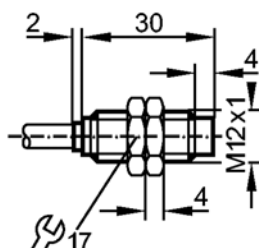


NF5030

IFA2004-N/V2A/6M/1D/1G

Inductive sensors



Product characteristics

Inductive sensor

Metal thread M12 x 1

Cable

ATEX approval

Group II, category 1D

Group II, category 1G/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)
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]	1500

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 / Al approx. 0.4 / Cu 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 TIIS TC16107 IECEx BVS 06.0003
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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
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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
Shock / vibration resistance	30 g (11 ms) / 10-55 Hz (1 mm)
MTTF [Years]	5096

Safety classification

Internal capacitance [nF]	< 141
Internal inductance [μH]	< 134

Mechanical data

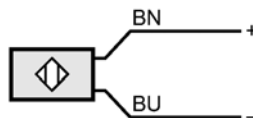
Mounting	non-flush mountable
Housing materials	stainless steel; PBT
Weight [kg]	0.253

Electrical connection

Connection	PVC cable / 6 m; 2 x 0.34 mm ²
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Wiring

Core colours
 BN brown
 BU blue

**Accessories**

Accessories (included)	2 lock nuts
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Remarks

Pack quantity [piece]	1
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