

LinMot®

Stainless Steel Motors IP69K



Designed for harsh or aggressive environment



Hygienic design for food industry



Stainless steel housing EN1.4404 / AISI 316



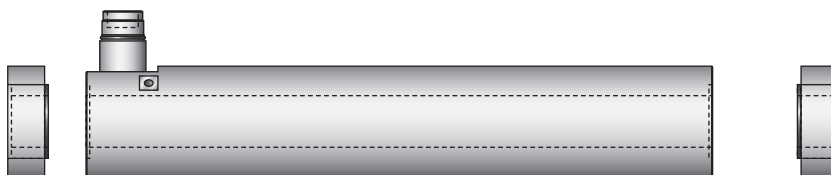
Completely sealed, Protection rating IP69K



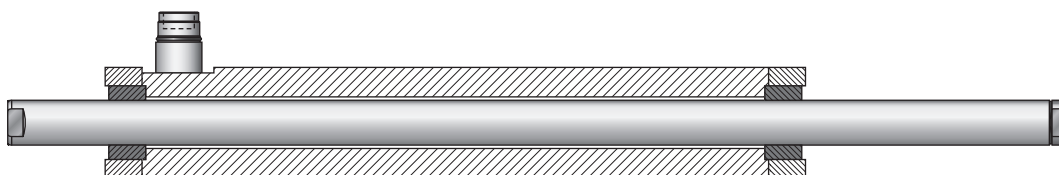
Available with integrated Fluid cooling

The linear motor technology for industrial applications

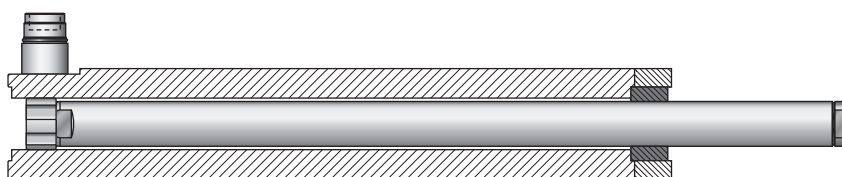
Stainless Steel Stator IP69K with bearings



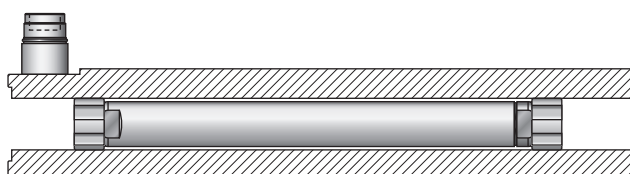
External bearings for mid range Strokes



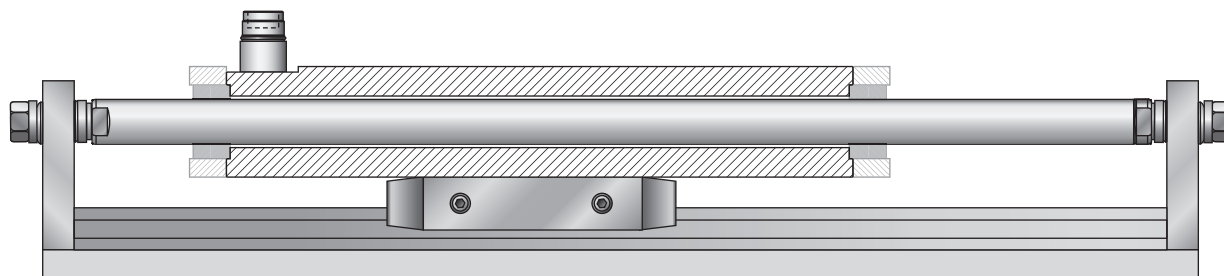
Internal/external bearings for short Strokes



