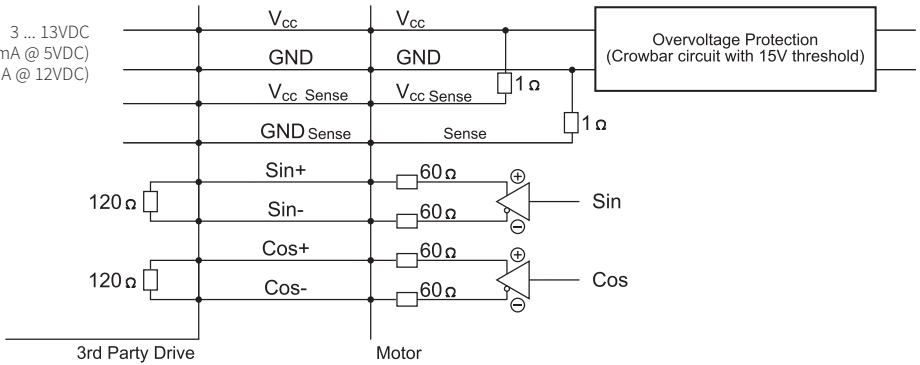
CONNECTOR PS10-70x160U-BL-QJ-D03



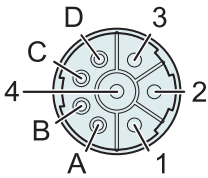
Connector Encoder J

View: Motor connector, plug side

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

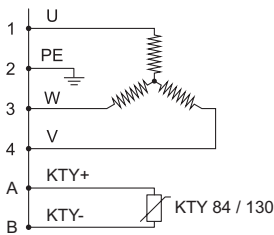


Motor Connector Wiring		Connector Encoder J	Wire Color Motor Cable
3 ... 13 VDC	Supply	1	red
GND	Supply	2	black
Vcc Sense (optional)	Supply Sense	3	white
GND Sense (optional)	Supply Sense	4	brown
Do not connect	–	5	–
Do not connect	–	6	–
Sin+	Encoder 1 Vpp	7	yellow
Sin-	Encoder 1 Vpp	8	orange
Cos+	Encoder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



Connector Power Q

View: Motor connector, plug side

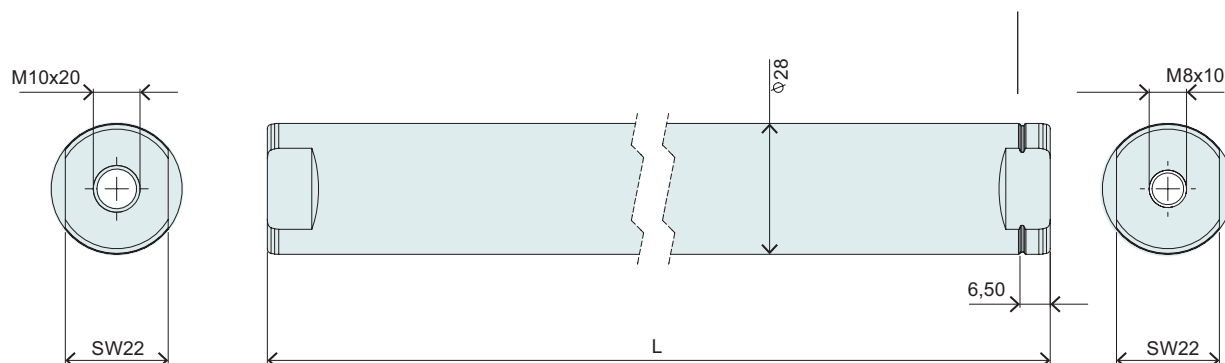


Motor Connector Wiring	Lesitungsstecker Q	Wire Color Motor Cable
Phase U	1	red (previously: black 1)
PE	2	yellow-green
Phase W	3	green (previously: black 3)
Phase V	4	blue (previously: black 2)
KTY +	A	purple (previously: black 5)
KTY -	B	grey (previously: black 6)
n. c.	C	yellow (previously: black 7)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

SLIDER

Slider Standard

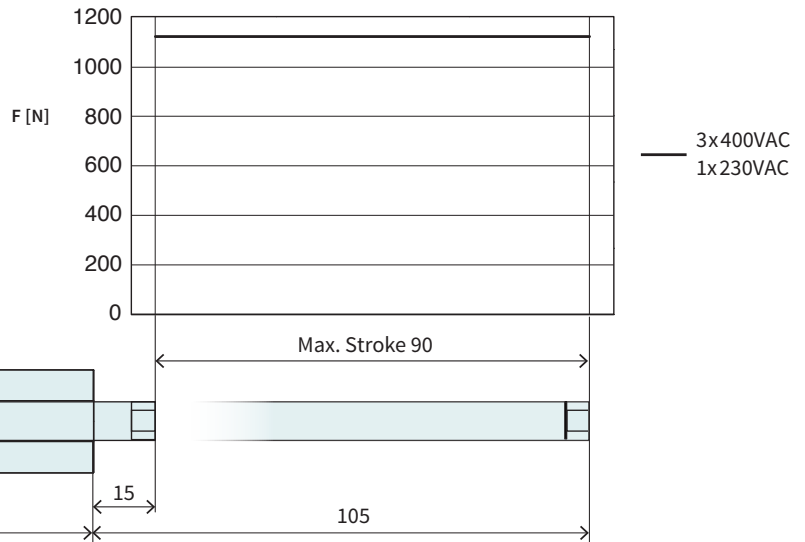
Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.



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

P10-70x160U/90-BL-QJ

Max. Stroke: 90 mm
Peak Force: 1120 N



Dimensions in mm

Technical Data P10-70x160U/90

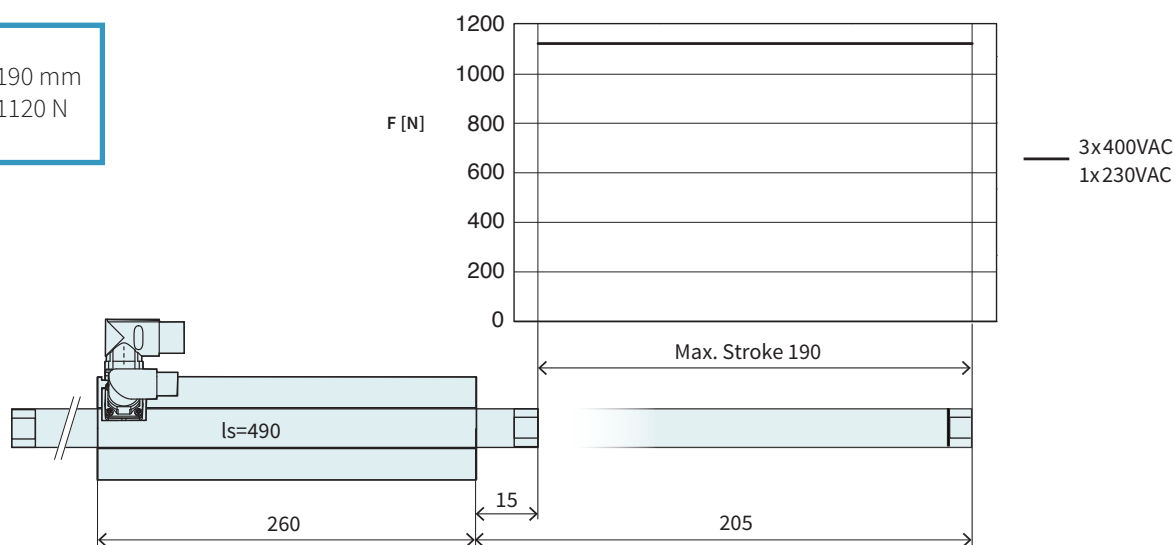
Stroke			
Max. Stroke	mm (in)	90	(3.53)
Force			
Max. Force @ 1x230VAC	N (lbf)	1120	(252)
Max. Force @ 3x400VAC	N (lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	56	(12.6)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



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

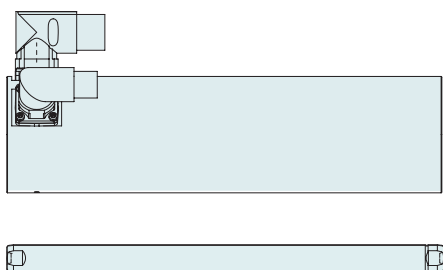
P10-70x160U/190-BL-QJ

Max. Stroke: 190 mm
Peak Force: 1120 N



Technical Data P10-70x160U/190

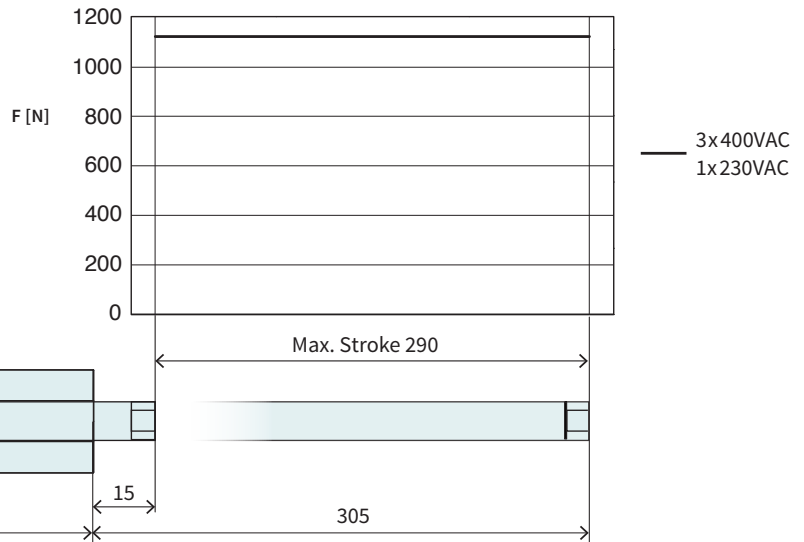
Stroke			
Max. Stroke	mm (in)	190	(7.48)
Force			
Max. Force @ 1x230VAC	N (lbf)	1120	(252)
Max. Force @ 3x400VAC	N (lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	56	(12.6)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



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

P10-70x160U/290-BL-QJ

Max. Stroke: 290 mm
Peak Force: 1120 N



Dimensions in mm

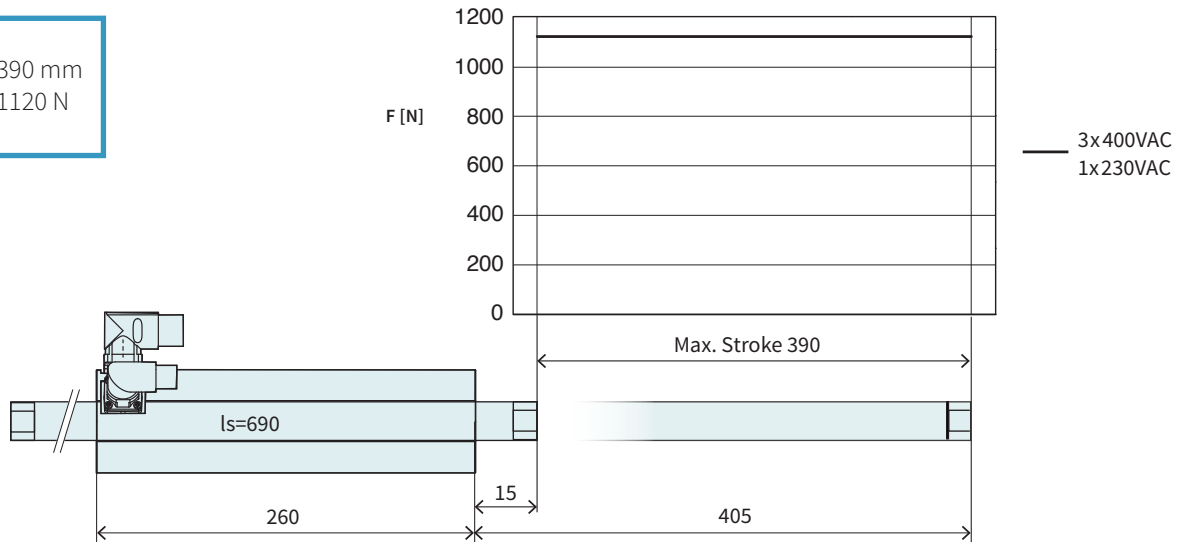
Technical Data P10-70x160U/290				
Stroke				
Max. Stroke	mm	(in)	290	(11.4)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1120	(252)
Max. Force @ 3x400VAC	N	(lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%		100	
Force Constant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



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

P10-70x160U/390-BL-QJ

Max. Stroke: 390 mm
Peak Force: 1120 N



Technical Data P10-70x160U/390

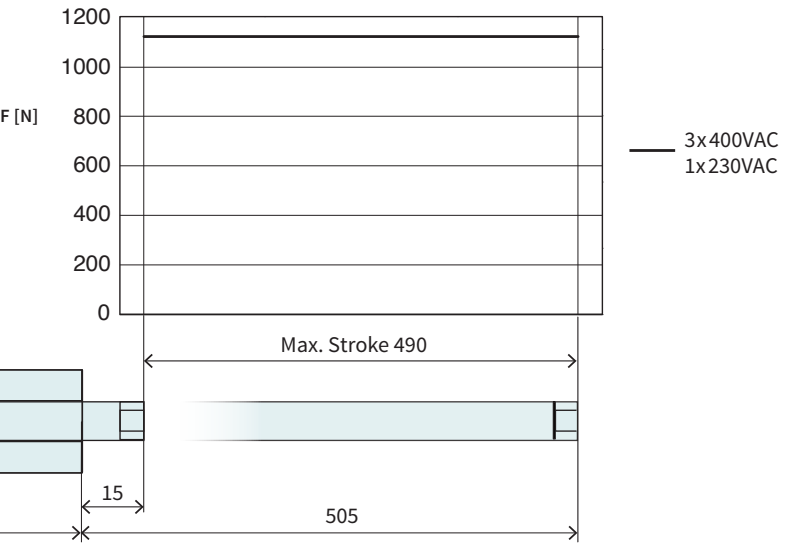
Stroke			
Max. Stroke	mm (in)	390	(15.4)
Force			
Max. Force @ 1x230VAC	N (lbf)	1120	(252)
Max. Force @ 3x400VAC	N (lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	56	(12.6)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



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

P10-70x160U/490-BL-QJ

Max. Stroke: 490 mm
Peak Force: 1120 N



Dimensions in mm

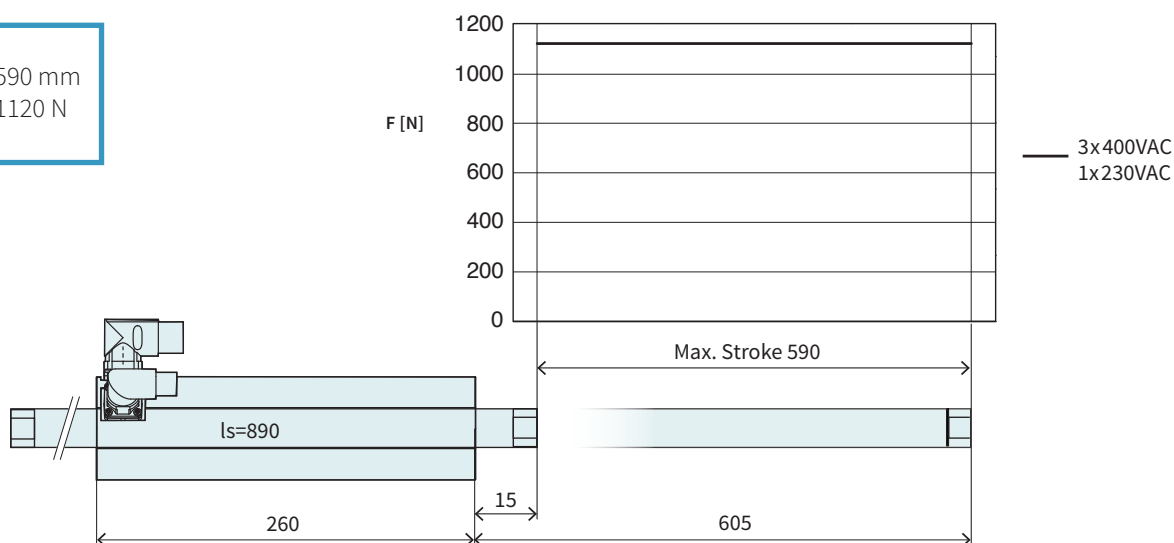
Technical Data P10-70x160U/490				
Stroke				
Max. Stroke	mm	(in)	490	(19.3)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1120	(252)
Max. Force @ 3x400VAC	N	(lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%		100	
Force Constant 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

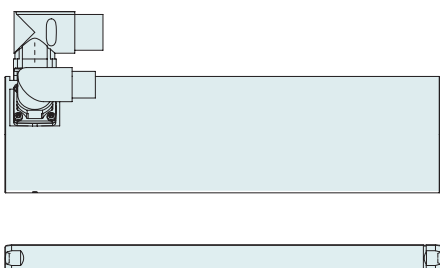
Max. Stroke: 590 mm
Peak Force: 1120 N



Dimensions in mm

Technical Data P10-70x160U/590

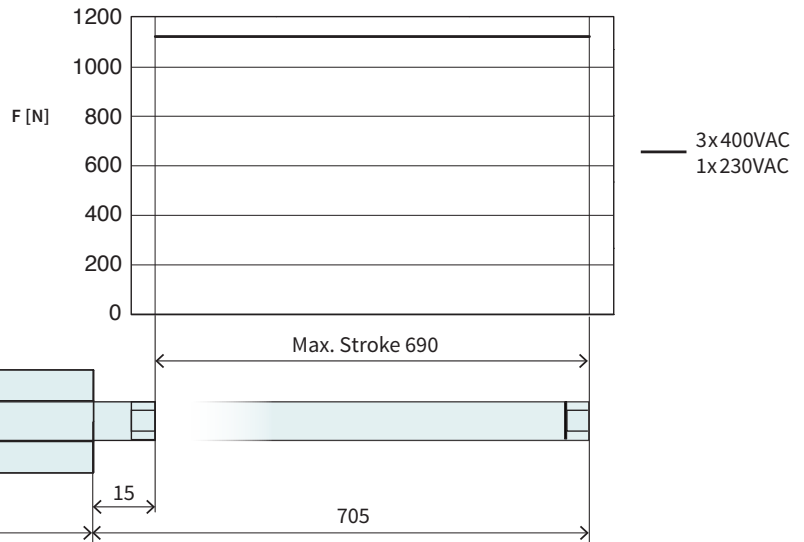
Stroke			
Max. Stroke	mm (in)	590	(23.19)
Force			
Max. Force @ 1x230VAC	N (lbf)	1120	(252)
Max. Force @ 3x400VAC	N (lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	56	(12.6)
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



