

P01-23x160/70x70 84

P01-23x160/40x100 86

P01-23x160/0x140 88

P01-23x160/70x210 90

P01-23x160/130x270 92

P01-23x160/200x340 94

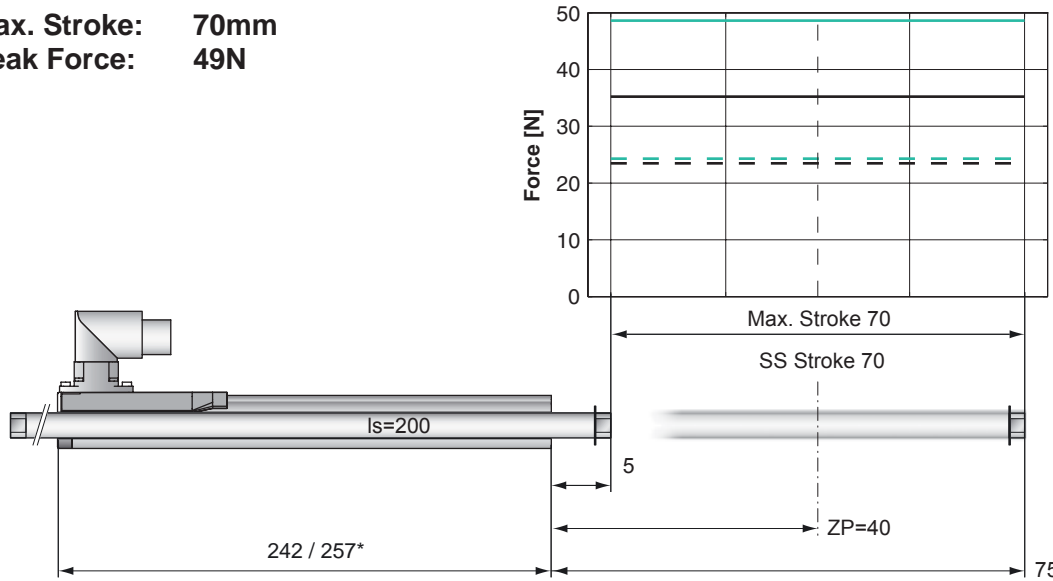
P01-23x160/260x400 96

P01-23x160/360x500 98

P01-23x160/540x680 100

P01-23x160/630x770 102

Max. Stroke: 70mm
Peak Force: 49N



Standard Winding:
 — E1100, 72VDC & E1001, 72VDC
 - - - E100, 48VDC

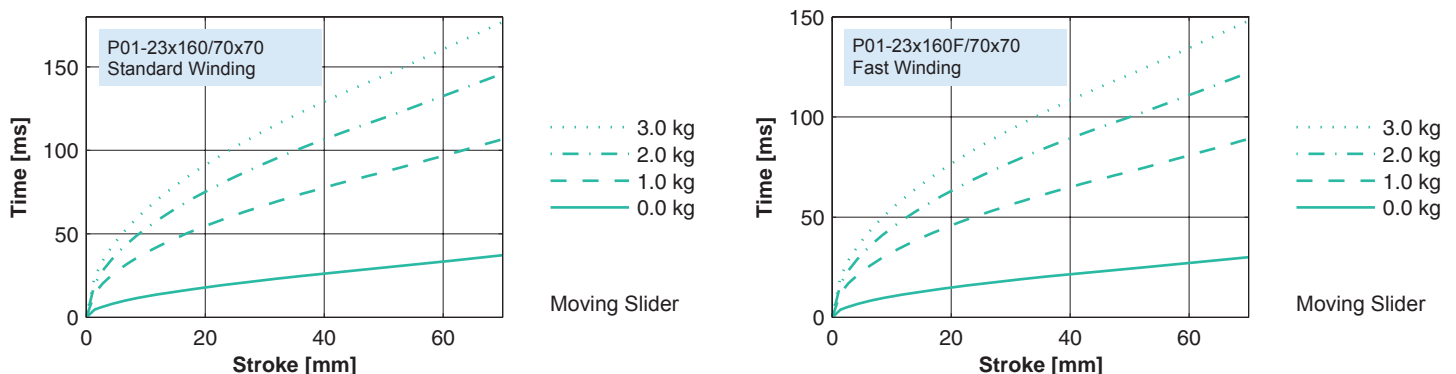
Fast Winding:
 — E1100, 72VDC & E1001, 72VDC
 - - - E100, 48VDC

Dimensions in mm
*Cable Type

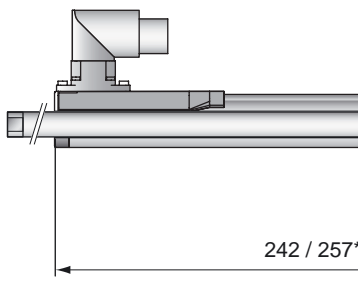
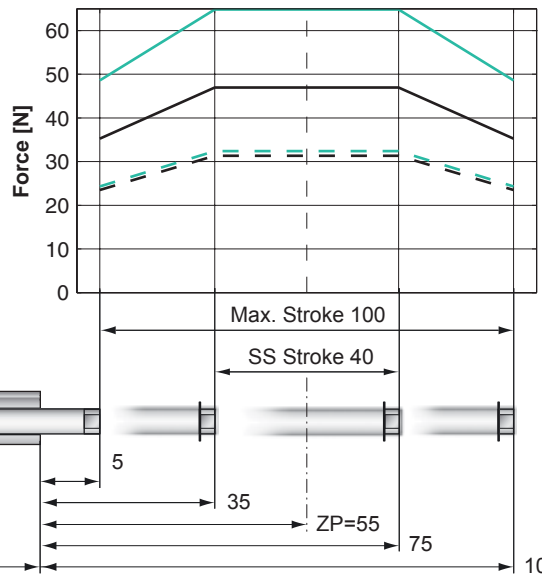
Motor Specification

		Connector Type		Cable Type	
		Standard Winding 23x160/70x70-R	Fast Winding 23x160F/70x70-R	Standard Winding 23x160/70x70 23x160/70x70-R20	Fast Winding 23x160F/70x70-R20
Stroke Max.	mm (in)	70 (2.76)	70 (2.76)	70 (2.76)	70 (2.76)
Stroke SS	mm (in)	70 (2.76)	70 (2.76)	70 (2.76)	70 (2.76)
Peak Force E1100 / E1001	N (lbf)	35 (7.9)	49 (10.9)	35 (7.9)	49 (10.9)
Peak Force E100	N (lbf)	23 (5.3)	24 (5.5)	23 (5.3)	24 (5.5)
Cont. Force	N (lbf)	9 (2.1)	9 (2.1)	9 (2.1)	9 (2.1)
Cont. Force Fan cooling	N (lbf)	18 (4.0)	18 (4.0)	18 (4.0)	18 (4.0)
Border Force	%	100	100	100	100
Force Constant	N/A (lbf/A)	12.4 (2.79)	8.1 (1.82)	12.4 (2.79)	8.1 (1.82)
Max. Current @ 72VDC	A	2.8	6.0	2.8	6.0
Max. Current @ 48VDC	A	1.9	4.3	1.9	4.3
Max. Velocity @ 72VDC	m/s (in/s)	5.3 (210)	8.2 (322)	5.3 (210)	8.2 (322)
Max. Velocity @ 48VDC	m/s (in/s)	3.6 (140)	5.5 (215)	3.6 (140)	5.5 (215)
Phase Resist. 25/80 °C	Ohm	20.6/24.9	9.0/10.9	20.6/24.9	9.0/10.9
Phase Inductance	mH	2.7	1.2	2.7	1.2
Thermal Resistance	°K/W	3.9	3.8	3.9	3.8
Thermal Time Const.	sec	1900	1800	1900	1800
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	242 (9.53)	242 (9.53)	257 (10.12)	257 (10.12)
Stator Mass	g (lb)	450 (0.99)	450 (0.99)	450 (0.99)	450 (0.99)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	200 (7.87)	200 (7.87)	200 (7.87)	200 (7.87)
Slider Mass	g (lb)	112 (0.25)	112 (0.25)	112 (0.25)	112 (0.25)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.55	±0.55	±0.55	±0.55
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram



Max. Stroke: 100mm
Peak Force: 65N



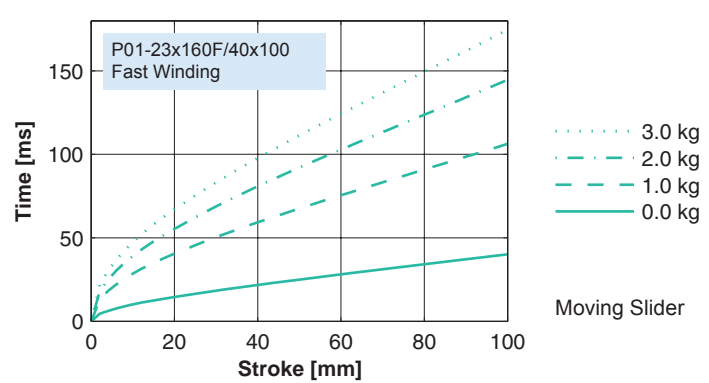
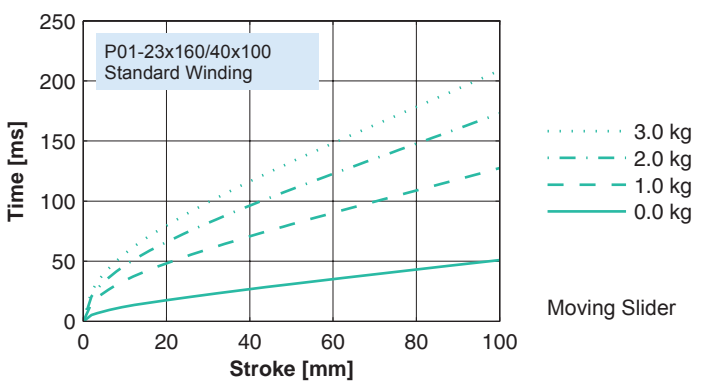
- Standard Winding:**
- E1100, 72VDC & E1001, 72VDC
 - - - E100, 48VDC
- Fast Winding:**
- E1100, 72VDC & E1001, 72VDC
 - - - E100, 48VDC

Dimensions in mm
*Cable Type

Motor Specification

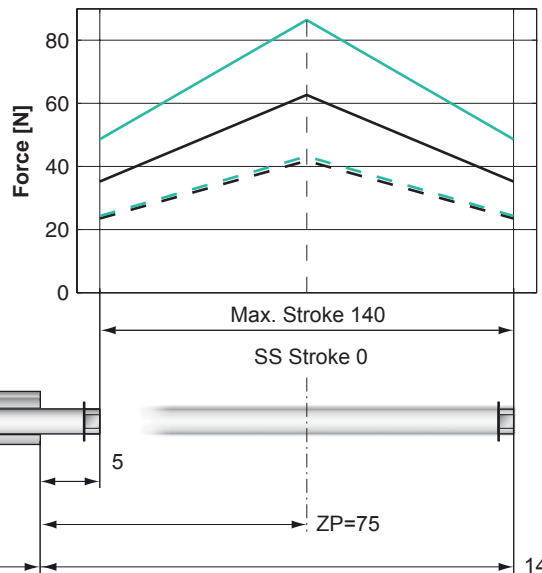
		Connector Type		Cable Type	
		Standard Winding 23x160/40x100-R	Fast Winding 23x160F/40x100-R	Standard Winding 23x160/40x100 23x160/40x100-R20	Fast Winding 23x160F/40x100-R20
Stroke Max.	mm (in)	100 (3.94)	100 (3.94)	100 (3.94)	100 (3.94)
Stroke SS	mm (in)	40 (1.57)	40 (1.57)	40 (1.57)	40 (1.57)
Peak Force E1100 / E1001	N (lbf)	47 (10.6)	65 (14.6)	47 (10.6)	65 (14.6)
Peak Force E100	N (lbf)	31 (7.0)	32 (7.3)	31 (7.0)	32 (7.3)
Cont. Force	N (lbf)	12 (2.8)	12 (2.8)	12 (2.8)	12 (2.8)
Cont. Force Fan cooling	N (lbf)	24 (5.3)	24 (5.3)	24 (5.3)	24 (5.3)
Border Force	%	75	75	75	75
Force Constant	N/A (lbf/A)	16.6 (3.72)	10.8 (2.43)	16.6 (3.72)	10.8 (2.43)
Max. Current @ 72VDC	A	2.8	6.0	2.8	6.0
Max. Current @ 48VDC	A	1.9	4.3	1.9	4.3
Max. Velocity @ 72VDC	m/s (in/s)	4.0 (157)	6.1 (241)	4.0 (157)	6.1 (241)
Max. Velocity @ 48VDC	m/s (in/s)	2.7 (105)	4.1 (161)	2.7 (105)	4.1 (161)
Phase Resist. 25/80 °C	Ohm	20.6/24.9	9.0/10.9	20.6/24.9	9.0/10.9
Phase Inductance	mH	2.7	1.2	2.7	1.2
Thermal Resistance	°K/W	3.9	3.8	3.9	3.8
Thermal Time Const.	sec	1900	1800	1900	1800
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	242 (9.53)	242 (9.53)	257 (10.12)	257 (10.12)
Stator Mass	g (lb)	450 (0.99)	450 (0.99)	450 (0.99)	450 (0.99)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	230 (9.06)	230 (9.06)	230 (9.06)	230 (9.06)
Slider Mass	g (lb)	137 (0.30)	137 (0.30)	137 (0.30)	137 (0.30)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.45	±0.45	±0.45	±0.45
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram



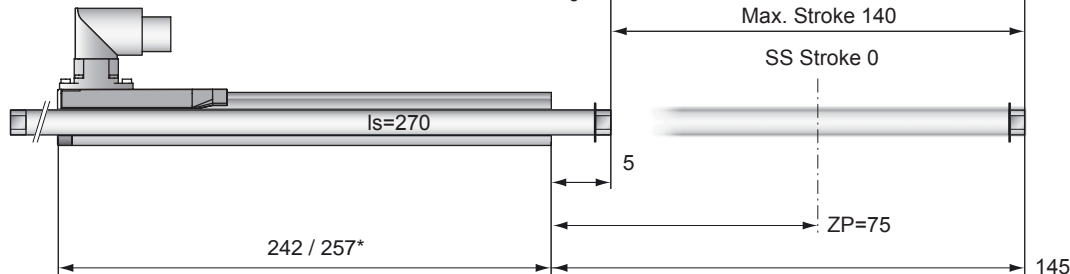
P01-23x160/40x100

Max. Stroke: 140mm
Peak Force: 86N



Standard Winding:
 — E1100, 72VDC & E1001, 72VDC
 - - - E100, 48VDC

Fast Winding:
 — E1100, 72VDC & E1001, 72VDC
 - - - E100, 48VDC

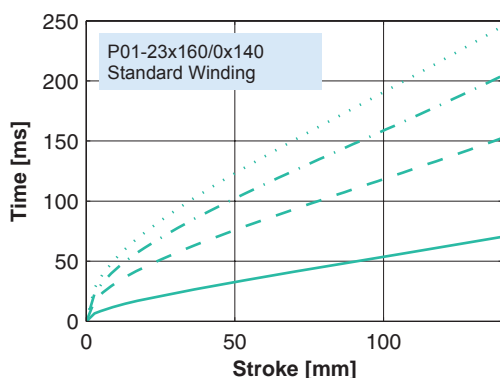


Dimensions in mm
 *Cable Type

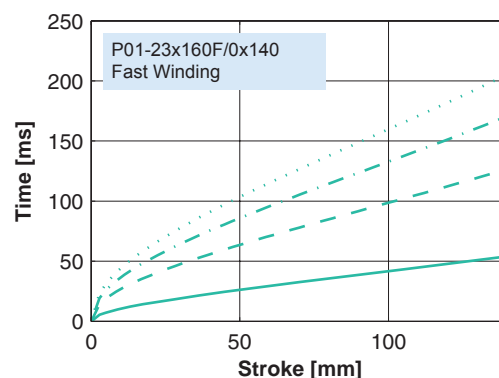
Motor Specification

		Connector Type		Cable Type	
		Standard Winding 23x160/0x140-R	Fast Winding 23x160F/0x140-R	Standard Winding 23x160/0x140 23x160/0x140-R20	Fast Winding 23x160F/0x140-R20
Stroke Max.	mm (in)	140 (5.51)	140 (5.51)	140 (5.51)	140 (5.51)
Stroke SS	mm (in)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
Peak Force E1100 / E1001	N (lbf)	63 (14.1)	86 (19.4)	63 (14.1)	86 (19.4)
Peak Force E100	N (lbf)	42 (9.4)	43 (9.7)	42 (9.4)	43 (9.7)
Cont. Force	N (lbf)	17 (3.7)	17 (3.7)	17 (3.7)	17 (3.7)
Cont. Force Fan cooling	N (lbf)	31 (7.1)	32 (7.1)	31 (7.1)	32 (7.1)
Border Force	%	56	56	56	56
Force Constant	N/A (lbf/A)	22.1 (4.96)	14.4 (3.24)	22.1 (4.96)	14.4 (3.24)
Max. Current @ 72VDC	A	2.8	6.0	2.8	6.0
Max. Current @ 48VDC	A	1.9	4.3	1.9	4.3
Max. Velocity @ 72VDC	m/s (in/s)	3.0 (118)	4.6 (181)	3.0 (118)	4.6 (181)
Max. Velocity @ 48VDC	m/s (in/s)	2.0 (79)	3.1 (121)	2.0 (79)	3.1 (121)
Phase Resist. 25/80 °C	Ohm	20.6/24.9	9.0/10.9	20.6/24.9	9.0/10.9
Phase Inductance	mH	2.7	1.2	2.7	1.2
Thermal Resistance	°K/W	3.9	3.8	3.9	3.8
Thermal Time Const.	sec	1900	1800	1900	1800
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	242 (9.53)	242 (9.53)	257 (10.12)	257 (10.12)
Stator Mass	g (lb)	450 (0.99)	450 (0.99)	450 (0.99)	450 (0.99)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	270 (10.63)	270 (10.63)	270 (10.63)	270 (10.63)
Slider Mass	g (lb)	171 (0.38)	171 (0.38)	171 (0.38)	171 (0.38)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.35	±0.35	±0.35	±0.35
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

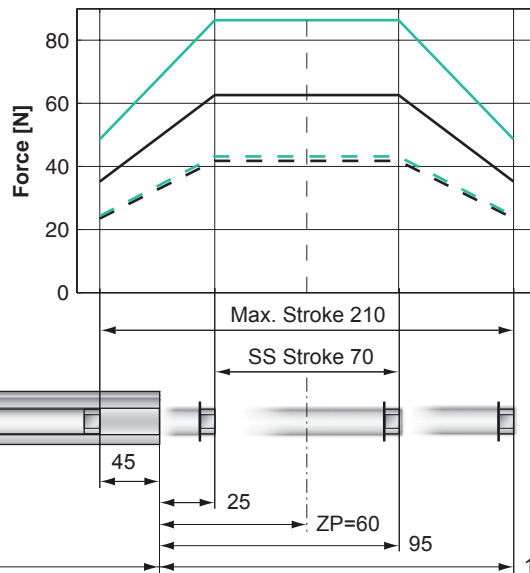


Moving Slider



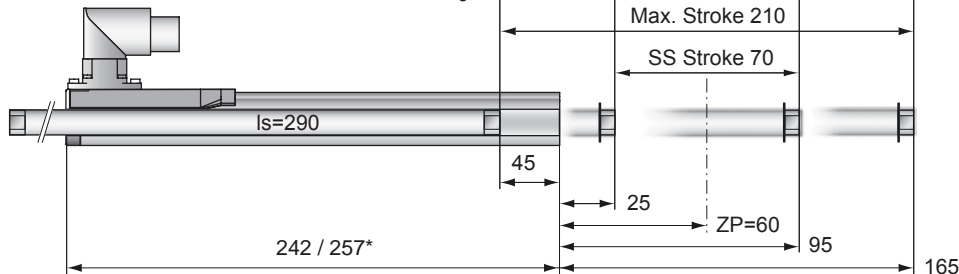
Moving Slider

Max. Stroke: 210mm
Peak Force: 86N



Standard Winding:
 — E1100, 72VDC & E1001, 72VDC
 - - - E100, 48VDC

Fast Winding:
 — E1100, 72VDC & E1001, 72VDC
 - - - E100, 48VDC

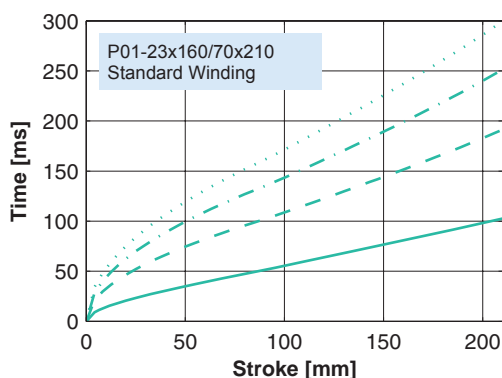


Dimensions in mm
 *Cable Type

Motor Specification

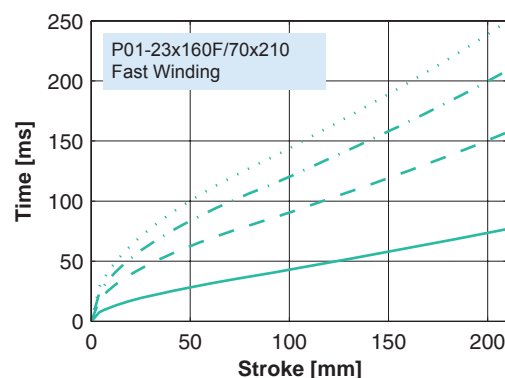
		Connector Type		Cable Type	
		Standard Winding 23x160/70x210-R	Fast Winding 23x160F/70x210-R	Standard Winding 23x160/70x210 23x160/70x210-R20	Fast Winding 23x160F/70x210-R20
Stroke Max.	mm (in)	210 (8.27)	210 (8.27)	210 (8.27)	210 (8.27)
Stroke SS	mm (in)	70 (2.76)	70 (2.76)	70 (2.76)	70 (2.76)
Peak Force E1100 / E1001	N (lbf)	63 (14.1)	86 (19.4)	63 (14.1)	86 (19.4)
Peak Force E100	N (lbf)	42 (9.4)	43 (9.7)	42 (9.4)	43 (9.7)
Cont. Force	N (lbf)	17 (3.7)	17 (3.7)	17 (3.7)	17 (3.7)
Cont. Force Fan cooling	N (lbf)	31 (7.1)	32 (7.1)	31 (7.1)	32 (7.1)
Border Force	%	56	56	56	56
Force Constant	N/A (lbf/A)	22.1 (4.96)	14.4 (3.24)	22.1 (4.96)	14.4 (3.24)
Max. Current @ 72VDC	A	2.8	6.0	2.8	6.0
Max. Current @ 48VDC	A	1.9	4.3	1.9	4.3
Max. Velocity @ 72VDC	m/s (in/s)	3.0 (118)	4.6 (181)	3.0 (118)	4.6 (181)
Max. Velocity @ 48VDC	m/s (in/s)	2.0 (79)	3.1 (121)	2.0 (79)	3.1 (121)
Phase Resist. 25/80 °C	Ohm	20.6/24.9	9.0/10.9	20.6/24.9	9.0/10.9
Phase Inductance	mH	2.7	1.2	2.7	1.2
Thermal Resistance	°K/W	3.9	3.8	3.9	3.8
Thermal Time Const.	sec	1900	1800	1900	1800
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	242 (9.53)	242 (9.53)	257 (10.12)	257 (10.12)
Stator Mass	g (lb)	450 (0.99)	450 (0.99)	450 (0.99)	450 (0.99)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	290 (11.42)	290 (11.42)	290 (11.42)	290 (11.42)
Slider Mass	g (lb)	220 (0.49)	220 (0.49)	220 (0.49)	220 (0.49)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.30	±0.30	±0.30	±0.30
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram



3.0 kg
 2.0 kg
 1.0 kg
 0.0 kg

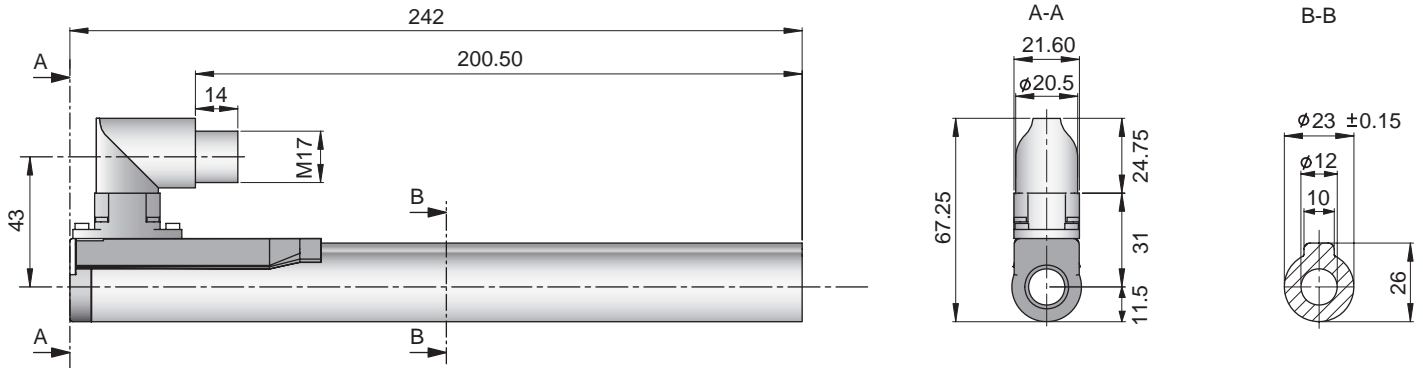
Moving Slider



3.0 kg
 2.0 kg
 1.0 kg
 0.0 kg

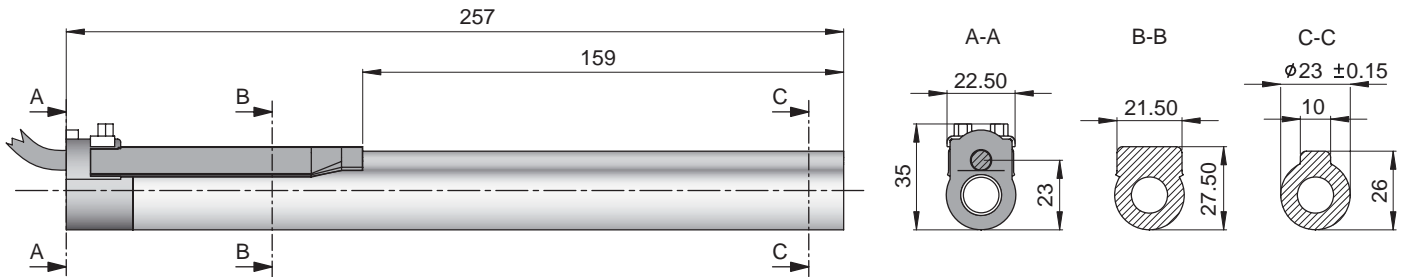
Moving Slider

Connector Type



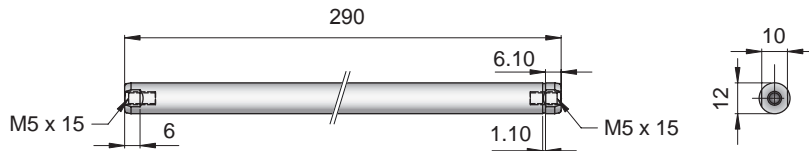
Linear Motor		Stator		Slider		
Type	Art.No	Type	Art. No.	Type	Art No.	
P01-23x160/70x210-R	-->	PS01-23x160-R	0150-1234	&	PL01-12x290/240	0150-1320
P01-23x160F/70x210-R	-->	PS01-23x160F-R	0150-1235	&	PL01-12x290/240	0150-1320

