

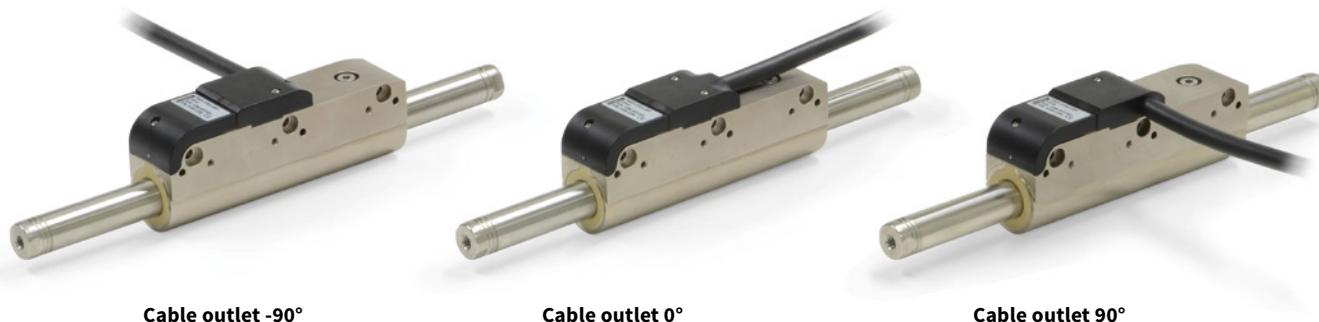
LINEAR MOTORS P01-37Sx120F-HP



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

LINEAR MOTORS P01-37Sx120F-HP

Technical Data	249
Motor Specifications	
P01-37Sx120F/40x120-HP	253
P01-37Sx120F/100x180-HP	254
P01-37Sx120F/160x240-HP	255
P01-37Sx120F/200x280-HP	256
P01-37Sx120F/300x380-HP	257
P01-37Sx120F/400x480-HP	258
P01-37Sx120F/500x580-HP	259
P01-37Sx120F/600x680-HP	260
P01-37Sx120F/700x780-HP	261
P01-37Sx120F/800x880-HP	262
P01-37Sx120F/1000x1080-HP	263
P01-37Sx120F/1200x1280-HP	264
P01-37Sx120F/1400x1480-HP	265
Accessories	266