Technical Data P10-70x160U/690

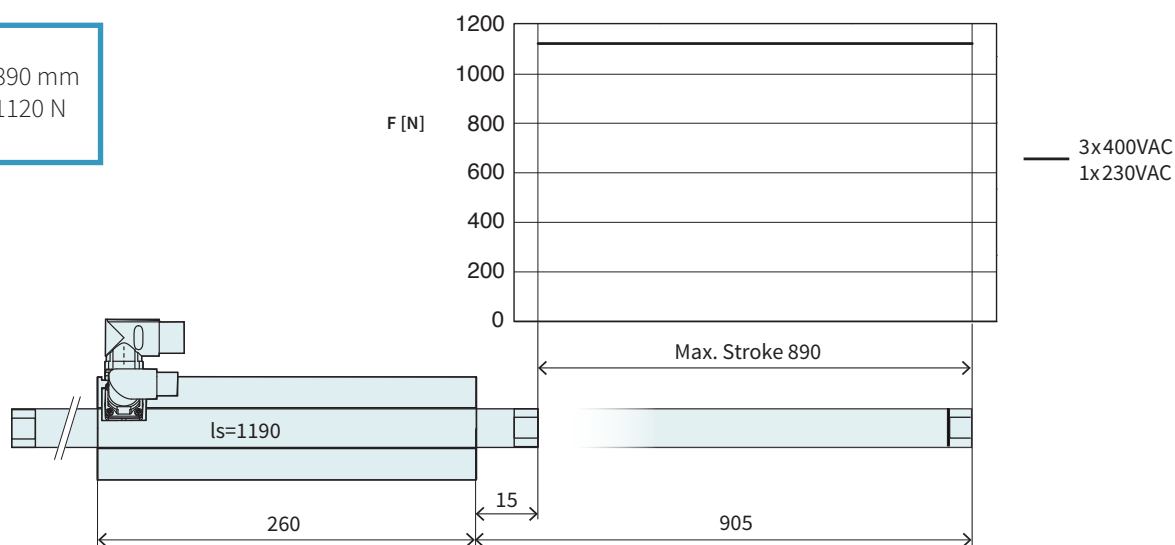
Stroke			
Max. Stroke	mm (in)	690	(27.19)
Force			
Max. Force @ 1x230VAC	N (lbf)	1120	(252)
Max. Force @ 3x400VAC	N (lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	56	(12.6)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



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

P10-70x160U/890-BL-QJ

Max. Stroke: 890 mm
Peak Force: 1120 N



Technical Data P10-70x160U/890

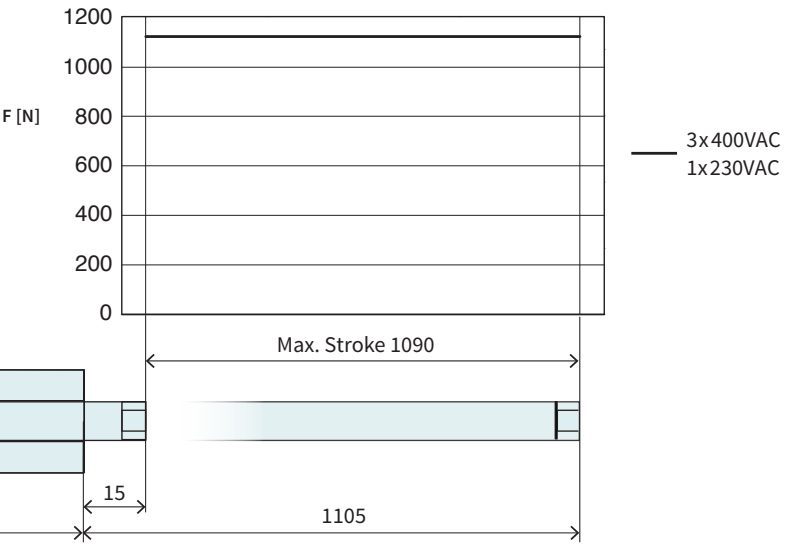
Stroke			
Max. Stroke	mm (in)	890	(34.99)
Force			
Max. Force @ 1x230VAC	N (lbf)	1120	(252)
Max. Force @ 3x400VAC	N (lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	56	(12.6)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



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

P10-70x160U/1090-BL-QJ

Max. Stroke: 1090 mm
Peak Force: 1120 N



Dimensions in mm

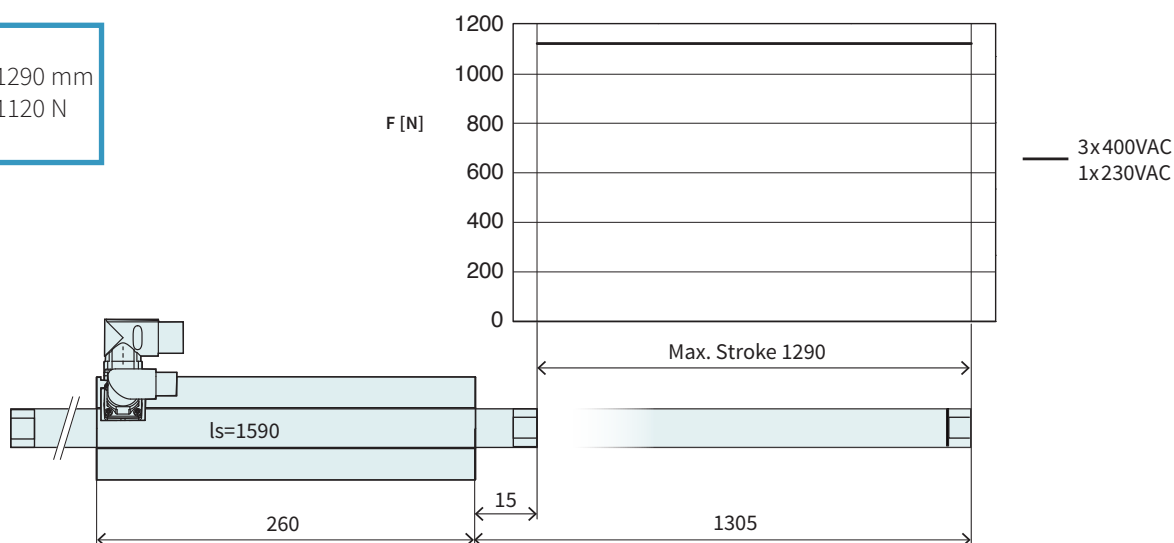
Technical Data P10-70x160U/1090				
Stroke				
Max. Stroke	mm	(in)	1090	(42.89)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1120	(252)
Max. Force @ 3x400VAC	N	(lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	56	(12.6)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	79.2	(17.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3.2	(129.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.6	(5.6)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		19.9 / 14	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.3 / 3.6 / 6.3	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.7 / 2.5 / 4.4	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.3 / 0.56 / 0.18	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 110	
Mechanical Data				
Slider Length	mm	(in)	1390	(55)
Slider Mass	g	(lb)	6530	(14.37)



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

P10-70x160U/1290-BL-QJ

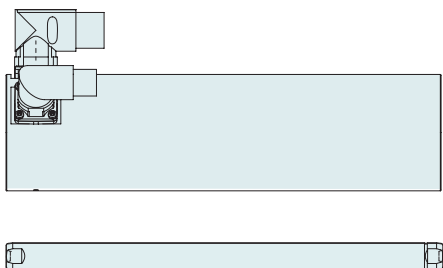
Max. Stroke: 1290 mm
Peak Force: 1120 N



Dimensions in mm

Technical Data P10-70x160U/1290

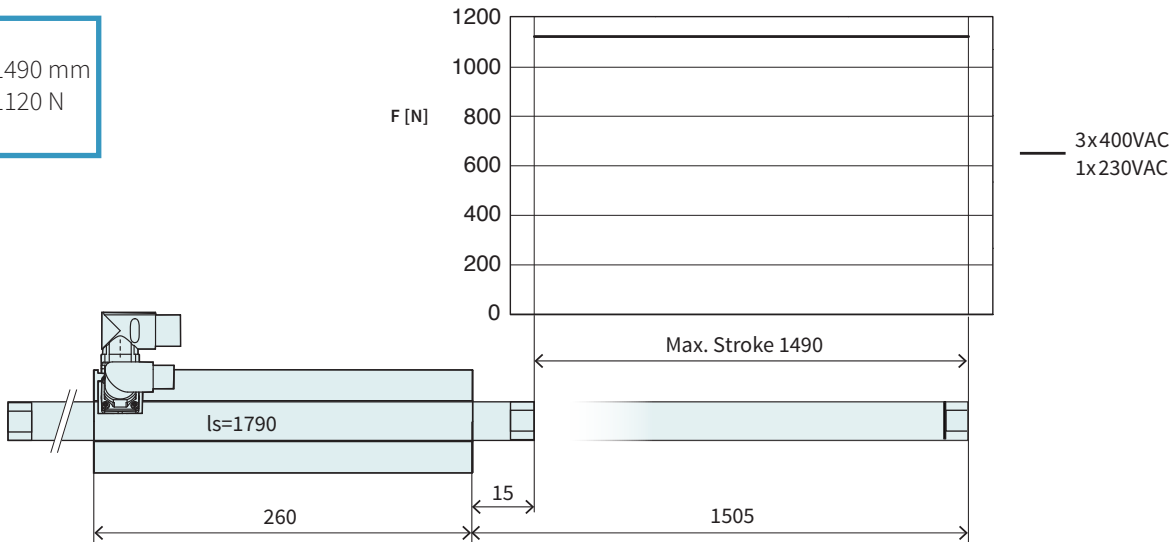
Stroke			
Max. Stroke	mm (in)	1290	(50.79)
Force			
Max. Force @ 1x230VAC	N (lbf)	1120	(252)
Max. Force @ 3x400VAC	N (lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	56	(12.6)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



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

P10-70x160U/1490-BL-QJ

Max. Stroke: 1490 mm
Peak Force: 1120 N



Dimensions in mm

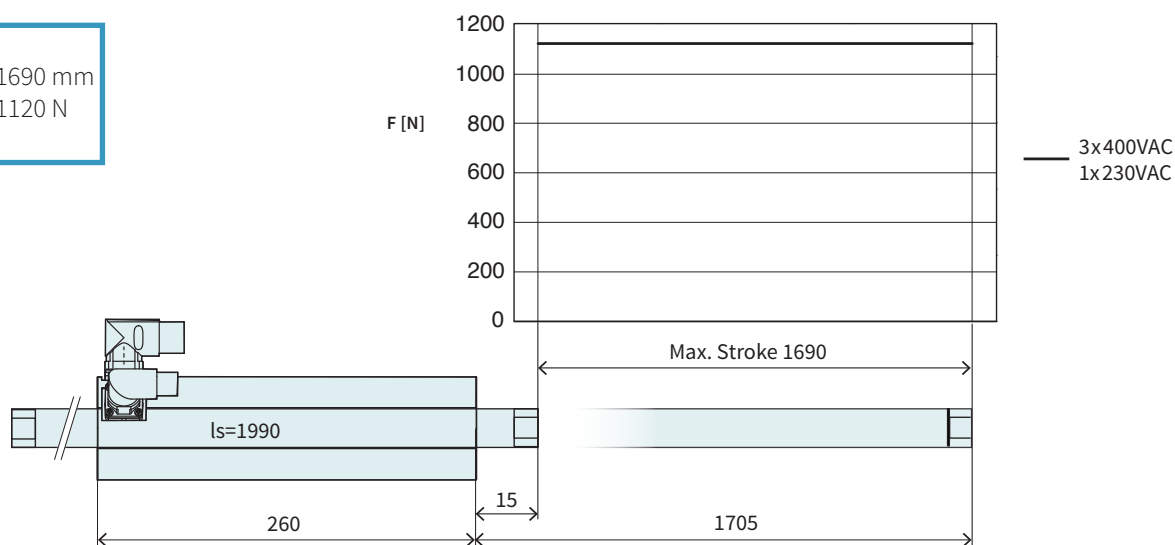
Technical Data P10-70x160U/1490				
Stroke				
Max. Stroke	mm	(in)	1490	(58.7)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1120	(252)
Max. Force @ 3x400VAC	N	(lbf)	1120	(252)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	130 / 200 / 350	(29 / 45 / 79)
Max. Border Force relative	%		100	
Force Constant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



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

P10-70x160U/1690-BL-QJ

Max. Stroke: 1690 mm
Peak Force: 1120 N



Dimensions in mm

Technical Data P10-70x160U/1690

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



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

Linear Guides H10

4



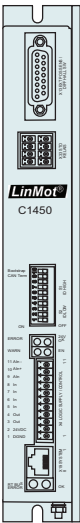
HM10-70x160/90	Linear Module 70x160 with 90 mm Stroke			
	H-Guide	H10-70x160/90	H-Guide for P10-70x160, Stroke max. 90 mm	0150-5409
	Stator	PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
		PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
		PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
		PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
	Slider	PL10-28x390/340	Slider for P10-70 'standard'	0150-2194
HM10-70x160/190	Linear Module 70x160 with 190 mm Stroke			
	H-Guide	H10-70x160/190	H-Guide for P10-70x160, Stroke max. 190 mm	0150-5410
	Stator	PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
		PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
		PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
		PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
	Slider	PL10-28x490/440	Slider for P10-70 'standard'	0150-2195
HM10-70x160/290	Linear Module 70x160 with 290 mm Stroke			
	H-Guide	H10-70x160/290	H-Guide for P10-70x160, Stroke max. 290 mm	0150-5411
	Stator	PS10-70x160U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1292
		PS10-70x160U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2283
		PS10-70x160U-BL-QJ-D02	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC	0150-2361
		PS10-70x160U-BL-QJ-D03	Stator 3x400VAC, Sin/Cos 1Vpp, KTY on power connector	0150-2709
	Slider	PL10-28x590/540	Slider for P10-70 'standard'	0150-2196

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

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

Motor Cable

4



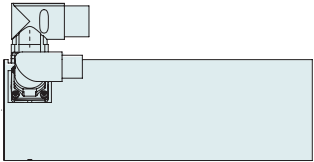
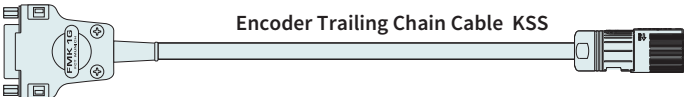
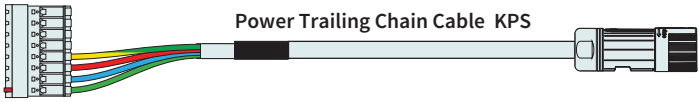
C1400



E1400

B Connector MC10-B/m

Q Connector MC10-Q/f



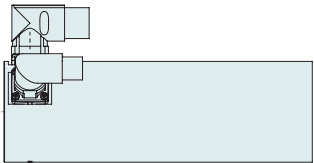
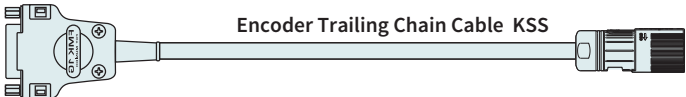
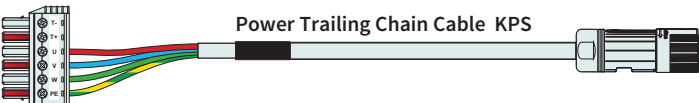
P10-70x160U

D15 Connector MC01-D15/f

J Connector MC10-J/f

L Connector MC10-L/m

Q Connector MC10-Q/f



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

4



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LINEAR MOTORS P10-70x240U



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

LINEAR MOTORS P10-70x240U

Technical Data **545**

Motor Specifications

P10-70x240U/10 **550**

P10-70x240U/110 **551**

P10-70x240U/210 **552**

P10-70x240U/310 **553**

P10-70x240U/410 **554**

P10-70x240U/510 **555**

P10-70x240U/610 **556**

P10-70x240U/810 **557**

P10-70x240U/1010 **558**

P10-70x240U/1210 **559**

P10-70x240U/1410 **560**

P10-70x240U/1610 **561**

Linear Guides **562**

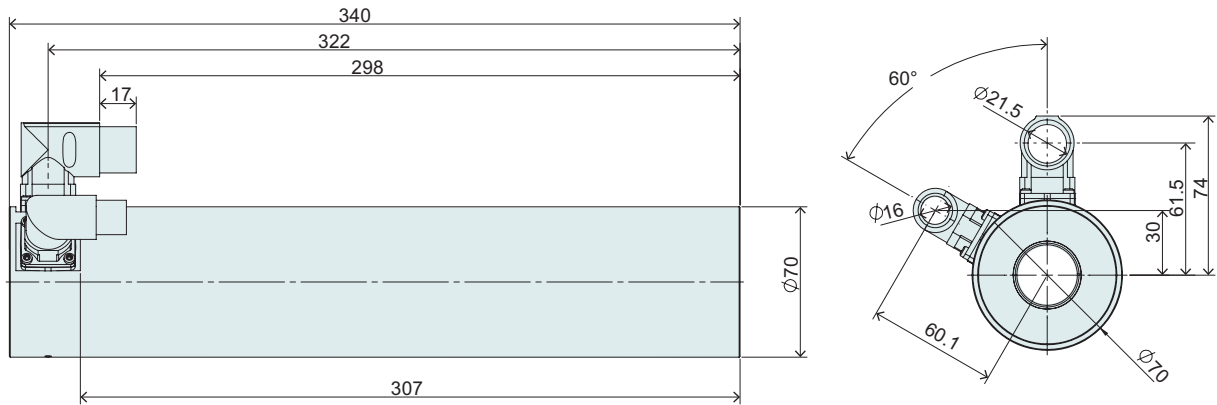
Accessories **564**



MOTOR FAMILY P10-70x240U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1610	(63.39)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1650	(371)
Max. Force @ 3x400VAC	N	(lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	59	(13.3)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	83.4	(18.8)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	3	(119.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	5.4	(209.9)
Position Detection				
Position Resolution	mm	(in)	0.005	(0.0002)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		27.9 / 19.7	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		3.3 / 5 / 8.7	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		2.3 / 3.5 / 6.1	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	68.1	(1.73)
Terminal Resistance 25 °C / 120 °C	Ohm		6.3 / 8.6	
Terminal Inductivity	mH		12	
Magnetic Period	mm	(in)	40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.87 / 0.38 / 0.12	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 510 / 110	
Mechanical Data				
Stator Diameter	mm	(in)	70	(2.8)
Stator Length	mm	(in)	340	(13)
Stator Mass	g	(lb)	5550	(12.21)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	390 - 1990	(15 - 78)
Slider Mass	g	(lb)	1830 - 9350	(4.03 - 20.57)
IP Code			IP 65	
Certification				
UL	File-No.		E354430	

