

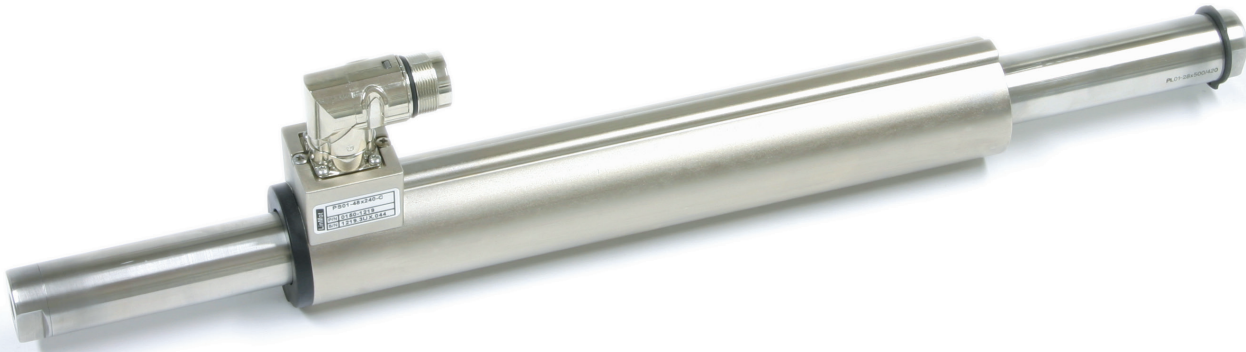
LINEAR MOTORS P01-48X240F



- ✓ Highly dynamic drives
- ✓ Higher permissible operating temperatures
- ✓ Maximum power density
- ✓ 25 Functional Safety variant available
- ✓ Wide stroke range
- ✓ Extensive range of accessories
- ✓ Dynamics and flexibility for handling, plant and machine construction

LINEAR MOTORS P01-48X240F

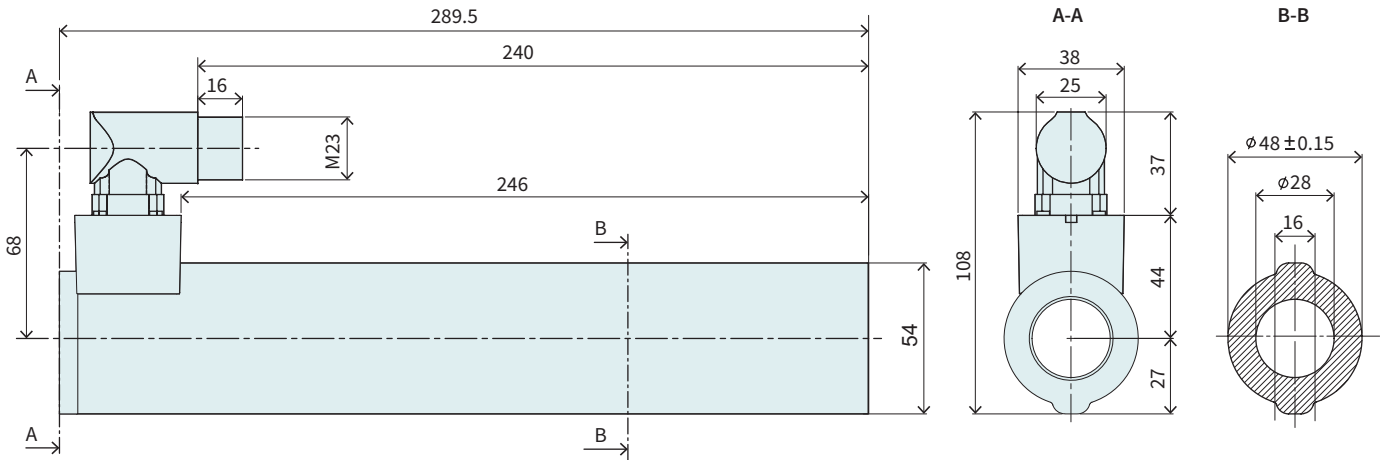
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MOTOR FAMILY P01-48x240F

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

STATOR

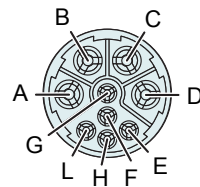


Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PS01-48x240F-C-2S	Stator with IP67 Connector M23/9(m) - 2S	0150-21220

CONNECTOR

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

C-Connector

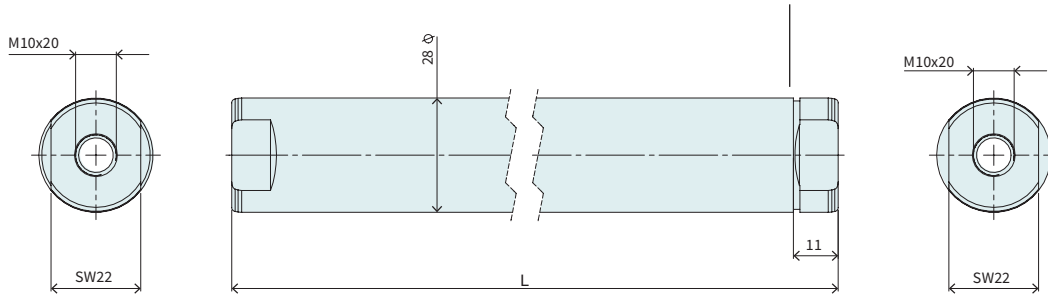


View: Motor Connector, plug side

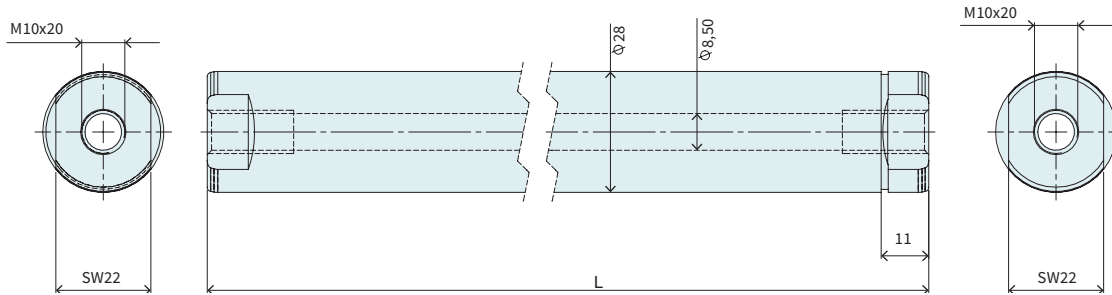
SLIDER

Slider Standard / Heavy Duty

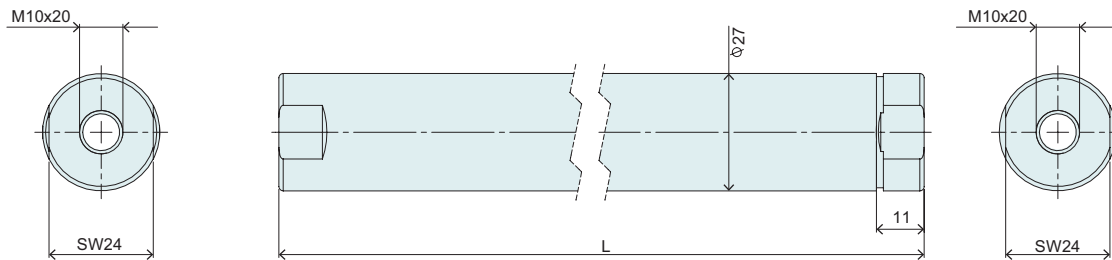
Number of grooves determines the slider type (see chapter 2 / slider) and marks the front end.



