



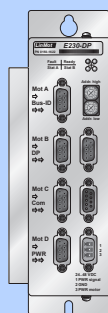
Series P02-23Sx80F-HP	224	P02-23Sx80F/160x220-HP	233
P02-23Sx80F/0x60-HP	227	P02-23Sx80F/220x280-HP	234
P02-23Sx80F/20x80-HP	228	P02-23Sx80F/290x350-HP	235
P02-23Sx80F/40x100-HP	229	P02-23Sx80F/350x410-HP	236
P02-23Sx80F/70x130-HP	230	P02-23Sx80F/450x510-HP	237
P02-23Sx80F/100x160-HP	231	P02-23Sx80F/630x690-HP	238
P02-23Sx80F/140x200-HP	232	P02-23Sx80F/720x780-HP	239
		Motor Cable	240



Motor Specification

		P02-23Sx80F-HP/...
Maximum Stroke	mm (in)	780 (30.71)
Maximum Force	N (lbf)	67 (15.1)
Maximum Velocity	m/s (in/s)	7.3 (287)
Max. Current	A	7.5
Cont. Current	A	1.5
Phase Resist. 25 °C	Ohm	10.3
Phase Resist. 80 °C	Ohm	12.5
Phase Inductance	mH	1.4
Thermal Resistance	°K/W	7.0
Thermal Time Const.	sec	900
Stator Diameter	mm (in)	23 (0.91)
Stator Length	mm (in)	105 (4.13)
Stator Mass	g (lb)	245 (0.54)
Slider Diameter	mm (in)	12 (0.47)
Position Resolution	mm (in)	0.01 (±0.0004)
Position Repeatability	mm (in)	±0.05 (±0.0020)
Position Resolution ES	mm (in)	0.001 (±0.00004)
Repeatability with EPS	mm (in)	±0.01 (±0.0004)

Accessories



Servo Drive:
E100



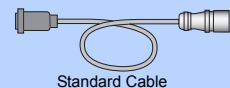
E1100



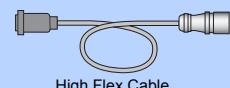
E1200



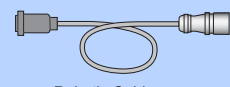
B1100



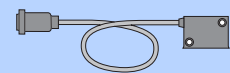
Standard Cable



High Flex Cable

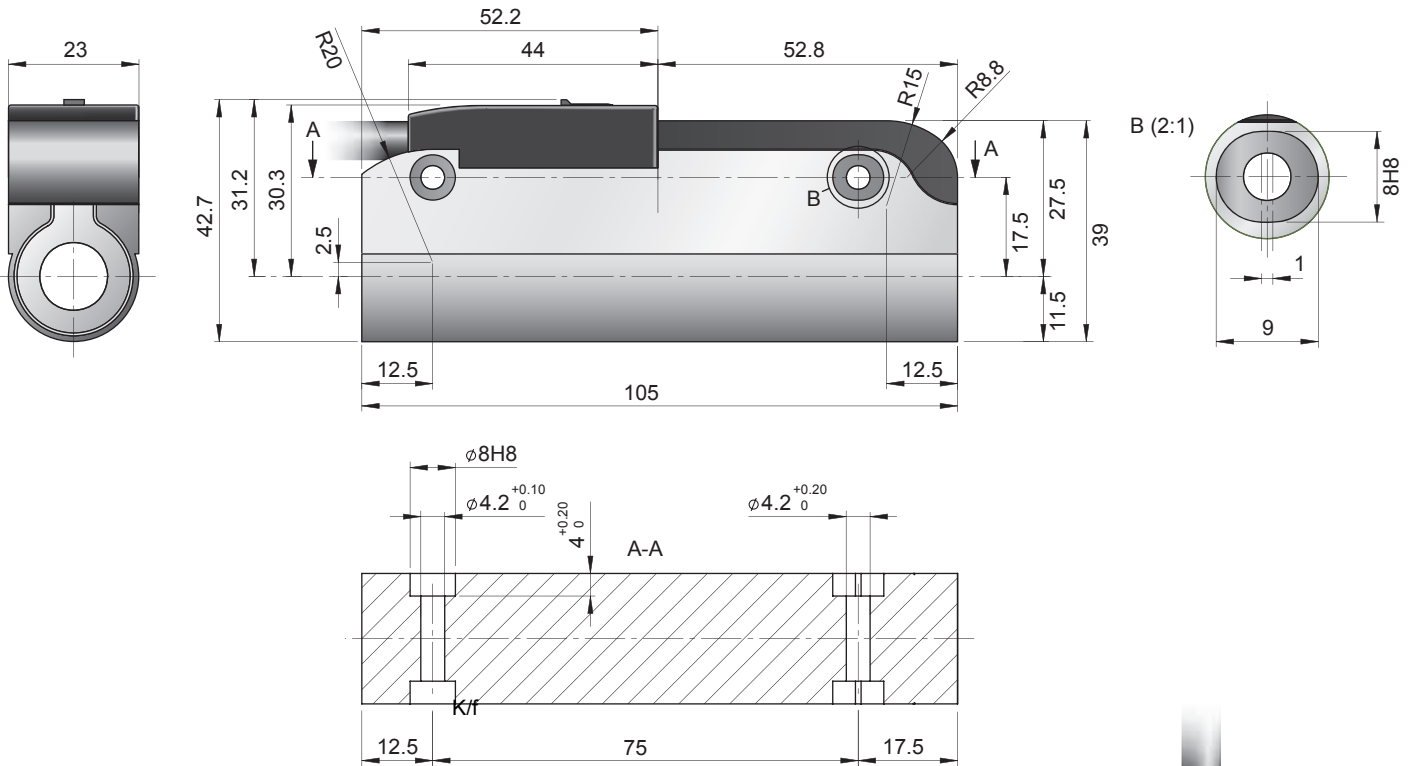


Robotic Cable

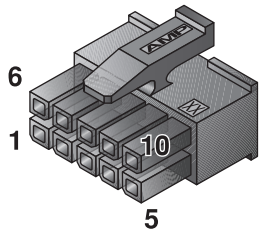
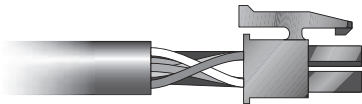


