LINEAR MOTORS P01-37x120

- 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 P01-37x120

Technical Data ____ **199**

Motor Specifications

P01-37x120/40x120-LC **202**

P01-37x120/100x180-LC **203**

P01-37x120/200x280-LC **204**

P01-37x120/300x380-LC **205**

P01-37x120/400x480-LC **206**

P01-37x120/500x580-LC **207**

P01-37x120/600x680-LC **208**

P01-37x120/700x780-LC **209**

P01-37x120/800x880-LC **210**

P01-37x120/1000x1080-LC **211**

P01-37x120/1200x1280-LC **212**

P01-37x120/1400x1480-LC **213**

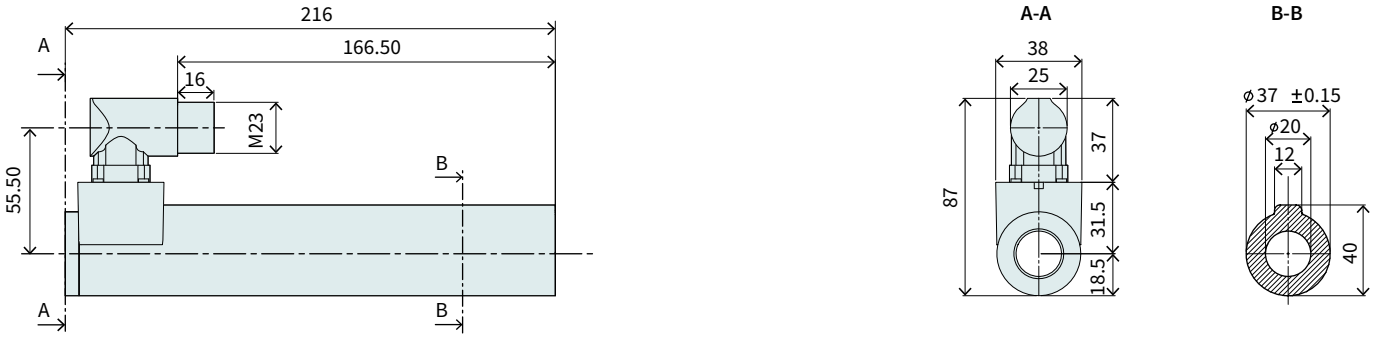
Linear Guides ____ **214**

Accessories ____ **216**

MOTOR FAMILY P01-37x120

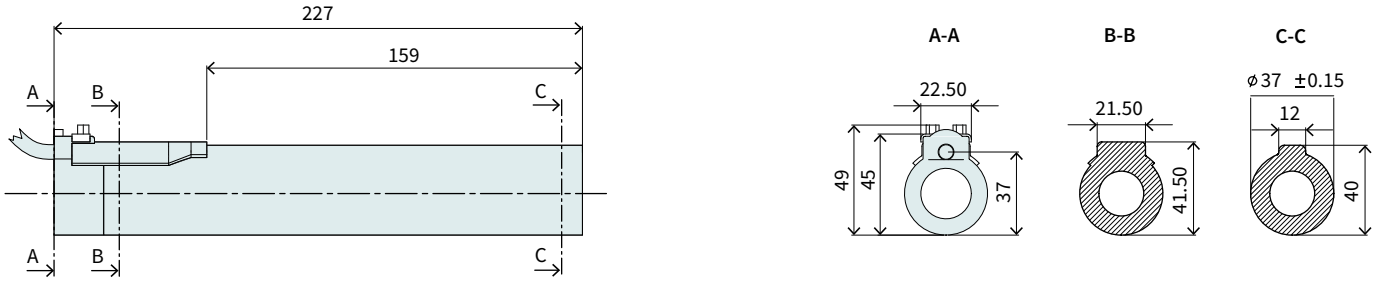
Technical Data				
Stroke				
Standard Stroke (SS)	mm	(in)	≤ 1400	(≤ 55.1)
Extended Stroke (ES)	mm	(in)	≤ 1480	(≤ 58.3)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	163	(36.7)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		≤ 67	
Force Constant	N/A_{pk}	(lbf/A_{pk})	20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.2	(129.9)
Position Detection				
Position Resolution	mm	(in)	0.005	(0.0002)
Repeatability	mm	(in)	±0.05	(±0.002)
Position Resolution with ES	mm	(in)	0.001	(0.00004)
Repeatability with ES	mm	(in)	±0.01	(±0.0004)
Linearity with ES	mm	(in)	±0.01	(±0.0004)
Electrical Data				
Max. Current @ 48VDC	A_{pk}		6.2	
Max. Current @ 72VDC	A_{pk}		7.9	
Max. Cont. Current [Passive cooling /Fan / Fluid]	A_{pk}		1.4 / 2.5 / -	
Terminal Resistance 25 °C / 120 °C	Ohm		6.2 / 8.5	
Terminal Inductivity	mH		3.1	
Magnetic Period	mm	(in)	40	(1.57)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Stator Diameter	mm	(in)	37	(1.5)
Stator Length [Connector type / Cable type]	mm	(in)	216 / 227	(8.5 / 8.9)
Stator Mass	g	(lb)	740	(1.6)
Slider Diameter	mm	(in)	20	(0.79)
Slider Length	mm	(in)	240 - 1600	(9.4 - 63)
Slider Mass	g	(lb)	490 - 3620	(1.1 - 7.96)
IP Code			IP 65	

STATOR CONNECTOR TYPE



Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223

STATOR CABLE TYPE

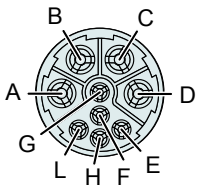


Item	Description	Item-No.
PS01-37x120	Stator, 1.5 m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2 m Cable, IP67 St. M23/9(m)	0150-1237

CONNECTOR

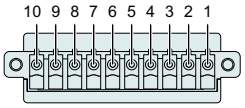
Motor Connector Wiring	PS01-37x120-C PS01-37x120-C20	PS01-37x120	Wire color motor cable
	C-Connector	P-Connector	
Ph 1+	A	1	red
Ph 1-	B	2	pink
Ph 2+	C	3	blue
Ph 2-	D	4	grey
+5VDC	E	5	white
GND	F	6	inner shield
Sin	G	7	yellow
Cos	H	8	green
Temp.	L	9	black
Shield	Housing	10	outer Shield