Hollow slider



High-Clearance Slider



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

Slider Standard 2S				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-28x350/270-2S	Slider 'standard' - Safety	180	30	0150-21380
PL01-28x410/330-2S	Slider 'standard' - Safety	240	90	0150-21381
PL01-28x500/420-2S	Slider 'standard' - Safety	330	180	0150-21382
PL01-28x620/540-2S	Slider 'standard' - Safety	450	300	0150-21383
PL01-28x710/630-2S	Slider 'standard' - Safety	540	390	0150-21384
PL01-28x800/720-2S	Slider 'standard' - Safety	630	480	0150-21385
PL01-28x920/840-2S	Slider 'standard' - Safety	750	600	0150-21386
PL01-28x1010/930-2S	Slider 'standard' - Safety	840	690	0150-21387
PL01-28x1220/1140-2S	Slider 'standard' - Safety	1050	900	0150-21388
PL01-28x1400/1320-2S	Slider 'standard' - Safety	1230	1080	0150-21389
PL01-28x1610/1530-2S	Slider 'standard' - Safety	1440	1290	0150-21390
PL01-28x1820/1740-2S	Slider 'standard' - Safety	1650	1500	0150-21395
PL01-28x2000/1920-2S	Slider 'standard' - Safety	1830	1680	0150-21396

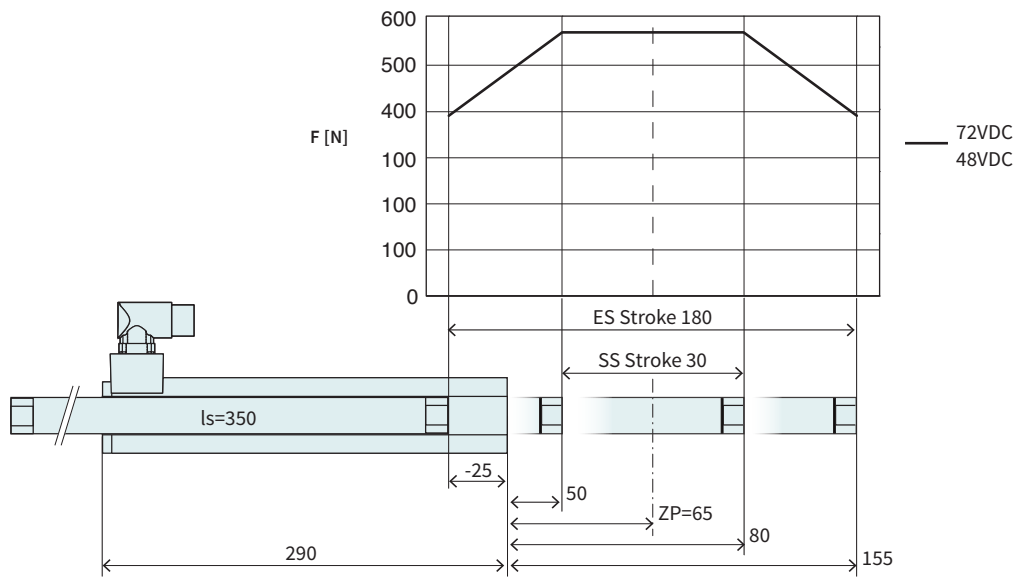
Slider Heavy Duty				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL02-28x350/270	Slider 'heavy duty'	180	30	0150-1411
PL02-28x410/330	Slider 'heavy duty'	240	90	0150-1412
PL02-28x500/420	Slider 'heavy duty'	330	180	0150-1413
PL02-28x620/540	Slider 'heavy duty'	450	300	0150-1414
PL02-28x710/630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

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

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

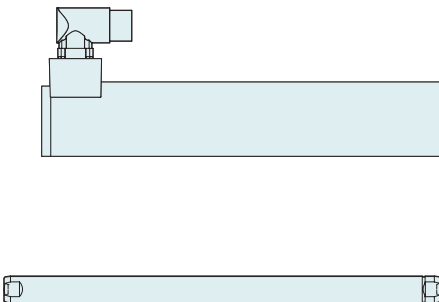
P01-48x240F/30x180

Max. Stroke: 180 mm
Peak Force: 572 N



Dimensions in mm

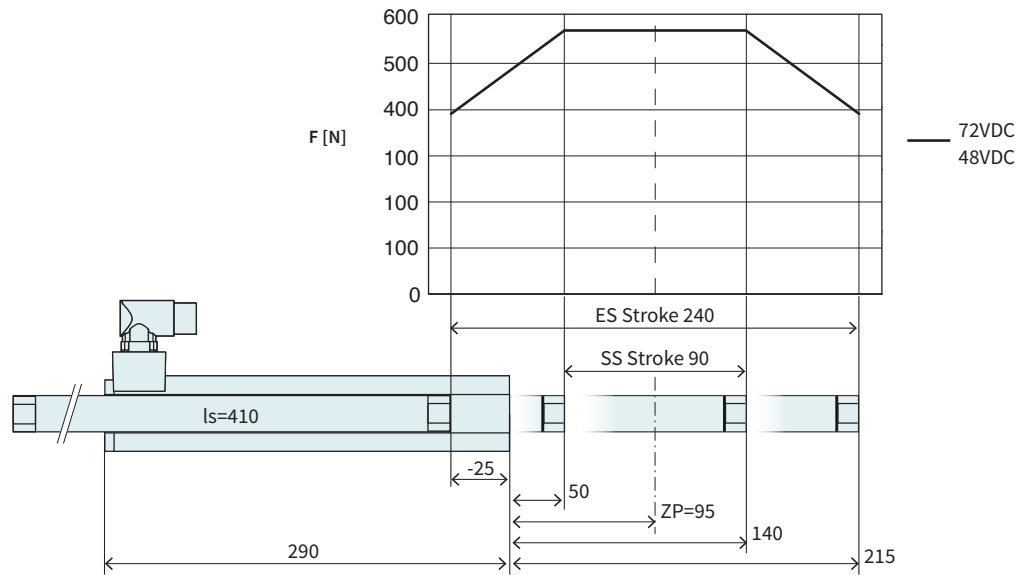
Technical Data P01-48x240F/30x180				
Stroke				
Standard Stroke (SS)	mm	(in)	30	(1.17)
Extended Stroke (ES)	mm	(in)	180	(7.08)
Force				
Max. Force @ 48VDC	N	(lbf)	572	(129)
Max. Force @ 72VDC	N	(lbf)	572	(129)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	140 / 240 / -	(32 / 55 / -)
Max.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



Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PS01-48x240F-C-2S	Stator with IP67 Connector M23/9(m) - 2S	0150-21220
PL01-28x350/270	Slider 'standard'	0150-1380
PL01-28x350/270-2S	Slider 'standard' - Safety	0150-21380
PL02-28x350/270	Slider 'heavy duty'	0150-1411
PL01-28x350/270-L*	Slider 'standard L'	0150-1475
PL01-27x350/270*	Slider 'high clearance'	0150-1467