Optional Linear Encoder

Stator



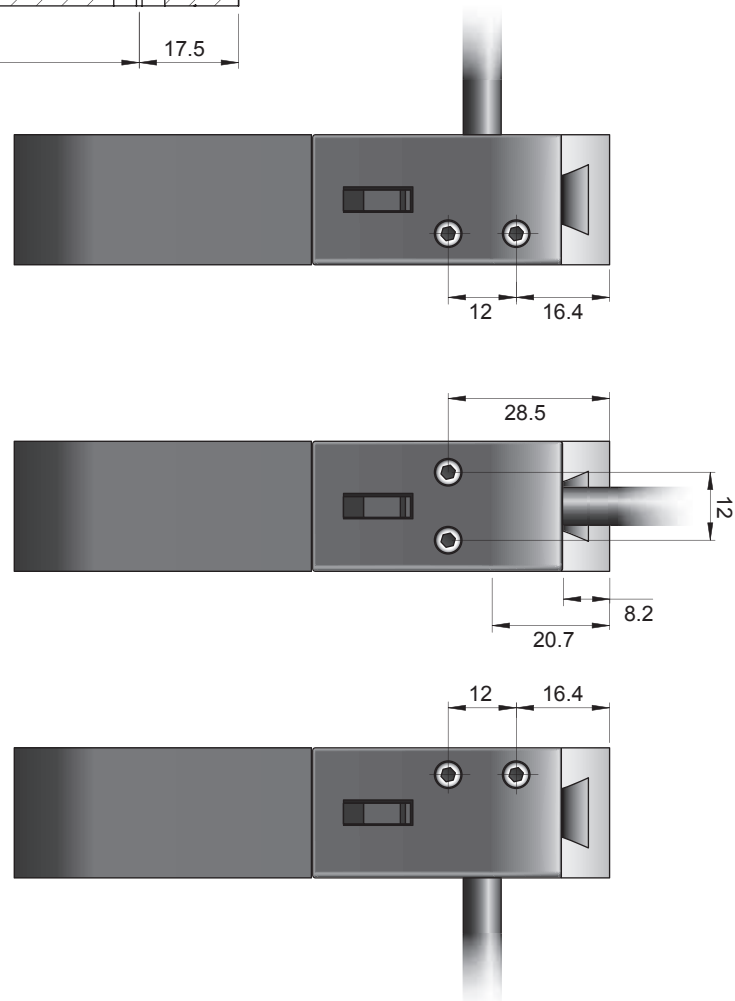
K-Connector



Motor Connector Wiring

Pin 1	red	Phase 1+
Pin 2	blue	Phase 2+
Pin 3		n.c.
Pin 4	pink	Phase 1-
Pin 5	grey	Phase 2-
Pin 6	yellow	Sensor Sin
Pin 7	green	Sensor Cos
Pin 8	brown	Ground
Pin 9	white	+5V
Pin 10	black	Temp sensor
shield	case	Shield

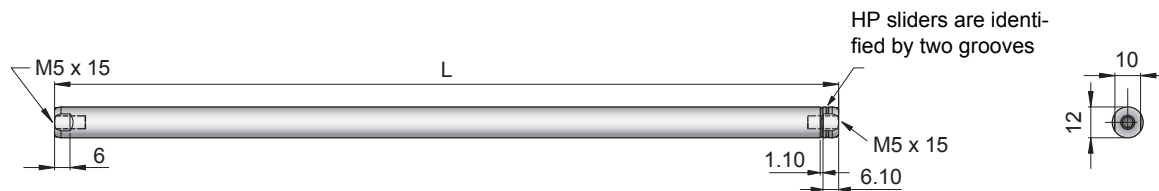
Stators are shipped with three covers for left/right/straight cable outlet



Ordering Information

Item	Description	Part Number
PS02-23Sx80F-HP-K	Stator HP with K-connector IP50	0150-1285

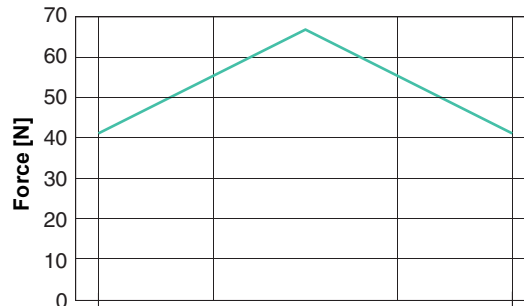
Sliders



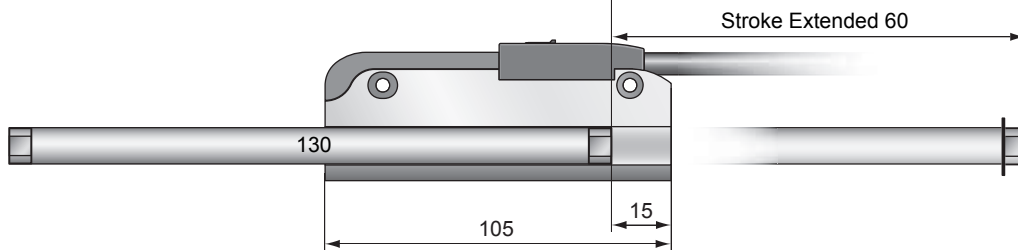
High Performance Slider		Length[mm]	Stroke[mm]	Part Number
PL01-12x130/90-HP	slider "High Performance"	130	0x60	0150-2209
PL01-12x150/110-HP	slider "High Performance"	150	20x80	0150-2281
PL01-12x170/130-HP	slider "High Performance"	170	40x100	0150-1529
PL01-12x200/160-HP	slider "High Performance"	200	70x130	0150-1518
PL01-12x230/190-HP	slider "High Performance"	230	100x160	0150-1519
PL01-12x270/230-HP	slider "High Performance"	270	140x200	0150-1520
PL01-12x290/250-HP	slider "High Performance"	290	160x220	0150-1521
PL01-12x350/310-HP	slider "High Performance"	350	220x280	0150-1522
PL01-12x420/380-HP	slider "High Performance"	420	290x350	0150-1523
PL01-12x480/440-HP	slider "High Performance"	480	350x410	0150-1524
PL01-12x580/540-HP	slider "High Performance"	580	450x510	0150-1525
PL01-12x760/720-HP	slider "High Performance"	760	630x690	0150-1526
PL01-12x850/810-HP	slider "High Performance"	850	720x780	0150-1527

