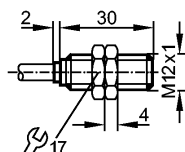


**NF5012**

IFA2002-N/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 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; (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]		$2 \pm 10 \%$

**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 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
Shock / vibration resistance		30 g (11 ms) / 10-55 Hz (1 mm)

**NF5012**

IFA2002-N/6M/1D/1G

**Inductive sensors**

MTTF	[Years]	5096
------	---------	------

**Safety classification**

Internal capacitance	[nF]	< 141
Internal inductance	[μH]	< 344

**Mechanical data**

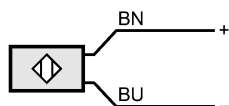
Mounting		flush mountable
Housing materials		brass white bronze coated; active face: PC
Weight	[kg]	0.255

**Electrical connection**

Connection		PVC cable / 6 m; 2 x 0.34 mm <sup>2</sup>
------------	--	---

**Wiring**

Core colors  
 BN brown  
 BU blue



**Accessories**

Accessories (included)		2 lock nuts
------------------------	--	-------------

**Remarks**

Pack quantity	[piece]	1
---------------	---------	---