C-Connector



View: Motor Connector, plug side

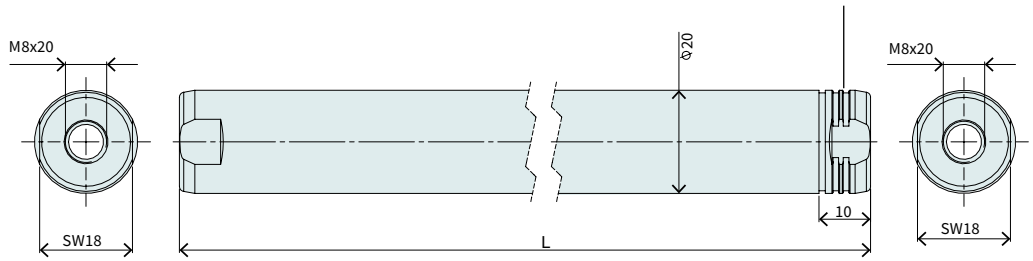
P-Connector



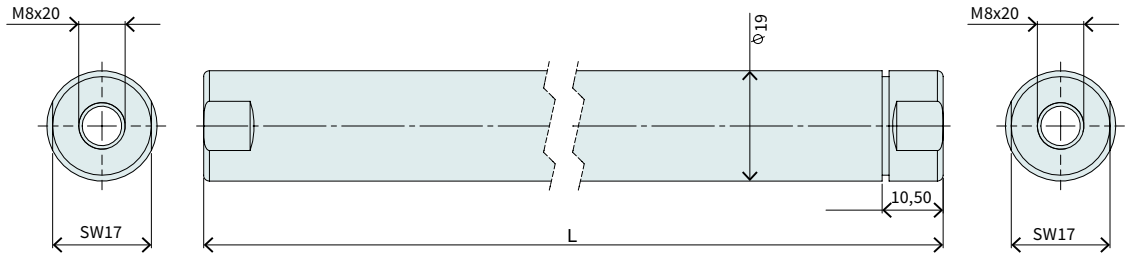
SLIDER

Slider Standard / Heavy Duty

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



High-Clearance Slider



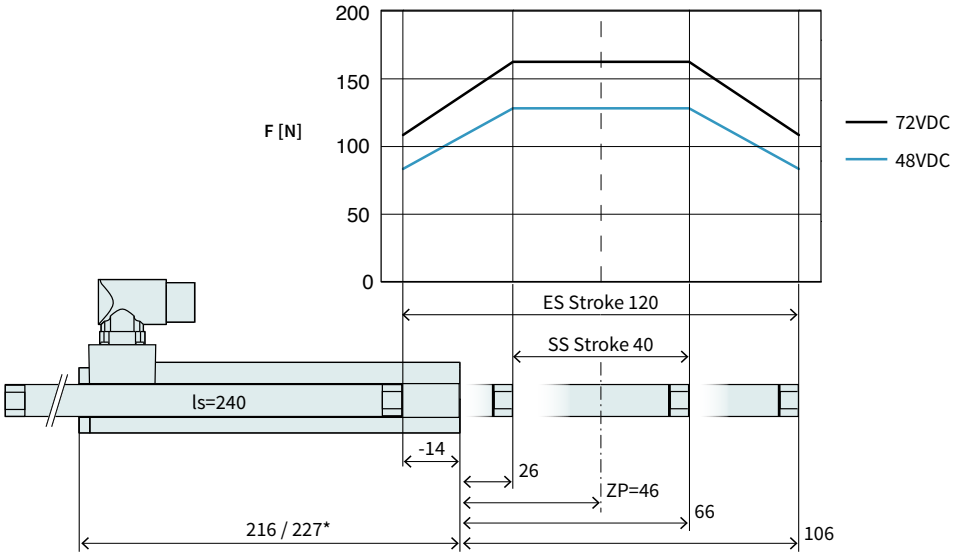
Slider Standard				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-20x240/180-LC	Slider 'standard LC'	120	40	0150-2560
PL01-20x300/240-LC	Slider 'standard LC'	180	100	0150-2561
PL01-20x400/340-LC	Slider 'standard LC'	280	200	0150-2562
PL01-20x500/440-LC	Slider 'standard LC'	380	300	0150-2563
PL01-20x600/540-LC	Slider 'standard LC'	480	400	0150-2564
PL01-20x700/640-LC	Slider 'standard LC'	580	500	0150-2565
PL01-20x800/740-LC	Slider 'standard LC'	680	600	0150-2566
PL01-20x900/840-LC	Slider 'standard LC'	780	700	0150-2567
PL01-20x1000/940-LC	Slider 'standard LC'	880	800	0150-2568
PL01-20x1200/1140-LC	Slider 'standard LC'	1080	1000	0150-2569
PL01-20x1400/1340-LC	Slider 'standard LC'	1280	1200	0150-2570
PL01-20x1600/1540-LC	Slider 'standard LC'	1480	1400	0150-2571

Slider Heavy Duty				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL02-20x240/180-LC	Slider 'heavy duty LC'	120	40	0150-2572
PL02-20x300/240-LC	Slider 'heavy duty LC'	180	100	0150-2573
PL02-20x400/340-LC	Slider 'heavy duty LC'	280	200	0150-2574
PL02-20x500/440-LC	Slider 'heavy duty LC'	380	300	0150-2575
PL02-20x600/540-LC	Slider 'heavy duty LC'	480	400	0150-2576
PL02-20x700/640-LC	Slider 'heavy duty LC'	580	500	0150-2577
PL02-20x800/740-LC	Slider 'heavy duty LC'	680	600	0150-2578
PL02-20x900/840-LC	Slider 'heavy duty LC'	780	700	0150-2579

High-Clearance Slider				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-19x240/160	Slider 'high clearance'	100	80	0150-1488
PL01-19x300/220	Slider 'high clearance'	160	140	0150-1489
PL01-19x395/320	Slider 'high clearance'	260	240	0150-1452
PL01-19x500/420	Slider 'high clearance'	360	340	0150-1455
PL01-19x600/520	Slider 'high clearance'	460	440	0150-1456
PL01-19x700/620	Slider 'high clearance'	560	540	0150-1457

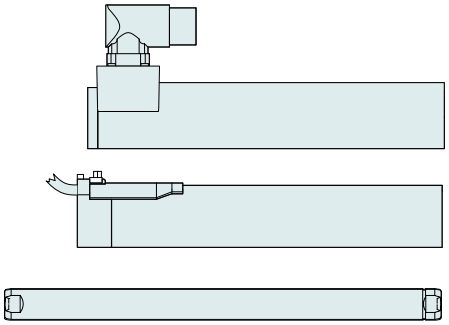
P01-37x120/40x120-LC

Max. Stroke: 120 mm
Peak Force: 163 N



Dimensions in mm
* Cable Type

Technical Data P01-37x120/40x120-LC				
Stroke				
Standard Stroke (SS)	mm	(in)	40	(1.57)
Extended Stroke (ES)	mm	(in)	120	(4.71)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	163	(36.7)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		67	
Force Constant	N/A_{pk}	(lbf/A_{pk})	20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.2	(129.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.5	
Electrical Data				
Max. Current @ 48VDC	A_{pk}		6.2	
Max. Current @ 72VDC	A_{pk}		7.9	
Max. Cont. Current [Passive cooling /Fan / Fluid]	A_{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm	(in)	240	(9.4)
Slider Mass	g	(lb)	490	(1.08)

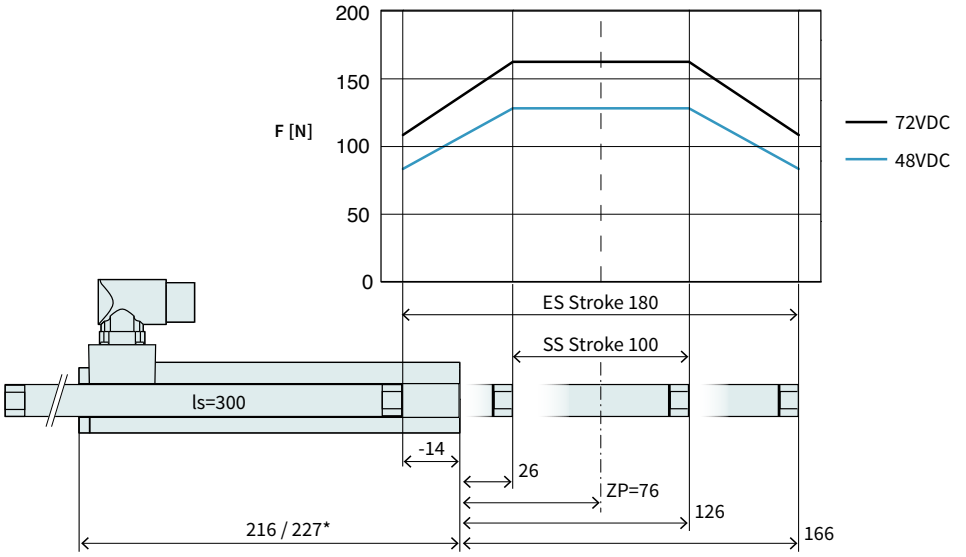


Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x240/180-LC	Slider 'standard LC'	0150-2560
PL02-20x240/180-LC	Slider 'heavy duty LC'	0150-2572
PL01-19x240/160*	Slider 'high clearance'	0150-1448

* With this slider, the motor specifications above change.

