

LINEAR MOTORS P02-23Sx80F-HP



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

LINEAR MOTORS P02-23Sx80F-HP

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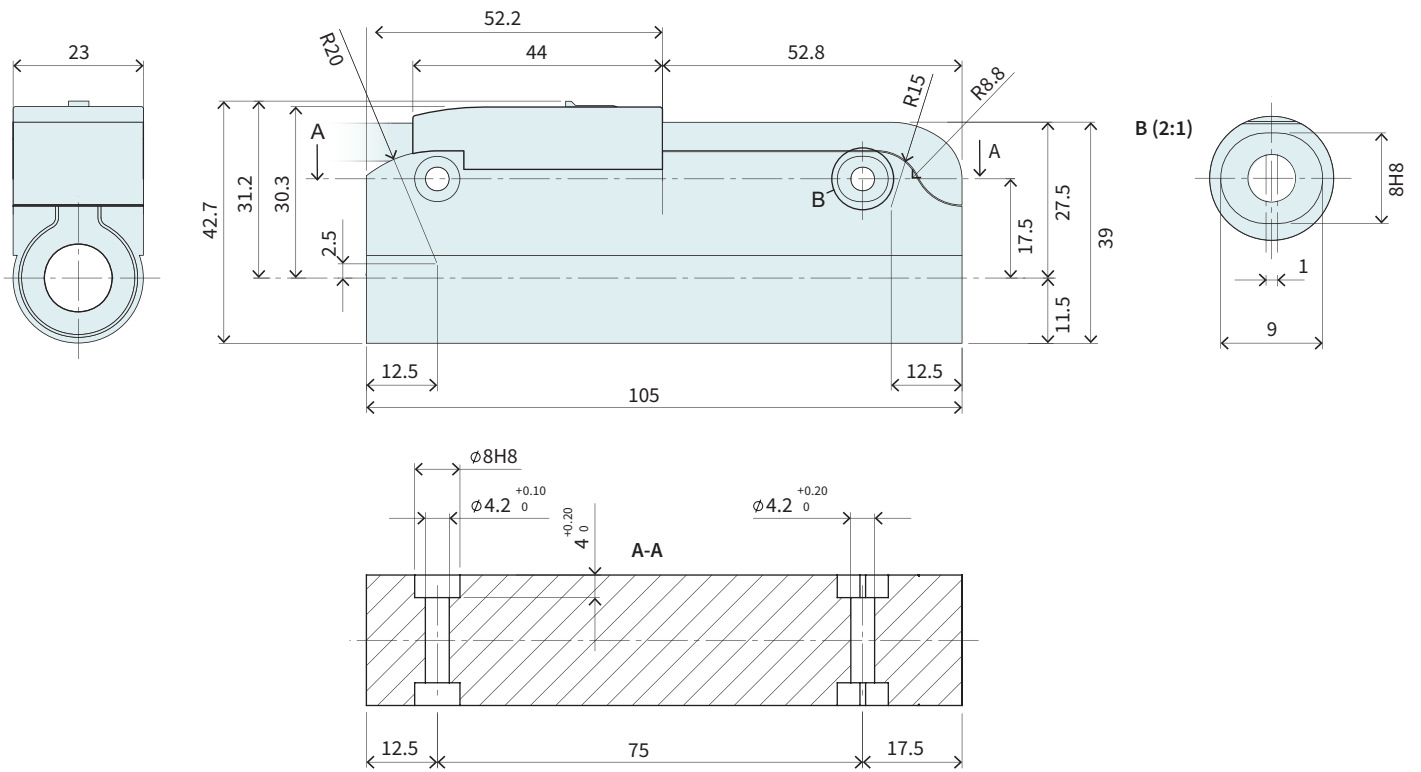
Accessories	110
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MOTOR FAMILY P02-23Sx80F-HP

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)	67.1	(15.1)
Max. Force @ 72VDC	N	(lbf)	67.1	(15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	13 / 24 / -	(2.9 / 5.3 / -)
Max. Border Force relative			%	
			≤ 63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	8.95	(2.01)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	4.9	(189.9)
Max. Velocity @ 72VDC	m/s	(in/s)	7.3	(289.9)
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}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -	
Terminal Resistance 25 °C / 150 °C	Ohm		4.2 / 6.2	
Terminal Inductivity	mH		0.6	
Magnetic Period	mm	(in)	20	(0.78)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Stator Diameter	mm	(in)	23	(0.91)
Stator Length [Connector type / Cable type]	mm	(in)	105	(4.1)
Stator Mass	g	(lb)	245	(0.54)
Slider Diameter	mm	(in)	12	(0.47)
Slider Length	mm	(in)	130 - 850	(5.1 - 33)
Slider Mass	g	(lb)	90 - 700	(0.2 - 1.54)
IP Code			IP 50	

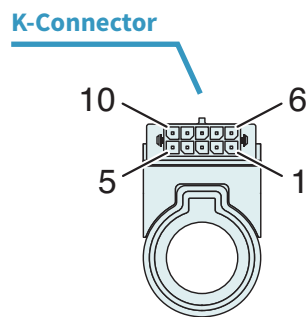
STATOR



Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285

CONNECTOR

Motor Connector Wiring		Wire color motor cable
Pin 1	Phase 1+	red
Pin 2	Phase 2+	blue
Pin 3	n.c.	n.c.
Pin 4	Phase 1-	pink
Pin 5	Phase 2-	grey
Pin 6	Sensor Sin	yellow
Pin 7	Sensor Cos	green
Pin 8	GND	brown
Pin 9	+5V	white
Pin 10	Temp sensor	black
	Housing	Shield

