

LINEAR MOTORS P01-48x150G-HP-C-M01



- ✓ Highly dynamic drives
- ✓ Increased continuous force and acceleration
- ✓ Higher permissible operating temperatures
- ✓ Wide stroke range
- ✓ Optional with air cooling
- ✓ Wide range of applications in handling modules as well as in plant and machine construction

LINEAR MOTORS P01-48x150G-HP-C-M01

Technical Data	3
Motor Specifications	
P01-48x150G/60x100-HP-C-M01	6
P01-48x150G/90x130-HP-C-M01	7
P01-48x150G/150x190-HP-C-M01	8
P01-48x150G/210x250-HP-C-M01	9
P01-48x150G/300x340-HP-C-M01	10
P01-48x150G/420x460-HP-C-M01	11
P01-48x150G/510x550-HP-C-M01	12
P01-48x150G/600x640-HP-C-M01	13
P01-48x150G/720x760-HP-C-M01	14
P01-48x150G/810x850-HP-C-M01	15
P01-48x150G/1020x1060-HP-C-M01	16
P01-48x150G/1200x1240-HP-C-M01	17
P01-48x150G/1410x1450-HP-C-M01	18
P01-48x150G/1620x1660-HP-C-M01	19
P01-48x150G/1800x1840-HP-C-M01	20
Accessories	21

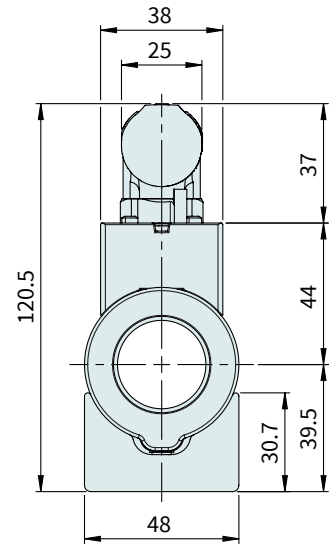
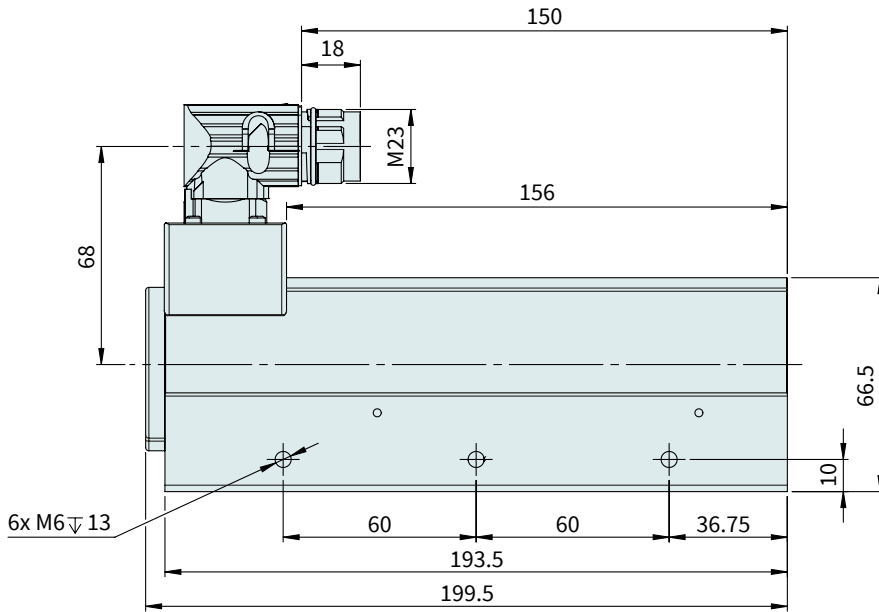
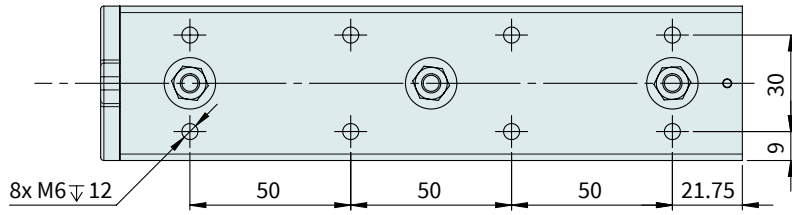


MOTOR FAMILY P01-48x150G-HP-C-M01



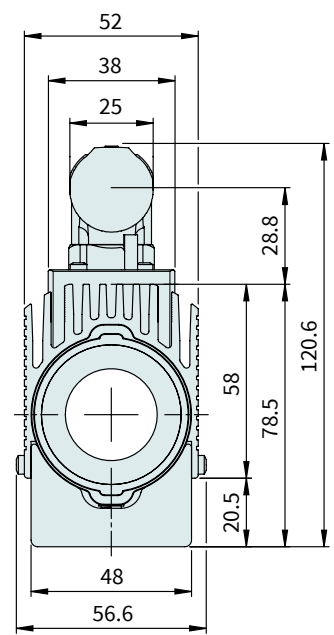
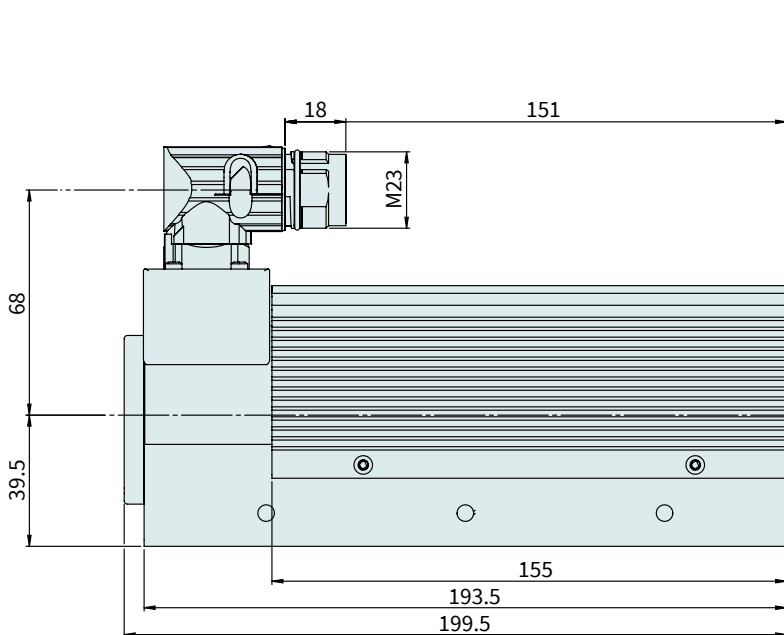
Technical Data			
Stroke			
Standard Stroke (SS)	mm (in)		≤ 1800 (≤ 70.9)
Extended Stroke (ES)	mm (in)		≤ 1840 (≤ 72.4)
Force			
Max. Force @ 48VDC	N (lbf)		360 (80.9)
Max. Force @ 72VDC	N (lbf)		360 (80.9)
Max. Cont. Force [Passive cooling / Cooling flange / Fan]	N (lbf)		80 / 94 / 157 (18 / 21 / 35)
Max. Border Force relative	%		83 / 90
Force Constant	N/A _{pk} (lbf/A _{pk})		15.65 (3.51)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)		2.7 (109.9)
Max. Velocity @ 72VDC	m/s (in/s)		4.1 (169.9)
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}		23.0
Max. Current @ 72VDC	A _{pk}		23.0
Max. Cont. Current [Passive cooling / Cooling flange / Fan]	A _{pk}		5.1 / 6.0 / 10.0
Terminal Resistance 25 °C / 120 °C	Ohm		0.81 / 1.2
Terminal Inductivity	mH		0.7
Magnetic Period	mm (in)		60 (2.35)
Thermal Data			
Max. Winding Temperature (Sensor)	°C		120
Thermal Resistance [Passive cooling / Cooling flange / Fan]	°K/W		2.65 / 1.95 / 0.7
Thermal Time Constant [Passive cooling / Cooling flange / Fan]	s		2000 / 1800 / 500
Mechanical Data			
Stator Diameter	mm (in)		48 (1.9)
Stator Length [Connector type / Cable type]	mm (in)		199.5 (7.9)
Stator Mass	g (lb)		1220 (2.7)
Slider Diameter	mm (in)		28 (1.1)
Slider Length	mm (in)		260 - 2000 (10 - 79)
Slider Mass	g (lb)		1150 - 9250 (2.5 - 20)
IP Code			IP 65
Certification			
cURus	File-No.		E354430