Internal bearings for short Strokes

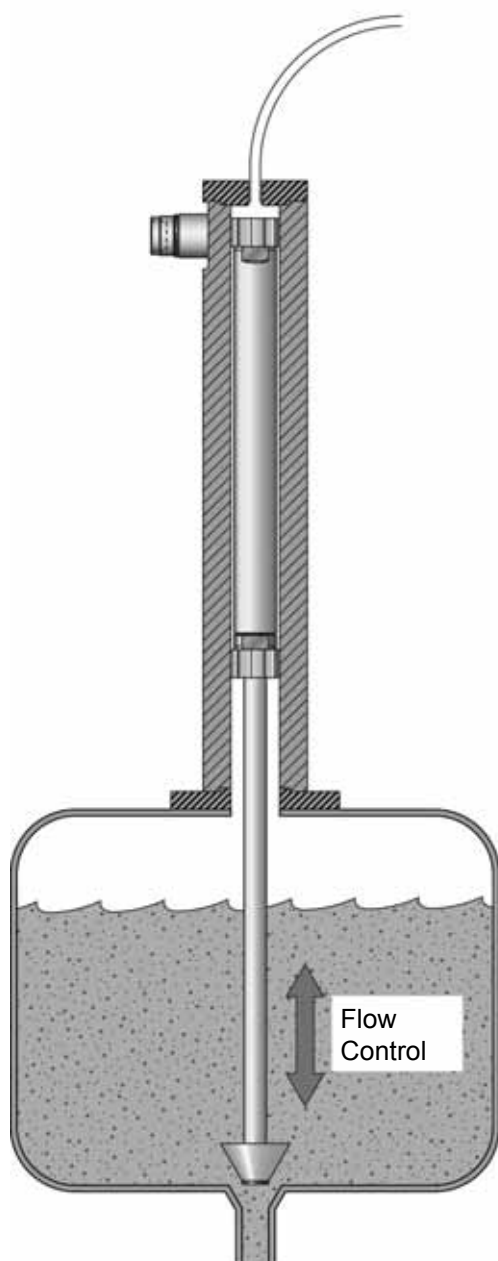


Application Example 1: Linear Stage IP69K



Application Example 2: Flow Control

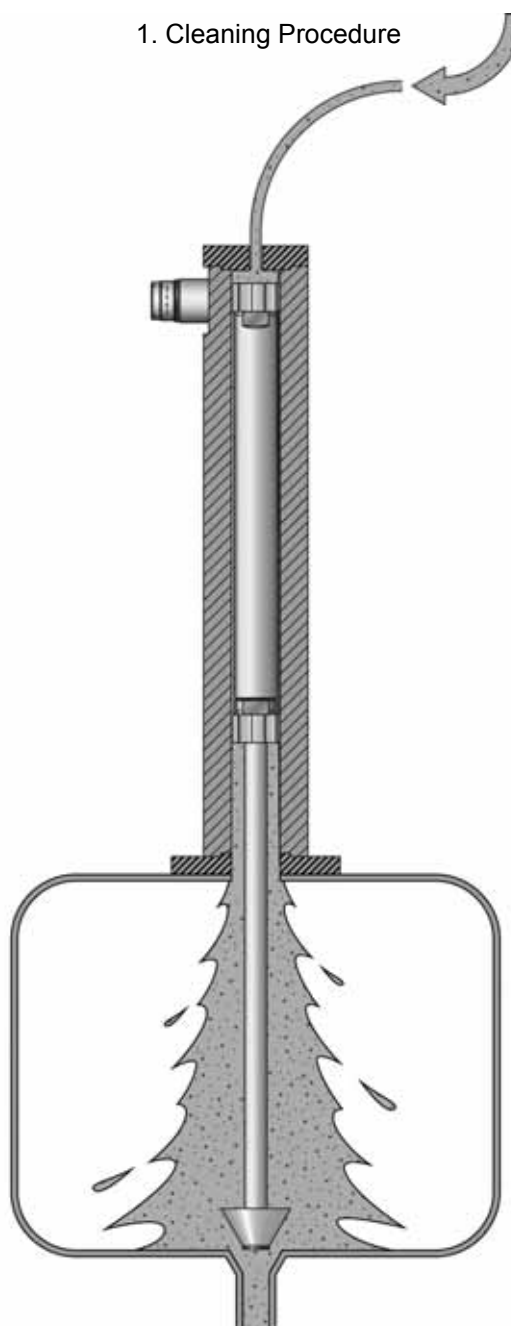
1. Normal Operation



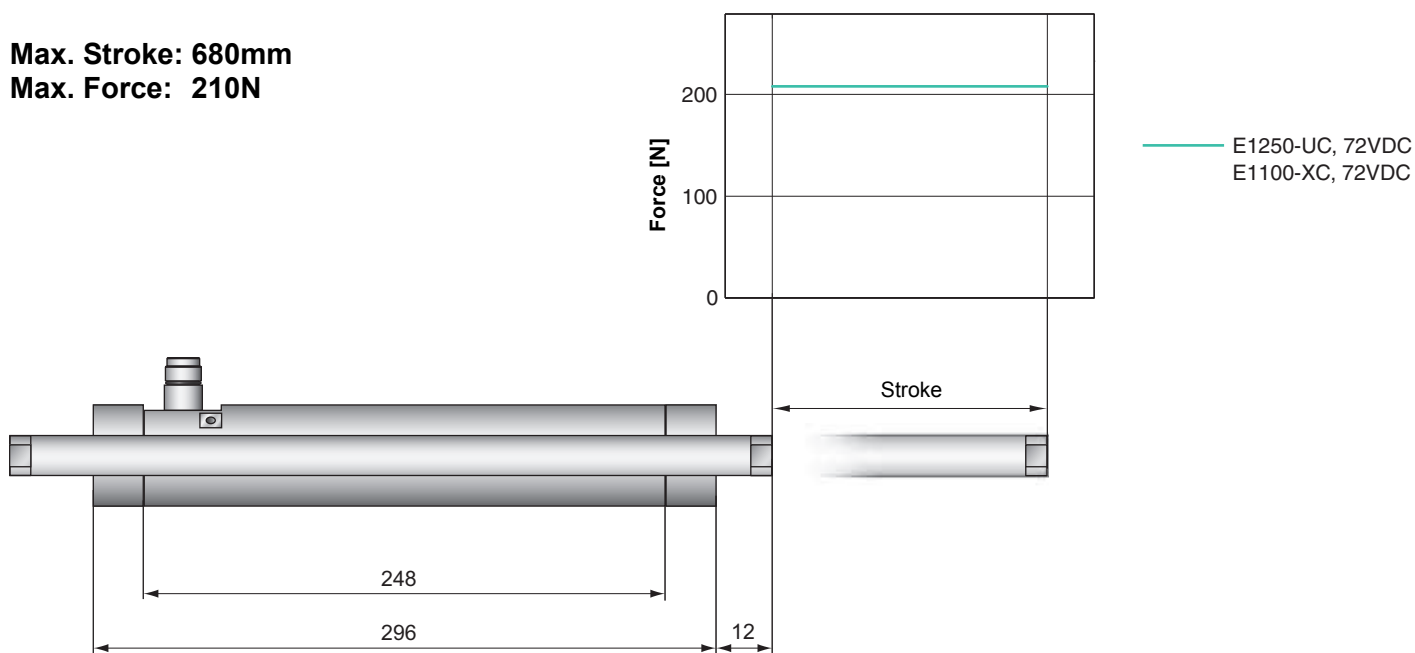
Applications:

