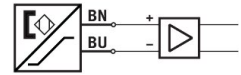


Proximity switch SDBT-MS-20NL-ZN-E-20-LE-EX6

Part number: 8185111

FESTO



[PDF](#) General operating condition

Data sheet

Feature	Value
Design	for T-slot
Based on norm	EN 60947-5-6
Symbol	00991433
Certification	RCM compliance mark c UL us - Listed (OL) c UL us - Listed (HazLoc)
CE marking (see declaration of conformity)	As per EU EMC directive as per EU explosion protection directive (ATEX) As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC acc. to UK EX instructions To UK RoHS instructions
Explosion prevention and 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
Type of ignition protection for gas	Class I, Division 1, Group A, B, C and D, T4 Class I, Zone 0, AEx ia IIC T4...T6 Ga Ex ia IIC T4...T6 Ga X
ATEX category for dust	II 1D
Type of (ignition) protection 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)
Explosive ambient temperature	T4, Zone 20, IIIC, with fixed cable installation: -40°C ≤ Ta ≤ +85°C T4, Zone 20, IIIC: -20°C ≤ Ta ≤ +85°C T6, with fixed cable routing: -40 °C ≤ Ta ≤ +45 °C T6: -20°C ≤ Ta ≤ +45°C
Max. input voltage Vi	28 V
Max. input current Ii	0.25 A
Max. input power Pi	T4: 350 mW T6: 72 mW
Effective internal inductance Li	30 µH
Effective internal capacitance Ci	79 nF
Certificate issuing authority	CSAE 22UKEX1322X DNV 17.0027 X GYJ20.1106X IECEX PTZ 18.0008X ML091200700NZ0 PTZ 16 ATEX 0010 X UL E232949 UL E539825
Special features	Oil-resistant
Note on materials	RoHS-compliant Halogen-free
Application note	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
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
Connection outlet orientation	Longitudinal
Connector cable test conditions	Flexural strength: as per Festo standard Test conditions on request
Cable length	20 m
Cable characteristic	Suitable for energy chains Suitable for robot applications

Feature	Value
Color cable sheath	Blue
Material of cable sheath	TPE-U(PUR)
Insulating sheath material	PP
Wire ends	Cable end sleeve
Type of mounting	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	206 g
Housing colour	Black
Housing material	High-alloy stainless steel
Switching status indication	LED yellow
Ambient temperature with flexible cable installation	-20 °C ... 85 °C
Degree of protection	IP65 IP68
LABS (PWIS) conformity	VDMA24364-B2-L