

LinMot®

Stainless Steel Motors



Designed for harsh or aggressive environment



Hygienic design for food industry



Stainless steel housing EN1.4404 / AISI 316



Completely sealed, Protection rating IP69K



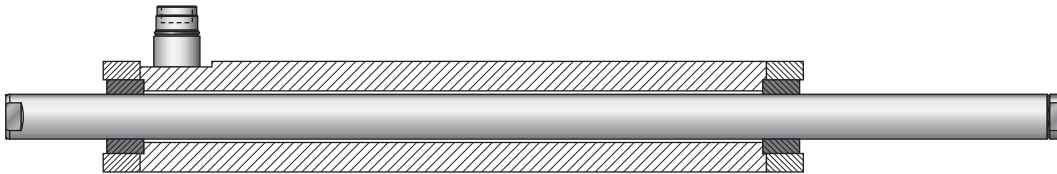
With optional integrated water cooling pipes

The linear motor technology for industrial applications

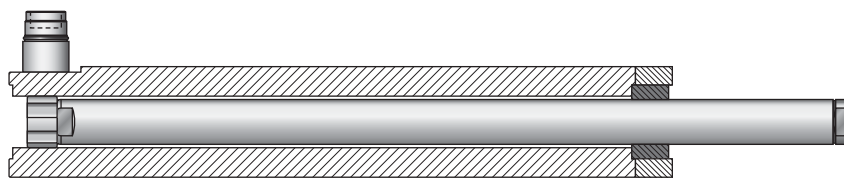
Stainless Steel Stator IP69K with bearings



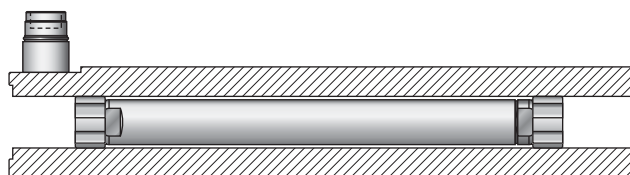
External bearings for mid range Strokes



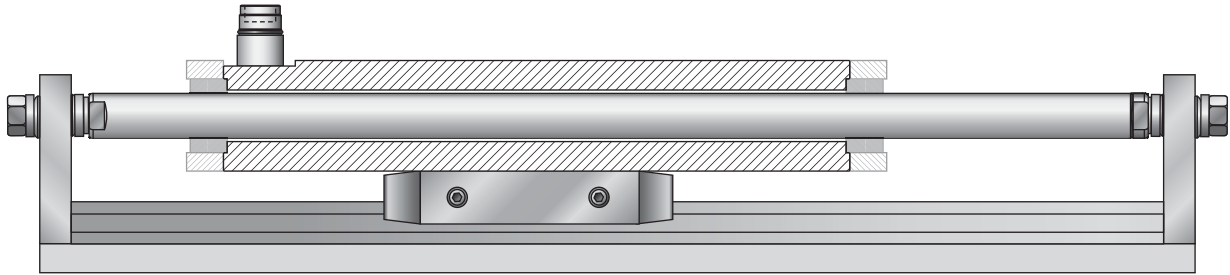
Internal/external bearings for short Strokes