STATOR



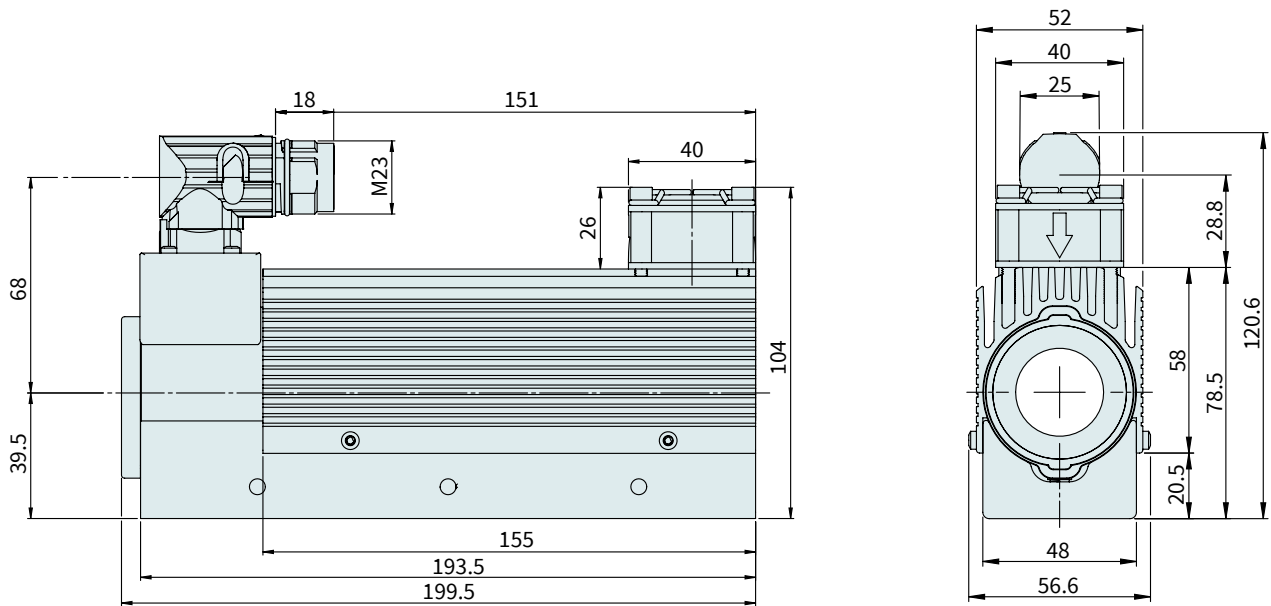
Item	Description	Item-No.
PS01-48x150G-HP-C-M01	Stator HP with IP67 Connector M23/9(m)	0150-4800

STATOR WITH HEAT SINK (ACCESSORIES)



Item	Description	Item-No.
PC01-48x150-M01	Heat sink for PS01-48x150-M01 linear motor	0150-4784

STATOR WITH HEAT SINK AND FAN (ACCESSORIES)

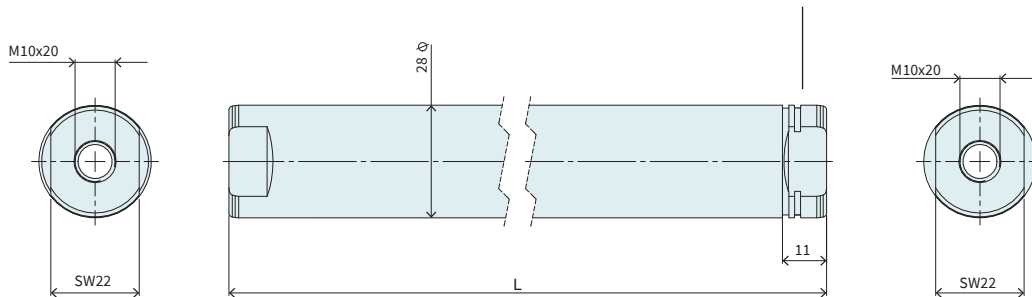


Item	Description	Item-No.
HV01-23	Fan cooling for PS01-48x150-M01 linear motor	0150-5050

SLIDER

Slider HP

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



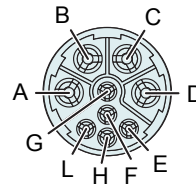
Slider High Performance				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-28x260/210-HP	Slider 'High Performance'	100	60	0150-3861
PL01-28x290/240-HP	Slider 'High Performance'	130	90	0150-3862
PL01-28x350/300-HP	Slider 'High Performance'	190	150	0150-3820
PL01-28x410/360-HP	Slider 'High Performance'	250	210	0150-3821
PL01-28x500/450-HP	Slider 'High Performance'	340	300	0150-3822
PL01-28x620/570-HP	Slider 'High Performance'	460	420	0150-3823
PL01-28x710/660-HP	Slider 'High Performance'	550	510	0150-3824
PL01-28x800/750-HP	Slider 'High Performance'	640	600	0150-3825
PL01-28x920/870-HP	Slider 'High Performance'	760	720	0150-3878
PL01-28x1010/960-HP	Slider 'High Performance'	850	810	0150-3827
PL01-28x1220/1170-HP	Slider 'High Performance'	1060	1020	0150-3828
PL01-28x1400/1350-HP	Slider 'High Performance'	1240	1200	0150-3829
PL01-28x1610/1560-HP	Slider 'High Performance'	1450	1410	0150-3830
PL01-28x1820/1770-HP	Slider 'High Performance'	1660	1620	0150-3831
PL01-28x2000/1950-HP	Slider 'High Performance'	1840	1800	0150-3832

CONNECTOR

3

Motor Connector Wiring	C-Connector	Wire color motor cable
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

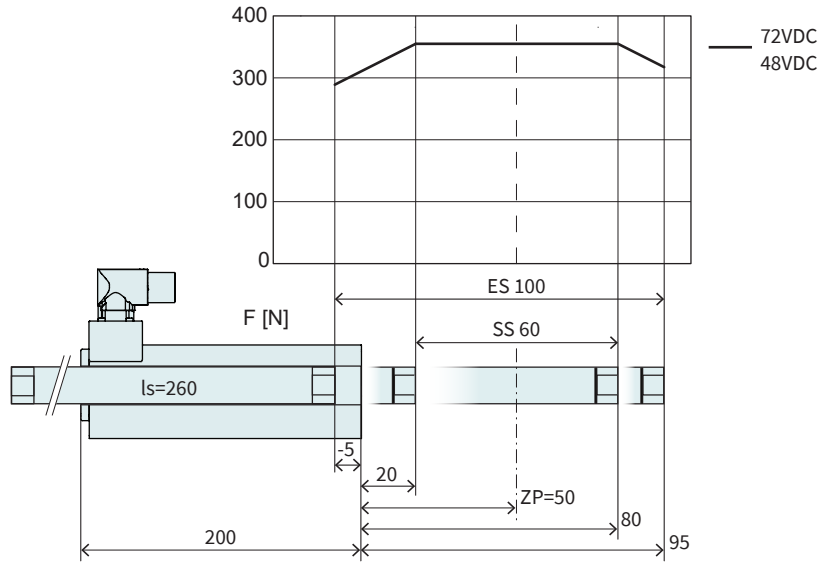
C-Connector



View: Motor Connector, plug side

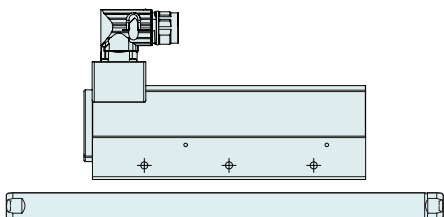
P01-48x150G/60x100-HP-C-M01

Max. Stroke: 100 mm
Peak Force: 360 N



Dimensions in mm

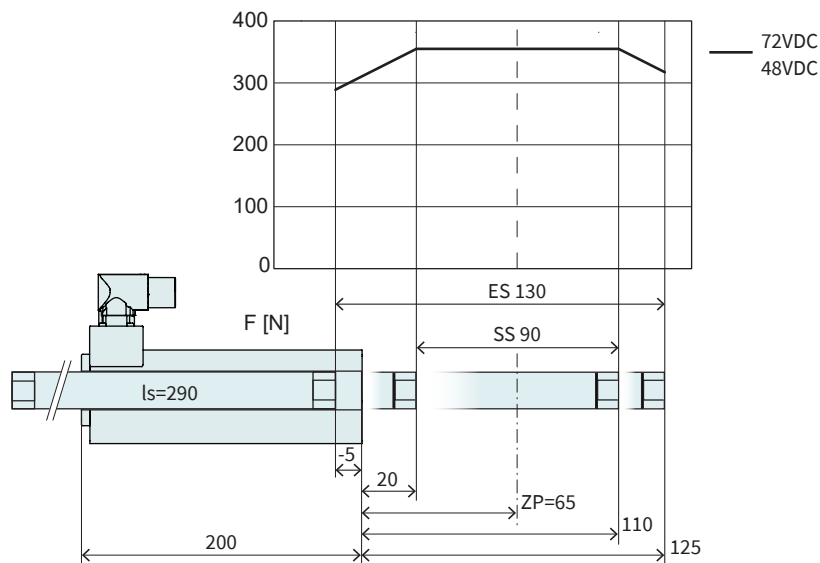
Technical Data P01-48x150G/60x100-HP-C-M01				
Stroke				
Standard Stroke (SS)	mm (in)		60 (2.35)	
Extended Stroke (ES)	mm (in)		100 (3.94)	
Force				
Max. Force @ 48VDC	N (lbf)		360 (80.9)	
Max. Force @ 72VDC	N (lbf)		360 (80.9)	
Max. Cont. Force [Passive cooling / Cooling flange / Fan]	N (lbf)		80 / 94 / 157 (18 / 21 / 35)	
Max. Border Force relative	%		83 / 90	
Force Constant	N/A _{pk} (lbf/A _{pk})		15.65 (3.51)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.7 (109.9)	
Max. Velocity @ 72VDC	m/s (in/s)		4.1 (169.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.7	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		23.0	
Max. Current @ 72VDC	A _{pk}		23.0	
Max. Cont. Current [Passive cooling / Cooling flange / Fan]	A _{pk}		5.1 / 6.0 / 10.0	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Cooling flange / Fan]	°K/W		2.65 / 1.95 / 0.7	
Thermal Time Constant [Passive cooling / Cooling flange / Fan]	s		2000 / 1800 / 500	
Mechanical Data				
Slider Length	mm (in)		260 (10)	
Slider Mass	g (lb)		1150 (2.5)	



