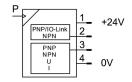
## Pressure sensor SPAN-P10R-G18F-PNLK-PNVBA-L1

**FESTO** 

Part number: 8134897





## **Data sheet**

General operating condition

| Feature                                      | Value   |
|--|---|
| Symbol                                       | 00995685  |
| Certification                                | RCM compliance mark c UL us - Listed (OL)                               |
| CE marking (see declaration of conformity)   | As per EU EMC directive<br>As per EU RoHS directive                     |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC To UK RoHS instructions                      |
| Certificate issuing authority                | UL E322346  |
| 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   |
| Max. overload pressure                       | 15 bar  |
| 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]<br>Inert gas              |
| Information on operating and pilot media     | Operation with oil lubrication possible                                 |
| Temperature of medium                        | 0 °C 50 °C  |
| Ambient temperature                          | 0 °C 50 °C  |
| 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                           | Window comparator Threshold value comparator Auto difference monitoring |
| Switching element function                   | N/C contact/N/O contact switchable                                      |
| Max. output current                          | 100 mA  |

| Feature   | Value   |
|---|---|
| Analog output   | 0 - 10 V  |
|   | 4 - 20 mA<br>1 - 5 V  |
| Max. load resistance of current output                | 500 Ohm   |
| Min. load resistance of current output                | 20 kOhm   |
| Short-circuit protection                              | yes   |
| Protocol  | IO-Link®  |
|   |   |
| IO-Link®, protocol version                            | Device V 1.1  |
| IO-Link®, profile                                     | Smart sensor profile  Binary data channel (BDC)                   |
| IO-Link®, function classes                            | 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 Byte  |
| 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                            | 15 V 30 V   |
| Reverse polarity protection                           | for all electrical connections                                    |
| Electrical connection 1, connection type              | Plug  |
| Electrical connection 1, connection technology        | Connection diagram L1J  |
| Electrical connection 1, number of pins/wires         | 4   |
| Electrical connection for input 1, connection pattern | 00995428  |
| Type of mounting                                      | Front panel mounting With thread With wall/surface bracket        |
| Mounting position                                     | Any   |
| Pneumatic connection                                  | Internal thread G1/8  |
| Product weight  | 34 g  |
| Housing material                                      | PA-reinforced   |
| Materials in contact with the media                   | FPM<br>High-alloy stainless steel                                 |
| Display type  | Illuminated LCD   |
| Displayable unit(s)                                   | MPa bar inH2O inHg kPa kgf/cm² mbar mmHg psi                      |
| Setting options                                       | IO-Link®<br>Teach-in<br>Via display and pushbuttons               |
| Protection against tampering                          | IO-Link®<br>PIN code  |
| Setting range threshold value                         | 0 % 100 %   |
| Setting range hysteresis                              | 0 % 90 %  |
| Degree of protection                                  | IP40  |
| Corrosion resistance class (CRC)                      | 2 - Moderate corrosion stress                                     |
| LABS (PWIS) conformity                                | VDMA24364-B1/B2-L   |

| Feature         | Value   |
|-----------------|---|
|                 | Metals with more than 1% by mass of copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils |
| Cleanroom class | Class 4 according to ISO 14644-1  |