Linear actuator DFPI-100- -ND2P-C1V Part number: 558189

With integrated displacement encoder, positioner and valve manifold.



Data sheet

| Feature | Value |
|--|---|
| Size of actuator | 100 |
| Flange hole pattern | F07 |
| Stroke | 40 990 mm |
| Stroke reserve | 3 mm |
| Piston diameter | 100 mm |
| Based on the standard | DIN 3358 |
| Cushioning | No cushioning |
| Assembly position | Any |
| Mode of operation | double-acting |
| Design structure | Piston rod |
| | Cylinder barrel |
| Outdoor use | C1 - weather protected locations of use |
| Position detection | For proximity sensor |
| | With integrated displacement encoder |
| Measuring method: displacement encoder | Potentiometer |
| Polarity protected | for operating voltage |
| | for set point value |
| | Initialization connection |
| Working pressure | 3 8 bar |
| Nominal working pressure | 6 bar |
| Max. speed, advancing | 0.074 m/s |
| Max. speed, retracting | 0.071 m/s |
| Operating voltage range DC | 21.6 26.4 V |
| Nominal operating voltage DC | 24 V |
| ATEX category Gas | II 3G |
| Explosion ignition protection type Gas | Ex nA II T4 X |
| ATEX category Dust | II 3D |
| Explosion ignition protection type Dust | Ex tD A22 IP65/67/69k T120°C X |
| Explosion-proof ambient temperature | -5°C <= Ta <= +50°C |
| Operating medium | Compressed air in accordance with ISO8573-1:2010 [7:4:4] |
| Note on operating and pilot medium | Lubricated operation possible (subsequently required for further operation) |
| CE symbol (see declaration of conformity) | according to EU-EMV guideline |
| | according to EU-Ex protection guideline (ATEX) |
| Continuous shock resistance per DIN/IEC 68, parts 2 - 82 | Tested in accordance with severity level 2 |
| Corrosion resistance classification CRC | 3 |
| Relative air humidity | 5 - 95 % |
| | Condensing |
| Protection class | IP65 |
| | IP67 |
| | IP69K |
| | NEMA 4 |
| | in assembled condition |
| | to IEC 60529 |

FESTO



FESTO

| Feature | Value | |
|---|--|---|
| Vibration resistance per DIN/IEC 68, parts 2 - 6 | Tested in accordance with severity level 2 | |
| Ambient temperature | -5 50 °C | |
| Theoretical force at 6 bar, return stroke | 4,417 N | |
| Theoretical force at 6 bar, advance stroke | 4,712 N | |
| Air consumption returning per 10 mm stroke | 0.5153 | |
| Air consumption advancing per 10 mm stroke | 0.5498 | |
| Moving mass with 0 mm stroke | 1,228 g | |
| Additional weight per 10 mm stroke | 80 g | |
| Additional weight of displacement encoder per 10 mm | 2 g | |
| Basic weight for 0 mm stroke | 4,671 g | |
| Additional mass factor per 10 mm of stroke | 27 g | |
| Size of the dead zone | 2 % | |
| Max. line length | 30 m | - |
| Electrical connection | 5-pin | |
| | Straight plug / screw terminal | |
| Mounting type | On flange to DIN 3358 | - |
| Pneumatic connection | G1/4 | |
| Materials note | Contains PWIS substances | |
| | Conforms to RoHS | |
| Materials information for cover | Wrought Aluminum alloy | |
| | Anodized | |
| Material information, lower seal | Wrought Aluminum alloy | |
| | Anodized | |
| Materials information for seals | NBR | |
| | TPE-U(PU) | |
| Materials information for piston rod | High alloy steel, non-corrosive | |
| Screw material data | High alloy steel, non-corrosive | |
| Materials information for cylinder barrel | Wrought Aluminum alloy | |
| | Anodized | |