Heavy Duty High Performance Slider		Length[mm]	Stroke[mm]	Part Number
PL02-12x130/90-HP	slider "heavy duty" "High Performance"	130	0x60	on request
PL02-12x150/110-HP	slider "heavy duty" "High Performance"	150	20x80	on request
PL02-12x170/130-HP	slider "heavy duty" "High Performance"	170	40x100	0150-1559
PL02-12x200/160-HP	slider "heavy duty" "High Performance"	200	70x130	0150-1532
PL02-12x230/190-HP	slider "heavy duty" "High Performance"	230	100x160	0150-1552
PL02-12x270/230-HP	slider "heavy duty" "High Performance"	270	140x200	0150-1533
PL02-12x290/250-HP	slider "heavy duty" "High Performance"	290	160x220	0150-1495
PL02-12x350/310-HP	slider "heavy duty" "High Performance"	350	220x280	0150-1555
PL02-12x420/380-HP	slider "heavy duty" "High Performance"	420	290x350	0150-1554
PL02-12x480/440-HP	slider "heavy duty" "High Performance"	480	350x410	on request
PL02-12x580/540-HP	slider "heavy duty" "High Performance"	580	450x510	on request
PL02-12x760/720-HP	slider "heavy duty" "High Performance"	760	630x690	on request
PL02-12x850/810-HP	slider "heavy duty" "High Performance"	850	720x780	on request

Max. Stroke: 60mm
Max. Force: 67N



— E1100, 72VDC

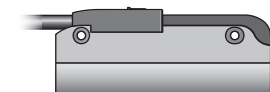


Dimensions in mm

Motor Specification

Stator Type		Standard Winding
Slider Type		High Performance High Performance Heavy Duty
Standard Stroke SS	mm (in)	- (-)
Extended Stroke ES	mm (in)	60 (2.36)
Max. Force	N (lbf)	67 (15.1)
Cont. Force	N (lbf)	15 (3.5)
Cont. Force with fan	N (lbf)	25 (5.6)
Max. Velocity	m/s (in/s)	7.3 (287)
Max. Current	A	7.5
Cont. Current	A	1.5
Cont. Current with fan	A	2.2
Force Constant	N/A (lbf/A)	9 (2.0)
Border Force	%	63
Linearity	%	±0.1
Slider Length	mm (in)	130 (5.12)
Slider Mass	g (lb)	90 (0.20)

Ordering Information

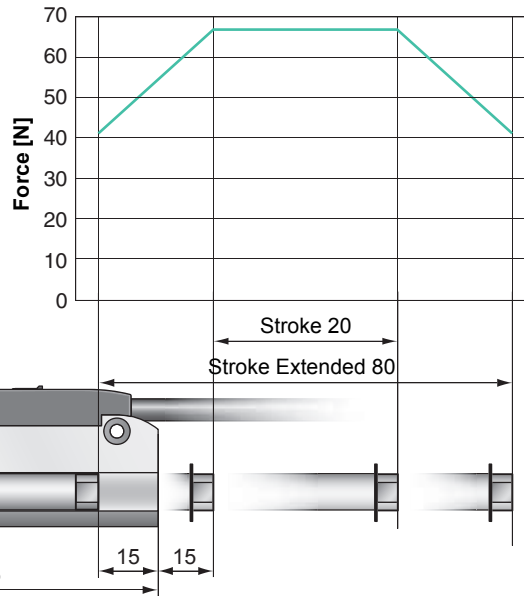


PS02-23Sx80F-HP-K	Stator HP with K-connector IP50	0150-1285
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PL01-12x130/90-HP	High Performance Slider	0150-2209
PL02-12x130/90-HP	High Performance Slider, Heavy Duty	on request

Max. Stroke: 80mm
Max. Force: 67N



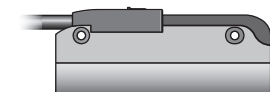
— E1100, 72VDC

Dimensions in mm

Motor Specification

Stator Type		Standard Winding
Slider Type		High Performance High Performance Heavy Duty
Standard Stroke SS	mm (in)	20 (0.79)
Extended Stroke ES	mm (in)	80 (3.15)
Max. Force	N (lbf)	67 (15.1)
Cont. Force	N (lbf)	15 (3.5)
Cont. Force with fan	N (lbf)	25 (5.6)
Max. Velocity	m/s (in/s)	7.3 (287)
Max. Current	A	7.5
Cont. Current	A	1.5
Cont. Current with fan	A	2.2
Force Constant	N/A (lbf/A)	9 (2.0)
Border Force	%	63
Linearity	%	±0.1
Slider Length	mm (in)	150 (5.91)
Slider Mass	g (lb)	110 (4.33)

Ordering Information

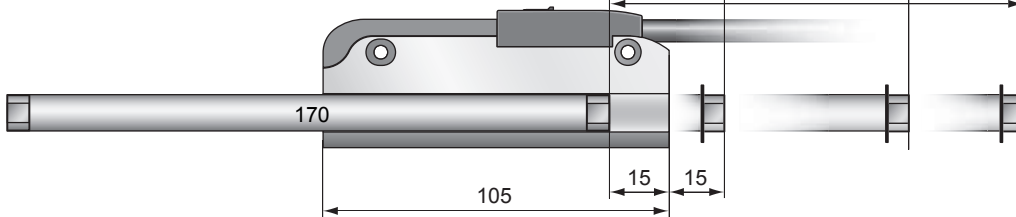
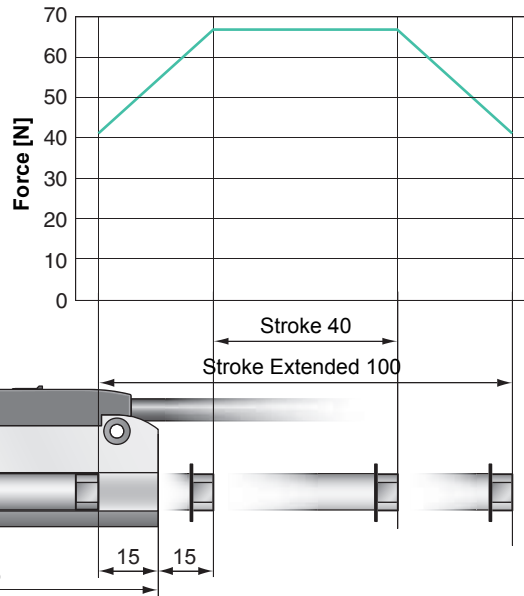


PS02-23Sx80F-HP-K	Stator HP with K-connector IP50	0150-1285
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PL01-12x150/110-HP	High Performance Slider	0150-2281
PL02-12x150/110-HP	High Performance Slider, Heavy Duty	on request

Max. Stroke: 100mm
Max. Force: 67N

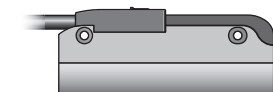


Dimensions in mm

Motor Specification

Stator Type		Standard Winding
Slider Type		High Performance High Performance Heavy Duty
Standard Stroke SS	mm (in)	40 (1.57)
Extended Stroke ES	mm (in)	100 (3.94)
Max. Force	N (lbf)	67 (15.1)
Cont. Force	N (lbf)	15 (3.5)
Cont. Force with fan	N (lbf)	25 (5.6)
Max. Velocity	m/s (in/s)	7.3 (287)
Max. Current	A	7.5
Cont. Current	A	1.5
Cont. Current with fan	A	2.2
Force Constant	N/A (lbf/A)	9 (2.0)
Border Force	%	63
Linearity	%	±0.1
Slider Length	mm (in)	170 (6.69)
Slider Mass	g (lb)	125 (0.28)