Item	Description	Item-No.
PS01-48x150G-HP-C-M01	Stator HP with IP67 Connector M23/9(m)	0150-4800
PL01-28x260/210-HP	Slider 'High Performance'	0150-3861

P01-48x150G/90x130-HP-C-M01

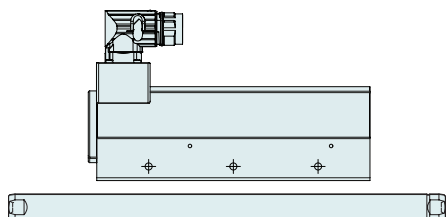
Max. Stroke: 130 mm
Peak Force: 360 N



Dimensions in mm

Technical Data P01-48x150G/90x130-HP-C-M01

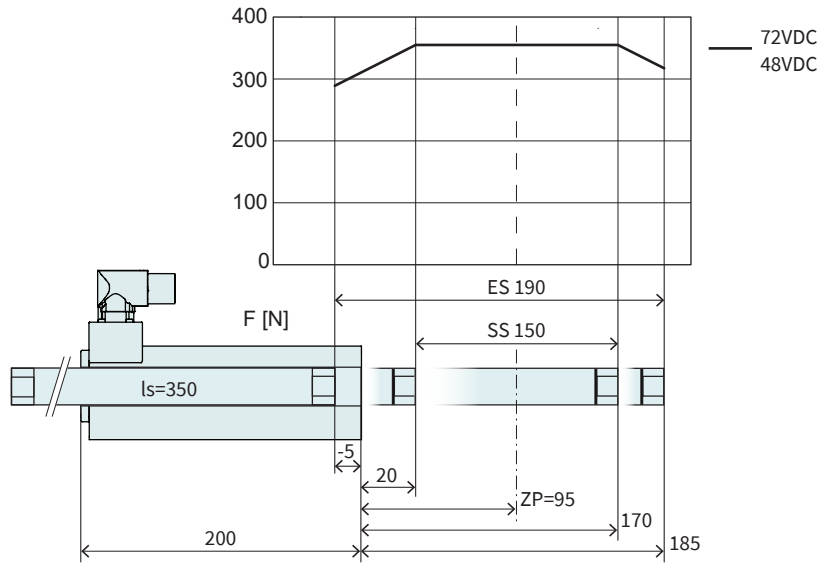
Stroke			
Standard Stroke (SS)	mm (in)		90 (3.53)
Extended Stroke (ES)	mm (in)		130 (5.12)
Force			
Max. Force @ 48VDC	N (lbf)		360 (80.9)
Max. Force @ 72VDC	N (lbf)		360 (80.9)
Max. Cont. Force [Passive cooling / Cooling flange / Fan]	N (lbf)		80 / 94 / 157 (18 / 21 / 35)
Max. Border Force relative	%		83 / 90
Force Constant	N/A _{pk} (lbf/A _{pk})		15.65 (3.51)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)		2.7 (109.9)
Max. Velocity @ 72VDC	m/s (in/s)		4.1 (169.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		±0.6
Electrical Data			
Max. Current @ 48VDC	A _{pk}		23.0
Max. Current @ 72VDC	A _{pk}		23.0
Max. Cont. Current [Passive cooling / Cooling flange / Fan]	A _{pk}		5.1 / 6.0 / 10.0
Thermal Data			
Max. Winding Temperature (Sensor)	°C		120
Thermal Resistance [Passive cooling / Cooling flange / Fan]	°K/W		2.65 / 1.95 / 0.7
Thermal Time Constant [Passive cooling / Cooling flange / Fan]	s		2000 / 1800 / 500
Mechanical Data			
Slider Length	mm (in)		290 (11)
Slider Mass	g (lb)		1290 (2.8)



Item	Description	Item-No.
PS01-48x150G-HP-C-M01	Stator HP with IP67 Connector M23/9(m)	0150-4800
PL01-28x290/240-HP	Slider 'High Performance'	0150-3862

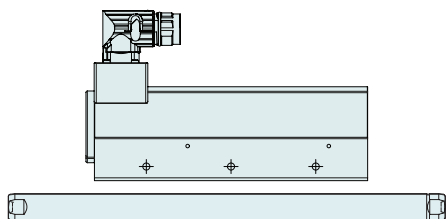
P01-48x150G/150x190-HP-C-M01

Max. Stroke: 190 mm
Peak Force: 360 N



Dimensions in mm

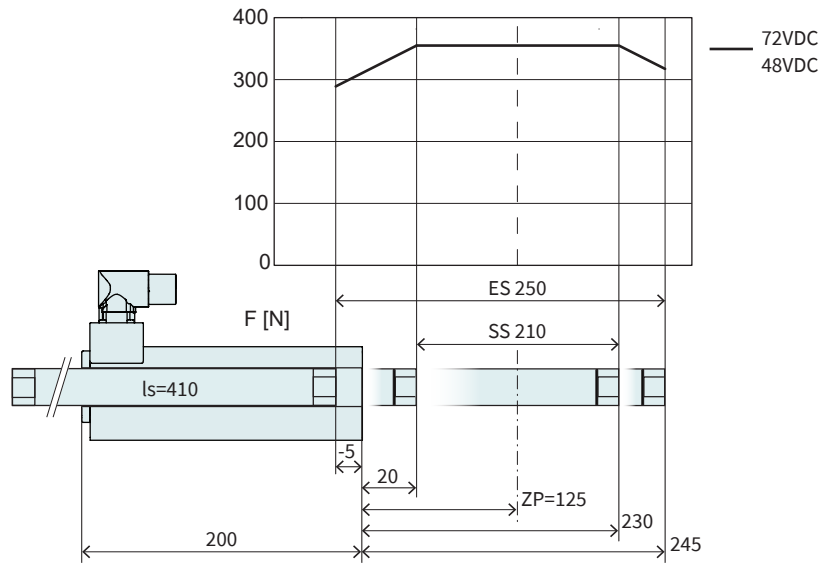
Technical Data P01-48x150G/150x190-HP-C-M01				
Stroke				
Standard Stroke (SS)	mm (in)		150 (5.91)	
Extended Stroke (ES)	mm (in)		190 (7.48)	
Force				
Max. Force @ 48VDC	N (lbf)		360 (80.9)	
Max. Force @ 72VDC	N (lbf)		360 (80.9)	
Max. Cont. Force [Passive cooling / Cooling flange / Fan]	N (lbf)		80 / 94 / 157 (18 / 21 / 35)	
Max. Border Force relative	%		83 / 90	
Force Constant	N/A _{pk} (lbf/A _{pk})		15.65 (3.51)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.7 (109.9)	
Max. Velocity @ 72VDC	m/s (in/s)		4.1 (169.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.45	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		23.0	
Max. Current @ 72VDC	A _{pk}		23.0	
Max. Cont. Current [Passive cooling / Cooling flange / Fan]	A _{pk}		5.1 / 6.0 / 10.0	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Cooling flange / Fan]	°K/W		2.65 / 1.95 / 0.7	
Thermal Time Constant [Passive cooling / Cooling flange / Fan]	s		2000 / 1800 / 500	
Mechanical Data				
Slider Length	mm (in)		350 (14)	
Slider Mass	g (lb)		1570 (3.5)	



Item	Description	Item-No.
PS01-48x150G-HP-C-M01	Stator HP with IP67 Connector M23/9(m)	0150-4800
PL01-28x350/300-HP	Slider 'High Performance'	0150-3820

