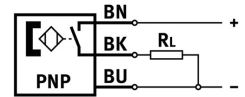


# Proximity sensor SMT-10M-PS-24V-E-2,5-Q-OE

Part number: 551374

FESTO



General operating condition

## Data sheet

| Feature                                              | Value                                                                                                 |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Design                                               | For C-slot                                                                                            |
| Conforms to standard                                 | EN 60947-5-2                                                                                          |
| Symbol                                               | 00991152                                                                                              |
| Approval                                             | RCM trademark                                                                                         |
| CE mark (see declaration of conformity)              | To EU EMC Directive<br>In accordance with EU RoHS Directive                                           |
| CE marking (see declaration of conformity)           | To UK instructions for EMC<br>To UK RoHS instructions                                                 |
| 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 ... 70 °C                                                                                      |
| Repetition accuracy                                  | 0.2 mm                                                                                                |
| Switching output                                     | PNP                                                                                                   |
| Switching element function                           | N/O contact                                                                                           |
| Switch-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 using mounting kits              | 50 mA                                                                                                 |
| Max. switching capacity DC                           | 2.8 W                                                                                                 |
| Max. switching capacity DC using mounting kits       | 1.5 W                                                                                                 |
| Voltage drop                                         | ≤1.7 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                                                                        |
| Electrical connection 1, connection type             | Cable                                                                                                 |
| Electrical connection 1, connector system            | Open end                                                                                              |
| Electrical connection 1, number of connections/cores | 3                                                                                                     |
| Connection outlet orientation                        | Lateral                                                                                               |

| Feature                                            | Value                                                                                                                                                                                                                             |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test conditions cable                              | Bending strength: to Festo standard<br>Test conditions on request<br>Torsional 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                                                                                                                                                                                     |
| Material cable sheath                              | TPE-U(PUR)                                                                                                                                                                                                                        |
| Type of mounting                                   | Screw-clamped<br>Insertable in the slot from above                                                                                                                                                                                |
| Max. tightening torque                             | 0.4 Nm                                                                                                                                                                                                                            |
| Mounting position                                  | optional                                                                                                                                                                                                                          |
| Product weight                                     | 16.8 g                                                                                                                                                                                                                            |
| Material housing                                   | PA-reinforced<br>High-alloy stainless steel                                                                                                                                                                                       |
| Switching status indication                        | Yellow LED                                                                                                                                                                                                                        |
| Ambient temperature with moving cable              | -20 °C ... 70 °C                                                                                                                                                                                                                  |
| Degree of protection                               | IP65<br>IP68                                                                                                                                                                                                                      |
| LABS (PWIS) conformity                             | VDMA24364-B2-L                                                                                                                                                                                                                    |
| Suitability for the production of Li-ion batteries | Metals with more than 1% by mass of copper, zinc or nickel by mass are excluded from use. 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                                                                                                                                                                                                  |