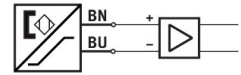


Proximity switch SDBT-MS-20NL-ZN-E-20-LE-EX6

Part number: 8185111

FESTO



[PDF](#) [General operating condition](#)

Data sheet

| Feature | Value |
|--|---|
| Design | For T-slot |
| Based on standard | EN 60947-5-6 |
| Symbol | 00991433 |
| Approval | RCM c UL us - Listed (Oil) c UL us - listed (HazLoc) |
| CE mark (see declaration of conformity) | To EU EMC Directive To EU Explosion Protection Directive (ATEX) In accordance with EU RoHS Directive |
| UKCA marking (see declaration of conformity) | To UK RoHS instructions |
| Explosion protection | Zone 0 (ATEX) Zone 0 (BR) Zone 0 (CA) Zone 0 (CN) Zone 0 (IEC-EX) Zone 0 (KR) Zone 0 (TW) Zone 0 (UKEX) Zone 0 (US) Zone 1 (ATEX) Zone 2 (ATEX) Zone 20 (ATEX) Zone 20 (BR) Zone 20 (CA) Zone 20 (CN) Zone 20 (IEC-EX) Zone 20 (KR) Zone 20 (TW) Zone 20 (UKEX) Zone 20 (US) Zone 21 (ATEX) Zone 22 (ATEX) |
| ATEX category gas | II 1G |
| Explosion ignition protection type for gas | Class I, Zone 0, AEx ia IIC T4...T6 Ga Ex ia IIC T4 ...T6 Ga X |
| ATEX category dust | II 1D |
| Explosion ignition protection type for dust | Zone 20, AEx ia IIIC T135 °C Da |

| Feature | Value |
|--|--|
| Explosion protection certification outside the EU | EPL Da (BR) EPL Da (CA) EPL Da (CN) EPL Da (GB) EPL Da (IEC-Ex) EPL Da (KR) EPL Da (TW) EPL Da (US) EPL Ga (BR) EPL Ga (CA) EPL Ga (CN) EPL Ga (GB) EPL Ga (IEC-EX) EPL Ga (KR) EPL Ga (TW) EPL Ga (US) |
| Explosion ambient temperature | T6, with fixed cable installation: -40°C ≤ Ta ≤ +45°C T6: -20°C ≤ Ta ≤ +45°C |
| Max. input voltage Ui | 28 V |
| Max. input current Ii | 0.25 A |
| Max. input power Pi | T4: 350 mW T6: 72 mW |
| Effective internal inductivity Li | 30 µH |
| Effective internal capacitance Ci | 79 nF |
| Certificate issuing authority | CSAE 22UKEX1322X DNV 17.0027 X IECEX PTZ 18.0008X ML091200700NZ0 PTZ 16 ATEX 0010 X UL E232949 UL E539825 |
| Special characteristics | Oil-resistant |
| Note on materials | RoHS compliant Free of halogen |
| Instructions on use | https://www.festo.com/Drive-Sensor-Overview |
| 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 |
| Switch-on time | <1 ms |
| Switch-off time | <1 ms |
| Max. switching frequency | 330 Hz |
| Off-state current | 0.4 mA ... 1 mA |
| Rated operational voltage DC | 8.2 V |
| Operational voltage range DC | 7.5 V ... 18 V |
| Residual ripple | 10% |
| Reverse polarity protection | For all electrical connections |
| Electrical connection 1, connection type | Cable |
| Electrical connection 1, connector system | Open end |
| Electrical connection 1, number of connections/cores | 2 |
| Connection outlet orientation | In-line |
| Test conditions cable | Bending strength: to Festo standard Test conditions on request |
| Cable length | 20 m |
| Cable characteristic | Suitable for energy chains Suitable for robot applications |
| Cable sheath colour | Blue |
| Material cable sheath | TPE-U(PUR) |

| Feature | Value |
|---------------------------------------|--|
| Material insulating sheath | PP |
| Wire ends | Wire ferrule |
| Type of mounting | Screw-clamped Insertable in the slot from above |
| Tightening torque | 0.1 Nm ... 0.6 Nm |
| Max. tightening torque | 0.6 Nm |
| Mounting position | Any |
| Product weight | 206 g |
| Housing colour | Black |
| Material housing | Reinforced PA High-alloy stainless steel |
| Switching status indication | Yellow LED |
| Ambient temperature with moving cable | -20 °C ... 85 °C |
| Degree of protection | IP65 IP68 |
| LABS (PWIS) conformity | VDMA24364-B2-L |