- Clean Room
- Vacuum
- Aseptic

1. Cleaning Procedure



Max. Stroke: 680mm
Max. Force: 210N

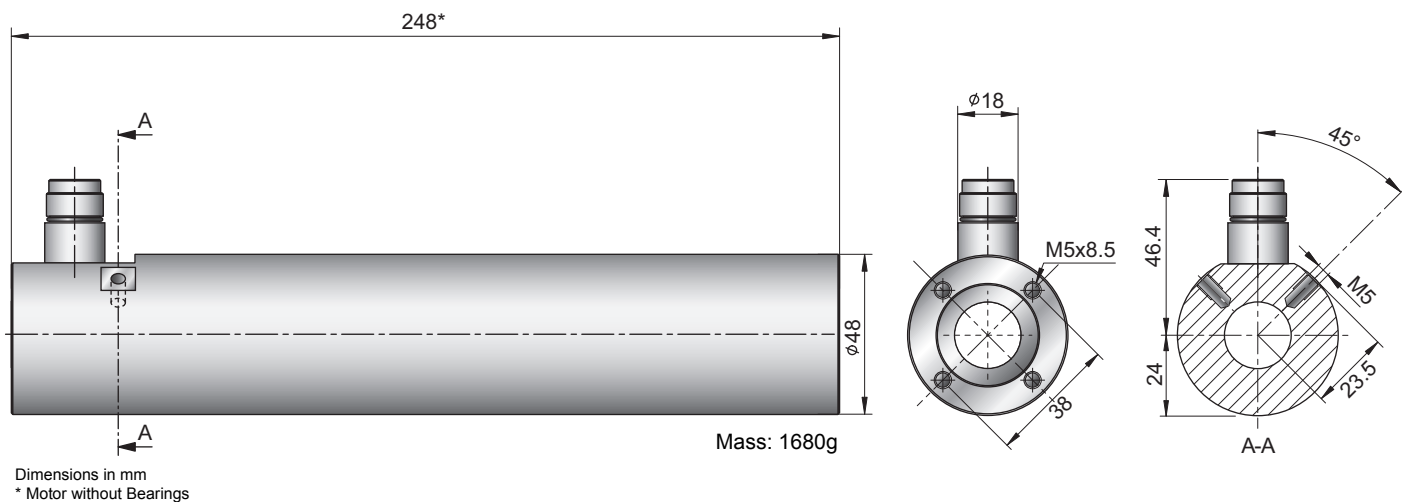


Dimensions in mm

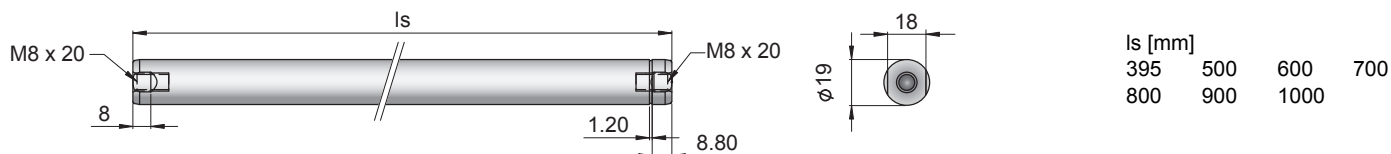
Motor Specification*

		P10-37x120F/...x...-HP-SSC							
Stroke	mm (in)	75 (2.95)	180 (7.09)	280 (11.02)	380 (14.96)	480 (18.90)	580 (22.83)	680 (26.77)	
Max. Force E12x0 - UC	N (lbf)				210 (47.2)				
Max. Force E11x0 - XC	N (lbf)				210 (47.2)				
Cont. Force	N (lbf)				24 (5.4)				
Cont. Force Fluid cooling	N (lbf)				65 (14.6)				
Force Constant	N/A (lbf/A)				14 (3.1)				
Max. Current @ 72VDC	A				15				
Max. Velocity @ 72VDC	m/s (in/s)				- (-)				
Phase Resist. 25/80 °C	Ohm				2.5/3				
Phase Inductance	mH				1.6				
Thermal Resistance	°K/W				-				
Thermal Time Const.	sec				-				
Stator Diameter	mm (in)				48 (1.89)				
Stator Length	mm (in)				296 (11.65)				
Stator Mass	g (lb)				2200 (4.85)				
Slider Diameter	mm (in)				19 (0.75)				
Slider Length	mm (in)	395 (15.55)	500 (19.69)	600 (23.62)	700 (27.56)	800 (31.50)	900 (35.43)	1000 (39.37)	
Slider Mass	g (lb)	746 (1.64)	958 (2.11)	1167 (2.57)	1376 (3.03)	1586 (3.50)	1785 (3.94)	1980 (4.37)	
Position Repeatability	mm (in)				±0.05 (±0.0020)				
Linearity	%				±0.10				
Repeatability with EPS	mm (in)				±0.01 (±0.0004)				
Linearity with EPS	mm (in)				±0.01 (±0.0004)				

*for Motors with Bearings, other Values without Bearings (see LinMot Designer)



PL01-19x.../...



Linear Motor		Stator		Slider	
Type	Art. Nr.	Type	Art. No.	Type	Art No.
P01-37x120F/75x75-HP-SSC	-->			& PL01-19x395/320	0150-1452
P01-37x120F/180x180-HP-SSC	-->			& PL01-19x500/420	0150-1455
P01-37x120F/280x280-HP-SSC	-->	PS01-37x120F-HP-SSC-R	0150-1282	& PL01-19x600/520	0150-1456
P01-37x120F/380x380-HP-SSC	-->	PS01-37x120F-HP-SSC-R-FC	0150-1283	& PL01-19x700/620	0150-1457
P01-37x120F/480x480-HP-SSC	-->			& PL01-19x800/720	01-50-1458
P01-37x120F/580x580-HP-SSC	-->			& PL01-19x900/820	0150-1459
P01-37x120F/680x680-HP-SSC	-->			& PL01-19x1000/920	0150-1460

Connectors

Motor Connector Wiring		
Ph 1+	red	1
Ph 1-	pink	2
Ph 2+	blue	3
Ph 2-	gray	4
+5VDC	white	A
GND	inner Shield	B
Sine	yellow	C
Cosine	green	D
Temp.	black	E
Shield	outer Shield	Case