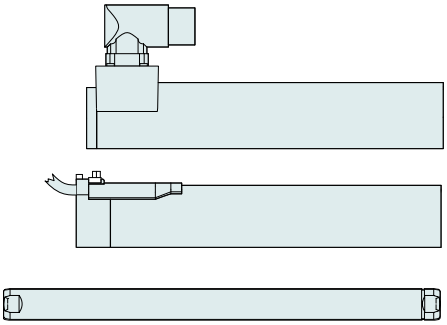
P01-37x120/100x180-LC

Max. Stroke: 180 mm
Peak Force: 163 N



Dimensions in mm
* Cable Type

Technical Data P01-37x120/100x180-LC				
Stroke				
Standard Stroke (SS)	mm	(in)	100	(3.93)
Extended Stroke (ES)	mm	(in)	180	(7.08)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	163	(36.7)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		67	
Force Constant	N/A_{pk}	(lbf/A_{pk})	20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.2	(129.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.4	
Electrical Data				
Max. Current @ 48VDC	A_{pk}		6.2	
Max. Current @ 72VDC	A_{pk}		7.9	
Max. Cont. Current [Passive cooling /Fan / Fluid]	A_{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm	(in)	300	(12)
Slider Mass	g	(lb)	630	(1.39)

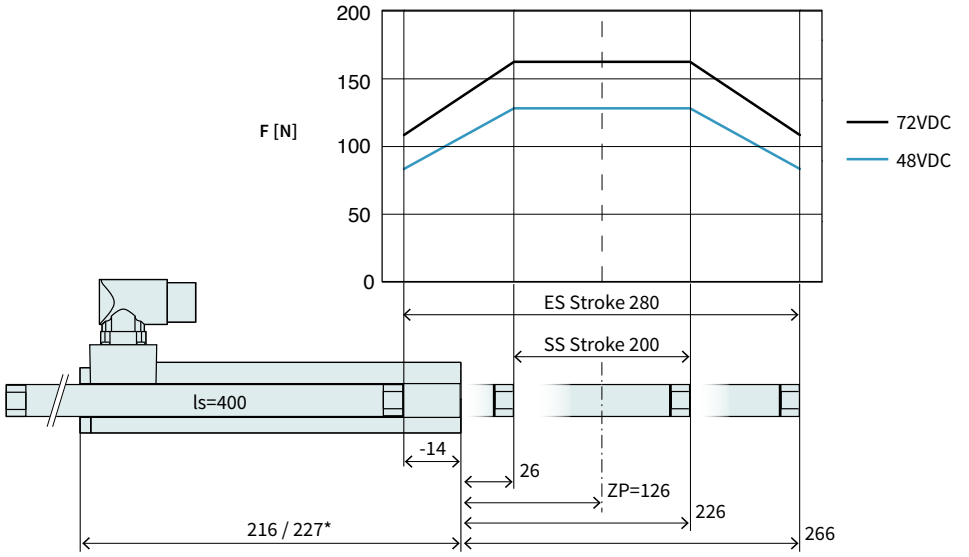


Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x300/240-LC	Slider 'standard LC'	0150-2561
PL02-20x300/240-LC	Slider 'heavy duty LC'	0150-2573
PL01-19x300/220*	Slider 'high clearance'	0150-1449

* With this slider, the motor specifications above change.

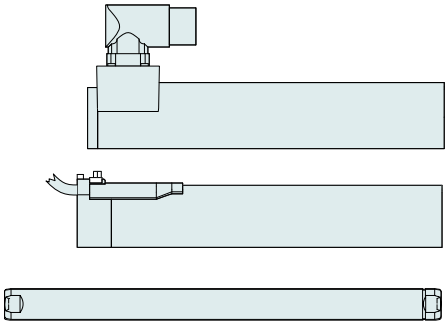
P01-37x120/200x280-LC

Max. Stroke: 280 mm
Peak Force: 163 N



Dimensions in mm
* Cable Type

Technical Data P01-37x120/200x280-LC				
Stroke				
Standard Stroke (SS)	mm	(in)	200	(7.86)
Extended Stroke (ES)	mm	(in)	280	(10.99)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	163	(36.7)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		67	
Force Constant	N/A_{pk}	(lbf/A_{pk})	20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.2	(129.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current @ 48VDC	A_{pk}		6.2	
Max. Current @ 72VDC	A_{pk}		7.9	
Max. Cont. Current [Passive cooling /Fan / Fluid]	A_{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm	(in)	400	(16)
Slider Mass	g	(lb)	860	(1.89)

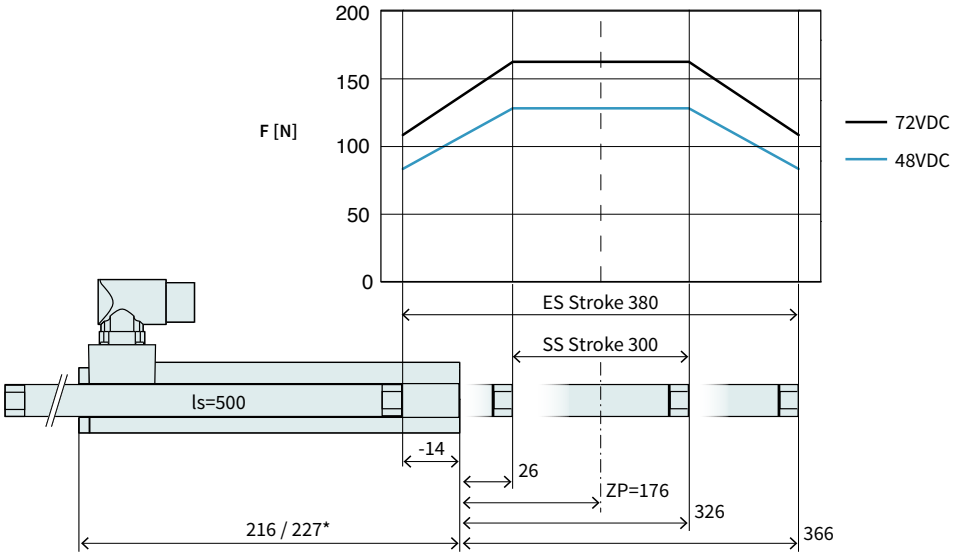


Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x400/340-LC	Slider 'standard LC'	0150-2562
PL02-20x400/340-LC	Slider 'heavy duty LC'	0150-2574
PL01-19x395/320*	Slider 'high clearance'	0150-1452

* With this slider, the motor specifications above change.