Internal bearings for short Strokes

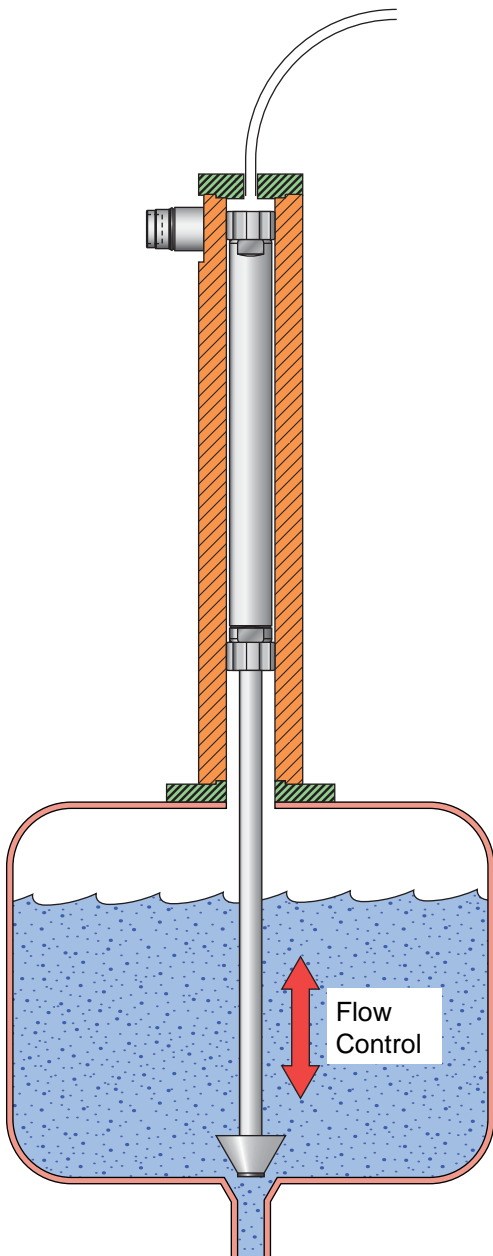


Application Example 1: Linear Stage IP69K

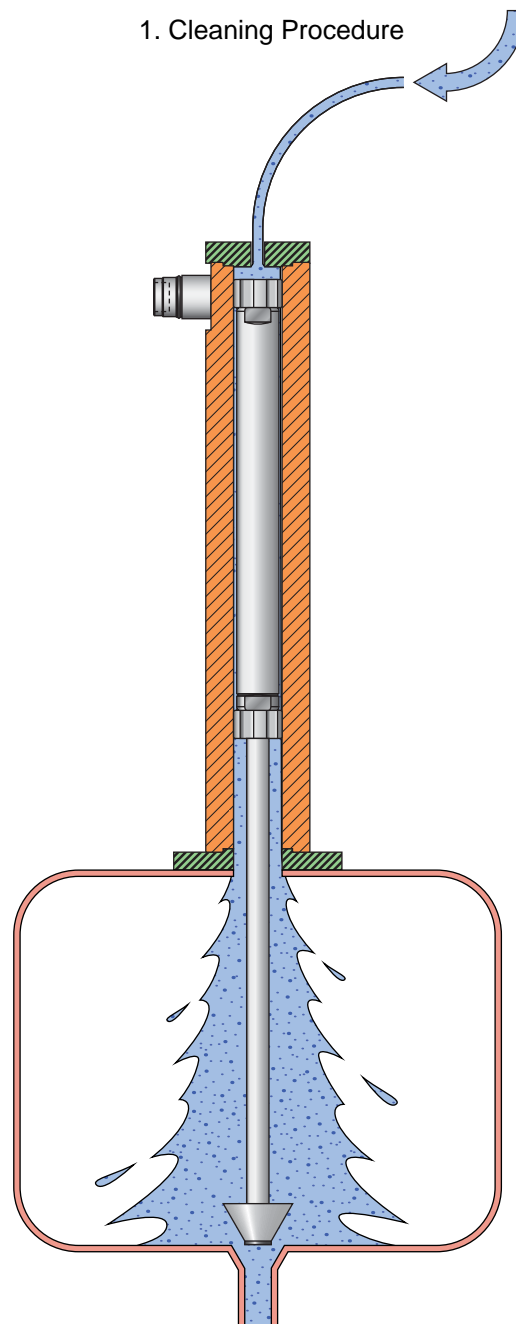


Application Example 2: Flow Control

1. Normal Operation



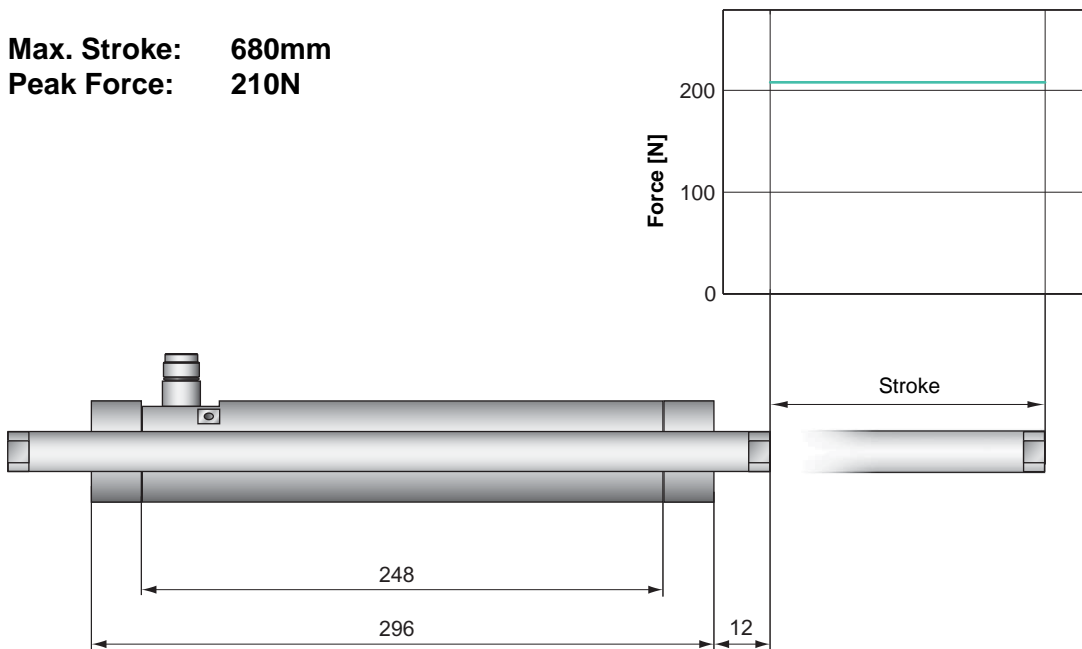
1. Cleaning Procedure



Applications:

- Clean Room
- Vacuum
- Aseptic

Max. Stroke: 680mm
Peak Force: 210N



— E1250-UC, 72VDC
 — E1100-XC, 72VDC

Preliminary Information

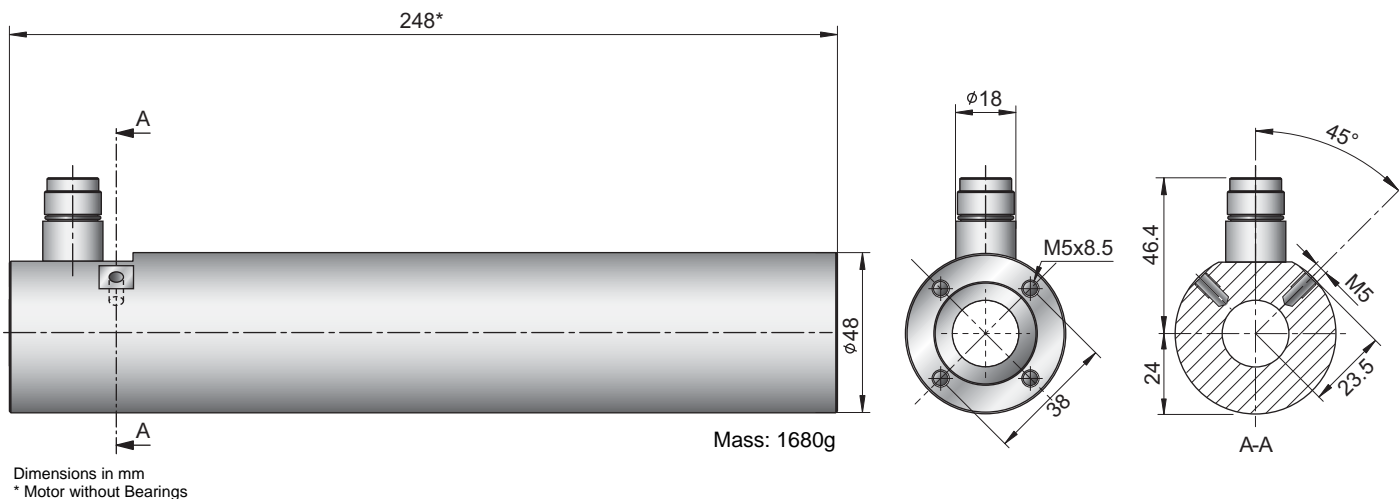
Dimensions in mm

Motor Specifications*

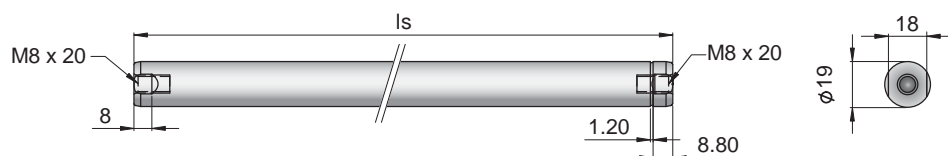
| | | 37x120F-L24-HP-SSC | | | | | | |
|----------------------------|-------------|--------------------|-------------|-------------|-----------------|-------------|-------------|--------------|
| | | 75 (2.95) | 180 (7.09) | 280 (11.02) | 380 (14.96) | 480 (18.90) | 580 (22.83) | 680 (26.77) |
| Stroke | mm (in) | | | | | | | |
| Peak Force E12x0 - UC | N (lbf) | | | | 210 (47.2) | | | |
| Peak Force E11x0 - XC | N (lbf) | | | | 210 (47.2) | | | |
| Cont. Force | N (lbf) | | | | 24 (5.4) | | | |
| Cont. Force Liquid 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 | | | |
| Position Rep. with ES | mm (in) | | | | ±0.01 (±0.0004) | | | |
| Linearity with ES | mm (in) | | | | ±0.01 (±0.0004) | | | |

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

PS01-37x120F-HP-SSC



PL01-19x.../...



| Is [mm] | 395 | 500 | 600 | 700 |
|---------|-----|-----|------|-----|
| | 800 | 900 | 1000 | |

| Linear Motor | | Stator | | Slider | |
|--------------------------------|----------|--------------------------|-----------|--------------------|------------|
| Type | Art. Nr. | Type | Art. No. | Type | Art No. |
| P01-37x120F/75x75-L24-HP-SSC | --> | | | & PL01-19x395/320 | 0150-1452 |
| P01-37x120F/180x180-L24-HP-SSC | --> | | | & PL01-19x500/420 | 0150-1455 |
| P01-37x120F/280x280-L24-HP-SSC | --> | PS01-37x120F-HP-SSC-R | 0150-1282 | & PL01-19x600/520 | 0150-1456 |
| P01-37x120F/380x380-L24-HP-SSC | --> | PS01-37x120F-HP-SSC-R-FC | 0150-1283 | & PL01-19x700/620 | 0150-1457 |
| P01-37x120F/480x480-L24-HP-SSC | --> | | | & PL01-19x800/720 | 01-50-1458 |
| P01-37x120F/580x580-L24-HP-SSC | --> | | | & PL01-19x900/820 | 0150-1459 |
| P01-37x120F/680x680-L24-HP-SSC | --> | | | & PL01-19x1000/920 | 0150-1460 |

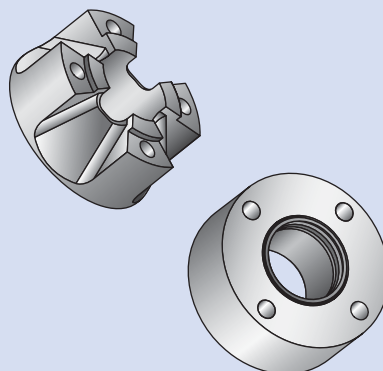
Connectors

Motor Connector Wiring

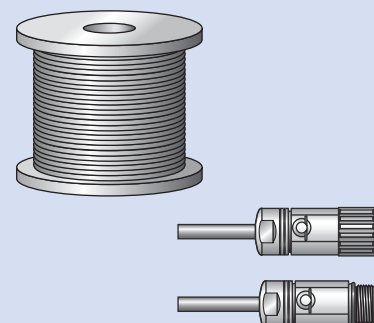
| | | |
|--------|--------------|------|
| Ph 1+ | red | 1 |
| Ph 1- | pink | 2 |
| Ph 2+ | blue | 3 |
| Ph 2- | gray | 4 |
| +5VDC | white | A |
| GND | inner Shield | B |
| Sine | yellow | C |
| Cosine | green | D |
| Temp. | black | E |
| Shield | outer Shield | Case |