P01-48x150G/210x250-HP-C-M01

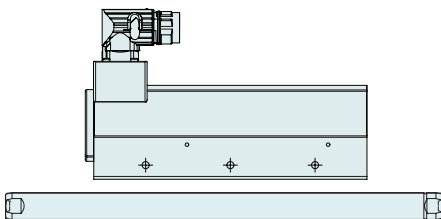
Max. Stroke: 250 mm
Peak Force: 360 N



Dimensions in mm

Technical Data P01-48x150G/210x250-HP-C-M01

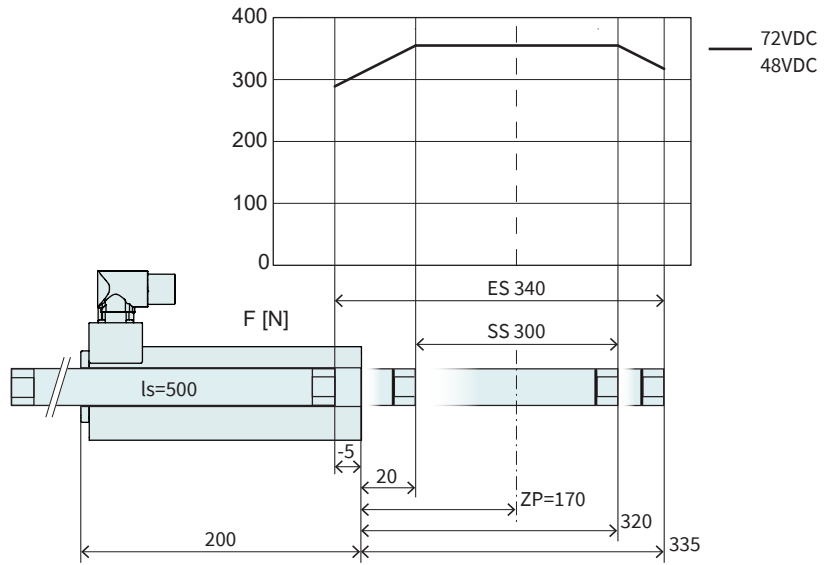
Stroke			
Standard Stroke (SS)	mm (in)	210 (8.26)	
Extended Stroke (ES)	mm (in)	250 (9.84)	
Force			
Max. Force @ 48VDC	N (lbf)	360 (80.9)	
Max. Force @ 72VDC	N (lbf)	360 (80.9)	
Max. Cont. Force [Passive cooling / Cooling flange / Fan]	N (lbf)	80 / 94 / 157 (18 / 21 / 35)	
Max. Border Force relative	%	83 / 90	
Force Constant	N/A _{pk} (lbf/A _{pk})	15.65 (3.51)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.7 (109.9)	
Max. Velocity @ 72VDC	m/s (in/s)	4.1 (169.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.4	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	23.0	
Max. Current @ 72VDC	A _{pk}	23.0	
Max. Cont. Current [Passive cooling / Cooling flange / Fan]	A _{pk}	5.1 / 6.0 / 10.0	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Cooling flange / Fan]	°K/W	2.65 / 1.95 / 0.7	
Thermal Time Constant [Passive cooling / Cooling flange / Fan]	s	2000 / 1800 / 500	
Mechanical Data			
Slider Length	mm (in)	410 (16)	
Slider Mass	g (lb)	1850 (4.1)	



Item	Description	Item-No.
PS01-48x150G-HP-C-M01	Stator HP with IP67 Connector M23/9(m)	0150-4800
PL01-28x410/360-HP	Slider 'High Performance'	0150-3821

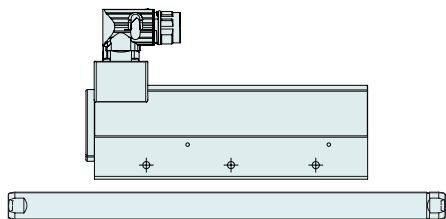
P01-48x150G/300x340-HP-C-M01

Max. Stroke: 340 mm
Peak Force: 360 N



Dimensions in mm

Technical Data P01-48x150G/300x340-HP-C-M01				
Stroke				
Standard Stroke (SS)	mm (in)		300 (11.8)	
Extended Stroke (ES)	mm (in)		340 (13.39)	
Force				
Max. Force @ 48VDC	N (lbf)		360 (80.9)	
Max. Force @ 72VDC	N (lbf)		360 (80.9)	
Max. Cont. Force [Passive cooling / Cooling flange / Fan]	N (lbf)		80 / 94 / 157 (18 / 21 / 35)	
Max. Border Force relative	%		83 / 90	
Force Constant	N/A _{pk} (lbf/A _{pk})		15.65 (3.51)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.7 (109.9)	
Max. Velocity @ 72VDC	m/s (in/s)		4.1 (169.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		23.0	
Max. Current @ 72VDC	A _{pk}		23.0	
Max. Cont. Current [Passive cooling / Cooling flange / Fan]	A _{pk}		5.1 / 6.0 / 10.0	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Cooling flange / Fan]	°K/W		2.65 / 1.95 / 0.7	
Thermal Time Constant [Passive cooling / Cooling flange / Fan]	s		2000 / 1800 / 500	
Mechanical Data				
Slider Length	mm (in)		500 (20)	
Slider Mass	g (lb)		2270 (5)	

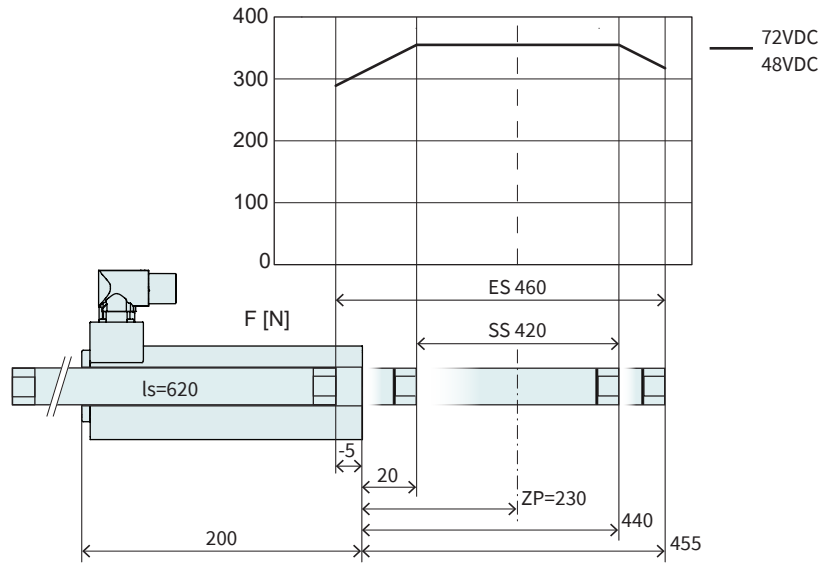


Item	Description	Item-No.
PS01-48x150G-HP-C-M01	Stator HP with IP67 Connector M23/9(m)	0150-4800
PL01-28x500/450-HP	Slider 'High Performance'	0150-3822

P01-48x150G/420x460-HP-C-M01

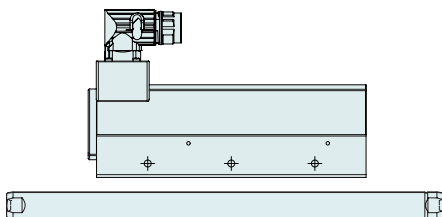
3

Max. Stroke: 460 mm
Peak Force: 360 N



Dimensions in mm

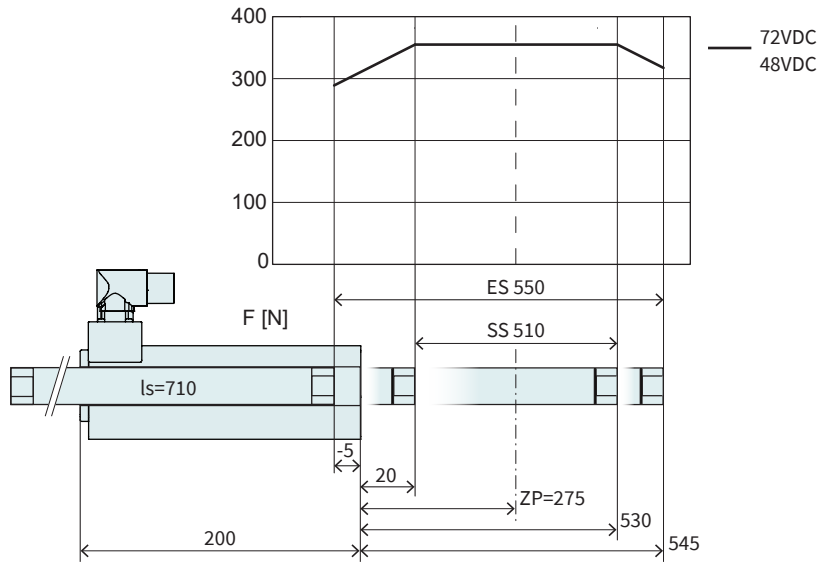
Technical Data P01-48x150G/420x460-HP-C-M01				
Stroke				
Standard Stroke (SS)	mm	(in)	420	(16.49)
Extended Stroke (ES)	mm	(in)	460	(18.11)
Force				
Max. Force @ 48VDC	N	(lbf)	360	(80.9)
Max. Force @ 72VDC	N	(lbf)	360	(80.9)
Max. Cont. Force [Passive cooling / Cooling flange / Fan]	N	(lbf)	80 / 94 / 157	(18 / 21 / 35)
Max. Border Force relative	%		83 / 90	
Force Constant	N/A _{pk}	(lbf/A _{pk})	15.65	(3.51)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.7	(109.9)
Max. Velocity @ 72VDC	m/s	(in/s)	4.1	(169.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		23.0	
Max. Current @ 72VDC	A _{pk}		23.0	
Max. Cont. Current [Passive cooling / Cooling flange / Fan]	A _{pk}		5.1 / 6.0 / 10.0	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Cooling flange / Fan]	°K/W		2.65 / 1.95 / 0.7	
Thermal Time Constant [Passive cooling / Cooling flange / Fan]	s		2000 / 1800 / 500	
Mechanical Data				
Slider Length	mm	(in)	620	(24)
Slider Mass	g	(lb)	2830	(6.2)