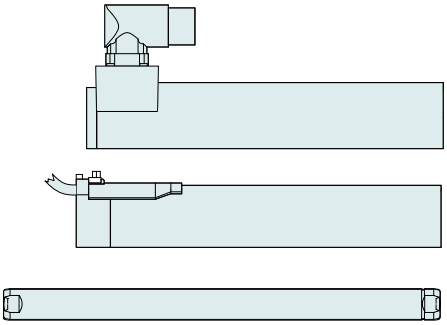
P01-37x120/300x380-LC

Max. Stroke: 380 mm
Peak Force: 163 N



Dimensions in mm
* Cable Type

Technical Data P01-37x120/300x380-LC				
Stroke				
Standard Stroke (SS)	mm	(in)	300	(11.8)
Extended Stroke (ES)	mm	(in)	380	(14.99)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	163	(36.7)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		67	
Force Constant	N/A_{pk}	(lbf/A_{pk})	20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.2	(129.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current @ 48VDC	A_{pk}		6.2	
Max. Current @ 72VDC	A_{pk}		7.9	
Max. Cont. Current [Passive cooling /Fan / Fluid]	A_{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm	(in)	500	(20)
Slider Mass	g	(lb)	1090	(2.4)

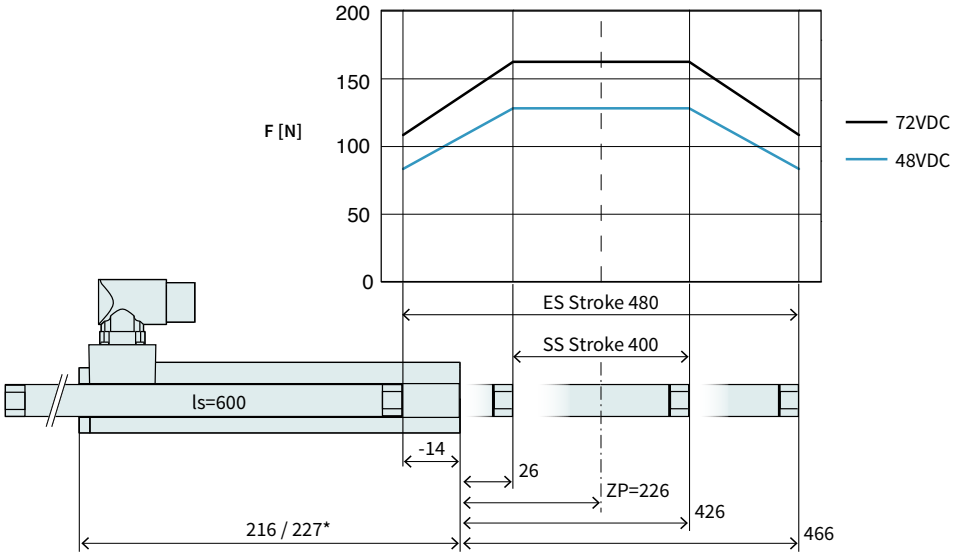


Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x500/440-LC	Slider 'standard LC'	0150-2563
PL02-20x500/440-LC	Slider 'heavy duty LC'	0150-2575
PL01-19x500/420*	Slider 'high clearance'	0150-1455

* With this slider, the motor specifications above change.

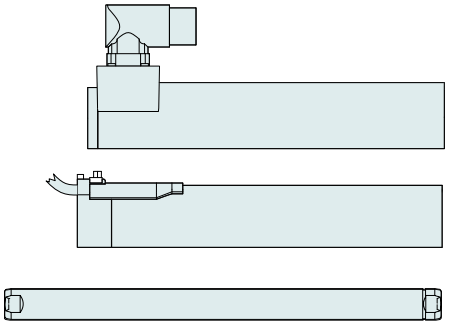
P01-37x120/400x480-LC

Max. Stroke: 480 mm
Peak Force: 163 N



Dimensions in mm
* Cable Type

Technical Data P01-37x120/400x480-LC				
Stroke				
Standard Stroke (SS)	mm	(in)	400	(15.69)
Extended Stroke (ES)	mm	(in)	480	(18.89)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	163	(36.7)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		67	
Force Constant	N/A_{pk}	(lbf/A_{pk})	20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.2	(129.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A_{pk}		6.2	
Max. Current @ 72VDC	A_{pk}		7.9	
Max. Cont. Current [Passive cooling /Fan / Fluid]	A_{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm	(in)	600	(24)
Slider Mass	g	(lb)	1330	(2.93)

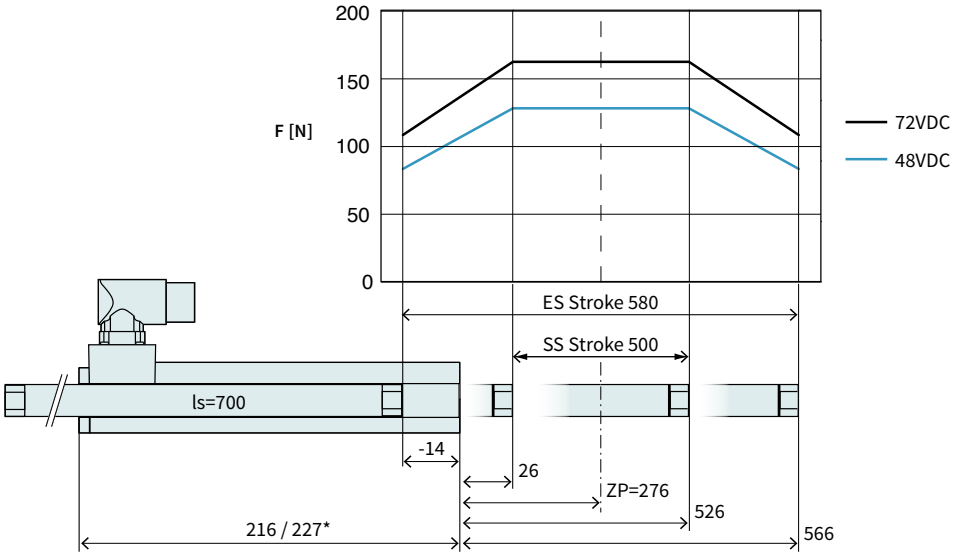


Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x600/540-LC	Slider 'standard LC'	0150-2564
PL02-20x600/540-LC	Slider 'heavy duty LC'	0150-2576
PL01-19x600/520*	Slider 'high clearance'	0150-1456

* With this slider, the motor specifications above change.

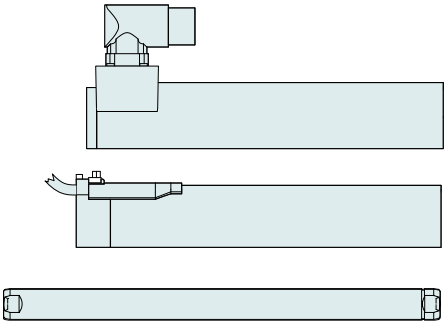
P01-37x120/500x580-LC

Max. Stroke: 580 mm
Peak Force: 163 N



Dimensions in mm
* Cable Type

Technical Data P01-37x120/500x580-LC				
Stroke				
Standard Stroke (SS)	mm	(in)	500	(19.69)
Extended Stroke (ES)	mm	(in)	580	(22.8)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	163	(36.7)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		67	
Force Constant	N/A_{pk}	(lbf/A_{pk})	20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.2	(129.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A_{pk}		6.2	
Max. Current @ 72VDC	A_{pk}		7.9	
Max. Cont. Current [Passive cooling /Fan / Fluid]	A_{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm	(in)	700	(28)
Slider Mass	g	(lb)	1560	(3.43)