Accessories

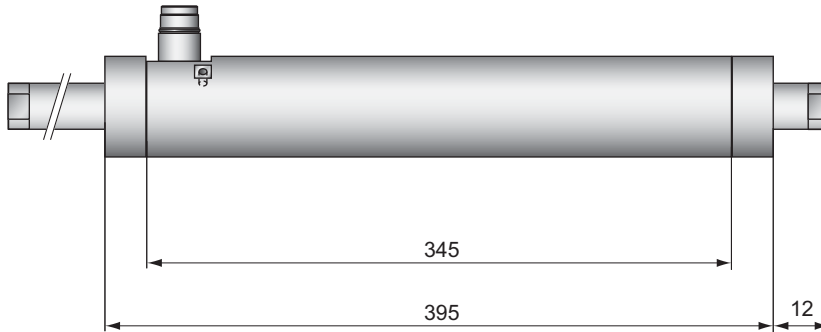
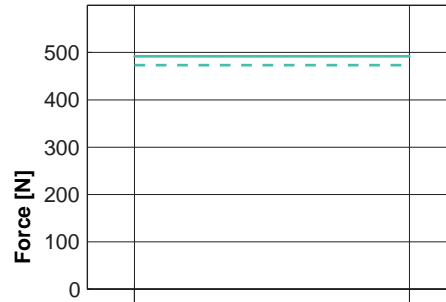
Plain Bearings



Cable + Connectors



Max. Stroke: 1580mm
Peak Force: 496N



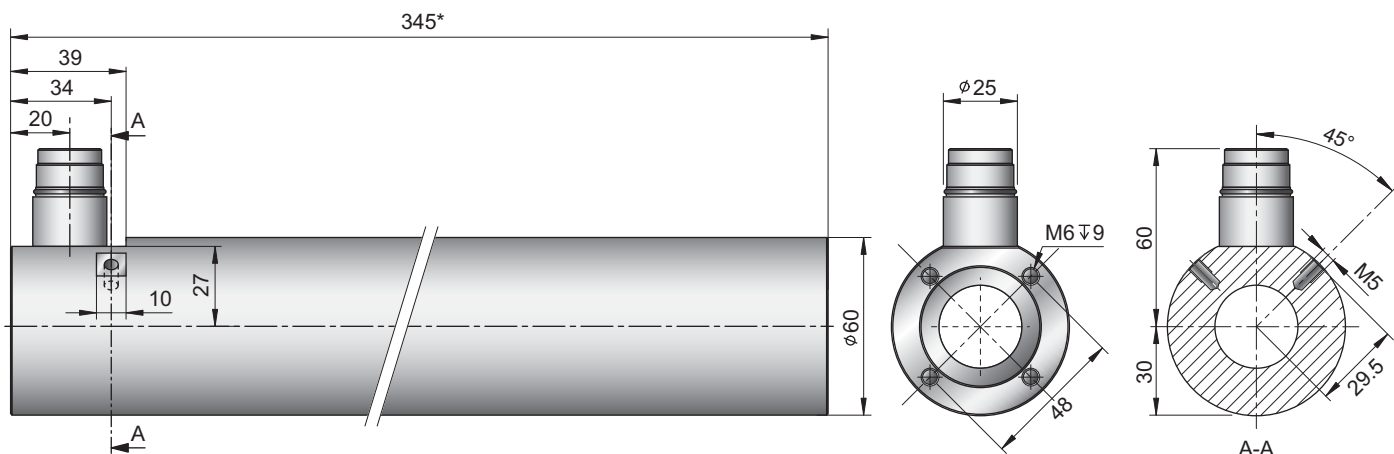
Dimensions in mm

Motor Specifications*

| | | 48x240F-L25-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) |
| Peak Force E12x0 - UC | N (lbf) | 496 (111.51) | | | | | | | |
| Peak Force E11x0 - XC | N (lbf) | 477 (107.23) | | | | | | | |
| Cont. Force | N (lbf) | 86 (19.33) | | | | | | | |
| Cont. Force Liquid 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 | | | | | | | |
| Position Rep. with ES | mm (in) | ±0.01 (±0.0004) | | | | | | | |
| Linearity with ES | mm (in) | ±0.01 (±0.0004) | | | | | | | |

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

PS01-48x240F-SSC

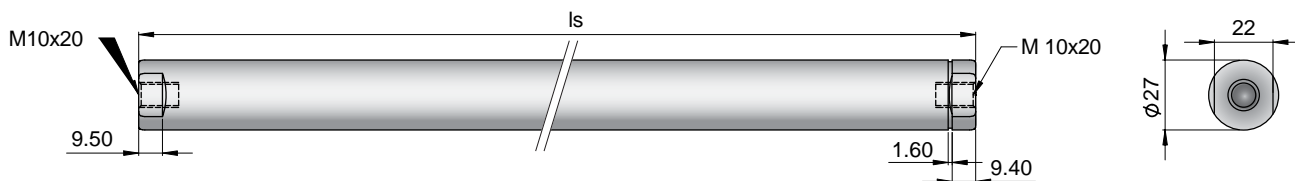


Dimensions in mm
* Motor without Bearings

PL01-27x.../...

