

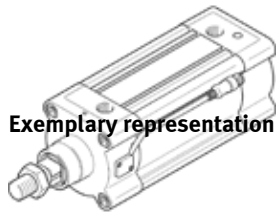
standards-based cylinder

DDPC-...-80- -

Part number: 1677705

FESTO

With contactless displacement encoder.



Data sheet

Overall data sheet – Individual values depend upon your configuration.

| Feature | Value |
|--|---|
| Stroke | 10 ... 2,000 mm |
| Stroke servopneumatic positioning | 50 ... 750 mm |
| Stroke Soft Stop | 50 ... 750 mm |
| Stroke shortening in the end-positions | ≥ 15 mm |
| Smallest positioning stroke | 3% of max. stroke However, no more than 10 mm |
| Piston diameter | 80 mm |
| Based on the standard | ISO 15552 (previously also VDMA 24652, ISO 6431, NF E49 003.1, UNI 10290) |
| Cushioning | P: Flexible cushioning rings/plates at both ends |
| Mounting position, positioning | Any |
| Mounting position, soft stop | Any |
| Measuring method: displacement encoder | Digital |
| Design structure | Piston Piston rod Profile barrel |
| Position detection | For proximity sensor With integrated displacement encoder |
| Variants | Clamping unit attached Extended piston rod Single-ended piston rod |
| Protection against torque/guide | Guide rod with yoke Square piston rod |
| Operating pressure MPa | ≤ 1.2 MPa |
| Operating pressure | ≤ 12 bar ≤ 174 psi |
| Operating pressure, positioning / soft stop | 4 ... 8 bar |
| Max. travel speed | 1 m/s |
| Min. travel speed | 0.05 m/s |
| Typical short stroke positioning time, horizontal | 0,77/0,95 s |
| Typical long stroke positioning time, horizontal | 0,88/1,02 s |
| Mode of operation | double-acting |
| Nominal operating voltage DC | 5 V |
| Authorisation | RCM Mark |
| CE mark (see declaration of conformity) | to EU directive for EMC in accordance with EU RoHS directive |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC To UK RoHS instructions |
| Operating medium | Compressed air in accordance with ISO8573-1:2010 [6:4:4] |
| Note on operating and pilot medium | Pressure dew point 10°C below ambient temperature/temperature of medium |
| Continuous shock resistance per DIN/IEC 68, parts 2 - 82 | Tested in accordance with severity level 2 |

| Feature | Value |
|--|--|
| Corrosion resistance classification CRC | 1 - Low corrosion stress |
| PWIS conformity | VDMA24364-B1/B2-L |
| Max. magnetic interference field | 10KA/m at a distance of 100 mm |
| Protection class | IP65 to IEC 60529 |
| Vibration resistance per DIN/IEC 68, parts 2 - 6 | Tested in accordance with severity level 2 |
| Ambient temperature | -20 ... 80 °C |
| Impact energy in end positions | 1.8 Nm |
| Max. torque for protection against rotation | ≤ 3 Nm |
| Max. load, horizontal | 300 kg |
| Max. load, vertical | 100 kg |
| Min. load, horizontal | 20 kg |
| Min. load, vertical | 20 kg |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting | 2,721 N |
| Theoretical force at 0.6 MPa (6 bar, 87 psi), advance | 3,016 N |
| Moving mass with 0 mm stroke | 804 g |
| Additional mass factor per 10 mm of stroke | 31 g |
| Basic weight for 0 mm stroke | 3,053 g |
| Additional weight per 10 mm stroke | 87 g |
| Output signal | Analogue |
| Repetition accuracy in ± mm | 0.5 mm |
| Max. controllable force during advance | 2,714 N |
| Max. controllable force during return | 2,449 N |
| Typical friction force | 140 N |
| Repetition accuracy, soft stop intermediate position | +/- 2 mm |
| Electrical connection, displacement encoder | 8-pin |
| Cable length | 1.5 m |
| Mounting type | with accessories |
| Pneumatic connection | G3/8 |
| Materials note | Conforms to RoHS |
| Material cover | Wrought Aluminium alloy |
| Material seals | FPM NBR TPE-U(PU) |
| Material cable sheath | TPE-U(PUR) |
| Material piston rod | High alloy steel |
| Material screws | Steel |
| Material sensor cover | Aluminium |
| Material sensor head | POM |
| Material connector housing | PBT |
| Material cylinder barrel | Wrought Aluminium alloy |