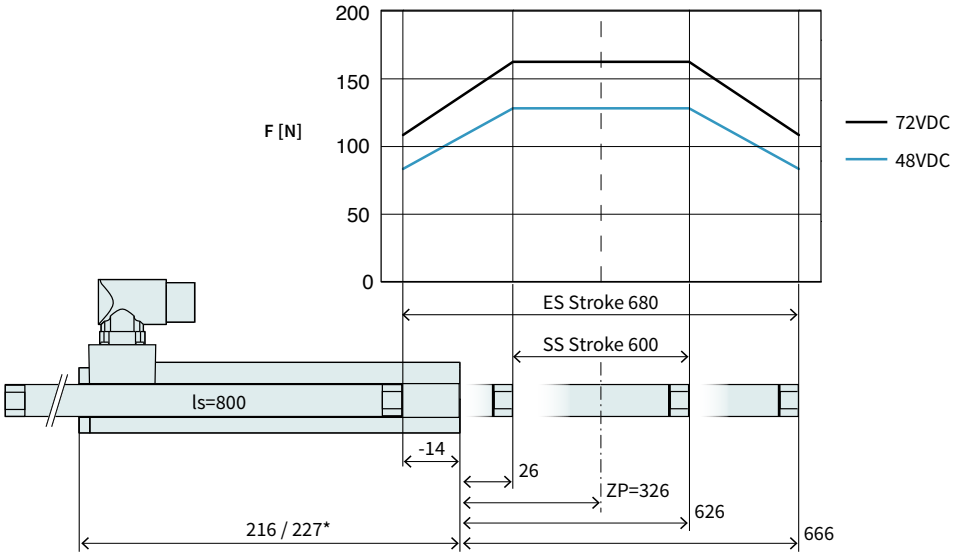


Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x700/640-LC	Slider 'standard LC'	0150-2565
PL02-20x700/640-LC	Slider 'heavy duty LC'	0150-2577
PL01-19x700/620*	Slider 'high clearance'	0150-1457

* With this slider, the motor specifications above change.

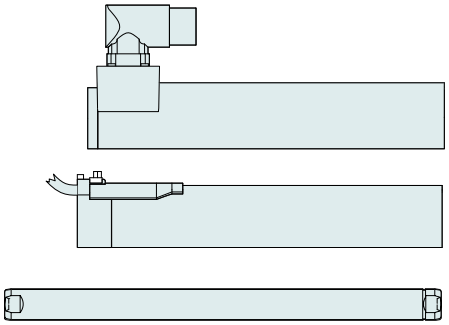
P01-37x120/600x680-LC

Max. Stroke: 680 mm
Peak Force: 163 N



Dimensions in mm
* Cable Type

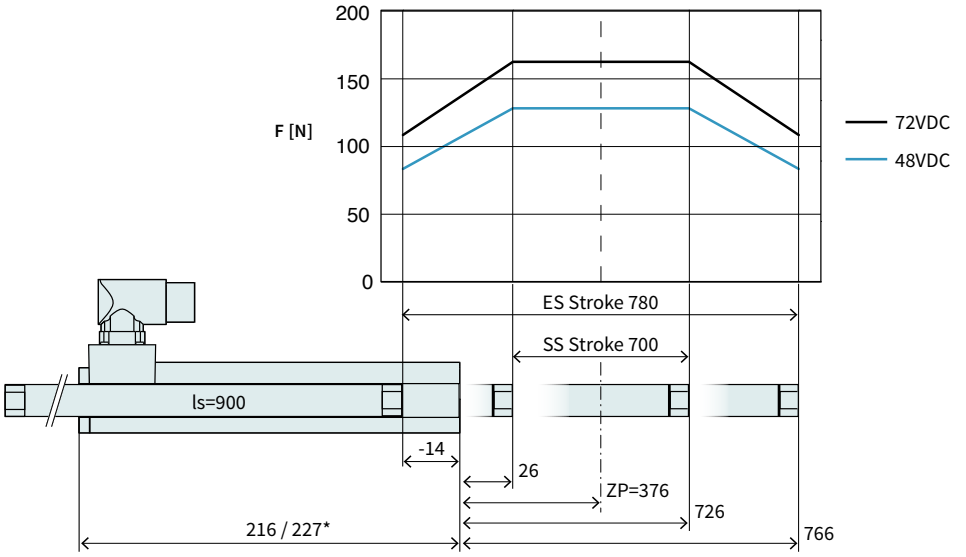
Technical Data P01-37x120/600x680-LC				
Stroke				
Standard Stroke (SS)	mm	(in)	600	(23.6)
Extended Stroke (ES)	mm	(in)	680	(26.8)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	163	(36.7)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		67	
Force Constant	N/A_{pk}	(lbf/A_{pk})	20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.2	(129.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A_{pk}		6.2	
Max. Current @ 72VDC	A_{pk}		7.9	
Max. Cont. Current [Passive cooling /Fan / Fluid]	A_{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm	(in)	800	(31)
Slider Mass	g	(lb)	1790	(3.94)



Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x800/740-LC	Slider 'standard LC'	0150-2566
PL02-20x800/740-LC	Slider 'heavy duty LC'	0150-2578

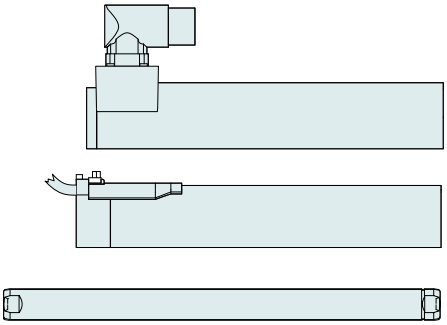
P01-37x120/700x780-LC

Max. Stroke: 780 mm
Peak Force: 163 N



Dimensions in mm
* Cable Type

Technical Data P01-37x120/700x780-LC				
Stroke				
Standard Stroke (SS)	mm	(in)	700	(27.6)
Extended Stroke (ES)	mm	(in)	780	(30.69)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	163	(36.7)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		67	
Force Constant	N/A_{pk}	(lbf/A_{pk})	20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.2	(129.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A_{pk}		6.2	
Max. Current @ 72VDC	A_{pk}		7.9	
Max. Cont. Current [Passive cooling /Fan / Fluid]	A_{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm	(in)	900	(35)
Slider Mass	g	(lb)	2020	(4.44)

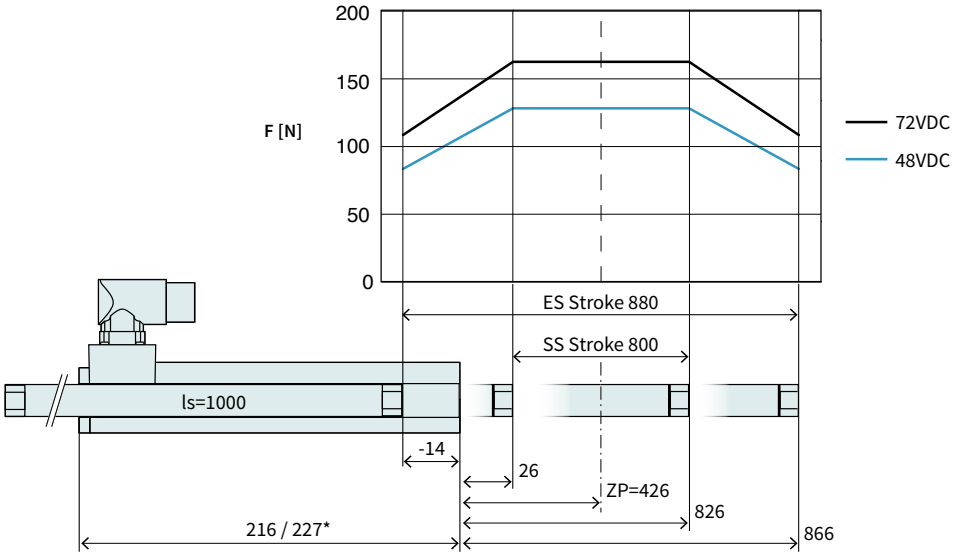


Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x900/840-LC	Slider 'standard LC'	0150-2567
PL02-20x900/840-LC	Slider 'heavy duty LC'	0150-2579