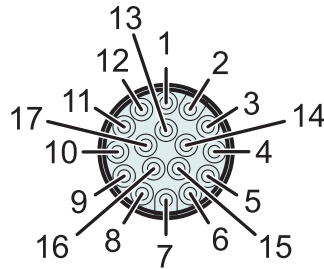
STATOR



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

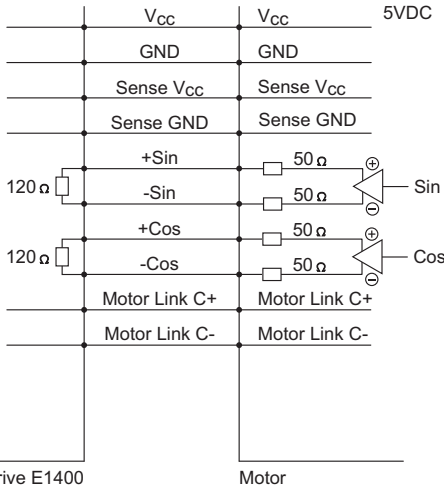
CONNECTOR PS10-70x240U-BL-QJ

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

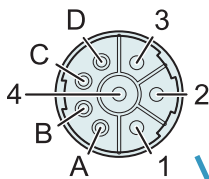


Connector Encoder J

View: Motor connector, plug side

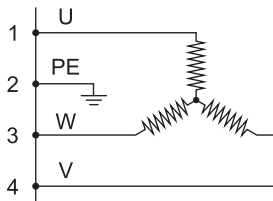


Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red
PE	2	yellow-green
Phase W	3	green
Phase V	4	blue
n. c.	A	n. c.
n. c.	B	n. c.
n. c.	C	n. c.
n. c.	D	n. c.

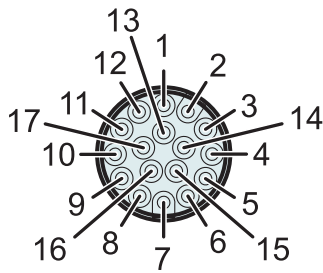


Connector Power Q

View: Motor connector, plug side



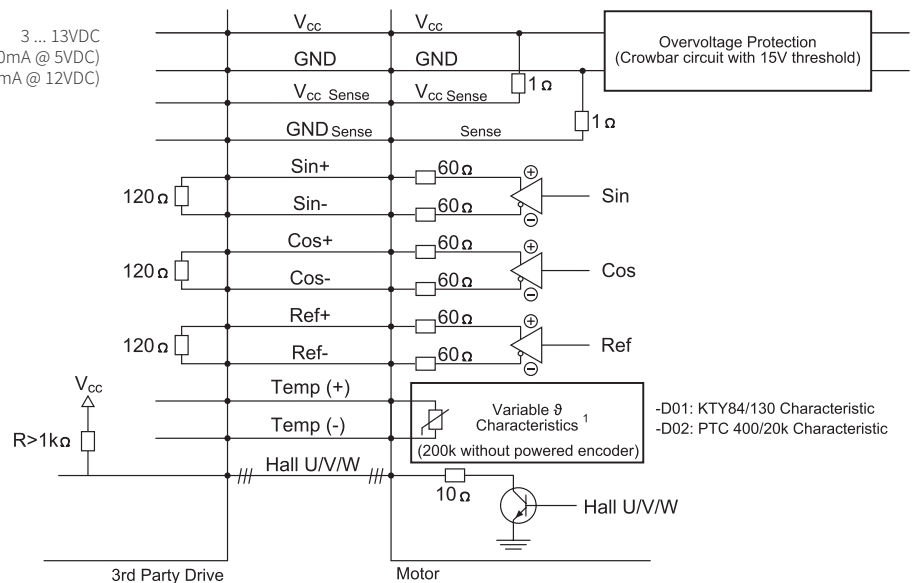
CONNECTOR PS10-70x240U-BL-QJ-D01/02



Connector Encoder J

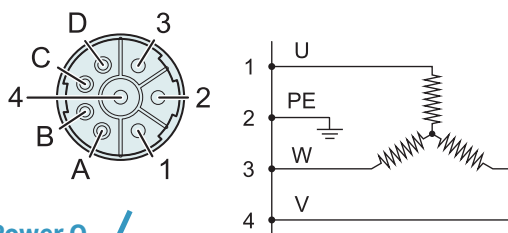
View: Motor connector, plug side

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



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

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

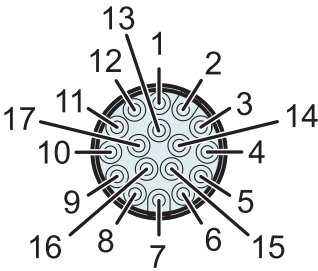


Connector Power Q

View: Motor connector, plug side

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

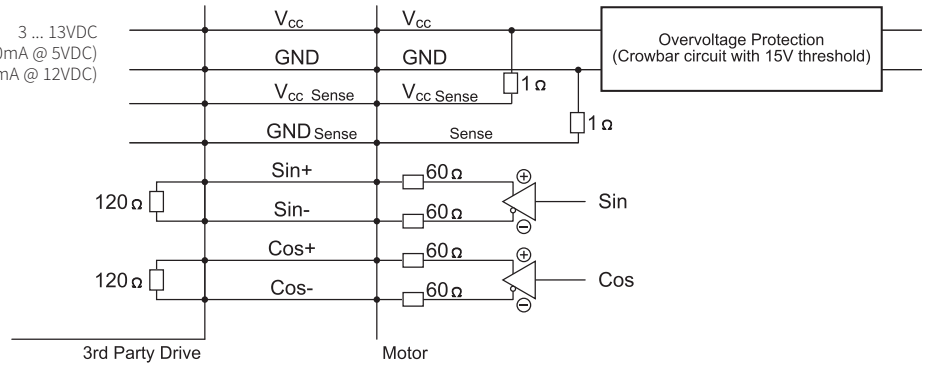
CONNECTOR PS10-70x240U-BL-QJ-D03



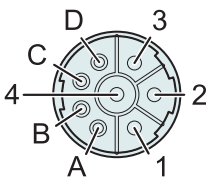
Connector Encoder J

View: Motor connector, plug side

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

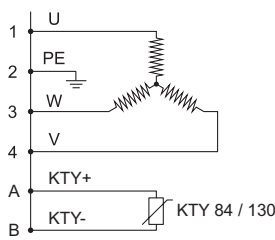


Motor Connector Wiring		Connector Encoder J	Wire Color Motor Cable
3 ... 13 VDC	Supply	1	red
GND	Supply	2	black
Vcc Sense (optional)	Supply Sense	3	white
GND Sense (optional)	Supply Sense	4	brown
Do not connect	–	5	–
Do not connect	–	6	–
Sin+	Encoder 1 Vpp	7	yellow
Sin-	Encoder 1 Vpp	8	orange
Cos+	Encoder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



Connector Power Q

View: Motor connector, plug side

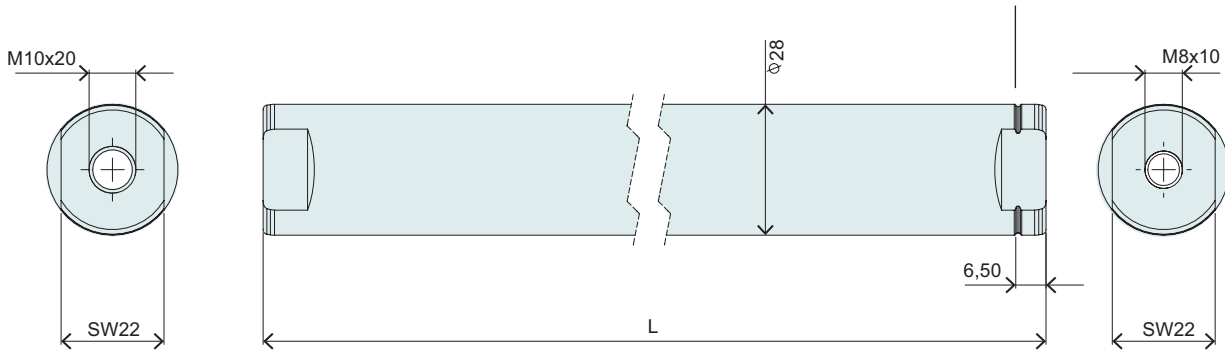


Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red (previously: black 1)
PE	2	yellow-green
Phase W	3	green (previously: black 3)
Phase V	4	blue (previously: black 2)
KTY +	A	purple (previously: black 5)
KTY -	B	grey (previously: black 6)
n. c.	C	yellow (previously: black 7)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

SLIDER

Slider Standard

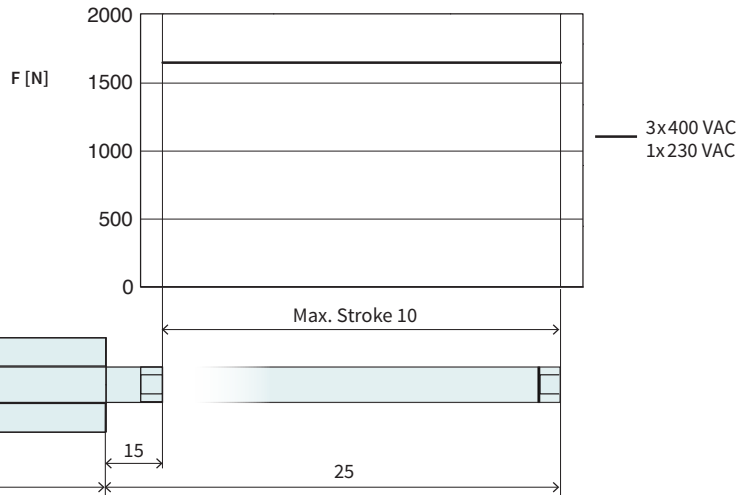
Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.



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

P10-70x240U/10-BL-QJ

Max. Stroke: 10 mm
Peak Force: 1650 N



Dimensions in mm

Technical Data P10-70x240U/10

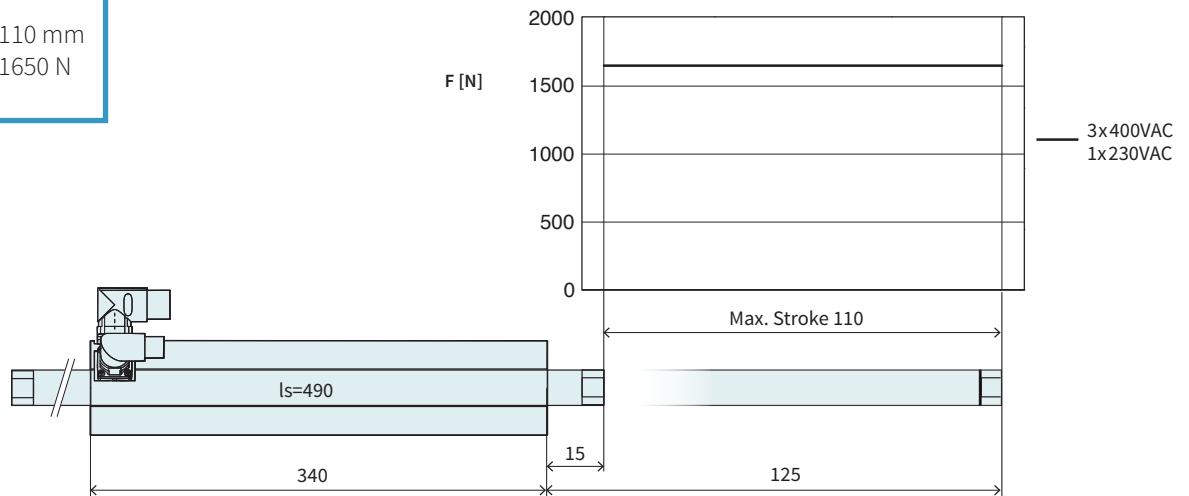
Stroke			
Max. Stroke	mm (in)	10	(0.39)
Force			
Max. Force @ 1x230VAC	N (lbf)	1650	(371)
Max. Force @ 3x400VAC	N (lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	59	(13.3)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



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

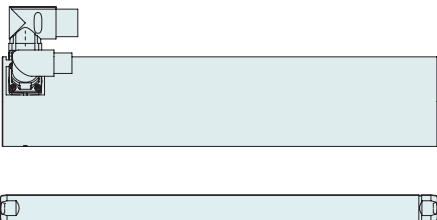
P10-70x240U/110-BL-QJ

Max. Stroke: 110 mm
Peak Force: 1650 N



Technical Data P10-70x240U/110

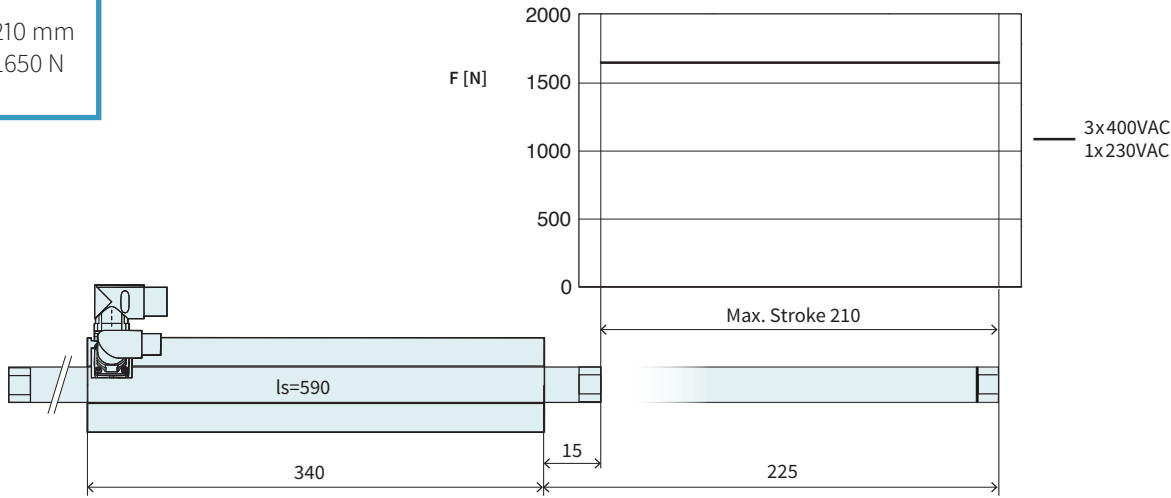
Stroke				
Max. Stroke	mm	(in)	110	(4.32)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1650	(371)
Max. Force @ 3x400VAC	N	(lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	59	(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

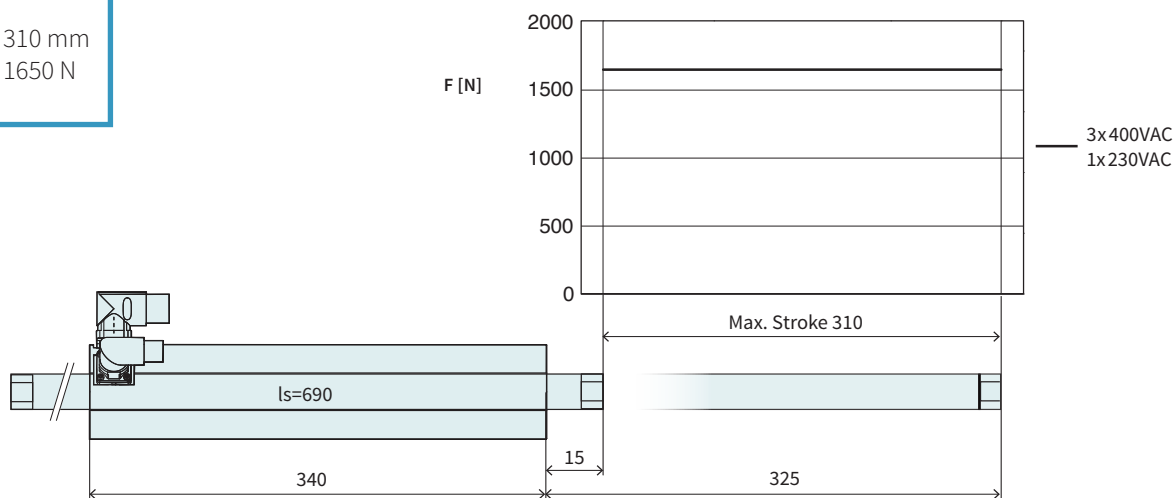
Technical Data P10-70x240U/210				
Stroke				
Max. Stroke	mm	(in)	210	(8.26)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1650	(371)
Max. Force @ 3x400VAC	N	(lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%		100	
Force Constant 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



