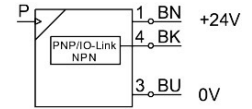


Pressure sensor SPA-E-V1R-S4-PNLK-2.5K

Part number: 8001440

FESTO



[General operating condition](#)

Data sheet

| Feature | Value |
|--|---|
| Symbol | 00995430 |
| Approval | RCM trademark c UL us - Recognized (OL) |
| CE mark (see declaration of conformity) | To EU EMC Directive In accordance with 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 |
| 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 | -0.1 MPa |
| End value for pressure measuring range | -1 bar |
| End value for pressure measuring range | -14.5 psi |
| 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] |
| 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 N/O contact 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) Process data variable (PDV) Identification Diagnostics 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) 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 Cable Open end |
| Cable length | 2.5 m |
| Type of mounting | Plug-in |
| Mounting position | optional |
| Pneumatic connection | Push-in sleeve QS-4 |
| Product weight | 40 g |
| Material housing | PA-reinforced |
| Material sealing ring | FPM |
| Display type | LED indicator 2-digit |
| Displayable units | %FS |
| Switching status indication | Yellow LED |
| Setting options | IO-Link® Teach-in 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 |