Cable Type



Linear Motor		Stator		Slider		
Type	Art.No	Type	Art. No.	Type	Art No.	
P01-23x160/70x210	-->	PS01-23x160	0150-1202	&	PL01-12x290/240	0150-1320
P01-23x160/70x210-R20	-->	PS01-23x160-R20	0150-1242	&	PL01-12x290/240	0150-1320
P01-23x160F/70x210-R20	-->	PS01-23x160F-R20	0150-1243	&	PL01-12x290/240	0150-1320

Slider



Standard Type	Slider Standard	PL01-12x290/240	0150-1320
Special Sliders	Heavy Duty Slider with WC/C-Coating	PL02-12x290/240	0150-1321
	Hollow Slider hole diameter 4.2mm	PL01-12x290/240-L	0150-1363

Connectors

Motor Connector Wiring

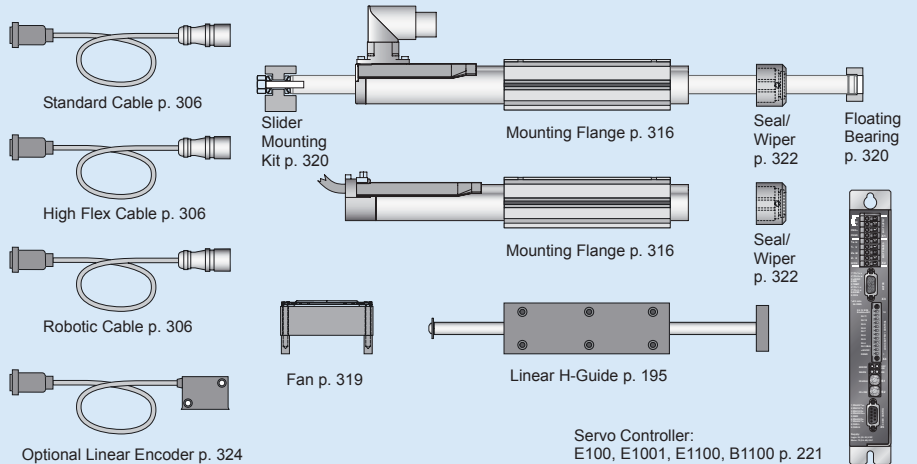
Cable Length:
P01-23x160... 1.0m
P01-23x160...-R20 0.2m

P01-23...-R
P01-23...-R20

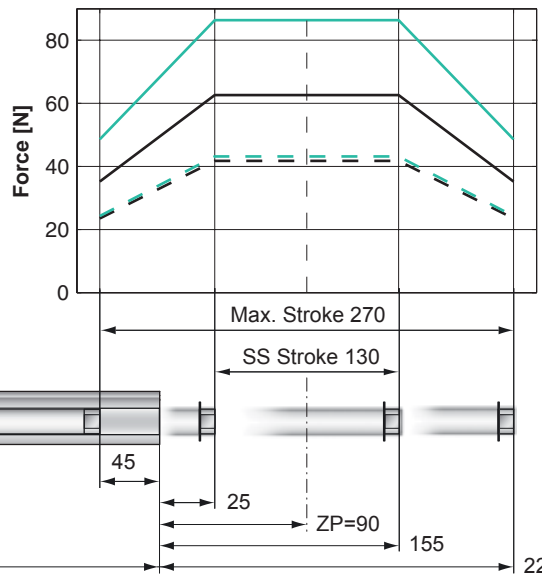
P01-23...

Wire	Color	Case	Case
Ph 1+	red	1	1
Ph 1-	pink	2	6
Ph 2+	blue	3	2
Ph 2-	grey	4	7
+5VDC	white	A	3
GND	inner Shield	B	8
Sine	yellow	C	4
Cosine	green	D	9
Temp.	black	E	5
Shield	outer Shield	Case	Case

Accessoires

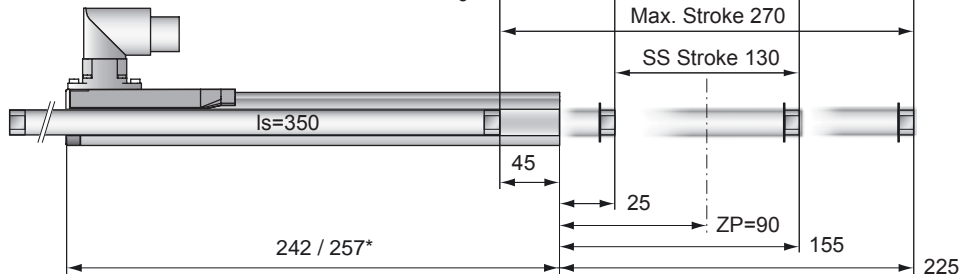


Max. Stroke: 270mm
Peak Force: 86N



Standard Winding:
 — E1100, 72VDC & E1001, 72VDC
 - - - E100, 48VDC

Fast Winding:
 — E1100, 72VDC & E1001, 72VDC
 - - - E100, 48VDC

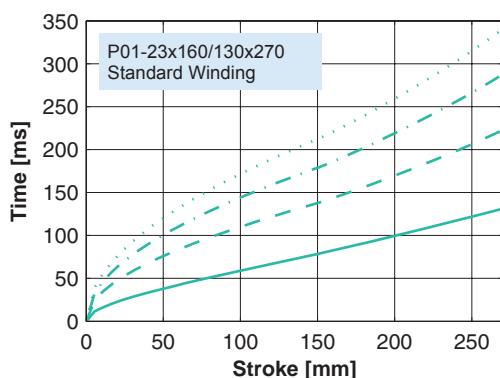


Dimensions in mm
 *Cable Type

Motor Specification

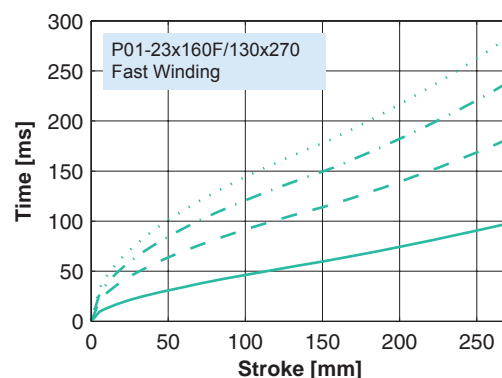
		Connector Type		Cable Type	
		Standard Winding 23x160/130x270-R	Fast Winding 23x160F/130x270-R	Standard Winding 23x160/130x270 23x160/130x270-R20	Fast Winding 23x160F/130x270-R20
Stroke Max.	mm (in)	270 (10.63)	270 (10.63)	270 (10.63)	270 (10.63)
Stroke SS	mm (in)	130 (5.12)	130 (5.12)	130 (5.12)	130 (5.12)
Peak Force E1100 / E1001	N (lbf)	63 (14.1)	86 (19.4)	63 (14.1)	86 (19.4)
Peak Force E100	N (lbf)	42 (9.4)	43 (9.7)	42 (9.4)	43 (9.7)
Cont. Force	N (lbf)	17 (3.7)	17 (3.7)	17 (3.7)	17 (3.7)
Cont. Force Fan cooling	N (lbf)	31 (7.1)	32 (7.1)	31 (7.1)	32 (7.1)
Border Force	%	56	56	56	56
Force Constant	N/A (lbf/A)	22.1 (4.96)	14.4 (3.24)	22.1 (4.96)	14.4 (3.24)
Max. Current @ 72VDC	A	2.8	6.0	2.8	6.0
Max. Current @ 48VDC	A	1.9	4.3	1.9	4.3
Max. Velocity @ 72VDC	m/s (in/s)	3.0 (118)	4.6 (181)	3.0 (118)	4.6 (181)
Max. Velocity @ 48VDC	m/s (in/s)	2.0 (79)	3.1 (121)	2.0 (79)	3.1 (121)
Phase Resist. 25/80 °C	Ohm	20.6/24.9	9.0/10.9	20.6/24.9	9.0/10.9
Phase Inductance	mH	2.7	1.2	2.7	1.2
Thermal Resistance	°K/W	3.9	3.8	3.9	3.8
Thermal Time Const.	sec	1900	1800	1900	1800
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	242 (9.53)	242 (9.53)	257 (10.12)	257 (10.12)
Stator Mass	g (lb)	450 (0.99)	450 (0.99)	450 (0.99)	450 (0.99)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	350 (13.78)	350 (13.78)	350 (13.78)	350 (13.78)
Slider Mass	g (lb)	271 (0.60)	271 (0.60)	271 (0.60)	271 (0.60)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.25	±0.25	±0.25	±0.25
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram



..... 3.0 kg
 - - - 2.0 kg
 - - - 1.0 kg
 — 0.0 kg

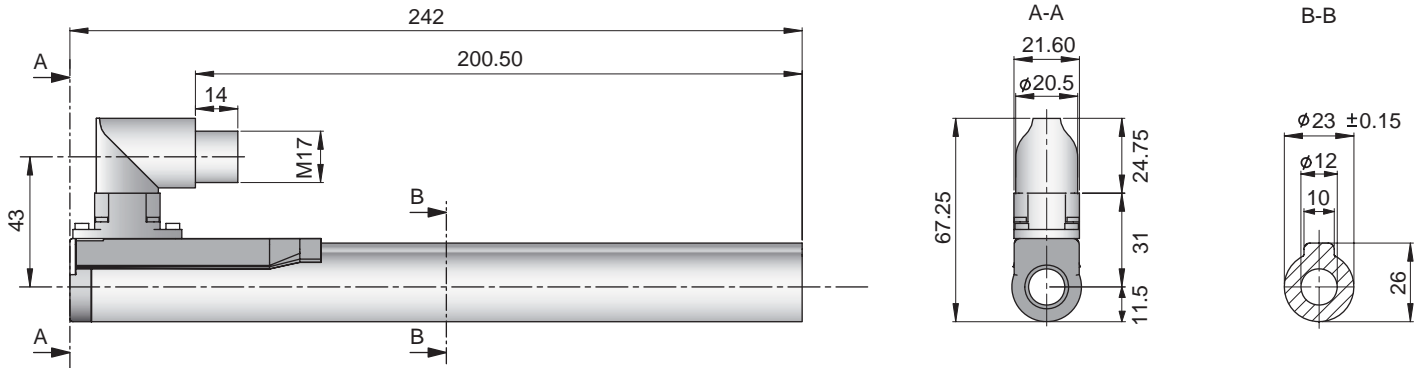
Moving Slider



..... 3.0 kg
 - - - 2.0 kg
 - - - 1.0 kg
 — 0.0 kg

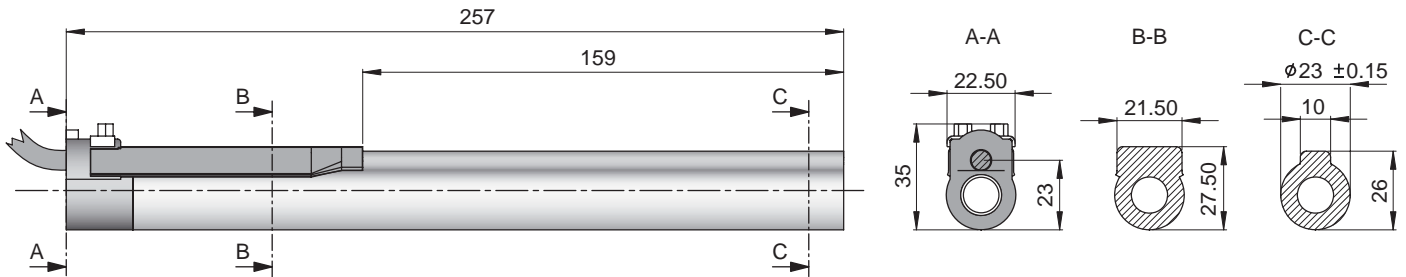
Moving Slider

Connector Type



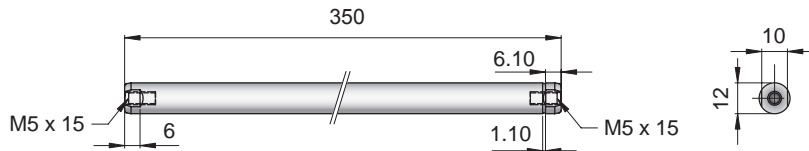
Linear Motor		Stator		Slider		
Type	Art.No	Type	Art. No.	Type	Art No.	
P01-23x160/130x270-R	-->	PS01-23x160-R	0150-1234	&	PL01-12x350/300	0150-1322
P01-23x160F/130x270-R	-->	PS01-23x160F-R	0150-1235	&	PL01-12x350/300	0150-1322