Cable outlet -90°

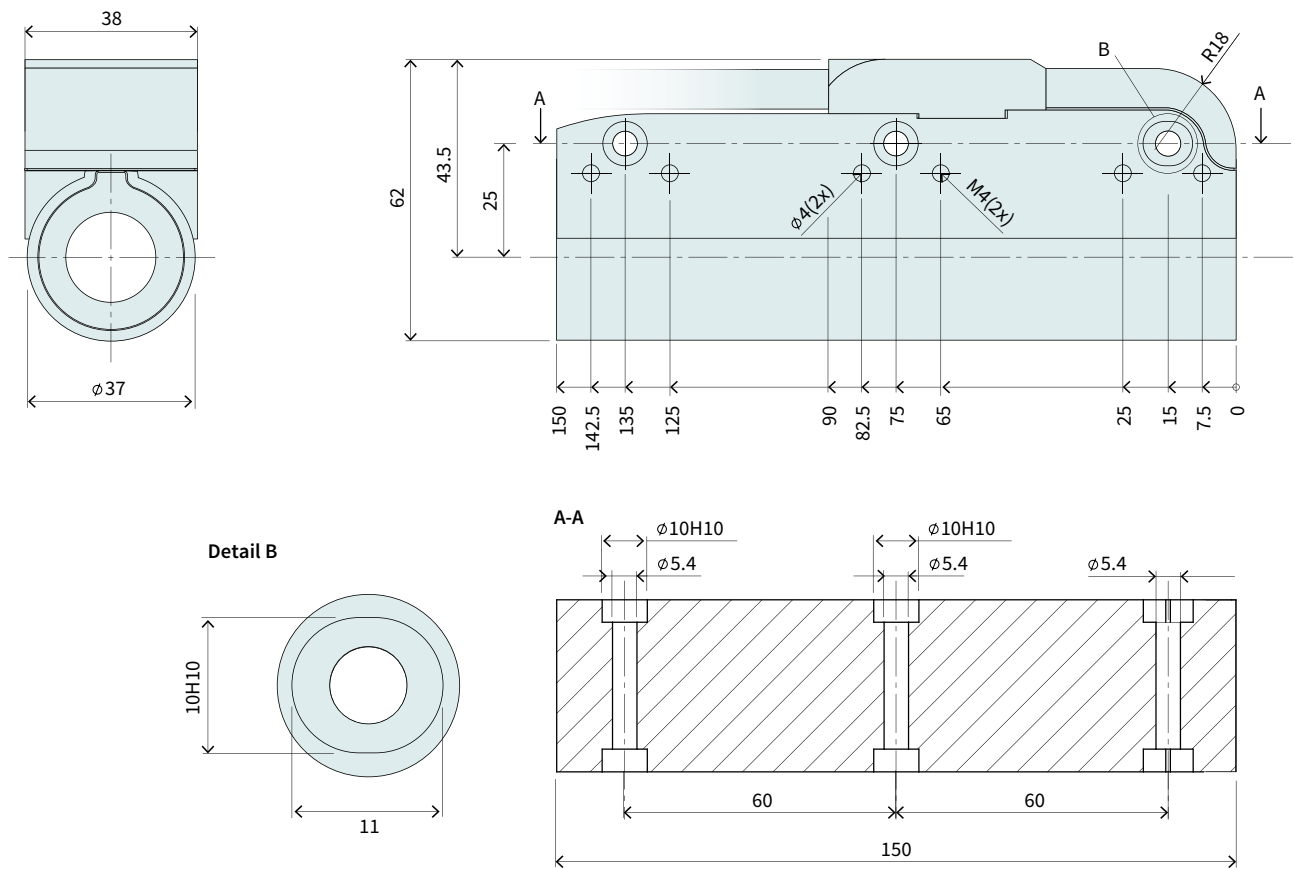
Cable outlet 0°

Cable outlet 90°

MOTOR FAMILY P01-37Sx120F-HP

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

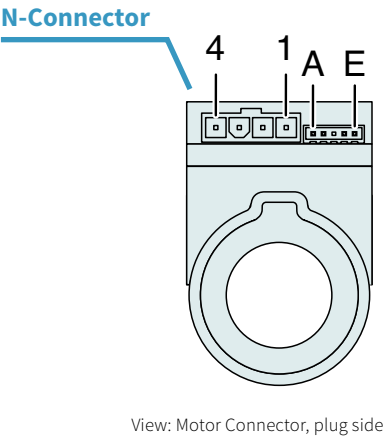
STATOR



Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296

CONNECTOR

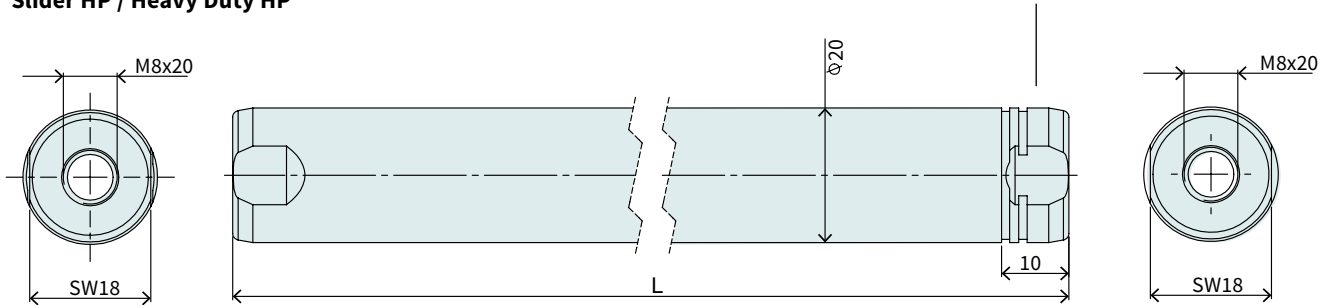
Motor Connector Wiring	N-Connector	Wire color motor cable
Phase 1+	Pin 4	red
Phase 1-	Pin 3	pink
Phase 2+	Pin 2	blue
Phase 2-	Pin 1	grey
+5V	Pin A	white
GND	Pin B	Inner Shield
Sensor Sin	Pin C	yellow
Sensor Cos	Pin D	green
Temp Sensor	Pin E	black
Housing		Outer Shield



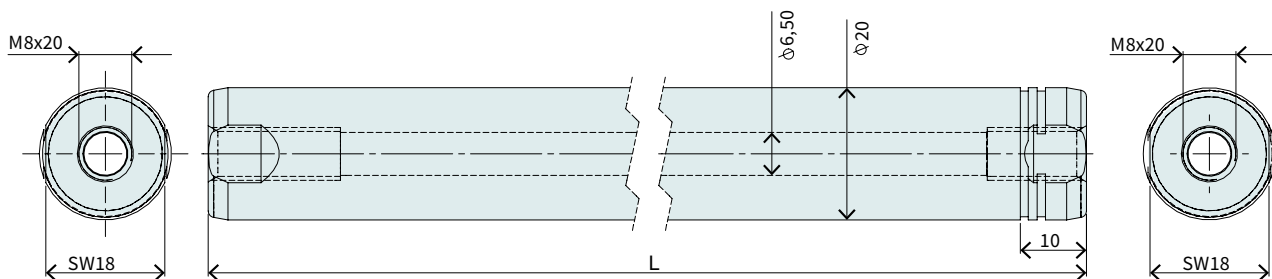
SLIDER

Slider HP / Heavy Duty HP

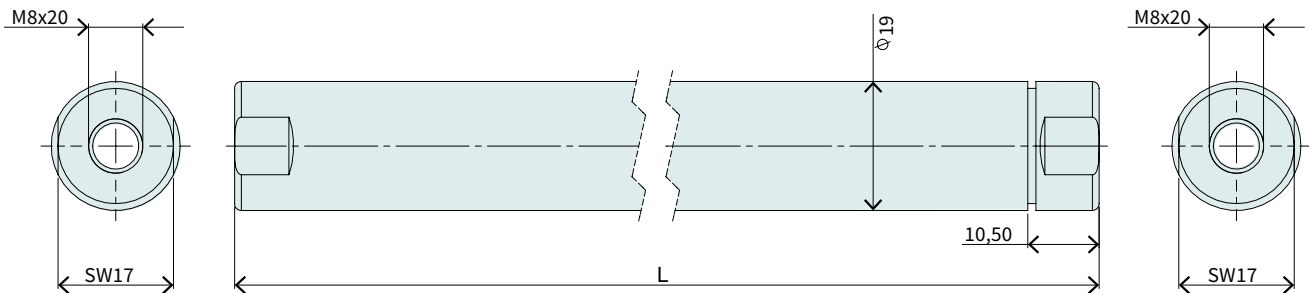
Number of grooves determines the slider type
(see chapter 2 / slider) and marks the front end.



