

1: threaded insert M3, depth 5.8 mm, max. tightening torque 1.2 Nm (screw fixing class 8.8) when brass insert in contact with counterpart.



Product characteristics

Inductive sensor

Rectangular, plastics

Cable

ATEX approval

Group II, category 1D

Group II, category 1G/2G

Sensing range 2 mm; [f] flush mountable

Electrical data

Electrical design

Connection to certified intrinsically safe circuits with the max. values $U = 15 \text{ V} / I = 50 \text{ mA} / P = 120 \text{ mW}$

Nominal voltage [V]

8.2 DC; (1k Ω)

Supply voltage [V]

7.5...30 DC; when used outside the hazardous area

Current consumption [mA]

< 1 disabled; (> 2.1 mA enabled)

Protection class

II

Outputs

Output function

normally closed

Current rating [mA]

< 30; when used outside the hazardous area

Switching frequency [Hz]

800

Monitoring range

Sensing range [mm]

2

Real sensing range (Sr) [mm]

$2 \pm 10 \%$

Accuracy / deviations

Correction factors

mild steel = 1 / stainless steel approx. 0.7 / brass approx. 0.5 / aluminium approx. 0.4 / copper approx. 0.3

Hysteresis [% of Sr]

1...15

Switch-point drift [% of Sr]

-10...10

Environment

Ambient temperature [°C]

-20...80

Protection

IP 67

Tests / approvals

Approval

PTB 01 ATEX 2191
BVS 04 ATEX E153
IECEx BVS 06.0003

Marking of the unit

Ⓔ II 1G Ex ia IIB T6 Ga
Ⓔ II 2G Ex ia IIC T6 Gb
Ⓔ II 1D Ex ia IIIC T 90°C Da

EMC

EN 60947-5-6

Shock / vibration resistance

30 g (11 ms) / 10-55 Hz (1 mm)

MTTF [Years]

5029

Safety classification

NN5001 - Inductive sensor - eclass: 27270101 / 27-27-01-01

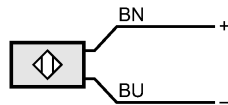
Internal capacitance	[nF]	< 110
Internal inductance	[μH]	< 135
Mechanical data		
Mounting		flush mountable
Housing materials		PBT
Weight	[kg]	0.148
Electrical connection		
Connection		PVC cable / 2 m; 2 x 0.5 mm ²

Wiring

Core colors

BN brown

BU blue



Remarks

Pack quantity	[piece]	1
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