Ordering Information

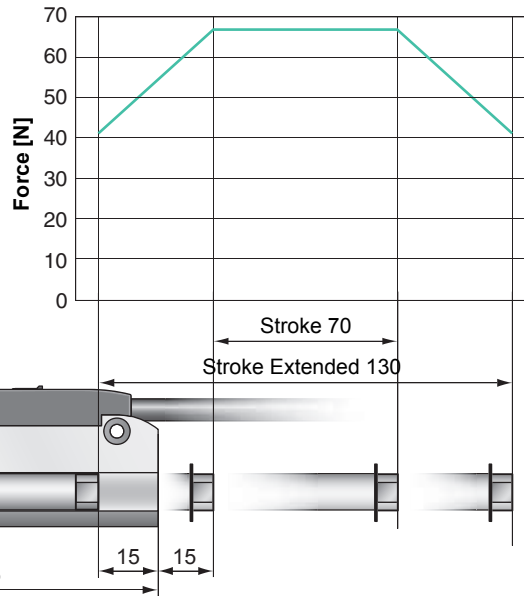


PS02-23Sx80F-HP-K	Stator HP with K-connector IP50	0150-1285
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PL01-12x170/130-HP	High Performance Slider	0150-1529
PL02-12x170/130-HP	High Performance Slider, Heavy Duty	0150-1559

Max. Stroke: 130mm
Max. Force: 67N



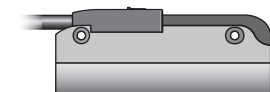
— E1100, 72VDC

Dimensions in mm

Motor Specification

Stator Type		Standard Winding
Slider Type		High Performance High Performance Heavy Duty
Standard Stroke SS	mm (in)	70 (2.76)
Extended Stroke ES	mm (in)	130 (5.12)
Max. Force	N (lbf)	67 (15.1)
Cont. Force	N (lbf)	15 (3.5)
Cont. Force with fan	N (lbf)	25 (5.6)
Max. Velocity	m/s (in/s)	7.3 (287)
Max. Current	A	7.5
Cont. Current	A	1.5
Cont. Current with fan	A	2.2
Force Constant	N/A (lbf/A)	9 (2.0)
Border Force	%	63
Linearity	%	±0.1
Slider Length	mm (in)	200 (7.87)
Slider Mass	g (lb)	150 (0.33)

Ordering Information

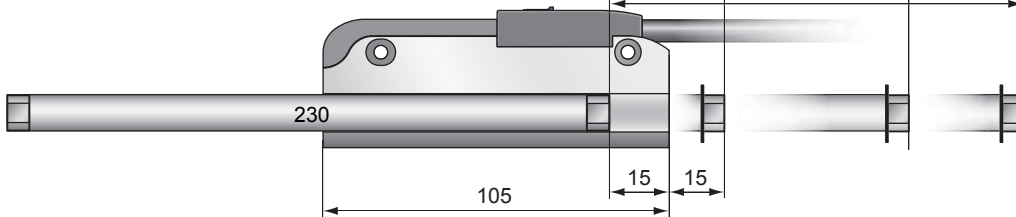
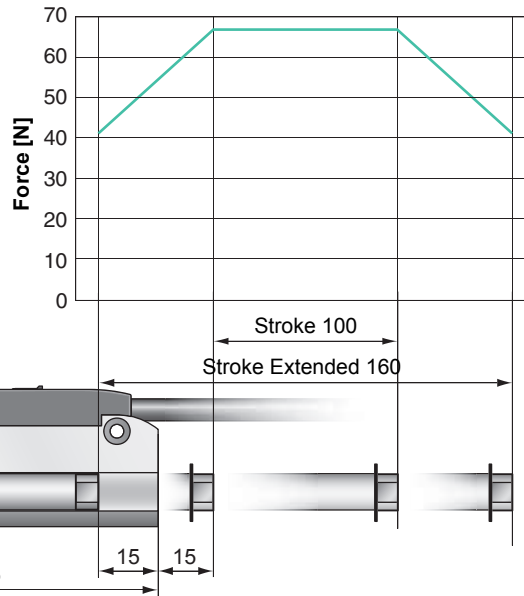


PS02-23Sx80F-HP-K	Stator HP with K-connector IP50	0150-1285
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PL01-12x200/160-HP	High Performance Slider	0150-1518
PL02-12x200/160-HP	High Performance Slider, Heavy Duty	0150-1532

Max. Stroke: 160mm
Max. Force: 67N

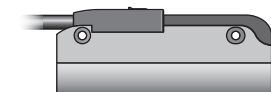


Dimensions in mm

Motor Specification

Stator Type		Standard Winding
Slider Type		High Performance High Performance Heavy Duty
Standard Stroke SS	mm (in)	100 (3.94)
Extended Stroke ES	mm (in)	160 (6.3)
Max. Force	N (lbf)	67 (15.1)
Cont. Force	N (lbf)	15 (3.5)
Cont. Force with fan	N (lbf)	25 (5.6)
Max. Velocity	m/s (in/s)	7.3 (287)
Max. Current	A	7.5
Cont. Current	A	1.5
Cont. Current with fan	A	2.2
Force Constant	N/A (lbf/A)	9 (2.0)
Border Force	%	63
Linearity	%	±0.1
Slider Length	mm (in)	230 (9.06)
Slider Mass	g (lb)	175 (0.39)

Ordering Information

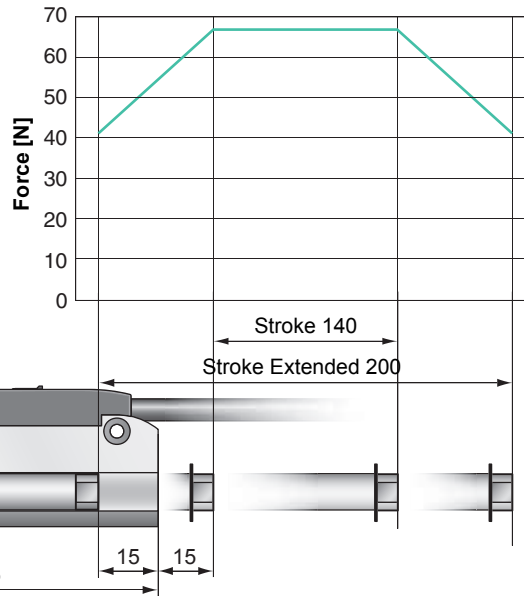


PS02-23Sx80F-HP-K	Stator HP with K-connector IP50	0150-1285
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PL01-12x230/190-HP	High Performance Slider	0150-1519
PL02-12x230/190-HP	High Performance Slider, Heavy Duty	0150-1552