Hollow slider HP



High-Clearance Slider



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

Slider Heavy Duty High Performance

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

Hollow slider High Performance

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

High-Clearance Slider

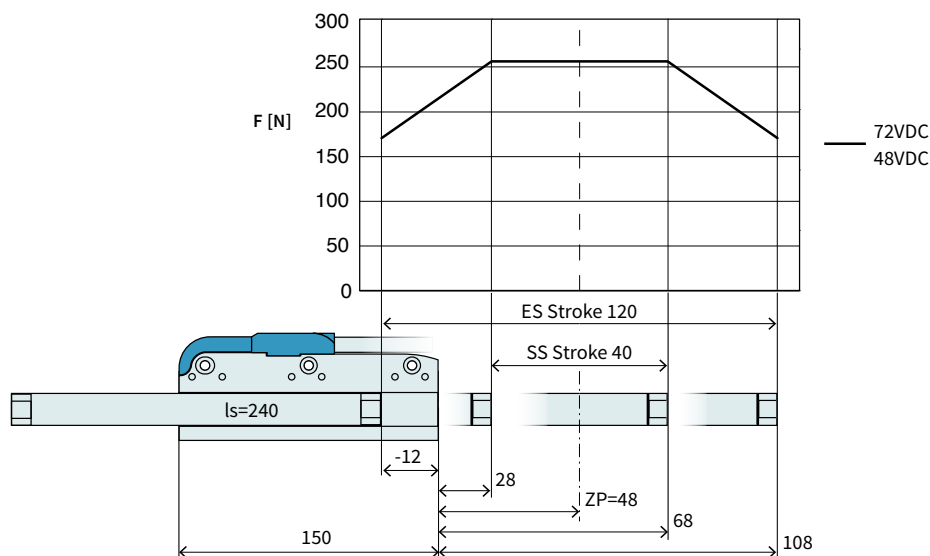
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-19x240/160	Slider 'high clearance'	100	80	0150-1448
PL01-19x300/220	Slider 'high clearance'	160	140	0150-1449
PL01-19x395/320	Slider 'high clearance'	260	240	0150-1452
PL01-19x500/420	Slider 'high clearance'	360	340	0150-1455
PL01-19x600/520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

P01-37Sx120F/40x120-HP

3

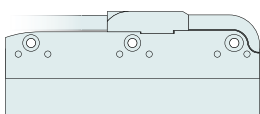
Max. Stroke: 120 mm
Peak Force: 255 N

Dimensions in mm



Technical Data P01-37Sx120F/40x120-HP

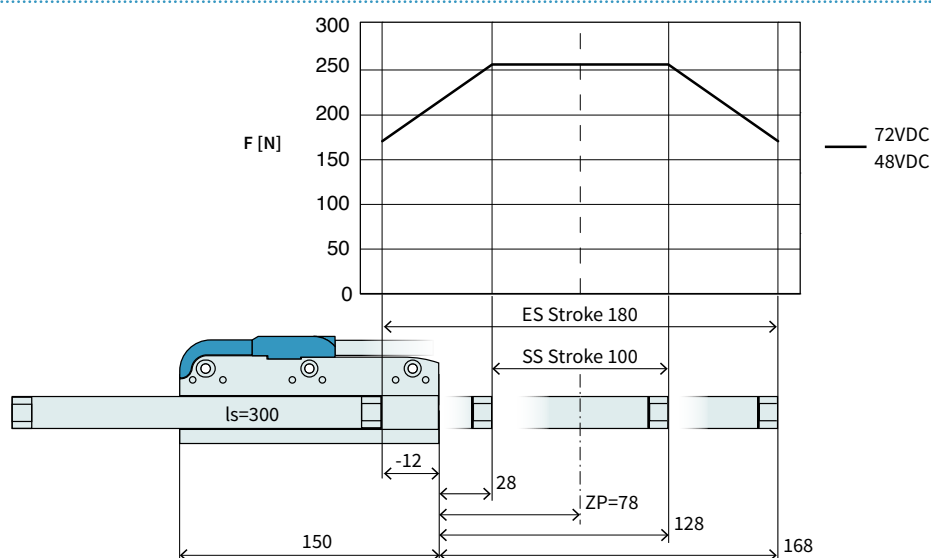
Stroke				
Standard Stroke (SS)	mm (in)		40 (1.57)	
Extended Stroke (ES)	mm (in)		120 (4.71)	
Force				
Max. Force @ 48VDC	N (lbf)		255 (57.3)	
Max. Force @ 72VDC	N (lbf)		255 (57.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		35 / 67 / - (7.8 / 15 / -)	
Max. Border Force relative	%		67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



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

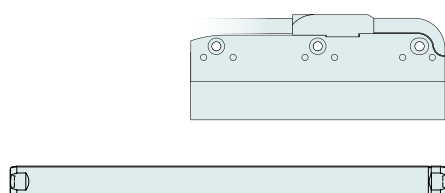
* With this slider, the motor specifications above change.

Max. Stroke: 180 mm
Peak Force: 255 N



Dimensions in mm

Technical Data P01-37Sx120F/100x180-HP				
Stroke				
Standard Stroke (SS)	mm	(in)	100	(3.93)
Extended Stroke (ES)	mm	(in)	180	(7.08)
Force				
Max. Force @ 48VDC	N	(lbf)	255	(57.3)
Max. Force @ 72VDC	N	(lbf)	255	(57.3)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	35 / 67 / -	(7.8 / 15 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk}	((lbf/A _{pk}))	17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.5	(99.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.8	(149.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.4	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling /Fan / Fluid]	A _{pk}		2.1 / 3.9 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		5.5 / 1.5 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2200 / 600 / -	
Mechanical Data				
Slider Length	mm	(in)	300	(12)
Slider Mass	g	(lb)	630	(1.39)

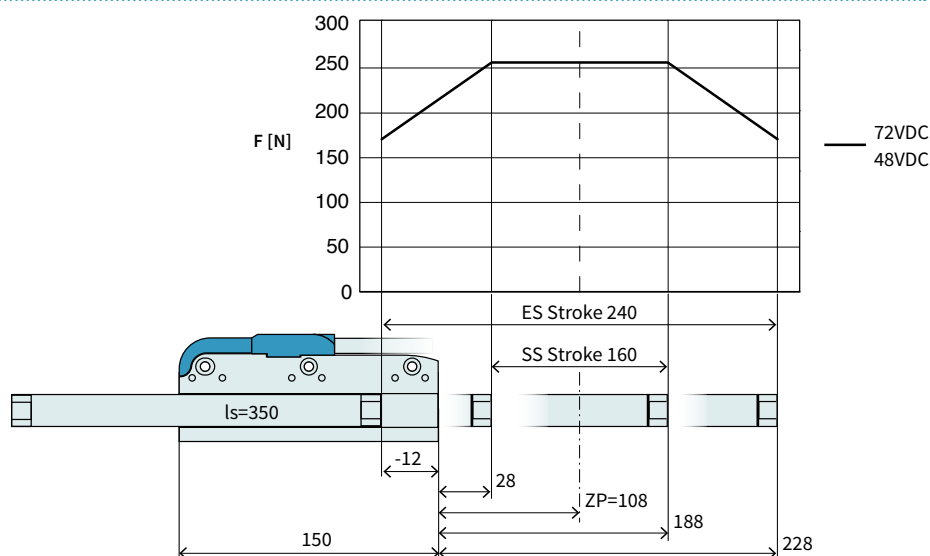


Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x300/240-HP	Slider 'High Performance'	0150-1506
PL02-20x300/240-HP	Slider 'heavy duty' 'High Performance'	0150-2163
PL01-20x300/240-HP-L*	Slider 'High Performance L'	0150-3696
PL01-19x300/220*	Slider 'high clearance'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

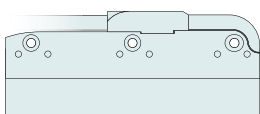
* With this slider, the motor specifications above change.