3

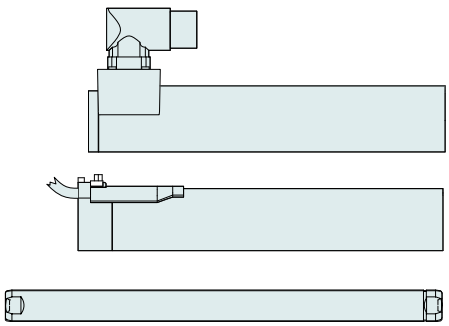
P01-37x120/800x880-LC

Max. Stroke: 880 mm
Peak Force: 163 N



Dimensions in mm
* Cable Type

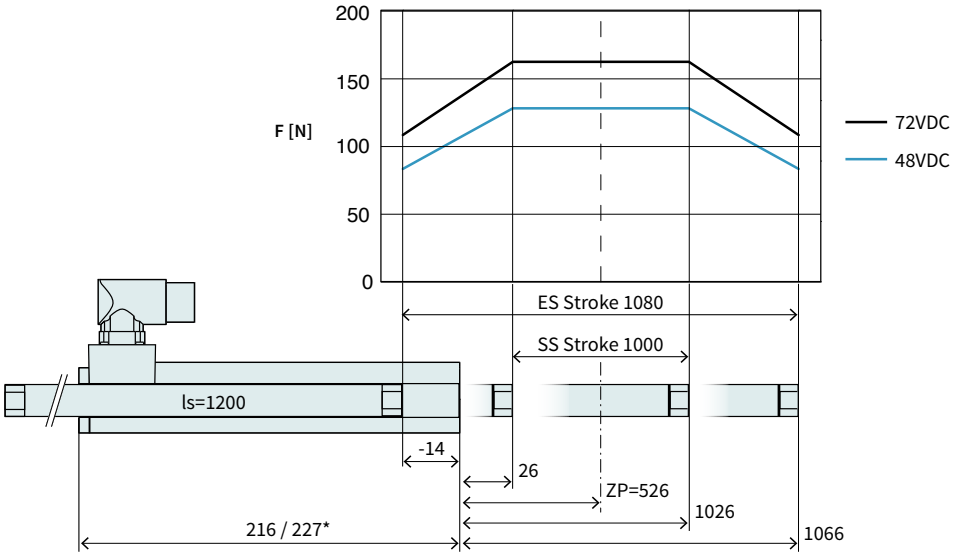
Technical Data P01-37x120/800x880-LC				
Stroke				
Standard Stroke (SS)	mm	(in)	800	(31.49)
Extended Stroke (ES)	mm	(in)	880	(34.6)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	163	(36.7)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		67	
Force Constant	N/A_{pk}	(lbf/A_{pk})	20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.2	(129.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A_{pk}		6.2	
Max. Current @ 72VDC	A_{pk}		7.9	
Max. Cont. Current [Passive cooling /Fan / Fluid]	A_{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm	(in)	1000	(39)
Slider Mass	g	(lb)	2230	(4.91)



Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x1000/940-LC	Slider 'standard LC'	0150-2568

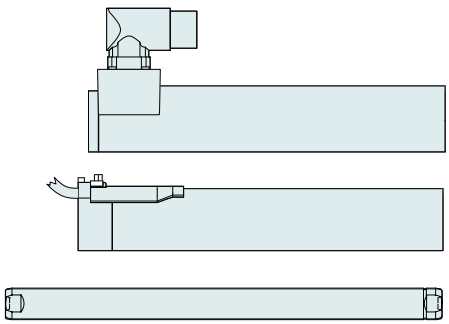
P01-37x120/1000x1080-LC

Max. Stroke: 1080 mm
Peak Force: 163 N



Dimensions in mm
* Cable Type

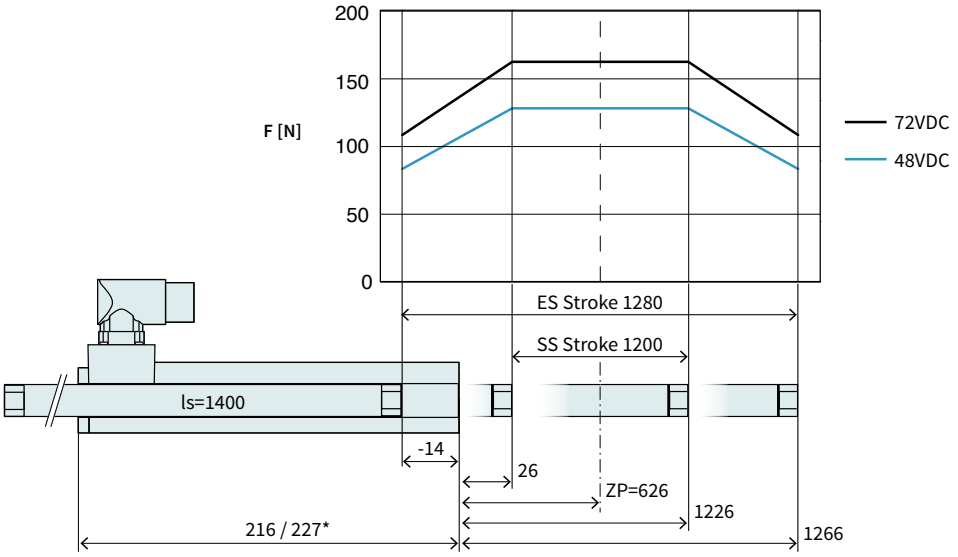
Technical Data P01-37x120/1000x1080-LC				
Stroke				
Standard Stroke (SS)	mm	(in)	1000	(39.39)
Extended Stroke (ES)	mm	(in)	1080	(42.49)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	163	(36.7)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		67	
Force Constant	N/A_{pk}	(lbf/A_{pk})	20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.2	(129.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A_{pk}		6.2	
Max. Current @ 72VDC	A_{pk}		7.9	
Max. Cont. Current [Passive cooling /Fan / Fluid]	A_{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm	(in)	1200	(47)
Slider Mass	g	(lb)	2690	(5.92)



Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x1200/1140-LC	Slider 'standard LC'	0150-2569

