

LINEAR MOTORS P01-23x80



- ✓ Highly dynamic drives
- ✓ Wide stroke range
- ✓ Available with cable outlet or with rotatable connector
- ✓ Optional with air cooling
- ✓ Wide range of applications in handling modules as well as in plant and machine construction

LINEAR MOTORS P01-23x80

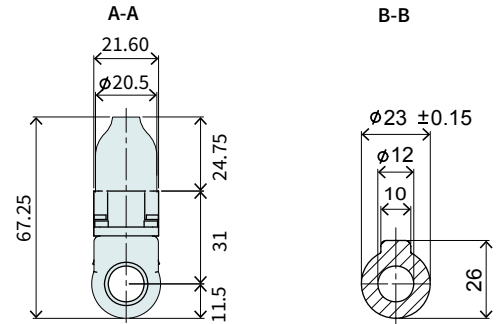
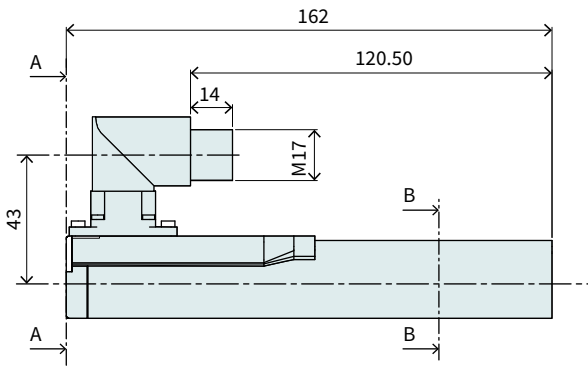
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MOTOR FAMILY P01-23x80

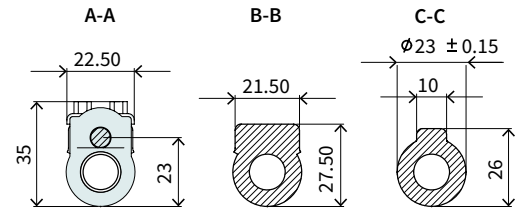
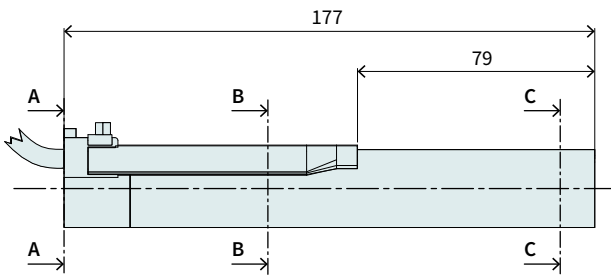
Technical Data				
Stroke				
Standard Stroke (SS)	mm (in)		≤ 720 (≤ 28.3)	
Extended Stroke (ES)	mm (in)		≤ 780 (≤ 30.69)	
Force				
Max. Force @ 48VDC	N (lbf)		41.6 (9.35)	
Max. Force @ 72VDC	N (lbf)		44 (9.89)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		8.6 / 16 / - (1.9 / 3.5 / -)	
Max. Border Force relative	%		≤ 63	
Force Constant	N/A _{pk} (lbf/A _{pk})		11 (2.47)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.9 (159.9)	
Max. Velocity @ 72VDC	m/s (in/s)		5.9 (239.9)	
Position Detection				
Position Resolution	mm (in)		0.002 (0.0001)	
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}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Terminal Resistance 25 °C / 120 °C	Ohm		10 / 14	
Terminal Inductivity	mH		1.4	
Magnetic Period	mm (in)		20 (0.78)	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		770 / 230 / -	
Mechanical Data				
Stator Diameter	mm (in)		23 (0.91)	
Stator Length [Connector type / Cable type]	mm (in)		162 / 177 (6.4 / 7)	
Stator Mass	g (lb)		265 (0.58)	
Slider Diameter	mm (in)		12 (0.47)	
Slider Length	mm (in)		130 - 850 (5.1 - 33)	
Slider Mass	g (lb)		90 - 700 (0.20 - 1.5)	
IP Code			IP 65	

STATOR CONNECTOR TYPE



Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233

STATOR CABLE TYPE

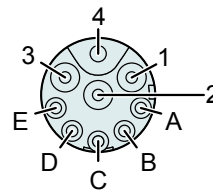


Item	Description	Item-No.
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1 m, Connector D-Sub-9(m)	0150-1201

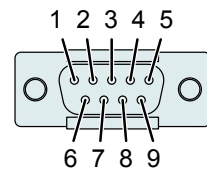
CONNECTOR

Motor Connector Wiring	PS01-23x80-R	PS01-23x80	Wire color motor cable	
	PS01-23x80-R20	R-Connector		D-Connector
Ph 1+		1	1	red
Ph 1-		2	6	pink
Ph 2+		3	2	blue
Ph 2-		4	7	grey
+5VDC		A	3	white
GND		B	8	inner shield
Sin		C	4	yellow
Cos		D	9	green
Temp.		E	5	black
Shield		Housing	Housing	outer Shield

