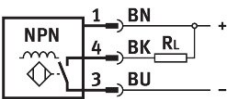


**Proximity sensor**  
**SIES-8M-NS-24V-K-2,5-M8D**  
Part number: 551398

**FESTO**



**Data sheet**

| Feature                                      | Value                                                                                               |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Design                                       | For T-slot                                                                                          |
| Conforms to standard                         | EN 60947-5-2                                                                                        |
| 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<br>To UK RoHS instructions                                               |
| 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                             | NPN                                                                                                 |
| Switching element function                   | N/O contact                                                                                         |
| Switch-on time                               | 0.1 µs                                                                                              |
| 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                            | 10 µA                                                                                               |
| Short circuit current rating                 | Pulsed                                                                                              |
| Overload protection                          | Available                                                                                           |
| Operational voltage range DC                 | 10 V...30 V                                                                                         |

| Feature                                                   | Value                                                                                                                       |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Residual ripple                                           | 10 %                                                                                                                        |
| No-load supply current                                    | 10 mA                                                                                                                       |
| Reverse polarity protection                               | For all electrical connections                                                                                              |
| Electrical connection 1, connection type                  | Cable with plug                                                                                                             |
| 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                                                                     |
| 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                                              | 2.5 m                                                                                                                       |
| Cable characteristic                                      | Standard/suitable for energy chains                                                                                         |
| Cable sheath colour                                       | Grey                                                                                                                        |
| Material cable sheath                                     | TPE-U(PU)                                                                                                                   |
| Material insulating sheath                                | PVC                                                                                                                         |
| 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                                          | Brass, nickel-plated<br>PA<br>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 suitability, measured according to ISO 14644-14 | Class 4 according to ISO 14644-1                                                                                            |
| Pollution degree                                          | 3                                                                                                                           |
| Additional information for sensor selection               | For T-slot                                                                                                                  |
| Electrical output                                         | NPN                                                                                                                         |
| Selection of sensor design                                | Special design                                                                                                              |