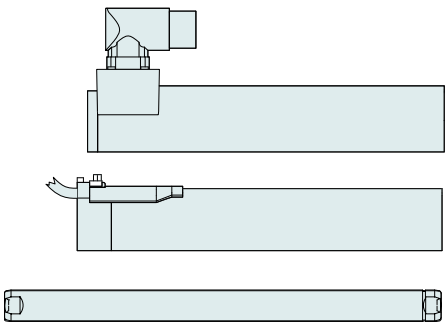
P01-37x120/1200x1280-LC

Max. Stroke: 1280 mm
Peak Force: 163 N



Dimensions in mm
* Cable Type

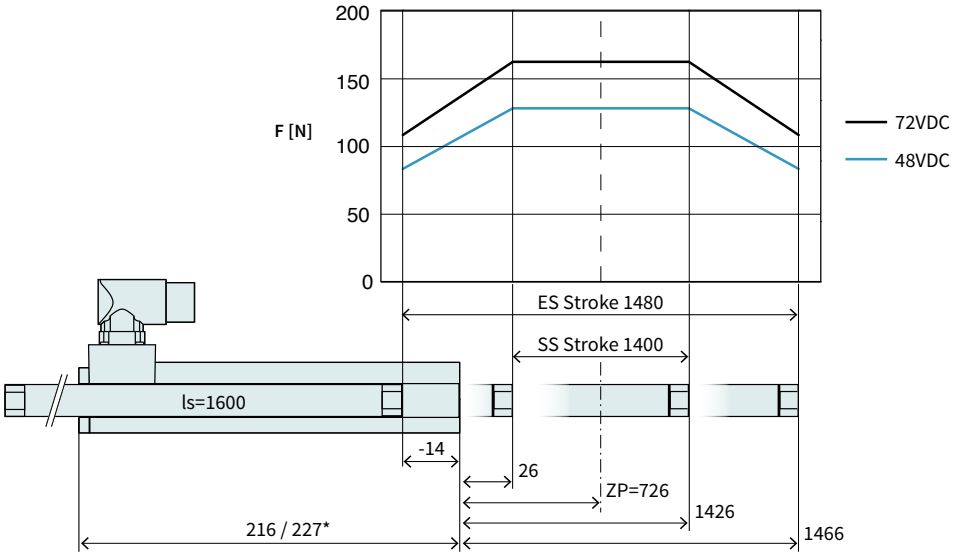
Technical Data P01-37x120/1200x1280-LC				
Stroke				
Standard Stroke (SS)	mm	(in)	1200	(47.2)
Extended Stroke (ES)	mm	(in)	1280	(50.39)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	163	(36.7)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		67	
Force Constant	N/A_{pk}	(lbf/A_{pk})	20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.2	(129.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A_{pk}		6.2	
Max. Current @ 72VDC	A_{pk}		7.9	
Max. Cont. Current [Passive cooling /Fan / Fluid]	A_{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm	(in)	1400	(55)
Slider Mass	g	(lb)	3160	(6.95)



Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x1400/1340-LC	Slider 'standard LC'	0150-2570

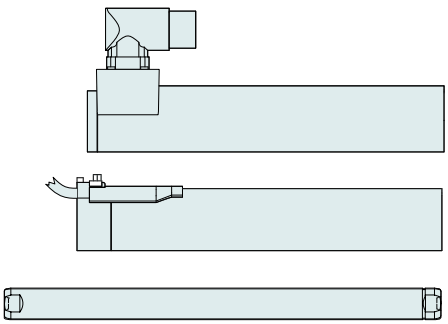
P01-37x120/1400x1480-LC

Max. Stroke: 1480 mm
Peak Force: 163 N



Dimensions in mm
* Cable Type

Technical Data P01-37x120/1400x1480-LC				
Stroke				
Standard Stroke (SS)	mm	(in)	1400	(55.1)
Extended Stroke (ES)	mm	(in)	1480	(58.29)
Force				
Max. Force @ 48VDC	N	(lbf)	128	(28.7)
Max. Force @ 72VDC	N	(lbf)	163	(36.7)
Max. Cont. Force [Passive cooling/ Fan / Fluid]	N	(lbf)	28 / 52 / -	(6.4 / 12 / -)
Max. Border Force relative	%		67	
Force Constant	N/A_{pk}	(lbf/A_{pk})	20.4	(4.59)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	2.2	(84.9)
Max. Velocity @ 72VDC	m/s	(in/s)	3.2	(129.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current @ 48VDC	A_{pk}		6.2	
Max. Current @ 72VDC	A_{pk}		7.9	
Max. Cont. Current [Passive cooling /Fan / Fluid]	A_{pk}		1.4 / 2.5 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		3.3 / 0.98 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1300 / 390 / -	
Mechanical Data				
Slider Length	mm	(in)	1600	(63)
Slider Mass	g	(lb)	3620	(8.0)



Item	Description	Item-No.
PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
PL01-20x1600/1540-LC	Slider 'standard LC'	0150-2571

Linear Guides H01

HM01-37x120/80	Linear Module 37x120 with 80 mm Stroke		
H-Guide	H01-37x166/80	H-Guide for P01-37x120, Stroke max 80mm	0150-5020
	H01-37x166/80-GF	H-Guide for P01-37x120, Stroke max 80mm	0150-5080
Stator	PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
	PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
	PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
Slider	PL01-20x300/240-LC	Slider 'standard LC'	0150-2561

HM01-37x120/180	Linear Module 37x120 with 180 mm Stroke		
H-Guide	H01-37x166/180	H-Guide for P01-37x120, Stroke max. 180 mm	0150-5021
	H01-37x166/180-GF	H=Guide for P01-37x120, Stroke max. 180 mm	0150-5081
Stator	PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
	PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
	PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
Slider	PL01-20x400/340-LC	Slider 'standard LC'	0150-2562

HM01-37x120/280	Linear Module 37x120 with 280 mm Stroke		
H-Guide	H01-37x166/280	H-Guide for P01-37x120, Stroke max. 280 mm	0150-5022
	H01-37x166/280-GF	H-Guide for P01-37x120, Stroke max. 280 mm	0150-5082
Stator	PS01-37x120-C	Stator with IP67 Connector M23/9(m)	0150-1223
	PS01-37x120-C20	Stator, 0.2m Cable, IP67 St. M23/9(m)	0150-1237
	PS01-37x120	Stator, 1.5m Cable, Connector P/10(m)	0150-1204
Slider	PL01-20x500/440-LC	Slider 'standard LC'	0150-2563

Accessories			
Brake	HB01-37	Pneumatic brake for H01-37 guides	0150-5052
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/H37	Adapter MagSpring 37&20 / H-Guide 37	0250-0117
Centering sleeve	HC01-09/04	Centering sleeve D9x4 mm	0150-3251
Wipers	HA01-27/20-F	Wiper for H01-37 guides, front side	0150-5108