Item	Description	Item-No.
PS01-48x150G-HP-C-M01	Stator HP with IP67 Connector M23/9(m)	0150-4800
PL01-28x620/570-HP	Slider 'High Performance'	0150-3823

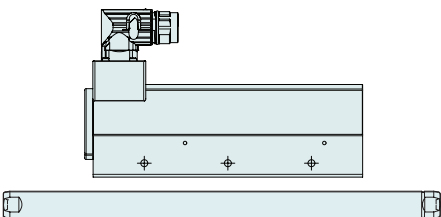
P01-48x150G/510x550-HP-C-M01

Max. Stroke: 550 mm
Peak Force: 360 N



Dimensions in mm

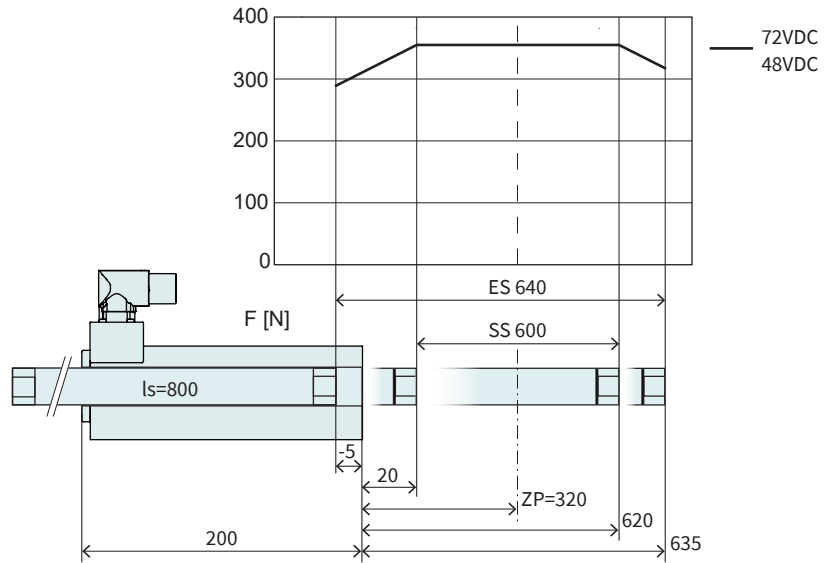
Technical Data P01-48x150G/510x550-HP-C-M01			
Stroke			
Standard Stroke (SS)	mm (in)		510 (20.1)
Extended Stroke (ES)	mm (in)		550 (21.65)
Force			
Max. Force @ 48VDC	N (lbf)		360 (80.9)
Max. Force @ 72VDC	N (lbf)		360 (80.9)
Max. Cont. Force [Passive cooling / Cooling flange / Fan]	N (lbf)		80 / 94 / 157 (18 / 21 / 35)
Max. Border Force relative	%		83 / 90
Force Constant	N/A _{pk} (lbf/A _{pk})		15.65 (3.51)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)		2.7 (109.9)
Max. Velocity @ 72VDC	m/s (in/s)		4.1 (169.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.25
Electrical Data			
Max. Current @ 48VDC	A _{pk}		23.0
Max. Current @ 72VDC	A _{pk}		23.0
Max. Cont. Current [Passive cooling / Cooling flange / Fan]	A _{pk}		5.1 / 6.0 / 10.0
Thermal Data			
Max. Winding Temperature (Sensor)	°C		120
Thermal Resistance [Passive cooling / Cooling flange / Fan]	°K/W		2.65 / 1.95 / 0.7
Thermal Time Constant [Passive cooling / Cooling flange / Fan]	s		2000 / 1800 / 500
Mechanical Data			
Slider Length	mm (in)		710 (28)
Slider Mass	g (lb)		3250 (7.2)



Item	Description	Item-No.
PS01-48x150G-HP-C-M01	Stator HP with IP67 Connector M23/9(m)	0150-4800
PL01-28x710/660-HP	Slider 'High Performance'	0150-3824

P01-48x150G/600x640-HP-C-M01

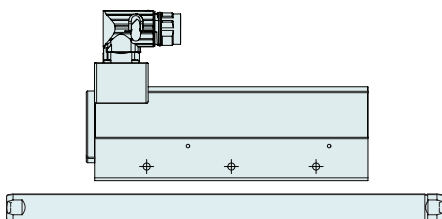
Max. Stroke: 640 mm
Peak Force: 360 N



Dimensions in mm

Technical Data P01-48x150G/600x640-HP-C-M01

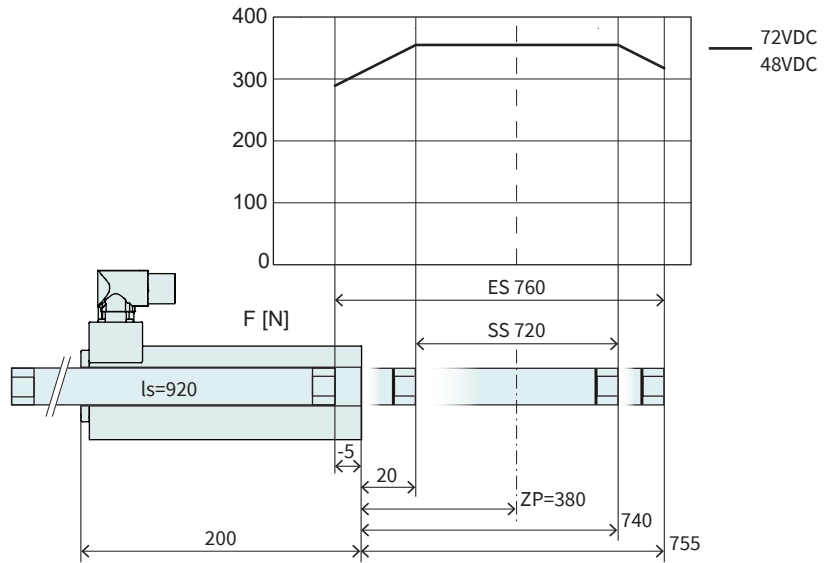
Stroke			
Standard Stroke (SS)	mm (in)		600 (23.6)
Extended Stroke (ES)	mm (in)		640 (25.20)
Force			
Max. Force @ 48VDC	N (lbf)		360 (80.9)
Max. Force @ 72VDC	N (lbf)		360 (80.9)
Max. Cont. Force [Passive cooling / Cooling flange / Fan]	N (lbf)		80 / 94 / 157 (18 / 21 / 35)
Max. Border Force relative	%		83 / 90
Force Constant	N/A _{pk} (lbf/A _{pk})		15.65 (3.51)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)		2.7 (109.9)
Max. Velocity @ 72VDC	m/s (in/s)		4.1 (169.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.2
Electrical Data			
Max. Current @ 48VDC	A _{pk}		23.0
Max. Current @ 72VDC	A _{pk}		23.0
Max. Cont. Current [Passive cooling / Cooling flange / Fan]	A _{pk}		5.1 / 6.0 / 10.0
Thermal Data			
Max. Winding Temperature (Sensor)	°C		120
Thermal Resistance [Passive cooling / Cooling flange / Fan]	°K/W		2.65 / 1.95 / 0.7
Thermal Time Constant [Passive cooling / Cooling flange / Fan]	s		2000 / 1800 / 500
Mechanical Data			
Slider Length	mm (in)		800 (31)
Slider Mass	g (lb)		3670 (8.1)



Item	Description	Item-No.
PS01-48x150G-HP-C-M01	Stator HP with IP67 Connector M23/9(m)	0150-4800
PL01-28x800/750-HP	Slider 'High Performance'	0150-3825