P01-48x240F/90x240

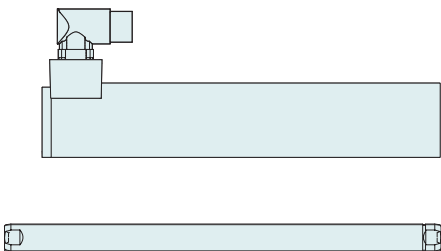
Max. Stroke: 240 mm
Peak Force: 572 N



Dimensions in mm

Technical Data P01-48x240F/90x240

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

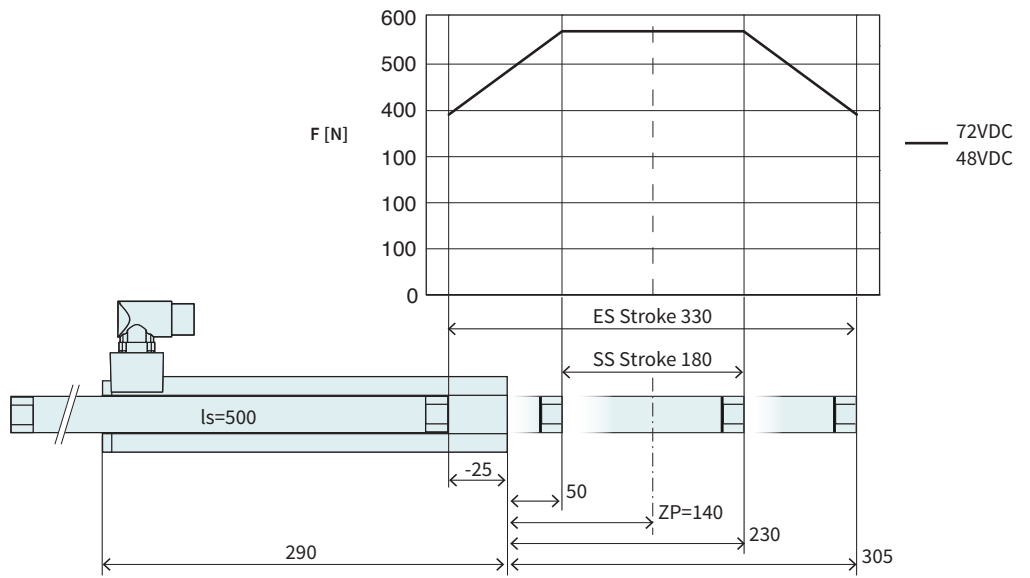


Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PS01-48x240F-C-2S	Stator with IP67 Connector M23/9(m) - 2S	0150-21220
PL01-28x410/330	Slider 'standard'	0150-1381
PL01-28x410/330-2S	Slider 'standard' - Safety	0150-21381
PL02-28x410/330	Slider 'heavy duty'	0150-1412
PL01-28x410/330-L*	Slider 'standard L'	0150-1476
PL01-27x410/330*	Slider 'high clearance'	0150-1468

* With this slider, the motor specifications above change.

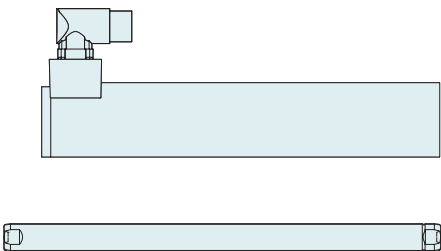
P01-48x240F/180x330

Max. Stroke: 330 mm
Peak Force: 572 N



Dimensions in mm

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



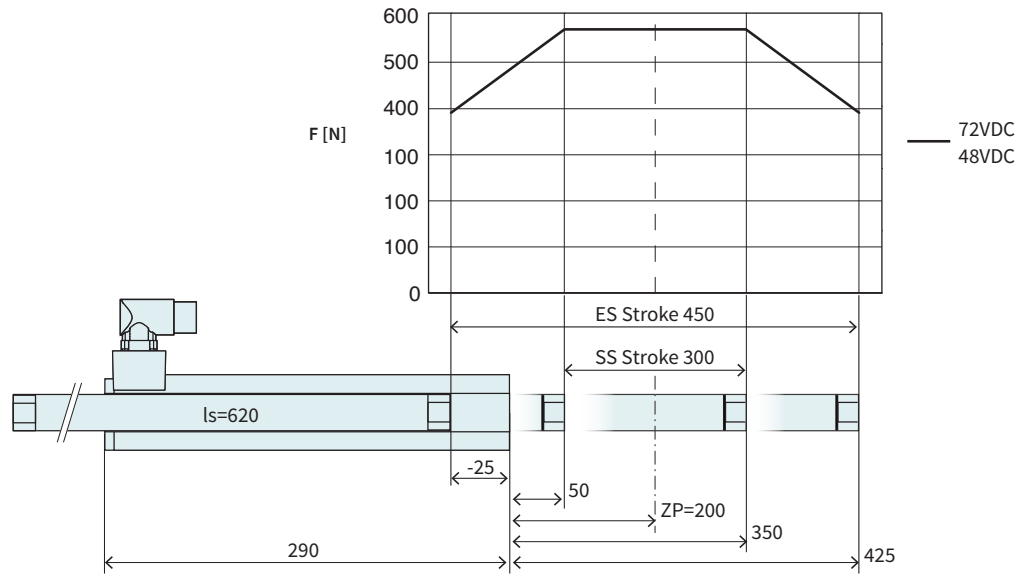
Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PS01-48x240F-C-2S	Stator with IP67 Connector M23/9(m) - 2S	0150-21220
PL01-28x500/420	Slider 'standard'	0150-1382
PL01-28x500/420-2S	Slider 'standard' - Safety	0150-21382
PL02-28x500/420	Slider 'heavy duty'	0150-1413
PL01-28x500/420-L*	Slider 'standard L'	0150-1480
PL01-27x500/420*	Slider 'high clearance'	0150-1469

* With this slider, the motor specifications above change.

P01-48x240F/300x450

3

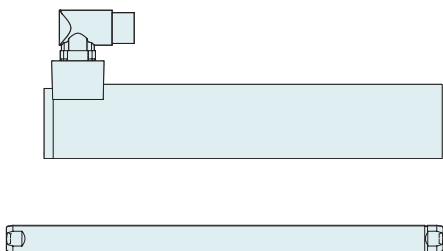
Max. Stroke: 450 mm
Peak Force: 572 N



Dimensions in mm

Technical Data P01-48x240F/300x450

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

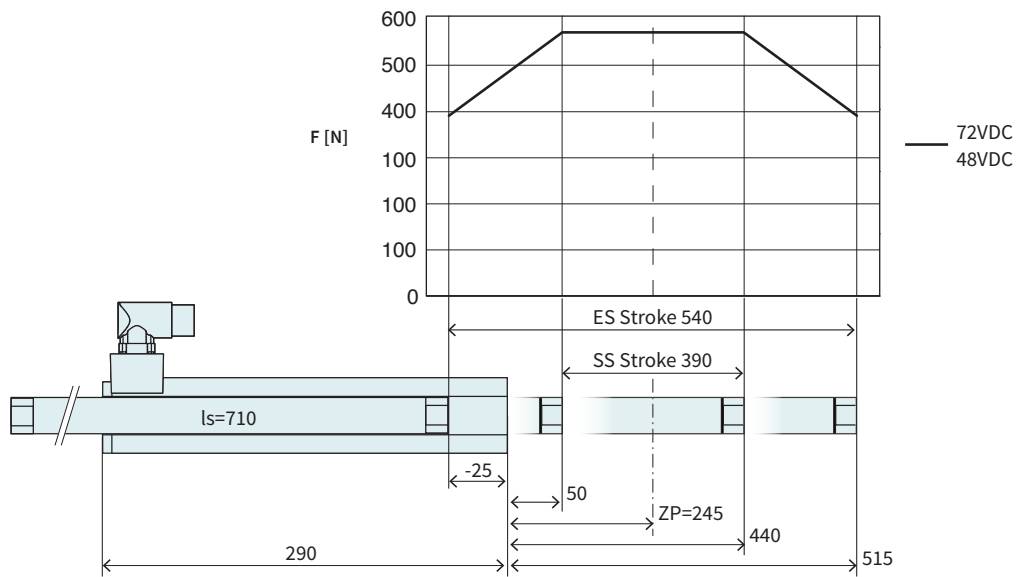


Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PS01-48x240F-C-2S	Stator with IP67 Connector M23/9(m) - 2S	0150-21220
PL01-28x620/540	Slider 'standard'	0150-1383
PL01-28x620/540-2S	Slider 'standard' - Safety	0150-21383
PL02-28x620/540	Slider 'heavy duty'	0150-1414
PL01-28x620/540-L*	Slider 'standard L'	0150-1481
PL01-27x620/540*	Slider 'high clearance'	0150-1470

* With this slider, the motor specifications above change.

