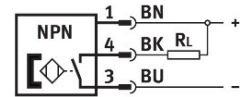


# Proximity sensor

## SMT-8M-A-NS-24V-E-0,3-M8D

Part number: 574339

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  |
| Special characteristics                        | Oil resistant   |
| 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                            | Magneto-resistive   |
| Ambient temperature                            | -40 °C...85 °C  |
| Repetition accuracy                            | 0.2 mm  |
| Switching output                               | NPN   |
| Switching element function                     | N/O contact   |
| Switch-on time                                 | 1.3 ms  |
| Switch-off time                                | 7.3 ms  |
| Max. switching frequency                       | 130 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   |
| Short circuit current rating                   | yes   |
| Overload protection                            | Available   |
| Rated operational voltage DC                   | 24 V  |
| Operational voltage range DC                   | 5 V...30 V  |
| Reverse polarity protection                    | For all electrical connections  |

| Feature  | Value  |
|--|--|
| Electrical connection 1, connection type             | Cable with plug  |
| Electrical connection 1, connector system            | M8x1, A-coded, to EN 61076-2-104   |
| Electrical connection 1, number of connections/cores | 3  |
| Electrical connection 1, type of mounting            | Screw-type lock<br>Rotatable   |
| Electrical connection 1, compatible type of mounting | Compatible with rotatable/non-rotatable screw-type lock  |
| Connection outlet orientation                        | In-line  |
| Material electrical contact                          | Gold-plated copper alloy   |
| Material connector housing                           | TPE-U(PU)  |
| Material screw-type lock                             | Nickel-plated brass  |
| Test conditions cable                                | Test conditions on request<br>Torsional strength: > 300,000 cycles, $\pm 270^\circ/0.1$ m<br>Flexural strength: > 50000 cycles, bending radius 5 mm<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)   |
| Material insulating sheath                           | PP   |
| Type of mounting                                     | Screw-clamped<br>Insertable in the slot from above   |
| Max. tightening torque                               | 0.6 Nm   |
| Mounting position                                    | optional   |
| Product weight                                       | 8.9 g  |
| Housing colour                                       | Black  |
| Material housing                                     | PA-reinforced<br>High-alloy stainless steel  |
| Material union nut                                   | Nickel-plated brass  |
| Switching status indication                          | Yellow LED   |
| Function reserve indication                          | Orange LED   |
| 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                                      | Element installed statically, no meaningful evaluation possible according to ISO 14644-1   |