

# Proximity sensor CRSMT-8M-PS-24V-K-0,3-M8D-EX2

Part number: 574383

FESTO



[General operating condition](#)

## Data sheet

| Feature   | Value  |
|---|--|
| Design  | For T-slot   |
| Based on norm                                     | EN 60947-5-2   |
| Symbol  | 00991153   |
| Certification                                     | RCM compliance mark  |
| CE marking (see declaration of conformity)        | As per EU EMC directive<br>as per EU explosion protection directive (ATEX)<br>As per EU RoHS directive |
| UKCA marking (see declaration of conformity)      | To UK RoHS instructions  |
| Explosion prevention and protection               | Zone 2 (ATEX)<br>Zone 2 (UKEX)<br>Zone 22 (ATEX)<br>Zone 22 (UKEX)                                     |
| ATEX category gas                                 | II 3G  |
| Type of ignition protection for gas               | Ex ec IIC T4 Gc X  |
| ATEX category for dust                            | II 3D  |
| Type of (ignition) protection for dust            | Ex tc IIIC T120°C Dc X   |
| Explosion protection certification outside the EU | EPL Dc (GB)<br>EPL Gc (GB)   |
| Explosive ambient temperature                     | -40°C ≤ Ta ≤ +85°C   |
| Special features                                  | Cooling lubricant-proof<br>Alkali-proof<br>Acid-proof  |
| Note on materials                                 | RoHS compliant<br>Halogen-free   |
| Application note                                  | Support / actuator-sensor overview "The right sensor for the actuator"                                 |
| Measured variable                                 | Position   |
| Measuring principle                               | Magneto-resistive  |
| Ambient temperature                               | -40 °C ... 85 °C   |
| Repetition accuracy                               | 0.2 mm   |
| Switching output                                  | PNP  |
| Switching element function                        | N.O. contact   |
| On time   | ≤1 ms  |
| Switch-off time                                   | ≤1 ms  |
| Max. switching frequency                          | 180 Hz   |
| Max. output current                               | 100 mA   |
| Max. output current in mounting kits              | 100 mA   |
| Max. switching capacity DC                        | 2.8 W  |
| Max. switching capacity DC in mounting kits       | 2.8 W  |

| Feature   | Value   |
|---|---|
| Voltage drop  | <1.5 V  |
| Inductive protective circuit                          | Adapted to MZ, MY and ME coils  |
| Minimum load current                                  | 0 mA  |
| Residual current                                      | <0.05 mA  |
| Short-circuit protection                              | Yes   |
| Overload protection                                   | Yes   |
| Rated operating voltage DC                            | 24 V  |
| DC operating voltage range                            | 5 V ... 30 V  |
| Residual ripple                                       | 10%   |
| Reverse polarity protection                           | for all electrical connections  |
| Electrical connection 1, connection type              | Cable with plug   |
| Electrical connection 1, connection technology        | M8x1 A-coded as per EN 61076-2-104  |
| Electrical connection 1, number of pins/wires         | 3   |
| Electrical connection 1, type of mounting             | Rotatable   |
| Electrical connection 1, type of mounting             | Compatible with rotatable/non-rotatable screw-type lock   |
| Electrical connection for input 1, connection pattern | 00991155  |
| Connection outlet orientation                         | Longitudinal  |
| Material of pin contacts                              | Brass, nickel-plated and gold-plated  |
| Material of plug housing                              | PP  |
| Material of screw-type lock                           | Brass, nickel-plated  |
| Connector cable test conditions                       | Flexural strength: as per Festo standard<br>Torsion resistance: > 300,000 cycles, ±270°/0.1 m<br>Energy chain: > 5 million cycles, bending radius 75 mm |
| Cable length  | 0.3 m   |
| Cable characteristic                                  | Standard/suitable for energy chains   |
| Color cable sheath                                    | Gray  |
| Material of cable sheath                              | TPE-O   |
| Insulating sheath material                            | PP  |
| Type of mounting                                      | Screwed on<br>Can be inserted in slot from above  |
| Tightening torque                                     | 0.1 Nm ... 0.6 Nm   |
| Max. tightening torque                                | 0.6 Nm  |
| Mounting position                                     | Any   |
| Product weight  | 16.1 g  |
| Housing colour  | Black   |
| Housing material                                      | PP<br>high-alloy stainless steel  |
| Switching status indication                           | Yellow LED  |
| Function reserve indication                           | Orange LED  |
| Ambient temperature with flexible cable installation  | -20 °C ... 85 °C  |
| Degree of protection                                  | IP65<br>IP68<br>IP69K   |
| Resistance to interference from magnetic fields       | Design insensitive to permanent magnetic fields < Bon   |
| LABS (PWIS) conformity                                | VDMA24364-B2-L  |
| For use in the food industry                          | See supplementary material information  |