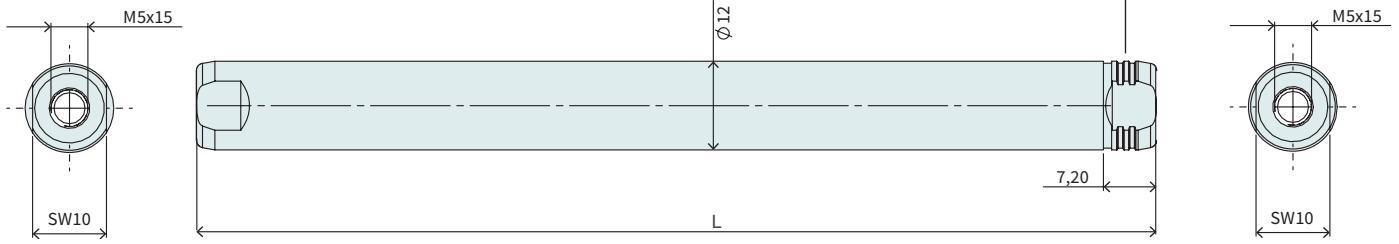


View: Motor Connector, plug side

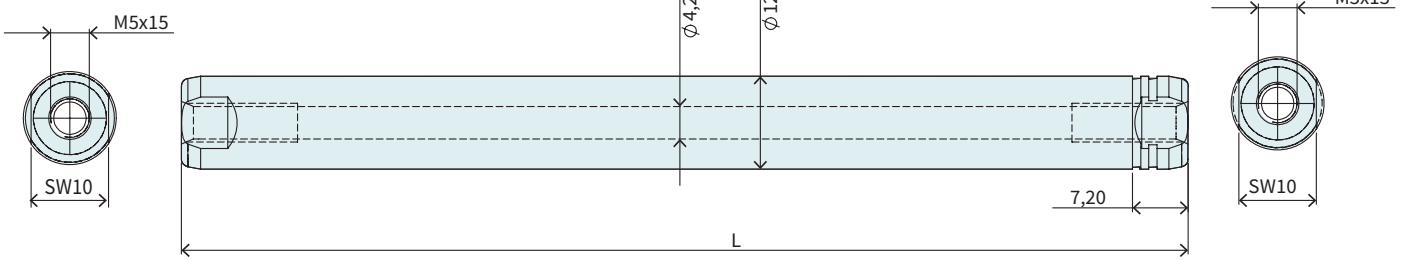
SLIDER

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

Slider HP / Heavy Duty HP



Hollow slider HP



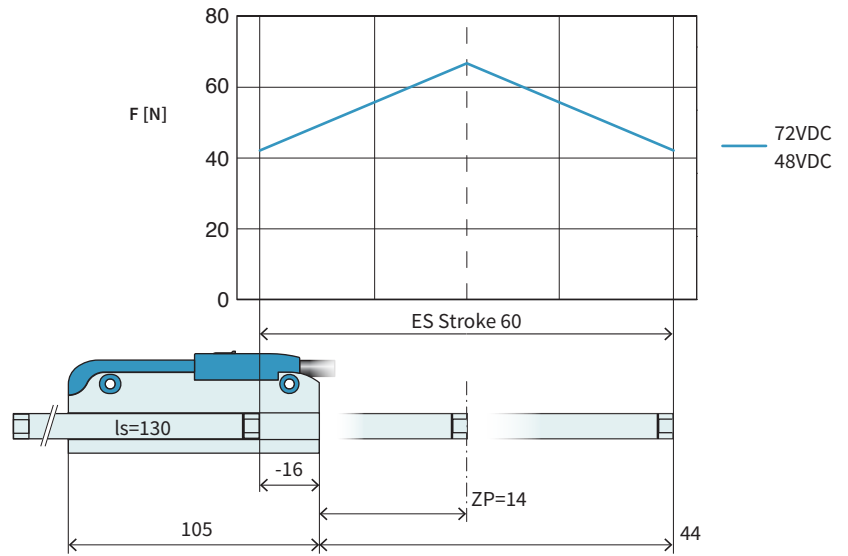
Slider High Performance				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-12x130/90-HP	Slider 'High Performance'	60	-	0150-2209
PL01-12x150/110-HP	Slider 'High Performance'	80	20	0150-2281
PL01-12x170/130-HP	Slider 'High Performance'	100	40	0150-1529
PL01-12x200/160-HP	Slider 'High Performance'	130	70	0150-1518
PL01-12x230/190-HP	Slider 'High Performance'	160	100	0150-1519
PL01-12x270/230-HP	Slider 'High Performance'	200	140	0150-1520
PL01-12x290/250-HP	Slider 'High Performance'	220	160	0150-1521
PL01-12x350/310-HP	Slider 'High Performance'	280	220	0150-1522
PL01-12x420/380-HP	Slider 'High Performance'	350	290	0150-1523
PL01-12x480/440-HP	Slider 'High Performance'	410	350	0150-1524
PL01-12x580/540-HP	Slider 'High Performance'	510	450	0150-1525
PL01-12x760/720-HP	Slider 'High Performance'	690	630	0150-1526
PL01-12x850/810-HP	Slider 'High Performance'	780	720	0150-1527

Slider Heavy Duty High Performance				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL02-12x130/90-HP	Slider 'heavy duty' 'High Performance'	60	-	0150-2983
PL02-12x150/110-HP	Slider 'heavy duty' 'High Performance'	80	20	on request
PL02-12x170/130-HP	Slider 'heavy duty' 'High Performance'	100	40	0150-1559
PL02-12x200/160-HP	Slider 'heavy duty' 'High Performance'	130	70	0150-1532
PL02-12x230/190-HP	Slider 'heavy duty' 'High Performance'	160	100	0150-1552
PL02-12x270/230-HP	Slider 'heavy duty' 'High Performance'	200	140	0150-1533
PL02-12x290/250-HP	Slider 'heavy duty' 'High Performance'	220	160	0150-1495
PL02-12x350/310-HP	Slider 'heavy duty' 'High Performance'	280	220	0150-1555
PL02-12x420/380-HP	Slider 'heavy duty' 'High Performance'	350	290	0150-1554
PL02-12x480/440-HP	Slider 'heavy duty' 'High Performance'	410	350	0150-2519
PL02-12x580/540-HP	Slider 'heavy duty' 'High Performance'	510	450	0150-2520
PL02-12x760/720-HP	Slider 'heavy duty' 'High Performance'	690	630	0150-2521
PL02-12x850/810-HP	Slider 'heavy duty' 'High Performance'	780	720	0150-2516

Hollow slider High Performance				
Item	Description	Max. Stroke [mm]	Standard Stroke [mm]	Item-No.
PL01-12x130/90-HP-L	Slider 'High Performance L'	60	-	0150-3687
PL01-12x150/110-HP-L	Slider 'High Performance L'	80	20	on request
PL01-12x170/130-HP-L	Slider 'High Performance L'	100	40	0150-3688
PL01-12x200/160-HP-L	Slider 'High Performance L'	130	70	0150-3689
PL01-12x230/190-HP-L	Slider 'High Performance L'	160	100	0150-2546
PL01-12x270/230-HP-L	Slider 'High Performance L'	200	140	0150-2557
PL01-12x290/250-HP-L	Slider 'High Performance L'	220	160	0150-3690
PL01-12x350/310-HP-L	Slider 'High Performance L'	280	220	0150-3691
PL01-12x420/380-HP-L	Slider 'High Performance L'	350	290	0150-3692
PL01-12x480/440-HP-L	Slider 'High Performance L'	410	350	0150-3693
PL01-12x580/540-HP-L	Slider 'High Performance L'	510	450	0150-3694
PL01-12x760/720-HP-L	Slider 'High Performance L'	690	630	0150-3695
PL01-12x850/810-HP-L	Slider 'High Performance L'	780	720	on request

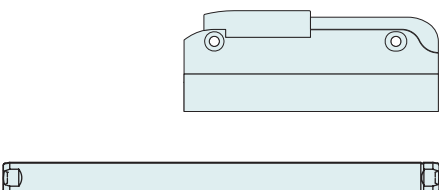
P02-23Sx80F/0x60-HP

Max. Stroke: 60 mm
Peak Force: 67 N



Dimensions in mm

Technical Data P02-23Sx80F/0x60-HP				
Stroke				
Standard Stroke (SS)	mm (in)		0 (0)	
Extended Stroke (ES)	mm (in)		60 (2.35)	
Force				
Max. Force @ 48VDC	N (lbf)		67.1 (15.1)	
Max. Force @ 72VDC	N (lbf)		67.1 (15.1)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		13 / 24 / - (2.9 / 5.3 / -)	
Max. Border Force relative	%		63	
Force Constant	N/A _{pk} (lbf/A _{pk})		8.95 (2.01)	
Velocity				
Max. Velocity @ 48VDC	m/s (in/s)		4.9 (189.9)	
Max. Velocity @ 72VDC	m/s (in/s)		7.3 (289.9)	
Position Detection				
Repeatability	mm (in)		±0.05 (±0.002)	
Linearity	%		± 0.5	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm (in)		130 (5.1)	
Slider Mass	g (lb)		90 (0.2)	