Cable Type



Linear Motor		Stator		Slider		
Type	Art.No	Type	Art. No.	Type	Art No.	
P01-23x160/130x270	-->	PS01-23x160	0150-1202	&	PL01-12x350/300	0150-1322
P01-23x160/130x270-R20	-->	PS01-23x160-R20	0150-1242	&	PL01-12x350/300	0150-1322
P01-23x160F/130x270-R20	-->	PS01-23x160F-R20	0150-1243	&	PL01-12x350/300	0150-1322

Slider



Standard Type	Slider Standard	PL01-12x350/300	0150-1322
Special Sliders	Heavy Duty Slider with WC/C-Coating	PL02-12x350/300	0150-1323
	Hollow Slider hole diameter 4.2mm	PL01-12x350/300-L	0150-1479

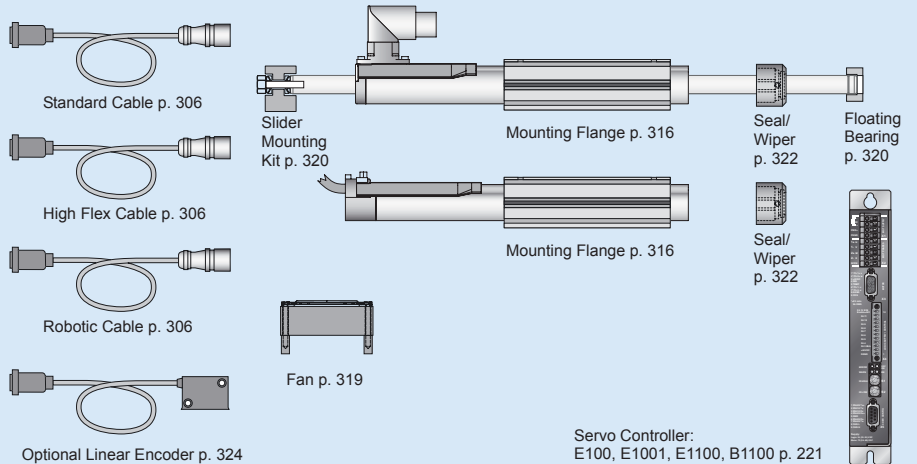
Connectors

Motor Connector Wiring

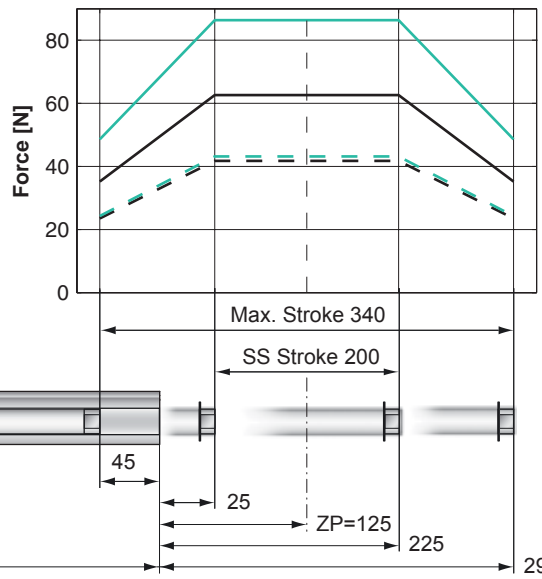
Cable Length:
P01-23x160... 1.0m
P01-23x160...-R20 0.2m

		P01-23...-R	P01-23...-R20	P01-23...
Ph 1+	red	1	1	
Ph 1-	pink	2	6	
Ph 2+	blue	3	2	
Ph 2-	grey	4	7	
+5VDC	white	A	3	
GND	inner Shield	B	8	
Sine	yellow	C	4	
Cosine	green	D	9	
Temp.	black	E	5	
Shield	outer Shield	Case	Case	

Accessoires

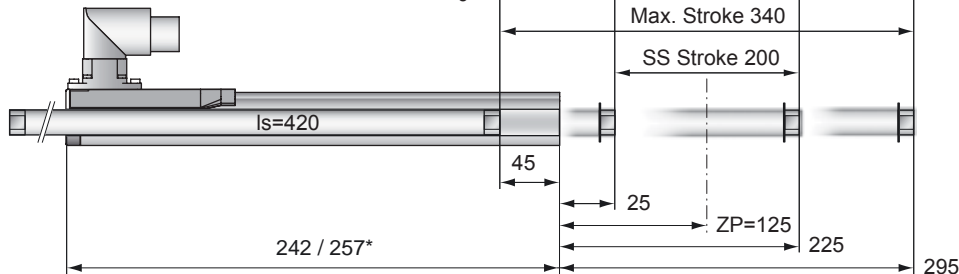


Max. Stroke: 340mm
Peak Force: 86N



Standard Winding:
 — E1100, 72VDC & E1001, 72VDC
 - - - E100, 48VDC

Fast Winding:
 — E1100, 72VDC & E1001, 72VDC
 - - - E100, 48VDC

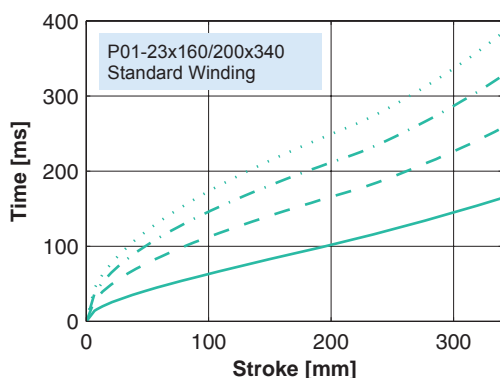


Dimensions in mm
 *Cable Type

Motor Specification

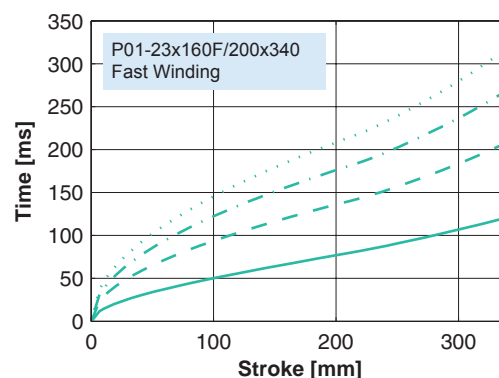
		Connector Type		Cable Type	
		Standard Winding 23x160/200x340-R	Fast Winding 23x160F/200x340-R	Standard Winding 23x160/200x340-R20	Fast Winding 23x160F/200x340-R20
Stroke Max.	mm (in)	340 (13.39)	340 (13.39)	340 (13.39)	340 (13.39)
Stroke SS	mm (in)	200 (7.87)	200 (7.87)	200 (7.87)	200 (7.87)
Peak Force E1100 / E1001	N (lbf)	63 (14.1)	86 (19.4)	63 (14.1)	86 (19.4)
Peak Force E100	N (lbf)	42 (9.4)	43 (9.7)	42 (9.4)	43 (9.7)
Cont. Force	N (lbf)	17 (3.7)	17 (3.7)	17 (3.7)	17 (3.7)
Cont. Force Fan cooling	N (lbf)	31 (7.1)	32 (7.1)	31 (7.1)	32 (7.1)
Border Force	%	56	56	56	56
Force Constant	N/A (lbf/A)	22.1 (4.96)	14.4 (3.24)	22.1 (4.96)	14.4 (3.24)
Max. Current @ 72VDC	A	2.8	6.0	2.8	6.0
Max. Current @ 48VDC	A	1.9	4.3	1.9	4.3
Max. Velocity @ 72VDC	m/s (in/s)	3.0 (118)	4.6 (181)	3.0 (118)	4.6 (181)
Max. Velocity @ 48VDC	m/s (in/s)	2.0 (79)	3.1 (121)	2.0 (79)	3.1 (121)
Phase Resist. 25/80 °C	Ohm	20.6/24.9	9.0/10.9	20.6/24.9	9.0/10.9
Phase Inductance	mH	2.7	1.2	2.7	1.2
Thermal Resistance	°K/W	3.9	3.8	3.9	3.8
Thermal Time Const.	sec	1900	1800	1900	1800
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	242 (9.53)	242 (9.53)	257 (10.12)	257 (10.12)
Stator Mass	g (lb)	450 (0.99)	450 (0.99)	450 (0.99)	450 (0.99)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	420 (16.54)	420 (16.54)	420 (16.54)	420 (16.54)
Slider Mass	g (lb)	330 (0.73)	330 (0.73)	330 (0.73)	330 (0.73)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.25	±0.25	±0.25	±0.25
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram



3.0 kg
 2.0 kg
 1.0 kg
 0.0 kg

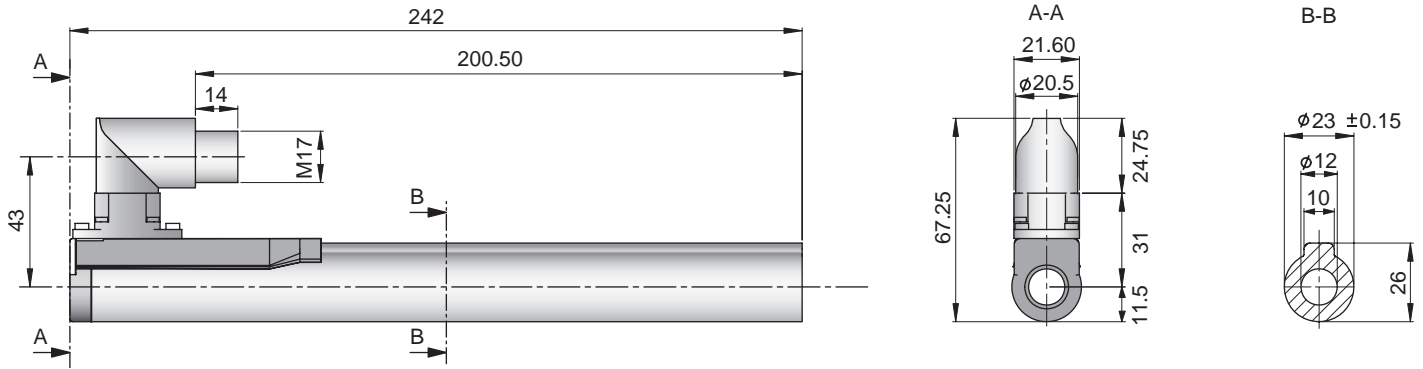
Moving Slider



3.0 kg
 2.0 kg
 1.0 kg
 0.0 kg

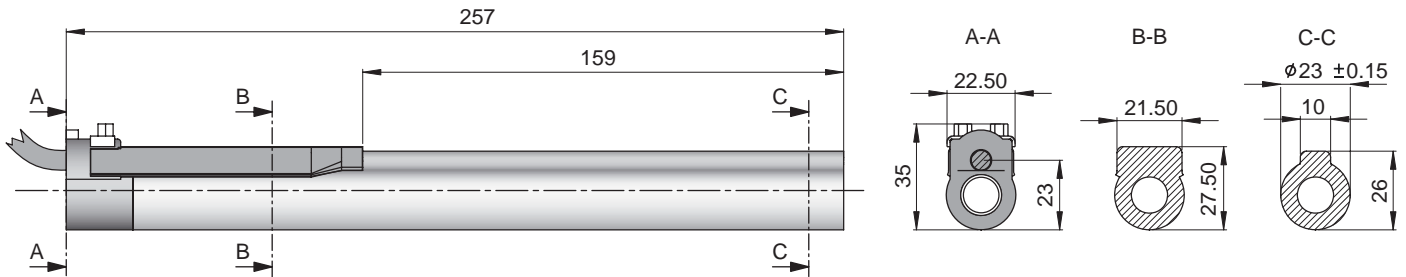
Moving Slider

Connector Type



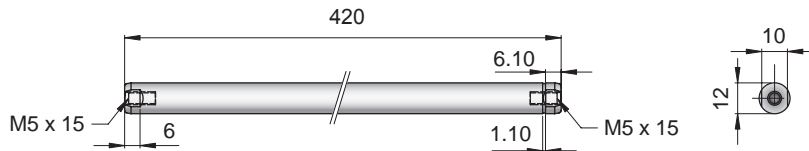
Linear Motor		Stator		Slider		
Type	Art.No	Type	Art. No.	Type	Art No.	
P01-23x160/200x340-R	-->	PS01-23x160-R	0150-1234	&	PL01-12x420/370	0150-1324
P01-23x160F/200x340-R	-->	PS01-23x160F-R	0150-1235	&	PL01-12x420/370	0150-1324