R-Connector



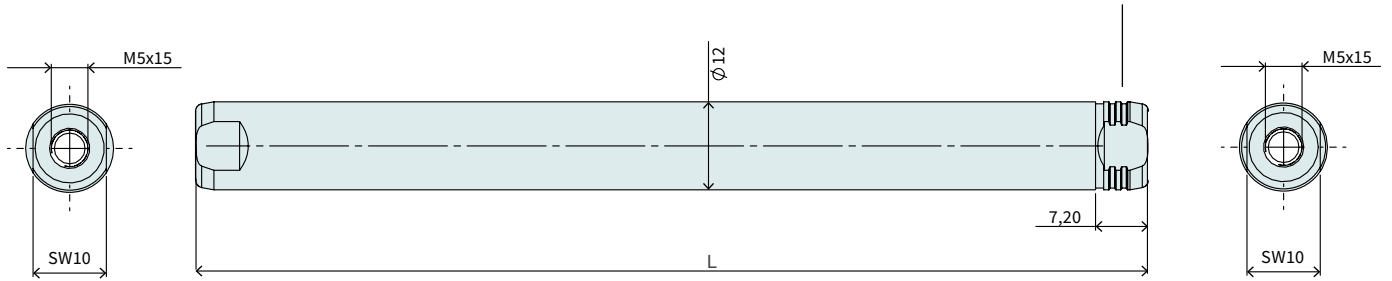
D-Connector



View: Motor Connector, plug side

SLIDER

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

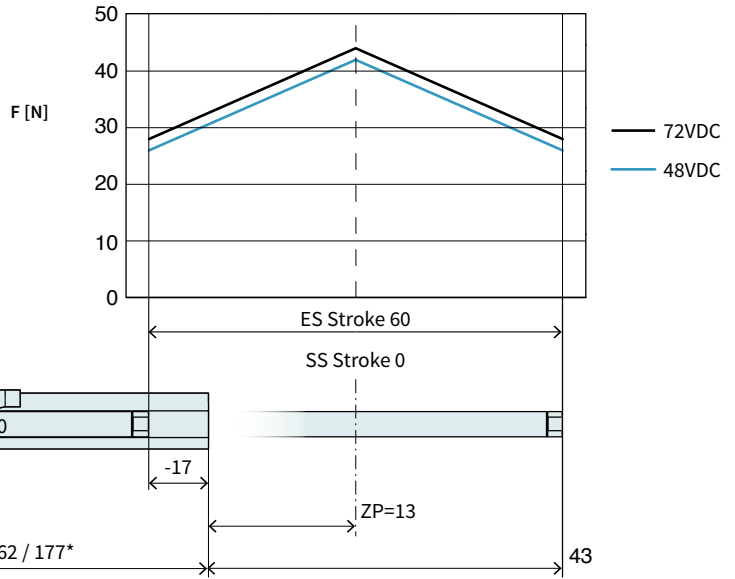


Slider Standard				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-12x130/90-LC	Slider 'standard LC'	60	0	0150-2580
PL01-12x170/130-LC	Slider 'standard LC'	100	40	0150-2581
PL01-12x190/150-LC	Slider 'standard LC'	120	60	0150-2582
PL01-12x230/190-LC	Slider 'standard LC'	160	100	0150-2598
PL01-12x290/250-LC	Slider 'standard LC'	220	160	0150-2583
PL01-12x350/310-LC	Slider 'standard LC'	280	220	0150-2584
PL01-12x420/380-LC	Slider 'standard LC'	350	290	0150-2585
PL01-12x480/440-LC	Slider 'standard LC'	410	350	0150-2586
PL01-12x580/540-LC	Slider 'standard LC'	510	450	0150-2587
PL01-12x760/720-LC	Slider 'standard LC'	690	630	0150-2589
PL01-12x850/810-LC	Slider 'standard LC'	780	720	0150-2588

Slider Heavy Duty				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL02-12x130/90-LC	Slider 'heavy duty LC'	60	0	0150-2590
PL02-12x170/130-LC	Slider 'heavy duty LC'	100	40	0150-2591
PL02-12x190/150-LC	Slider 'heavy duty LC'	120	60	0150-2592
PL02-12x230/190-LC	Slider 'heavy duty LC'	160	100	0150-2599
PL02-12x290/250-LC	Slider 'heavy duty LC'	220	160	0150-2593
PL02-12x350/310-LC	Slider 'heavy duty LC'	280	220	0150-2594
PL02-12x420/380-LC	Slider 'heavy duty LC'	350	290	0150-2595
PL02-12x480/440-LC	Slider 'heavy duty LC'	410	350	0150-2597
PL02-12x580/540-LC	Slider 'heavy duty LC'	510	450	0150-2596
PL02-12x760/720-LC	Slider 'heavy duty LC'	690	630	on request
PL02-12x850/810-LC	Slider 'heavy duty LC'	780	720	on request

P01-23x80/0x60-LC

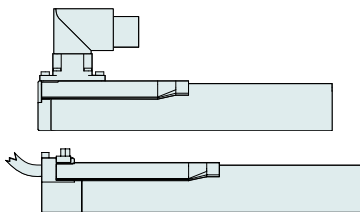
Max. Stroke: 60 mm
Peak Force: 44 N



Dimensions in mm
 *Cable Type

Technical Data P01-23x80/0x60-LC

Stroke			
Standard Stroke (SS)	mm (in)		0 (0)
Extended Stroke (ES)	mm (in)		60 (2.35)
Force			
Max. Force @ 48VDC	N (lbf)		41.6 (9.35)
Max. Force @ 72VDC	N (lbf)		44 (9.89)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N (lbf)		8.6 / 16 / - (1.9 / 3.5 / -)
Max. Border Force relative	%		63
Force Constant	N/A _{pk} (lbf/A _{pk})		11 (2.47)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)		3.9 (159.9)
Max. Velocity @ 72VDC	m/s (in/s)		5.9 (239.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.5
Electrical Data			
Max. Current @ 48VDC	A _{pk}		3.7
Max. Current @ 72VDC	A _{pk}		3.9
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		770 / 230 / -
Mechanical Data			
Slider Length	mm (in)		130 (5.1)
Slider Mass	g (lb)		90 (0.16)

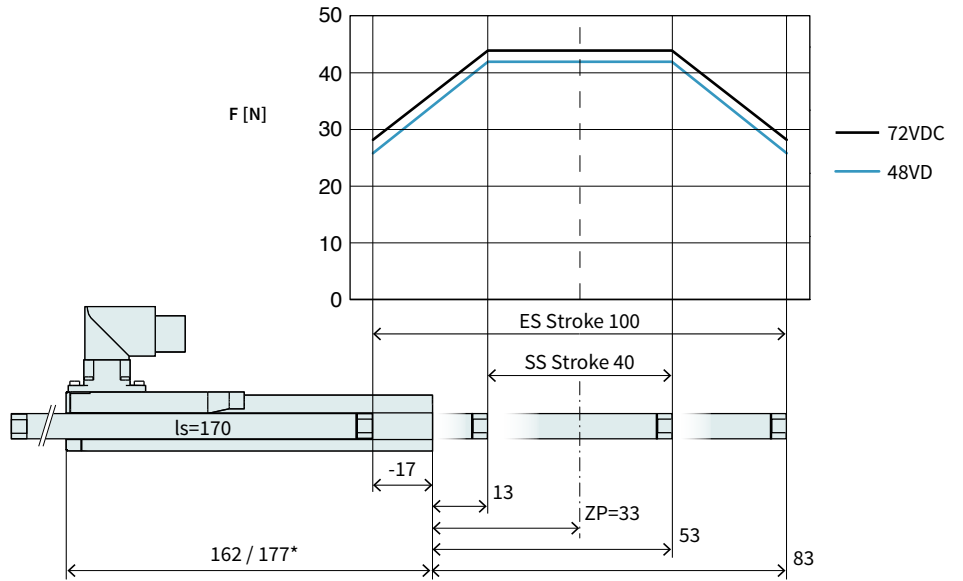


Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201
PL01-12x130/90-LC	Slider 'standard LC'	0150-2580
PL02-12x130/90-LC	Slider 'heavy duty LC'	0150-2590