Max. Stroke: 200mm
Max. Force: 67N

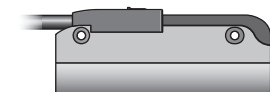


Dimensions in mm

Motor Specification

Stator Type		Standard Winding
Slider Type		High Performance High Performance Heavy Duty
Standard Stroke SS	mm (in)	140 (5.51)
Extended Stroke ES	mm (in)	200 (7.87)
Max. Force	N (lbf)	67 (15.1)
Cont. Force	N (lbf)	15 (3.5)
Cont. Force with fan	N (lbf)	25 (5.6)
Max. Velocity	m/s (in/s)	7.3 (287)
Max. Current	A	7.5
Cont. Current	A	1.5
Cont. Current with fan	A	2.2
Force Constant	N/A (lbf/A)	9 (2.0)
Border Force	%	63
Linearity	%	±0.1
Slider Length	mm (in)	270 (16.63)
Slider Mass	g (lb)	210 (0.46)

Ordering Information

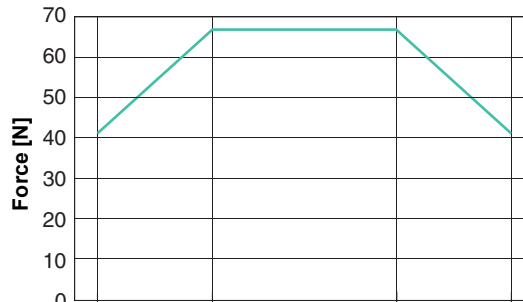


PS02-23Sx80F-HP-K	Stator HP with K-connector IP50	0150-1285
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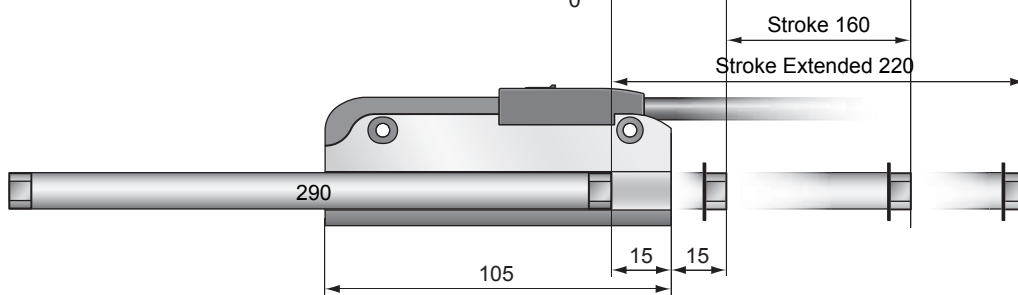


PL01-12x270/230-HP	High Performance Slider	0150-1520
PL02-12x270/230-HP	High Performance Slider, Heavy Duty	0150-1533

Max. Stroke: 220mm
Max. Force: 67N



E1100, 72VDC

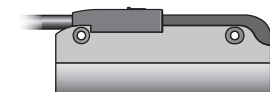


Dimensions in mm

Motor Specification

Stator Type		Standard Winding
Slider Type		High Performance High Performance Heavy Duty
Standard Stroke SS	mm (in)	160 (6.30)
Extended Stroke ES	mm (in)	220 (8.66)
Max. Force	N (lbf)	67 (15.1)
Cont. Force	N (lbf)	15 (3.5)
Cont. Force with fan	N (lbf)	25 (5.6)
Max. Velocity	m/s (in/s)	7.3 (287)
Max. Current	A	7.5
Cont. Current	A	1.5
Cont. Current with fan	A	2.2
Force Constant	N/A (lbf/A)	9 (2.0)
Border Force	%	63
Linearity	%	±0.1
Slider Length	mm (in)	290 (11.42)
Slider Mass	g (lb)	230 (0.51)

Ordering Information

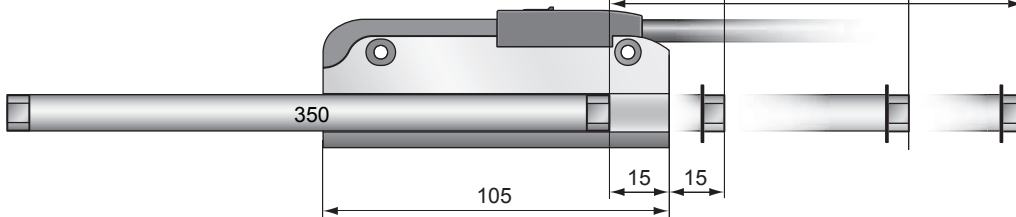
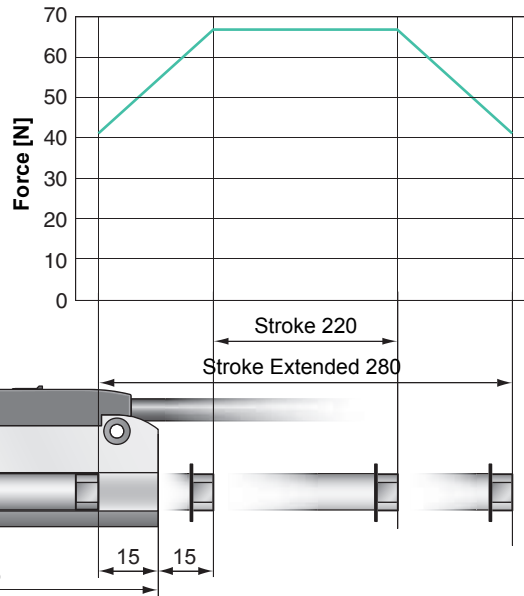


PS02-23Sx80F-HP-K	Stator HP with K-connector IP50	0150-1285
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PL01-12x290/250-HP	High Performance Slider	0150-1521
PL02-12x290/250-HP	High Performance Slider, Heavy Duty	0150-1495

