

pressure sensor

SPAN-B2R-M5F-PNLK-PNVBA-L1

Part number: 8035540

FESTO



Data sheet

| Feature | Value |
|--|--|
| Authorisation | RCM Mark c UL us - Listed (OL) |
| CE mark (see declaration of conformity) | to EU directive for EMC in accordance with EU RoHS directive |
| KC mark | KC-EMV |
| Certificate issuing department | UL E322346 |
| Materials note | Conforms to RoHS |
| Measured variable | Relative pressure |
| Measurement method | Piezoresistive pressure sensor |
| Pressure measuring range start value (MPa) | -0.1 MPa |
| Pressure measuring range, initial value | -1 bar |
| Pressure measuring range start value (psi) | -14.5 psi |
| Pressure measuring range end value (MPa) | 0.1 MPa |
| Pressure measuring range, final value | 1 bar |
| Pressure measuring range end value (psi) | 14.5 psi |
| Overload range | 5 bar |
| Overload pressure | 0.5 MPa 5 bar |
| Overload pressure (psi) | 72.5 psi |
| Operating medium | Compressed air in accordance with ISO8573-1:2010 [7:4:4] Inert gases |
| Note on operating and pilot medium | Lubricated operation possible |
| Medium temperature | 0 ... 50 °C |
| Ambient temperature | 0 ... 50 °C |
| Accuracy, FS | 1.5 %FS |
| Repetition accuracy in ± %FS | 0.3 %FS |
| Temperature co-efficient in ± %FS/K | 0.05 %FS/K |
| Switch output | 2 x PNP or 2 x NPN switchable |
| Switching function | Window comparator Threshold value comparator Auto difference monitoring |
| Switching element function | N/C or N/O contact, switchable |
| Max. output current | 100 mA |
| Analogue output | 0 - 10 V 4 - 20 mA 1 - 5 V |
| Max. load resistance, current output | 500 Ohm |
| Min. load resistance, voltage output | 20 kOhm |
| 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) Process Data Variable (PDV) Identification diagnosis |

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|--|--|
| | Teach channel |
| 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) 2 bit BDC (pressure monitoring) |
| IO-Link, minimum cycle time | 3 ms |
| IO-Link, data memory required | 0.5 Kilobyte |
| Operating voltage range DC | 15 ... 30 V |
| Polarity protected | for all electrical connections |
| Electrical connection 1, connection type | Plug |
| Electrical connection 1, connection technology | Connection pattern L1J |
| Electrical connection 1, number of pins/wires | 4 |
| Mounting type | Front panel installation with wall/surface fixing |
| Assembly position | Any |
| Pneumatic connection | Female thread M5 |
| Product weight | 34 g |
| Material housing | PA-reinforced |
| Materials in contact with media | FPM Nickel-plated brass NBR PA-reinforced |
| Type of display | illuminated LCD |
| Unit(s) that can be displayed | MPa bar inchH2O inchHg kPa kgf/cm ² mbar mmHg psi |
| Setting options | IO-Link Teach-In Via display and buttons |
| Protection against manipulation | IO-Link PIN-Code |
| Threshold value setting range | 0 ... 100 % |
| Hysteresis setting range | 0 ... 90 % |
| Protection class | IP40 |
| Corrosion resistance classification CRC | 2 - Moderate corrosion stress |