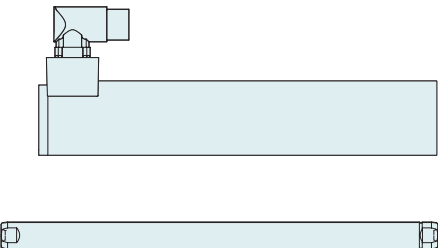
P01-48x240F/390x540

Max. Stroke: 540 mm
Peak Force: 572 N



Dimensions in mm

Technical Data P01-48x240F/390x540				
Stroke				
Standard Stroke (SS)	mm (in)		390 (15.4)	
Extended Stroke (ES)	mm (in)		540 (21.3)	
Force				
Max. Force @ 48VDC	N (lbf)		572 (129)	
Max. Force @ 72VDC	N (lbf)		572 (129)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		140 / 240 / - (32 / 55 / -)	
Max. Border Force relative	%		69	
Force Constant	N/A _{pk} (lbf/A _{pk})		22 (4.95)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		1.9 (78.9)	
Max. Velocity @ 72VDC	m/s (in/s)		2.9 (119.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		±0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		6.5 / 11 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.32 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 330 / -	
Mechanical Data				
Slider Length	mm (in)		710 (28)	
Slider Mass	g (lb)		3140 (6.91)	



Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PS01-48x240F-C-2S	Stator with IP67 Connector M23/9(m) - 2S	0150-21220

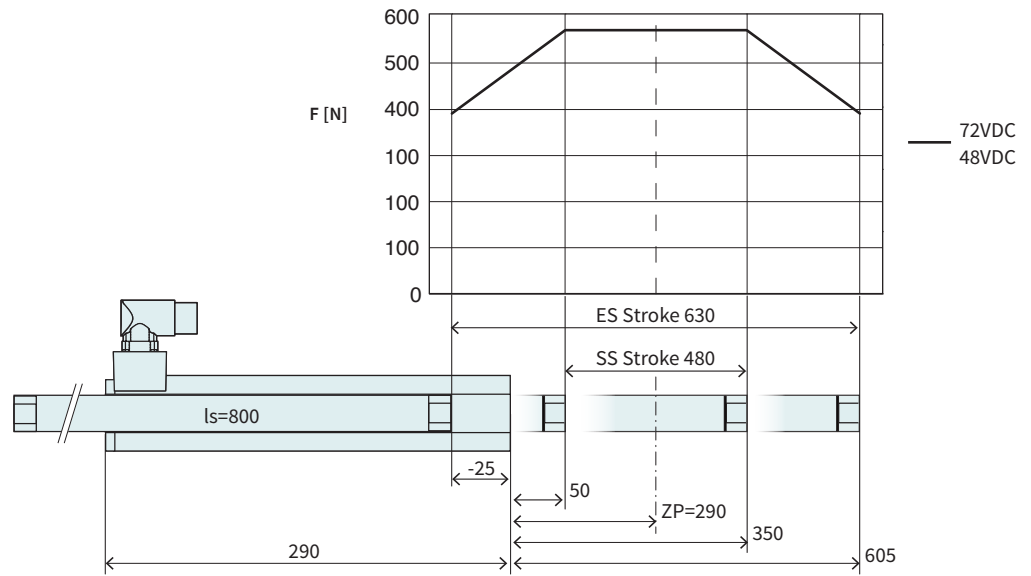
PL01-28x710/630	Slider 'standard'	0150-1384
PL01-28x710/630-2S	Slider 'standard' - Safety	0150-21384
PL02-28x710/630	Slider 'heavy duty'	0150-1415
PL01-28x710/630-L*	Slider 'standard L'	0150-1482
PL01-27x710/630*	Slider 'high clearance'	0150-1471

* With this slider, the motor specifications above change.

P01-48x240F/480x630

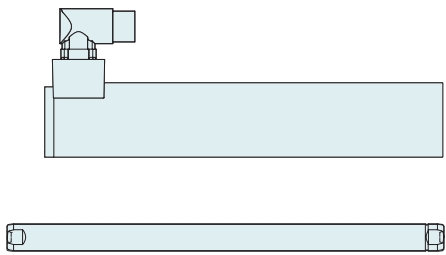
3

Max. Stroke: 630 mm
Peak Force: 572 N



Dimensions in mm

Technical Data P01-48x240F/480x630			
Stroke			
Standard Stroke (SS)	mm (in)		480 (18.89)
Extended Stroke (ES)	mm (in)		630 (24.8)
Force			
Max. Force @ 48VDC	N (lbf)		572 (129)
Max. Force @ 72VDC	N (lbf)		572 (129)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		140 / 240 / - (32 / 55 / -)
Max. Border Force relative	%		69
Force Constant	N/A _{pk} (lbf/A _{pk})		22 (4.95)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)		1.9 (78.9)
Max. Velocity @ 72VDC	m/s (in/s)		2.9 (119.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.2
Electrical Data			
Max. Current @ 48VDC	A _{pk}		25.9
Max. Current @ 72VDC	A _{pk}		25.9
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		6.5 / 11 / -
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.32 / -
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 330 / -
Mechanical Data			
Slider Length	mm (in)		800 (31)
Slider Mass	g (lb)		3560 (7.83)



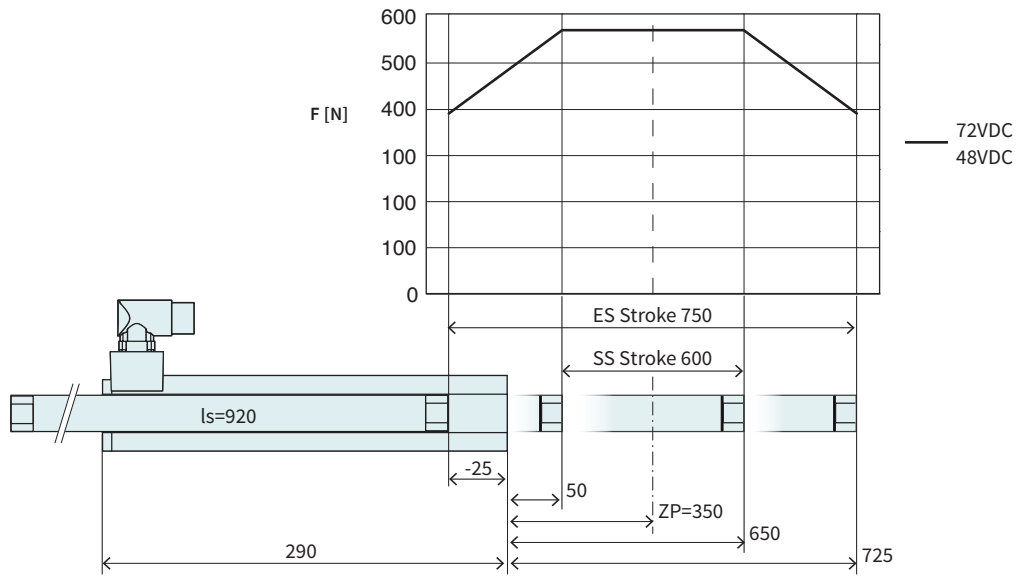
Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PS01-48x240F-C-2S	Stator with IP67 Connector M23/9(m) - 2S	0150-21220

PL01-28x800/720	Slider 'standard'	0150-1385
PL01-28x800/720-2S	Slider 'standard' - Safety	0150-21385
PL02-28x800/720	Slider 'heavy duty'	0150-1416
PL01-28x800/720-L*	Slider 'standard L'	0150-1483

* With this slider, the motor specifications above change.

