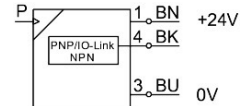


# Pressure sensor SPA-E-P10R-S6-PNLK-2.5K

Part number: 8001446

FESTO



[PDF](#) General operating condition

## Data sheet

| Feature                                      | Value   |
|--|---|
| Symbol                                       | 00995430  |
| Approval                                     | RCM trademark<br>c UL us - Recognized (OL)                  |
| 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 instructions for EMC<br>To UK RoHS instructions       |
| Certificate issuing authority                | UL E322346  |
| Note on materials                            | RoHS-compliant  |
| Measured variable                            | Relative pressure   |
| Measurement method                           | Piezoresistive pressure sensor with display                 |
| 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   |
| 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]                   |
| Note on operating and pilot medium           | Lubricated operation possible                               |
| Media temperature                            | 0 °C ... 50 °C  |
| Ambient temperature                          | 0 °C ... 50 °C  |
| Resolution ADC                               | 10 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                             | PNP/NPN, switchable   |
| Switching function                           | Freely programmable   |
| Switching element function                   | N/C contact<br>N/O contact<br>Switchable                    |
| Switch-on time                               | 1 ms  |
| Switch-off time                              | 1 ms  |
| Max. output current                          | 100 mA  |
| Display range start value                    | 0 %FS   |

| Feature  | Value  |
|--|--|
| Display range end value                            | 99 %FS   |
| 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                       | 18 V ... 30 V  |
| Reverse polarity protection                        | For all electrical connections   |
| Electrical connection                              | 3-wire<br>Cable<br>Open end  |
| Cable length                                       | 2.5 m  |
| Type of mounting                                   | Plug-in  |
| Mounting position                                  | optional   |
| Pneumatic connection                               | Push-in sleeve QS-6  |
| Product weight                                     | 40 g   |
| Material housing                                   | PA-reinforced  |
| Material sealing ring                              | FPM  |
| Display type                                       | LED indicator<br>2-digit   |
| Displayable units                                  | %FS  |
| Switching status indication                        | Yellow LED   |
| Setting options                                    | IO-Link®<br>Teach-in<br>Via display and keys   |
| Protection against tampering                       | PIN code   |
| Setting range threshold value                      | 1 % ... 98 %   |
| Degree of protection                               | IP40   |
| Corrosion resistance class CRC                     | 2 - Moderate corrosion stress  |
| LABS (PWIS) conformity                             | VDMA24364-B2-L   |
| Suitability for the production of Li-ion batteries | Suitable for battery production according to the Festo internal definition of the degree of severity F1A with restrictions regarding the use of Cu/Zn/Ni |
| Cleanroom class                                    | Class 4 according to ISO 14644-1   |