Technical Data P10-70x240U/310

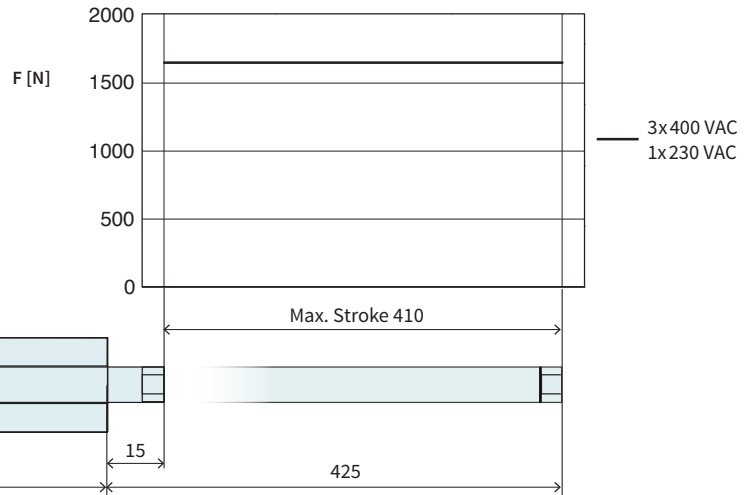
Stroke			
Max. Stroke	mm (in)	310	(12.19)
Force			
Max. Force @ 1x230VAC	N (lbf)	1650	(371)
Max. Force @ 3x400VAC	N (lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	59	(13.3)
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

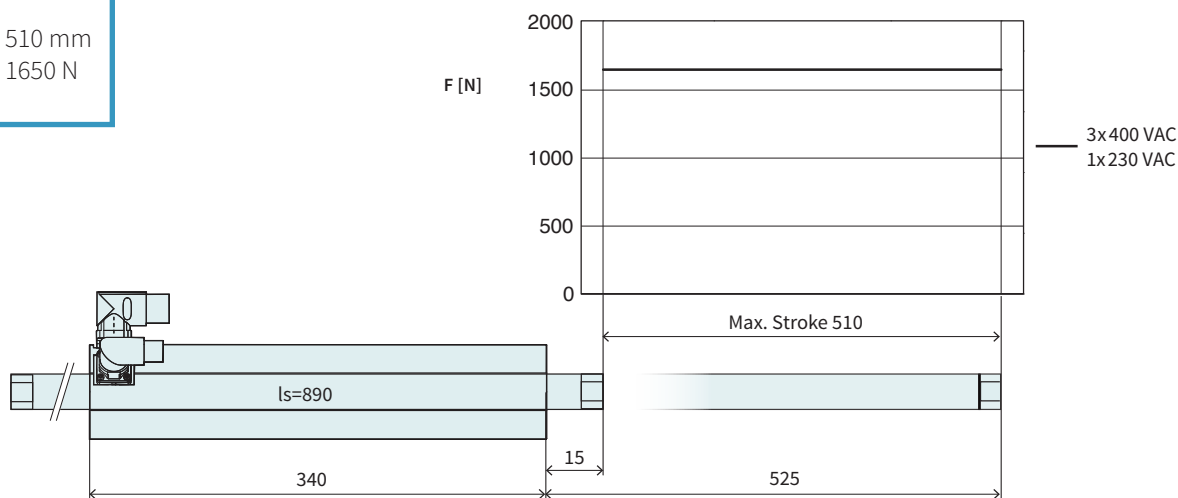
Stroke			
Max. Stroke	mm (in)	410	(16.1)
Force			
Max. Force @ 1x230VAC	N (lbf)	1650	(371)
Max. Force @ 3x400VAC	N (lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	59	(13.3)
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

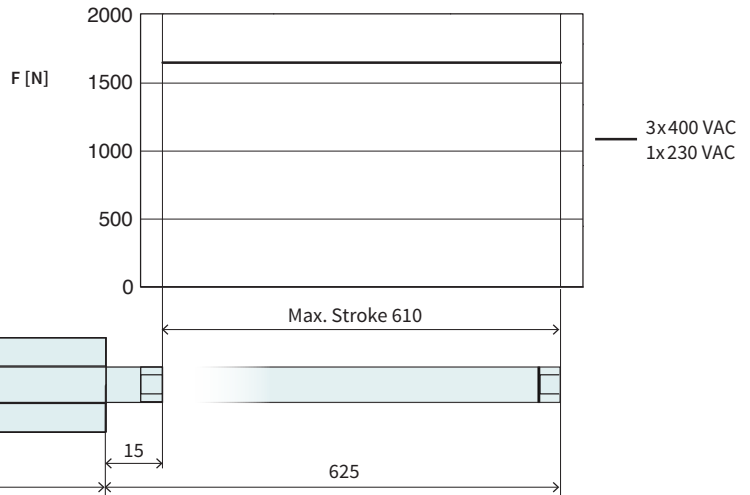
Stroke			
Max. Stroke	mm (in)	510	(20.1)
Force			
Max. Force @ 1x230VAC	N (lbf)	1650	(371)
Max. Force @ 3x400VAC	N (lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	59	(13.3)
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

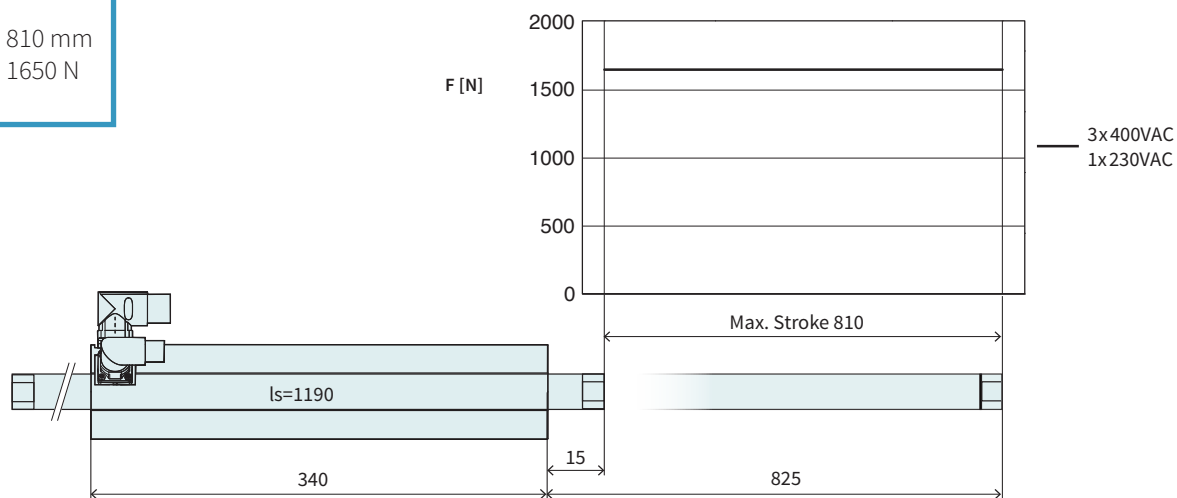
Stroke				
Max. Stroke	mm	(in)	610	(23.99)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1650	(371)
Max. Force @ 3x400VAC	N	(lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	59	(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



Technical Data P10-70x240U/810

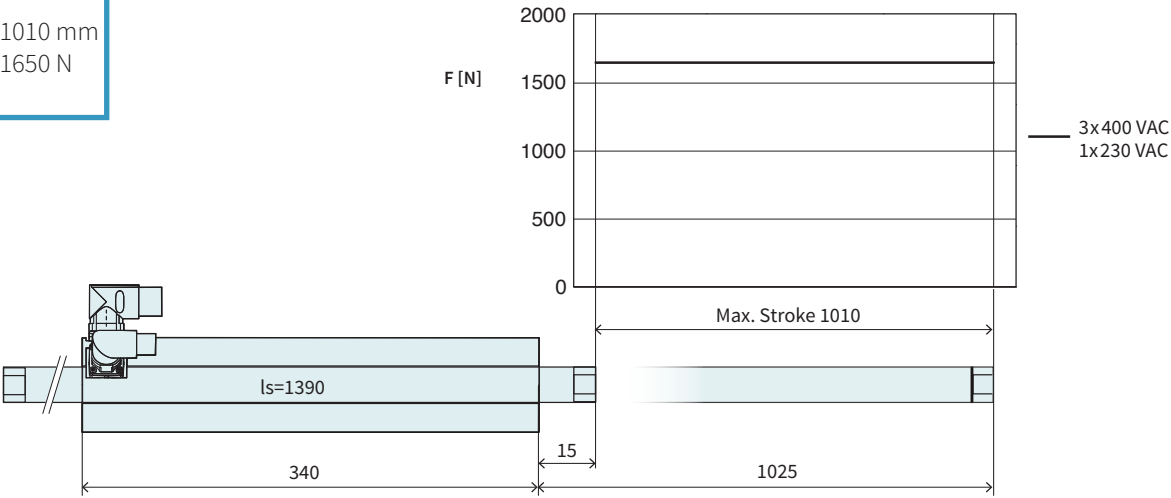
Stroke			
Max. Stroke	mm (in)	810	(31.89)
Force			
Max. Force @ 1x230VAC	N (lbf)	1650	(371)
Max. Force @ 3x400VAC	N (lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	59	(13.3)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



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

P10-70x240U/1010-BL-QJ

Max. Stroke: 1010 mm
Peak Force: 1650 N



Dimensions in mm

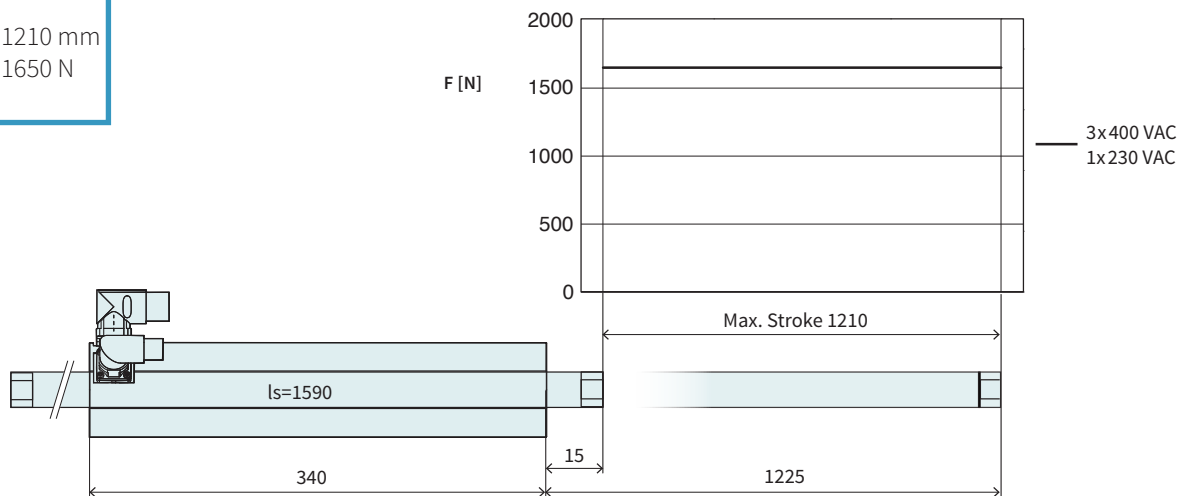
Technical Data P10-70x240U/1010				
Stroke				
Max. Stroke	mm	(in)	1010	(39.79)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1650	(371)
Max. Force @ 3x400VAC	N	(lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%		100	
Force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



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

P10-70x240U/1210-BL-QJ

Max. Stroke: 1210 mm
Peak Force: 1650 N



Technical Data P10-70x240U/1210

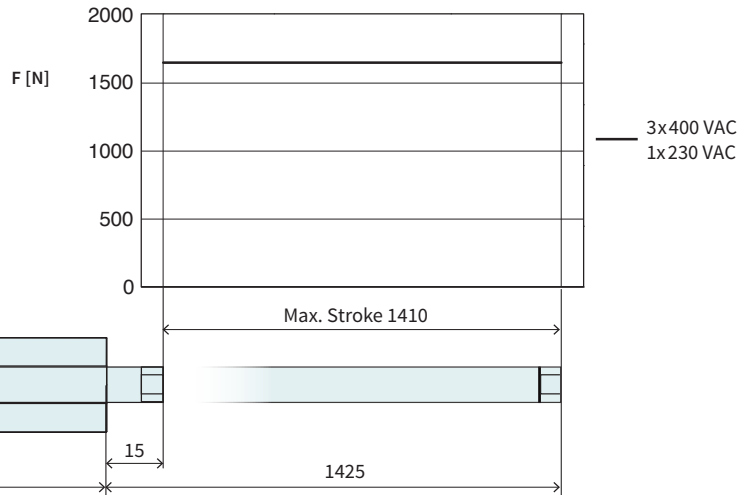
Stroke			
Max. Stroke	mm (in)	1210	(47.6)
Force			
Max. Force @ 1x230VAC	N (lbf)	1650	(371)
Max. Force @ 3x400VAC	N (lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	59	(13.3)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



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

P10-70x240U/1410-BL-QJ

Max. Stroke: 1410 mm
Peak Force: 1650 N



Dimensions in mm

Technical Data P10-70x240U/1410

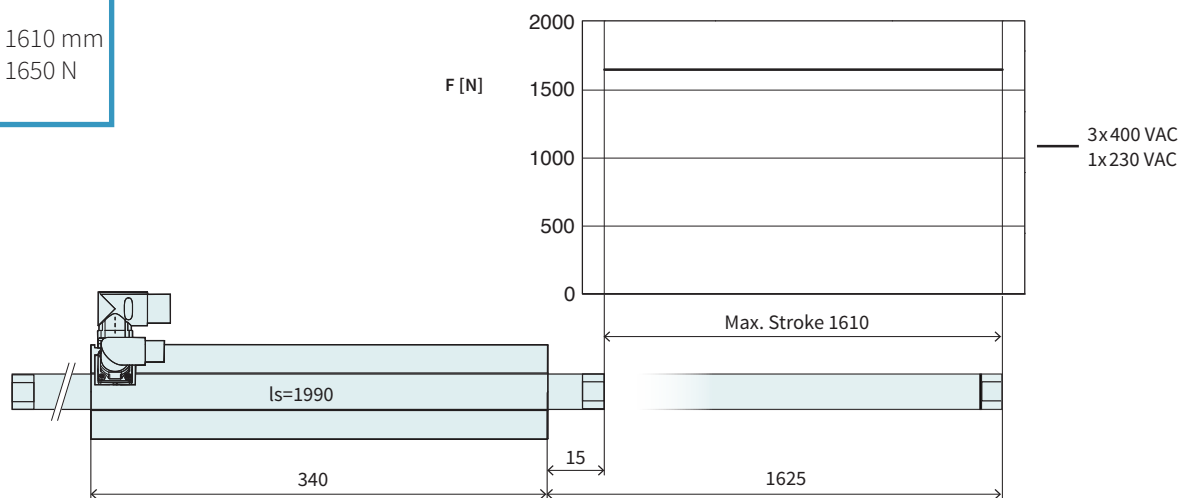
Stroke				
Max. Stroke	mm	(in)	1410	(55.49)
Force				
Max. Force @ 1x230VAC	N	(lbf)	1650	(371)
Max. Force @ 3x400VAC	N	(lbf)	1650	(371)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	190 / 290 / 510	(43 / 66 / 120)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	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

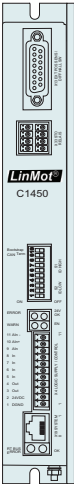


HM10-70x240/110	Linear Module 70x240 with 110 mm Stroke			
→	H-Guide	H10-70x240/110	H-Guide for P10-70x240, Stroke max. 110 mm	0150-5185
	Stator	PS10-70x240U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1293
		PS10-70x240U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2284
		PS10-70x240U-BL-QJ-D02	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

Motor Cable



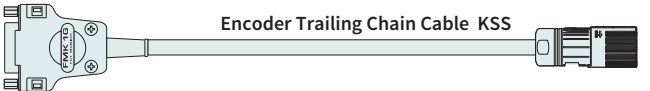
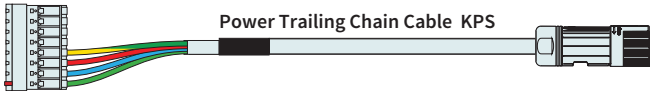
C1400



E1400

B Connector MC10-B/m

Q Connector MC10-Q/f



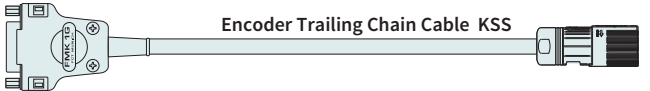
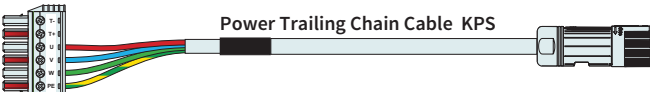
P10-70x240U

D15 Connector MC01-D15/f

J Connector MC10-J/f

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 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.
PF10-70x270	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**

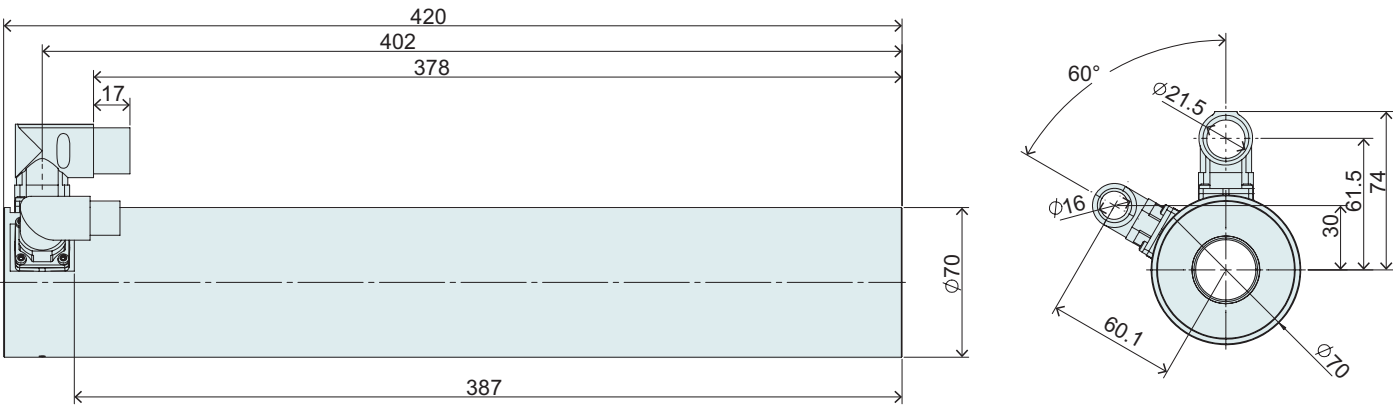
Accessories **589**



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			
Certification				
UL	File-No.		E354430	

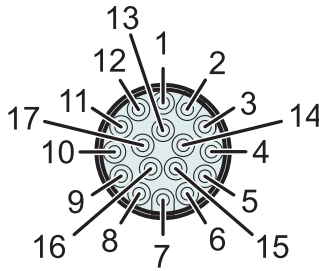
STATOR



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

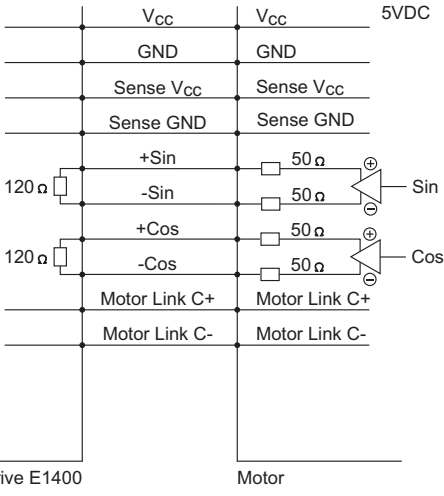
CONNECTOR PS10-70x320U-BL-QJ

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

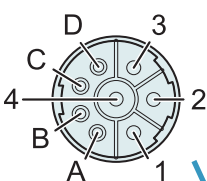


Connector Encoder J

View: Motor connector, plug side

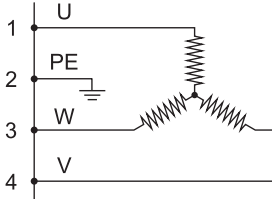


Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red
PE	2	yellow-green
Phase W	3	green
Phase V	4	blue
n. c.	A	n. c.
n. c.	B	n. c.
n. c.	C	n. c.
n. c.	D	n. c.