P01-37Sx120F/160x240-HP

Max. Stroke: 240 mm
Peak Force: 255 N



Technical Data P01-37Sx120F/160x240-HP				
Stroke				
Standard Stroke (SS)	mm (in)	160	(6.29)	
Extended Stroke (ES)	mm (in)	240	(9.44)	
Force				
Max. Force @ 48VDC	N (lbf)	255	(57.3)	
Max. Force @ 72VDC	N (lbf)	255	(57.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	35 / 67 / -	(7.8 / 15 / -)	
Max. Border Force relative	%	67		
Force Constant	N/A _{pk} (lbf/A _{pk})	17	(3.82)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)	2.5	(99.9)	
Max. Velocity @ 72VDC	m/s (in/s)	3.8	(149.9)	
Position Detection				
Repeatability	mm (in)	±0.05	(±0.002)	
Linearity	%	± 0.3		
Electrical Data				
Max. Current @ 48VDC	A _{pk}	14.9		
Max. Current @ 72VDC	A _{pk}	14.9		
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	2.1 / 3.9 / -		
Thermal Data				
Max. Winding Temperature (Sensor)	°C	120		
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	5.5 / 1.5 / -		
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	2200 / 600 / -		
Mechanical Data				
Slider Length	mm (in)	360	(14)	
Slider Mass	g (lb)	760	(1.67)	



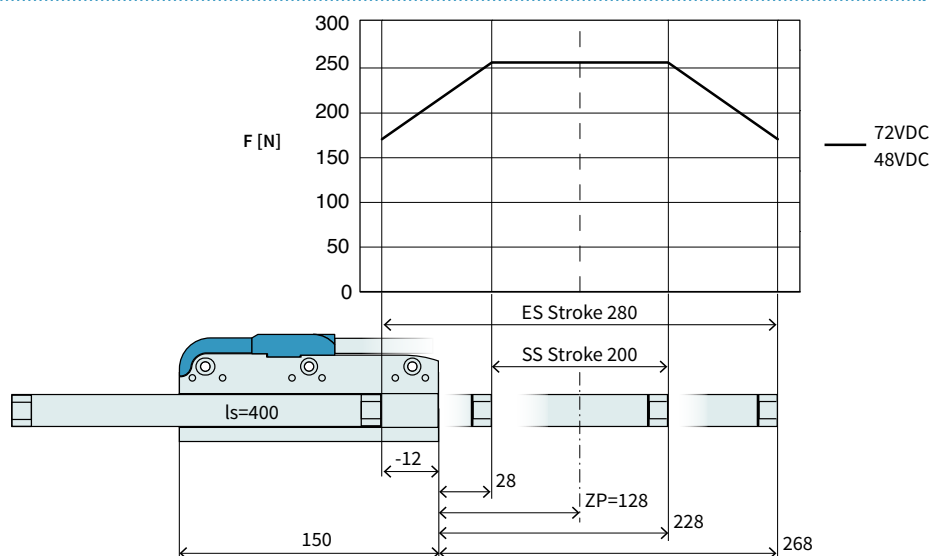
Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x360/300-HP	Slider 'High Performance'	0150-1507
PL02-20x360/300-HP	Slider 'heavy duty' 'High Performance'	0150-2164
PL01-20x360/300-HP-L*	Slider 'High Performance L'	0150-1537

* With this slider, the motor specifications above change.

P01-37Sx120F/200x280-HP

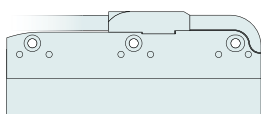
Max. Stroke: 280 mm
Peak Force: 255 N

Dimensions in mm



Technical Data P01-37Sx120F/200x280-HP

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

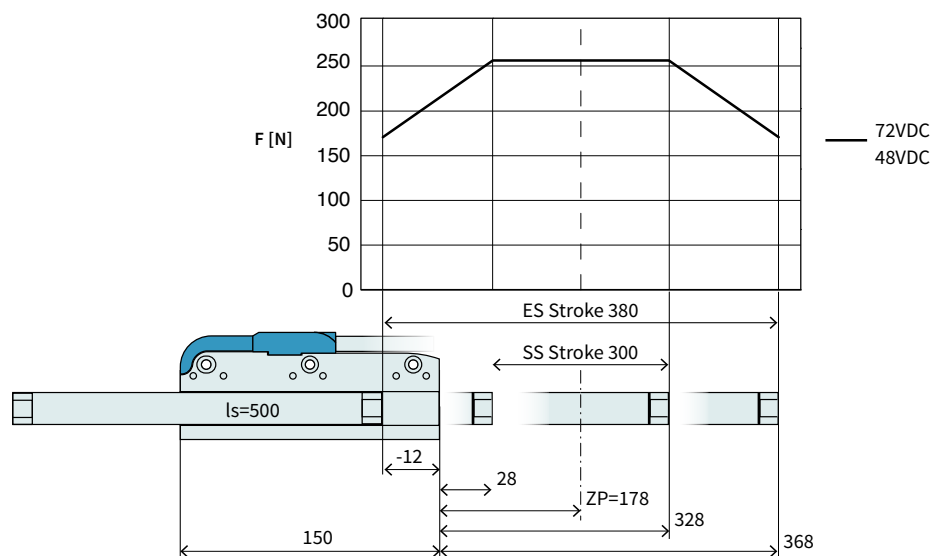


Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x400/340-HP	Slider 'High Performance'	0150-1508
PL02-20x400/340-HP	Slider 'heavy duty' 'High Performance'	0150-2165
PL01-20x400/340-HP-L*	Slider 'High Performance L'	0150-3697
PL01-19x395/320*	Slider 'high clearance'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

* With this slider, the motor specifications above change.

