

1: field connection



Product characteristics

Inductive sensor

Rectangular, plastics

Quick disconnect

Dual sensor for actuator feedback

For actuators using standard ISO 5211 (VDI/VDE 3845) mounting

ATEX approval

Group II, category 1D

Group II, category 2G

Sensing range 4 mm; [nf] non-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)

Current consumption [mA]

< 1 disabled; (> 2.2 mA enabled)

Protection class

III

Outputs

Output function

2 x normally closed

Switching frequency [Hz]

250

Monitoring range

Sensing range [mm]

4

Real sensing range (Sr) [mm]

4 \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...70

Protection

IP 67

Tests / approvals

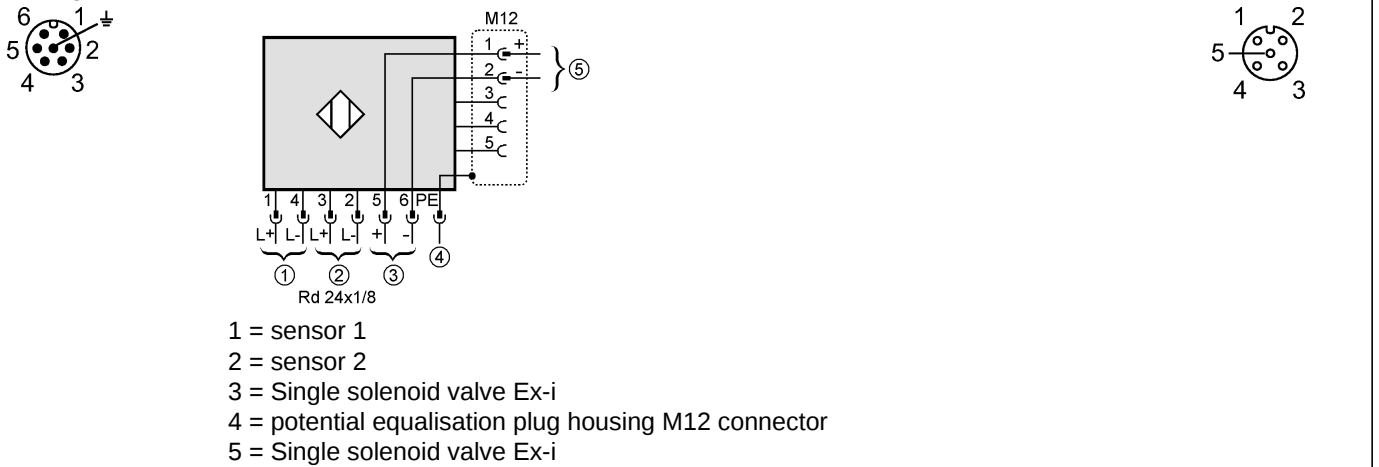
Approval

BVS 03 ATEX E131
BVS 04 ATEX E153
IECEX BVS 06.0003

N95001 - Inductive sensor - eclass: 27220590 / 27-22-05-90

Marking of the unit	<p>⊕ II 2G Ex ia IIC T6 Gb Ta: -20...70°C</p> <p>⊕ II 1D Ex ia IIIB T 90°C Da Ta: -20...70°C</p> <p>⊕ II 2G Ex ia IIC T5 Gb Ta: -20...80°C</p> <p>⊕ II 1D Ex ia IIIB T 100°C Da Ta: -20...80°C</p>
EMC	EN 60947-5-6
Shock / vibration resistance	30 g (11 ms) / 10-55 Hz (1 mm)
MTTF [Years]	1218
Safety classification	
Internal capacitance [nF]	< 150 **)
Internal inductance [μH]	< 150 **)
Mechanical data	
Mounting	non-flush mountable
Housing materials	housing: PBT; cover: PC
Weight [kg]	0.174
Displays / operating elements	
Output status indication LED	2 x yellow
Electrical connection	
Connection	Rd 24 x 1/8 connector 6 pins + PE / M12-connector 5 pins

Wiring



Remarks	
Remarks	<p>**) per intrinsically safe electric circuit</p> <p>Solenoid valve circuit Ex-i: only for connection to intrinsically safe certified circuits with the max. values U = 28 V DC / P = 2 W</p>
Pack quantity [piece]	1