Cable Type



Linear Motor		Stator		Slider		
Type	Art.No	Type	Art. No.	Type	Art No.	
P01-23x160/200x340	-->	PS01-23x160	0150-1202	&	PL01-12x420/370	0150-1324
P01-23x160/200x340-R20	-->	PS01-23x160-R20	0150-1242	&	PL01-12x420/370	0150-1324
P01-23x160F/200x340-R20	-->	PS01-23x160F-R20	0150-1243	&	PL01-12x420/370	0150-1324

Slider



Standard Type		Slider Standard		PL01-12x420/370	
Special Sliders		Heavy Duty Slider with WC/C-Coating		PL02-12x420/370	
Hollow Slider		hole diameter 4.2mm		PL01-12x420/370-L	
					0150-1324
					0150-1325
					0150-1394

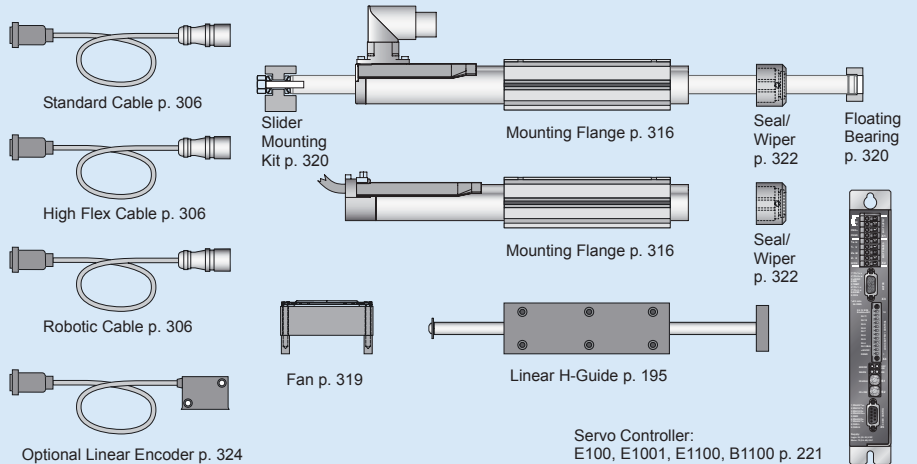
Connectors

Motor Connector Wiring

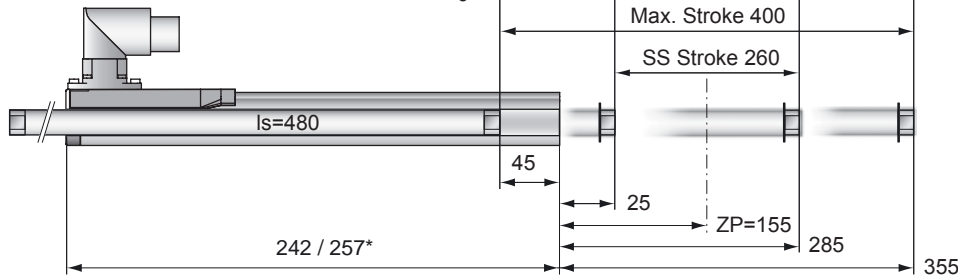
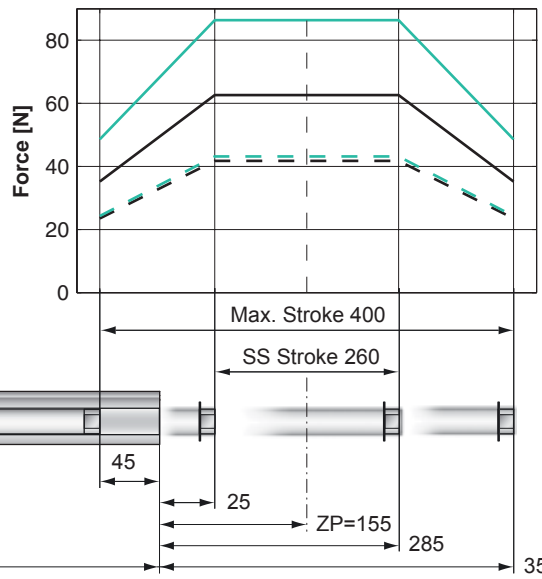
Cable Length:
P01-23x160... 1.0m
P01-23x160...-R20 0.2m

		P01-23...-R	P01-23...-R20	P01-23...
Ph 1+	red	1	1	
Ph 1-	pink	2	6	
Ph 2+	blue	3	2	
Ph 2-	grey	4	7	
+5VDC	white	A	3	
GND	inner Shield	B	8	
Sine	yellow	C	4	
Cosine	green	D	9	
Temp.	black	E	5	
Shield	outer Shield	Case	Case	

Accessoires



Max. Stroke: 400mm
Peak Force: 86N

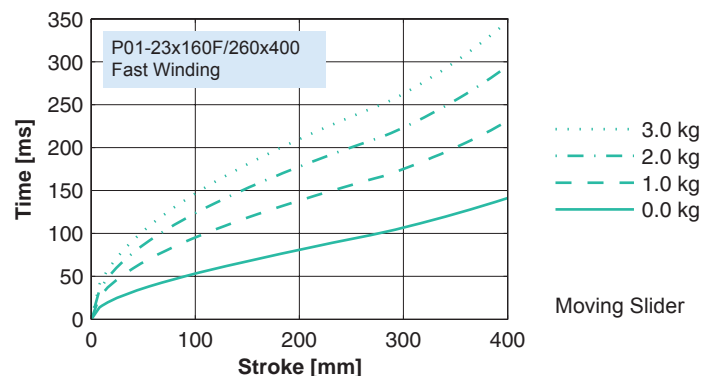
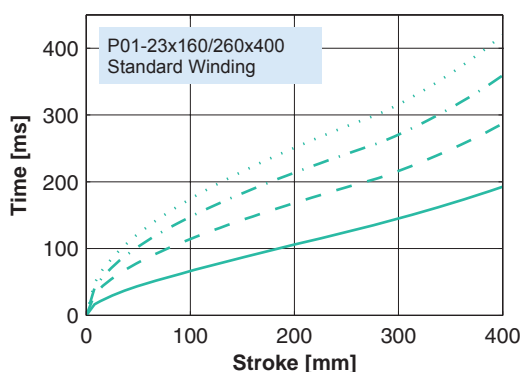


Dimensions in mm
 *Cable Type

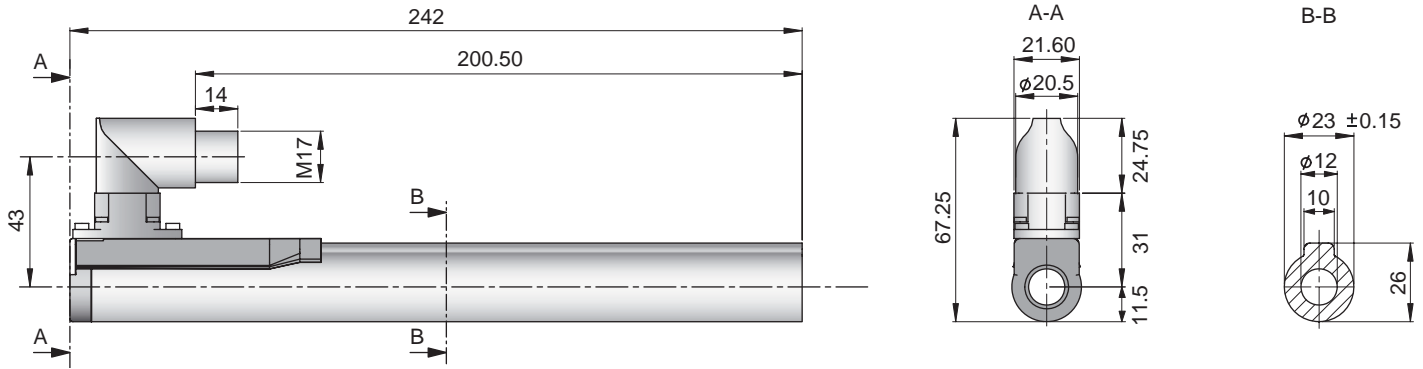
Motor Specification

		Connector Type		Cable Type	
		Standard Winding 23x160/260x400-R	Fast Winding 23x160F/260x400-R	Standard Winding 23x160/260x400 23x160/260x400-R20	Fast Winding 23x160F/260x400-R20
Stroke Max.	mm (in)	400 (15.75)	400 (15.75)	400 (15.75)	400 (15.75)
Stroke SS	mm (in)	260 (10.24)	260 (10.24)	260 (10.24)	260 (10.24)
Peak Force E1100 / E1001	N (lbf)	63 (14.1)	86 (19.4)	63 (14.1)	86 (19.4)
Peak Force E100	N (lbf)	42 (9.4)	43 (9.7)	42 (9.4)	43 (9.7)
Cont. Force	N (lbf)	17 (3.7)	17 (3.7)	17 (3.7)	17 (3.7)
Cont. Force Fan cooling	N (lbf)	31 (7.1)	32 (7.1)	31 (7.1)	32 (7.1)
Border Force	%	56	56	56	56
Force Constant	N/A (lbf/A)	22.1 (4.96)	14.4 (3.24)	22.1 (4.96)	14.4 (3.24)
Max. Current @ 72VDC	A	2.8	6.0	2.8	6.0
Max. Current @ 48VDC	A	1.9	4.3	1.9	4.3
Max. Velocity @ 72VDC	m/s (in/s)	3.0 (118)	4.6 (181)	3.0 (118)	4.6 (181)
Max. Velocity @ 48VDC	m/s (in/s)	2.0 (79)	3.1 (121)	2.0 (79)	3.1 (121)
Phase Resist. 25/80 °C	Ohm	20.6/24.9	9.0/10.9	20.6/24.9	9.0/10.9
Phase Inductance	mH	2.7	1.2	2.7	1.2
Thermal Resistance	°K/W	3.9	3.8	3.9	3.8
Thermal Time Const.	sec	1900	1800	1900	1800
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	242 (9.53)	242 (9.53)	257 (10.12)	257 (10.12)
Stator Mass	g (lb)	450 (0.99)	450 (0.99)	450 (0.99)	450 (0.99)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	480 (18.90)	480 (18.90)	480 (18.90)	480 (18.90)
Slider Mass	g (lb)	380 (0.84)	380 (0.84)	380 (0.84)	380 (0.84)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.25	±0.25	±0.25	±0.25
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

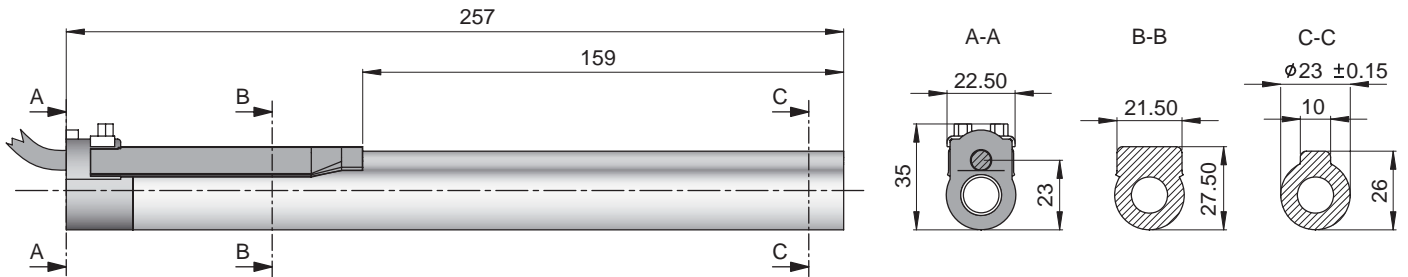


Connector Type



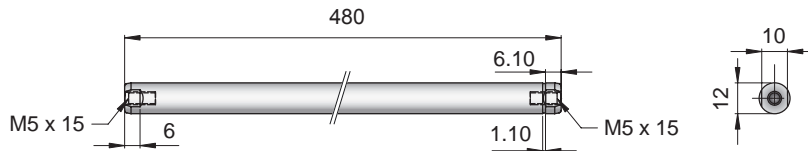
Linear Motor		Stator		Slider		
Type	Art.No	Type	Art. No.	Type	Art No.	
P01-23x160/260x400-R	-->	PS01-23x160-R	0150-1234	&	PL01-12x480/430	0150-1372
P01-23x160F/260x400-R	-->	PS01-23x160F-R	0150-1235	&	PL01-12x480/430	0150-1372