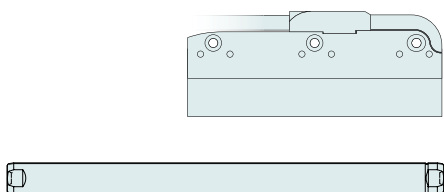
P01-37Sx120F/300x380-HP

Max. Stroke: 380 mm
Peak Force: 255 N



Dimensions in mm

Technical Data P01-37Sx120F/300x380-HP				
Stroke				
Standard Stroke (SS)	mm	(in)	300	(11.8)
Extended Stroke (ES)	mm	(in)	380	(14.99)
Force				
Max. Force @ 48VDC	N	(lbf)	255	(57.3)
Max. Force @ 72VDC	N	(lbf)	255	(57.3)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	35 / 67 / -	(7.8 / 15 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk} (lbf/A _{pk})		17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.5	(99.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.8	(149.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling /Fan / Fluid]	A _{pk}		2.1 / 3.9 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		5.5 / 1.5 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2200 / 600 / -	
Mechanical Data				
Slider Length	mm	(in)	500	(20)
Slider Mass	g	(lb)	1090	(2.4)



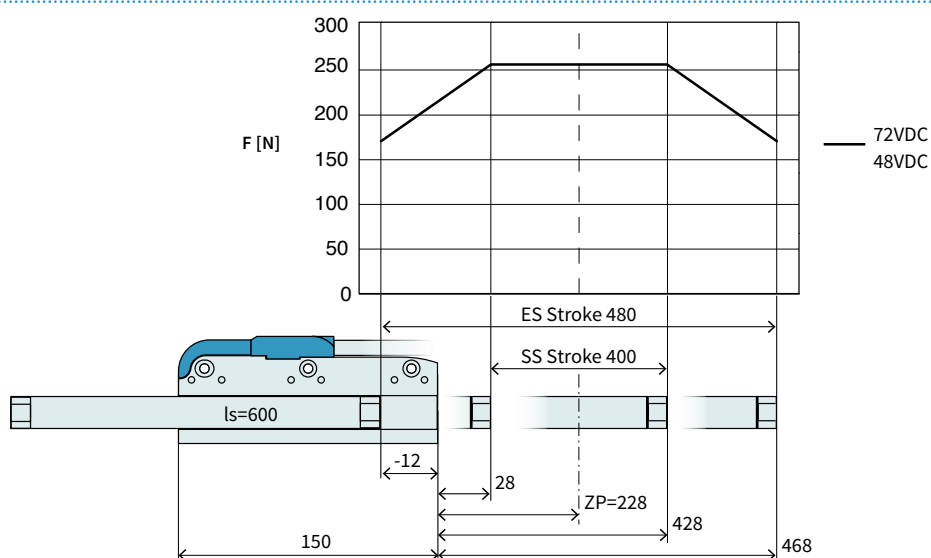
Item	Description	Item-No.
PS01-375x120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x500/440-HP	Slider 'High Performance'	0150-1509
PL02-20x500/440-HP	Slider 'heavy duty' 'High Performance'	0150-2166
PL01-20x500/440-HP-L*	Slider 'High Performance L'	0150-3698
PL01-19x500/420*	Slider 'high clearance'	0150-1455

* With this slider, the motor specifications above change.

P01-37Sx120F/400x480-HP

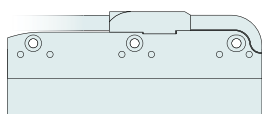
Max. Stroke: 480 mm
Peak Force: 255 N

Dimensions in mm



Technical Data P01-37Sx120F/400x480-HP

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

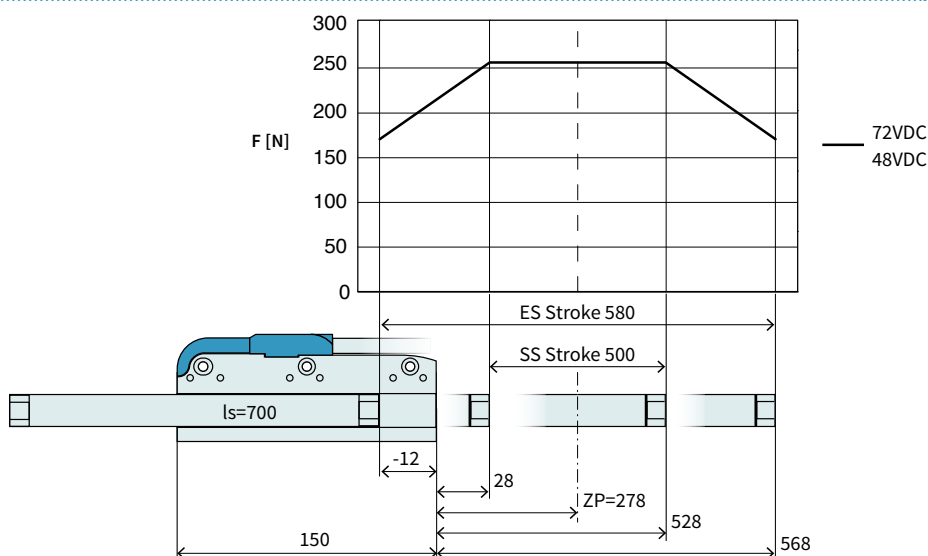


Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x600/540-HP	Slider 'High Performance'	0150-1510
PL02-20x600/540-HP	Slider 'heavy duty' 'High Performance'	0150-2167
PL01-20x600/540-HP-L*	Slider 'High Performance L'	0150-3699
PL01-19x600/520*	Slider 'high clearance'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

* With this slider, the motor specifications above change.

