

Product characteristics

Inductive sensor

Rectangular, plastics

Quick disconnect

ATEX approval

Group II, category 2G

Group II, category 1D

Sensing range 35 mm; [nfl] 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)

Supply voltage [V]

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

Current consumption [mA]

< 1 disabled; (> 2.1 mA enabled)

Protection class

III

Outputs

Output function

normally closed

Current rating [mA]

< 30; when used outside the hazardous area

Switching frequency [Hz]

100

Monitoring range

Sensing range [mm]

35

Real sensing range (Sr) [mm]

$35 \pm 10 \%$

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

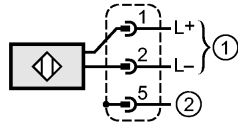
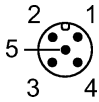
Approval

BVS 04 ATEX E 091 X
IECEx BVS 06.0003

NM501A - Inductive sensor - eclass: 27270101 / 27-27-01-01

Marking of the unit	<p>II 2G Ex ia IIB T6 Gb</p> <p>II 1D Ex ia IIIC T 90°C Da</p>
EMC	EN 60947-5-6
Shock / vibration resistance	30 g (11 ms) / 10-55 Hz (1 mm)
MTTF [Years]	2935
Safety classification	
Internal capacitance [nF]	< 220
Internal inductance [µH]	< 710
Mechanical data	
Mounting	non-flush mountable
Housing materials	housing: PPE; end cap: PPS; connector housing: brass special coating; Mounting adapter: PPS
Weight [kg]	0.193
Displays / operating elements	
Output status indication LED	yellow
Electrical connection	
Connection	M12 connector

Wiring



- 1 = connection to NAMUR-amplifier
2 = Potential equalisation plug housing

Accessories	
Accessories (included)	Mounting bracket; hex-wrench
Remarks	
Remarks	5 positions of the active zone possible
Pack quantity [piece]	1