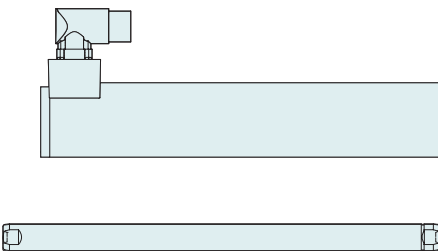
P01-48x240F/600x750

Max. Stroke: 750 mm
Peak Force: 572 N



Dimensions in mm

Technical Data P01-48x240F/600x750				
Stroke				
Standard Stroke (SS)	mm (in)		600 (23.6)	
Extended Stroke (ES)	mm (in)		750 (29.49)	
Force				
Max. Force @ 48VDC	N (lbf)		572 (129)	
Max. Force @ 72VDC	N (lbf)		572 (129)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		140 / 240 / - (32 / 55 / -)	
Max. Border Force relative	%		69	
Force Constant	N/A _{pk} (lbf/A _{pk})		22 (4.95)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		1.9 (78.9)	
Max. Velocity @ 72VDC	m/s (in/s)		2.9 (119.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		6.5 / 11 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.32 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 330 / -	
Mechanical Data				
Slider Length	mm (in)		920 (36)	
Slider Mass	g (lb)		4120 (9.06)	

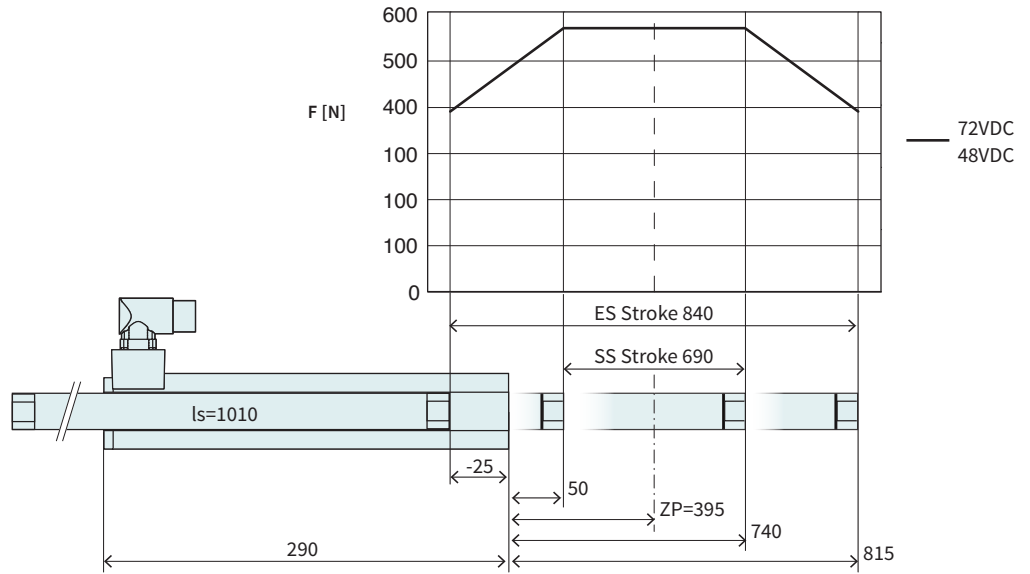


Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PS01-48x240F-C-2S	Stator with IP67 Connector M23/9(m) - 2S	0150-21220
PL01-28x920/840	Slider 'standard'	0150-1386
PL01-28x920/840-2S	Slider 'standard' - Safety	0150-21386
PL02-28x920/840	Slider 'heavy duty'	0150-1417
PL01-28x920/840-L*	Slider 'standard L'	0150-1484

* With this slider, the motor specifications above change.

P01-48x240F/690x840

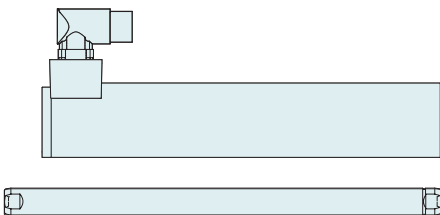
Max. Stroke: 840 mm
Peak Force: 572 N



Dimensions in mm

Technical Data P01-48x240F/690x840

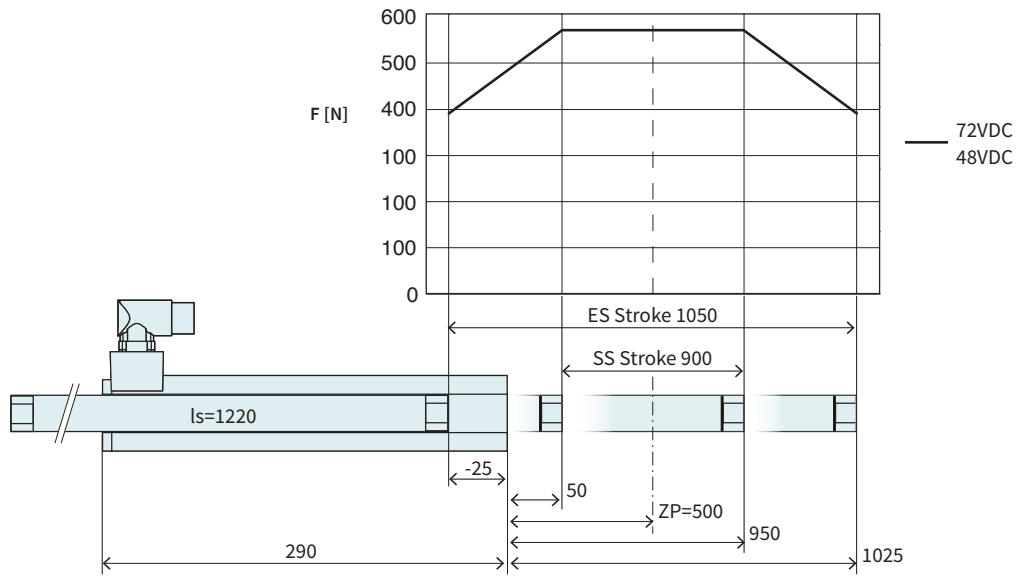
Stroke			
Standard Stroke (SS)	mm (in)		690 (27.19)
Extended Stroke (ES)	mm (in)		840 (33.1)
Force			
Max. Force @ 48VDC	N (lbf)		572 (129)
Max. Force @ 72VDC	N (lbf)		572 (129)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		140 / 240 / - (32 / 55 / -)
Max. Border Force relative	%		69
Force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



Item	Description	Item-No.
PS01-48x240F-C	ator with IP67 Connector M23/9(m)	0150-1220
PS01-48x240F-C-2S	Stator with IP67 Connector M23/9(m) - 2S	0150-21220
PL01-28x1010/930	Slider 'standard'	0150-1387
PL01-28x1010/930-2S	Slider 'standard' - Safety	0150-21387