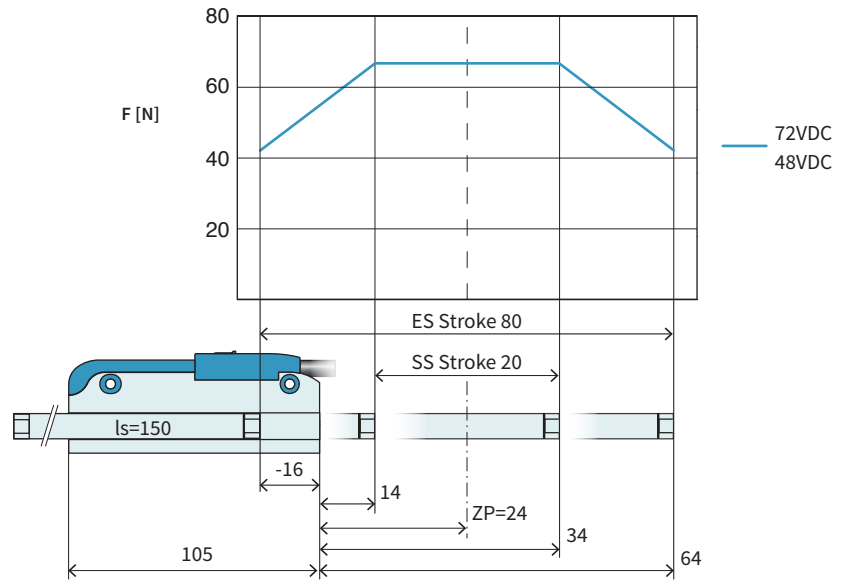


Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x130/90-HP	Slider 'High Performance'	0150-2209
PL02-12x130/90-HP	Slider 'heavy duty' 'High Performance'	0150-2983
PL01-12x130/90-HP-L*	Slider 'High Performance L'	0150-3687

* With this slider, the motor specifications above change.

P02-23Sx80F/20x80-HP

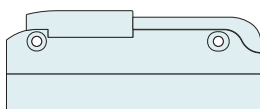
Max. Stroke: 80 mm
Peak Force: 67 N



Dimensions in mm

Technical Data P02-23Sx80F/20x80-HP

Stroke			
Standard Stroke (SS)	mm (in)		20 (0.78)
Extended Stroke (ES)	mm (in)		80 (3.14)
Force			
Max. Force @ 48VDC	N (lbf)		67.1 (15.1)
Max. Force @ 72VDC	N (lbf)		67.1 (15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		13 / 24 / - (2.9 / 5.3 / -)
Max. Border Force relative	%		63
Force Constant	N/A _{pk} (lbf/A _{pk})		8.95 (2.01)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)		4.9 (189.9)
Max. Velocity @ 72VDC	m/s (in/s)		7.3 (289.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.4
Electrical Data			
Max. Current @ 48VDC	A _{pk}		7.4
Max. Current @ 72VDC	A _{pk}		7.4
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -
Thermal Data			
Max. Winding Temperature (Sensor)	°C		120
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -
Mechanical Data			
Slider Length	mm (in)		150 (5.9)
Slider Mass	g (lb)		110 (0.24)

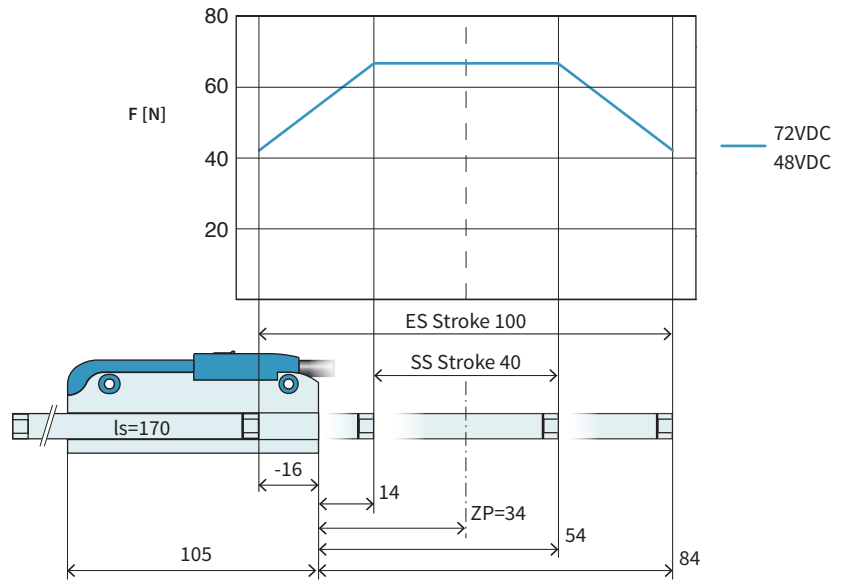


Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x150/110-HP	Slider 'High Performance'	0150-2281
PL02-12x150/110-HP	Slider 'heavy duty' 'High Performance'	on request
PL01-12x150/110-HP-L*	Slider 'High Performance L'	on request

* With this slider, the motor specifications above change.

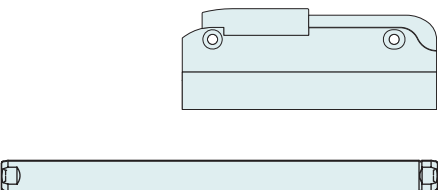
P02-23Sx80F/40x100-HP

Max. Stroke: 100 mm
Peak Force: 67 N



Dimensions in mm

Technical Data P02-23Sx80F/40x100-HP				
Stroke				
Standard Stroke (SS)	mm	(in)	40	(1.57)
Extended Stroke (ES)	mm	(in)	100	(3.93)
Force				
Max. Force @ 48VDC	N	(lbf)	67.1	(15.1)
Max. Force @ 72VDC	N	(lbf)	67.1	(15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	13 / 24 / -	(2.9 / 5.3 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	8.95	(2.01)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	4.9	(189.9)
Max. Velocity @ 72VDC	m/s	(in/s)	7.3	(289.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.35	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm	(in)	170	(6.7)
Slider Mass	g	(lb)	130	(0.28)

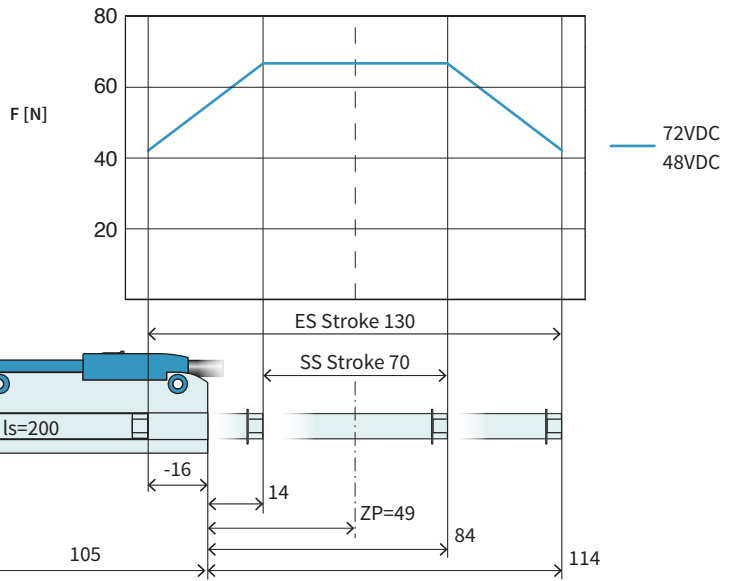


Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x170/130-HP	Slider 'High Performance'	0150-1529
PL02-12x170/130-HP	Slider 'heavy duty' 'High Performance'	0150-1559
PL01-12x170/130-HP-L*	Slider 'High Performance L'	0150-3688

* With this slider, the motor specifications above change.