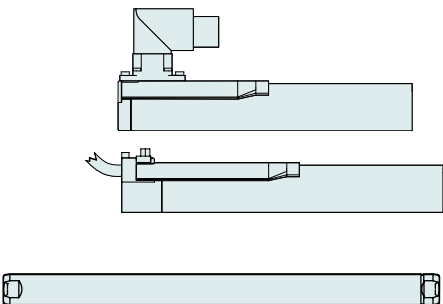
P01-23x80/40x100-LC

Max. Stroke: 100 mm
Peak Force: 44 N

Dimensions in mm
 *Cable Type



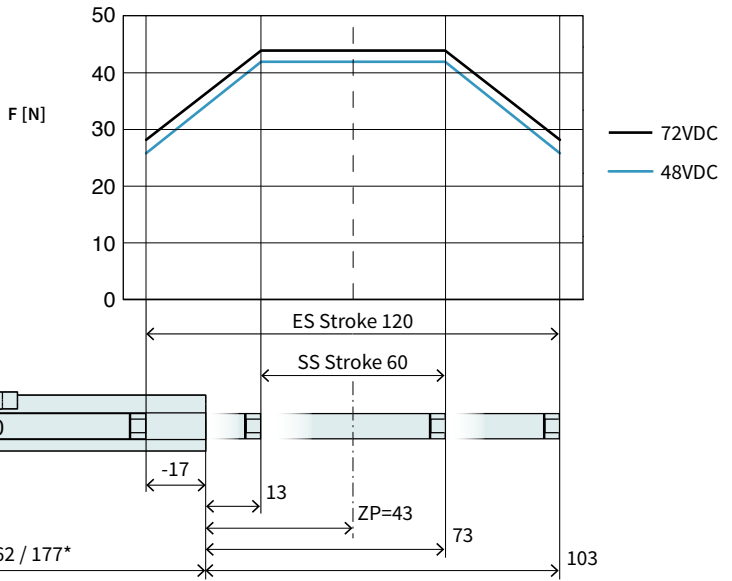
Technical Data P01-23x80/40x100-LC				
Stroke				
Standard Stroke (SS)	mm (in)		40 (1.57)	
Extended Stroke (ES)	mm (in)		100 (3.93)	
Force				
Max. Force @ 48VDC	N (lbf)		41.6 (9.35)	
Max. Force @ 72VDC	N (lbf)		44 (9.89)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		8.6 / 16 / - (1.9 / 3.5 / -)	
Max. Border Force relative	%		63	
Force Constant	N/A _{pk} (lbf/A _{pk})		11 (2.47)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.9 (159.9)	
Max. Velocity @ 72VDC	m/s (in/s)		5.9 (239.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		±0.35	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		770 / 230 / -	
Mechanical Data				
Slider Length	mm (in)		170 (6.7)	
Slider Mass	g (lb)		130 (0.23)	



Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201
PL01-12x170/130-LC	Slider 'standard LC'	0150-2581
PL02-12x170/130-LC	Slider 'heavy duty LC'	0150-2591

P01-23x80/60x120-LC

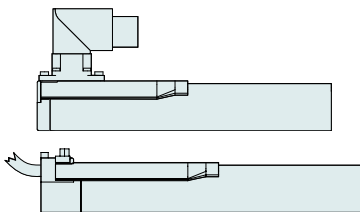
Max. Stroke: 120 mm
Peak Force: 44 N



Dimensions in mm
 *Cable Type

Technical Data P01-23x80/60x120-LC

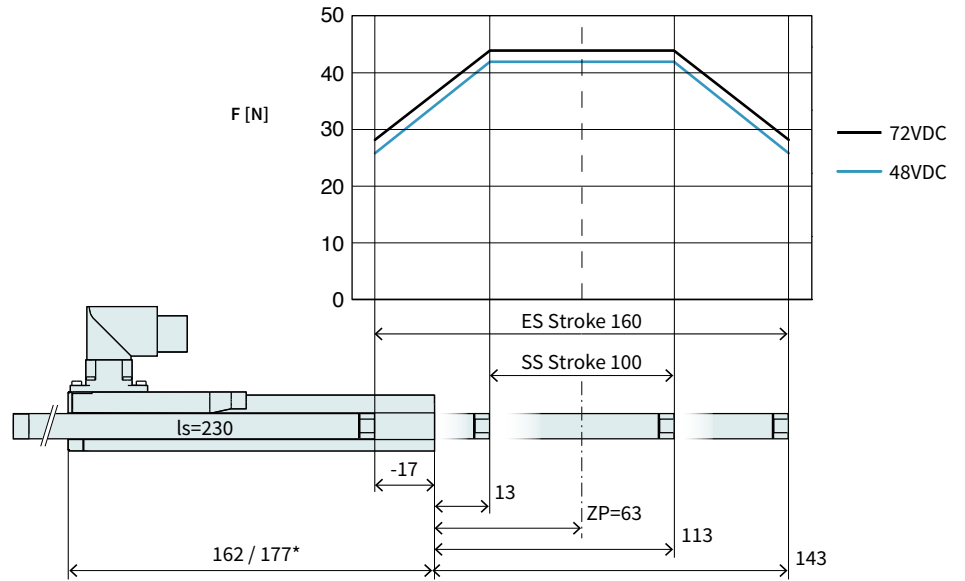
Stroke			
Standard Stroke (SS)	mm (in)	60	(2.35)
Extended Stroke (ES)	mm (in)	120	(4.71)
Force			
Max. Force @ 48VDC	N (lbf)	41.6	(9.35)
Max. Force @ 72VDC	N (lbf)	44	(9.89)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	8.6 / 16 / -	(1.9 / 3.5 / -)
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	11	(2.47)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3.9	(159.9)
Max. Velocity @ 72VDC	m/s (in/s)	5.9	(239.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	±0.3	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	3.7	
Max. Current @ 72VDC	A _{pk}	3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	0.78 / 1.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	770 / 230 / -	
Mechanical Data			
Slider Length	mm (in)	190	(7.5)
Slider Mass	g (lb)	145	(0.26)



Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201
PL01-12x190/150-LC	Slider 'standard LC'	0150-2582
PL02-12x190/150-LC	Slider 'heavy duty LC'	0150-2592

