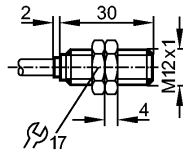


NF5002

IFA2002-N/1D/1G

Inductive sensors



Product characteristics

Inductive sensor
Metal thread M12 x 1
Cable
ATEX approval
Group II, category 1D
Group II, category 2G
Sensing range 2 mm; [f] flush mountable

Electrical data

Electrical design	Connection to certified intrinsically safe circuits with the max. values U = 15 V / I = 50 mA / P = 120 mW
Nominal voltage [V]	8.2 DC; (1kΩ)
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]	1200

Monitoring range

Sensing range [mm]	2
Real sensing range (Sr) [mm]	2 ± 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, when used outside hazardous areas
Protection	IP 67

Tests / approvals

Approval	PTB 01 ATEX 2191 BVS 04 ATEX E153 IECEX BVS 06.0003 TIIS TC16107
Marking of the unit	⊕ II 1G Ex ia IIC T6 Ga Ta: -20...70° C ⊕ II 1G Ex ia IIC T5 Ga Ta: -20...80° C ⊕ II 1D Ex ia IIIC T90° C Da Ta: -20...70° C ⊕ II 1D Ex ia IIIC T100° C Da Ta: -20...80° C
EMC	EN 60947-5-6

NF5002

IFA2002-N/1D/1G

Inductive sensors

Shock / vibration resistance	30 g (11 ms) / 10-55 Hz (1 mm)
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MTTF [Years]	5096
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Safety classification

Internal capacitance [nF]	< 140
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Internal inductance [μH]	< 340
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Mechanical data

Mounting	flush mountable
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Housing materials	brass special coating; active face: PC
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Weight [kg]	0.134
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Electrical connection

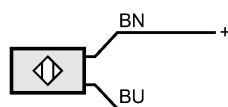
Connection	PVC cable / 2 m; 2 x 0.34 mm ²
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Wiring

Core colors

BN brown

BU blue



Accessories

Accessories (included)	2 lock nuts
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Remarks

Pack quantity [piece]	1
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