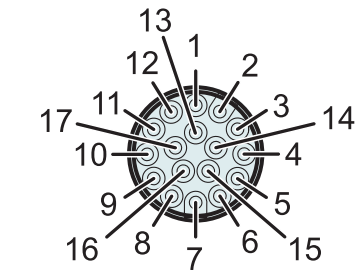


Connector Power Q

View: Motor connector, plug side



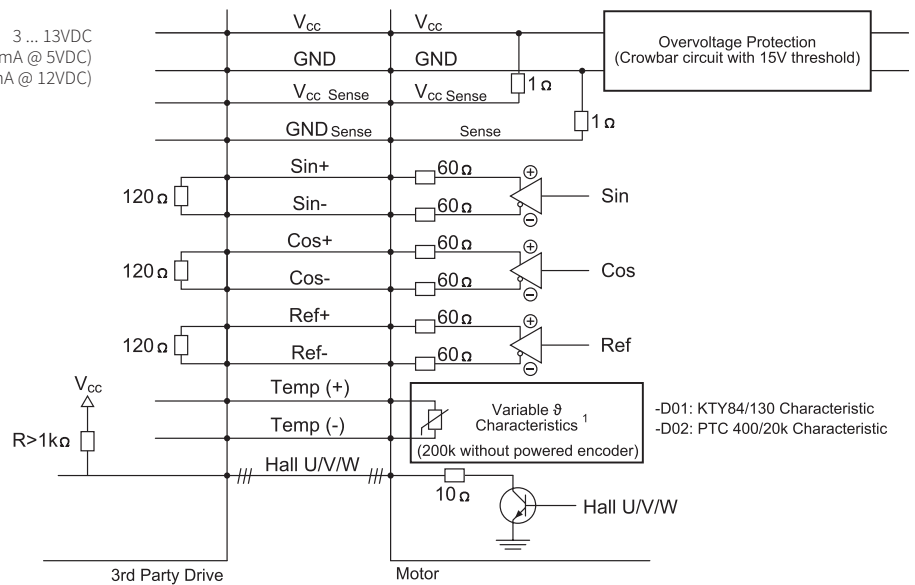
CONNECTOR PS10-70x320U-BL-QJ-D01/02



Connector Encoder J

View: Motor connector, plug side

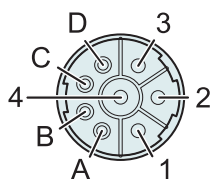
3 ... 13VDC
($I_{max} < 150\text{mA}$ @ 5VDC)
($I_{max} < 80\text{mA}$ @ 12VDC)



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

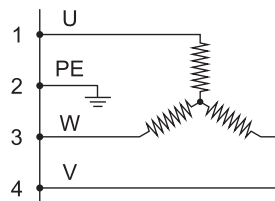
Motor Connector Wiring				
PS10-70x320U-BL-QJ-D01	PS10-70x320U-BL-QJ-D02	Function	Connector Encoder J	Wire Color Motor Cable
3 ... 13VDC	3 ... 13VDC	Supply	1	white
GND	GND	Supply	2	brown
Vcc Sense (optional)	Vcc Sense (optional)	Supply Sense	3	green
GND Sense (optional)	GND Sense (optional)	Supply Sense	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 16VDC. The maximum current must not exceed 15 mA.



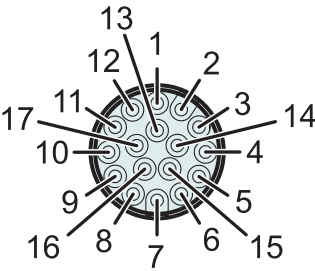
Connector Power Q

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.

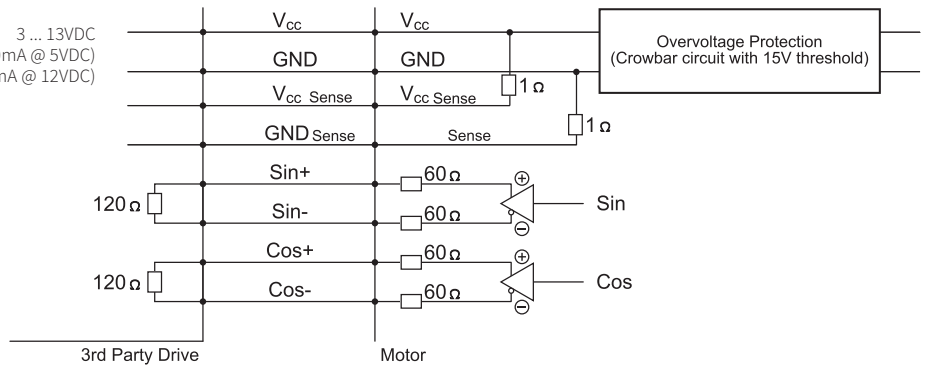
CONNECTOR PS10-70X320U-BL-QJ-D03



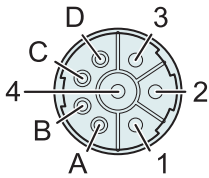
Connector Encoder J

View: Motor connector, plug side

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

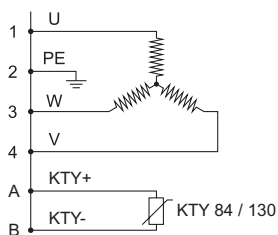


Motor Connector Wiring		Connector Encoder J	Wire Color Motor Cable
3 ... 13 VDC	Supply	1	red
GND	Supply	2	black
Vcc Sense (optional)	Supply Sense	3	white
GND Sense (optional)	Supply Sense	4	brown
Do not connect	–	5	–
Do not connect	–	6	–
Sin+	Encoder 1 Vpp	7	yellow
Sin-	Encoder 1 Vpp	8	orange
Cos+	Encoder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



Connector Power Q

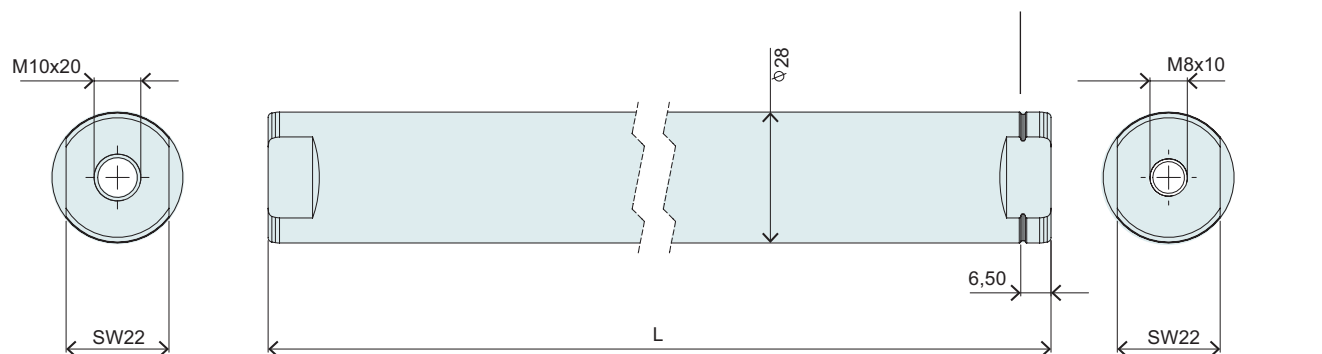
View: Motor connector, plug side



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

SLIDER

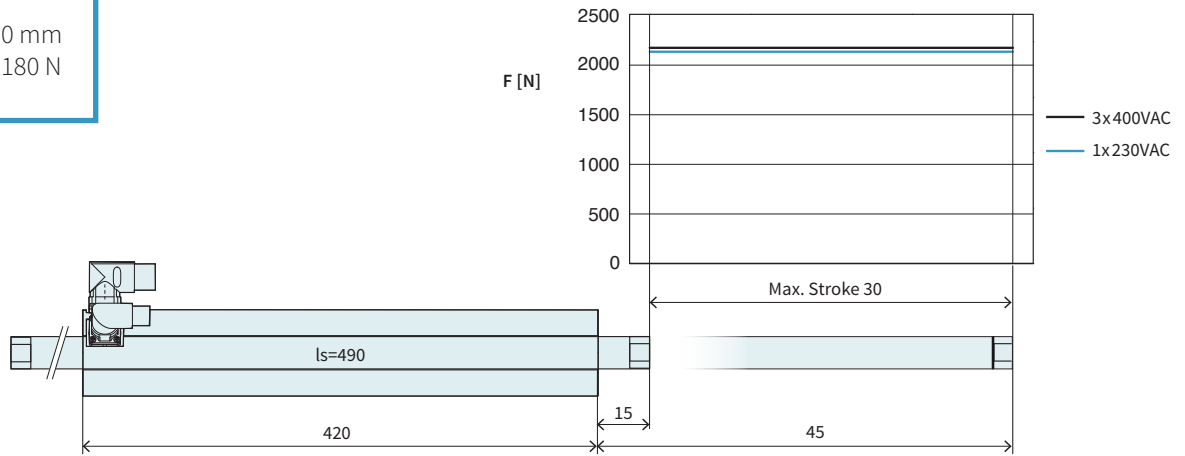
Slider Standard



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

P10-70x320U/30-BL-QJ

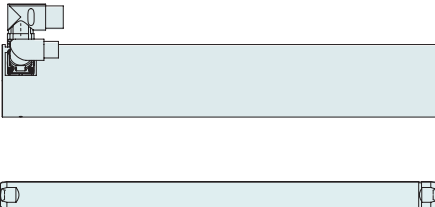
Max. Stroke: 30 mm
Peak Force: 2180 N



Dimensions in mm

Technical Data P10-70x320U/30

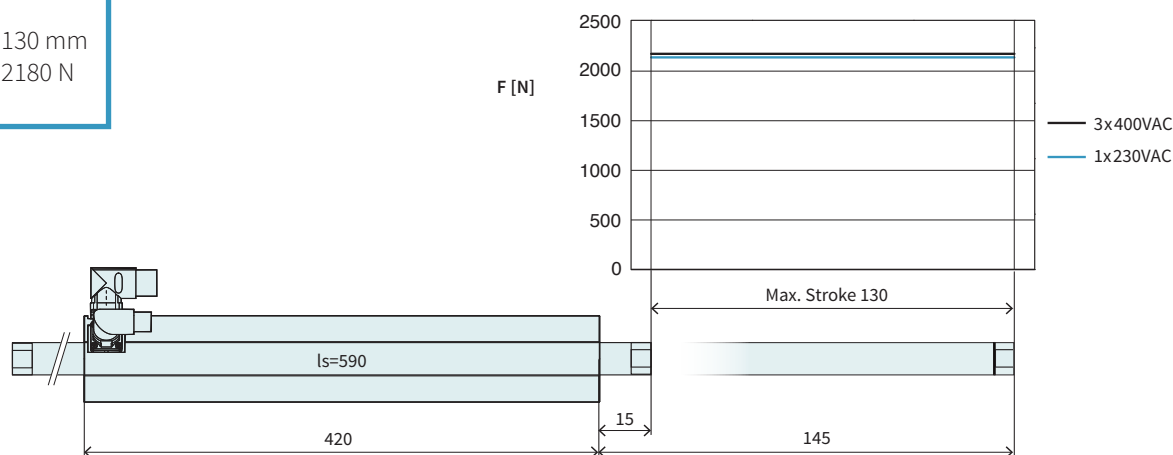
Stroke			
Max. Stroke	mm (in)	30	(1.17)
Force			
Max. Force @ 1x230VAC	N (lbf)	2170	(487)
Max. Force @ 3x400VAC	N (lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	64	(14.4)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



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

P10-70x320U/130-BL-QJ

Max. Stroke: 130 mm
Peak Force: 2180 N



Dimensions in mm

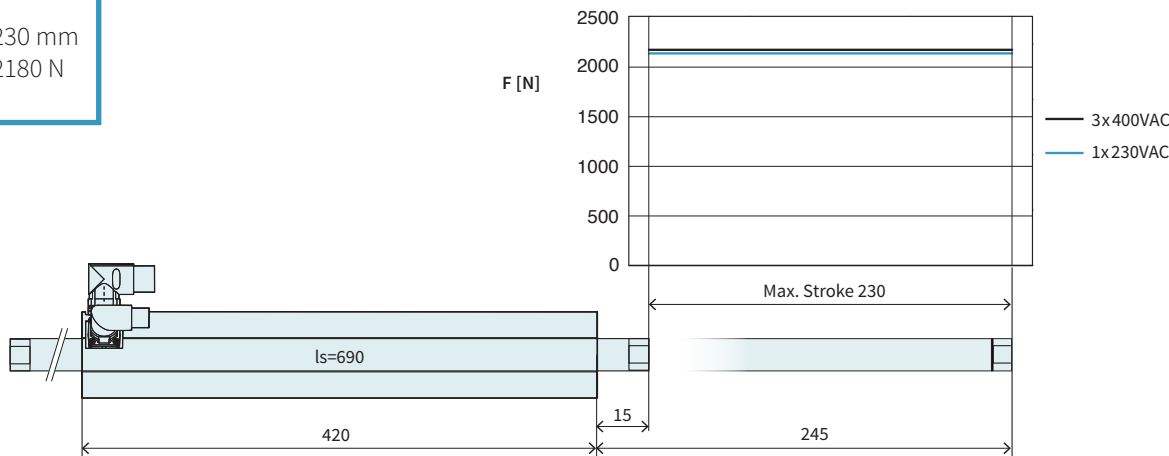
Technical Data P10-70x320U/130				
Stroke				
Max. Stroke	mm	(in)	130	(5.12)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force Constant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



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

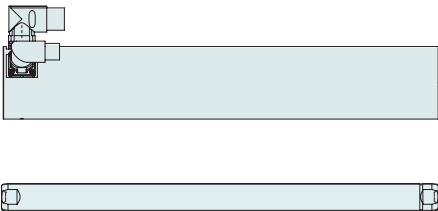
P10-70x320U/230-BL-QJ

Max. Stroke: 230 mm
Peak Force: 2180 N



Dimensions in mm

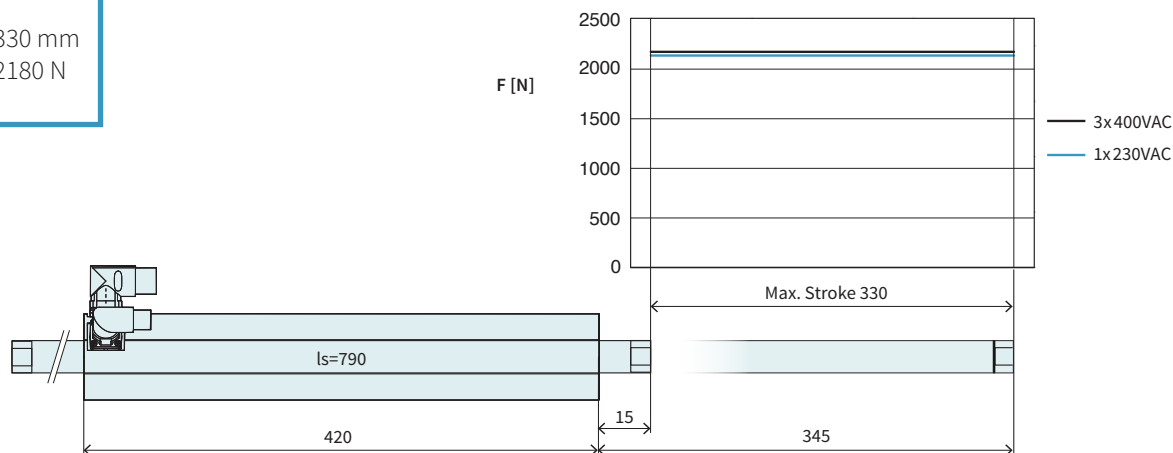
Technical Data P10-70x320U/230				
Stroke				
Max. Stroke	mm	(in)	230	(9.06)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force Constant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