P02-23Sx80F/70x130-HP

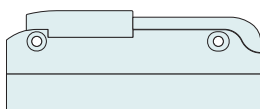
Max. Stroke: 130 mm
Peak Force: 67 N



Dimensions in mm

Technical Data P02-23Sx80F/70x130-HP

Stroke			
Standard Stroke (SS)	mm (in)		70 (2.75)
Extended Stroke (ES)	mm (in)		130 (5.12)
Force			
Max. Force @ 48VDC	N (lbf)		67.1 (15.1)
Max. Force @ 72VDC	N (lbf)		67.1 (15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		13 / 24 / - (2.9 / 5.3 / -)
Max. Border Force relative	%		63
Force Constant	N/A _{pk} (lbf/A _{pk})		8.95 (2.01)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)		4.9 (189.9)
Max. Velocity @ 72VDC	m/s (in/s)		7.3 (289.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.3
Electrical Data			
Max. Current @ 48VDC	A _{pk}		7.4
Max. Current @ 72VDC	A _{pk}		7.4
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -
Thermal Data			
Max. Winding Temperature (Sensor)	°C		120
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -
Mechanical Data			
Slider Length	mm (in)		200 (7.9)
Slider Mass	g (lb)		155 (0.34)

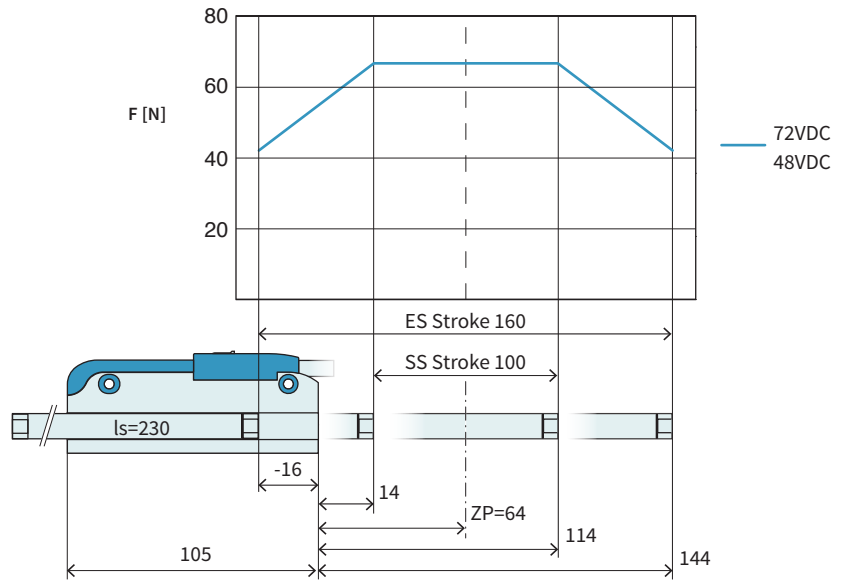


Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x200/160-HP	Slider 'High Performance'	0150-1518
PL02-12x200/160-HP	Slider 'heavy duty' 'High Performance'	0150-1532
PL01-12x200/160-HP-L*	Slider 'High Performance L'	0150-3689

* With this slider, the motor specifications above change.

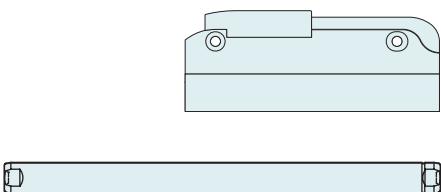
P02-23Sx80F/100x160-HP

Max. Stroke: 160 mm
Peak Force: 67 N



Dimensions in mm

Technical Data P02-23Sx80F/100x160-HP				
Stroke				
Standard Stroke (SS)	mm	(in)	100	(3.93)
Extended Stroke (ES)	mm	(in)	160	(6.29)
Force				
Max. Force @ 48VDC	N	(lbf)	67.1	(15.1)
Max. Force @ 72VDC	N	(lbf)	67.1	(15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	13 / 24 / -	(2.9 / 5.3 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	8.95	(2.01)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	4.9	(189.9)
Max. Velocity @ 72VDC	m/s	(in/s)	7.3	(289.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		±0.25	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm	(in)	230	(9.1)
Slider Mass	g	(lb)	180	(0.4)

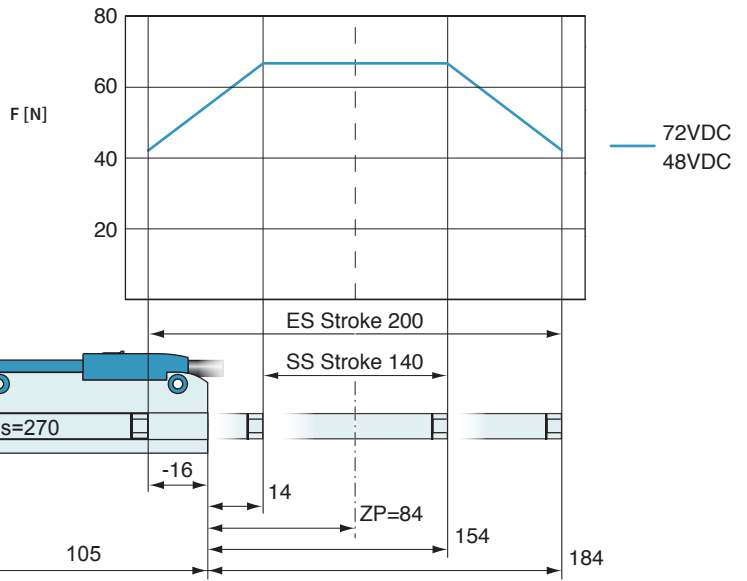


Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x230/190-HP	Slider 'High Performance'	0150-1519
PL02-12x230/190-HP	Slider 'heavy duty' 'High Performance'	0150-1552
PL01-12x230/190-HP-L*	Slider 'High Performance L'	0150-2546

* With this slider, the motor specifications above change.

