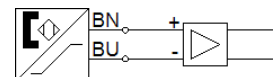
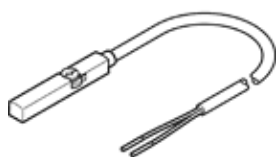


# Proximity Sensor

## SDBT-MS-20NL-ZN-E-2.5-LE-EX6

Part number: 8185110

FESTO



## Data sheet

| Feature   | Value  |
|---|--|
| Design  | for T-slot   |
| Based on the standard                             | EN 60947-5-6   |
| Authorization                                     | RCM Mark   |
| CE symbol (see declaration of conformity)         | according to EU-EMV guideline<br>according to EU-Ex protection guideline (ATEX)<br>in accordance with EU RoHS directive  |
| UKCA marking (see declaration of conformity)      | To UK instructions for EMC<br>To UK EX instructions<br>To UK RoHS instructions   |
| ATEX category Gas                                 | II 1G  |
| Explosion ignition protection type Gas            | Ex ia IIC T4...T6 Ga   |
| ATEX category Dust                                | II 1D  |
| Explosion ignition protection type Dust           | Ex ia IIIC T135°C Da   |
| Explosion protection certification outside the EU | EPL Da (BR)<br>EPL Da (CN)<br>EPL Da (GB)<br>EPL Da (IEC-EX)<br>EPL Da (KR)<br>EPL Ga (BR)<br>EPL Ga (CN)<br>EPL Ga (GB)<br>EPL Ga (IEC-EX)<br>EPL Ga (KR)   |
| Explosion-proof ambient temperature               | T4, with fixed cable installation: $-40^{\circ}\text{C} \leq T_a \leq +85^{\circ}\text{C}$<br>T4: $-20^{\circ}\text{C} \leq T_a \leq +85^{\circ}\text{C}$<br>T6, with fixed cable installation: $-40^{\circ}\text{C} \leq T_a \leq +45^{\circ}\text{C}$<br>T6: $-20^{\circ}\text{C} \leq T_a \leq +45^{\circ}\text{C}$ |
| Max. input voltage                                | 28 V   |
| Max. input current                                | 0,25 A   |
| Max. input power                                  | T4: 350 mW<br>T6: 72 mW  |
| effective inductivity                             | 30 $\mu\text{H}$   |
| effective capacity                                | 79 nF  |
| Certificate issuing department                    | 21-AV4BO-0130X<br>21-AV4BO-0131X<br>CSAE 22UKEX1322X<br>DNV 17.0027 X<br>GYJ20.1106X<br>IECEX PTZ 18.0008X<br>PTZ 16 ATEX 0010 X   |
| Special characteristics                           | Oil resistant  |
| Materials note                                    | Conforms to RoHS<br>Halogen-free   |
| Instructions for use                              | Support / Actuator-sensor overview "The right sensor for the actuator"   |
| Measured variable                                 | Position   |
| Measuring principle                               | Magneto-resistive  |

| Feature  | Value  |
|--|--|
| Ambient temperature                                  | -40 ... 85 °C  |
| Repetition accuracy                                  | 0.2 mm   |
| Switch output  | NAMUR  |
| Switching element function                           | NAMUR  |
| Switch-on time                                       | < 1 ms   |
| Switch-off time                                      | < 1 ms   |
| Max. switching frequency                             | 330 Hz   |
| Residual current                                     | 0.4 ... 1 mA   |
| Nominal operating voltage DC                         | 8.2 V  |
| Operating voltage range DC                           | 7.5 ... 18 V   |
| Residual ripple                                      | 10 %   |
| Polarity protected                                   | 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 exit direction                             | axial  |
| Test conditions of cable                             | Bending strength according to Festo standard<br>Test conditions on request |
| Cable length   | 2.5 m  |
| Cable attribute                                      | For robots<br>Suitable for energy chains                                   |
| Cable sheath color                                   | blue   |
| Material cable sheath                                | TPE-U(PUR)   |
| Material insulation                                  | PP   |
| Wire ends  | Wire end ferrule   |
| Mounting type  | Tightened<br>Insertable in slot from above                                 |
| Tightening torque                                    | 0.1 ... 0.6 Nm   |
| Max. tightening torque                               | 0.6 Nm   |
| Assembly position                                    | Any  |
| Product weight                                       | 28 g   |
| Housing color  | Black  |
| Material housing                                     | PA-reinforced<br>High alloy steel, non-corrosive                           |
| Operating status display                             | Yellow LED   |
| Ambient temperature with flexible cable installation | -20 ... 85 °C  |
| Protection class                                     | IP65<br>IP68   |
| PWIS conformity                                      | VDMA24364-B2-L   |