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

P10-70x320U/330-BL-QJ

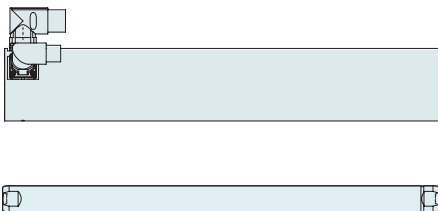
Max. Stroke: 330 mm
Peak Force: 2180 N



Dimensions in mm

Technical Data P10-70x320U/330

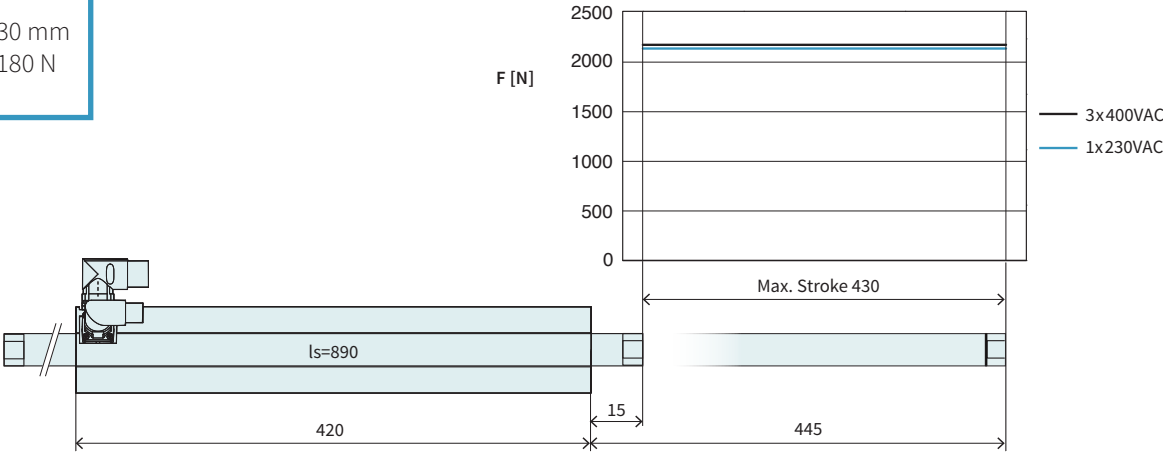
Stroke				
Max. Stroke	mm	(in)	330	(12.99)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	64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



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

P10-70x320U/430-BL-QJ

Max. Stroke: 430 mm
Peak Force: 2180 N



Dimensions in mm

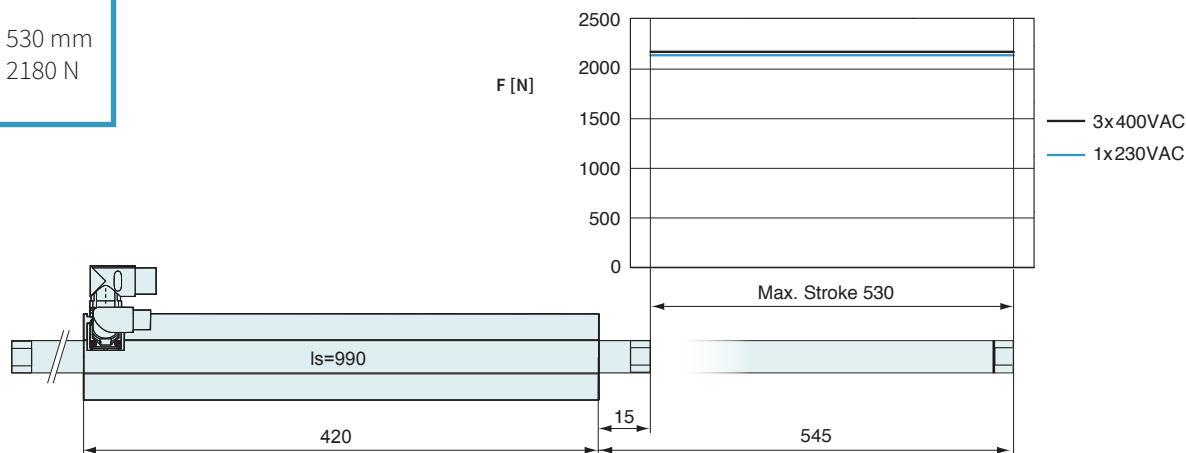
Technical Data P10-70x320U/430				
Stroke				
Max. Stroke	mm	(in)	430	(16.89)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force Constant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



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

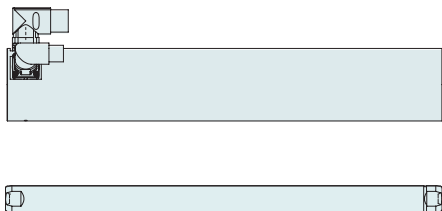
P10-70x320U/530-BL-QJ

Max. Stroke: 530 mm
Peak Force: 2180 N



Dimensions in mm

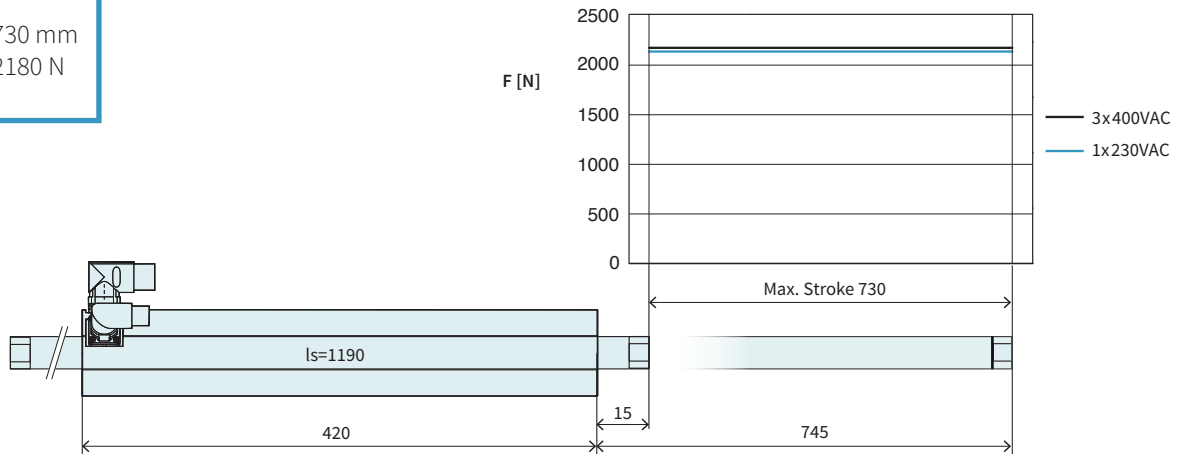
Technical Data P10-70x320U/530				
Stroke				
Max. Stroke	mm	(in)	530	(20.89)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force Constant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



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

P10-70x320U/730-BL-QJ

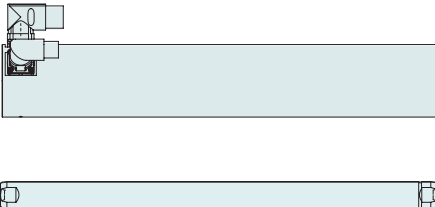
Max. Stroke: 730 mm
Peak Force: 2180 N



Dimensions in mm

Technical Data P10-70x320U/730

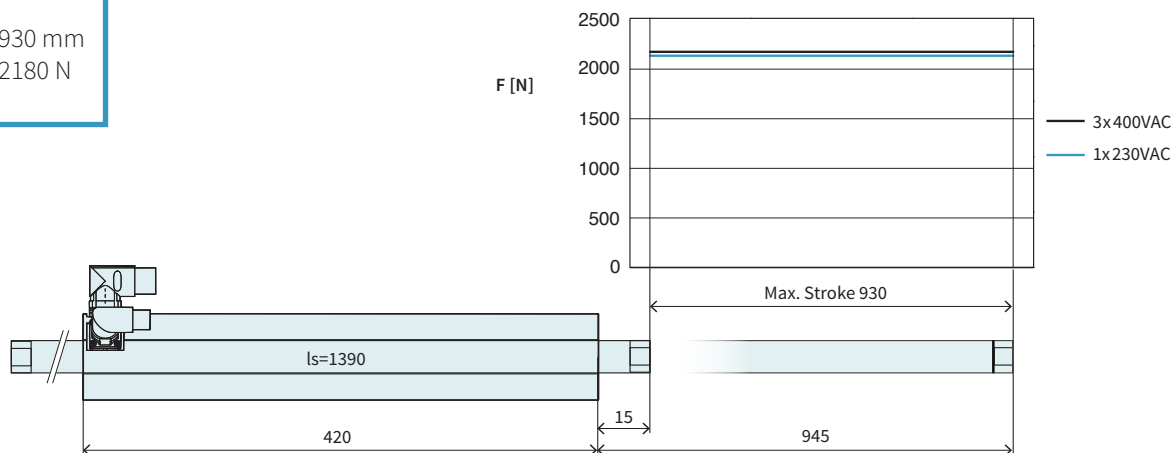
Stroke				
Max. Stroke	mm	(in)	730	(28.69)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	64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



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

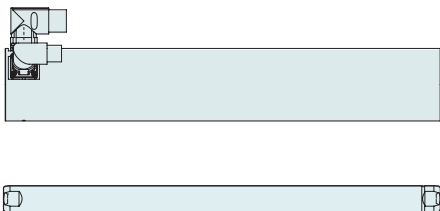
P10-70x320U/930-BL-QJ

Max. Stroke: 930 mm
Peak Force: 2180 N



Dimensions in mm

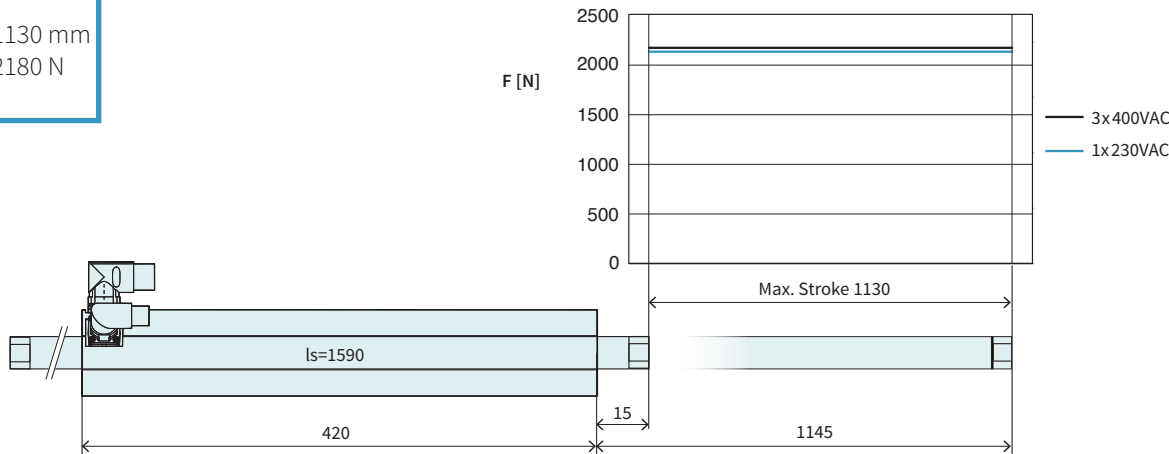
Technical Data P10-70x320U/930				
Stroke				
Max. Stroke	mm	(in)	930	(36.6)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force Constant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



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

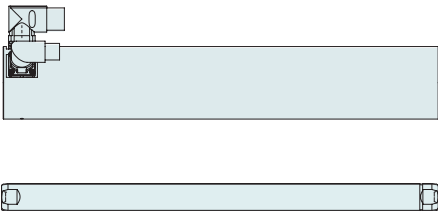
P10-70x320U/1130-BL-QJ

Max. Stroke: 1130 mm
Peak Force: 2180 N



Dimensions in mm

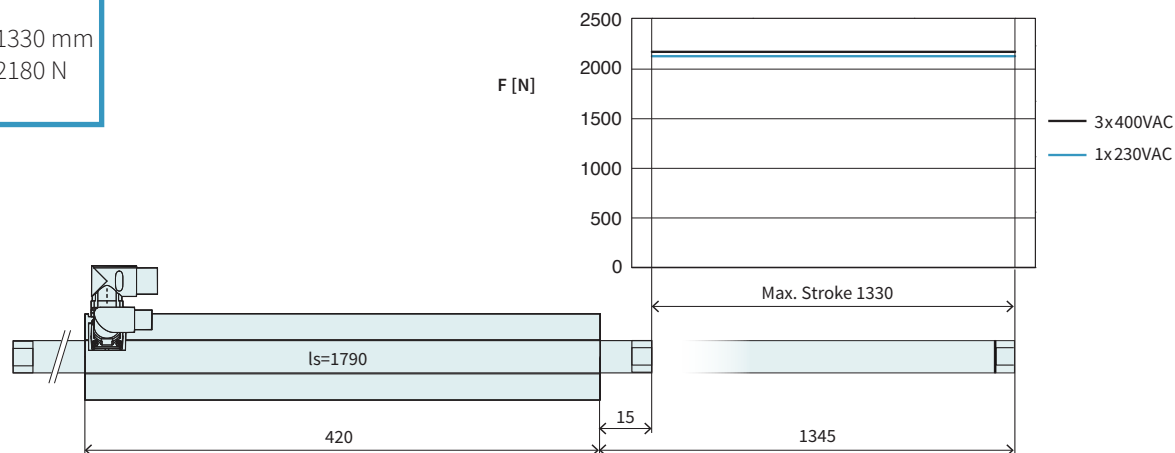
Technical Data P10-70x320U/1130				
Stroke				
Max. Stroke	mm	(in)	1130	(44.49)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force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



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

P10-70x320U/1330-BL-QJ

Max. Stroke: 1330 mm
Peak Force: 2180 N



Dimensions in mm

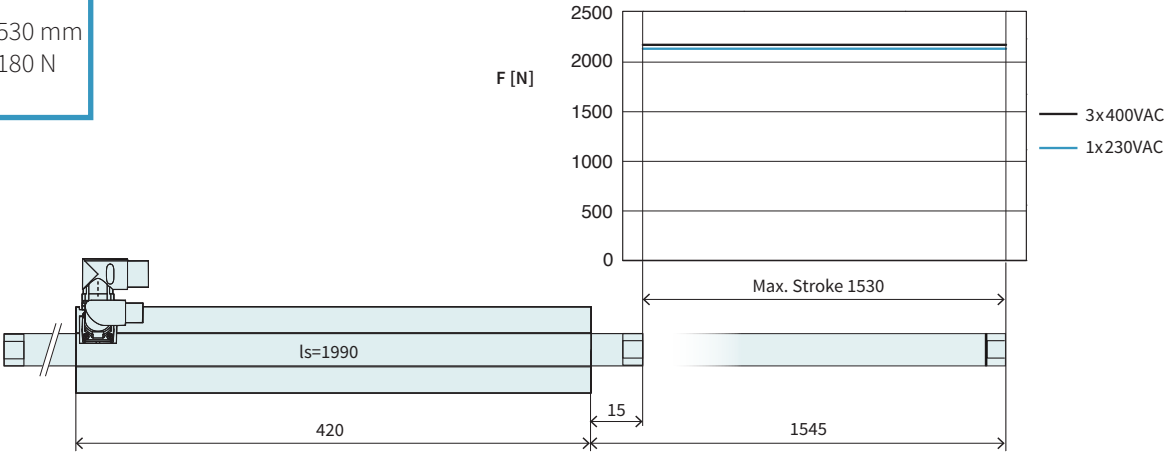
Technical Data P10-70x320U/1330				
Stroke				
Max. Stroke	mm	(in)	1330	(52.39)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2170	(487)
Max. Force @ 3x400VAC	N	(lbf)	2180	(489)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	260 / 400 / 700	(58 / 89 / 160)
Max. Border Force relative	%		100	
Force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



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

P10-70x320U/1530-BL-QJ

Max. Stroke: 1530 mm
Peak Force: 2180 N



Dimensions in mm

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



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

Linear Guides H10



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

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

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

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

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

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

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

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

Accessories

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



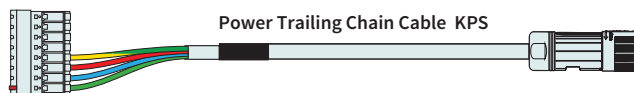
C1400



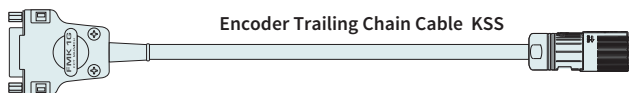
E1400

B Connector MC10-B/m

Q Connector MC10-Q/f



Power Trailing Chain Cable KPS



Encoder Trailing Chain Cable KSS



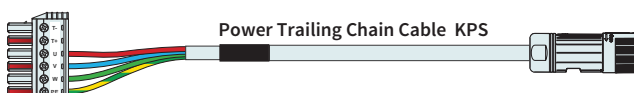
P10-70x320U

D15 Connector MC01-D15/f

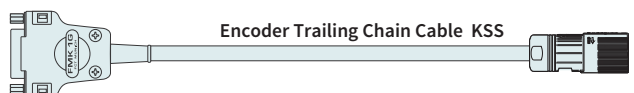
J Connector MC10-J/f

L Connector MC10-L/m

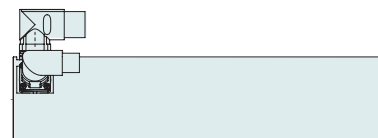
Q Connector MC10-Q/f



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 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.
PF10-70x350	Flange for PS10-70x320	0150-2290