P0S-23Sx80F/140x200-HP

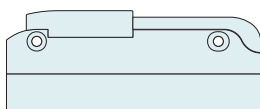
Max. Stroke: 200 mm
Peak Force: 67 N



Dimensions in mm

Technical Data P02-23Sx80F/140x200-HP

Stroke			
Standard Stroke (SS)	mm (in)	140	(5.5)
Extended Stroke (ES)	mm (in)	200	(7.86)
Force			
Max. Force @ 48VDC	N (lbf)	67.1	(15.1)
Max. Force @ 72VDC	N (lbf)	67.1	(15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	13 / 24 / -	(2.9 / 5.3 / -)
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	8.95	(2.01)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	4.9	(189.9)
Max. Velocity @ 72VDC	m/s (in/s)	7.3	(289.9)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.2	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.4	
Max. Current @ 72VDC	A _{pk}	7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.5 / 2.7 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	830 / 250 / -	
Mechanical Data			
Slider Length	mm (in)	270	(11)
Slider Mass	g (lb)	215	(0.47)

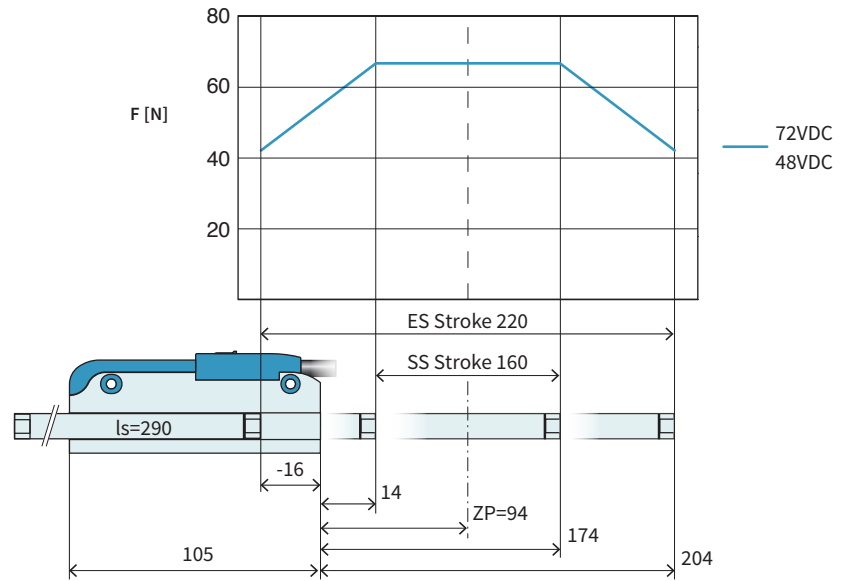


Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x270/230-HP	Slider 'High Performance'	0150-1520
PL02-12x270/230-HP	Slider 'heavy duty' 'High Performance'	0150-1533
PL01-12x270/230-HP-L*	Slider 'High Performance L'	0150-2557

* With this slider, the motor specifications above change.

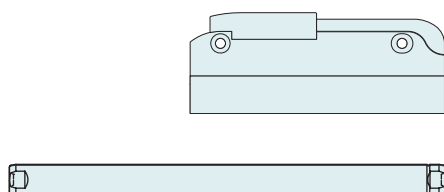
P02-23Sx80F/160x220-HP

Max. Stroke: 220 mm
Peak Force: 67 N



Dimensions in mm

Technical Data P02-23Sx80F/160x220-HP				
Stroke				
Standard Stroke (SS)	mm	(in)	160	(6.29)
Extended Stroke (ES)	mm	(in)	220	(8.65)
Force				
Max. Force @ 48VDC	N	(lbf)	67.1	(15.1)
Max. Force @ 72VDC	N	(lbf)	67.1	(15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	13 / 24 / -	(2.9 / 5.3 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	8.95	(2.01)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	4.9	(189.9)
Max. Velocity @ 72VDC	m/s	(in/s)	7.3	(289.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm	(in)	290	(11)
Slider Mass	g	(lb)	230	(0.51)

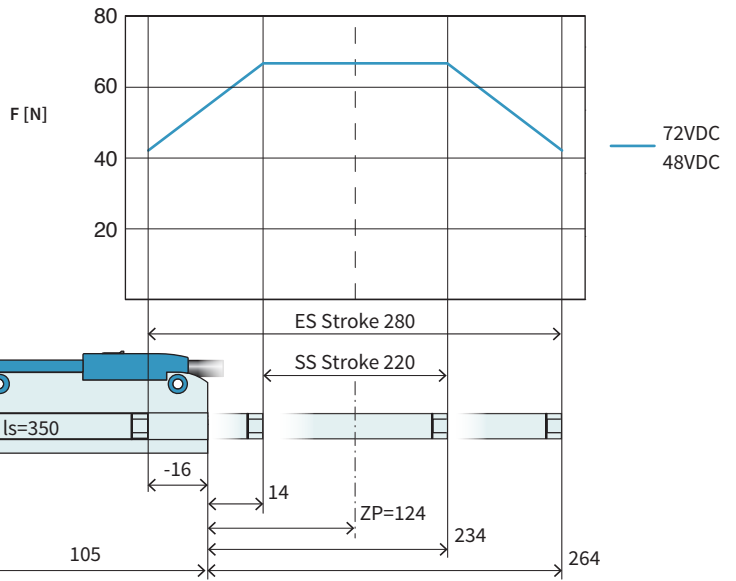


Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x290/250-HP	Slider 'High Performance'	0150-1521
PL02-12x290/250-HP	Slider 'heavy duty' 'High Performance'	0150-1495
PL01-12x290/250-HP-L*	Slider 'High Performance L'	0150-3690

* With this slider, the motor specifications above change.

P02-23Sx80F/220x280-HP

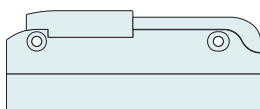
Max. Stroke: 280 mm
Peak Force: 67 N



Dimensions in mm

Technical Data P02-23Sx80F/220x280-HP

Stroke			
Standard Stroke (SS)	mm (in)		220 (8.65)
Extended Stroke (ES)	mm (in)		280 (10.99)
Force			
Max. Force @ 48VDC	N (lbf)		67.1 (15.1)
Max. Force @ 72VDC	N (lbf)		67.1 (15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		13 / 24 / - (2.9 / 5.3 / -)
Max. Border Force relative	%		63
Force Constant	N/A _{pk} (lbf/A _{pk})		8.95 (2.01)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)		4.9 (189.9)
Max. Velocity @ 72VDC	m/s (in/s)		7.3 (289.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.2
Electrical Data			
Max. Current @ 48VDC	A _{pk}		7.4
Max. Current @ 72VDC	A _{pk}		7.4
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -
Thermal Data			
Max. Winding Temperature (Sensor)	°C		120
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -
Mechanical Data			
Slider Length	mm (in)		350 (14)
Slider Mass	g (lb)		280 (0.62)

