

Pressure sensor SPAU-P10R-T-R18M-L-PNLK-PNVBA-M8D

FESTO

Part number: 8001203



[PDF](#) General operating condition

Data sheet

| Feature | Value |
|--|---|
| Symbol | 00995410 |
| Approval | RCM trademark c UL us listed (OL) |
| CE mark (see declaration of conformity) | To EU EMC Directive In accordance with EU RoHS Directive |
| CE marking (see declaration of conformity) | To UK instructions for EMC To UK RoHS instructions |
| KC mark | KC-EMV |
| Note on materials | RoHS-compliant |
| Measured variable | Relative pressure |
| Measurement method | Piezoresistive pressure sensor |
| Start value for pressure measuring range | 0 MPa |
| Start value for pressure measuring range | 0 bar |
| Start value for pressure measuring range | 0 psi |
| End value for pressure measuring range | 1 MPa |
| End value for pressure measuring range | 10 bar |
| End value for pressure measuring range | 145 psi |
| Max. overload pressure | 15 bar |
| Overload pressure | 1.5 MPa |
| Overload pressure | 15 bar |
| Overload pressure | 217.5 psi |
| Operating medium | Compressed air to ISO 8573-1:2010 [7:4:4] Inert gases |
| Note on operating and pilot medium | Lubricated operation possible |
| Media temperature | 0 °C ... 50 °C |
| Ambient temperature | 0 °C ... 50 °C |
| Resolution ADC | 12 bit |
| Accuracy in ± % FS | 1.5 %FS |
| Repetition accuracy in ± %FS | 0.3 %FS |
| Temperature coefficient in ± %FS/K | 0.05 %FS/K |
| Switching output | 2 x PNP or 2 x NPN, switchable |
| Switching function | Freely programmable |
| Switching element function | N/C or N/O contact, switchable |
| Max. output current | 100 mA |
| Analogue output | 0 - 10 V 4 - 20 mA 1 - 5 V |

| Feature | Value |
|--|--|
| Rise time | 3 ms |
| Max. load resistance current output | 500 Ohm |
| Min. load resistance voltage output | 10 kOhm |
| Short circuit current rating | yes |
| Protocol | IO-Link® |
| IO-Link, Protocol version | Device V 1.1 |
| IO-Link, Profile | Smart sensor profile |
| IO-Link, Function classes | Binary data channel (BDC) Process data variable (PDV) Identification Diagnostics Teach channel |
| IO-Link, communication mode | COM2 (38.4 kBaud) |
| IO-Link, SIO-Mode support | Yes |
| IO-Link, Port class | A |
| IO-Link, Process data length OUT | 0 bytes |
| IO-Link, Process data length IN | 2 bytes |
| IO-Link, Process data content IN | 14 bit PDV (pressure measurement value) 2 bit BDC (pressure monitoring) |
| IO-Link, Min. cycle time | 3 ms |
| IO-Link, Data storage required | 500 Byte |
| Operational voltage range DC | 20 V ... 30 V |
| Reverse polarity protection | For all electrical connections |
| Electrical connection 1, connection type | Plugs |
| Electrical connection 1, connector system | M8x1, A-coded, to EN 61076-2-104 |
| Electrical connection 1, number of connections/cores | 4 |
| Electrical connection 1, connection pattern | 00991171 |
| Type of mounting | Via thread |
| Mounting position | optional |
| Pneumatic connection | R1/8 |
| Product weight | 80 g |
| Display type | Illuminated LCD |
| Displayable units | MPa bar inH2O inHg kPa kgf/cm ² mmHg psi |
| Setting options | IO-Link® Teach-in Via display and keys |
| Protection against tampering | IO-Link PIN code |
| Setting range threshold value | 0 % ... 100 % |
| Setting range hysteresis | 0 % ... 90 % |
| Degree of protection | IP65 IP67 |
| Corrosion resistance class CRC | 2 - Moderate corrosion stress |
| LABS (PWIS) conformity | VDMA24364-B1/B2-L |