Accessories

Plain Bearings

PB01-37x24-P-WD
Art. No. 0150-3299

PB01-37x24-P-SSC
Art. No. 0150-3290

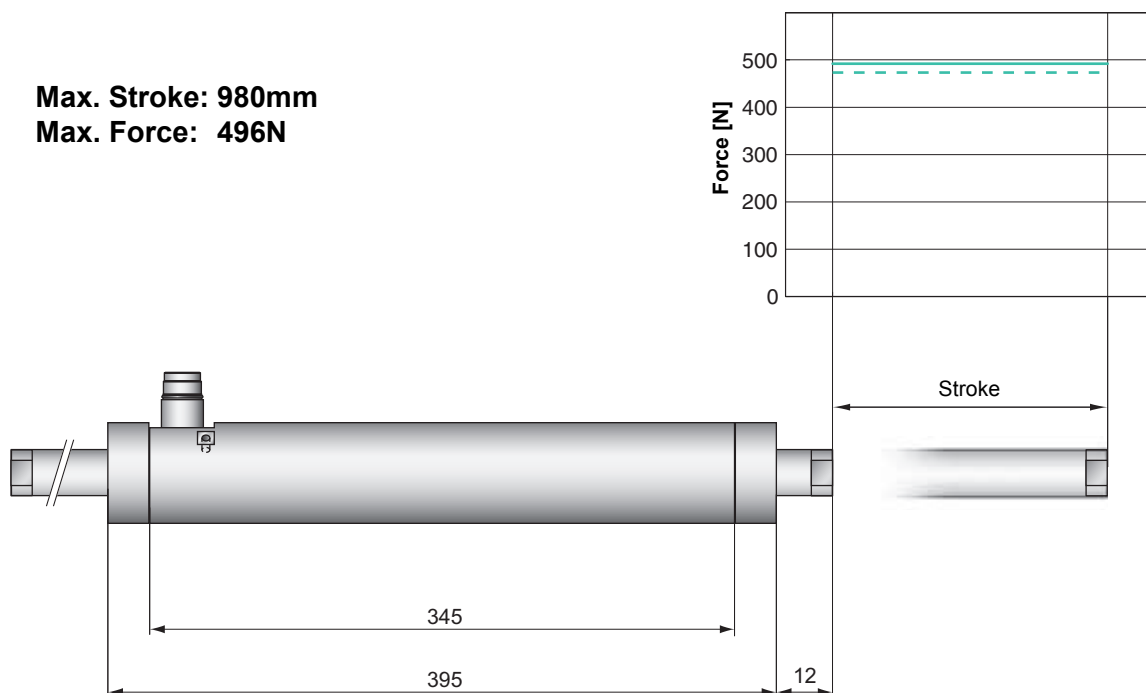
Connectors

MC01-R/f-IP69K-SSC
Art. No. 0150-3347

MC01-R/f-IP69K-SSC-as
Art. No. 0150-3343

Max. Stroke: 980mm

Max. Force: 496N

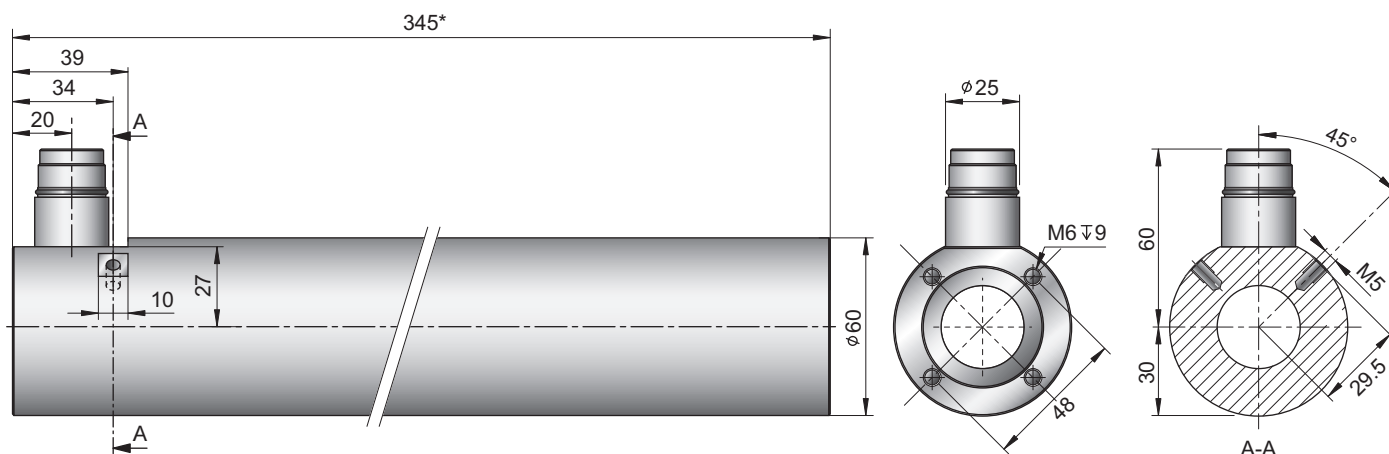


Dimensions in mm

Motor Specification*

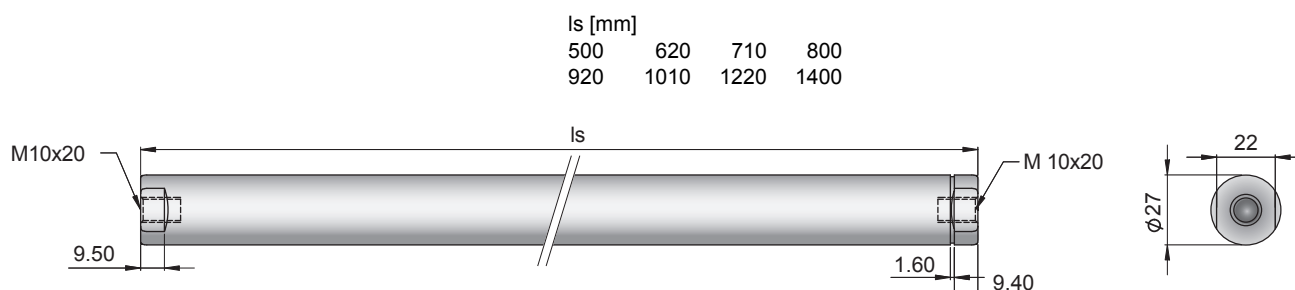
		P01-48x240F/...x...-SSC							
Stroke	mm (in)	80 (3.15)	200 (7.87)	290 (11.42)	380 (14.96)	500 (19.69)	590 (23.23)	800 (31.50)	980 (38.58)
Max. Force E12x0 - UC	N (lbf)				496 (111.51)				
Max. Force E11x0 - XC	N (lbf)				477 (107.23)				
Cont. Force	N (lbf)				86 (19.33)				
Cont. Force Fluid cooling	N (lbf)				241 (54.18)				
Force Constant	N/A (lbf/A)				19.1 (4.29)				
Max. Current @ 72VDC	A				26				
Max. Velocity @ 72VDC	m/s (in/s)				3.4 (134)				
Phase Resist. 25/80 °C	Ohm				1.0/1.2				
Phase Inductance	mH				1.0				
Thermal Resistance	°K/W				- (-)				
Thermal Time Const.	sec				- (-)				
Stator Diameter	mm (in)				60 (2.36)				
Stator Length	mm (in)				345 (13.58)				
Stator Mass	g (lb)				3710 (8.18)				
Slider Diameter	mm (in)				27 (0.059)				
Slider Length	mm (in)	500(19.69)	620(24.41)	710(27.95)	800(31.50)	920(36.22)	1010(39.76)	1220(48.03)	1400(55.12)
Slider Mass	g (lb)	2010(4.43)	2530(5.58)	2920(6.44)	3310(7.30)	3830(8.44)	4220(9.30)	5130(11.31)	5910(13.03)
Position Repeatability	mm (in)				±0.05 (±0.0020)				
Linearity	%				±0.10				
Repeatability with EPS	mm (in)				±0.01 (±0.0004)				
Linearity with EPS	mm (in)				±0.01 (±0.0004)				

*for Motors with Bearings, other Values without Bearings (see LinMot Designer)



Dimensions in mm
* Motor without Bearings

PL01-27x.../...