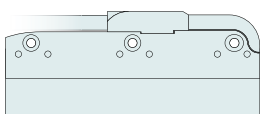
P01-37Sx120F/500x580-HP

Max. Stroke: 580 mm
Peak Force: 255 N



Dimensions in mm

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

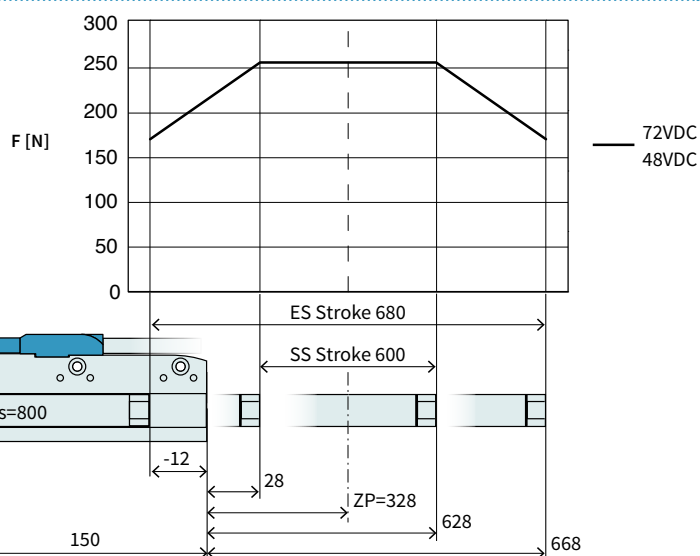


Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x700/640-HP	Slider 'High Performance'	0150-1511
PL02-20x700/640-HP	Slider 'heavy duty' 'High Performance'	0150-2168
PL01-20x700/640-HP-L*	Slider 'High Performance L'	0150-3700
PL01-19x700/620*	Slider 'high clearance'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

* With this slider, the motor specifications above change.

P01-37Sx120F/600x680-HP

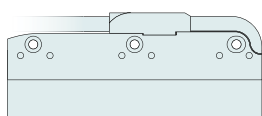
Max. Stroke: 680 mm
Peak Force: 255 N



Dimensions in mm

Technical Data P01-37Sx120F/600x680-HP

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



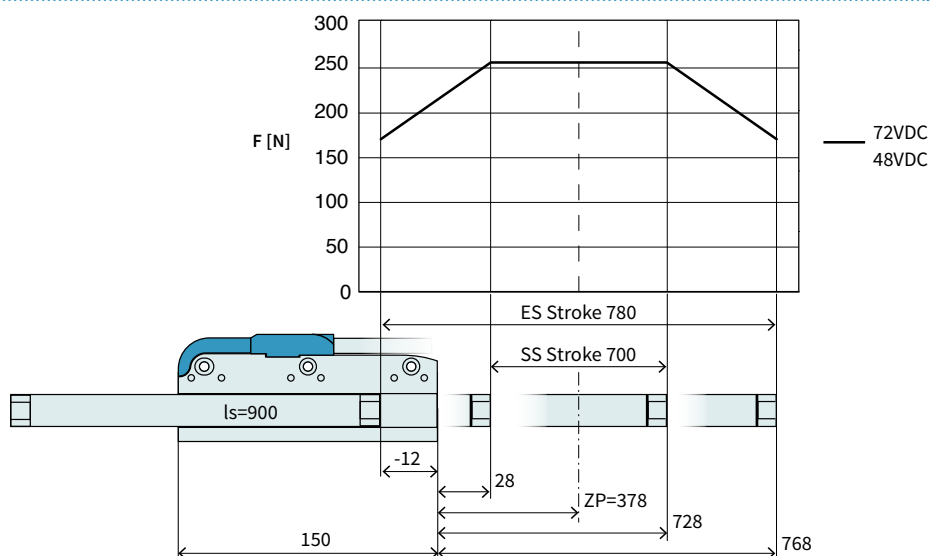
Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x800/740-HP	Slider 'High Performance'	0150-1512
PL02-20x800/740-HP	Slider 'heavy duty' 'High Performance'	0150-2169
PL01-20x800/740-HP-L*	Slider 'High Performance L'	0150-3701

* With this slider, the motor specifications above change.

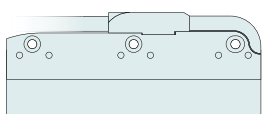
P01-37Sx120F/700x780-HP

Max. Stroke: 780 mm
Peak Force: 255 N

Dimensions in mm



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

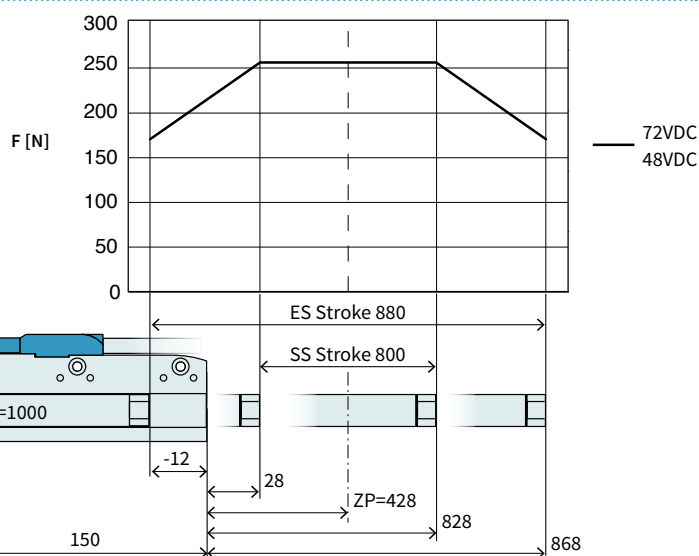


Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x900/840-HP	Slider 'High Performance'	0150-1513
PL02-20x900/840-HP	Slider 'heavy duty' 'High Performance'	0150-2170
PL01-20x900/840-HP-L*	Slider 'High Performance L'	0150-3702

* With this slider, the motor specifications above change.

