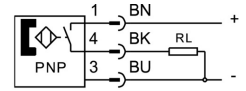


# Proximity sensor CRSMT-8M-PS-24V-K-0,3-M12

Part number: 574382

**FESTO**



## 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 instructions for EMC<br>acc. to UK EX instructions<br>To UK RoHS instructions                    |
| KC characters                                     | KC EMC                                                                                                 |
| Explosion prevention and protection               | Zone 2 (ATEX)<br>Zone 22 (ATEX)                                                                        |
| 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                                  | Resistant to cooling lubricants<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                                                                                                  |

| Feature                                               | Value                                                                                                                                                  |
|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Max. switching capacity DC in mounting kits           | 2.8 W                                                                                                                                                  |
| 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                                   | Available                                                                                                                                              |
| 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        | M12x1 A-coded as per EN 61076-2-101                                                                                                                    |
| Electrical connection 1, number of pins/wires         | 3                                                                                                                                                      |
| Electrical connection 1, type of mounting             | Screw-type lock                                                                                                                                        |
| Electrical connection for input 1, connection pattern | 00995573                                                                                                                                               |
| Connection outlet orientation                         | Longitudinal                                                                                                                                           |
| Material of pin contacts                              | Brass, nickel-plated and gold-plated                                                                                                                   |
| Material of plug housing                              | PP                                                                                                                                                     |
| Connector cable test conditions                       | Flexural strength: as per Festo standard<br>Cable chain: 5 million cycles, bending radius 75 mm<br>Torsional resistance: > 300 000 cycles, ±270°/0.1 m |
| Cable length                                          | 0.3 m                                                                                                                                                  |
| Cable characteristic                                  | Standard + cable chain                                                                                                                                 |
| Color cable sheath                                    | Gray                                                                                                                                                   |
| Material of cable sheath                              | TPE-O                                                                                                                                                  |
| Insulating sheath material                            | PP                                                                                                                                                     |
| Type of mounting                                      | Screwed tightly<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                                        | 9.1 g                                                                                                                                                  |
| Housing colour                                        | Black                                                                                                                                                  |
| Housing material                                      | PA<br>PP<br>High-alloy stainless steel                                                                                                                 |
| Material of union nut                                 | Brass, nickel-plated                                                                                                                                   |
| Switching status indication                           | LED yellow                                                                                                                                             |
| Function reserve indication                           | LED orange                                                                                                                                             |
| Ambient temperature with flexible cable installation  | -20 °C ... 85 °C                                                                                                                                       |
| Degree of protection                                  | IP65<br>IP68<br>IP69K                                                                                                                                  |
| Resistance to interference from magnetic fields       | Due to design, insensitive to permanent magnetic fields < Bon                                                                                          |
| LABS (PWIS) conformity                                | VDMA24364-B2-L                                                                                                                                         |
| For use in the food industry                          | See supplementary material information                                                                                                                 |