

# Pressure sensor SPAN-V1R-Q4-PNLK-PNVBA-L1

Part number: 8035543

FESTO



General operating condition

## Data sheet

| Feature                                      | Value   |
|--|---|
| Symbol                                       | 00995685  |
| Approval                                     | RCM<br>c UL us - Listed (Oil)   |
| CE mark (see declaration of conformity)      | To EU EMC Directive<br>In accordance with EU RoHS Directive                   |
| UKCA marking (see declaration of conformity) | To UK RoHS instructions   |
| Certificate issuing authority                | UL E322346  |
| 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       | -0.1 MPa  |
| End value for pressure measuring range       | -1 bar  |
| End value for pressure measuring range       | -14.5 psi   |
| Max. overload pressure                       | 5 bar   |
| Overload pressure                            | 0.5 MPa   |
| Overload pressure                            | 5 bar   |
| Overload pressure                            | 72.5 psi  |
| Operating medium                             | Compressed air to ISO 8573-1:2010 [7:4:4]<br>Inert gas                        |
| Note on operating and pilot medium           | Lubricated operation possible   |
| Media temperature                            | 0 °C ... 50 °C  |
| Ambient temperature                          | 0 °C ... 50 °C  |
| 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                           | Window comparator<br>Threshold value comparator<br>Auto difference monitoring |
| Switching element function                   | NC or NO, switchable  |
| Max. output current                          | 100 mA  |
| Analogue output                              | 0 - 10 V<br>4 - 20 mA<br>1 - 5 V  |

| Feature   | Value  |
|---|--|
| Max. load resistance current output                       | 500 Ohm  |
| Min. load resistance voltage output                       | 20 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)<br>Process data variable (PDV)<br>Identification<br>Diagnostics<br>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)<br>2 bit BDC (pressure monitoring)                                 |
| IO-Link, Min. cycle time                                  | 3 ms   |
| IO-Link, Data storage required                            | 500 Byte   |
| Operational voltage range DC                              | 15 V ... 30 V  |
| Reverse polarity protection                               | For all electrical connections   |
| Electrical connection 1, connection type                  | Plug   |
| Electrical connection 1, connector system                 | Plug pattern L1J   |
| Electrical connection 1, number of connections/cores      | 4  |
| Electrical connection 1, connection pattern               | 00995428   |
| Type of mounting  | Front panel mounting<br>Via wall/surface bracket   |
| Mounting position   | Any  |
| Pneumatic connection                                      | For tubing O.D. 4 mm   |
| Product weight  | 25 g   |
| Material housing  | Reinforced PA  |
| Material in contact with the medium                       | Fluoro rubber<br>NBR<br>Reinforced PA  |
| Display type  | Illuminated LCD  |
| Displayable units   | MPa<br>bar<br>inH2O<br>inHg<br>kPa<br>kgf/cm <sup>2</sup><br>mbar<br>mmHg<br>psi                           |
| Setting options   | IO-Link®<br>Teach-in<br>Via display and buttons  |
| 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  |
| Cleanroom suitability, measured according to ISO 14644-14 | Class 4 according to ISO 14644-1   |