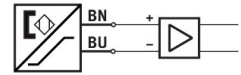


# Proximity switch SDBT-MS-20NL-ZN-E-2.5-LE-EX6

Part number: 8185110

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	<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
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	2.5 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	28 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