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

Bridge Guide B01

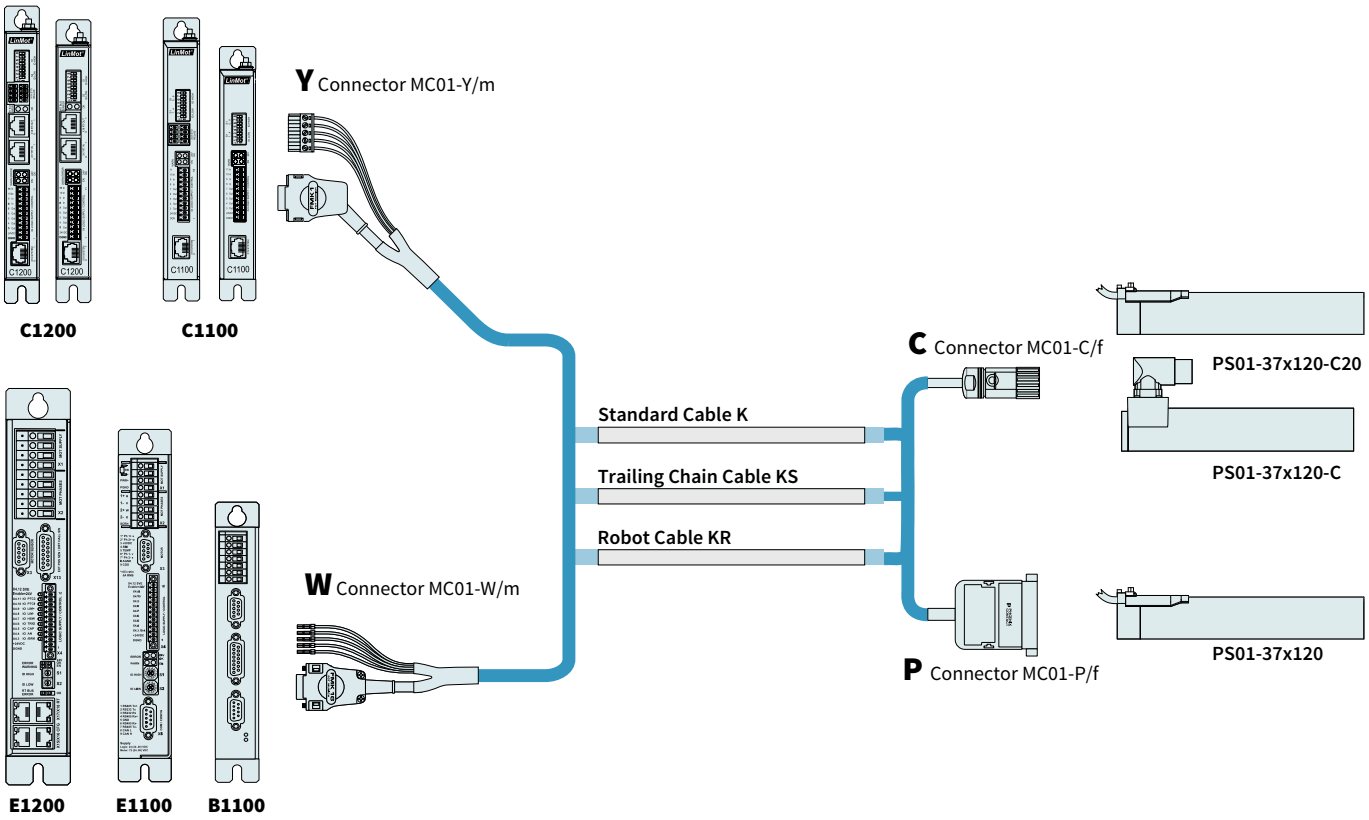
BM01-37x120/160	**Bridge Module 37x120 with 160 mm Stroke [1]**			
	B-Guide	B01-37x166/160	B-Guide for P01-37x120, Stroke max 160 mm	0150-5138
		B01-37x166/160-GF	B-Guide for P01-37x120, Stroke max 160 mm	0150-5141
	Stator	PS01-37x120-C	Stator with IP67 connector M23/9(m)	0150-1223
		PS01-37x120-C20	Linearmotor Stator, 0.2m Cable, Connector C - IP67	0150-1237
		PS01-37x120	Linearmotor Stator, 1.5m Cable, Connector P	0150-1204
	Slider	PL01-19x395/320	High Clearance Slider for B01-37x166/160	0150-1452
BM01-37x120/260	**Bridge Module 37x120 with 260 mm Stroke [1]**			
	B-Guide	B01-37x166/260	B-Guide for P01-37x120, Stroke max 260 mm	0150-5139
		B01-37x166/260-GF	B-Guide for P01-37x120, Stroke max 260 mm	0150-5142
	Stator	PS01-37x120-C	Stator with IP67 connector M23/9(m)	0150-1223
		PS01-37x120-C20	Linearmotor Stator, 0.2m Cable, Connector C - IP67	0150-1237
		PS01-37x120	Linearmotor Stator, 1.5m Cable, Connector P	0150-1204
	Slider	PL01-19x500/420	High Clearance Slider for B01-37x166/260	0150-1455
BM01-37x120/360	**Bridge Module 37x120 with 360 mm Stroke [1]**			
	B-Guide	B01-37x166/360	B-Guide for P01-37x120, Stroke max 360 mm	0150-5140
		B01-37x166/360-GF	B-Guide for P01-37x120, Stroke max 360 mm	0150-5143
	Stator	PS01-37x120-C	Stator with IP67 connector M23/9(m)	0150-1223
		PS01-37x120-C20	Linearmotor Stator, 0.2m Cable, Connector C - IP67	0150-1237
		PS01-37x120	Linearmotor Stator, 1.5m Cable, Connector P	0150-1204
	Slider	PL01-19x600/520	High Clearance Slider for B01-37x166/260	0150-1456

Accessories				
	Brake	HB01-37	Pneumatic Brake for H01-37/600N (4-6Bar)	0150-5052
	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/H37	Adapter MagSpring 37&20 / H-Guide 37	0250-0117
	Centering sleeve	HC01-09/04	Centering sleeve D9x4 mm	0150-3251
	Wipers	HA01-37/19-F	Wiper for H01-37 guides, front side	0150-5177

[1] The stroke is reduced by 18 mm when using cable models.

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

Motor Cable



ORDERING INFORMATION

STANDARD CABLE		
Item	**Description**	**Item-No.**
K05-W/C-2	Motor Cable W/C, 2 m	0150-2123
K05-W/C-4	Motor Cable W/C, 4 m	0150-2124
K05-W/C-6	Motor Cable W/C, 6 m	0150-2125
K05-W/C-8	Motor Cable W/C, 8 m	0150-2126
K05-W/C-	Motor Cable W/C, Custom length	0150-3263
K05-W/P	Motor Cable W/P, Custom length	0150-3113
K05-Y/C-2	Motor Cable Y/R, 2 m	0150-2425
K05-Y/C-4	Motor Cable Y/R, 4 m	0150-2426
K05-Y/C-6	Motor Cable Y/R, 6 m	0150-2427
K05-Y/C-8	Motor Cable Y/R, 8 m	0150-2428
K05-Y-Fe/C-	Motor Cable Y-Fe/R, Custom length	0150-3502

TRAILING CHAIN CABLE		
Item	**Description**	**Item-No.**
KS05-W/C-4	Trailing Chain Cable W/C, 4 m	0150-2127
KS05-W/C-6	Trailing Chain Cable W/C, 6 m	0150-2128
KS05-W/C-8	Trailing Chain Cable W/C, 8 m	0150-2129
KS05-W/C-	Trailing Chain Cable W/C, Custom length	0150-3204
KS05-W/P-	Trailing Chain Cable W/P, Custom length	0150-3114
KS05-Y/C-4	Trailing Chain Cable Y/C, 4 m	0150-2436
KS05-Y/C-6	Trailing Chain Cable Y/C, 6 m	0150-2437
KS05-Y/C-8	Trailing Chain Cable Y/C, 8 m	0150-2438
KS05-Y-Fe/C-	Trailing Chain Cable Y-Fe/C, Custom length	0150-3508

ROBOT CABLE		
Item	**Description**	**Item-No.**
KR05-W/C-	Robot Cable KR05-W/C, Custom length	0150-3644
KR05-Y-Fe/C-	Robot Cable KR05-Y-Fe/C, Custom length	0150-3513

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
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.
PF02-37x100	Flange 37x100 mm	0150-1998
PF02-37x140	Flange 37x140 mm	0150-2105

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

FANS

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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

SLIDER MOUNTING

Item	Description	Item-No.
PLF01-20	Fixed Bearing Set for 19mm and 20mm Slider	0150-3083
PLF01-20-SS	Fixed Bearing Set for 19mm and 20mm Slider, Stainless steel	0150-3296
PLL01-19	Floating Bearing for PL01-19 Slider	0150-3335
PLL01-20	Floating Bearing for PL01-20 Slider	0150-3084
PLM01-20-MK	Mounting Kit for PL01-20 Slider	0150-3079

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

WIPERS

Item	Description	Item-No.
PA01-37/19-F	Wiper front side for PS01-37x...	0150-3225
PA01-37/19-R	Wiper back side for PS01-37x...-C	0150-3226
PA01-37/19-R cable	Wiper back side for PS01-37-Cable Type	0150-3227
PA01-37/20-F	Wiper front side for PS01-37x...	0150-3126
PA01-37/20-R	Wiper front side for PS01-37x...	0150-3201
PA01-37/20-R cable	Wiper back side for PS01-37-Cable Type	0150-3221

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS

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