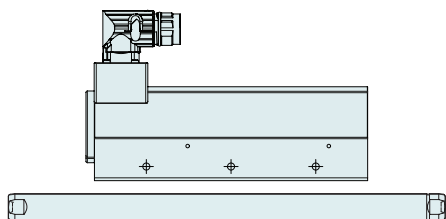
P01-48x150G/720x760-HP-C-M01

Max. Stroke: 760 mm
Peak Force: 360 N



Dimensions in mm

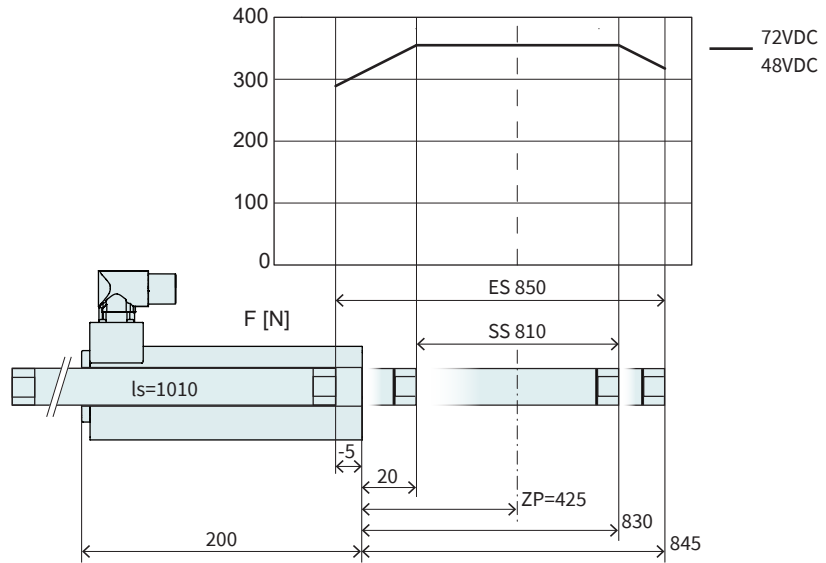
Technical Data P01-48x150G/720x760-HP-C-M01				
Stroke				
Standard Stroke (SS)	mm (in)		720 (28.3)	
Extended Stroke (ES)	mm (in)		760 (29.92)	
Force				
Max. Force @ 48VDC	N (lbf)		360 (80.9)	
Max. Force @ 72VDC	N (lbf)		360 (80.9)	
Max. Cont. Force [Passive cooling / Cooling flange / Fan]	N (lbf)		80 / 94 / 157 (18 / 21 / 35)	
Max. Border Force relative	%		83 / 90	
Force Constant	N/A _{pk} (lbf/A _{pk})		15.65 (3.51)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.7 (109.9)	
Max. Velocity @ 72VDC	m/s (in/s)		4.1 (169.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		23.0	
Max. Current @ 72VDC	A _{pk}		23.0	
Max. Cont. Current [Passive cooling / Cooling flange / Fan]	A _{pk}		5.1 / 6.0 / 10.0	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Cooling flange / Fan]	°K/W		2.65 / 1.95 / 0.7	
Thermal Time Constant [Passive cooling / Cooling flange / Fan]	s		2000 / 1800 / 500	
Mechanical Data				
Slider Length	mm (in)		920 (36)	
Slider Mass	g (lb)		4230 (9.3)	



Item	Description	Item-No.
PS01-48x150G-HP-C-M01	Stator HP with IP67 Connector M23/9(m)	0150-4800
PL01-28x920/870-HP	Slider 'High Performance'	0150-3878

P01-48x150G/810x850-HP-C-M01

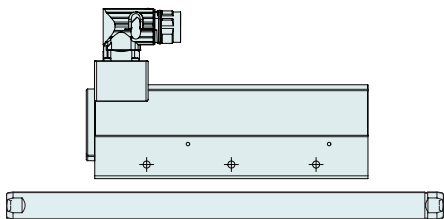
Max. Stroke: 850 mm
Peak Force: 360 N



Dimensions in mm

Technical Data P01-48x150G/810x850-HP-C-M01

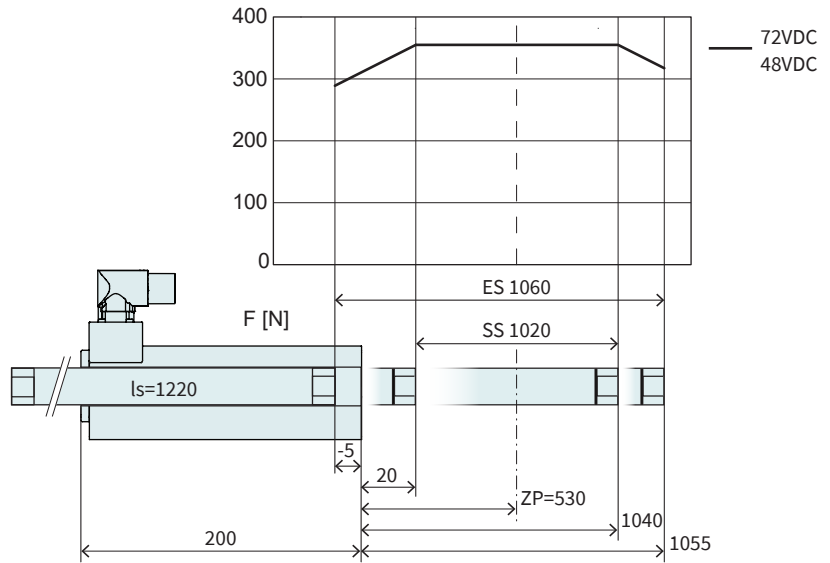
Stroke			
Standard Stroke (SS)	mm (in)		810 (31.89)
Extended Stroke (ES)	mm (in)		850 (33.46)
Force			
Max. Force @ 48VDC	N (lbf)		360 (80.9)
Max. Force @ 72VDC	N (lbf)		360 (80.9)
Max. Cont. Force [Passive cooling / Cooling flange / Fan]	N (lbf)		80 / 94 / 157 (18 / 21 / 35)
Max. Border Force relative	%		83 / 90
Force Constant	N/A _{pk} (lbf/A _{pk})		15.65 (3.51)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)		2.7 (109.9)
Max. Velocity @ 72VDC	m/s (in/s)		4.1 (169.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.2
Electrical Data			
Max. Current @ 48VDC	A _{pk}		23.0
Max. Current @ 72VDC	A _{pk}		23.0
Max. Cont. Current [Passive cooling / Cooling flange / Fan]	A _{pk}		5.1 / 6.0 / 10.0
Thermal Data			
Max. Winding Temperature (Sensor)	°C		120
Thermal Resistance [Passive cooling / Cooling flange / Fan]	°K/W		2.65 / 1.95 / 0.7
Thermal Time Constant [Passive cooling / Cooling flange / Fan]	s		2000 / 1800 / 500
Mechanical Data			
Slider Length	mm (in)		1010 (40)
Slider Mass	g (lb)		4650 (10)



Item	Description	Item-No.
PS01-48x150G-HP-C-M01	Stator HP with IP67 Connector M23/9(m)	0150-4800
PL01-28x1010/960-HP	Slider 'High Performance'	0150-3827

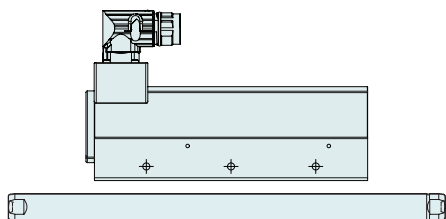
P01-48x150G/1020x1060-HP-C-M01

Max. Stroke: 1060 mm
Peak Force: 360 N



Dimensions in mm

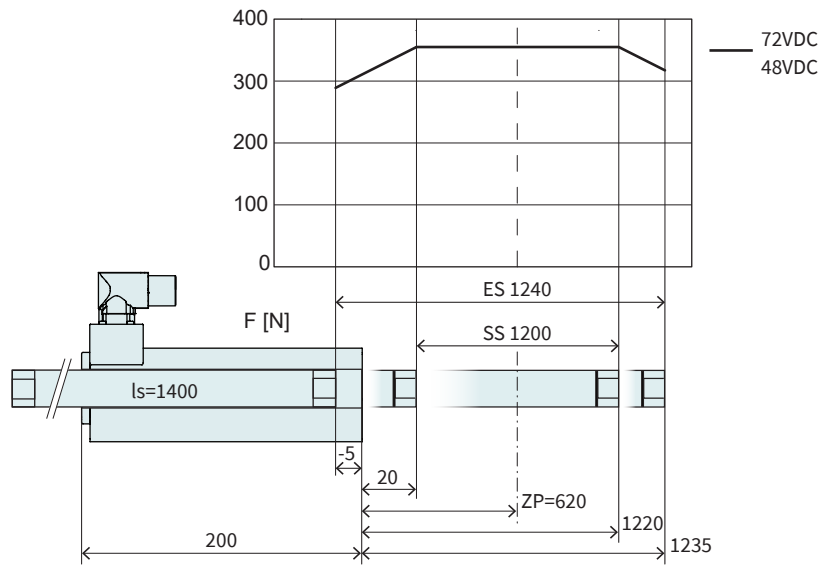
Technical Data P01-48x150G/1020x1060-HP-C-M01				
Stroke				
Standard Stroke (SS)	mm (in)		1020	(40.2)
Extended Stroke (ES)	mm (in)		1060	(41.73)
Force				
Max. Force @ 48VDC	N (lbf)		360	(80.9)
Max. Force @ 72VDC	N (lbf)		360	(80.9)
Max. Cont. Force [Passive cooling / Cooling flange / Fan]	N (lbf)		80 / 94 / 157	(18 / 21 / 35)
Max. Border Force relative	%		83 / 90	
Force Constant	N/A _{pk} (lbf/A _{pk})		15.65	(3.51)
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.7	(109.9)
Max. Velocity @ 72VDC	m/s (in/s)		4.1	(169.9)
Position Detection				
Repeatability	mm (in)		±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		23.0	
Max. Current @ 72VDC	A _{pk}		23.0	
Max. Cont. Current [Passive cooling / Cooling flange / Fan]	A _{pk}		5.1 / 6.0 / 10.0	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Cooling flange / Fan]	°K/W		2.65 / 1.95 / 0.7	
Thermal Time Constant [Passive cooling / Cooling flange / Fan]	s		2000 / 1800 / 500	
Mechanical Data				
Slider Length	mm (in)		1220	(48)
Slider Mass	g (lb)		5620	(12)



Item	Description	Item-No.
PS01-48x150G-HP-C-M01	Stator HP with IP67 Connector M23/9(m)	0150-4800
PL01-28x1220/1170-HP	Slider 'High Performance'	0150-3828