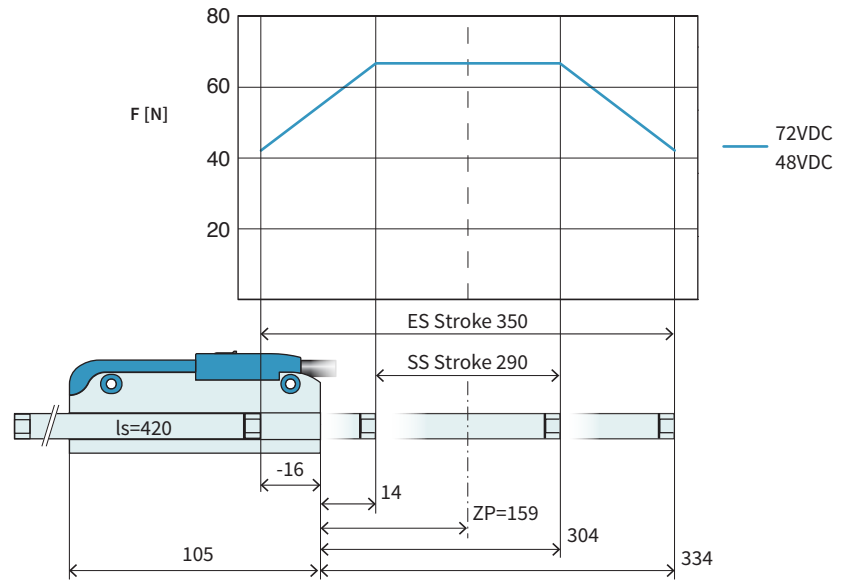


Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x350/310-HP	Slider 'High Performance'	0150-1522
PL02-12x350/310-HP	Slider 'heavy duty' 'High Performance'	0150-1555
PL01-12x350/310-HP-L*	Slider 'High Performance L'	0150-3691

* With this slider, the motor specifications above change.

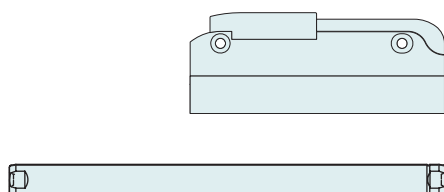
P02-23Sx80F/290x350-HP

Max. Stroke: 350 mm
Peak Force: 67 N



Dimensions in mm

Technical Data P02-23Sx80F/290x350-HP				
Stroke				
Standard Stroke (SS)	mm	(in)	290	(11.4)
Extended Stroke (ES)	mm	(in)	350	(13.8)
Force				
Max. Force @ 48VDC	N	(lbf)	67.1	(15.1)
Max. Force @ 72VDC	N	(lbf)	67.1	(15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	13 / 24 / -	(2.9 / 5.3 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	8.95	(2.01)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	4.9	(189.9)
Max. Velocity @ 72VDC	m/s	(in/s)	7.3	(289.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		±0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm	(in)	420	(17)
Slider Mass	g	(lb)	340	(0.75)

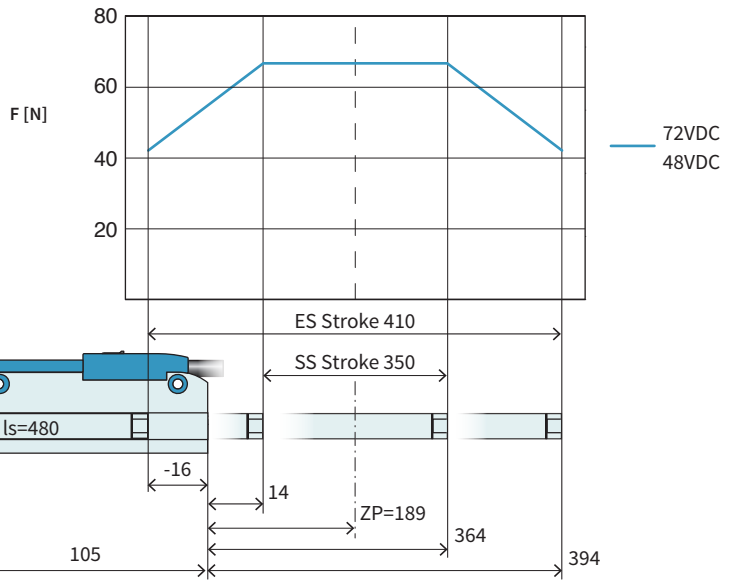


Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x420/380-HP	Slider 'High Performance'	0150-1523
PL02-12x420/380-HP	Slider 'heavy duty' 'High Performance'	0150-1554
PL01-12x420/380-HP-L*	Slider 'High Performance L'	0150-3692

* With this slider, the motor specifications above change.

P02-23Sx80F/350x410-HP

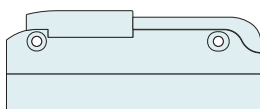
Max. Stroke: 410 mm
Peak Force: 67 N



Dimensions in mm

Technical Data P02-23Sx80F/350x410-HP

Stroke			
Standard Stroke (SS)	mm (in)		350 (13.8)
Extended Stroke (ES)	mm (in)		410 (16.1)
Force			
Max. Force @ 48VDC	N (lbf)		67.1 (15.1)
Max. Force @ 72VDC	N (lbf)		67.1 (15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		13 / 24 / - (2.9 / 5.3 / -)
Max. Border Force relative	%		63
Force Constant	N/A _{pk} (lbf/A _{pk})		8.95 (2.01)
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)		4.9 (189.9)
Max. Velocity @ 72VDC	m/s (in/s)		7.3 (289.9)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.15
Electrical Data			
Max. Current @ 48VDC	A _{pk}		7.4
Max. Current @ 72VDC	A _{pk}		7.4
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -
Thermal Data			
Max. Winding Temperature (Sensor)	°C		120
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -
Mechanical Data			
Slider Length	mm (in)		480 (19)
Slider Mass	g (lb)		390 (0.78)

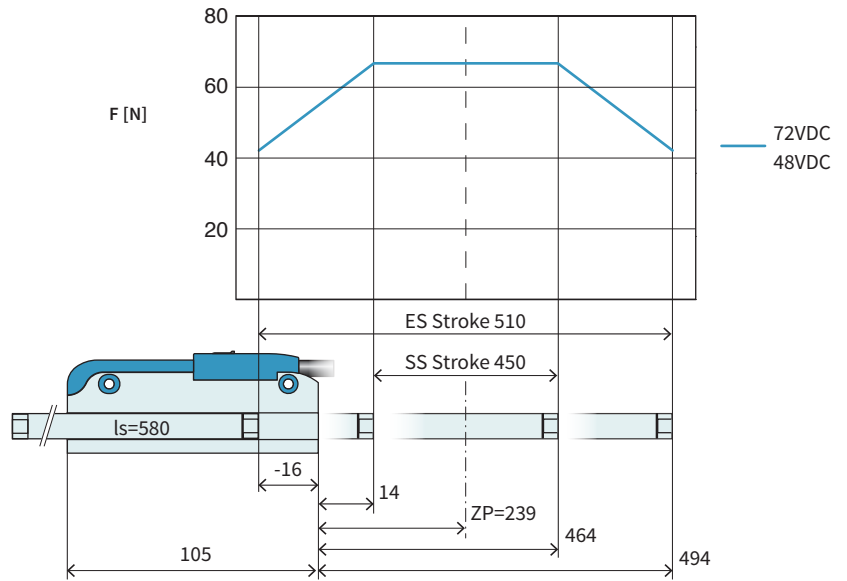


Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x480/440-HP	Slider 'High Performance'	0150-1524
PL02-12x480/440-HP	Slider 'heavy duty' 'High Performance'	0150-2519
PL01-12x480/440-HP-L*	Slider 'High Performance L'	0150-3693

* With this slider, the motor specifications above change.