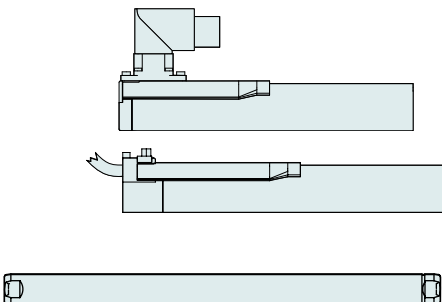
P01-23x80/100x160-LC

Max. Stroke: 160 mm
Peak Force: 44 N



Dimensions in mm
 *Cable Type

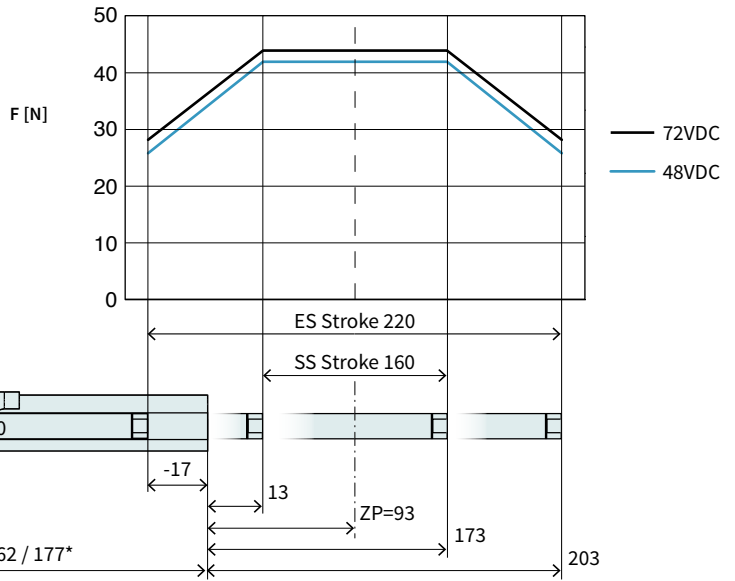
Technical Data P01-23x80/100x160-LC			
Stroke			
Standard Stroke (SS)	mm (in)		100 (3.93)
Extended Stroke (ES)	mm (in)		160 (6.29)
Force			
Max. Force @ 48VDC	N (lbf)		41.6 (9.35)
Max. Force @ 72VDC	N (lbf)		44 (9.89)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		8.6 / 16 / - (1.9 / 3.5 / -)
Max. Border Force relative	%		63
Force Constant	N/A _{pk} (lbf/A _{pk})		11 (2.47)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)		3.9 (159.9)
Max. Velocity @ 72VDC	m/s (in/s)		5.9 (239.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.25
Electrical Data			
Max. Current @ 48VDC	A _{pk}		3.7
Max. Current @ 72VDC	A _{pk}		3.9
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		770 / 230 / -
Mechanical Data			
Slider Length	mm (in)		230 (9.1)
Slider Mass	g (lb)		180 (0.32)



Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201
PL01-12x230/190-LC	Slider 'standard LC'	0150-2598
PL02-12x230/190-LC	Slider 'heavy duty LC'	0150-2599

P01-23x80/160x220-LC

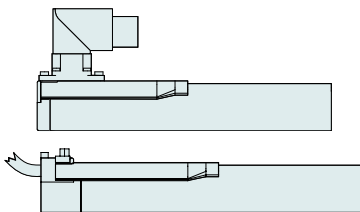
Max. Stroke: 220 mm
Peak Force: 44 N



Dimensions in mm
 *Cable Type

Technical Data P01-23x80/160x220-LC

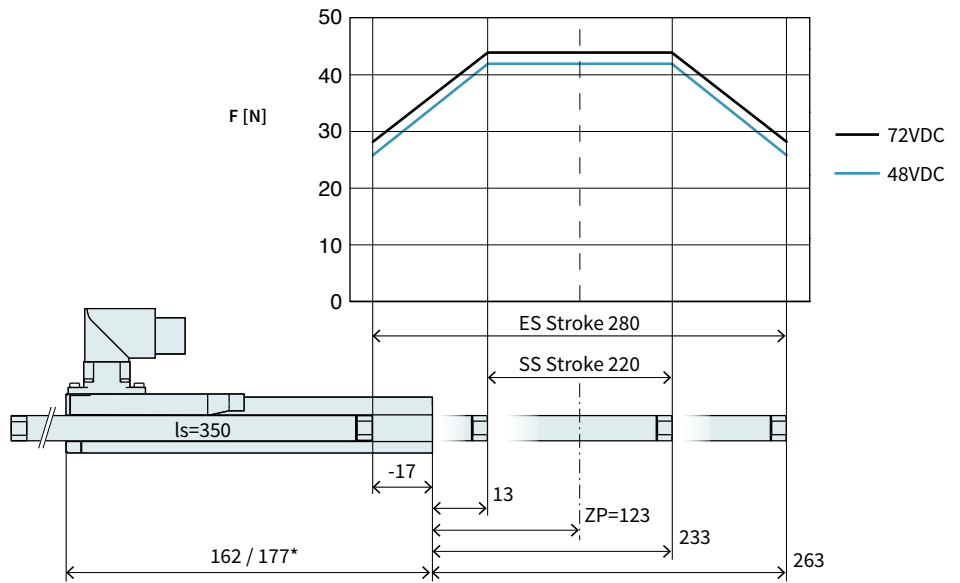
Stroke			
Standard Stroke (SS)	mm (in)	160	(6.29)
Extended Stroke (ES)	mm (in)	220	(8.65)
Force			
Max. Force @ 48VDC	N (lbf)	41.6	(9.35)
Max. Force @ 72VDC	N (lbf)	44	(9.89)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	8.6 / 16 / -	(1.9 / 3.5 / -)
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	11	(2.47)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	3.9	(159.9)
Max. Velocity @ 72VDC	m/s (in/s)	5.9	(239.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	3.7	
Max. Current @ 72VDC	A _{pk}	3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	0.78 / 1.4 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	770 / 230 / -	
Mechanical Data			
Slider Length	mm (in)	290	(11)
Slider Mass	g (lb)	230	(0.41)



Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201
PL01-12x290/250-LC	Slider 'standard LC'	0150-2583
PL02-12x290/250-LC	Slider 'heavy duty LC'	0150-2593

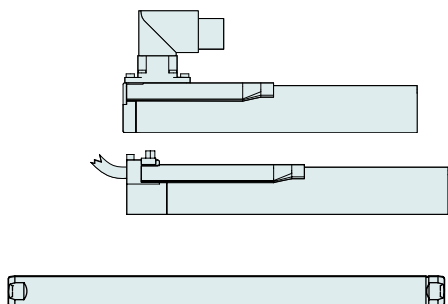
P01-23x80/220x280-LC

Max. Stroke: 280 mm
Peak Force: 44 N



Dimensions in mm
 *Cable Type

Technical Data P01-23x80/220x280-LC				
Stroke				
Standard Stroke (SS)	mm	(in)	220	(8.65)
Extended Stroke (ES)	mm	(in)	280	(10.99)
Force				
Max. Force @ 48VDC	N	(lbf)	41.6	(9.35)
Max. Force @ 72VDC	N	(lbf)	44	(9.89)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	8.6 / 16 / -	(1.9 / 3.5 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	11	(2.47)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	3.9	(159.9)
Max. Velocity @ 72VDC	m/s	(in/s)	5.9	(239.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		770 / 230 / -	
Mechanical Data				
Slider Length	mm	(in)	350	(14)
Slider Mass	g	(lb)	280	(0.5)