Cable Type



Linear Motor		Stator		Slider		
Type	Art.No	Type	Art. No.	Type	Art No.	
P01-23x160/260x400	-->	PS01-23x160	0150-1202	&	PL01-12x480/430	0150-1372
P01-23x160/260x400-R20	-->	PS01-23x160-R20	0150-1242	&	PL01-12x480/430	0150-1372
P01-23x160F/260x400-R20	-->	PS01-23x160F-R20	0150-1243	&	PL01-12x480/430	0150-1372

Slider



Standard Type		Slider Standard		PL01-12x480/430	
Special Sliders		Heavy Duty Slider with WC/C-Coating		PL02-12x480/430	
		Hollow Slider hole diameter 4.2mm		PL01-12x480/430-L	
					0150-1372
					0150-1373
					on request

Connectors

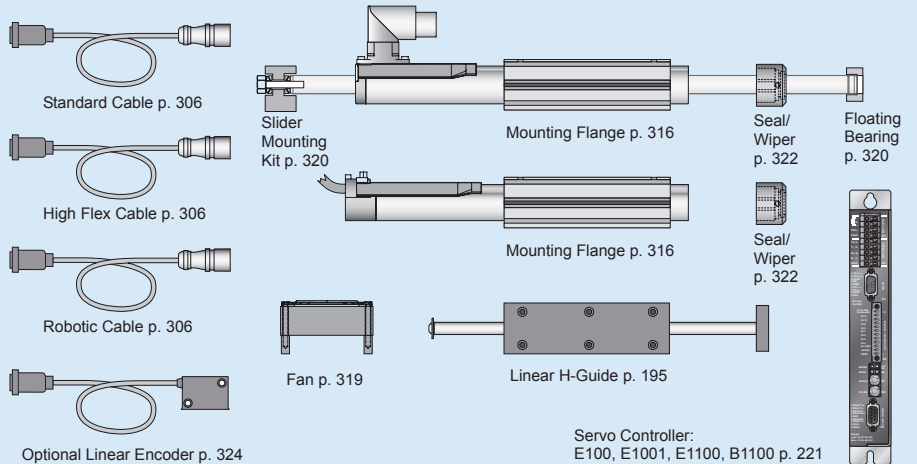
Motor Connector Wiring

Cable Length:
P01-23x160... 1.0m
P01-23x160...-R20 0.2m

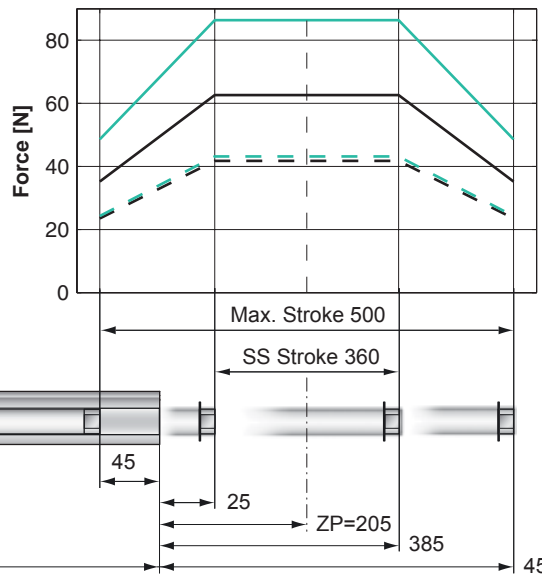
P01-23...-R
P01-23...-R20
P01-23...

Wire	Color	Case	Case
Ph 1+	red	1	1
Ph 1-	pink	2	6
Ph 2+	blue	3	2
Ph 2-	grey	4	7
+5VDC	white	A	3
GND	inner Shield	B	8
Sine	yellow	C	4
Cosine	green	D	9
Temp.	black	E	5
Shield	outer Shield	Case	Case

Accessoires

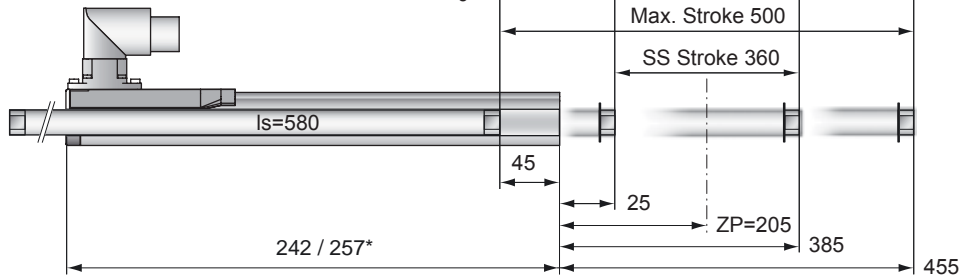


Max. Stroke: 500mm
Peak Force: 86N



Standard Winding:
 — E1100, 72VDC & E1001, 72VDC
 - - - E100, 48VDC

Fast Winding:
 — E1100, 72VDC & E1001, 72VDC
 - - - E100, 48VDC

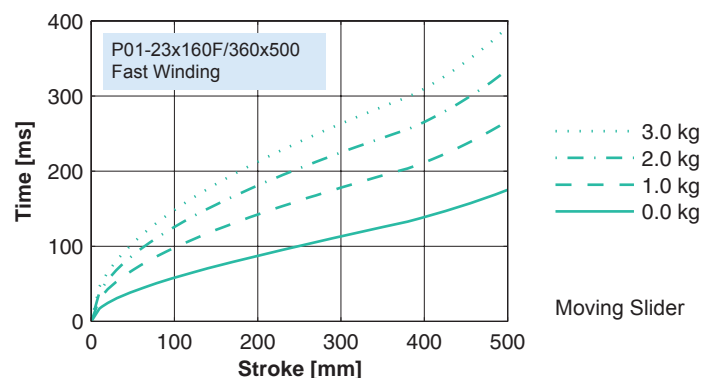
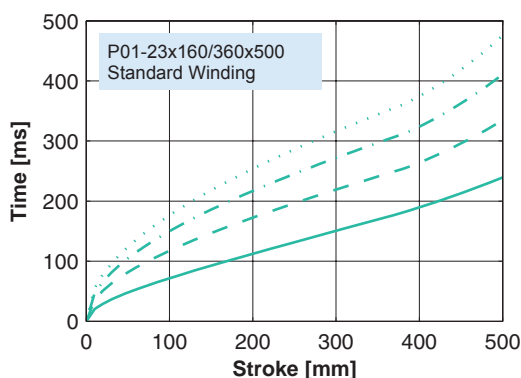


Dimensions in mm
 *Cable Type

Motor Specification

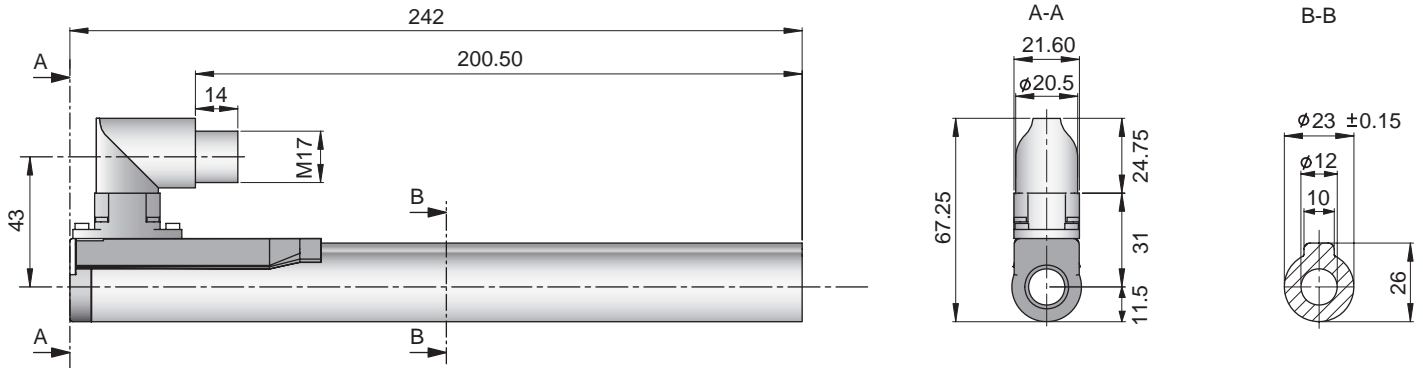
		Connector Type		Cable Type	
		Standard Winding 23x160/360x500-R	Fast Winding 23x160F/360x500-R	Standard Winding 23x160/360x500 23x160/360x500-R20	Fast Winding 23x160F/360x500-R20
Stroke Max.	mm (in)	500 (19.69)	500 (19.69)	500 (19.69)	500 (19.69)
Stroke SS	mm (in)	360 (14.17)	360 (14.17)	360 (14.17)	360 (14.17)
Peak Force E1100 / E1001	N (lbf)	63 (14.1)	86 (19.4)	63 (14.1)	86 (19.4)
Peak Force E100	N (lbf)	42 (9.4)	43 (9.7)	42 (9.4)	43 (9.7)
Cont. Force	N (lbf)	17 (3.7)	17 (3.7)	17 (3.7)	17 (3.7)
Cont. Force Fan cooling	N (lbf)	31 (7.1)	32 (7.1)	31 (7.1)	32 (7.1)
Border Force	%	56	56	56	56
Force Constant	N/A (lbf/A)	22.1 (4.96)	14.4 (3.24)	22.1 (4.96)	14.4 (3.24)
Max. Current @ 72VDC	A	2.8	6.0	2.8	6.0
Max. Current @ 48VDC	A	1.9	4.3	1.9	4.3
Max. Velocity @ 72VDC	m/s (in/s)	3.0 (118)	4.6 (181)	3.0 (118)	4.6 (181)
Max. Velocity @ 48VDC	m/s (in/s)	2.0 (79)	3.1 (121)	2.0 (79)	3.1 (121)
Phase Resist. 25/80 °C	Ohm	20.6/24.9	9.0/10.9	20.6/24.9	9.0/10.9
Phase Inductance	mH	2.7	1.2	2.7	1.2
Thermal Resistance	°K/W	3.9	3.8	3.9	3.8
Thermal Time Const.	sec	1900	1800	1900	1800
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	242 (9.53)	242 (9.53)	257 (10.12)	257 (10.12)
Stator Mass	g (lb)	450 (0.99)	450 (0.99)	450 (0.99)	450 (0.99)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	580 (22.83)	580 (22.83)	580 (22.83)	580 (22.83)
Slider Mass	g (lb)	465 (1.03)	465 (1.03)	465 (1.03)	465 (1.03)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.20	±0.20	±0.20	±0.20
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram



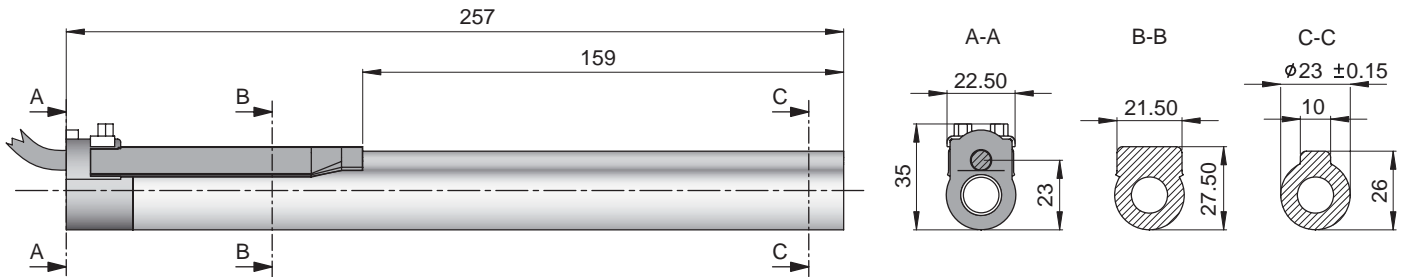
P01-23x160/360x500

Connector Type



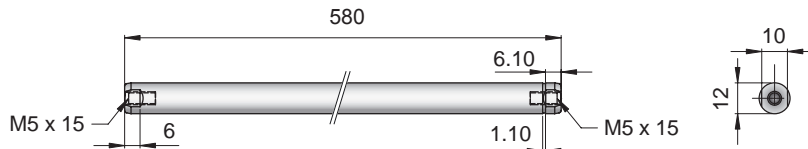
Linear Motor		Stator		Slider		
Type	Art.No	Type	Art. No.	Type	Art No.	
P01-23x160/360x500-R	-->	PS01-23x160-R	0150-1234	&	PL01-12x580/530	0150-1355
P01-23x160F/360x500-R	-->	PS01-23x160F-R	0150-1235	&	PL01-12x580/530	0150-1355

Cable Type



Linear Motor		Stator		Slider		
Type	Art.No	Type	Art. No.	Type	Art No.	
P01-23x160/360x500	-->	PS01-23x160	0150-1202	&	PL01-12x580/530	0150-1355
P01-23x160/360x500-R20	-->	PS01-23x160-R20	0150-1242	&	PL01-12x580/530	0150-1355
P01-23x160F/360x500-R20	-->	PS01-23x160F-R20	0150-1243	&	PL01-12x580/530	0150-1355

