

Proportional directional control valve VPWP-6-

Part number: 550171

FESTO



Data sheet

| Feature | Value |
|---|---|
| Nominal size | 6 mm |
| Type of actuation | Electric |
| Sealing principle | Hard |
| Mounting position | optional Preferably horizontal (display elements facing upwards) If the valve is moved, it must be mounted at a right angle to the direction of movement |
| Design | Piston gate valve With integrated pressure sensors |
| Type of reset | Magnetic spring |
| Safety instructions | Safety position VPWP: if there is a problem with the control interface, the valve assumes the closed mid-position. |
| Type of piloting | Direct |
| Flow direction | Non-reversible |
| Valve function | 5/3-way proportional directional control valve, closed |
| Status displays | LED yellow = PL (power load) LED green = power LED red = error |
| Operating pressure | 0 MPa...1 MPa 0 bar...10 bar |
| Operating pressure positioning/Soft Stop | 4 bar...8 bar |
| Nominal operating pressure | 0.6 MPa 6 bar 87 psi |
| Standard nominal flow rate (standardised to DIN 1343) | 700 l/min |
| Nominal operating voltage DC | 24 V |
| Operational voltage range DC | 18 V...30 V |
| Load voltage range DC | 18 V...30 V |
| Max. load current of the voltage output | 500 mA |
| Max. load current of the digital output | 500 mA |
| Max. current consumption of valve drive | 1.2 A |
| Max. current consumption, logic | 0.15 A |
| Nominal load voltage DC | 24 V |
| Supply voltage of the digital output | 24 V load voltage |
| Supply voltage of the voltage output | 24 V load voltage |

| Feature | Value |
|--|--|
| Approval | RCM trademark |
| CE mark (see declaration of conformity) | To EU EMC Directive To EU Explosion Protection Directive (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 | Zone 2 (ATEX) |
| ATEX category gas | II 3G |
| Explosion ignition protection type for gas | Ex nA IIC T5 X Gc |
| Explosion ambient temperature | 0 °C <= Ta <= +50 °C |
| Operating medium | Compressed air to ISO 8573-1:2010 [6:4:4] |
| Note on operating and pilot medium | Lubricated operation not possible |
| Corrosion resistance class CRC | 1 - Low corrosion stress |
| LABS (PWIS) conformity | VDMA24364-B1/B2-L |
| Media temperature | 0 °C...50 °C |
| Degree of protection | IP65 In assembled state |
| Ambient temperature | 0 °C...50 °C |
| Product weight | 776 g |
| Pressure resolution | 0.01 bar |
| Linearity error in ± %FS | 1.5 % |
| Repetition accuracy FS | 1 % |
| Design of the 24 V voltage output | Reverse supply with no damage No galvanic isolation Protected against short circuits Reverse supply with no damage |
| Digital output design | To IEC 61131-2 Positive logic (PNP) No galvanic isolation Protected against short circuits Reverse supply with no damage |
| Control-Interface | Digital CAN bus with Festo protocol Integrated terminating resistor |
| Electrical connection fieldbus interface IN | Plugs M9 5-pin |
| Electrical connection fieldbus interface OUT | Socket M9 5-pin |
| Fieldbus interface electrical connection | Socket M8 4-pin |
| Type of mounting | With through-hole With accessories |
| Colour of connections | Port 2: Blue Connection 4: black |
| Pneumatic connection, port 1 | G1/8 |
| Pneumatic connection, port 2 | G1/8 |
| Pneumatic connection, port 3 | G1/8 |
| Pneumatic connection, port 4 | G1/8 |
| Pneumatic connection, port 5 | G1/8 |
| Note on materials | RoHS-compliant |
| Material cover | PA-reinforced |
| Material housing | Wrought aluminium alloy Anodised |