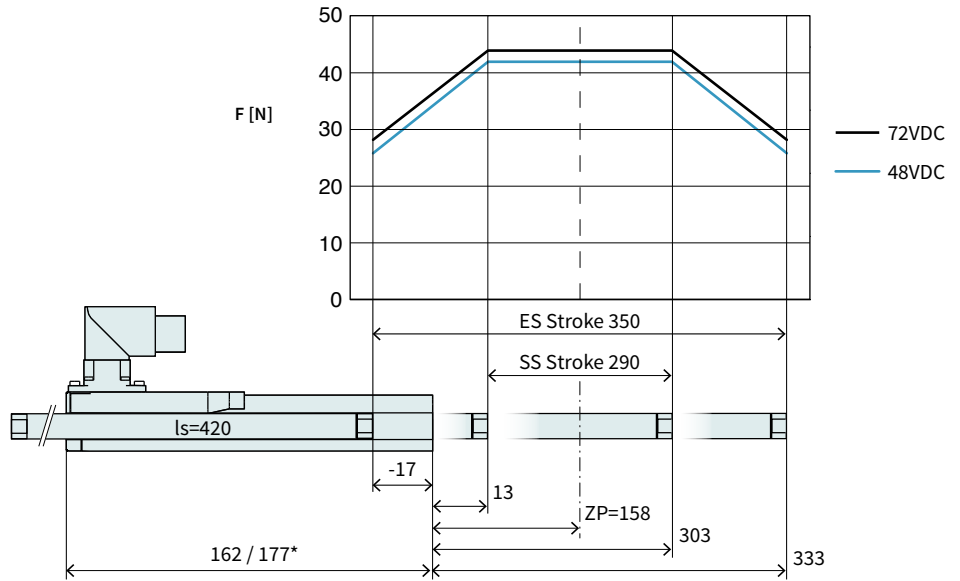


Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201
PL01-12x350/310-LC	Slider 'standard LC'	0150-2584
PL02-12x350/310-LC	Slider 'heavy duty LC'	0150-2594

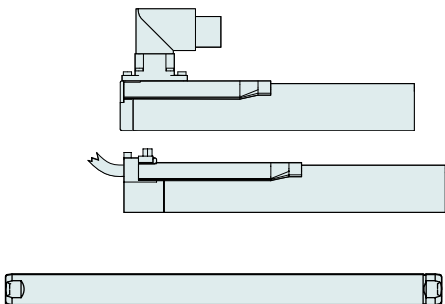
P01-23x80/290x350-LC

Max. Stroke: 350 mm
Peak Force: 44 N

Dimensions in mm
 *Cable Type



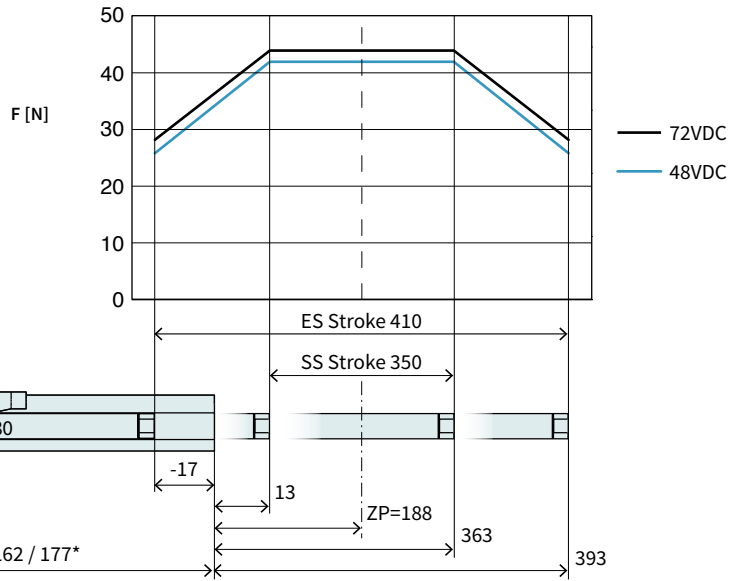
Technical Data P01-23x80/290x350-LC				
Stroke				
Standard Stroke (SS)	mm (in)		290	(11.4)
Extended Stroke (ES)	mm (in)		350	(13.8)
Force				
Max. Force @ 48VDC	N (lbf)		41.6	(9.35)
Max. Force @ 72VDC	N (lbf)		44	(9.89)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		8.6 / 16 / -	(1.9 / 3.5 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk} (lbf/A _{pk})		11	(2.47)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.9	(159.9)
Max. Velocity @ 72VDC	m/s (in/s)		5.9	(239.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		770 / 230 / -	
Mechanical Data				
Slider Length	mm (in)		420	(17)
Slider Mass	g (lb)		340	(0.61)



Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201
PL01-12x420/380-LC	Slider 'standard LC'	0150-2585
PL02-12x420/380-LC	Slider 'heavy duty LC'	0150-2595

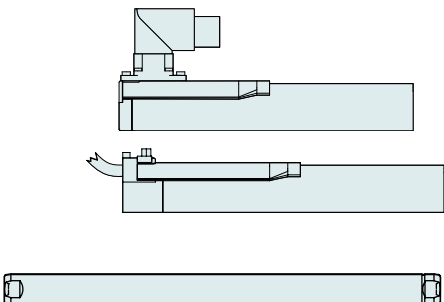
P01-23x80/350x410-LC

Max. Stroke: 410 mm
Peak Force: 44 N



Dimensions in mm
 *Cable Type

Technical Data P01-23x80/350x410-LC				
Stroke				
Standard Stroke (SS)	mm (in)		350 (13.8)	
Extended Stroke (ES)	mm (in)		410 (16.1)	
Force				
Max. Force @ 48VDC	N (lbf)		41.6 (9.35)	
Max. Force @ 72VDC	N (lbf)		44 (9.89)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		8.6 / 16 / - (1.9 / 3.5 / -)	
Max. Border Force relative	%		63	
Force Constant	N/A _{pk} (lbf/A _{pk})		11 (2.47)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		3.9 (159.9)	
Max. Velocity @ 72VDC	m/s (in/s)		5.9 (239.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		±0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		770 / 230 / -	
Mechanical Data				
Slider Length	mm (in)		480 (19)	
Slider Mass	g (lb)		390 (0.7)	