P01-37Sx120F/800x880-HP

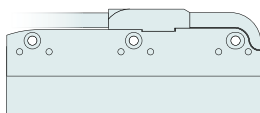
Max. Stroke: 880 mm
Peak Force: 255 N



Dimensions in mm

Technical Data P01-37Sx120F/800x880-HP

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

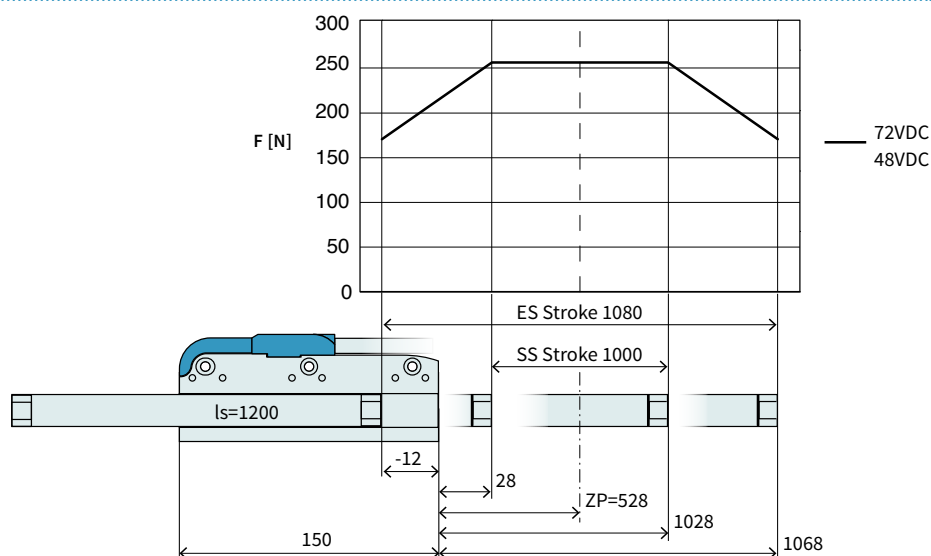


Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x1000/940-HP	Slider 'High Performance'	0150-1514
PL01-20x1000/940-HP-L*	Slider 'High Performance L'	0150-3703

* With this slider, the motor specifications above change.

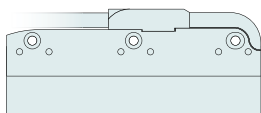
P01-37Sx120F/1000x1080-HP

Max. Stroke: 1080 mm
Peak Force: 255 N



Dimensions in mm

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

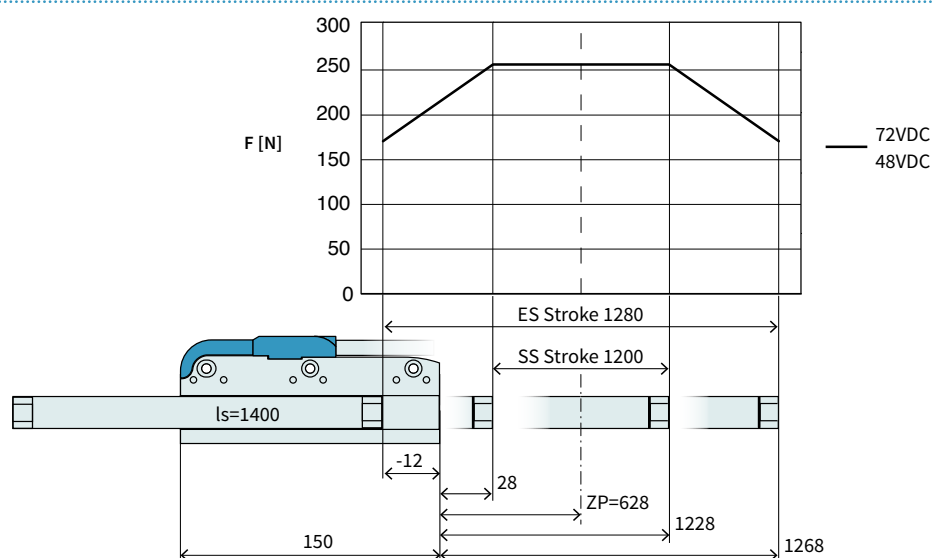


Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x1200/1140-HP	Slider 'High Performance'	0150-1515
PL01-20x1200/1140-HP-L*	Slider 'High Performance L'	0150-2510

* With this slider, the motor specifications above change.

P01-37Sx120F/1200x1280-HP

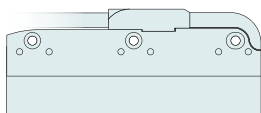
Max. Stroke: 1280 mm
Peak Force: 255 N



Dimensions in mm

Technical Data P01-37Sx120F/1200x1280-HP

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

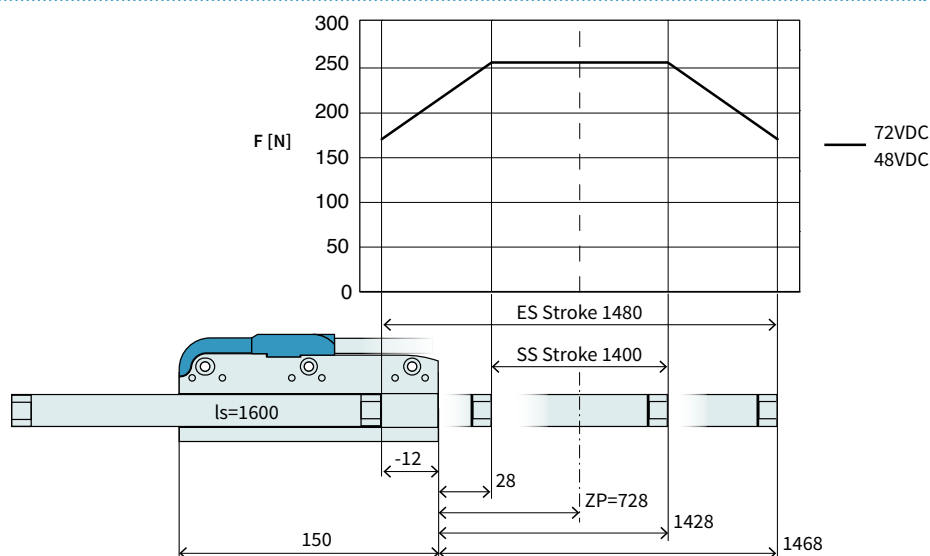


Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x1400/1340-HP	Slider 'High Performance'	0150-1516
PL01-20x1400/1340-HP-L*	Slider 'High Performance L'	on request

* With this slider, the motor specifications above change.

