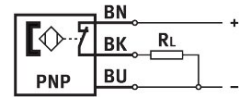


# Proximity sensor SMT-8M-A-PO-24V-E-7,5-OE

Part number: 574340

**FESTO**



[General operating condition](#)

## Data sheet

| Feature                                        | Value                                                                                                 |
|------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Design                                         | for T-slot                                                                                            |
| Based on norm                                  | EN 60947-5-2                                                                                          |
| Symbol                                         | 00991151                                                                                              |
| Certification                                  | RCM compliance mark<br>c UL us - Listed (OL)                                                          |
| 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 instructions for EMC<br>To UK RoHS instructions                                                 |
| Certificate issuing authority                  | UL E232949                                                                                            |
| 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 ... 85 °C                                                                                      |
| Repetition accuracy                            | 0.2 mm                                                                                                |
| Switching output                               | PNP                                                                                                   |
| Switching element function                     | N/C contact                                                                                           |
| On time                                        | ≤1.3 ms                                                                                               |
| Switch-off time                                | ≤7.3 ms                                                                                               |
| Max. switching frequency                       | 130 Hz                                                                                                |
| Max. output current                            | 100 mA                                                                                                |
| Max. output current in mounting kits           | 100 mA                                                                                                |
| Max. switching capacity DC                     | 2.8 W                                                                                                 |
| Max. switching capacity DC in mounting kits    | 2.8 W                                                                                                 |
| Voltage drop                                   | <1.5 V                                                                                                |
| Short-circuit protection                       | yes                                                                                                   |
| Overload protection                            | Available                                                                                             |
| Rated operating voltage DC                     | 24 V                                                                                                  |
| DC operating voltage range                     | 5 V ... 30 V                                                                                          |
| 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                      | Test conditions on request<br>Torsion resistance: > 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                                         | 7.5 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                                     | Can be inserted in slot from above                                                                                                                                                                           |
| Max. tightening torque                               | 0.6 Nm                                                                                                                                                                                                       |
| Mounting position                                    | Any                                                                                                                                                                                                          |
| Product weight                                       | 85.1 g                                                                                                                                                                                                       |
| Housing colour                                       | Black                                                                                                                                                                                                        |
| Housing material                                     | High-alloy stainless steel                                                                                                                                                                                   |
| Switching status indication                          | LED yellow                                                                                                                                                                                                   |
| Function reserve indication                          | LED orange                                                                                                                                                                                                   |
| Ambient temperature with flexible cable installation | -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   | Suitable for battery production with reduced Cu/Zn/Ni values (F1a)                                                                                                                                           |
| Cleanroom class                                      | Statically installed element, no meaningful evaluation possible according to ISO 14644-1                                                                                                                     |