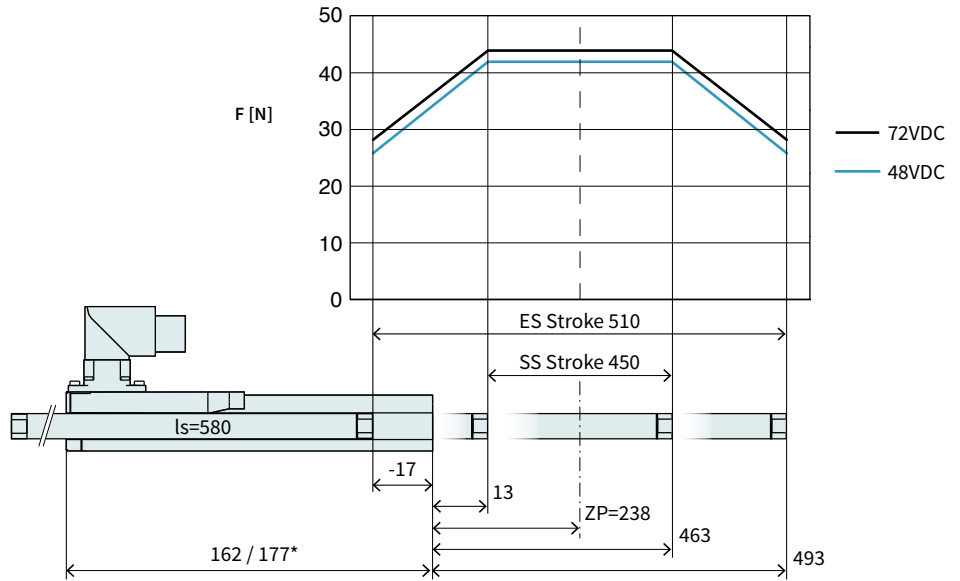


Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201
PL01-12x480/440-LC	Slider 'standard LC'	0150-2586
PL02-12x480/440-LC	Slider 'heavy duty LC'	0150-2597

P01-23x80/450x510-LC

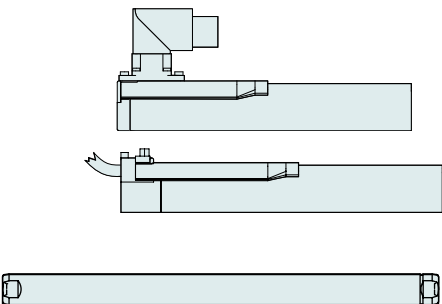
Max. Stroke: 510 mm
Peak Force: 44 N

Dimensions in mm
 *Cable Type



Technical Data P01-23x80/450x510-LC

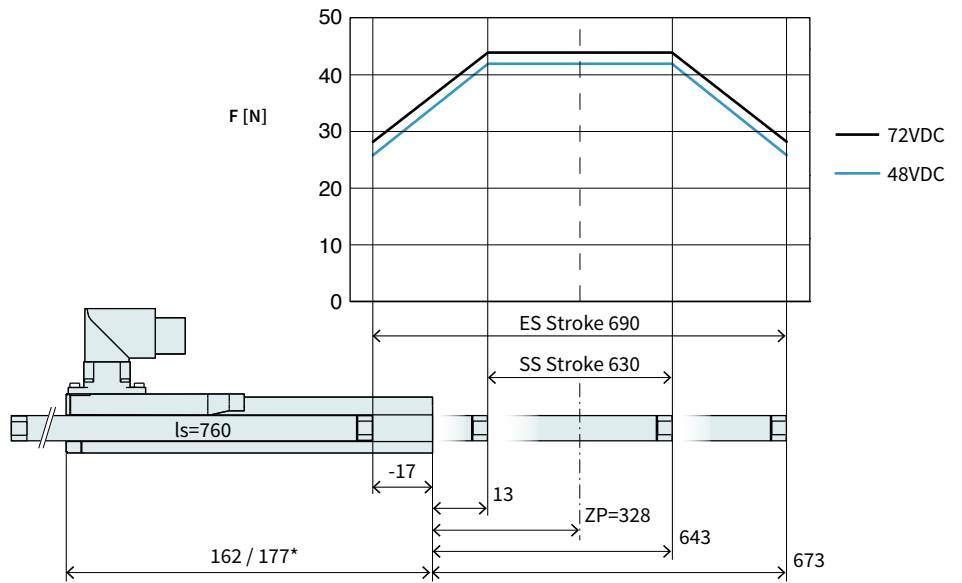
Technical Data P01-23x80/450x510-LC			
Stroke			
Standard Stroke (SS)	mm (in)		450 (17.69)
Extended Stroke (ES)	mm (in)		510 (20.1)
Force			
Max. Force @ 48VDC	N (lbf)		41.6 (9.35)
Max. Force @ 72VDC	N (lbf)		44 (9.89)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		8.6 / 16 / - (1.9 / 3.5 / -)
Max. Border Force relative	%		63
Force Constant	N/A _{pk} (lbf/A _{pk})		11 (2.47)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)		3.9 (159.9)
Max. Velocity @ 72VDC	m/s (in/s)		5.9 (239.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.15
Electrical Data			
Max. Current @ 48VDC	A _{pk}		3.7
Max. Current @ 72VDC	A _{pk}		3.9
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		770 / 230 / -
Mechanical Data			
Slider Length	mm (in)		580 (23)
Slider Mass	g (lb)		480 (0.86)



Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201
PL01-12x580/540-LC	Slider 'standard LC'	0150-2587
PL02-12x580/540-LC	Slider 'heavy duty LC'	0150-2596

