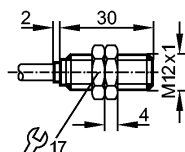


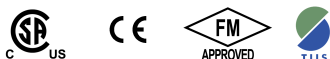
**NF5003**

IF-2004-N/1D/2G

**Inductive sensors**



Made in Germany



**Product characteristics**

Inductive sensor
Plastic thread M12 x 1
Cable
ATEX approval
Group II, category 1D/1G
Sensing range 4 mm; [nf] non-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]	1500	

**Range**

Sensing range [mm]	4	
Real sensing range (Sr) [mm]	4 ± 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	
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)	
MTTF [Years]	5096	

## NF5003

IF-2004-N/1D/2G

Inductive sensors

### Safety classification

Internal capacitance	[nF]	< 140
Internal inductance	[μH]	< 130

### Mechanical data

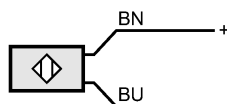
Mounting		non-flush mountable
Housing materials		PBT
Weight	[kg]	0.118

### Electrical connection

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