P01-48x150G/1200x1240-HP-C-M01

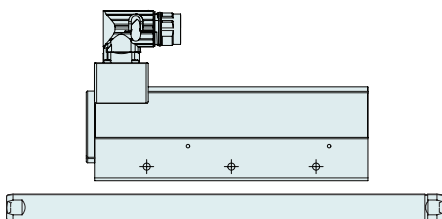
Max. Stroke: 1240 mm
Peak Force: 360 N



Dimensions in mm

Technical Data P01-48x150G/1200x1240-HP-C-M01

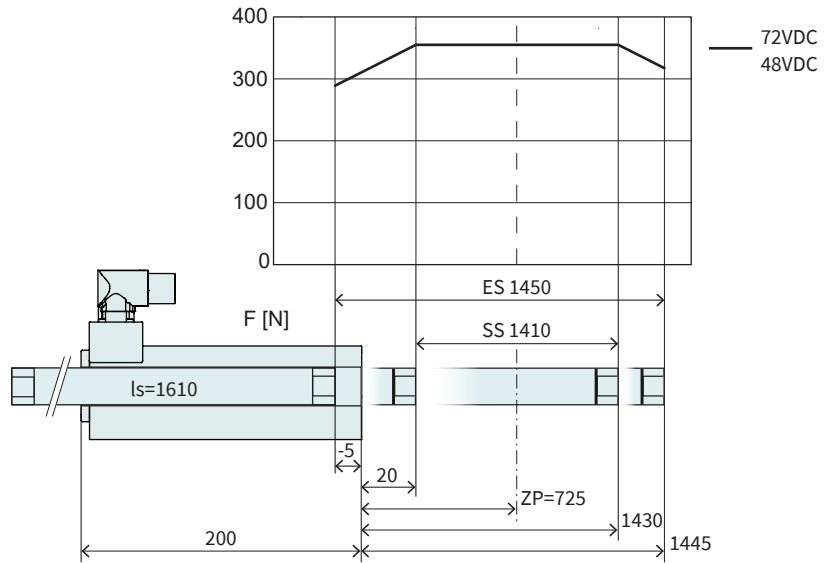
Stroke				
Standard Stroke (SS)	mm	(in)		1200 (47.2)
Extended Stroke (ES)	mm	(in)		1240 (48.82)
Force				
Max. Force @ 48VDC	N	(lbf)		360 (80.9)
Max. Force @ 72VDC	N	(lbf)		360 (80.9)
Max. Cont. Force [Passive cooling / Cooling flange / Fan]	N	(lbf)		80 / 94 / 157 (18 / 21 / 35)
Max. Border Force relative		%		83 / 90
Force Constant	N/A _{pk}	(lbf/A _{pk})		15.65 (3.51)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)		2.7 (109.9)
Max. Velocity @ 72VDC	m/s	(in/s)		4.1 (169.9)
Position Detection				
Repeatability	mm	(in)		±0.05 (±0.002)
Linearity		%		± 0.15
Electrical Data				
Max. Current @ 48VDC		A _{pk}		23.0
Max. Current @ 72VDC		A _{pk}		23.0
Max. Cont. Current [Passive cooling / Cooling flange / Fan]		A _{pk}		5.1 / 6.0 / 10.0
Thermal Data				
Max. Winding Temperature (Sensor)		°C		120
Thermal Resistance [Passive cooling / Cooling flange / Fan]		*K/W		2.65 / 1.95 / 0.7
Thermal Time Constant [Passive cooling / Cooling flange / Fan]		s		2000 / 1800 / 500
Mechanical Data				
Slider Length	mm	(in)		1400 (55)
Slider Mass		g	(lb)	6460 (14)



Item	Description	Item-No.
PS01-48x150G-HP-C-M01	Stator HP with IP67 Connector M23/9(m)	Q150-4800
PL01-28x1400/1350-HP	Slider 'High Performance'	Q150-3829

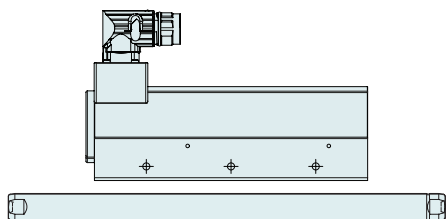
P01-48x150G/1410x1450-HP-C-M01

Max. Stroke: 1450 mm
Peak Force: 360 N



Dimensions in mm

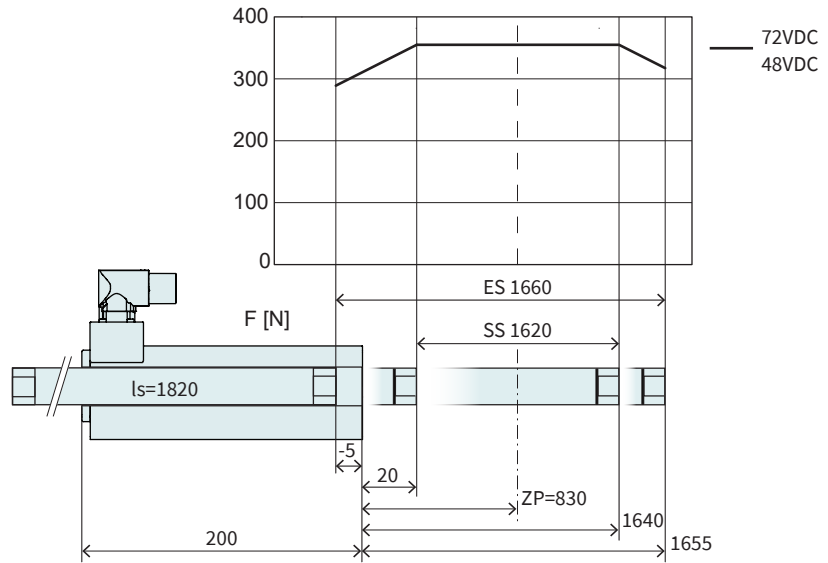
Technical Data P01-48x150G/1410x1450-HP-C-M01				
Stroke				
Standard Stroke (SS)	mm (in)		1410 (55.49)	
Extended Stroke (ES)	mm (in)		1450 (57.09)	
Force				
Max. Force @ 48VDC	N (lbf)		360 (80.9)	
Max. Force @ 72VDC	N (lbf)		360 (80.9)	
Max. Cont. Force [Passive cooling / Cooling flange / Fan]	N (lbf)		80 / 94 / 157 (18 / 21 / 35)	
Max. Border Force relative	%		83 / 90	
Force Constant	N/A _{pk} (lbf/A _{pk})		15.65 (3.51)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		2.7 (109.9)	
Max. Velocity @ 72VDC	m/s (in/s)		4.1 (169.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		23.0	
Max. Current @ 72VDC	A _{pk}		23.0	
Max. Cont. Current [Passive cooling / Cooling flange / Fan]	A _{pk}		5.1 / 6.0 / 10.0	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Cooling flange / Fan]	°K/W		2.65 / 1.95 / 0.7	
Thermal Time Constant [Passive cooling / Cooling flange / Fan]	s		2000 / 1800 / 500	
Mechanical Data				
Slider Length	mm (in)		1610 (63)	
Slider Mass	g (lb)		7440 (16)	



Item	Description	Item-No.
PS01-48x150G-HP-C-M01	Stator HP with IP67 Connector M23/9(m)	0150-4800
PL01-28x1610/1560-HP	Slider 'High Performance'	0150-3830

