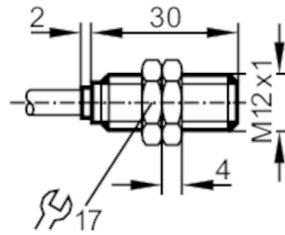


# NF5003



## Inductive NAMUR sensor

IF-2004-N/1D/1G



Product characteristics	
Electrical design	NAMUR
Output function	normally closed
Sensing range [mm]	4
Housing	Threaded type
Dimensions [mm]	M12 x 1 / L = 30
Electrical data	
Connection at circuit amplifier	yes
Switching amplifiers	connection to certified intrinsically safe circuits with the max. values: U = 15 V / I = 50 mA / P = 120 mW
Nominal voltage DC [V]	8.2; (1kΩ)
Supply voltage DC [V]	7.5...30; (when used outside the hazardous area)
Current consumption [mA]	< 1; (disabled; conductive: > 2,1)
Protection class	III
Outputs	
Electrical design	NAMUR
Output function	normally closed
Permanent current rating of switching output DC [mA]	30; (when used outside the hazardous area)
Switching frequency DC [Hz]	1500
Monitoring range	
Sensing range [mm]	4
Real sensing range Sr [mm]	4 ± 10 %
Accuracy / deviations	
Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 0.4 / copper: 0.3
Hysteresis [% of Sr]	1...15
Switch-point drift [% of Sr]	-10...10
Operating conditions	
Ambient temperature [°C]	-20...80
Protection	IP 67

# NF5003



## Inductive NAMUR sensor

IF-2004-N/1D/1G

Tests / approvals									
Approval	PTB 01 ATEX 2191; BVS 04 ATEX E153; TIIS TC16107; IECEx BVS 06.0003								
ATEX marking	<table border="0"> <tr> <td style="text-align: center;">Ⓔ</td> <td>II 1G Ex ia IIC T6 Ga Ta: -20...70° C</td> </tr> <tr> <td style="text-align: center;">Ⓔ</td> <td>II 1G Ex ia IIC T5 Ga Ta: -20...80° C</td> </tr> <tr> <td style="text-align: center;">Ⓔ</td> <td>II 1D Ex ia IIIC T90° C Da Ta: -20...70° C</td> </tr> <tr> <td style="text-align: center;">Ⓔ</td> <td>II 1D Ex ia IIIC T100° C Da Ta: -20...80° C</td> </tr> </table>	Ⓔ	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
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Ⓔ	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]	4736								

Safety classification	
Max. internal capacitance [nF]	140
Max. internal inductance [μH]	130

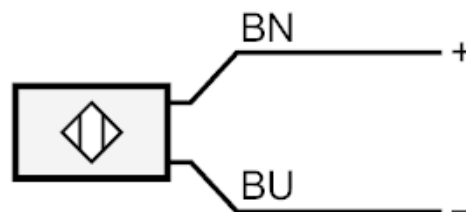
Mechanical data	
Weight [g]	121.5
Housing	Threaded type
Mounting	non-flush mountable
Dimensions [mm]	M12 x 1 / L = 30
Thread designation	M12 x 1
Material	PBT

Accessories	
Items supplied	lock nuts: 2

Remarks	
Pack quantity	1 pcs.

Electrical connection	
Cable: 2 m, PVC; 2 x 0.34 mm <sup>2</sup>	

### Connection



Core colors :  
 BN = brown  
 BU = blue