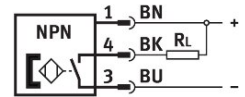


# Proximity sensor SMTSO-8E-NS-M12-LED-24

Part number: 175825

**FESTO**



## Data sheet

| Feature                                              | Value                                                                  |
|------------------------------------------------------|------------------------------------------------------------------------|
| Design                                               | For T-slot                                                             |
| Based on norm                                        | EN 60947-5-2                                                           |
| 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 instructions for EMC<br>To UK RoHS instructions                  |
| Special features                                     | Welding field resistant<br>Welding spatter-resistant                   |
| Note on materials                                    | RoHS compliant                                                         |
| Application note                                     | Support / actuator-sensor overview "The right sensor for the actuator" |
| Measured variable                                    | Position                                                               |
| Measuring principle                                  | Magneto-inductive                                                      |
| Ambient temperature                                  | -25 °C...70 °C                                                         |
| Repetition accuracy                                  | 0.2 mm                                                                 |
| Switching output                                     | NPN                                                                    |
| Switching characteristics during the welding process | Output signal freezes                                                  |
| Switching element function                           | N.O. contact                                                           |
| On time                                              | 38 ms                                                                  |
| Switch-off time                                      | 20 ms                                                                  |
| Max. switching frequency                             | 14 Hz                                                                  |
| Max. output current                                  | 200 mA                                                                 |
| Max. switching capacity DC                           | 6 W                                                                    |
| Voltage drop                                         | 3 V                                                                    |
| Residual current                                     | 0.01 mA                                                                |
| Short-circuit protection                             | Yes                                                                    |
| Overload protection                                  | Yes                                                                    |
| DC operating voltage range                           | 10 V...30 V                                                            |
| Residual ripple                                      | 10%                                                                    |
| Reverse polarity protection                          | for all electrical connections                                         |
| Electrical connection 1, connection type             | Plug                                                                   |
| Electrical connection 1, connection technology       | M12x1 A-coded as per EN 61076-2-101                                    |

| Feature                                         | Value                                                                         |
|-------------------------------------------------|-------------------------------------------------------------------------------|
| Electrical connection 1, number of pins/wires   | 3                                                                             |
| Electrical connection 1, type of mounting       | Screw-type lock<br>not rotatable<br>Compatible with rotatable screw-type lock |
| Connection outlet orientation                   | Transverse                                                                    |
| Material of pin contacts                        | Gold-plated brass                                                             |
| Type of mounting                                | Clamped in T slot<br>With accessories<br>Can be inserted in slot from above   |
| Mounting position                               | Any                                                                           |
| Product weight                                  | 10 g                                                                          |
| Housing colour                                  | Black                                                                         |
| Housing material                                | Wrought aluminum alloy<br>PA<br>PUR<br>high-alloy stainless steel             |
| Switching status indication                     | Yellow LED                                                                    |
| Degree of protection                            | IP65<br>IP67                                                                  |
| Resistance to interference from magnetic fields | 45 - 65 Hz<br>Alternating magnetic field                                      |
| LABS (PWIS) conformity                          | VDMA24364-B2-L                                                                |