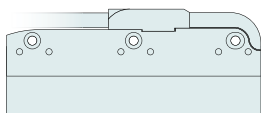
P01-37Sx120F/1400x1480-HP

Max. Stroke: 1480 mm
Peak Force: 255 N



Dimensions in mm

Technical Data P01-37Sx120F/1400x1480-HP				
Stroke				
Standard Stroke (SS)	mm (in)		1400 (55.1)	
Extended Stroke (ES)	mm (in)		1480 (58.29)	
Force				
Max. Force @ 48VDC	N (lbf)		255 (57.3)	
Max. Force @ 72VDC	N (lbf)		255 (57.3)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		35 / 67 / -	(7.8 / 15 / -)
Max. Border Force relative	%		67	
Force Constant	N/A _{pk} (lbf/A _{pk})		17	(3.82)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.5 (99.9)	
Max. Velocity @ 72VDC	m/s (in/s)		3.8 (149.9)	
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		±0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		14.9	
Max. Current @ 72VDC	A _{pk}		14.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		2.1 / 3.9 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		5.5 / 1.5 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		2200 / 600 / -	
Mechanical Data				
Slider Length	mm (in)		1600 (63)	
Slider Mass	g (lb)		3620 (7.96)	

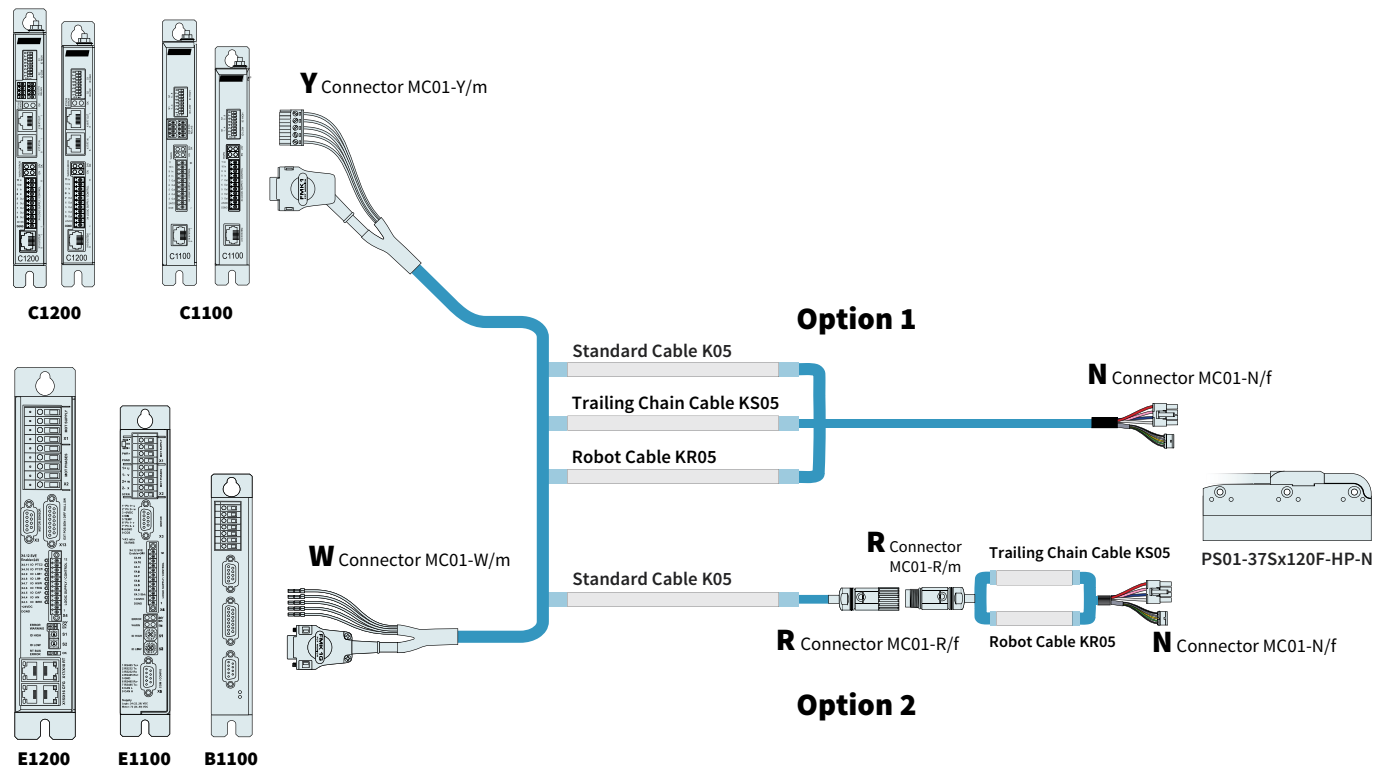


Item	Description	Item-No.
PS01-37Sx120F-HP-N	Stator HP, Cable -90°, 0°, +90°	0150-1296
PL01-20x1600/1540-HP	Slider 'High Performance'	0150-1517
PL01-20x1600/1540-HP-L*	Slider 'High Performance L'	on request

* With this slider, the motor specifications above change.

Motor Cable

3



ORDERING INFORMATION

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

OPTION 2

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

CONNECTOR & CABLE (INDIVIDUAL)

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

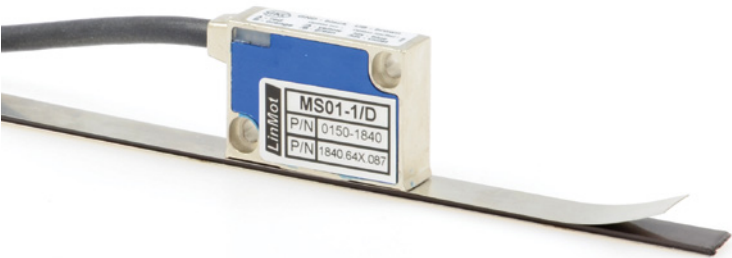
SLIDER MOUNTING



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".