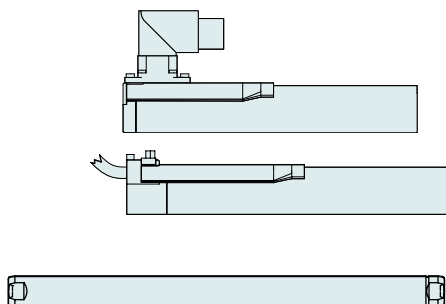
P01-23x80/630x690-LC

Max. Stroke: 690 mm
Peak Force: 44 N



Dimensions in mm
 *Cable Type

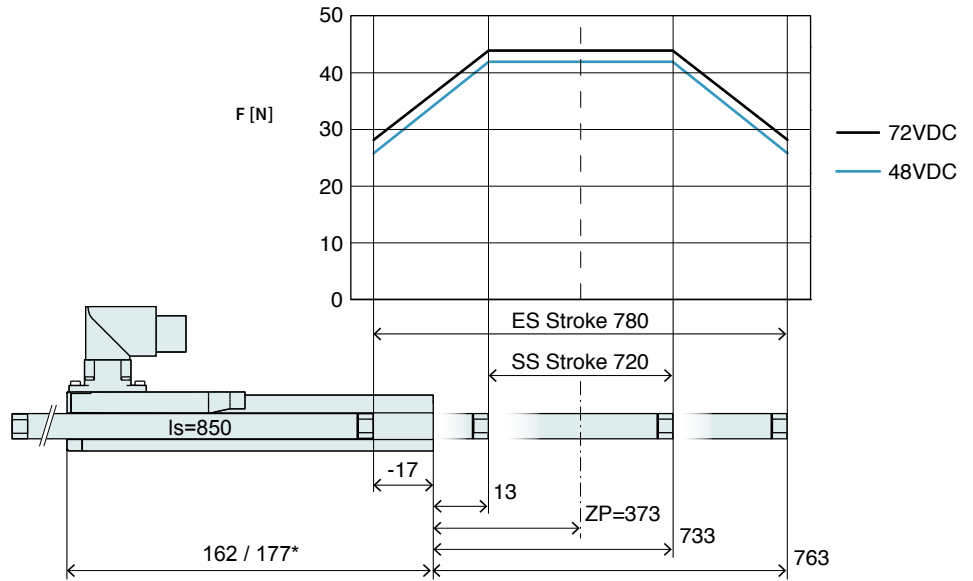
Technical Data P01-23x80/630x690-LC				
Stroke				
Standard Stroke (SS)	mm	(in)	630	(24.8)
Extended Stroke (ES)	mm	(in)	690	(27.19)
Force				
Max. Force @ 48VDC	N	(lbf)	41.6	(9.35)
Max. Force @ 72VDC	N	(lbf)	44	(9.89)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	8.6 / 16 / -	(1.9 / 3.5 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	11	(2.47)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	3.9	(159.9)
Max. Velocity @ 72VDC	m/s	(in/s)	5.9	(239.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		±0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		3.7	
Max. Current @ 72VDC	A _{pk}		3.9	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		770 / 230 / -	
Mechanical Data				
Slider Length	mm	(in)	760	(30)
Slider Mass	g	(lb)	630	(1.1)



Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201
PL01-12x760/720-LC	Slider 'standard LC'	0150-2589
PL01-12x760/720-LC	Slider 'heavy duty LC'	on request

P01-23x80/720x780-LC

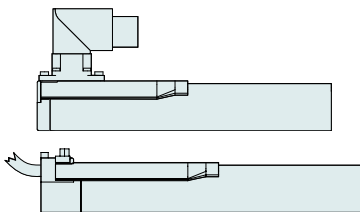
Max. Stroke: 780 mm
Peak Force: 44 N



Dimensions in mm
 *Cable Type

Technical Data P01-23x80/720x780-LC

Stroke			
Standard Stroke (SS)	mm (in)		720 (28.3)
Extended Stroke (ES)	mm (in)		780 (30.69)
Force			
Max. Force @ 48VDC	N (lbf)		41.6 (9.35)
Max. Force @ 72VDC	N (lbf)		44 (9.89)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		8.6 / 16 / - (1.9 / 3.5 / -)
Max. Border Force relative	%		63
Force Constant	N/A _{pk} (lbf/A _{pk})		11 (2.47)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)		3.9 (159.9)
Max. Velocity @ 72VDC	m/s (in/s)		5.9 (239.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.15
Electrical Data			
Max. Current @ 48VDC	A _{pk}		3.7
Max. Current @ 72VDC	A _{pk}		3.9
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		0.78 / 1.4 / -
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		770 / 230 / -
Mechanical Data			
Slider Length	mm (in)		850 (33)
Slider Mass	g (lb)		700 (1.3)



Item	Description	Item-No.
PS01-23x80-R	Stator with IP67 Connector M17/9(m)	0150-1233
PS01-23x80-R20	Stator, 0,2 m cable, IP67 con. M17/9(m)	0150-1241
PS01-23x80	Stator, cable 1m, Connector D-Sub-9(m)	0150-1201
PL01-12x850/810-LC	Slider 'standard LC'	0150-2588
PL02-12x850/810-LC	Slider 'heavy duty LC'	on request