Slider



Standard Type		Slider Standard		PL01-12x580/530	
Special Sliders		Heavy Duty Slider with WC/C-Coating		PL02-12x580/530	
		Hollow Slider hole diameter 4.2mm		PL01-12x580/530-L	
					0150-1355
					0150-1356
					0150-1391

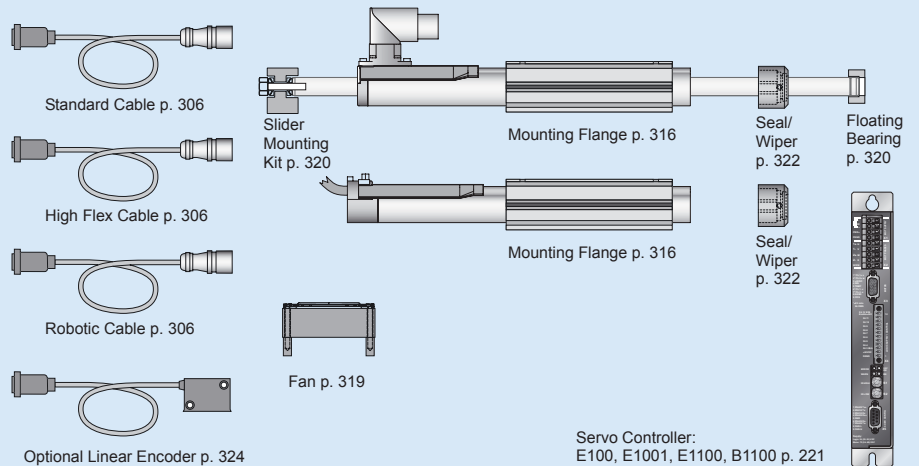
Connectors

Motor Connector Wiring

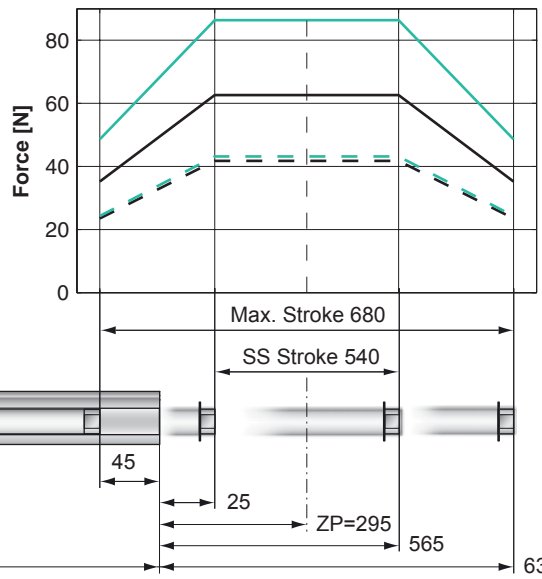
Cable Length:
P01-23x160... 1.0m
P01-23x160...-R20 0.2m

		P01-23...-R	P01-23...-R20	P01-23...
Ph 1+	red	1	1	
Ph 1-	pink	2	6	
Ph 2+	blue	3	2	
Ph 2-	grey	4	7	
+5VDC	white	A	3	
GND	inner Shield	B	8	
Sine	yellow	C	4	
Cosine	green	D	9	
Temp.	black	E	5	
Shield	outer Shield	Case	Case	

Accessoires

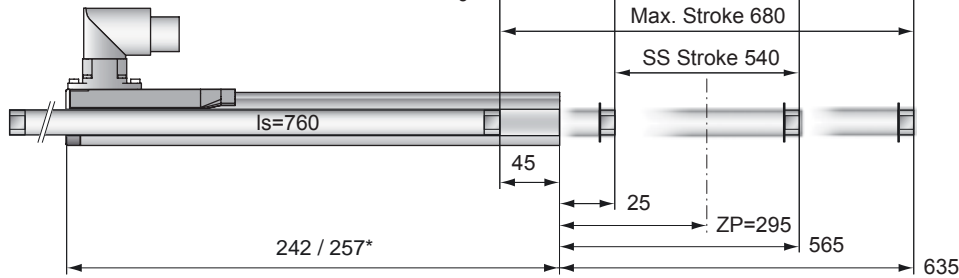


Max. Stroke: 680mm
Peak Force: 86N



Standard Winding:
 — E1100, 72VDC & E1001, 72VDC
 - - - E100, 48VDC

Fast Winding:
 — E1100, 72VDC & E1001, 72VDC
 - - - E100, 48VDC

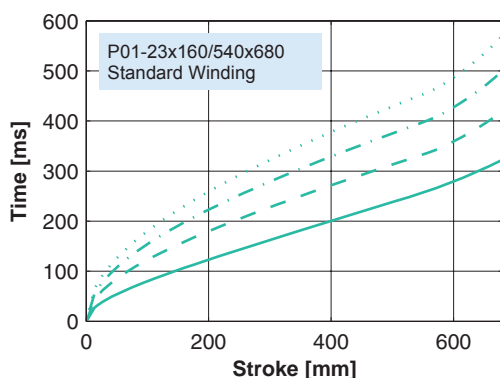


Dimensions in mm
 *Cable Type

Motor Specification

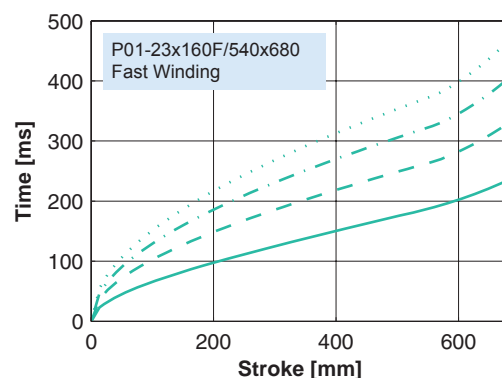
		Connector Type		Cable Type	
		Standard Winding 23x160/540x680-R	Fast Winding 23x160F/540x680-R	Standard Winding 23x160/540x680-R20	Fast Winding 23x160F/540x680-R20
Stroke Max.	mm (in)	680 (26.77)	680 (26.77)	680 (26.77)	680 (26.77)
Stroke SS	mm (in)	540 (21.26)	540 (21.26)	540 (21.26)	540 (21.26)
Peak Force E1100 / E1001	N (lbf)	63 (14.1)	86 (19.4)	63 (14.1)	86 (19.4)
Peak Force E100	N (lbf)	42 (9.4)	43 (9.7)	42 (9.4)	43 (9.7)
Cont. Force	N (lbf)	17 (3.7)	17 (3.7)	17 (3.7)	17 (3.7)
Cont. Force Fan cooling	N (lbf)	31 (7.1)	32 (7.1)	31 (7.1)	32 (7.1)
Border Force	%	56	56	56	56
Force Constant	N/A (lbf/A)	22.1 (4.96)	14.4 (3.24)	22.1 (4.96)	14.4 (3.24)
Max. Current @ 72VDC	A	2.8	6.0	2.8	6.0
Max. Current @ 48VDC	A	1.9	4.3	1.9	4.3
Max. Velocity @ 72VDC	m/s (in/s)	3.0 (118)	4.6 (181)	3.0 (118)	4.6 (181)
Max. Velocity @ 48VDC	m/s (in/s)	2.0 (79)	3.1 (121)	2.0 (79)	3.1 (121)
Phase Resist. 25/80 °C	Ohm	20.6/24.9	9.0/10.9	20.6/24.9	9.0/10.9
Phase Inductance	mH	2.7	1.2	2.7	1.2
Thermal Resistance	°K/W	3.9	3.8	3.9	3.8
Thermal Time Const.	sec	1900	1800	1900	1800
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	242 (9.53)	242 (9.53)	257 (10.12)	257 (10.12)
Stator Mass	g (lb)	450 (0.99)	450 (0.99)	450 (0.99)	450 (0.99)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	760 (29.92)	760 (29.92)	760 (29.92)	760 (29.92)
Slider Mass	g (lb)	615 (1.36)	615 (1.36)	615 (1.36)	615 (1.36)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.20	±0.20	±0.20	±0.20
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram



..... 3.0 kg
 - - - 2.0 kg
 - · - 1.0 kg
 — 0.0 kg

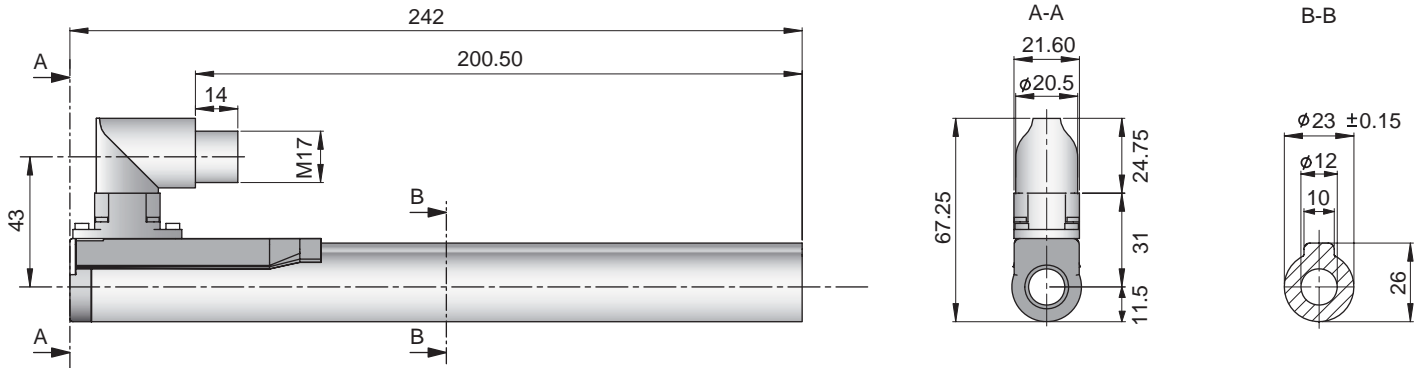
Moving Slider



..... 3.0 kg
 - - - 2.0 kg
 - · - 1.0 kg
 — 0.0 kg

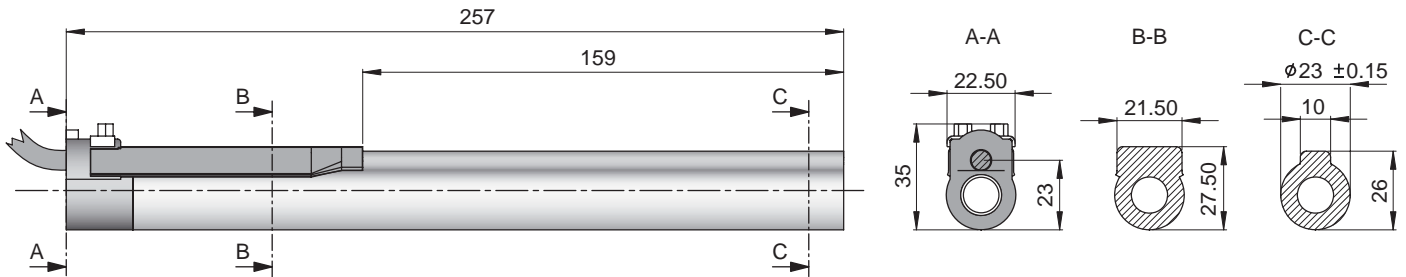
Moving Slider

Connector Type



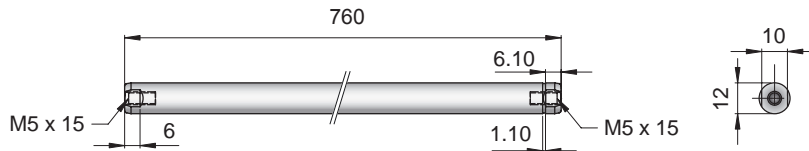
Linear Motor		Stator		Slider		
Type	Art.No	Type	Art. No.	Type	Art No.	
P01-23x160/540x680-R	-->	PS01-23x160-R	0150-1234	&	PL01-12x760/710	0150-1366
P01-23x160F/540x680-R	-->	PS01-23x160F-R	0150-1235	&	PL01-12x760/710	0150-1366

Cable Type



Linear Motor		Stator		Slider		
Type	Art.No	Type	Art. No.	Type	Art No.	
P01-23x160/540x680	-->	PS01-23x160	0150-1202	&	PL01-12x760/710	0150-1366
P01-23x160/540x680-R20	-->	PS01-23x160-R20	0150-1242	&	PL01-12x760/710	0150-1366
P01-23x160F/540x680-R20	-->	PS01-23x160F-R20	0150-1243	&	PL01-12x760/710	0150-1366

Slider



Standard Type		Slider Standard		PL01-12x760/710	
Special Sliders		Heavy Duty Slider	with WC/C-Coating	PL02-12x760/710	on request
		Hollow Slider	hole diameter 4.2mm	PL01-12x760/710-L	0150-1392