ls [mm]

| | | | |
|-----|------|------|------|
| 500 | 620 | 710 | 800 |
| 920 | 1010 | 1220 | 1400 |



| Linear Motor | Stator | | Slider | | |
|-----------------------------|----------|------------------------|-------------------|---------------------|-----------|
| Type | Art. Nr. | Type | Art. No. | Art No. | |
| P01-48x240F/80x80-L25-SSC | --> | | & PL01-27x500/420 | 0150-1469 | |
| P01-48x240F/200x200-L25-SSC | --> | | & PL01-27x620/540 | 0150-1470 | |
| P01-48x240F/290x290-L25-SSC | --> | PS01-48x240F-SSC-C | 0150-1267 | & PL01-27x710/630 | 0150-1471 |
| P01-48x240F/380x380-L25-SSC | --> | PS01-48x240F-SSC-C-FC | 0150-1268 | & PL01-27x800/720 | 0150-1472 |
| P01-48x240F/500x500-L25-SSC | --> | PS01-48x240F-SSC-Cw | 0150-1274 | & PL01-27x920/840 | 0150-1447 |
| P01-48x240F/590x590-L25-SSC | --> | PS01-48x240F-SSC-Cw-FC | 0150-1275 | & PL01-27x1010/930 | 0150-1473 |
| P01-48x240F/800x800-L25-SSC | --> | | | & PL01-27x1220/1140 | 0150-1587 |
| P01-48x240F/980x980-L25-SSC | --> | | | & PL01-27x1400/1320 | 0150-1588 |

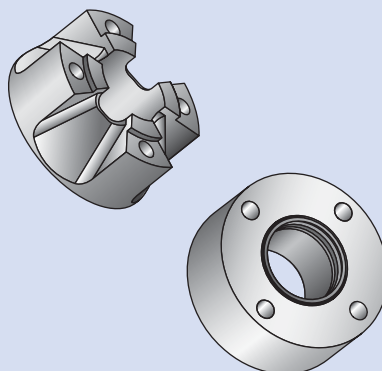
Connectors

Motor Connector Wiring

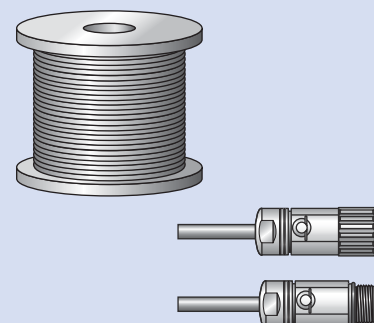
| | | |
|--------|--------------|------|
| Ph 1+ | red | 1 |
| Ph 1- | pink | 2 |
| Ph 2+ | blue | 3 |
| Ph 2- | gray | 4 |
| +5VDC | white | A |
| GND | inner Shield | B |
| Sine | yellow | C |
| Cosine | green | D |
| Temp. | black | E |
| Shield | outer Shield | Case |