Max. Stroke: 280mm
Max. Force: 67N

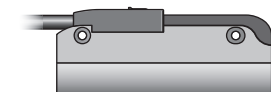


Dimensions in mm

Motor Specification

Stator Type		Standard Winding
Slider Type		High Performance High Performance Heavy Duty
Standard Stroke SS	mm (in)	220 (8.66)
Extended Stroke ES	mm (in)	280 (11.02)
Max. Force	N (lbf)	67 (15.1)
Cont. Force	N (lbf)	15 (3.5)
Cont. Force with fan	N (lbf)	25 (5.6)
Max. Velocity	m/s (in/s)	7.3 (287)
Max. Current	A	7.5
Cont. Current	A	1.5
Cont. Current with fan	A	2.2
Force Constant	N/A (lbf/A)	9 (2.0)
Border Force	%	63
Linearity	%	±0.1
Slider Length	mm (in)	350 (13.78)
Slider Mass	g (lb)	280 (0.62)

Ordering Information

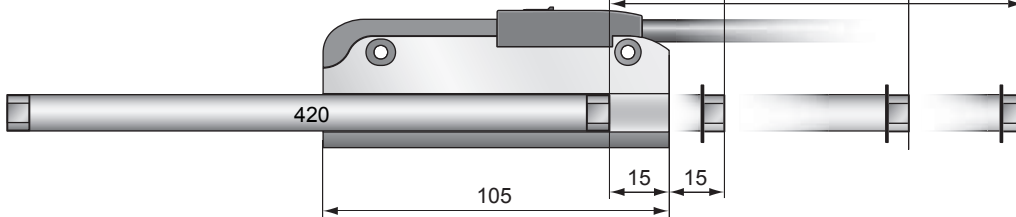
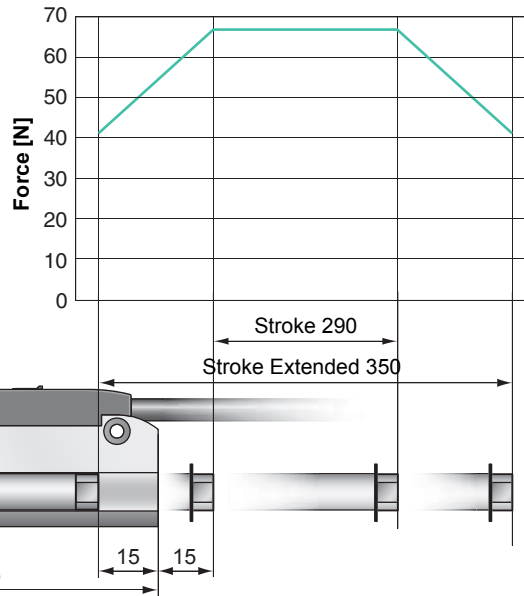


PS02-23Sx80F-HP-K	Stator HP with K-connector IP50	0150-1285
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PL01-12x350/310-HP	High Performance Slider	0150-1522
PL02-12x350/310-HP	High Performance Slider, Heavy Duty	0150-1555

Max. Stroke: 350mm
Max. Force: 67N

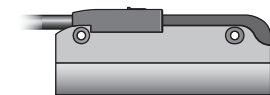


Dimensions in mm

Motor Specification

Stator Type		Standard Winding
Slider Type		High Performance High Performance Heavy Duty
Standard Stroke SS	mm (in)	290 (11.42)
Extended Stroke ES	mm (in)	350 (13.78)
Max. Force	N (lbf)	67 (15.1)
Cont. Force	N (lbf)	15 (3.5)
Cont. Force with fan	N (lbf)	25 (5.6)
Max. Velocity	m/s (in/s)	7.3 (287)
Max. Current	A	7.5
Cont. Current	A	1.5
Cont. Current with fan	A	2.2
Force Constant	N/A (lbf/A)	9 (2.0)
Border Force	%	63
Linearity	%	±0.1
Slider Length	mm (in)	420 (16.53)
Slider Mass	g (lb)	340 (0.75)

Ordering Information

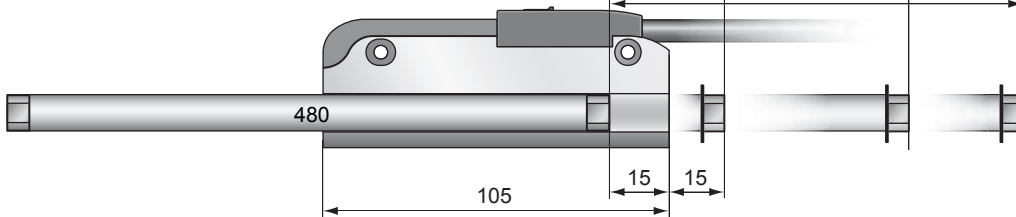
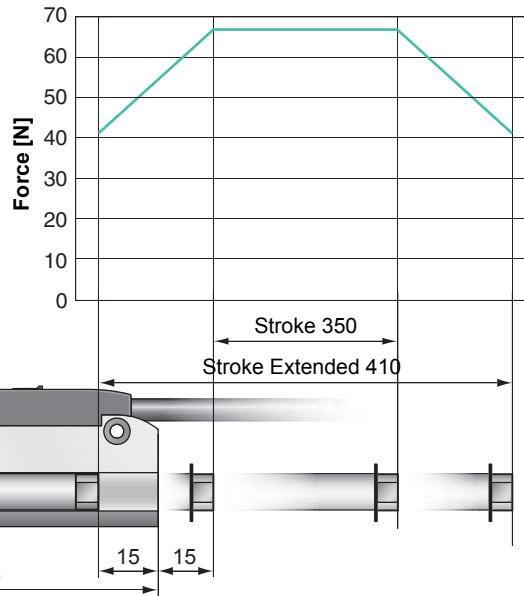


PS02-23Sx80F-HP-K	Stator HP with K-connector IP50	0150-1285
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PL01-12x420/380-HP	High Performance Slider	0150-1523
PL02-12x420/38-HP	High Performance Slider, Heavy Duty	0150-1554

Max. Stroke: 410mm
Max. Force: 67N

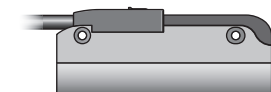


Dimensions in mm

Motor Specification

Stator Type		Standard Winding
Slider Type		High Performance High Performance Heavy Duty
Standard Stroke SS	mm (in)	350 (13.78)
Extended Stroke ES	mm (in)	410 (16.14)
Max. Force	N (lbf)	67 (15.1)
Cont. Force	N (lbf)	15 (3.5)
Cont. Force with fan	N (lbf)	25 (5.6)
Max. Velocity	m/s (in/s)	7.3 (287)
Max. Current	A	7.5
Cont. Current	A	1.5
Cont. Current with fan	A	2.2
Force Constant	N/A (lbf/A)	9 (2.0)
Border Force	%	63
Linearity	%	±0.1
Slider Length	mm (in)	480 (18.90)
Slider Mass	g (lb)	390 (0.86)