Linear Guides H01

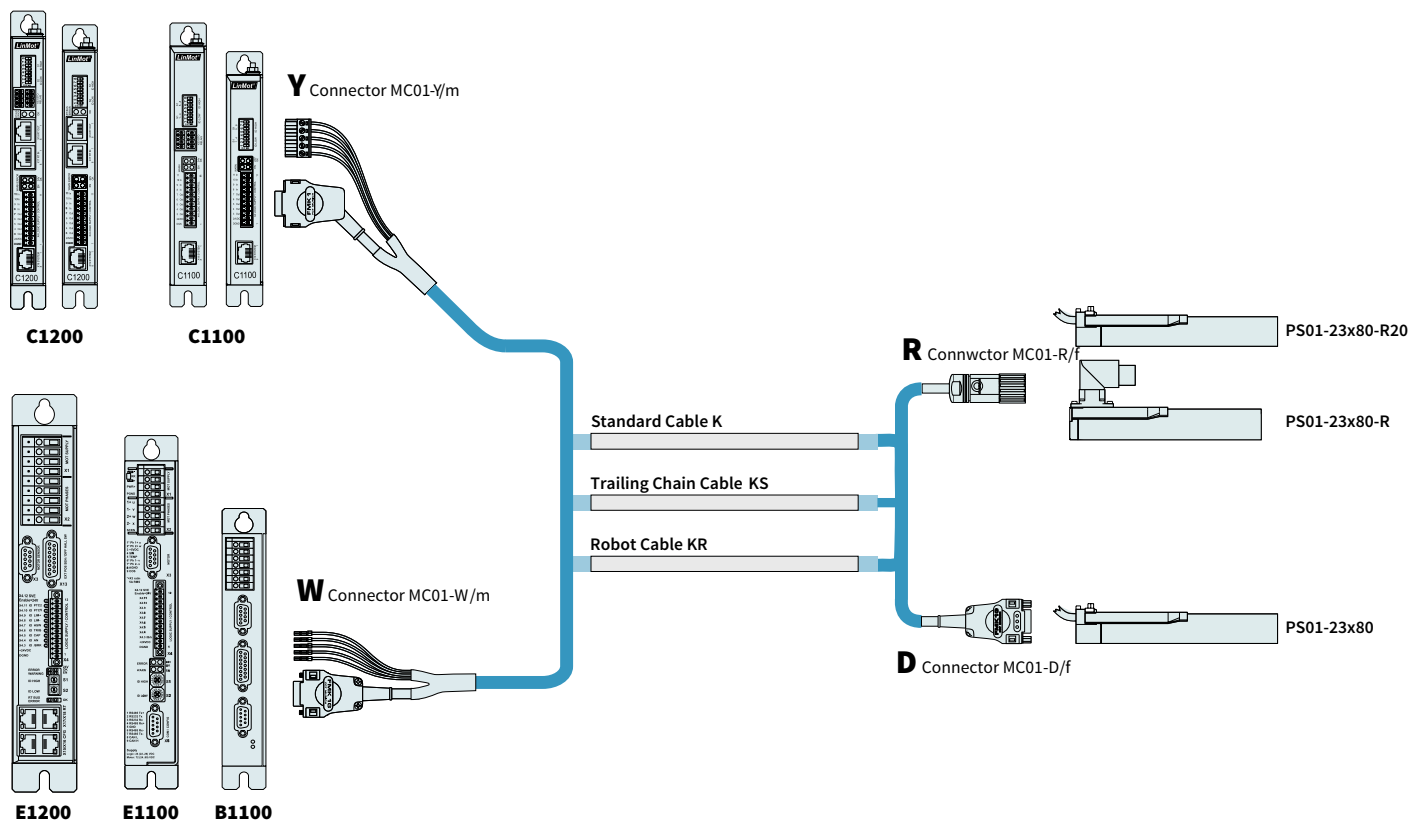


HM01-23x80/60		Linear Module 23x80 with 60 mm Stroke		
→	H-Guide	H01-23x86/60	H-Guide for P01-23x80, Stroke max 60 mm	0150-5014
		H01-23x86/60-GF	H-Guide for P01-23x80, Stroke max 60 mm	0150-5074
→	Stator	PS01-23x80-R	Stator with IP67 connector M17/9(m)	0150-1233
		PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
		PS01-23x80	Stator, cable 1 m, connector D-Sub-9(m)	0150-1201
→	Slider	PL01-12x190/150-LC	Slider 'standard LC'	0150-2582
HM01-23x80/160		Linear Module 23x80 with 160mm Stroke		
→	H-Guide	H01-23x86/160	H-Guide for P01-23x80, Stroke max 160 mm	0150-5015
		H01-23x86/160-GF	H-Guide for P01-23x80, Stroke max 160 mm	0150-5075
→	Stator	PS01-23x80-R	Stator with IP67 connector M17/9(m)	0150-1233
		PS01-23x80-R20	Stator, 0.2 m cable, IP67 con. M17/9(m)	0150-1241
		PS01-23x80	Stator, cable 1 m, connector D-Sub-9(m)	0150-1201
→	Slider	PL01-12x290/250-LC	Slider 'standard LC'	0150-2583
HM01-23x80/260		Linear Module 23x80 with 260mm Stroke		
→	H-Guide	H01-23x86/260	H-Guide for P01-23x80, Stroke max 260 mm	0150-5016
		H01-23x86/260-GF	H-Guide for P01-23x80, Stroke max 260 mm	0150-5076
→	Stator	PS01-23x80-R	Stator with IP67 connector M17/9(m)	0150-1233
		PS01-23x80-R20	Stator, 0.2m cable, IP67 con. M17/9(m)	0150-1241
		PS01-23x80	Stator, cable 1m, connector D-Sub-9(m)	0150-1201
→	Slider	PL01-12x420/380-LC	Slider 'standard LC'	0150-2585
Accessories				
→	Fan	HV01-23	Fan cooling for H01-23	0150-5050
→	MagSpring	MF01-20/H23	Flange MagSpring 20 / H-Guide 23	0250-2306
		MA01-20/H23	Adapter MagSpring 20 / H-Guide 23	0250-0116
→	Centering sleeve	HC01-09/04	Centering sleeve D9x4 mm	0150-3251

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

MOTOR CABLE

3



ORDERING INFORMATION

STANDARD CABLE

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-W/D-0.4	Motor Cable W/D, 0.4 m	0150-1947
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
K05-Y-Fe/D-	Motor Cable Y-Fe/D, Custom length	0150-1947

TRAILING CHAIN CABLE

Item	Description	Item-No.
KS05-W/R-4	Trailing Chain Cable W/R, 4 m	0150-2106
KS05-W/R-6	Trailing Chain Cable W/R, 6 m	0150-2131
KS05-W/R-8	Trailing Chain Cable W/R, 8 m	0150-2107
KS05-W/R-	Trailing Chain Cable W/R, Custom length	0150-3256
KS05-Y/R-4	Trailing Chain Cable Y/R, 4 m	0150-2433
KS05-Y/R-6	Trailing Chain Cable Y/R, 6 m	0150-2434
KS05-Y/R-8	Trailing Chain Cable Y/R, 8 m	0150-2435
KS05-Y-Fe/R-	Trailing Chain Cable Y-Fe/R, Custom length	0150-3507
KS05-Y-Fe/D-	Trailing Chain Cable Y-Fe/D, Custom length	0150-3556

ROBOT CABLE

Item	Description	Item-No.
KR05-W/R-	Robot Cable KR05-W/R, Custom length	0150-3336
KR05-Y-Fe/R-	Robot Cable KR05-Y-Fe/R, Custom length	0150-3512

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-D/f	Motor Connector D/f	0150-3025
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

MOTOR FLANGES



Item	Description	Item-No.
PF02-23x50	Flange 23x50 mm	0150-2102
PF02-23x90	Flange 23x90 mm	0150-2146

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-23	Fan cooling for H01-23 and PF02-23	0150-5050

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING



Item	Description	Item-No.
PLF01-12	Fixed End Washer Set for 12 mm sliders	0150-3085
PLF01-12-Ni	Fixed End Washer Set for 12 mm sliders nickel-plated	0150-3573
PLL02-12	Floating support for PL01-12 Sliders	0150-3111

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

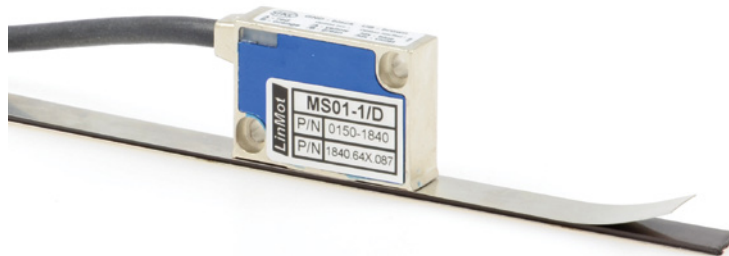
WIPERS



Item	Description	Item-No.
PA01-23/12-F	Seal front side for PS01-23x...	0150-3125

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1 μ m, A/B (for incremental 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 1 μ m, 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".