

# Proximity sensor SMT-10M-NS-24V-E-2,5-L-OE

Part number: 551377

FESTO



 [General operating condition](#)

## Data sheet

| Feature  | Value   |
|--|---|
| Design   | for round slot  |
| Conforms to standard                           | EN 60947-5-2  |
| Symbol   | 00991149  |
| Certification                                  | RCM compliance mark   |
| 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 RoHS instructions   |
| Special features                               | Oil-resistant   |
| Note on materials                              | RoHS-compliant<br>Halogen-free  |
| Application note                               | <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 ... 70 °C  |
| Repetition accuracy                            | 0.2 mm  |
| Switching output                               | NPN   |
| Switching element function                     | N/O contact   |
| On time  | ≤1.3 ms   |
| Switch-off time                                | 4.2 ms ... 7.3 ms   |
| Max. switching frequency                       | 130 Hz  |
| Max. output current                            | 100 mA  |
| Max. output current in mounting kits           | 50 mA   |
| Max. switching capacity DC                     | 2.8 W   |
| Max. switching capacity DC in mounting kits    | 1.5 W   |
| Voltage drop                                   | ≤1.5 V  |
| Residual current                               | <0.15 mA  |
| Short-circuit protection                       | yes   |
| Overload protection                            | Yes   |
| Rated operating voltage DC                     | 24 V  |
| DC operating voltage range                     | 5 V ... 30 V  |
| Residual ripple                                | 10 %  |
| Reverse polarity protection                    | for all electrical connections  |
| Electrical connection 1, connection type       | Cable   |
| Electrical connection 1, connection technology | Open end  |
| Electrical connection 1, number of pins/wires  | 3   |
| Connection outlet orientation                  | Longitudinal  |

| Feature   | Value   |
|---|---|
| Connector cable test conditions                           | Flexural strength: as per Festo standard<br>Test conditions on request<br>Torsion resistance: > 300,000 cycles, $\pm 270^\circ/0.1$ m<br>Energy chain: > 5 million cycles, bending radius 28 mm |
| Cable length  | 2.5 m   |
| Cable characteristic                                      | suitable for energy chains/robot applications   |
| Color cable sheath  | Gray  |
| Material of cable sheath                                  | TPE-U(PUR)  |
| Insulating sheath material                                | PP  |
| Wire ends   | Cable end sleeve  |
| Type of mounting  | Screwed tightly<br>Can be inserted in slot from above   |
| Max. tightening torque                                    | 0.4 Nm  |
| Mounting position   | Any   |
| Product weight  | 16.8 g  |
| Housing colour  | Black   |
| Housing material  | High-alloy stainless steel  |
| Switching status indication                               | LED yellow  |
| Ambient temperature with flexible cable installation      | -20 °C ... 70 °C  |
| Degree of protection                                      | IP65<br>IP68  |
| LABS (PWIS) conformity                                    | VDMA24364-B2-L  |
| Suitability for the production of Li-ion batteries        | Suitable for battery production with reduced Cu/Zn/Ni values (F1a)  |
| Cleanroom suitability, measured according to ISO 14644-14 | Statically installed element, no meaningful evaluation possible according to ISO 14644-1  |