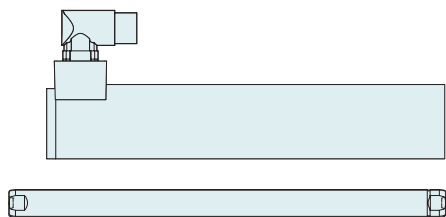
P01-48x240F/900x1050

Max. Stroke: 1050 mm
Peak Force: 572 N



Dimensions in mm

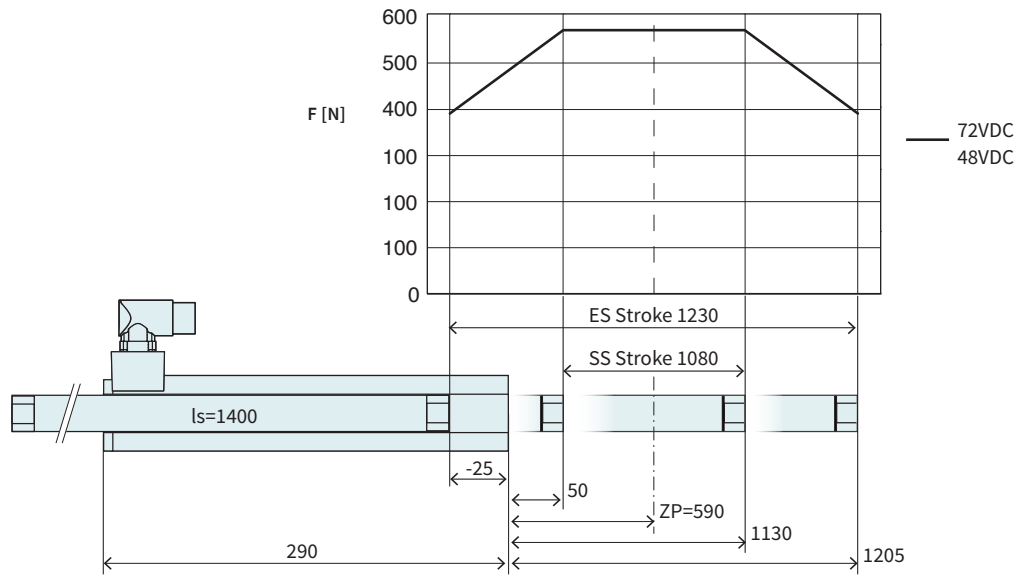
Technical Data P01-48x240F/900x1050			
Stroke			
Standard Stroke (SS)	mm (in)	900 (35.39)	
Extended Stroke (ES)	mm (in)	1050 (41.29)	
Force			
Max. Force @ 48VDC	N (lbf)	572 (129)	
Max. Force @ 72VDC	N (lbf)	572 (129)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	140 / 240 / - (32 / 55 / -)	
Max. Border Force relative	%	69	
Force Constant	N/A _{pk} (lbf/A _{pk})	22 (4.95)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.9 (78.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2.9 (119.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	±0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	25.9	
Max. Current @ 72VDC	A _{pk}	25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	6.5 / 11 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.95 / 0.32 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	970 / 330 / -	
Mechanical Data			
Slider Length	mm (in)	1220 (48)	
Slider Mass	g (lb)	5510 (12.12)	



Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PS01-48x240F-C-2S	Stator with IP67 Connector M23/9(m) - 2S	0150-21220
PL01-28x1220/1140	Slider 'standard'	0150-1388
PL01-28x1220/1140-2S	Slider 'standard' - Safety	0150-21388

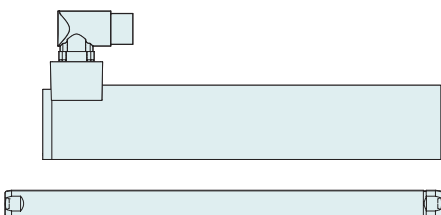
P01-48x240F/1080x1230

Max. Stroke: 1230 mm
Peak Force: 572 N



Dimensions in mm

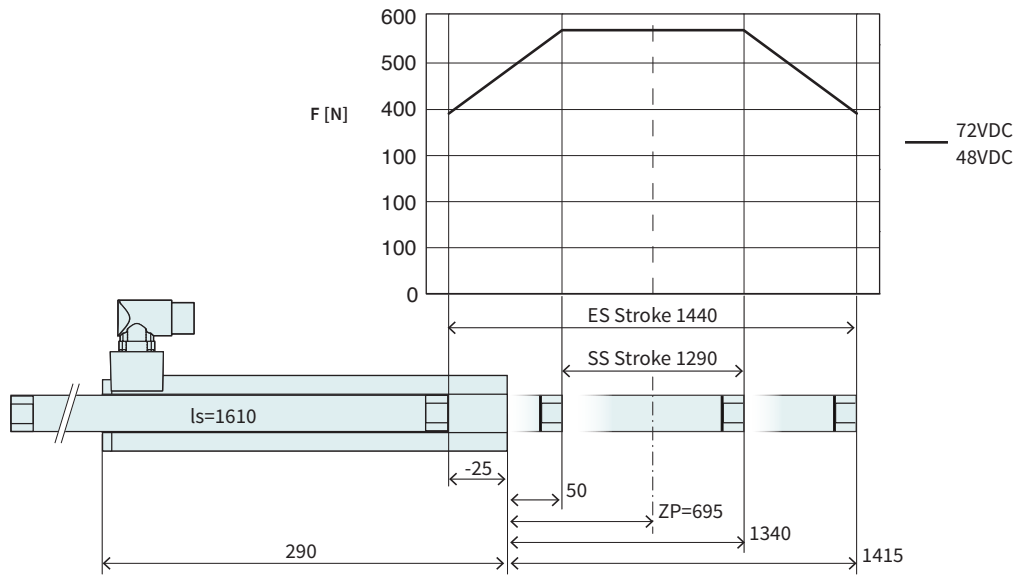
Technical Data P01-48x240F/1080x1230			
Stroke			
Standard Stroke (SS)	mm (in)	1080	(42.49)
Extended Stroke (ES)	mm (in)	1230	(48.39)
Force			
Max. Force @ 48VDC	N (lbf)	572	(129)
Max. Force @ 72VDC	N (lbf)	572	(129)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	140 / 240 / -	(32 / 55 / -)
Max. Border Force relative	%	69	
Force Constant	N/A _{pk} (lbf/A _{pk})	22	(4.95)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.9	(78.9)
Max. Velocity @ 72VDC	m/s (in/s)	2.9	(119.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	25.9	
Max. Current @ 72VDC	A _{pk}	25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	6.5 / 11 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.95 / 0.32 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	970 / 330 / -	
Mechanical Data			
Slider Length	mm (in)	1400	(55)
Slider Mass	g (lb)	6350	(13.97)



Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PS01-48x240F-C-2S	Stator with IP67 Connector M23/9(m) - 2S	0150-21220
PL01-28x1400/1320	Slider 'standard'	0150-1389
PL01-28x1400/1320-2S	Slider 'standard' - Safety	0150-21389

P01-48x240F/1290x1440

Max. Stroke: 1440 mm
Peak Force: 572 N



Dimensions in mm

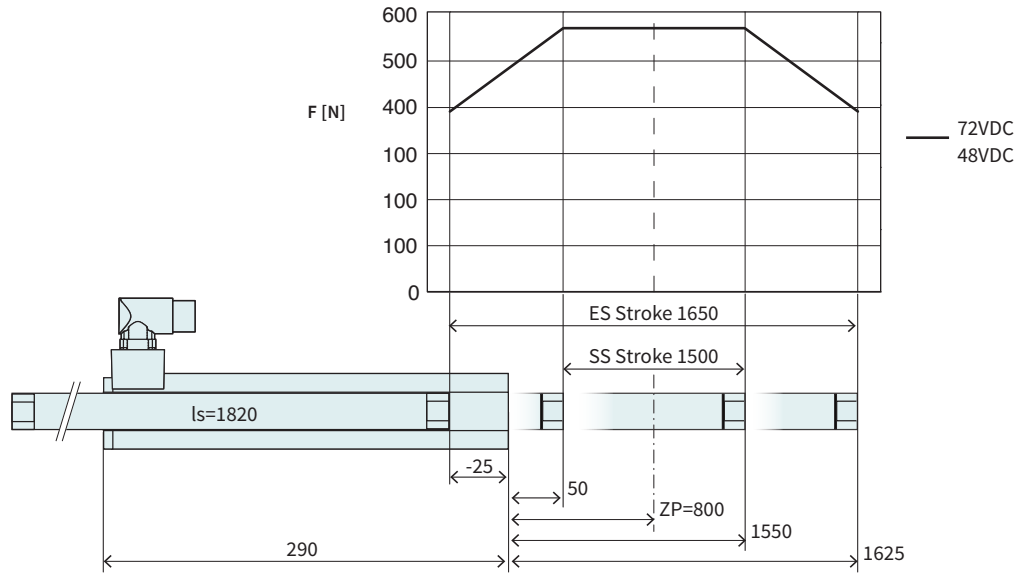
Technical Data P01-48x240F/1290x1440			
Stroke			
Standard Stroke (SS)	mm (in)	1290 (50.79)	
Extended Stroke (ES)	mm (in)	1440 (56.7)	
Force			
Max. Force @ 48VDC	N (lbf)	572 (129)	
Max. Force @ 72VDC	N (lbf)	572 (129)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	140 / 240 / -	(32 / 55 / -)
Max. Border Force relative	%	69	
Force Constant	N/A _{pk} (lbf/A _{pk})	22 (4.95)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	1.9 (78.9)	
Max. Velocity @ 72VDC	m/s (in/s)	2.9 (119.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	±0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	25.9	
Max. Current @ 72VDC	A _{pk}	25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	6.5 / 11 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	0.95 / 0.32 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	970 / 330 / -	
Mechanical Data			
Slider Length	mm (in)	1610 (63)	
Slider Mass	g (lb)	7330 (16.13)	



Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PS01-48x240F-C-2S	Stator with IP67 Connector M23/9(m) - 2S	0150-21220
PL01-28x1610/1530	Slider 'standard'	0150-1390
PL01-28x1610/1530-2S	Slider 'standard' - Safety	0150-21390

P01-48x240F/1500x1650

Max. Stroke: 1650 mm
Peak Force: 572 N



Dimensions in mm

Technical Data P01-48x240F/1500x1650

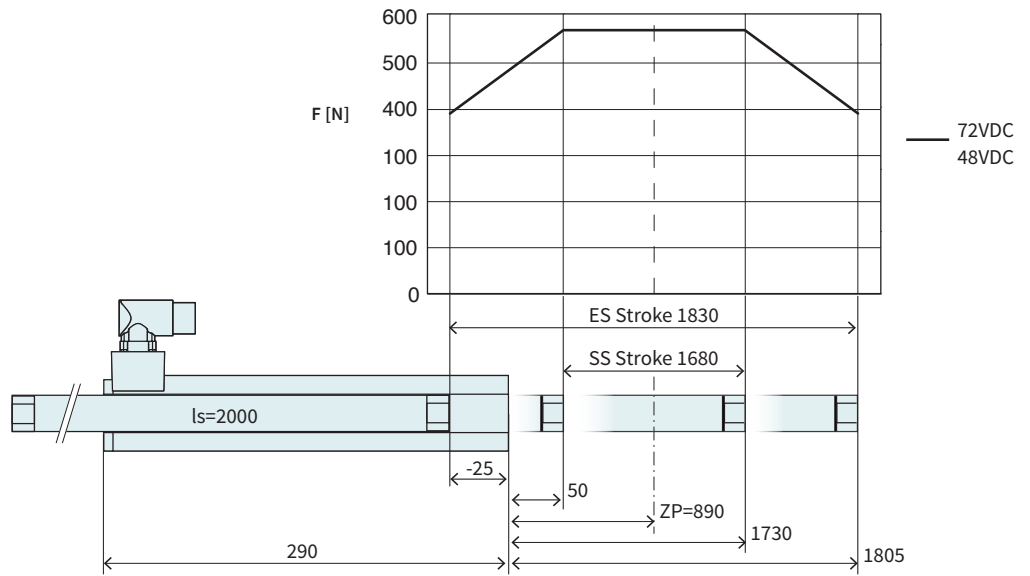
Stroke			
Standard Stroke (SS)	mm (in)		1500 (59.1)
Extended Stroke (ES)	mm (in)		1650 (64.99)
Force			
Max. Force @ 48VDC	N (lbf)		572 (129)
Max. Force @ 72VDC	N (lbf)		572 (129)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		140 / 240 / - (32 / 55 / -)
Max. Border Force relative	%		69
Force Constant	N/A _{pk} (lbf/A _{pk})		22 (4.95)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)		1.9 (78.9)
Max. Velocity @ 72VDC	m/s (in/s)		2.9 (119.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.15
Electrical Data			
Max. Current @ 48VDC	A _{pk}		25.9
Max. Current @ 72VDC	A _{pk}		25.9
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		6.5 / 11 / -
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.32 / -
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 330 / -
Mechanical Data			
Slider Length	mm (in)		1820 (72)
Slider Mass	g (lb)		8300 (18.26)



Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PS01-48x240F-C-2S	Stator with IP67 Connector M23/9(m) - 2S	0150-21220
PL01-28x1820/1740	Slider 'standard'	0150-1395
PL01-28x1820/1740-2S	Slider 'standard' - Safety	0150-21395

P01-48x240F/1680x1830

Max. Stroke: 1830 mm
Peak Force: 572 N



Dimensions in mm

Technical Data P01-48x240F/1680x1830				
Stroke				
Standard Stroke (SS)	mm (in)		1680 (66.09)	
Extended Stroke (ES)	mm (in)		1830 (71.99)	
Force				
Max. Force @ 48VDC	N (lbf)		572 (129)	
Max. Force @ 72VDC	N (lbf)		572 (129)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		140 / 240 / -	(32 / 55 / -)
Max. Border Force relative	%		69	
Force Constant	N/A _{pk} (lbf/A _{pk})		22	(4.95)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		1.9	(78.9)
Max. Velocity @ 72VDC	m/s (in/s)		2.9	(119.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		25.9	
Max. Current @ 72VDC	A _{pk}		25.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		6.5 / 11 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		0.95 / 0.32 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		970 / 330 / -	
Mechanical Data				
Slider Length	mm (in)		2000	(79)
Slider Mass	g (lb)		9140	(20.11)



Item	Description	Item-No.
PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
PS01-48x240F-C-2S	Stator with IP67 Connector M23/9(m) - 2S	0150-21220
PL01-28x2000/1920	Slider 'standard'	0150-1396
PL01-28x2000/1920-2S	Slider 'standard' - Safety	0150-21396

Linear Guides H01

3



HM01-48x240/120		Linear Module 48x240 with 120 mm Stroke			
→	H-Guide	H01-48x250/120	H-Guide for P01-48x240, Stroke max 120 mm		0150-5100
		H01-48x250/120-GF	H-Guide for P01-48x240, Stroke max 120 mm		0150-5104
→	Stator	PS01-48x240F-C	Stator with IP67 Connector M23/9(m)		0150-1220
		PS01-48x240F-C-2S	Stator with IP67 Connector M23/9(m) - Safety		0150-21220
→	Slider	PL01-28x410/330	Slider Standard for H01-48x250/120		0150-1381
		PL01-28x410/330-2S	Slider 'standard' - Safety		0150-21381

HM01-48x240/210		Linear Module 48x240 with 210 mm Stroke			
→	H-Guide	H01-48x250/210	H-Guide for P01-48x240, Stroke max 210 mm		0150-5101
		H01-48x250/210-GF	H-Guide for P01-48x240, Stroke max 210 mm		0150-5105
→	Stator	PS01-48x240F-C	Stator with IP67 Connector M23/9(m)		0150-1220
		PS01-48x240F-C-2S	Stator with IP67 Connector M23/9(m) - Safety		0150-21220
→	Slider	PL01-28x500/420	Slider Standard for H01-48x250/210		0150-1382
		PL01-28x500/420-2S	Slider 'standard' - Safety		0150-21382

HM01-48x240/330		Linear Module 48x240 with 330 mm Stroke			
→	H-Guide	H01-48x250/330	H-Guide for P01-48x240, Stroke max 330 mm		0150-5102
		H01-48x250/330-GF	H-Guide for P01-48x240, Stroke max 330 mm		0150-5106
→	Stator	PS01-48x240F-C	Stator with IP67 Connector M23/9(m)		0150-1220
		PS01-48x240F-C-2S	Stator with IP67 Connector M23/9(m) - Safety		0150-21220
→	Slider	PL01-28x620/540	Slider Standard for H01-48x250/330		0150-1383
		PL01-28x620/540-2S	Slider 'standard' - Safety		0150-21383

HM01-48x240/420		Linear Module 48x240 with 420 mm Stroke			
→	H-Guide	H01-48x250/420	H-Guide for P01-48x240, Stroke max 420 mm		0150-5103
		H01-48x250/420-GF	H-Guide for P01-48x240, Stroke max 420 mm		0150-5107
→	Stator	PS01-48x240F-C	Stator with IP67 Connector M23/9(m)		0150-1220
		PS01-48x240F-C-2S	Stator with IP67 Connector M23/9(m) - Safety		0150-21220
→	Slider	PL01-28x710/630	Slider Standard for H01-48x250/420		0150-1384
		PL01-28x710/630-2S	Slider 'standard' - Safety		0150-21384