Is [mm]
500 620 710 800
920 1010 1220 1400

Linear Motor		Stator		Slider	
Type	Art. Nr.	Type	Art. No.	Type	Art No.
P01-48x240F/80x80-SSC	-->			& PL01-27x500/420	0150-1469
P01-48x240F/200x200-SSC	-->			& PL01-27x620/540	0150-1470
P01-48x240F/290x290-SSC	-->			& PL01-27x710/630	0150-1471
P01-48x240F/380x380-SSC	-->	PS01-48x240F-SSC-C	0150-1267	& PL01-27x800/720	0150-1472
P01-48x240F/500x500-SSC	-->	PS01-48x240F-SSC-C-FC	0150-1268	& PL01-27x920/840	0150-1447
P01-48x240F/590x590-SSC	-->			& PL01-27x1010/930	0150-1473
P01-48x240F/800x800-SSC	-->			& PL01-27x1220/1140	0150-1587
P01-48x240F/980x980-SSC	-->			& PL01-27x1400/1320	0150-1588

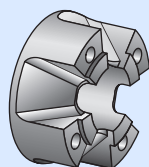
Connectors

Motor Connector Wiring

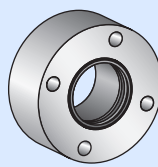
Ph 1+	red	1
Ph 1-	pink	2
Ph 2+	blue	3
Ph 2-	gray	4
+5VDC	white	A
GND	inner Shield	B
Sine	yellow	C
Cosine	green	D
Temp.	black	E
Shield	outer Shield	Case

