

# Proximity sensor SIEH-M12B-PS-S-L

Part number: 150451

FESTO



General operating condition

## Data sheet

| Feature                                              | Value                                                                                                |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Conforms to standard                                 | EN 60947-5-2                                                                                         |
| Symbol                                               | 00991701                                                                                             |
| Approval                                             | C-Tick<br>c UL us listed (OL)                                                                        |
| CE mark (see declaration of conformity)              | To EU EMC Directive<br>In accordance with EU RoHS Directive                                          |
| UKCA marking (see declaration of conformity)         | To UK instructions for EMC (UK-E)<br>To UK RoHS instructions (UK-R)                                  |
| Rated operating distance                             | 4 mm                                                                                                 |
| Assured operating distance                           | 3.24 mm                                                                                              |
| Reduction factors                                    | Aluminium = 0.4<br>Stainless steel St 18/8 = 0.8<br>Copper = 0.4<br>Brass = 0.5<br>Steel St 37 = 1.0 |
| Ambient temperature                                  | -25 °C ... 70 °C                                                                                     |
| Repetition accuracy with constant conditions         | 0.2 mm                                                                                               |
| Switching output                                     | PNP                                                                                                  |
| Switching element function                           | N/O contact                                                                                          |
| Hysteresis                                           | ≤0.36 mm                                                                                             |
| Max. switching frequency                             | 2500 Hz                                                                                              |
| Max. output current                                  | 200 mA                                                                                               |
| Voltage drop                                         | ≤2 V                                                                                                 |
| Inductive protective circuit                         | Integrated                                                                                           |
| Short circuit current rating                         | Pulsed                                                                                               |
| Operational voltage range DC                         | 10 V ... 30 V                                                                                        |
| Residual ripple                                      | ± 10%                                                                                                |
| No-load supply current                               | ≤10 mA                                                                                               |
| Reverse polarity protection                          | For all electrical connections                                                                       |
| Electrical connection 1, connection type             | Plugs                                                                                                |
| Electrical connection 1, connector system            | M12x1, A-coded to EN 61076-2-101                                                                     |
| Electrical connection 1, number of connections/cores | 4                                                                                                    |
| Electrical connection 1, type of mounting            | Screw-type lock<br>Not rotatable                                                                     |
| Electrical connection 1, compatible type of mounting | Compatible with rotatable screw-type lock                                                            |
| Size                                                 | M12                                                                                                  |
| Type of mounting                                     | Via lock nut                                                                                         |
| Mounting type                                        | Flush                                                                                                |

| Feature                                     | Value                           |
|---------------------------------------------|---------------------------------|
| Product weight                              | 30 g                            |
| Material housing                            | PBTP<br>Nickel-plated           |
| Switching status indication                 | Yellow LED                      |
| Ambient temperature with moving cable       | -5 °C ... 70 °C                 |
| Degree of protection                        | IP65<br>IP67                    |
| Corrosion resistance class CRC              | 2 - Moderate corrosion stress   |
| LABS (PWIS) conformity                      | VDMA24364-B2-L                  |
| Additional information for sensor selection | with increased sensing distance |
| Electrical output                           | PNP                             |
| Selection of sensor design                  | Standard                        |