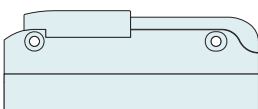
P02-23Sx80F/450x510-HP

Max. Stroke: 510 mm
Peak Force: 67 N



Dimensions in mm

Technical Data P02-23Sx80F/450x510-HP				
Stroke				
Standard Stroke (SS)	mm	(in)	450	(17.69)
Extended Stroke (ES)	mm	(in)	510	(20.1)
Force				
Max. Force @ 48VDC	N	(lbf)	67.1	(15.1)
Max. Force @ 72VDC	N	(lbf)	67.1	(15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	13 / 24 / -	(2.9 / 5.3 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	8.95	(2.01)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	4.9	(189.9)
Max. Velocity @ 72VDC	m/s	(in/s)	7.3	(289.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		±0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm	(in)	580	(23)
Slider Mass	g	(lb)	480	(1.06)

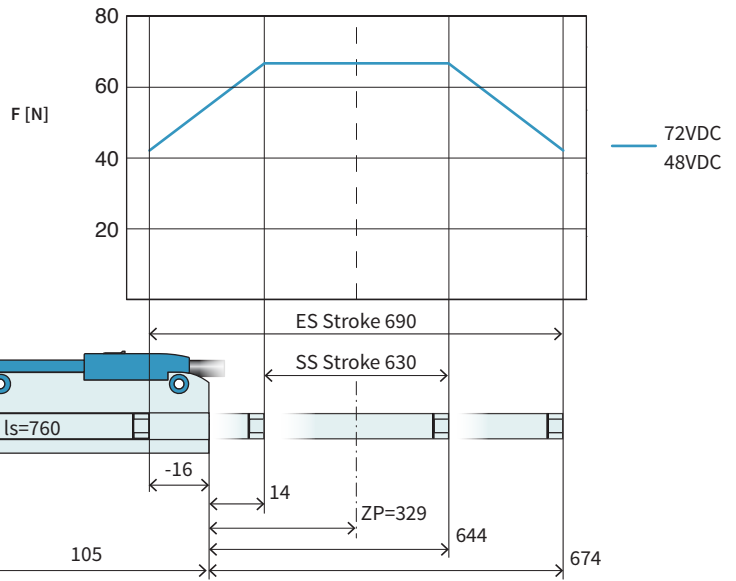


Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x580/540-HP	Slider 'High Performance'	0150-1525
PL02-12x580/540-HP	Slider 'heavy duty' 'High Performance'	0150-2520
PL01-12x580/540-HP-L*	Slider 'High Performance L'	0150-3694

* With this slider, the motor specifications above change.

P02-23Sx80F/630x690-HP

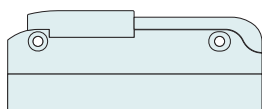
Max. Stroke: 690 mm
Peak Force: 67 N



Dimensions in mm

Technical Data P02-23Sx80F/630x690-HP

Stroke			
Standard Stroke (SS)	mm (in)	630 (24.8)	
Extended Stroke (ES)	mm (in)	690 (27.19)	
Force			
Max. Force @ 48VDC	N (lbf)	67.1 (15.1)	
Max. Force @ 72VDC	N (lbf)	67.1 (15.1)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	13 / 24 / - (2.9 / 5.3 / -)	
Max. Border Force relative	%	63	
Force Constant	N/A _{pk} (lbf/A _{pk})	8.95 (2.01)	
Velocity			
Max. Velocity @ 48VDC	m/s (in/s)	4.9 (189.9)	
Max. Velocity @ 72VDC	m/s (in/s)	7.3 (289.9)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current @ 48VDC	A _{pk}	7.4	
Max. Current @ 72VDC	A _{pk}	7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}	1.5 / 2.7 / -	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	830 / 250 / -	
Mechanical Data			
Slider Length	mm (in)	760 (30)	
Slider Mass	g (lb)	630 (1.39)	

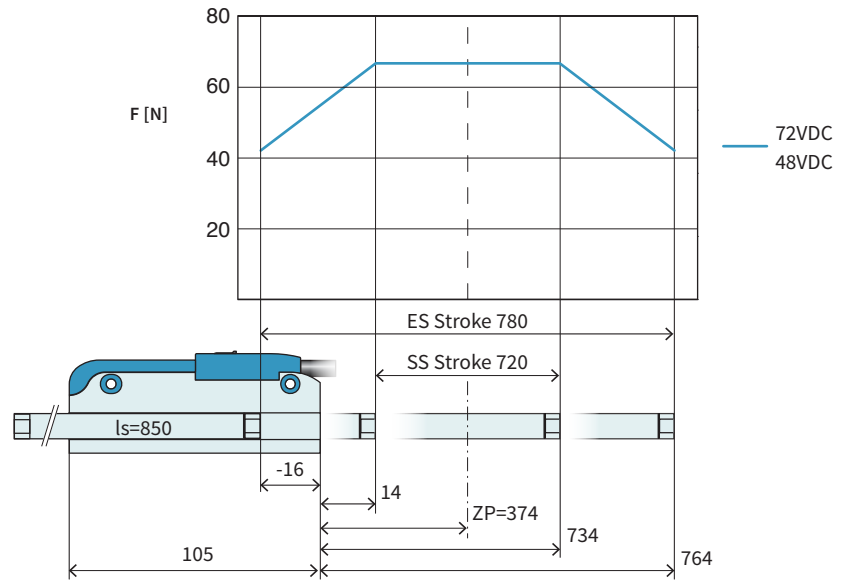


Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x760/720-HP	Slider 'High Performance'	0150-1526
PL02-12x760/720-HP	Slider 'heavy duty' 'High Performance'	0150-2521
PL01-12x760/720-HP-L*	Slider 'High Performance L'	0150-3695

* With this slider, the motor specifications above change.