Accessories

Plain Bearings

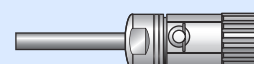


PB01-48x25-P-WD
Art. No. 0150-3271



PB01-48x25-P-SSC
Art. No. 0150-3281

Connectors

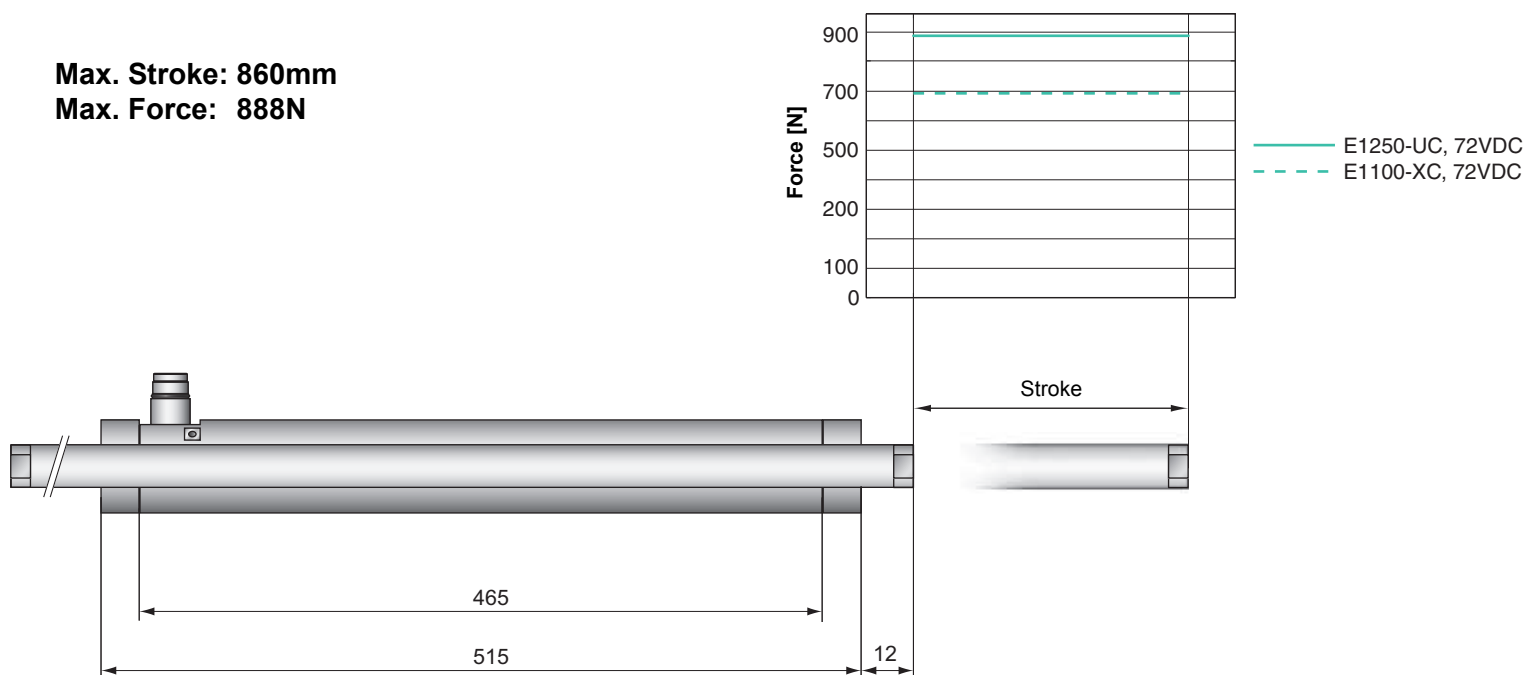


MC01-C/f-IP69K-SSC
Art. No. 0150-3306

MC01-C/f-IP69K-SSC-as
Art. No. 0150-3325

Max. Stroke: 860mm

Max. Force: 888N

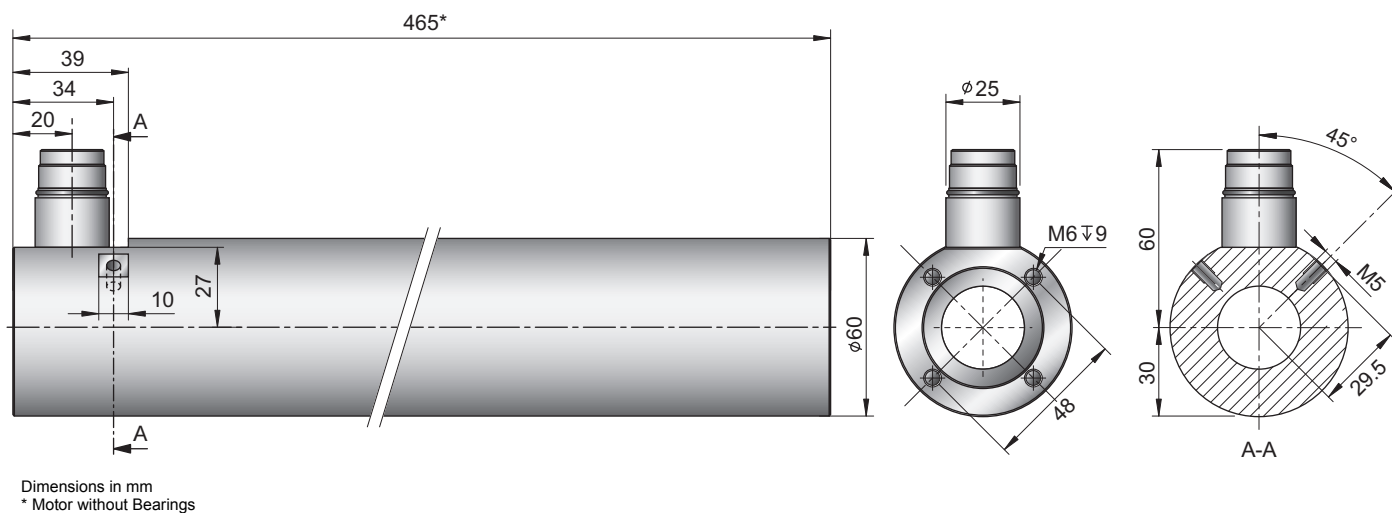


Dimensions in mm

Motor Specification*

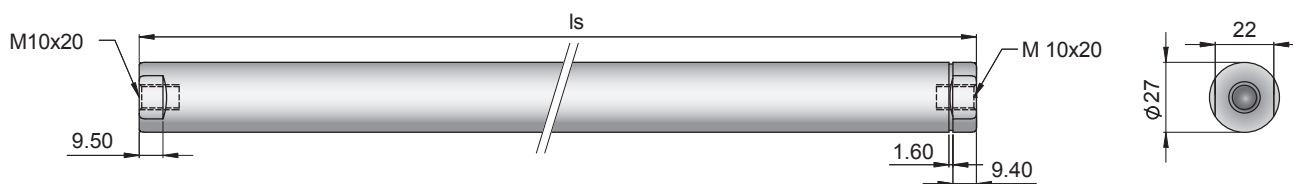
		P01-48x360F/...x...-SSC							
Extended Stroke ES	mm (in)	80 (3.15)	170 (6.69)	260 (10.24)	380 (14.96)	470 (18.50)	680 (26.77)	860 (33.86)	
Max. Force E12x0 - UC	N (lbf)				888 (199.6)				
Max. Force E11x0 - XC	N (lbf)				693 (155.8)				
Cont. Force	N (lbf)				129 (29.0)				
Cont. Force Fluid cooling	N (lbf)				360 (80.9)				
Force Constant	N/A (lbf/A)				27.7 (6.23)				
Max. Current @ 72VDC	A				32				
Max. Velocity @ 72VDC	m/s (in/s)				2.35				
Phase Resist. 25/80 °C	Ohm				1.5/1.8				
Phase Inductance	mH				1.5				
Thermal Resistance	°K/W				- (-)				
Thermal Time Const.	sec				- (-)				
Stator Diameter	mm (in)				60 (2.36)				
Stator Length	mm (in)				465 (18.31)				
Stator Mass	g (lb)				5000 (11.02)				
Slider Diameter	mm (in)				27 (0.059)				
Slider Length	mm (in)	620(24.41)	710(27.95)	800(31.50)	920(36.22)	1010(39.76)	1220(48.03)	1400(55.12)	
Slider Mass	g (lb)	2530(5.58)	2920(6.44)	3310(7.30)	3830(8.44)	4220(9.30)	5130(11.31)	5910(13.03)	
Position Repeatability	mm (in)				±0.05 (±0.0020)				
Linearity	%				±0.10				
Repeatability with EPS	mm (in)				±0.01 (±0.0004)				
Linearity with EPS	mm (in)				±0.01 (±0.0004)				

*for Motors with Bearings, other Values without Bearings (see LinMot Designer)



PL01-27x.../...

ls [mm]
620 710 800 920
1010 1220 1400

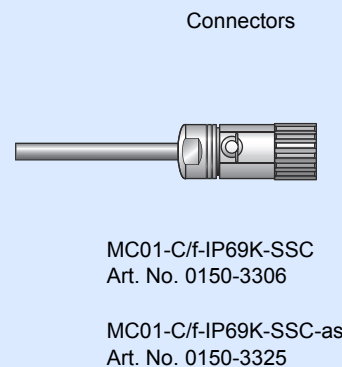
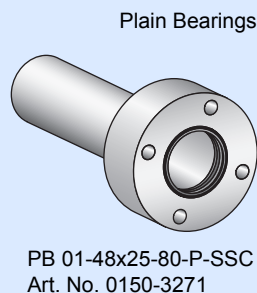


Linear Motor		Stator		Slider	
Type	Art. Nr.	Type	Art. No.	Type	Art No.
P01-48x360F/80x80-SSC	-->			& PL01-27x620/540	0150-1470
P01-48x360F/170x170-SSC	-->			& PL01-27x710/630	0150-1471
P01-48x360F/260x260-SSC	-->			& PL01-27x800/720	0150-1472
P01-48x360F/380x380-SSC	-->	PS01-48x360F-SSC-C	0150-1270	& PL01-27x920/840	0150-1447
P01-48x360F/470x470-SSC	-->	PS01-48x360F-SSC-C-FC	0150-1271	& PL01-27x1010/930	0150-1473
P01-48x360F/680x680-SSC	-->			& PL01-27x1220/1140	0150-1587
P01-48x360F/860x860-SSC	-->			& PL01-27x1400/1320	0150-1588

