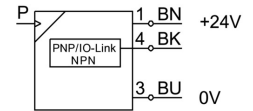


# Pressure sensor SPA-E-V1R-Q3-PNLK-2.5K

Part number: 8001442

FESTO



## Data sheet

| Feature                                    | Value   |
|--|---|
| Type code                                  | SPA-E   |
| Symbol                                     | 00995430  |
| Certification                              | RCM compliance mark<br>c UL us - Recognized (OL)    |
| CE marking (see declaration of conformity) | As per EU EMC directive<br>As per EU RoHS directive |
| KC characters                              | KC EMC  |
| Certificate issuing authority              | UL E322346  |
| Note on materials                          | RoHS-compliant                                      |
| Measured variable                          | Relative pressure                                   |
| Method of measurement                      | Piezoresistive pressure sensor with display         |
| Pressure measuring range initial value     | 0 bar   |
| Pressure measuring range end value         | -1 bar  |
| Max. overload pressure                     | 5 bar   |
| Operating medium                           | Compressed air as per ISO 8573-1:2010 [7:4:4]       |
| Information on operating and pilot media   | Operation with oil lubrication possible             |
| Temperature of medium                      | 0 °C ... 50 °C                                      |
| Ambient temperature                        | 0 °C ... 50 °C                                      |
| ADC resolution                             | 10 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                           | PNP/NPN switchable                                  |
| Switching function                         | Freely programmable                                 |
| Switching element function                 | N/C contact<br>N/O contact<br>Switchable            |
| Max. output current                        | 100 mA  |
| Display range start value                  | 0 %FS   |
| Display range end value                    | 99 %FS  |
| Short-circuit protection                   | yes   |
| Protocol                                   | IO-Link®  |
| IO-Link®, protocol version                 | Device V 1.1  |
| IO-Link®, profile                          | Smart sensor profile                                |

| Feature                           | Value  |
|-----------------------------------|--|
| 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 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)<br>2 bit BDC (pressure monitoring)                                       |
| IO-Link®, minimum cycle time      | 3 ms   |
| IO-Link®, data memory required    | 500 byte   |
| DC operating voltage range        | 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                  | With accessories   |
| Mounting position                 | Any  |
| Pneumatic connection              | QS-3   |
| Product weight                    | 40 g   |
| Housing material                  | PA-reinforced  |
| Sealing ring material             | NBR  |
| Display type                      | LED display<br>2-digit   |
| Displayable unit(s)               | %FS  |
| Switching status indication       | LED yellow   |
| Setting options                   | IO-Link®<br>Teach-in<br>Via display and pushbuttons  |
| Protection against tampering      | PIN code   |
| Setting range threshold value     | 1 % ... 98 %   |
| Degree of protection              | IP40   |
| Corrosion resistance class (CRC)  | 2 - Moderate corrosion stress  |