Ordering Information

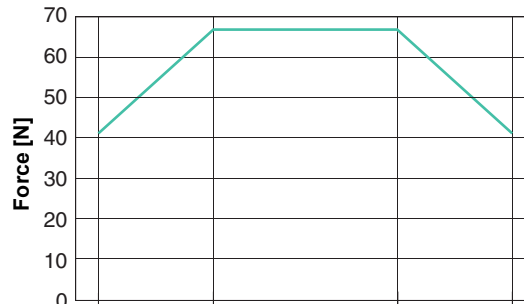


PS02-23Sx80F-HP-K	Stator HP with K-connector IP50	0150-1285
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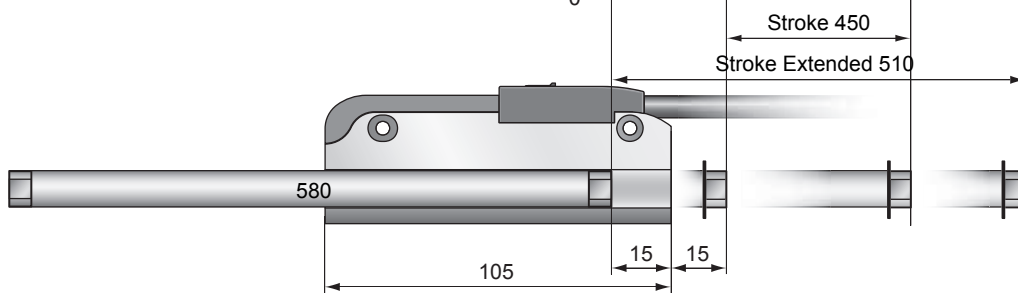


PL01-12x480/440-HP	High Performance Slider	0150-1524
PL02-12x480/440-HP	High Performance Slider, Heavy Duty	on request

Max. Stroke: 510mm
Max. Force: 67N



— E1100, 72VDC

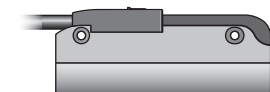


Dimensions in mm

Motor Specification

Stator Type		Standard Winding
Slider Type		High Performance High Performance Heavy Duty
Standard Stroke SS	mm (in)	450 (17.72)
Extended Stroke ES	mm (in)	510 (20.08)
Max. Force	N (lbf)	67 (15.1)
Cont. Force	N (lbf)	15 (3.5)
Cont. Force with fan	N (lbf)	25 (5.6)
Max. Velocity	m/s (in/s)	7.3 (287)
Max. Current	A	7.5
Cont. Current	A	1.5
Cont. Current with fan	A	2.2
Force Constant	N/A (lbf/A)	9 (2.0)
Border Force	%	63
Linearity	%	±0.1
Slider Length	mm (in)	580 (22.83)
Slider Mass	g (lb)	475 (1.05)

Ordering Information

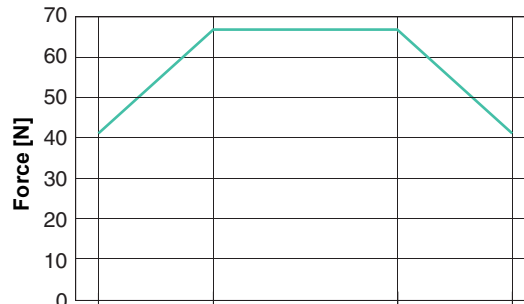


PS02-23Sx80F-HP-K	Stator HP with K-connector IP50	0150-1285
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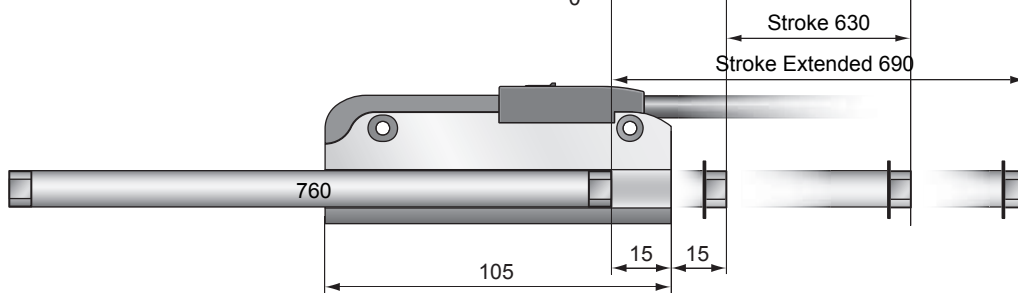


PL01-12x580/540-HP	High Performance Slider	0150-1525
PL02-12x580/540-HP	High Performance Slider, Heavy Duty	on request

Max. Stroke: 690mm
Max. Force: 67N



E1100, 72VDC

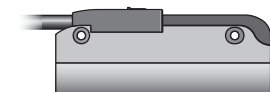


Dimensions in mm

Motor Specification

Stator Type		Standard Winding
Slider Type		High Performance High Performance Heavy Duty
Standard Stroke SS	mm (in)	630 (24.80)
Extended Stroke ES	mm (in)	690 (27.17)
Max. Force	N (lbf)	67 (15.1)
Cont. Force	N (lbf)	15 (3.5)
Cont. Force with fan	N (lbf)	25 (5.6)
Max. Velocity	m/s (in/s)	7.3 (287)
Max. Current	A	7.5
Cont. Current	A	1.5
Cont. Current with fan	A	2.2
Force Constant	N/A (lbf/A)	9 (2.0)
Border Force	%	63
Linearity	%	±0.1
Slider Length	mm (in)	760 (29.92)
Slider Mass	g (lb)	625 (1.38)

Ordering Information

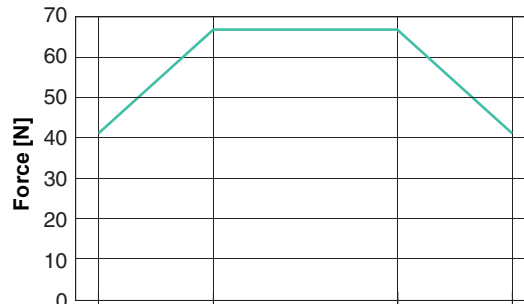


PS02-23Sx80F-HP-K	Stator HP with K-connector IP50	0150-1285
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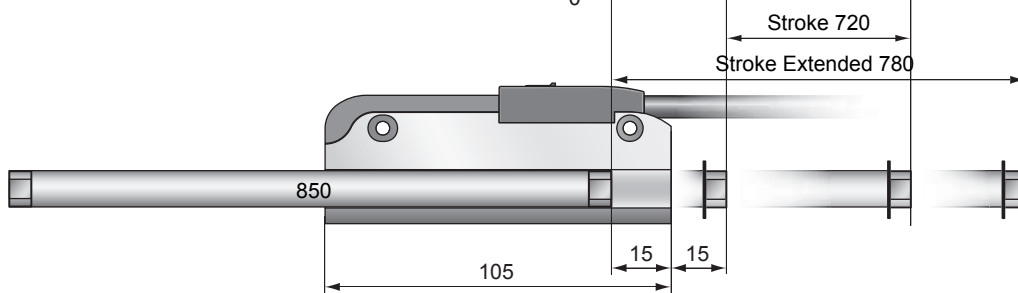