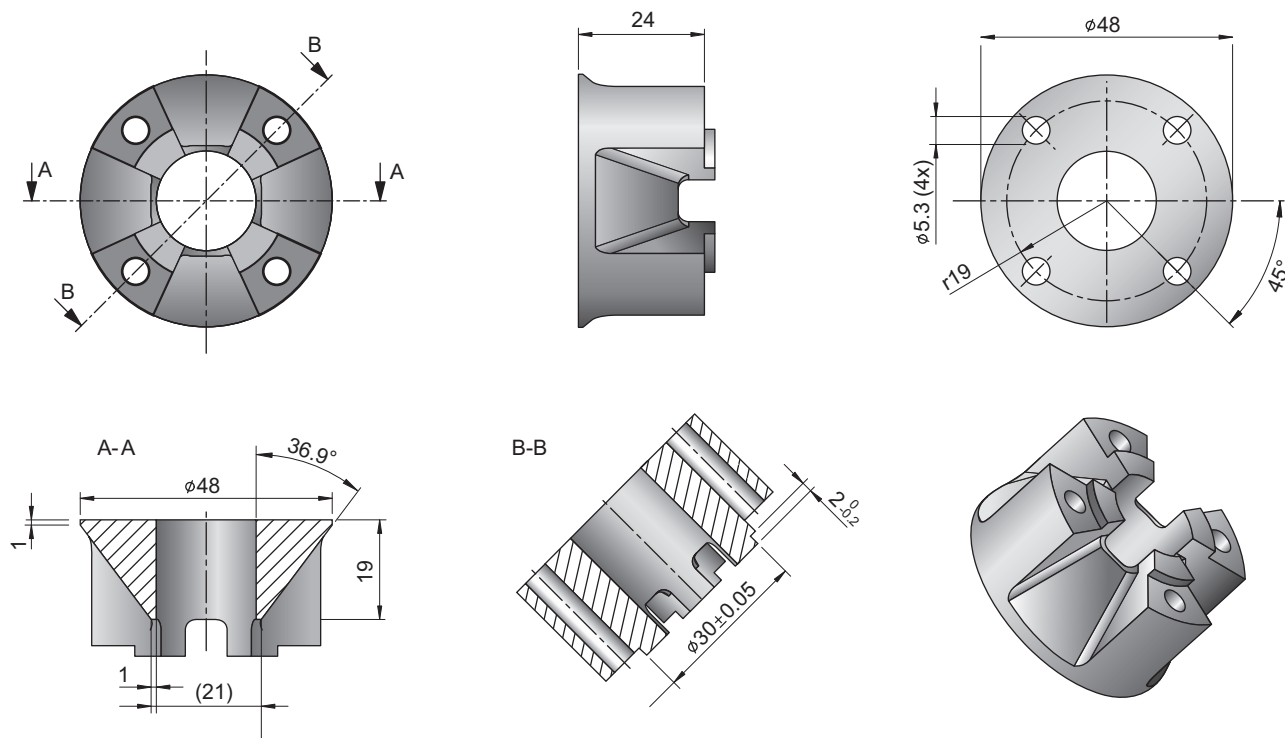
Connectors

Motor Connector Wiring		
Ph 1+	red	1
Ph 1-	pink	2
Ph 2+	blue	3
Ph 2-	gray	4
+5VDC	white	A
GND	inner Shield	B
Sine	yellow	C
Cosine	green	D
Temp.	black	E
Shield	outer Shield	Case

