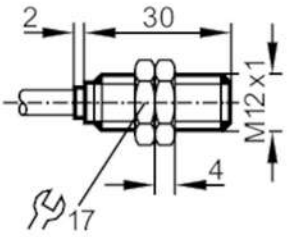
# NF5012

## Inductive NAMUR sensor

IFA2002-N/6M/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 |
| **Tests / approvals** | | |
| Approval | | PTB 01 ATEX 2191; BVS 04 ATEX E153; TIIS TC16107; IECEx BVS 06.0003 |

# NF5012

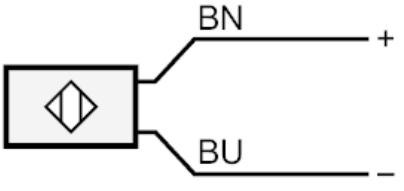
## Inductive NAMUR sensor

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

| | | |
|---|---|---|
| ATEX marking | | 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] | 4736 |
| **Safety classification** | | |
| Max. internal capacitance | [nF] | 141 |
| Max. internal inductance | [µH] | 344 |
| **Mechanical data** | | |
| Weight | [g] | 254 |
| Housing | | threaded type |
| Mounting | | flush mountable |
| Dimensions | [mm] | M12 x 1 / L = 30 |
| Thread designation | | M12 x 1 |
| Materials | | brass white bronze coated; sensing face: PC |
| **Accessories** | | |
| Items supplied | | lock nuts: 2 |
| **Remarks** | | |
| Pack quantity | | 1 pcs. |
| **Electrical connection** | | |

Cable: 6 m, PVC; 2 x 0.34 mm²

Connection




| | |
|---|---|
| | Core colours : |
| BN = | brown |
| BU = | blue |