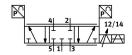
## Proportional directional control valve VPWP-10-L-5-Q-10-E-G-EX1 Part number: 1552544

**FESTO** 





General operating condition

## **Data sheet**

| Feature                                      | Value   |
|--|---|
| Nominal width                                | 10 mm   |
| Actuation type                               | Electrical  |
| Sealing principle                            | Hard  |
| Mounting position                            | Any Preferably horizontal (display elements facing upwards); if the pneumatic valve is moved, it must be mounted at right angles to the direction of movement |
| Structural design                            | Piston gate valve with integrated pressure sensors  |
| Reset method                                 | Magnetic spring   |
| Safety instructions                          | VPWP safety position: the blocked mid-position is approached in case of a control interface malfunction.  |
| Type of control                              | Direct  |
| Flow direction                               | Non-reversible  |
| Symbol                                       | 00992136  |
| Valve function                               | 5/3 proportional directional control valve, closed  |
| Status indications                           | LED yellow = PL (power load) LED green = power LED red = error  |
| Operating pressure                           | 0 MPa 1 MPa   |
| Operating pressure                           | 0 bar 10 bar  |
| Operating pressure for positioning/soft stop | 4 bar 8 bar   |
| Nominal operating pressure                   | 0.6 MPa   |
| Nominal operating pressure                   | 6 bar   |
| Nominal operating pressure                   | 87 psi  |
| Standard nominal flow rate                   | 2000 l/min  |
| Nominal operating voltage DC                 | 24 V  |
| DC operating voltage range                   | 18 V 30 V   |
| Load voltage range DC                        | 18 V 30 V   |
| Max. load current at voltage output          | 500 mA  |
| Max. load current of the digital output      | 500 mA  |
| Max. current consumption, valve drive        | 1.2 A   |
| Logic max. current consumption               | 0.15 A  |
| Nominal voltage DC                           | 24 V  |
| Supply voltage of the digital output         | 24 V load voltage   |
| Supply voltage of the voltage output         | 24 V load voltage   |
| Certification                                | RCM compliance mark   |

| Feature                                      | Value  |
|--|--|
| CE marking (see declaration of conformity)   | As per EU EMC directive<br>as per EU explosion protection directive (ATEX)<br>As per EU RoHS directive               |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC acc. to UK EX instructions To UK RoHS instructions  |
| Explosion prevention and protection          | Zone 2 (ATEX)  |
| ATEX category gas                            | II 3G  |
| Type of ignition protection for gas          | Ex nA IIC T5 X Gc  |
| Explosive ambient temperature                | 0°C <= Ta <= +50°C   |
| Operating medium                             | Compressed air as per ISO 8573-1:2010 [6:4:4]  |
| Information on operating and pilot media     | Operation with oil lubrication not possible  |
| Corrosion resistance class (CRC)             | 1 - Low corrosion stress   |
| LABS (PWIS) conformity                       | VDMA24364-B1/B2-L  |
| Temperature of medium                        | 0 ℃ 50 ℃   |
| Degree of protection                         | IP65<br>In mounted state   |
| Ambient temperature                          | 0 °C 50 °C   |
| Product weight                               | 1010 g   |
| Pressure resolution                          | 0.01 bar   |
| Linearity error FS                           | <1.5 %   |
| Repetition accuracy FS                       | <1 %   |
| Design of the 24 V voltage output            | Reverse supply without destruction No galvanic isolation Short circuit-proof Reverse supply without destruction      |
| Digital output design                        | as per IEC 61131-2 Positive logic (PNP) No galvanic isolation Short circuit-proof Reverse supply without destruction |
| Control interface                            | Digital CAN bus with Festo protocol Terminating resistor integrated  |
| Fieldbus interface electrical connection IN  | Plug<br>M9<br>5-pin  |
| Fieldbus interface electrical connection OUT | Socket<br>M9<br>5-pin  |
| Fieldbus interface electrical connection     | Socket<br>M8<br>4-pin  |
| Type of mounting                             | With through-hole<br>With accessories  |
| Color of connections                         | Connection 2: blue<br>Connection 4: black  |
| Pneumatic connection 1                       | G3/8   |
| Pneumatic connection 2                       | G3/8   |
| Pneumatic connection 3                       | G3/8   |
| Pneumatic connection 4                       | G3/8   |
| Pneumatic connection 5                       | G3/8   |
| Note on materials                            | RoHS-compliant   |
| Cover material                               | PA-reinforced  |
| Housing material                             | Wrought aluminum alloy<br>Anodized   |