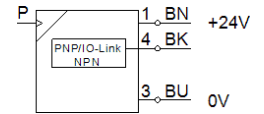
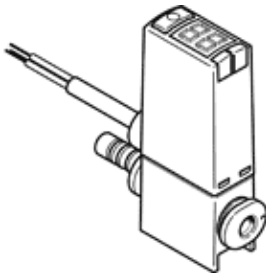


# Pressure sensor SPAE-P10R-Q4-PNLK-2.5K

Part number: 8001448

FESTO



## Data sheet

| Feature                                      | Value   |
|--|---|
| Authorization                                | RCM Mark<br>c UL us - Recognized (OL)   |
| CE symbol (see declaration of conformity)    | according to EU-EMV guideline<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 department               | UL E322346  |
| Materials note                               | Conforms to RoHS  |
| Measured variable                            | Relative pressure   |
| Measurement method                           | Piezoresistive pressure sensor with display   |
| Pressure measuring range start value (MPa)   | 0 MPa   |
| Pressure measuring range, initial value      | 0 bar   |
| Pressure measuring range start value (psi)   | 0 psi   |
| Pressure measuring range end value (MPa)     | 1 MPa   |
| Pressure measuring range, final value        | 10 bar  |
| Pressure measuring range end value (psi)     | 145 psi   |
| Overload pressure                            | 1.5 MPa<br>15 bar   |
| Overload pressure (psi)                      | 217.5 psi   |
| Operating medium                             | Compressed air in accordance with ISO8573-1:2010 [7:4:4]  |
| Note on operating and pilot medium           | Lubricated operation possible   |
| Medium temperature                           | 0 ... 50 °C   |
| Ambient temperature                          | 0 ... 50 °C   |
| Resolution of analogue/digital converter     | 10 Bit  |
| Accuracy, FS                                 | 1.5 %FS   |
| Repetition accuracy in ± %FS                 | 0.3 %FS   |
| Temperature co-efficient in ± %FS/K          | 0.05 %FS/K  |
| Switch output                                | PNP/NPN, switchable   |
| Switching function                           | Freely programmable   |
| Switching element function                   | Normally closed contact<br>Normally open contact<br>Switchable  |
| Switch-on time                               | 1 ms  |
| Switch-off time                              | 1 ms  |
| Max. output current                          | 100 mA  |
| Indicating range, lower limit                | 0 %FS   |
| Indicating range, upper limit                | 99 %FS  |
| Short circuit strength                       | Yes   |
| Protocol                                     | IO-Link   |
| IO-Link, protocol                            | Device V 1.1  |
| IO-Link, profile                             | Smart sensor profile  |
| IO-Link, function classes                    | Binary Data Channels (BDC)<br>Process Data Variable (PDV)<br>Identification<br>diagnosis<br>Teach channel |

| <b>Feature</b>                          | <b>Value</b>   |
|---|--|
| IO-Link, communication mode             | COM2 (38,4 kBaud)  |
| IO-Link, SIO mode support               | Yes  |
| IO-Link, port type                      | 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 reading)<br>2 bit BDC (pressure monitoring) |
| IO-Link, minimum cycle time             | 3 ms   |
| IO-Link, data memory required           | 0.5 Kilobyte   |
| Operating voltage range DC              | 18 ... 30 V  |
| Polarity protected                      | for all electrical connections                                   |
| Electrical connection                   | 3-core<br>Cable<br>Open end                                      |
| Cable length                            | 2.5 m  |
| Mounting type                           | with accessories   |
| Assembly position                       | Any  |
| Pneumatic connection                    | QS-4   |
| Product weight                          | 40 g   |
| Material housing                        | PA-reinforced  |
| Material sealing ring                   | FPM<br>NBR   |
| Type of display                         | LED display<br>2-digit   |
| Unit(s) that can be displayed           | %FS  |
| Operating status display                | Yellow LED   |
| Setting options                         | IO-Link<br>Teach-In<br>Via display and buttons                   |
| Protection against manipulation         | PIN-Code   |
| Threshold value setting range           | 1 ... 98 %   |
| Protection class                        | IP40   |
| Corrosion resistance classification CRC | 2 - Moderate corrosion stress                                    |
| PWIS conformity                         | VDMA24364-B2-L   |
| Cleanroom class                         | ISO class 4  |