Accessories

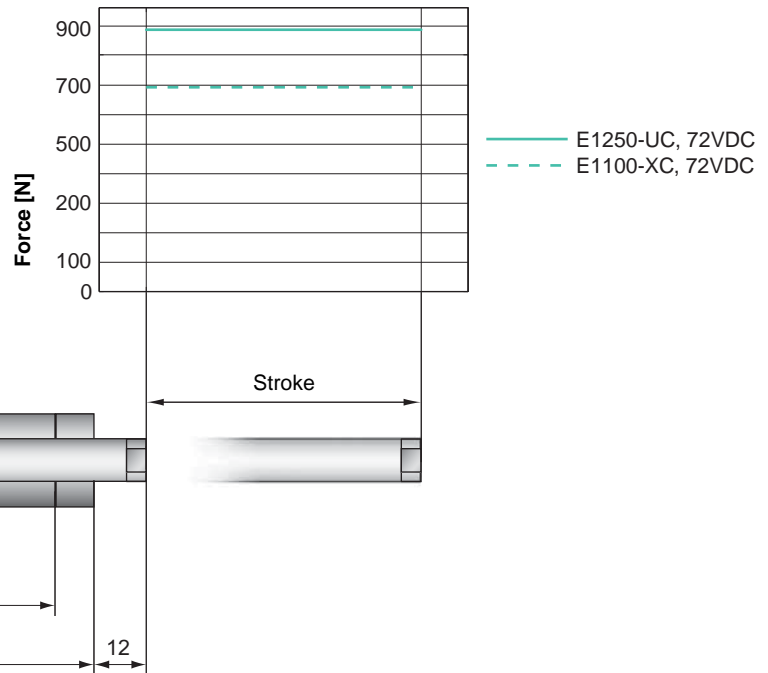
Plain Bearings



Cable + Connectors



Max. Stroke: 1710mm
Peak Force: 888N



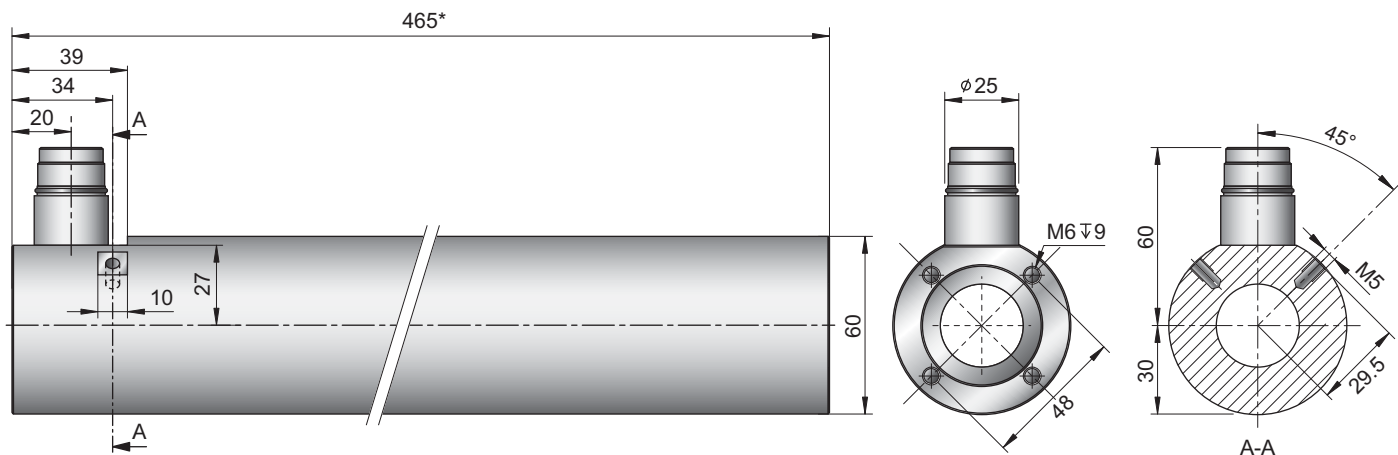
Dimensions in mm

Motor Specification

| | | 48x360F-L25-SSC | | | | | | |
|----------------------------|-------------|-----------------|------------|-----------------|------------|-------------|-------------|-------------|
| | | 80 | 170 | 260 | 380 | 470 | 680 | 860 |
| Stroke Max. | mm (in) | | | | | | | |
| Peak Force E12x0 - UC | N (lbf) | | | 888 (199.6) | | | | |
| Peak Force E11x0 - XC | N (lbf) | | | 693 (155.8) | | | | |
| Cont. Force | N (lbf) | | | 129 (29.0) | | | | |
| Cont. Force Liquid 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 | | | | |
| Position Rep. with ES | mm (in) | | | ±0.01 (±0.0004) | | | | |
| Linearity with ES | mm (in) | | | ±0.01 (±0.0004) | | | | |

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

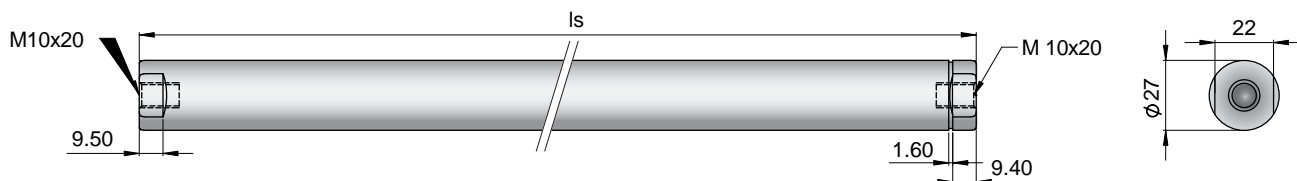
PS01-48x360F-SSC



Dimensions in mm
* Motor without Bearings

PL01-27x.../...-HP

Is [mm]
620 710 800 920
1010 1220 1400



| Linear Motor Type | Art. Nr. | Stator Type | Art. No. | Slider Type | Art No. |
|-----------------------------|----------|-----------------------|-----------|---------------------|-----------|
| P01-48x360F/80x80-L25-SSC | --> | | | & PL01-27x620/540 | 0150-1470 |
| P01-48x360F/170x170-L25-SSC | --> | | | & PL01-27x710/630 | 0150-1471 |
| P01-48x360F/260x260-L25-SSC | --> | | | & PL01-27x800/720 | 0150-1472 |
| P01-48x360F/380x380-L25-SSC | --> | PS01-48x360F-SSC-C | 0150-1270 | & PL01-27x920/840 | 0150-1447 |
| P01-48x360F/470x470-L25-SSC | --> | PS01-48x360F-SSC-C-FC | 0150-1271 | & PL01-27x1010/930 | 0150-1473 |
| P01-48x360F/680x680-L25-SSC | --> | | | & PL01-27x1220/1140 | 0150-1587 |
| P01-48x360F/860x860-L25-SSC | --> | | | & PL01-27x1400/1320 | 0150-1588 |

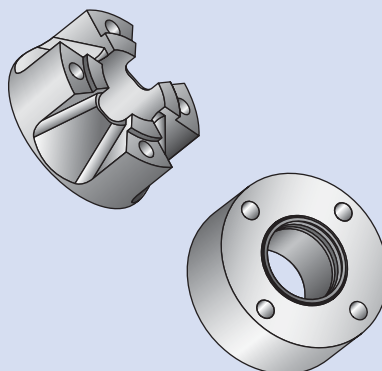
Connectors

Motor Connector Wiring

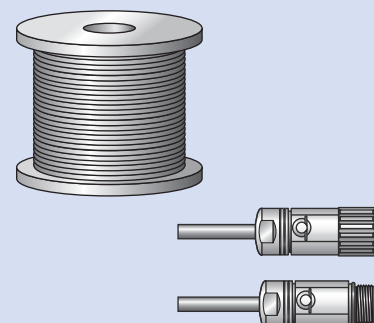
| | | |
|--------|--------------|------|
| Ph 1+ | red | 1 |
| Ph 1- | pink | 2 |
| Ph 2+ | blue | 3 |
| Ph 2- | gray | 4 |
| +5VDC | white | A |
| GND | inner Shield | B |
| Sine | yellow | C |
| Cosine | green | D |
| Temp. | black | E |
| Shield | outer Shield | Case |

