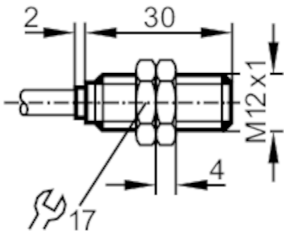




Inductive NAMUR sensor

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 E 153 X; IECEx BVS 06.0003X; TIIS TC16107                                     |

# 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 T20090°C Da Ta: -20...70°C   |
|                            | II 1D Ex ia IIIC T200100° 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 |
|----------------|--------------|

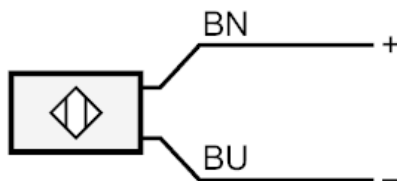
### Remarks

|               |        |
|---------------|--------|
| Pack quantity | 1 pcs. |
|---------------|--------|

### Electrical connection

Cable: 6 m, PVC; 2 x 0.34 mm²

### Connection



BN = Core colours : brown  
BU = blue