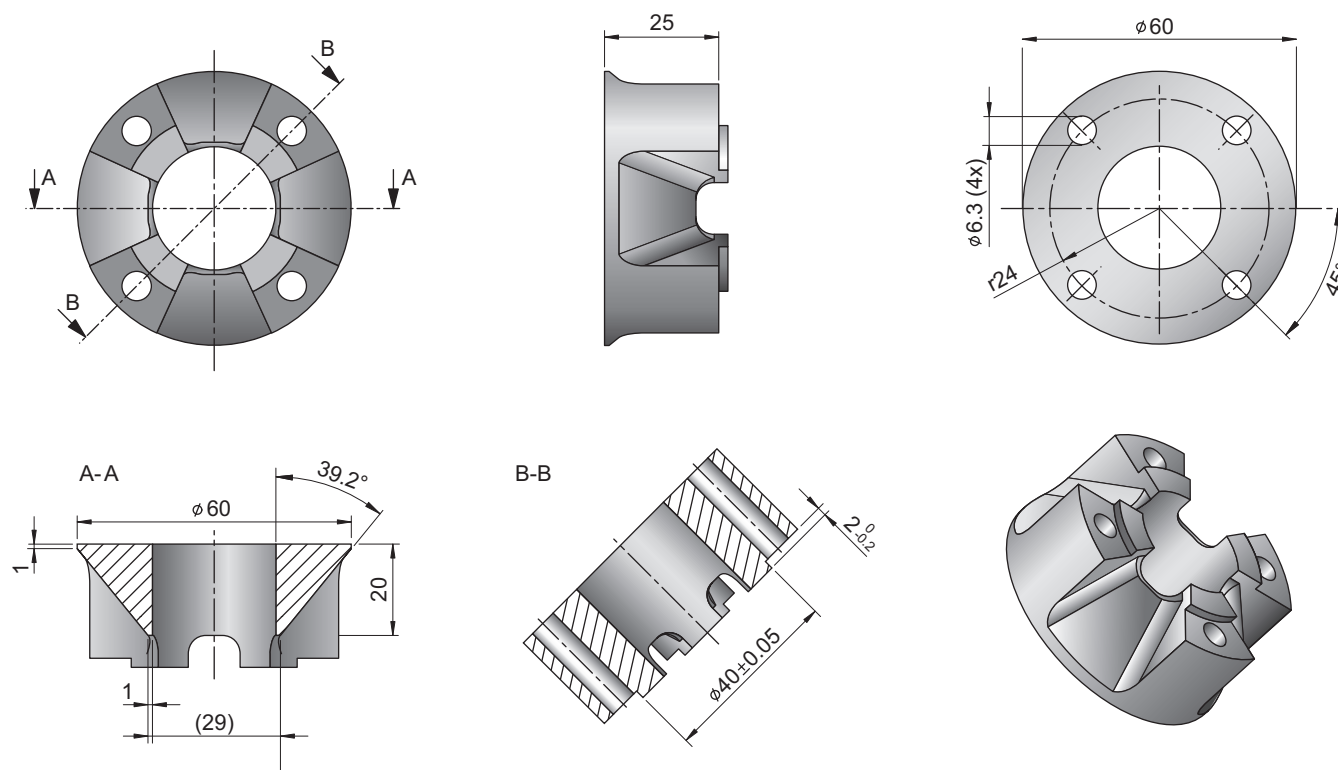
Accessories



PB02-37x24-P-WD



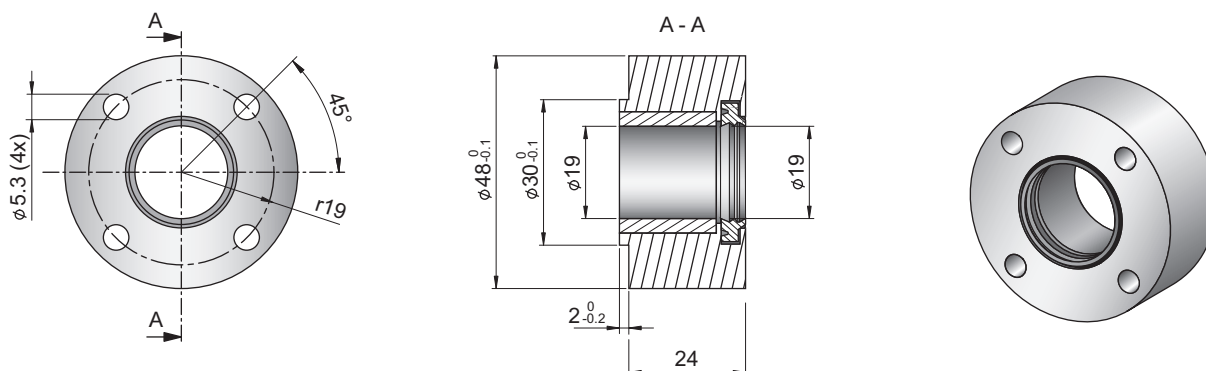
PB02-48x25-P-WD



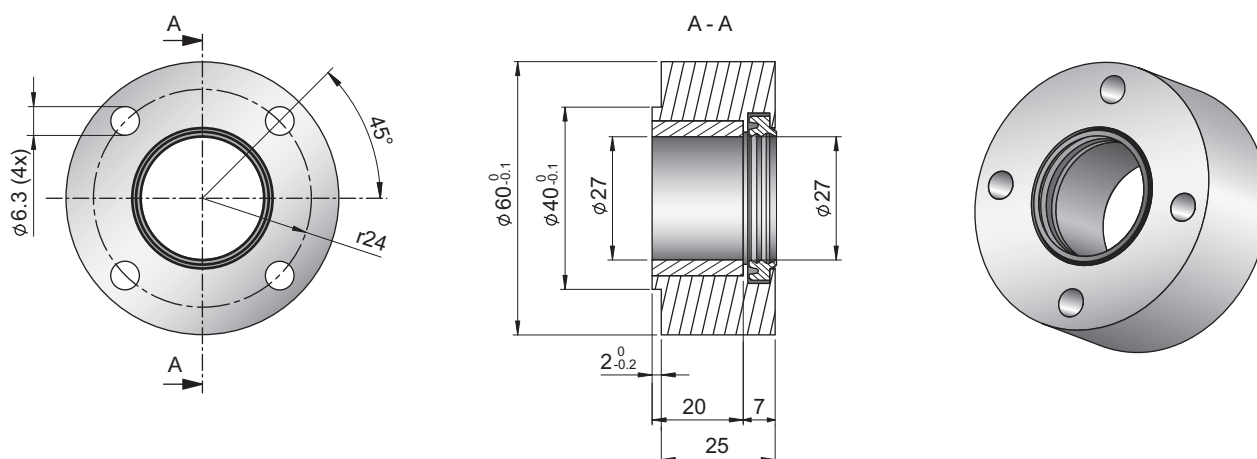
Ordering information

Item	Description	Part Number
PB01-37x24-P-WD	Plain Bearing for PS01-37x...-SSC (synthetical, FDA materials)	0150-3299
PB01-48x25-P-WD	Plain Bearing for PS01-48x...-SSC (synthetical, FDA materials)	0150-3271

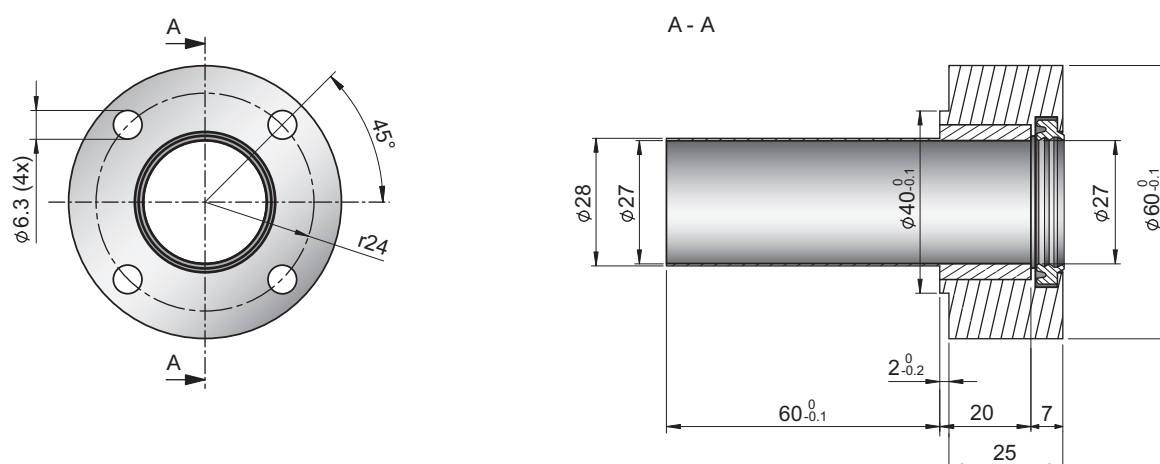
PB01-37x24-P-SSC



PB01-48x25-P-SSC



PB01-48x25-80-P-SSC



Ordering information

Item	Description	Part Number
PB01-37x24-P-SSC	Plain Bearing for PS01-37x120...-SSC (synthetical, FDA materials)	0150-3290
PB01-48x25-P-SSC	Plain Bearing for PS01-48x240...-SSC (synthetical, FDA materials)	0150-3281
PB01-48x25-80-P-SSC	Plain Bearing for PS01-48x360...-SSC (synthetical, FDA materials)	0150-3413