

# Pressure sensor SPAN-B-B11R-M5FAL-PN-L1

Part number: 8114756

**FESTO**



General operating condition

## Data sheet

| Feature                                      | Value                                                      |
|----------------------------------------------|------------------------------------------------------------|
| Symbol                                       | 00997331                                                   |
| Certification                                | RCM compliance mark<br>c UL us - Listed (OL)               |
| CE marking (see declaration of conformity)   | As per EU EMC directive<br>As per EU RoHS directive        |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC<br>To UK RoHS instructions      |
| Note on materials                            | RoHS-compliant                                             |
| Measured variable                            | Relative pressure                                          |
| Method of measurement                        | Piezoresistive pressure sensor                             |
| Pressure measuring range initial value       | -0.1 MPa                                                   |
| Pressure measuring range initial value       | -1 bar                                                     |
| Pressure measuring range initial value       | -14.5 psi                                                  |
| Pressure measuring range end value           | 1 MPa                                                      |
| Pressure measuring range end value           | 10 bar                                                     |
| Pressure measuring range end value           | 145 psi                                                    |
| Max. overload pressure                       | 15 bar                                                     |
| Overload pressure                            | 1.5 MPa                                                    |
| Overload pressure                            | 15 bar                                                     |
| Overload pressure                            | 217.5 psi                                                  |
| Operating medium                             | Compressed air as per ISO 8573-1:2010 [7:4:4]<br>Inert gas |
| Information on operating and pilot media     | Operation with oil lubrication possible                    |
| Temperature of medium                        | 0 °C ... 50 °C                                             |
| Ambient temperature                          | 0 °C ... 50 °C                                             |
| Accuracy in ± % FS                           | 1.5 %FS                                                    |
| Repetition accuracy in ± %FS                 | 0.3 %FS                                                    |
| Temperature co-efficient in ± %FS/K          | 0.1 %FS/K                                                  |
| Switching output                             | PNP/NPN switchable                                         |
| Switching function                           | Window comparator<br>Threshold value comparator            |
| Switching element function                   | N/C contact/N/O contact switchable                         |
| Max. output current                          | 80 mA                                                      |
| Short-circuit protection                     | yes                                                        |
| DC operating voltage range                   | 10.8 V ... 30 V                                            |
| Reverse polarity protection                  | for all electrical connections                             |

| Feature                                               | Value                                                              |
|-------------------------------------------------------|--------------------------------------------------------------------|
| Electrical connection 1, connection type              | Plug                                                               |
| Electrical connection 1, connection technology        | Connection diagram L1J                                             |
| Electrical connection 1, number of pins/wires         | 4                                                                  |
| Electrical connection for input 1, connection pattern | 00995428                                                           |
| Type of mounting                                      | With wall/surface bracket                                          |
| Mounting position                                     | Any                                                                |
| Pneumatic connection                                  | Internal thread M5                                                 |
| Product weight                                        | 21 g                                                               |
| Housing material                                      | PA-reinforced                                                      |
| Materials in contact with the media                   | FPM<br>PA-reinforced                                               |
| Display type                                          | Illuminated LCD                                                    |
| Displayable unit(s)                                   | MPa<br>bar<br>inHg<br>kPa<br>mmHg<br>psi                           |
| Setting options                                       | Teach-in<br>Via display and pushbuttons                            |
| Protection against tampering                          | PIN code                                                           |
| Setting range threshold value                         | 0 % ... 100 %                                                      |
| Setting range hysteresis                              | 0 % ... 90 %                                                       |
| Degree of protection                                  | IP40                                                               |
| Corrosion resistance class (CRC)                      | 2 - Moderate corrosion stress                                      |
| LABS (PWIS) conformity                                | VDMA24364-B1/B2-L                                                  |
| Suitability for the production of Li-ion batteries    | Suitable for battery production with reduced Cu/Zn/Ni values (F1a) |
| Cleanroom class                                       | Class 4 according to ISO 14644-1                                   |