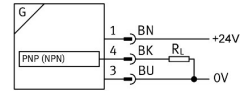


# Proximity switch SDBT-MSX-1L-PU-E-0.3-N-M12

Part number: 8222734

FESTO



## Data sheet

| Feature  | Value   |
|--|---|
| Design   | For T-slot  |
| Based on standard                              | EN 60947-5-2  |
| Approval                                       | RCM trademark<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<br>To UK RoHS instructions   |
| Certificate issuing authority                  | UL E232949  |
| Note on materials                              | RoHS-compliant<br>Free of halogen   |
| Instructions on use                            | <a href="https://www.festo.com/Drive-Sensor-Overview">https://www.festo.com/Drive-Sensor-Overview</a> |
| Measured variable                              | Position  |
| Measuring principle                            | Magnetic Hall   |
| Ambient temperature                            | -40 °C...85 °C  |
| Max. travel speed                              | 3 m/s   |
| Repetition accuracy                            | 0.1 mm  |
| Switching output                               | PNP/NPN, switchable   |
| Switching element function                     | N/C or N/O contact, switchable  |
| Hysteresis                                     | 0.2 mm  |
| Switch-on time                                 | 2 ms  |
| Switch-off time                                | 2 ms  |
| Max. switching frequency                       | 200 Hz  |
| Max. output current                            | 100 mA  |
| Max. output current using mounting kits        | 100 mA  |
| Max. switching capacity DC                     | 2.8 W   |
| Max. switching capacity DC using mounting kits | 2.8 W   |
| Voltage drop                                   | 1.5 V   |
| Min. load current                              | 0.15 mA   |
| Off-state current                              | 0.2 mA  |
| Short circuit current rating                   | yes   |
| Overload protection                            | Available   |

| Feature  | Value  |
|--|--|
| Rated operational voltage DC                         | 24 V   |
| Operational voltage range DC                         | 10 V...30 V  |
| Reverse polarity protection                          | For all electrical connections   |
| Electrical connection 1, connection type             | Cable with plug  |
| Electrical connection 1, connector system            | M12x1, A-coded to EN 61076-2-101   |
| Electrical connection 1, number of connections/cores | 3  |
| Electrical connection 1, type of mounting            | Screw-type lock  |
| Connection outlet orientation                        | In-line  |
| Test conditions cable                                | Bending strength: to Festo standard<br>Test conditions on request<br>Torsional strength: > 300,000 cycles, $\pm 270^\circ/0.1$ m<br>Energy chain: > 5 million cycles, bending radius 28 mm   |
| Cable length   | 0.3 m  |
| Cable characteristic                                 | Suitable for energy chains/robot applications  |
| Cable sheath colour                                  | Grey   |
| Material cable sheath                                | TPE-U(PUR)   |
| Type of mounting                                     | Screw-clamped<br>Insertable in the slot from above   |
| Max. tightening torque                               | 0.6 Nm   |
| Mounting position                                    | optional   |
| Product weight                                       | 12 g   |
| Housing colour                                       | Black  |
| Material housing                                     | Brass, nickel-plated<br>PA-reinforced<br>High-alloy stainless steel  |
| Switching status indication                          | Yellow LED   |
| Status indication                                    | Green LED  |
| Setting options                                      | Auto teach-in<br>Capacitive pushbutton   |
| Ambient temperature with moving cable                | -20 °C...85 °C   |
| Degree of protection                                 | IP65<br>IP68<br>IP69K  |
| LABS (PWIS) conformity                               | VDMA24364-B2-L   |
| Suitability for the production of Li-ion batteries   | Product corresponds to the internal product definition from Festo for use in battery production: Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils |
| Cleanroom class                                      | Class 4 according to ISO 14644-1   |