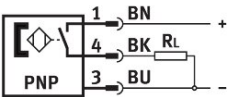


**Proximity sensor**  
**SMTSO-8E-PS-M12-LED-24**  
Part number: 191986

**FESTO**



**Data sheet**

| Feature                                      | Value                                                                  |
|----------------------------------------------|------------------------------------------------------------------------|
| Design                                       | For T-slot                                                             |
| Based on standard                            | EN 60947-5-2                                                           |
| Approval                                     | RCM trademark                                                          |
| 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                  |
| Special characteristics                      | Welding field resistant<br>Resistant to welding spatter                |
| Note on materials                            | RoHS-compliant                                                         |
| Instructions on use                          | 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                             | PNP                                                                    |
| Switching behavior during welding process    | Output signal freezes                                                  |
| Switching element function                   | N/O contact                                                            |
| Switch-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                                                                    |
| Off-state current                            | 0.01 mA                                                                |
| Short circuit current rating                 | yes                                                                    |
| Overload protection                          | Yes                                                                    |
| Operational voltage range DC                 | 10 V...30 V                                                            |
| Residual ripple                              | 10 %                                                                   |
| Reverse polarity protection                  | For all electrical connections                                         |
| Electrical connection 1, connection type     | Plugs                                                                  |
| Electrical connection 1, connector system    | M12x1, A-coded to EN 61076-2-101                                       |

| Feature                                              | Value                                                                    |
|------------------------------------------------------|--------------------------------------------------------------------------|
| Electrical connection 1, number of connections/cores | 3                                                                        |
| Electrical connection 1, type of mounting            | Screw-type lock<br>Not rotatable                                         |
| Electrical connection 1, compatible type of mounting | Compatible with rotatable screw-type lock                                |
| Connection outlet orientation                        | Lateral                                                                  |
| Material electrical contact                          | Gold-plated brass                                                        |
| Type of mounting                                     | Clamped in T-slot<br>Insertable in the slot from above                   |
| Mounting position                                    | optional                                                                 |
| Product weight                                       | 19 g                                                                     |
| Housing colour                                       | Black                                                                    |
| Material housing                                     | Wrought aluminium alloy<br>PA<br>TPE-U(PU)<br>High-alloy stainless steel |
| Switching status indication                          | Yellow LED                                                               |
| Degree of protection                                 | IP65<br>IP67                                                             |
| Immunity to magnetic fields                          | 45 - 65 Hz<br>Alternating magnetic field                                 |
| LABS (PWIS) conformity                               | VDMA24364-B2-L                                                           |