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

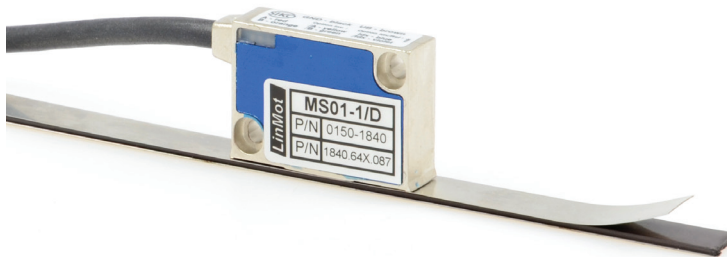
LUBRICANT RESERVOIR



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

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LINEAR MOTORS P10-70x400U



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

LINEAR MOTORS P10-70x400U

Technical Data **597**

Motor Specifications

 P10-70x400U/50 **602**

 P10-70x400U/150 **603**

 P10-70x400U/250 **604**

 P10-70x400U/350 **605**

 P10-70x400U/450 **606**

 P10-70x400U/650 **607**

 P10-70x400U/850 **608**

 P10-70x400U/1050 **609**

 P10-70x400U/1250 **610**

 P10-70x400U/1450 **611**

Linear Guides **612**

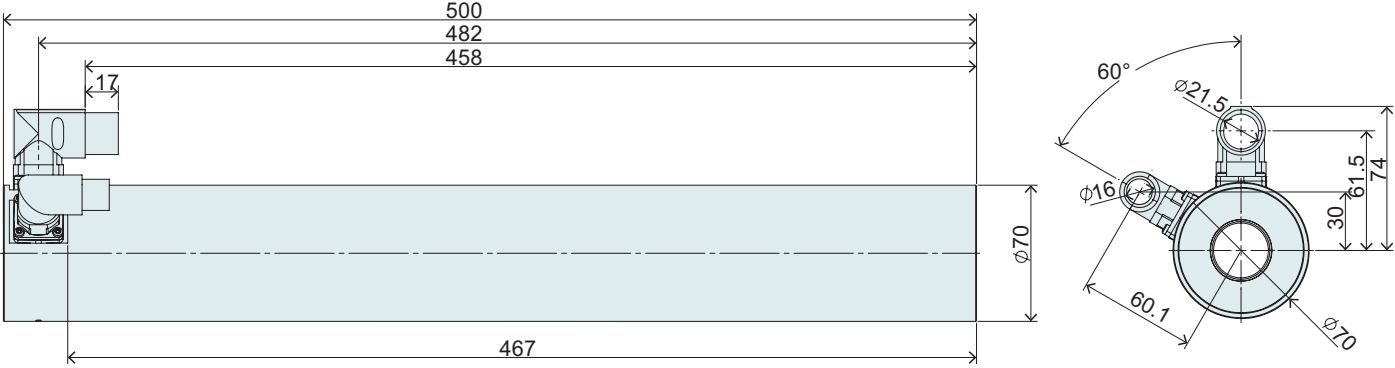
Accessories **614**



MOTOR FAMILY P10-70x400U

Technical Data				
Stroke				
Max. Stroke (ES)	mm	(in)	1450	(57.1)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	80	(18)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	113	(25.4)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	2.2	(89.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	3.9	(159.9)
Position Detection				
Position Resolution	mm	(in)	0.005	(0.0002)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 1x230VAC	A _{pk} / A _{rms}		26.8 / 18.9	
Max. Current @ 3x400VAC	A _{pk} / A _{rms}		33.9 / 23.9	
Max. Cont. Current 1 [Passive cooling /Fan / Fluid]	A _{pk}		4 / 6.2 / 11	
Max. Cont. Current 2 [Passive cooling /Fan / Fluid]	A _{rms}		2.9 / 4.4 / 7.9	
Back EMF Constant	V _{pk} / (m/s)	(V _{pk} / (in/s))	92.4	(2.35)
Terminal Resistance 25 °C / 120 °C	Ohm		6.9 / 9.5	
Terminal Inductivity	mH		13	
Magnetic Period	mm	(in)	40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.52 / 0.22 / 0.068	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2100 / 500 / 100	
Mechanical Data				
Stator Diameter	mm	(in)	70	(2.8)
Stator Length	mm	(in)	500	(20)
Stator Mass	g	(lb)	8250	(18.15)
Slider Diameter	mm	(in)	28	(1.1)
Slider Length	mm	(in)	590 - 1990	(23 - 78)
Slider Mass	g	(lb)	2770 - 9350	(6.09 - 20.57)
IP Code			IP 65	
Certification				
UL	File-No.		E354430	

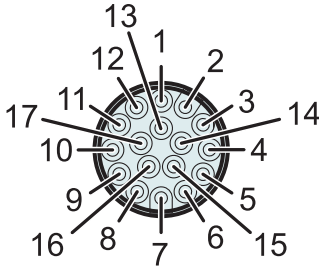
STATOR



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

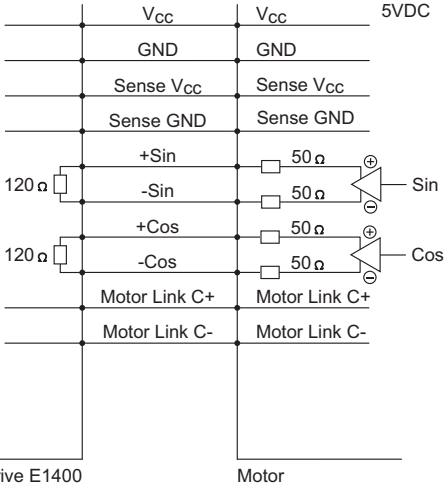
CONNECTOR PS10-70x400U-BL-QJ

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

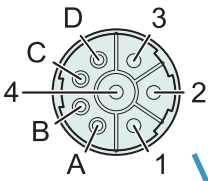


Connector Encoder J

View: Motor connector, plug side

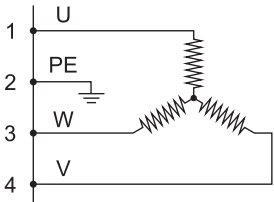


Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red
PE	2	yellow-green
Phase W	3	green
Phase V	4	blue
n. c.	A	n. c.
n. c.	B	n. c.
n. c.	C	n. c.
n. c.	D	n. c.

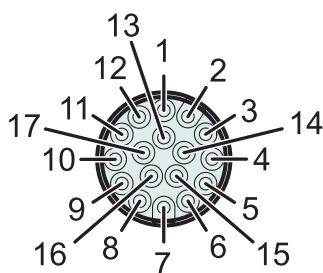


Connector Power Q

View: Motor connector, plug side



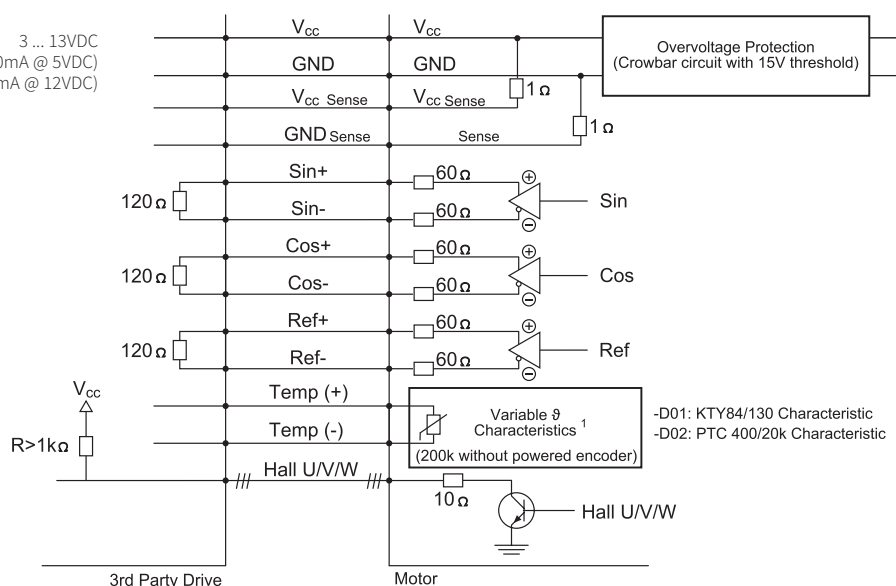
CONNECTOR PS10-70x400U-BL-QJ-D01/02



Connector Encoder J

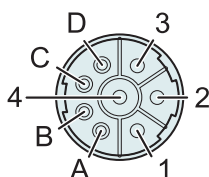
View: Motor connector, plug side

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



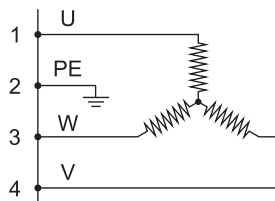
Motor Connector Wiring				
PS10-70x400U-BL-QJ-D01	PS10-70x400U-BL-QJ-D02	Function	Connector Encoder J	Wire Color Motor Cable
3 ... 13 VDC	3 ... 13 VDC	Supply	1	white
GND	GND	Supply	2	brown
Vcc Sense (optional)	Vcc Sense (optional)	Supply Sense	3	green
GND Sense (optional)	GND Sense (optional)	Supply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

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



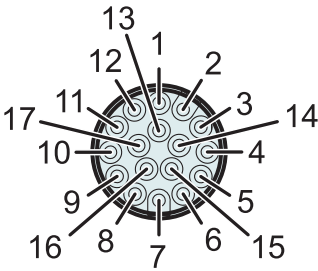
Connector Power Q

View: Motor connector, plug side



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

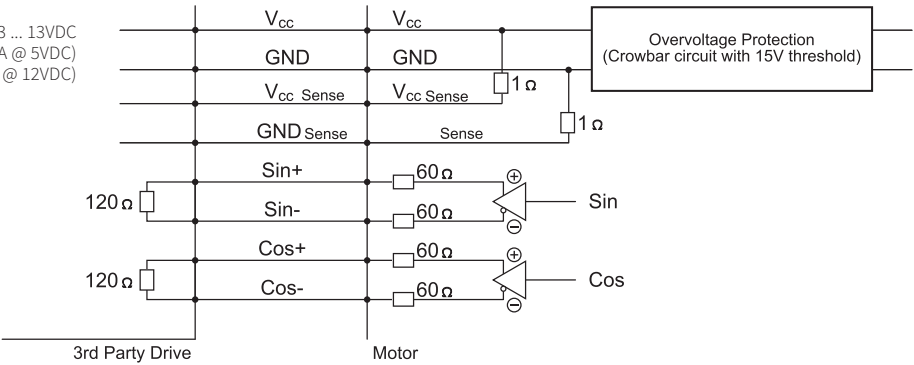
CONNECTOR PS10-70x400U-BL-QJ-D03



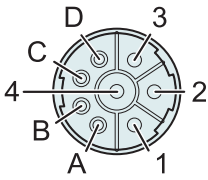
Connector Encoder J

View: Motor connector, plug side

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

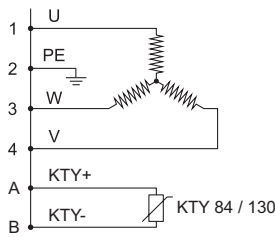


Motor Connector Wiring		Wire Color Motor Cable	Connector Encoder J
3 ... 13 VDC	Supply	red	1
GND	Supply	black	2
Vcc Sense (optional)	Supply Sense	white	3
GND Sense (optional)	Supply Sense	brown	4
Do not connect	–	–	5
Do not connect	–	–	6
Sin+	Encoder 1 Vpp	yellow	7
Sin-	Encoder 1 Vpp	orange	8
Cos+	Encoder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



Connector Power Q

View: Motor connector, plug side

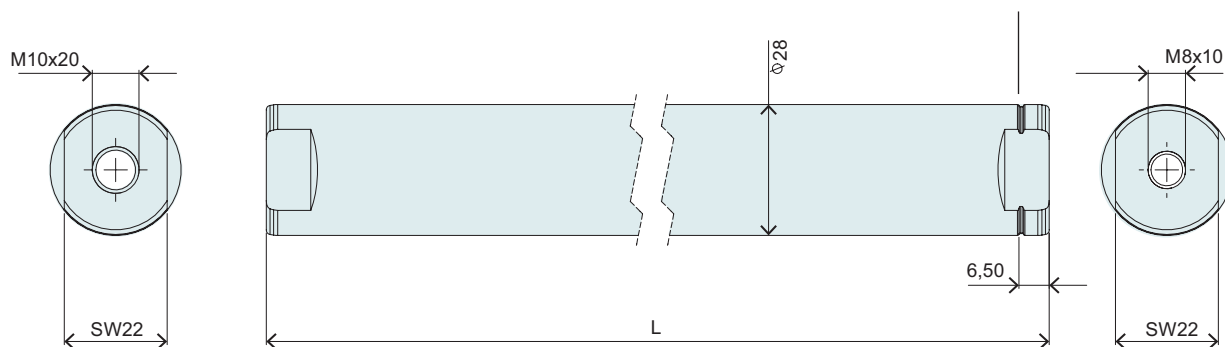


Motor Connector Wiring	Connector Power Q	Wire Color Motor Cable
Phase U	1	red (previously: black 1)
PE	2	yellow-green
Phase W	3	green (previously: black 3)
Phase V	4	blue (previously: black 2)
KTY +	A	purple (previously: black 5)
KTY -	B	grey (previously: black 6)
n. c.	C	yellow (previously: black 7)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

SLIDER

Slider Standard

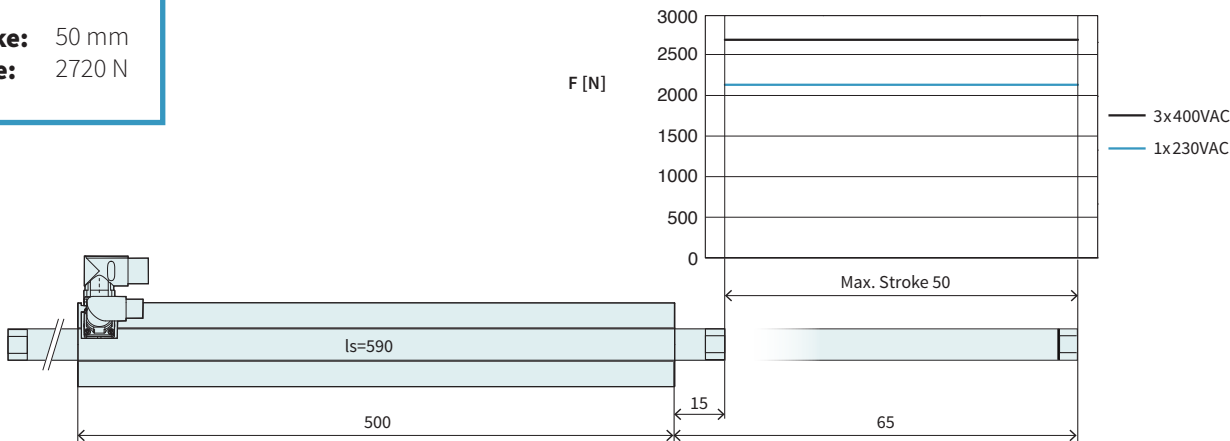
Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.



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

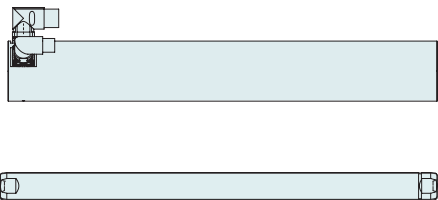
P10-70x400U/50-BL-QJ

Max. Stroke: 50 mm
Peak Force: 2720 N



Dimensions in mm

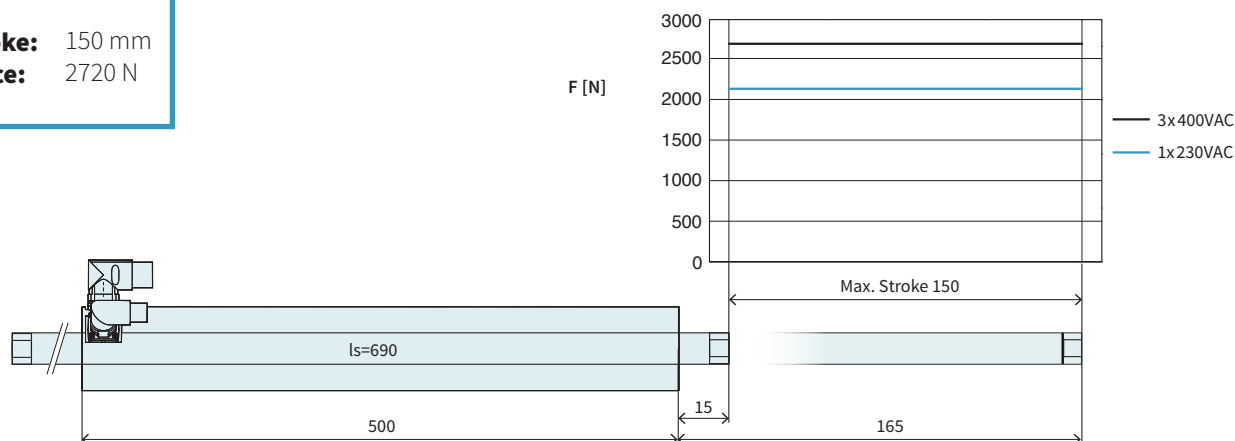
Technical Data P10-70x400U/50				
Stroke				
Max. Stroke	mm	(in)	50	(1.96)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 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

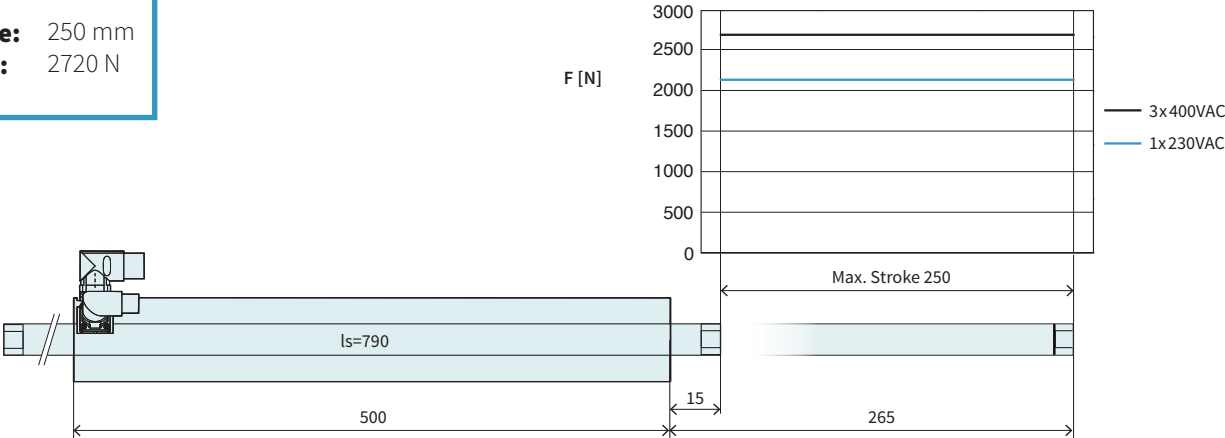
Technical Data P10-70x400U/150				
Stroke				
Max. Stroke	mm	(in)	150	(5.91)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 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
PL10-28x690/640	Slider for P10-70 'standard'	0150-2197