PL01-12x760/720-HP	High Performance Slider	0150-1526
PL02-12x760/720-HP	High Performance Slider, Heavy Duty	on request

Max. Stroke: 780mm
Max. Force: 67N



— E1100, 72VDC

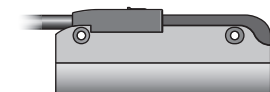


Dimensions in mm

Motor Specification

Stator Type		Standard Winding
Slider Type		High Performance High Performance Heavy Duty
Standard Stroke SS	mm (in)	720 (28.35)
Extended Stroke ES	mm (in)	780 (30.71)
Max. Force	N (lbf)	67 (15.1)
Cont. Force	N (lbf)	15 (3.5)
Cont. Force with fan	N (lbf)	25 (5.6)
Max. Velocity	m/s (in/s)	7.3 (287)
Max. Current	A	7.5
Cont. Current	A	1.5
Cont. Current with fan	A	2.2
Force Constant	N/A (lbf/A)	9 (2.0)
Border Force	%	63
Linearity	%	±0.1
Slider Length	mm (in)	850 (33.46)
Slider Mass	g (lb)	700 (1.54)

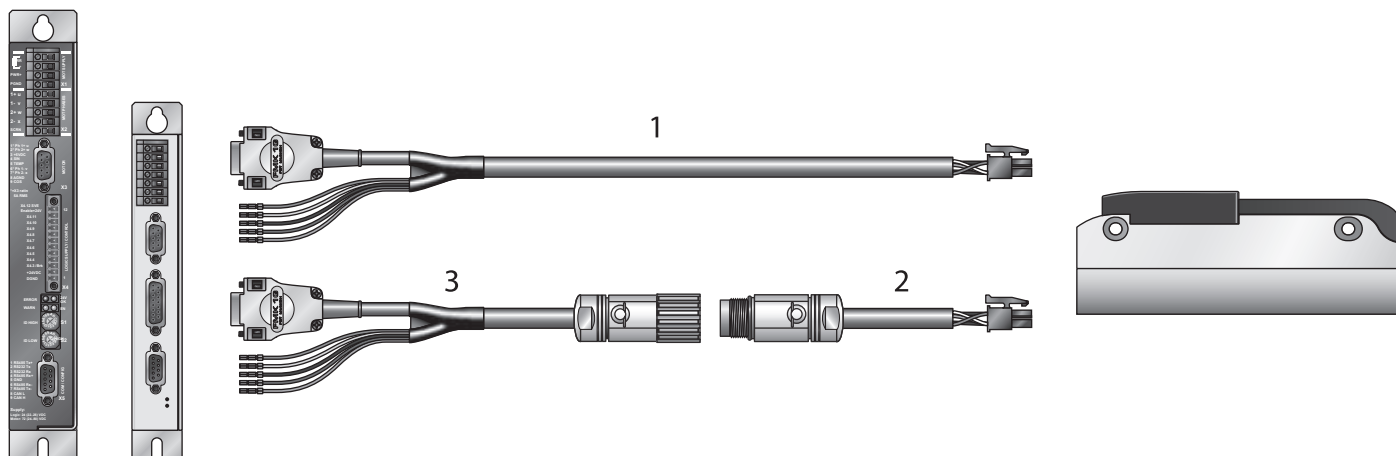
Ordering Information



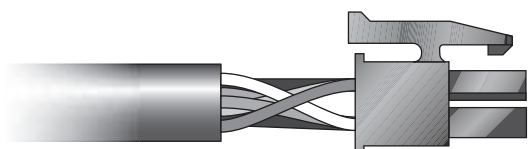
PS02-23Sx80F-HP-K	Stator HP with K-connector IP50	0150-1285
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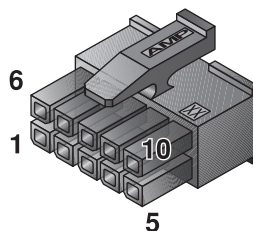
PL01-12x850/810-HP	High Performance Slider	0150-1527
PL02-12x850/810-HP	High Performance Slider, Heavy Duty	on request



K-Connector



K/f



5

Motor Connector Wiring

Pin 1	red	Phase 1+
Pin 2	blue	Phase 2+
Pin 3		n.c.
Pin 4	pink	Phase 1-
Pin 5	grey	Phase 2-
Pin 6	yellow	Sensor Sin
Pin 7	green	Sensor Cos
Pin 8	brown	Ground
Pin 9	white	+5V
Pin 10	black	Temp sensor
shield	case	Shield

Ordering Information

1. High Flex Motor Cable directly to the Controller (length up to 2m)

Item	Description	Part Number
KS03-W/K-2	High Flex cable W/K, 2m	0150-2187
KS03-W/K-	High Flex cable W/K, custom length	0150-3357

2. High Flex Motor Cable with R Connector (length up to 2m)

KS03-R/K-1	High Flex cable R/K, 1m	0150-2185
KS03-R/K-2	High Flex cable R/K, 2m	0150-2186
KS03-R/K-	High Flex cable R/K, custom length	0150-3353

3. Motor Extension Cables (length up to 50m)

Standard cable		
K05-W/R-2	Standard cable W/R, 2m	0150-2119
K05-W/R-4	Standard cable W/R, 4m	0150-2120
K05-W/R-6	Standard cable W/R, 6m	0150-2121
K05-W/R-8	Standard cable W/R, 8m	0150-2122
K05-W/R-10	Standard cable W/R, 10m	0150-2132
K05-W/R-	Standard cable W/R, custom length	0150-3262

High Flex cable chain cable

KS05-W/R-4	High Flex cable W/R, 4m	0150-2106
KS05-W/R-6	High Flex cable W/R, 6m	0150-2131
KS05-W/R-8	High Flex cable W/R, 8m	0150-2107
KS05-W/R-	High Flex cable W/R, custom length	0150-3256

Connectors & Cable

KS03--09	High Flex cable per m	0150-2182
KR05-W/R-	Robot cable W/R, per m	0150-3336
MC01-K/f	K/f connector	0150-3345
MC01-K/f-as	K/f connector, assembled	0150-3346