

# Proximity sensor SIES-8M-NO-24V-K-7,5-OE

Part number: 551401

FESTO



[General operating condition](#)

## Data sheet

| Feature                                      | Value   |
|--|---|
| Design                                       | For T-slot  |
| Conforms to standard                         | EN 60947-5-2  |
| Symbol                                       | 00991643  |
| Approval                                     | RCM<br>c UL us - Listed (Oil)   |
| 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/C 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   |

| Feature   | Value   |
|---|---|
| Electrical connection 1, connector system                 | Open end  |
| Electrical connection 1, number of connections/cores      | 3   |
| Connection outlet orientation                             | In-line   |
| 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  | 7.5 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 groove<br>Screw-clamped<br>Insertable in the slot from above   |
| Tightening torque   | 0.6 Nm  |
| Mounting position   | Any   |
| 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                            | 3 - high corrosion stress   |
| 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 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  |