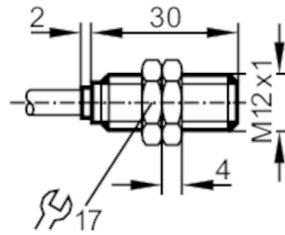


# NF5001



## Inductive NAMUR sensor

IF-2002-N/1D/1G



### Product characteristics

Electrical design	NAMUR	
Output function	normally closed	
Sensing range [mm]	2	
Housing	threaded type	
Dimensions [mm]	M12 x 1 / L = 30	

### Electrical data

Connection to switching amplifiers	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]	1200	

### Detection zone

Sensing range [mm]	2	
Real sensing range Sr [mm]	2 ± 10 %	

### Accuracy / deviations

Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 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	

# NF5001



## Inductive NAMUR sensor

IF-2002-N/1D/1G

Tests / approvals	
Approval	PTB 01 ATEX 2191; BVS 04 ATEX E153; TIIS TC16107; IECEx BVS 06.0003
ATEX marking	$\text{Ex}$ II 1G Ex ia IIC T6 Ga Ta: -20...70° C
	$\text{Ex}$ II 1G Ex ia IIC T5 Ga Ta: -20...80° C
	$\text{Ex}$ II 1D Ex ia IIIC T90° C Da Ta: -20...70° C
	$\text{Ex}$ 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]	340

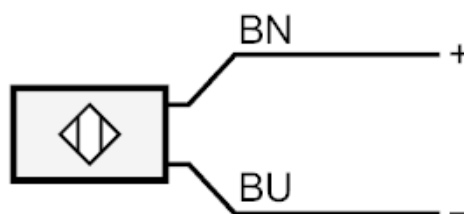
Mechanical data	
Weight [g]	119
Housing	threaded type
Mounting	flush mountable
Dimensions [mm]	M12 x 1 / L = 30
Thread designation	M12 x 1
Materials	PBT

Accessories	
Accessories (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 colours :

BN = brown  
BU = blue