Accessories					
→	Brake	HB01-48	Pneumatic Brake for H01-48/1000N(4-6Bar)		0150-5098
→	Fan	HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48		0150-5051
→	MagSpring	MF01-37/H37	Flange MagSpring 37 / H-Guide 23/37/48		0250-2307
		MA01-37/H48	Adapter MagSpring 37 / H-Guide 48		0250-0118
→	Sliding block	PFN01-8/M6	Sliding block 8mm, M6 thread		0250-3245
→	Centering sleeve	HC01-11/05	Centering sleeve D11x5 mm		0150-3252
→	Wipers	HA01-48/28-F	Wiper for H01-48 guides, front side		0150-5109

Bridge Guide B01



BM01-48x240/90 | Bridge Module 48x240 with 90 mm Stroke

→	B-Guide	B01-48x250/90	B-Guide for P01-48x240, Stroke max 90 mm	0150-5150
		B01-48x250/90-GF	B-Guide for P01-48x240, Stroke max 90 mm	0150-5154
→	Stator	PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
→	Slider	PL01-27x410/330	High Clearance Slider for B01-48x250/90	0150-1468

BM01-48x240/180 | Bridge Module 48x240 with 180 mm Stroke

→	B-Guide	B01-48x250/180	B-Guide for P01-48x240, Stroke max 180mm	0150-5151
		B01-48x250/180-GF	B-Guide for P01-48x240, Stroke max 180mm	0150-5155
→	Stator	PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
→	Slider	PL01-27x500/420	High Clearance Slider for B01-48x250/180	0150-1469

BM01-48x240/300 | Bridge Module 48x240 with 300 mm Stroke

→	B-Guide	B01-48x250/300	B-Guide for P01-48x240, Stroke max 300 mm	0150-5152
		B01-48x250/300-GF	B-Guide for P01-48x240, Stroke max 300 mm	0150-5156
→	Stator	PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
→	Slider	PL01-27x620/540	High Clearance Slider for B01-48x250/300	0150-1470

BM01-48x240/390 | Bridge Module 48x240 with 390 mm Stroke

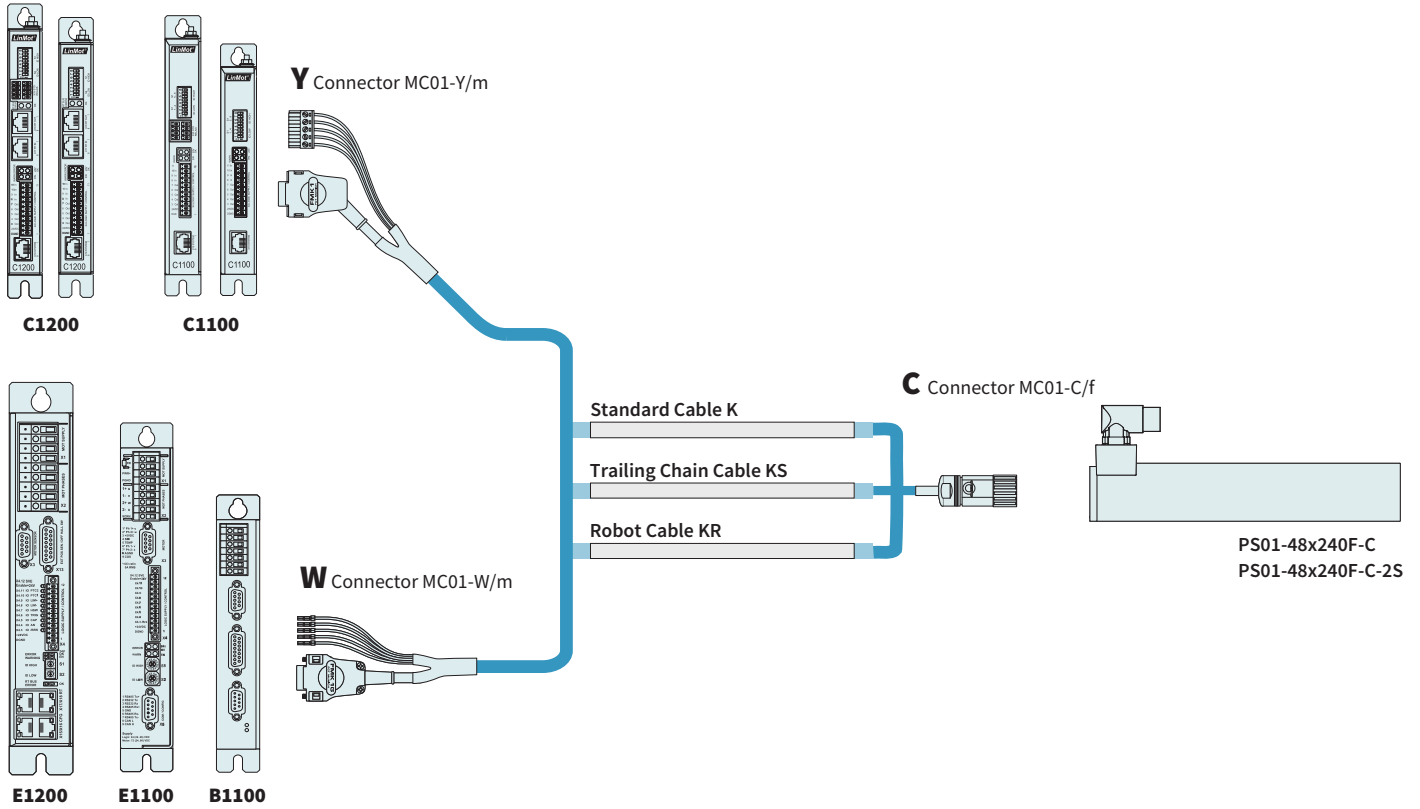
→	B-Guide	B01-48x250/390	B-Guide for P01-48x240, Stroke max 390 mm	0150-5153
		B01-48x250/390-GF	B-Guide for P01-48x240, Stroke max 390 mm	0150-5157
→	Stator	PS01-48x240F-C	Stator with IP67 Connector M23/9(m)	0150-1220
→	Slider	PL01-27x710/630	High Clearance Slider for B01-48x250/390	0150-1471

Accessories

Brake	HB01-48	Pneumatic Brake for H01-48/1000N(4-6Bar)	0150-5098
Fan	HV01-37/48	Fan for H01-37 and -48 H-Guideen	0150-5051
MagSpring	MF01-37/H37	Flange MagSpring 37 / H-Guide 23/37/48	0250-2307
	MA01-37/H48	Adapter MagSpring 37 / H-Guide 48	0250-0118
Sliding block	PFN01-8/M6	Sliding block 8mm, M6 thread	0250-3245
Centering sleeve	HC01-11/05	Centering sleeve D11x5 mm	0150-3252
Wipers	HA01-48/27-F	Wiper for H01-48 guides, front side	0150-5178

Motor Cable

3



ORDERING INFORMATION

STANDARD CABLE

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

TRAILING CHAIN CABLE

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

ROBOT CABLE

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

CONNECTOR & CABLE (INDIVIDUAL)

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

MOTOR FLANGES

3



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

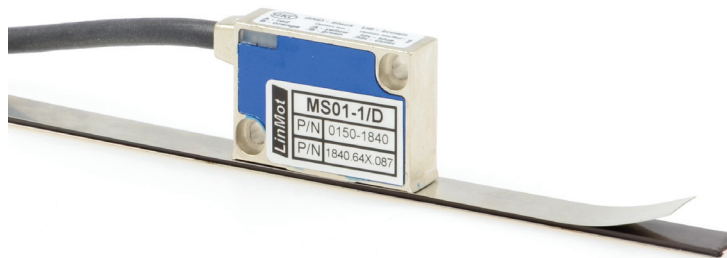
WIPERS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

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