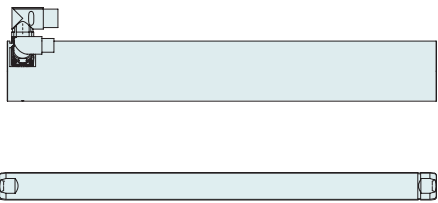
P10-70x400U/250-BL-QJ

Max. Stroke: 250 mm
Peak Force: 2720 N



Dimensions in mm

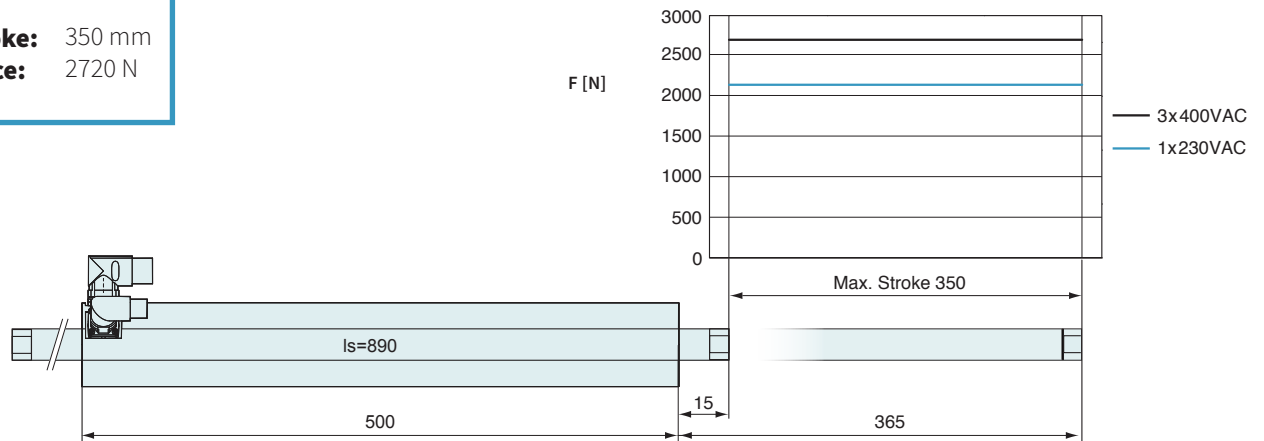
Technical Data P10-70x400U/250				
Stroke				
Max. Stroke	mm	(in)	250	(9.83)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 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

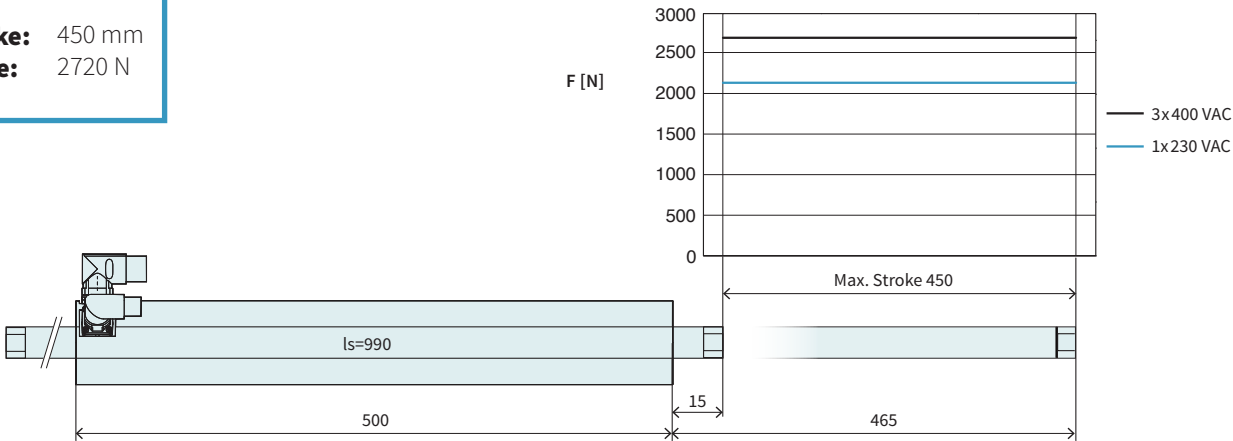
Technical Data P10-70x400U/350				
Stroke				
Max. Stroke	mm	(in)	350	(13.8)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 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

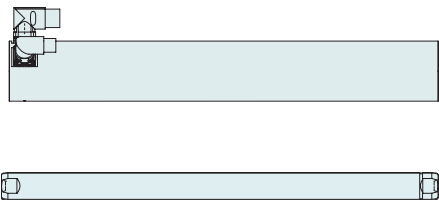
P10-70x400U/450-BL-QJ

Max. Stroke: 450 mm
Peak Force: 2720 N



Dimensions in mm

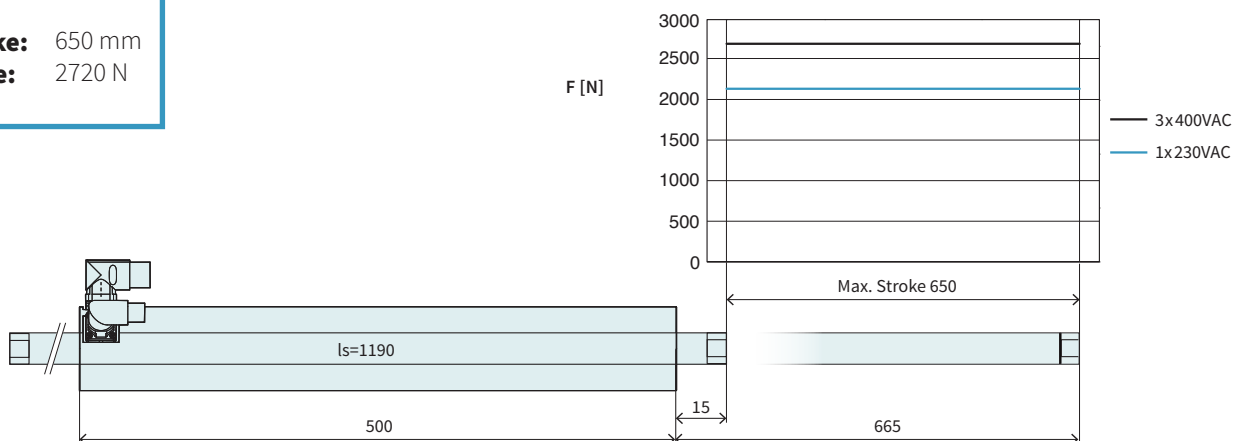
Technical Data P10-70x400U/450				
Stroke				
Max. Stroke	mm	(in)	450	(17.69)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force 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

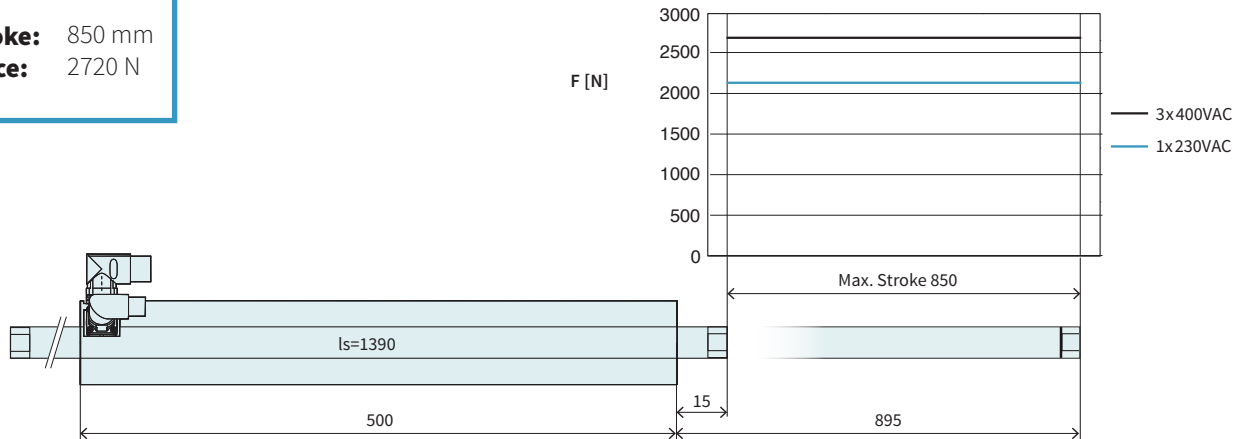
Technical Data P10-70x400U/650				
Stroke				
Max. Stroke	mm	(in)	650	(25.6)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 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

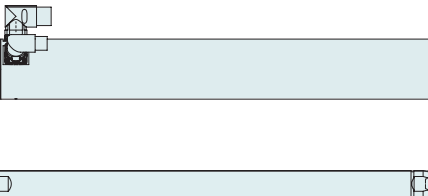
Max. Stroke: 850 mm
Peak Force: 2720 N



Dimensions in mm

Technical Data P10-70x400U/850

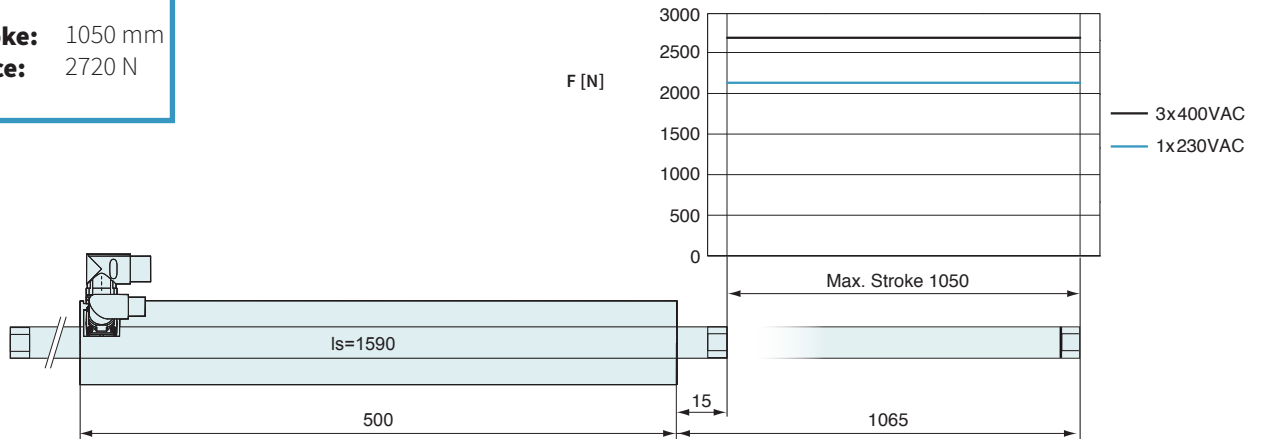
Stroke				
Max. Stroke	mm	(in)	850	(33.49)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	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

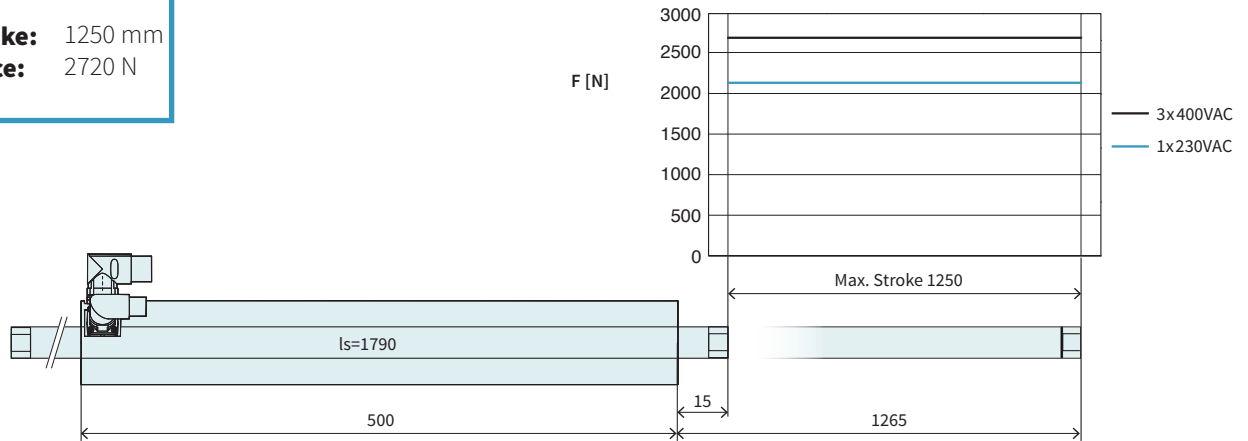
Technical Data P10-70x400U/1050				
Stroke				
Max. Stroke	mm	(in)	1050	(41.29)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force 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

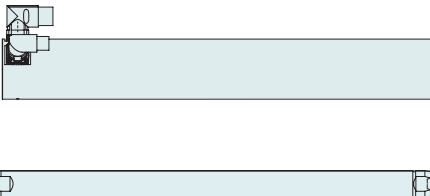
P10-70x400U/1250-BL-QJ

Max. Stroke: 1250 mm
Peak Force: 2720 N



Dimensions in mm

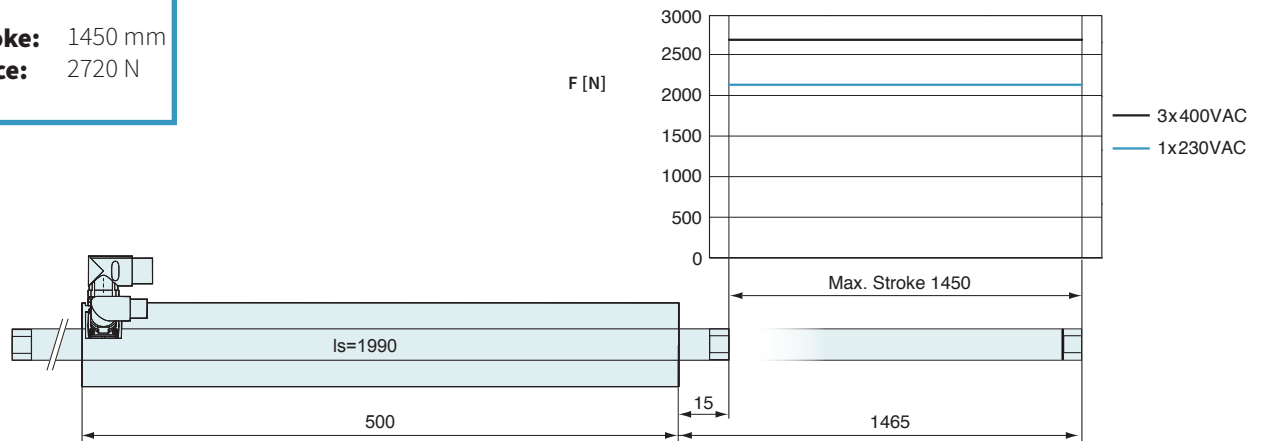
Technical Data P10-70x400U/1250				
Stroke				
Max. Stroke	mm	(in)	1250	(49.2)
Force				
Max. Force @ 1x230VAC	N	(lbf)	2150	(483)
Max. Force @ 3x400VAC	N	(lbf)	2720	(611)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	320 / 500 / 890	(73 / 110 / 200)
Max. Border Force relative	%		100	
Force 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

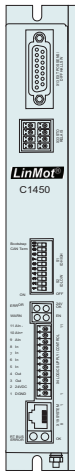
HM10-70x400/250		Linear Module 70x400 with 250 mm Stroke			
	→	H-Guide	H10-70x400/250	H-Guide for P10-70x400, Stroke max. 250 mm	0150-5421
	→	Stator	PS10-70x400U-BL-QJ	Stator 3x400VAC, LinMot Encoder	0150-1294
			PS10-70x400U-BL-QJ-D01	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, KTY	0150-2286
			PS10-70x400U-BL-QJ-D02	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

Motor Cable

4



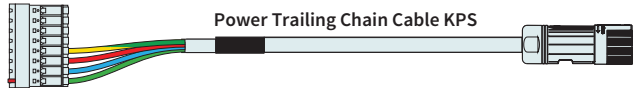
C1400



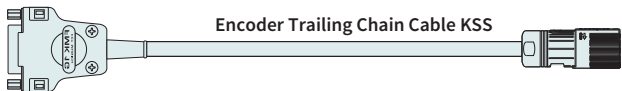
E1400

B Connector MC10-B/m

Q Connector MC10-Q/f



Encoder Trailing Chain Cable KSS



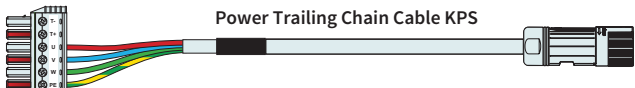
P10-70x400U

D15 Connector MC01-D15/f

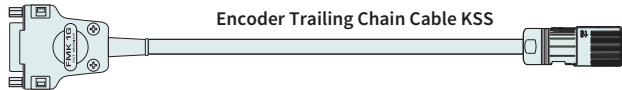
J Connector MC10-J/f

L Connector MC10-L/m

Q Connector MC10-Q/f



Encoder Trailing Chain Cable KSS



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 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.
PF10-70x430	Flange for PS10-70x400	0150-2276



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

BEARING KIT



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

LUBRICANT RESERVOIR

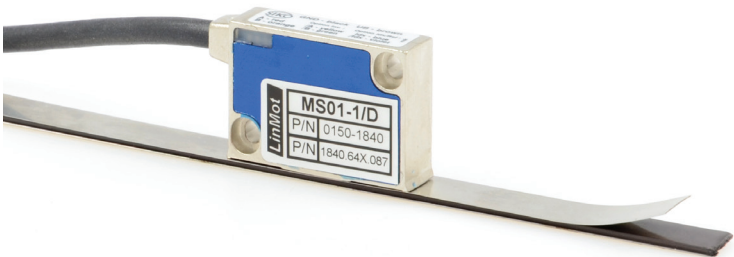


Item	Description	Item-No.
PA10-70/28	Lubricant reservoir for PS10-70 with lubricating nipple	0150-3543

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS

4



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".