

Pressure sensor SPAU-P10R-W-G18FD-L-PNLK-PNVBA-M8U

FESTO

Part number: 8001231



General operating condition

Data sheet

| Feature | Value |
|--|--|
| Symbol | 00995410 |
| Certification | RCM compliance mark c UL us - Listed (OL) |
| CE marking (see declaration of conformity) | As per EU EMC directive As per EU RoHS directive |
| UKCA marking (see declaration of conformity) | To UK RoHS instructions |
| KC characters | KC-EMV |
| Note on materials | RoHS compliant |
| Measured variable | Relative pressure |
| Method of measurement | Piezoresistive pressure sensor |
| Pressure measuring range initial value | 0 MPa |
| Pressure measuring range initial value | 0 bar |
| Pressure measuring range initial value | 0 psi |
| Pressure measuring range end value | 1 MPa |
| Pressure measuring range end value | 10 bar |
| Pressure measuring range end value | 145 psi |
| Overload pressure | 1.5 MPa |
| Overload pressure | 15 bar |
| Overload pressure | 217.5 psi |
| Operating medium | Compressed air as per ISO 8573-1:2010 [7:4:4] Inert gases |
| Information on operating and pilot media | Lubricated operation possible |
| Temperature of medium | 0 °C ... 50 °C |
| Ambient temperature | 0 °C ... 50 °C |
| ADC resolution | 12 bit |
| Accuracy in ± % FS | 1.5 %FS |
| Repetition accuracy in ± %FS | 0.3 %FS |
| Temperature co-efficient 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 contact/N/O contact, switchable |
| Max. output current | 100 mA |
| Analog output | 0 - 10 V 4 - 20 mA 1 - 5 V |
| Rise time | 3 ms |
| Max. load resistance of current output | 500 Ohm |

| Feature | Value |
|---|--|
| Min. load resistance of voltage output | 10 kOhm |
| Short-circuit protection | 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 kBd) |
| IO-Link®, SIO mode support | Yes |
| IO-Link®, port class | A |
| IO-Link®, process data width OUT | 0 bytes |
| IO-Link®, process data width IN | 2 Byte |
| IO-Link®, process data content IN | 14 bit PDV (pressure measurement) 2 bit BDC (pressure monitoring) |
| IO-Link®, minimum cycle time | 3 ms |
| IO-Link®, data memory required | 500 byte |
| DC operating voltage range | 20 V ... 30 V |
| Reverse polarity protection | for all electrical connections |
| Electrical connection 1, connection type | Plug |
| Electrical connection 1, connection technology | M8x1 A-coded as per EN 61076-2-104 |
| Electrical connection 1, number of pins/wires | 4 |
| Electrical connection 1, type of mounting | not rotatable |
| Electrical connection 1, type of mounting | Compatible with snap-locking Compatible with rotatable screw-type lock |
| Electrical connection for input 1, connection pattern | 00991171 |
| Type of mounting | With wall/surface bracket |
| Mounting position | Any |
| Pneumatic connection | G1/8 |
| Product weight | 80 g |
| Materials in contact with the media | FPM PA-reinforced high-alloy stainless steel |
| Display type | Illuminated LCD |
| Displayable unit(s) | MPa bar In H2O In Hg 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 |