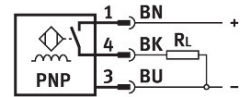


# Proximity sensor SIES-8M-PS-24V-K-10-M8D

Part number: 551390

**FESTO**



[General operating condition](#)

## Data sheet

| Feature                                      | Value                                                                                               |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Design                                       | For T-slot                                                                                          |
| Conforms to standard                         | EN 60947-5-2                                                                                        |
| Symbol                                       | 00991701                                                                                            |
| Approval                                     | RCM trademark<br>c UL us listed (OL)                                                                |
| 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 (UK-E)<br>To UK RoHS instructions (UK-R)                                 |
| KC mark                                      | KC-EMV                                                                                              |
| Note on materials                            | RoHS-compliant                                                                                      |
| Measured variable                            | Position                                                                                            |
| Measuring principle                          | Inductive                                                                                           |
| Rated operating distance                     | 1.5 mm                                                                                              |
| Reduction factors                            | Aluminium = 0.62<br>Stainless steel V2A = 0.95<br>Copper = 0.6<br>Brass = 0.72<br>Steel St 37 = 1.0 |
| Ambient temperature                          | -25 °C ... 70 °C                                                                                    |
| Repetition accuracy with constant conditions | ≤ 0.05 mm, approach from the side                                                                   |
| Switching output                             | PNP                                                                                                 |
| Switching element function                   | N/O contact                                                                                         |
| Switch-on time                               | ≤ 1.0E-4 ms                                                                                         |
| Max. switching frequency                     | 4500 Hz                                                                                             |
| Max. output current                          | 150 mA                                                                                              |
| Max. switching capacity DC                   | 4.5 W                                                                                               |
| Voltage drop                                 | ≤ 2 V                                                                                               |
| Inductive protective circuit                 | Integrated                                                                                          |
| Min. load current                            | 0 mA                                                                                                |
| Off-state current                            | ≤ 0.01 mA                                                                                           |
| Short circuit current rating                 | Pulsed                                                                                              |
| Overload protection                          | Available                                                                                           |
| Operational voltage range DC                 | 10 V ... 30 V                                                                                       |
| Residual ripple                              | 10 %                                                                                                |
| No-load supply current                       | ≤ 10 mA                                                                                             |
| Reverse polarity protection                  | For all electrical connections                                                                      |
| Electrical connection 1, connection type     | Cable with plug                                                                                     |

| Feature                                              | Value                                                                                                                       |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Electrical connection 1, connector system            | M8x1, A-coded, to EN 61076-2-104                                                                                            |
| Electrical connection 1, number of connections/cores | 3                                                                                                                           |
| Electrical connection 1, type of mounting            | Screw-type lock<br>Rotatable                                                                                                |
| Electrical connection 1, compatible type of mounting | Compatible with rotatable/non-rotatable screw-type lock                                                                     |
| Electrical connection 1, connection pattern          | 00991155                                                                                                                    |
| Connection outlet orientation                        | In-line                                                                                                                     |
| Material electrical contact                          | Gold-plated brass                                                                                                           |
| Test conditions cable                                | Bending strength: to Festo standard<br>Test conditions on request<br>Energy chain: > 5 million cycles, bending radius 75 mm |
| Cable length                                         | 10 m                                                                                                                        |
| Cable characteristic                                 | Standard/suitable for energy chains                                                                                         |
| Cable sheath colour                                  | Grey                                                                                                                        |
| Material cable sheath                                | TPE-U(PU)                                                                                                                   |
| Material insulating sheath                           | PP                                                                                                                          |
| Size                                                 | Slot 8                                                                                                                      |
| Type of mounting                                     | Flush with T-slot<br>Screw-clamped<br>Insertable in the slot from above                                                     |
| Tightening torque                                    | 0.6 Nm                                                                                                                      |
| Mounting position                                    | optional                                                                                                                    |
| Mounting type                                        | Flush                                                                                                                       |
| Housing colour                                       | Black                                                                                                                       |
| Material housing                                     | PUR<br>High-alloy stainless steel                                                                                           |
| Switching status indication                          | Yellow LED                                                                                                                  |
| Ambient temperature with moving cable                | -5 °C ... 70 °C                                                                                                             |
| Degree of protection                                 | IP65<br>IP67                                                                                                                |
| Insulation voltage                                   | 50 V                                                                                                                        |
| Immunity to surge                                    | 0.8 kV                                                                                                                      |
| Corrosion resistance class CRC                       | 2 - Moderate corrosion stress                                                                                               |
| LABS (PWIS) conformity                               | VDMA24364-B2-L                                                                                                              |
| Cleanroom class                                      | Class 4 according to ISO 14644-1                                                                                            |
| Pollution degree                                     | 3                                                                                                                           |
| Additional information for sensor selection          | For T-slot                                                                                                                  |
| Electrical output                                    | PNP                                                                                                                         |
| Selection of sensor design                           | Special design                                                                                                              |