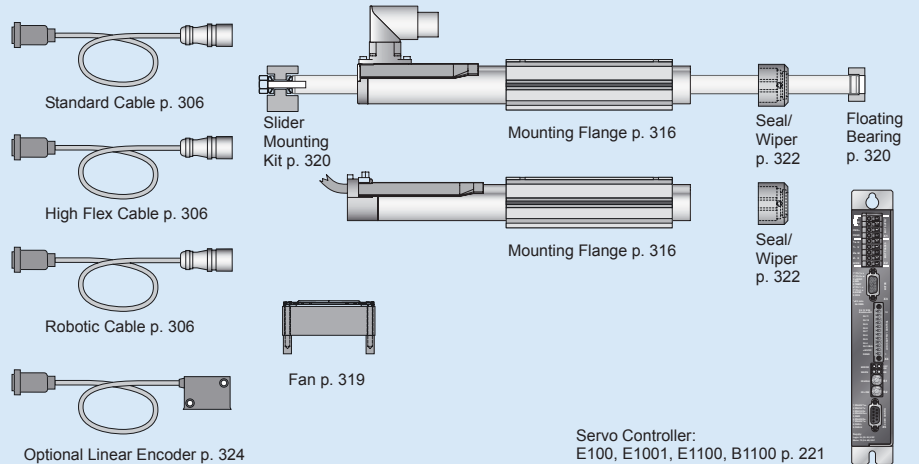
Connectors

Motor Connector Wiring

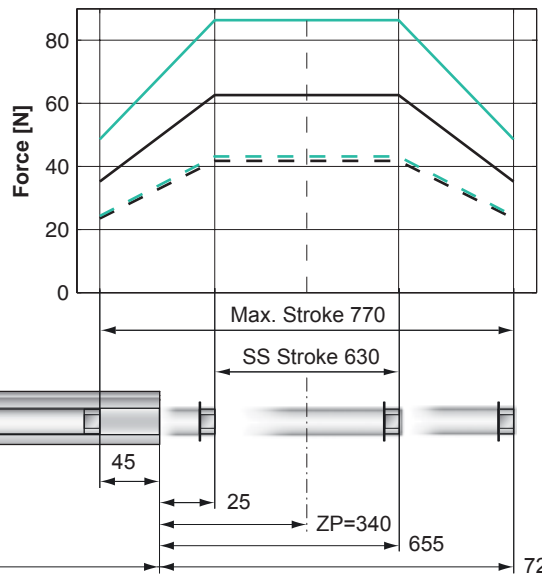
Cable Length:
P01-23x160... 1.0m
P01-23x160...-R20 0.2m

		P01-23...-R	P01-23...-R20	P01-23...
Ph 1+	red	1	1	
Ph 1-	pink	2	6	
Ph 2+	blue	3	2	
Ph 2-	grey	4	7	
+5VDC	white	A	3	
GND	inner Shield	B	8	
Sine	yellow	C	4	
Cosine	green	D	9	
Temp.	black	E	5	
Shield	outer Shield	Case	Case	

Accessoires

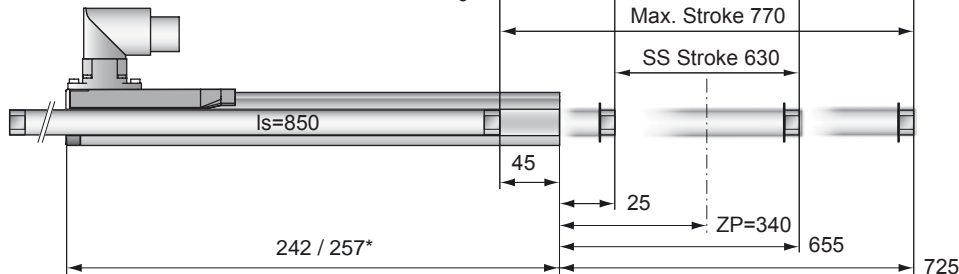


Max. Stroke: 770mm
Peak Force: 86N



Standard Winding:
 — E1100, 72VDC & E1001, 72VDC
 - - - E100, 48VDC

Fast Winding:
 — E1100, 72VDC & E1001, 72VDC
 - - - E100, 48VDC

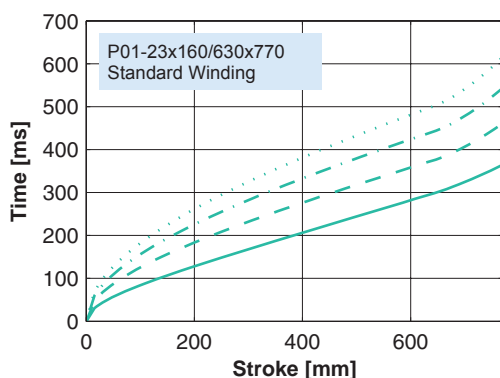


Dimensions in mm
 *Cable Type

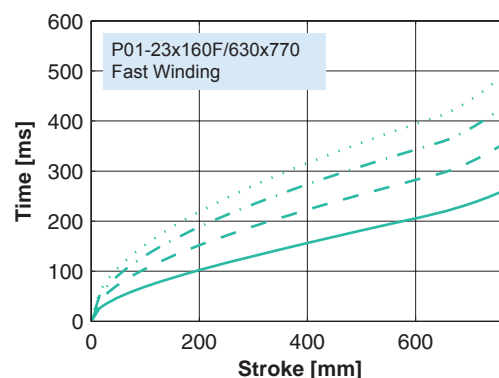
Motor Specification

		Connector Type		Cable Type	
		Standard Winding 23x160/630x770-R	Fast Winding 23x160F/630x770-R	Standard Winding 23x160/630x770 23x160/630x770-R20	Fast Winding 23x160F/630x770-R20
Stroke Max.	mm (in)	770 (30.31)	770 (30.31)	770 (30.31)	770 (30.31)
Stroke SS	mm (in)	630 (24.80)	630 (24.80)	630 (24.80)	630 (24.80)
Peak Force E1100 / E1001	N (lbf)	63 (14.1)	86 (19.4)	63 (14.1)	86 (19.4)
Peak Force E100	N (lbf)	42 (9.4)	43 (9.7)	42 (9.4)	43 (9.7)
Cont. Force	N (lbf)	17 (3.7)	17 (3.7)	17 (3.7)	17 (3.7)
Cont. Force Fan cooling	N (lbf)	31 (7.1)	32 (7.1)	31 (7.1)	32 (7.1)
Border Force	%	56	56	56	56
Force Constant	N/A (lbf/A)	22.1 (4.96)	14.4 (3.24)	22.1 (4.96)	14.4 (3.24)
Max. Current @ 72VDC	A	2.8	6.0	2.8	6.0
Max. Current @ 48VDC	A	1.9	4.3	1.9	4.3
Max. Velocity @ 72VDC	m/s (in/s)	3.0 (118)	4.6 (181)	3.0 (118)	4.6 (181)
Max. Velocity @ 48VDC	m/s (in/s)	2.0 (79)	3.1 (121)	2.0 (79)	3.1 (121)
Phase Resist. 25/80 °C	Ohm	20.6/24.9	9.0/10.9	20.6/24.9	9.0/10.9
Phase Inductance	mH	2.7	1.2	2.7	1.2
Thermal Resistance	°K/W	3.9	3.8	3.9	3.8
Thermal Time Const.	sec	1900	1800	1900	1800
Stator Diameter	mm (in)	23 (0.91)	23 (0.91)	23 (0.91)	23 (0.91)
Stator Length	mm (in)	242 (9.53)	242 (9.53)	257 (10.12)	257 (10.12)
Stator Mass	g (lb)	450 (0.99)	450 (0.99)	450 (0.99)	450 (0.99)
Slider Diameter	mm (in)	12 (0.47)	12 (0.47)	12 (0.47)	12 (0.47)
Slider Length	mm (in)	850 (33.46)	850 (33.46)	850 (33.46)	850 (33.46)
Slider Mass	g (lb)	690 (1.52)	690 (1.52)	690 (1.52)	690 (1.52)
Position Repeatability	mm (in)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)	±0.05 (±0.0020)
Linearity	%	±0.20	±0.20	±0.20	±0.20
Position Rep. with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)
Linearity with ES	mm (in)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)	±0.01 (±0.0004)

Position-Time Diagram

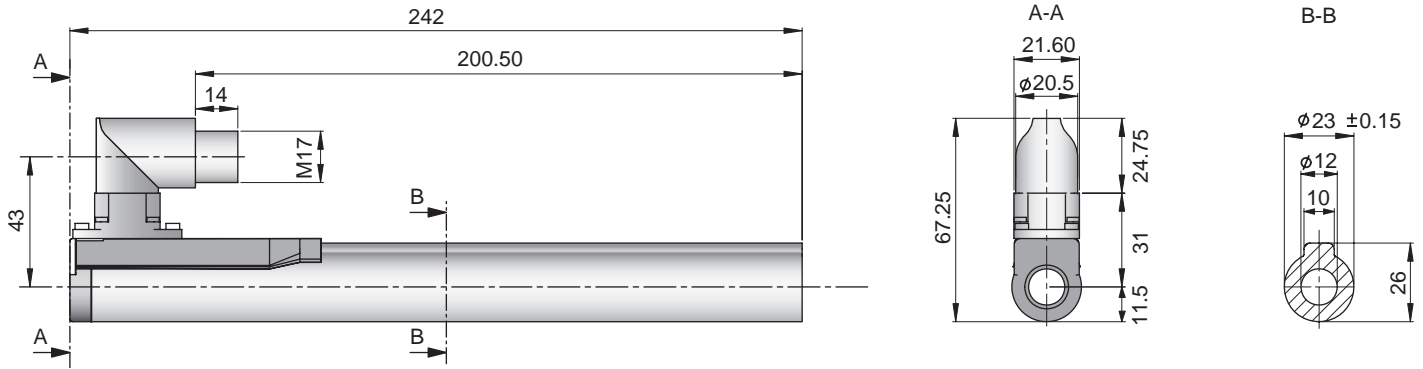


Moving Slider



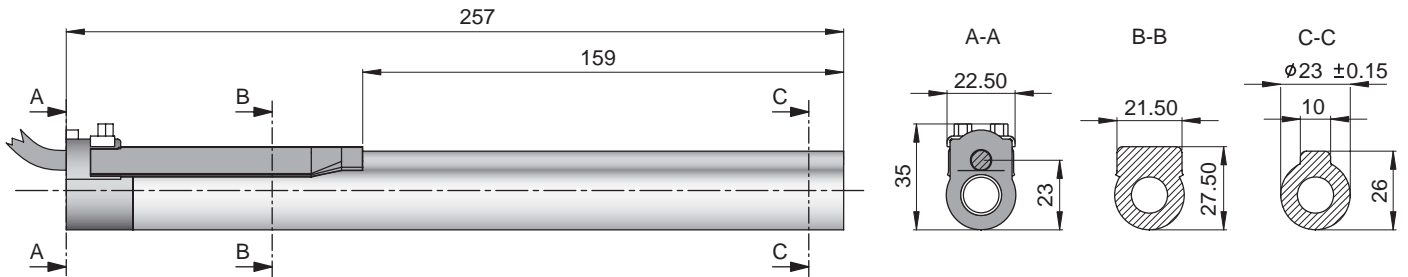
Moving Slider

Connector Type



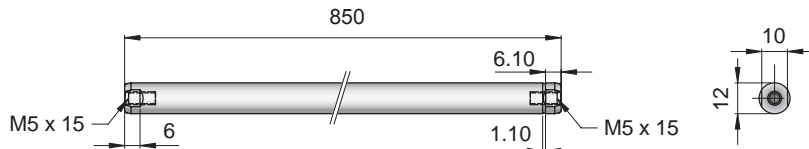
Linear Motor		Stator		Slider		
Type	Art.No	Type	Art. No.	Type	Art No.	
P01-23x160/630x770-R	-->	PS01-23x160-R	0150-1234	&	PL01-12x850/800	0150-1365
P01-23x160F/630x770-R	-->	PS01-23x160F-R	0150-1235	&	PL01-12x850/800	0150-1365

Cable Type



Linear Motor		Stator		Slider		
Type	Art.No	Type	Art. No.	Type	Art No.	
P01-23x160/630x770	-->	PS01-23x160	0150-1202	&	PL01-12x850/800	0150-1365
P01-23x160/630x770-R20	-->	PS01-23x160-R20	0150-1242	&	PL01-12x850/800	0150-1365
P01-23x160F/630x770-R20	-->	PS01-23x160F-R20	0150-1243	&	PL01-12x850/800	0150-1365

Slider



Standard Type	Slider Standard	PL01-12x850/800	0150-1365
Special Sliders	Heavy Duty Slider with WC/C-Coating	PL02-12x850/800	on request
	Hollow Slider hole diameter 4.2mm	PL01-12x850/800-L	on request

Connectors

Motor Connector Wiring

Cable Length:
P01-23x160... 1.0m
P01-23x160...-R20 0.2m

		P01-23...-R	P01-23...-R20	P01-23...
Ph 1+	red	1	1	
Ph 1-	pink	2	6	
Ph 2+	blue	3	2	
Ph 2-	grey	4	7	
+5VDC	white	A	3	
GND	inner Shield	B	8	
Sine	yellow	C	4	
Cosine	green	D	9	
Temp.	black	E	5	
Shield	outer Shield	Case	Case	

Accessoires

