

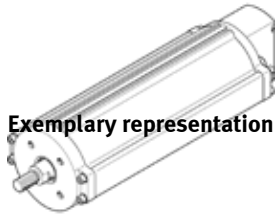
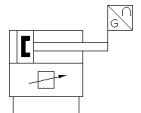
linear drive DFPI-100- -ND2P-C1V-P-A

FESTO

Part number: 1548005
Product to be discontinued

with integrated electropneumatic positioner, double-acting, piston diameter 100 mm, mounting interfaces for process valve fittings to DIN EN ISO 5210 on bearing cap, electric/pneumatic connection via metallic female socket and connecting cable NHSB (accessories), 4-wire, 24 VDC power supply, setpoint input 4...20 mA, position feedback signal 4...20 mA, piston rod safety position.

Type to be discontinued. Available until 2024. See Support Portal for alternative products.



Exemplary representation

Data sheet

| Feature | Value |
|---|--|
| Size of actuator | 100 |
| Flange hole pattern | F07 |
| Stroke | 40 ... 990 mm |
| Stroke reserve | 3 mm |
| Piston diameter | 100 mm |
| Fitting connection conforms to standard | ISO 5210 |
| Cushioning | No cushioning |
| Assembly position | Any |
| Mode of operation | double-acting |
| Design structure | Piston Piston rod Profile barrel |
| Position detection | With integrated displacement encoder |
| Measuring method: displacement encoder | Potentiometer |
| Polarity protected | for operating voltage for setpoint value Initialisation connection |
| Operating pressure MPa | 0.3 ... 0.8 MPa |
| Operating pressure | 3 ... 8 bar 43.5 ... 116 psi |
| Nominal operating pressure | 0.6 MPa 6 bar |
| Analogue output | 4 - 20 mA |
| Operating voltage range DC | 21.6 ... 26.4 V |
| Max. current consumption | 220 mA |
| Nominal operating voltage DC | 24 V |
| Setpoint input | 4 ... 20 mA |
| Authorisation | RCM Mark |
| KC mark | KC-EMV |
| CE mark (see declaration of conformity) | to EU directive for EMC to EU directive explosion protection (ATEX) in accordance with EU RoHS directive |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC To UK EX instructions To UK RoHS instructions |
| Explosion protection certification outside the EU | EPL Dc (GB) EPL Gc (GB) |
| ATEX category Gas | II 3G |

| Feature | Value |
|--|--|
| ATEX category Dust | II 3D |
| Explosion ignition protection type Gas | Ex ec IIC T4 X Gc |
| Explosion ignition protection type Dust | Ex tc IIIC T120°C X Dc |
| 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) |
| Continuous shock resistance per DIN/IEC 68, parts 2 - 82 | Tested in accordance with severity level 2 |
| Storage temperature | -5 ... 50 °C |
| Medium temperature | -5 ... 40 °C |
| Relative air humidity | 5 - 100 % Condensing |
| Protection class | IP65 IP67 IP69K NEMA 4 |
| Vibration resistance per DIN/IEC 68, parts 2 - 6 | Tested in accordance with severity level 2 |
| Ambient temperature | -5 ... 50 °C |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting | 4,417 N |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance | 4,712 N |
| Air consumption returning per 10 mm stroke | 0.5153 l |
| Air consumption advancing per 10 mm stroke | 0.5498 l |
| Moving mass with 0 mm stroke | 1,228 g |
| Additional mass factor per 10 mm of stroke | 27 g |
| Basic weight for 0 mm stroke | 5,237 g |
| Additional weight per 10 mm stroke | 80 g |
| Additional weight of displacement encoder per 10 mm | 2 g |
| Accuracy of analogue output | 1 %FS |
| Size of the dead zone | 1 %FS |
| Hysteresis FS | 1 %FS |
| Positioning accuracy | 1.0% FS |
| Repetition accuracy in ± %FS | 1 %FS |
| Electrical connection | 5-pin Straight plug / screw terminal With specific accessories |
| Pneumatic connection | For tubing outside diameter 8 mm For tubing outside diameter 10 mm With specific accessories |
| Materials note | Contains PWIS substances Conforms to RoHS |
| Material of end caps | Anodised wrought aluminium alloy |
| Material underneath cover | Anodised wrought aluminium alloy |
| Material piston rod | High alloy steel, non-corrosive |
| Material piston rod wiper seal | TPE-U(PU) |
| Material screws | High alloy steel, non-corrosive |
| Material static seals | NBR |
| Material cylinder barrel | Smooth-anodised wrought aluminium alloy |