Accessories

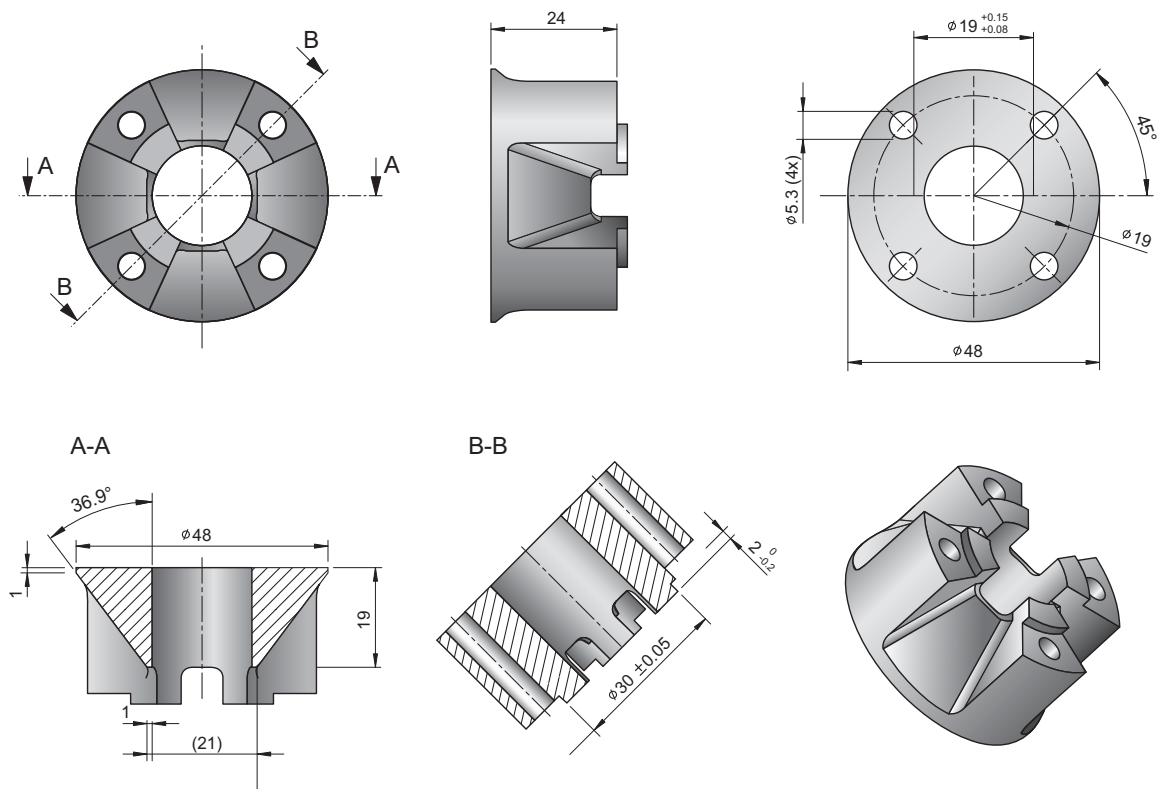
Plain Bearings



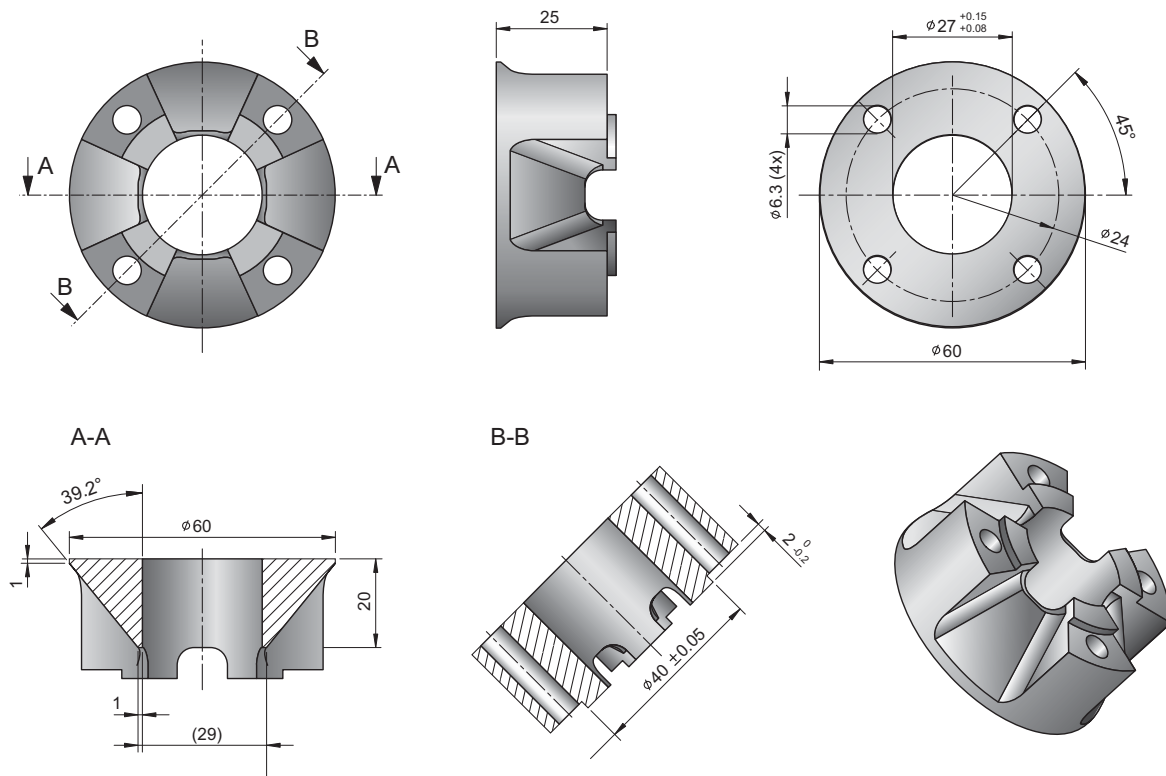
Cable + Connectors



PB02-37x24-P-WD



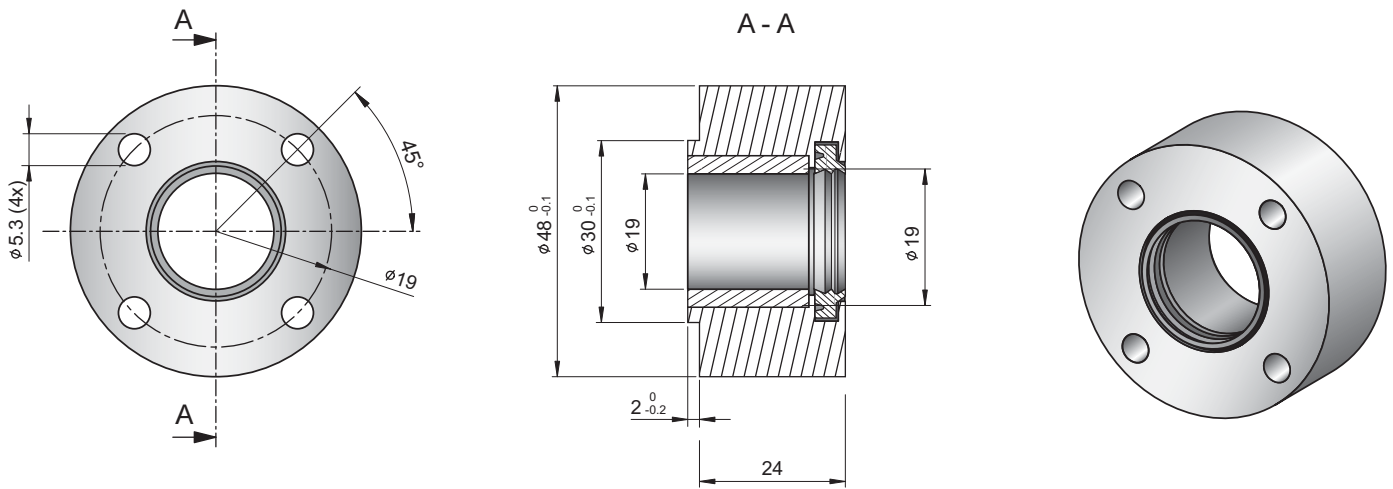
PB02-48x25P-WD



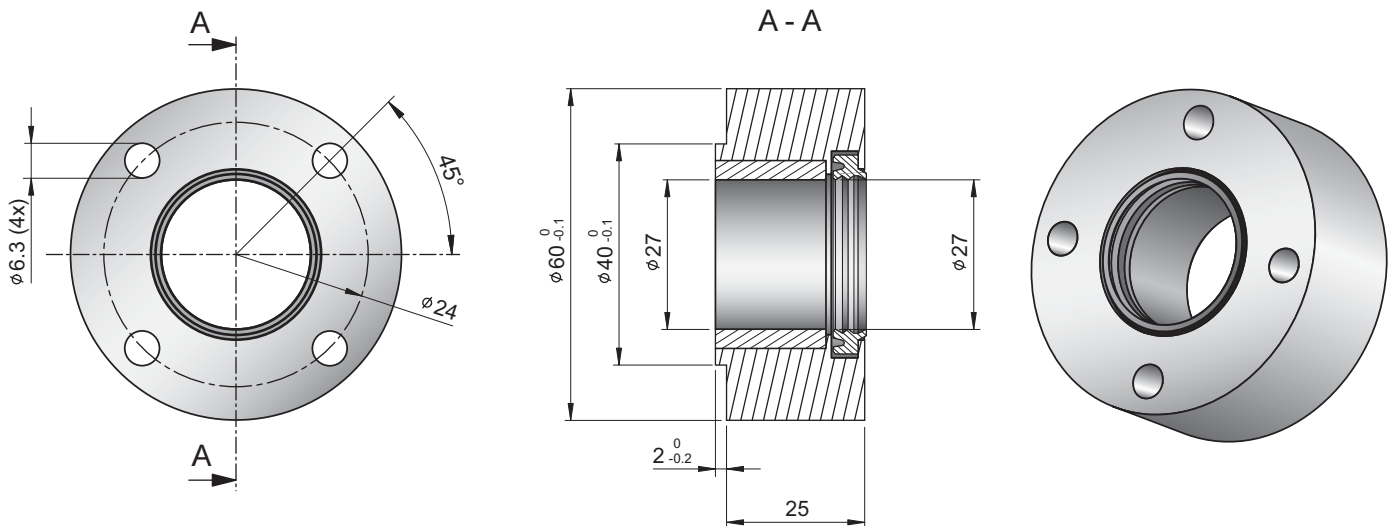
Ordering information

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

PB01-37x24-SS



PB01-48x25-SS



Ordering information

| Item | Description | Part Number |
|---------------|---|-------------|
| PB01-37x24-SS | Plain Bearing for PS01-37x...-SSC (Stainless Steel) | 0150-3290 |
| PB01-48x25-SS | Plain Bearing for PS01-48x...-SSC (Stainless Steel) | 0150-3281 |

Smart solutions are driven by

LinMot®

Your local contractor:



LinMot®

All for linear motion from a single source

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