P01-48x150G/1620x1660-HP-C-M01

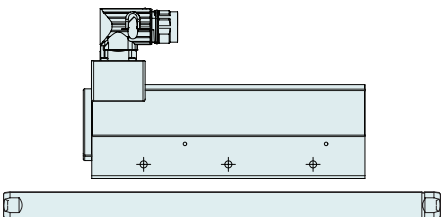
Max. Stroke: 1660 mm
Peak Force: 360 N



Dimensions in mm

Technical Data P01-48x150G/1620x1660-HP-C-M01

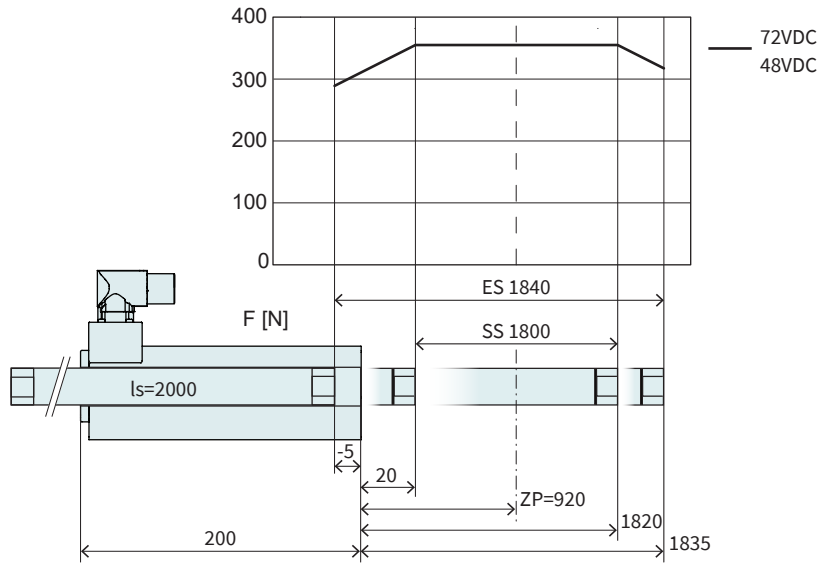
Stroke			
Standard Stroke (SS)	mm (in)		1620 (63.79)
Extended Stroke (ES)	mm (in)		1660 (65.35)
Force			
Max. Force @ 48VDC	N (lbf)		360 (80.9)
Max. Force @ 72VDC	N (lbf)		360 (80.9)
Max. Cont. Force [Passive cooling / Cooling flange / Fan]	N (lbf)		80 / 94 / 157 (18 / 21 / 35)
Max. Border Force relative	%		83 / 90
Force Constant	N/A _{pk} (lbf/A _{pk})		15.65 (3.51)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)		2.7 (109.9)
Max. Velocity @ 72VDC	m/s (in/s)		4.1 (169.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.15
Electrical Data			
Max. Current @ 48VDC	A _{pk}		23.0
Max. Current @ 72VDC	A _{pk}		23.0
Max. Cont. Current [Passive cooling / Cooling flange / Fan]	A _{pk}		5.1 / 6.0 / 10.0
Thermal Data			
Max. Winding Temperature (Sensor)	°C		120
Thermal Resistance [Passive cooling / Cooling flange / Fan]	°K/W		2.65 / 1.95 / 0.7
Thermal Time Constant [Passive cooling / Cooling flange / Fan]	s		2000 / 1800 / 500
Mechanical Data			
Slider Length	mm (in)		1820 (72)
Slider Mass	g (lb)		8410 (19)



Item	Description	Item-No.
PS01-48x150G-HP-C-M01	Stator HP with IP67 Connector M23/9(m)	0150-4800
PL01-28x1820/1770-HP	Slider 'High Performance'	0150-3831

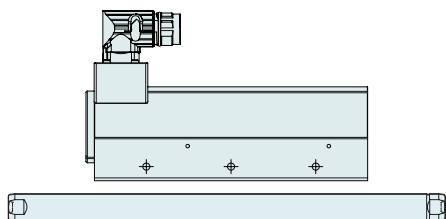
P01-48x150G/1800x1840-HP-C-M01

Max. Stroke: 1840 mm
Peak Force: 360 N



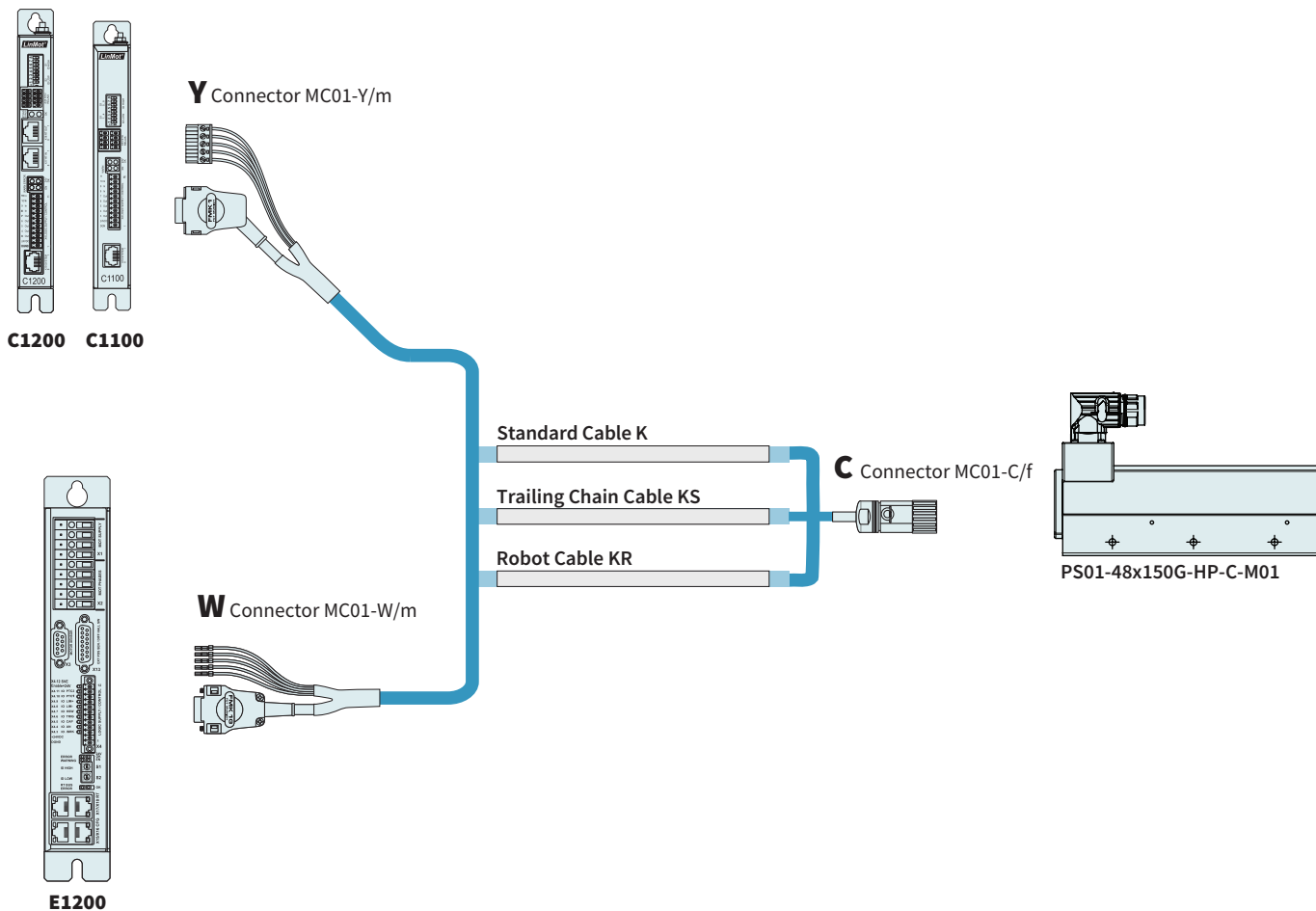
Dimensions in mm

Technical Data P01-48x150G/1800x1840-HP-C-M01			
Stroke			
Standard Stroke (SS)	mm (in)	1800	(70.9)
Extended Stroke (ES)	mm (in)	1840	(72.44)
Force			
Max. Force @ 48VDC	N (lbf)	360	(80.9)
Max. Force @ 72VDC	N (lbf)	360	(80.9)
Max. Cont. Force [Passive cooling / Cooling flange / Fan]	N (lbf)	80 / 94 / 157	(18 / 21 / 35)
Max. Border Force relative	%	83 / 90	
Force Constant	N/A _{pk} (lbf/A _{pk})	15.65	(3.51)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	2.7	(109.9)
Max. Velocity @ 72VDC	m/s (in/s)	4.1	(169.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	23.0	
Max. Current @ 72VDC	A _{pk}	23.0	
Max. Cont. Current [Passive cooling / Cooling flange / Fan]	A _{pk}	5.1 / 6.0 / 10.0	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Cooling flange / Fan]	°K/W	2.65 / 1.95 / 0.7	
Thermal Time Constant [Passive cooling / Cooling flange / Fan]	s	2000 / 1800 / 500	
Mechanical Data			
Slider Length	mm (in)	2000	(79)
Slider Mass	g (lb)	9250	(20)



Item	Description	Item-No.
PS01-48x150G-HP-C-M01	Stator HP with IP67 Connector M23/9(m)	0150-4800
PL01-28x2000/1950-HP	Slider 'High Performance'	0150-3832

Motor Cable



Note: Linear Motor does not run on servo drive series E100 and E1000 as well as on the series B1100 and E1100.

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/C, 2 m	0150-2429
K15-Y/C-4	Motor Cable Y/C, 4 m	0150-2430
K15-Y/C-6	Motor Cable Y/C, 6 m	0150-2431
K15-Y/C-8	Motor Cable Y/C, 8 m	0150-2432
K15-Y-Fe/C-	Motor Cable Y-Fe/C, 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

HEAT SINK



Item	Description	Item-No.
PC01-48x150-M01	Heat sink for PS01-48x150-M01 linear motor	0150-4784

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS



Item	Description	Item-No.
HV01-23	Fan cooling for PS01-48x150-M01 linear motor	0150-5050

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

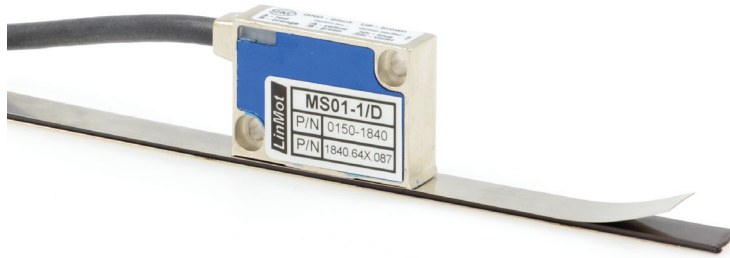
SLIDER MOUNTING



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".

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".

Area with horizontal dotted lines for notes.