

Proportional flow control valve VPCF-6-L-8-G38-6-V1-E-EX2

Part number: 8041714

FESTO



General operating condition

Data sheet

| Feature | Value |
|--|---|
| Valve function | 3-way proportional flow control valve |
| Design | Piston gate valve With integrated pressure sensors |
| Type of piloting | Direct |
| Type of actuation | Electrical |
| Type of reset | Magnetic spring |
| Symbol | 00995603 |
| Flow direction | Non-reversible |
| Mounting position | Any |
| Sealing principle | Hard |
| Nominal size | 6 mm |
| Short circuit current rating | Yes |
| Display type | LED |
| Flow range | 0 l/min ... 1000 l/min |
| Operating pressure | 0.1 MPa ... 0.6 MPa |
| Operating pressure | 1 bar ... 6 bar |
| Flow rate control range | 20 l/min ... 1000 l/min |
| Note on the flow rate control range | Regulation takes place as of 20 l/min; below this reference value the flow control valve switches to the exhaust port. The accuracy specifications provided are based on a flow rate control range of 50-1000 l/min. |
| Repetition accuracy in \pm %FS | 0.5 %FS |
| Absolute accuracy in \pm %FS at room temperature | 3 %FS |
| Hysteresis in \pm %FS | 0.8 %FS |
| Ambient temperature | 0 °C ... 50 °C |
| Media temperature | 15 °C ... 35 °C |
| Operating medium | Compressed air to ISO 8573-1:2010 [6:4:4] |
| Note on operating and pilot medium | Maximum particle size 5 μ m |
| Degree of protection | IP65 |
| Note on degree of protection | In mounted state |
| Approval | RCM |
| CE mark (see declaration of conformity) | To EU EMC Directive To EU Explosion Protection Directive (ATEX) In accordance with EU RoHS Directive |
| Explosion protection | Zone 2 (ATEX) Zone 22 (ATEX) |
| UKCA marking (see declaration of conformity) | To UK RoHS instructions |
| ATEX category gas | II 3G |

| Feature | Value |
|---|--|
| ATEX category dust | II 3D |
| Explosion ignition protection type for gas | Ex nA IIC T5 X Gc |
| Explosion ignition protection type for dust | Ex tc IIIC T60°C X Dc |
| Explosion ambient temperature | 0°C ≤ Ta ≤ +50°C |
| LABS (PWIS) conformity | VDMA24364-B1/B2-L |
| Note on materials | RoHS compliant |
| Vibration resistance | Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6 |
| Shock resistance | Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27 |
| Corrosion resistance class CRC | 1 - Low corrosion stress |
| Nominal operating voltage DC | 24 V |
| Operational voltage range DC | 20.4 V ... 30 V |
| Residual ripple | 5% |
| Max. current consumption | 1.2 A |
| Current consumption with no-load outputs | 150 mA |
| Switching output | PNP |
| Switching input | PNP |
| Current rating per output | 100 mA |
| Reverse polarity protection | For operating voltage |
| Duty cycle | 100% |
| Max. electrical power consumption | 36 W |
| Signal range analogue output | 0 - 10 V |
| Signal range analogue input | 0 - 10 V |
| Diagnostic function | Display via LED |
| Electrical connection | M12x1 Plug |
| Type of mounting | Direct mounting via through-hole Direct mounting via thread |
| Pneumatic connection, port 1 | G3/8 |
| Pneumatic connection, port 2 | G3/8 |
| Pneumatic connection, port 3 | G3/8 |
| Product weight | 856 g |
| Material housing | Anodised wrought aluminium alloy |
| Material seals | Fluoro rubber HNBR |