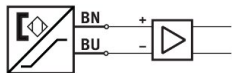


# Proximity sensor SDBT-MS-20NL-ZN-E-10-LE-EX6

Part number: 579072

**FESTO**



## Data sheet

| Feature                                           | Value                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Design                                            | For T-slot                                                                                                                                                                                                                                                                                                                                                                |
| Based on norm                                     | EN 60947-5-6                                                                                                                                                                                                                                                                                                                                                              |
| Certification                                     | RCM compliance mark<br>c UL us - Listed (OL)<br>c UL us - Listed (HazLoc)                                                                                                                                                                                                                                                                                                 |
| 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                                                                                                                                                                                                                                                                                       |
| Explosion prevention and protection               | Zone 0 (ATEX)<br>Zone 0 (BR)<br>Zone 0 (CA)<br>Zone 0 (CN)<br>Zone 0 (IEC-EX)<br>Zone 0 (KR)<br>Zone 0 (TW)<br>Zone 0 (UKEX)<br>Zone 0 (US)<br>Zone 1 (ATEX)<br>Zone 2 (ATEX)<br>Zone 20 (ATEX)<br>Zone 20 (BR)<br>Zone 20 (CA)<br>Zone 20 (CN)<br>Zone 20 (IEC-EX)<br>Zone 20 (KR)<br>Zone 20 (TW)<br>Zone 20 (UKEX)<br>Zone 20 (US)<br>Zone 21 (ATEX)<br>Zone 22 (ATEX) |
| Explosion protection certification outside the EU | EPL Da (BR)<br>EPL Da (CA)<br>EPL Da (CN)<br>EPL Da (GB)<br>EPL Da (IEC-EX)<br>EPL Da (KR)<br>EPL Da (TW)<br>EPL Da (US)                                                                                                                                                                                                                                                  |

| Feature                                              | Value                                                                                                                    |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
|                                                      | EPL Ga (BR)<br>EPL Ga (CA)<br>EPL Ga (CN)<br>EPL Ga (GB)<br>EPL Ga (IEC-EX)<br>EPL Ga (KR)<br>EPL Ga (TW)<br>EPL Ga (US) |
| Max. input voltage $V_i$                             | 28 V                                                                                                                     |
| Max. input current $I_i$                             | 0.25 A                                                                                                                   |
| Max. input power $P_i$                               | T4: 350 mW<br>T6: 72 mW                                                                                                  |
| Effective internal inductance $L_i$                  | 30 $\mu$ H                                                                                                               |
| Effective internal capacitance $C_i$                 | 79 nF                                                                                                                    |
| Special features                                     | Oil-resistant                                                                                                            |
| Note on materials                                    | RoHS compliant<br>Halogen-free                                                                                           |
| Application note                                     | <a href="https://www.festo.com/Drive-Sensor-Overview">https://www.festo.com/Drive-Sensor-Overview</a>                    |
| Measured variable                                    | Position                                                                                                                 |
| Measuring principle                                  | Magneto-resistive                                                                                                        |
| Ambient temperature                                  | -40 °C...85 °C                                                                                                           |
| Repetition accuracy                                  | 0.2 mm                                                                                                                   |
| Switching output                                     | NAMUR                                                                                                                    |
| Switching element function                           | NAMUR                                                                                                                    |
| On time                                              | 1 ms                                                                                                                     |
| Switch-off time                                      | 1 ms                                                                                                                     |
| Max. switching frequency                             | 330 Hz                                                                                                                   |
| Residual current                                     | 0.4 mA...1 mA                                                                                                            |
| Rated operating voltage DC                           | 8.2 V                                                                                                                    |
| DC operating voltage range                           | 7.5 V...18 V                                                                                                             |
| Residual ripple                                      | 10%                                                                                                                      |
| Reverse polarity protection                          | for all electrical connections                                                                                           |
| Electrical connection 1, connection type             | Cable                                                                                                                    |
| Electrical connection 1, connection technology       | Open end                                                                                                                 |
| Electrical connection 1, number of pins/wires        | 2                                                                                                                        |
| Connector cable test conditions                      | Flexural strength: as per Festo standard<br>Test conditions on request                                                   |
| Cable length                                         | 10 m                                                                                                                     |
| Cable characteristic                                 | Suitable for energy chains<br>Suitable for robot applications                                                            |
| Color cable sheath                                   | Blue                                                                                                                     |
| Material of cable sheath                             | TPE-U(PUR)                                                                                                               |
| Insulating sheath material                           | PP                                                                                                                       |
| Wire ends                                            | Wire ferrule                                                                                                             |
| 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                                       | 104 g                                                                                                                    |
| Housing colour                                       | Black                                                                                                                    |
| Housing material                                     | PA-reinforced<br>high-alloy stainless steel                                                                              |
| Switching status indication                          | Yellow LED                                                                                                               |
| Ambient temperature with flexible cable installation | -20 °C...85 °C                                                                                                           |
| Degree of protection                                 | IP65<br>IP68                                                                                                             |

| Feature                | Value          |
|------------------------|----------------|
| LABS (PWIS) conformity | VDMA24364-B2-L |