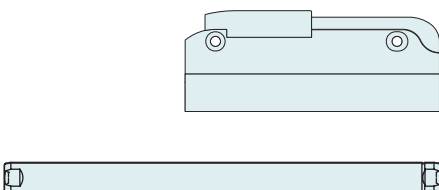
P02-23Sx80F/720x780-HP

Max. Stroke: 780 mm
Peak Force: 67 N



Dimensions in mm

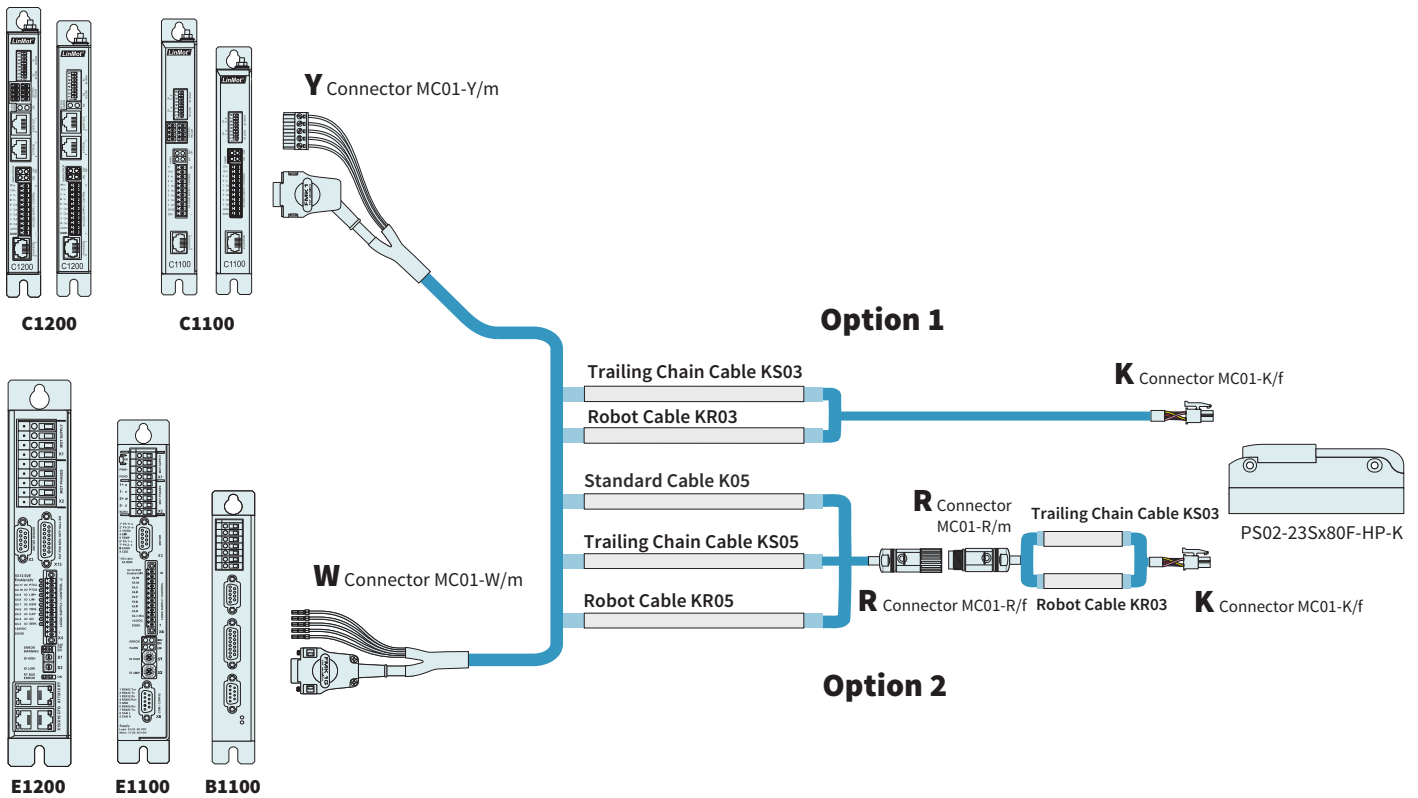
Technical Data P02-23Sx80F/720x780-HP				
Stroke				
Standard Stroke (SS)	mm	(in)	720	(28.3)
Extended Stroke (ES)	mm	(in)	780	(30.69)
Force				
Max. Force @ 48VDC	N	(lbf)	67.1	(15.1)
Max. Force @ 72VDC	N	(lbf)	67.1	(15.1)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	13 / 24 / -	(2.9 / 5.3 / -)
Max. Border Force relative	%		63	
Force Constant	N/A _{pk}	(lbf/A _{pk})	8.95	(2.01)
Velocity				
Max. Velocity @ 48VDC	m/s	(in/s)	4.9	(189.9)
Max. Velocity @ 72VDC	m/s	(in/s)	7.3	(289.9)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		±0.15	
Electrical Data				
Max. Current @ 48VDC	A _{pk}		7.4	
Max. Current @ 72VDC	A _{pk}		7.4	
Max. Cont. Current [Passive cooling / Fan / Fluid]	A _{pk}		1.5 / 2.7 / -	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		120	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		6.4 / 1.9 / -	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		830 / 250 / -	
Mechanical Data				
Slider Length	mm	(in)	850	(33)
Slider Mass	g	(lb)	700	(1.54)



Item	Description	Item-No.
PS02-23Sx80F-HP-K	Stator HP, Cable -90°, 0°, +90°	0150-1285
PL01-12x850/810-HP	Slider 'High Performance'	0150-1527
PL02-12x850/810-HP	Slider 'heavy duty' 'High Performance'	0150-2516
PL01-12x850/810-HP-L*	Slider 'High Performance L'	on request

* With this slider, the motor specifications above change.

Motor Cable



ORDERING INFORMATION

OPTION 1 – TRAILING CHAIN CABLE / ROBOT CABLE

Item	Description	Item-No.
KS03-W-Fe/K-2	Trailing Chain Cable W-Fe/K 2 m	0150-2187
KS03-W-Fe/K-4	Trailing Chain Cable W-Fe/K 4 m	0150-2369
KS03-W-Fe/K-6	Trailing Chain Cable W-Fe/K 6 m	0150-2370
KS03-W-Fe/K-	Trailing Chain Cable W-Fe/K, Custom Length (max. 6m)	0150-3357
KS03-Y-Fe/K-2	Trailing Chain Cable Y-Fe/K, 2 m	0150-2446
KS03-Y-Fe/K-4	Trailing Chain Cable Y-Fe/K, 4 m	0150-2447
KS03-Y-Fe/K-6	Trailing Chain Cable Y-Fe/K, 6 m	0150-2448
KS03-Y-Fe/K-	Trailing Chain Cable Y-Fe/K, Custom Length (max. 6m)	0150-3516
KR03-Y-Fe/K-	Robot Cable KR03-Y-Fe/K, Custom Length (max. 6m)	0150-3718
KR03-W-Fe/K-	Robot Cable KR03-W-Fe/K, Custom Length (max. 6m)	0150-3755

OPTION 2 – 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-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

OPTION 2 – 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/R-	Trailing Chain Cable Y/R, Custom length	0150-3507

OPTION 2 – 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

OPTION 2 – TRAILING CHAIN CABLE / ROBOT CABLE

Item	Description	Item-No.
KS03-R/K-1	Trailing Chain Cable R/K 1 m	0150-2185
KS03-R/K-2	Trailing Chain Cable R/K 2 m	0150-2186
KS03-R/K-	Trailing Chain Cable R/K, Custom length (max. 6m)	0150-3530
KR03-R/K-	Robot Cable R/K, Custom length (max. 6m)	0150-3754

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-K/f	Motor Connector K (f)	0150-3345
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
KS03-09	Trailing Chain Cable per m (max. 6m connection length)	0150-2182
KR03-09	Robot Cable per m	0150-2801

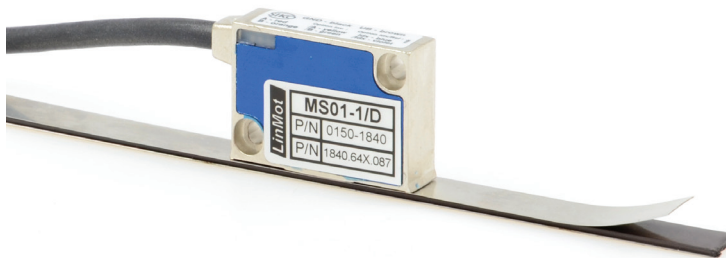
SLIDER MOUNTING



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

FIND MORE PRODUCT DETAILS IN THE CHAPTER "ACCESSORIES".

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for 1mm 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 1mm 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".