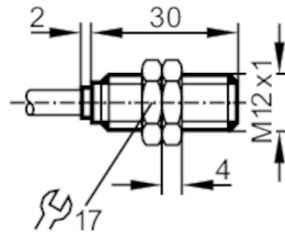




## Inductive NAMUR sensor

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    |

### Tests / approvals

|          |                                                                     |
|----------|---------------------------------------------------------------------|
| Approval | PTB 01 ATEX 2191; BVS 04 ATEX E153; TIIS TC16107; IECEx BVS 06.0003 |
|----------|---------------------------------------------------------------------|



## Inductive NAMUR sensor

IF-2002-N/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] | 140 |
| Max. internal inductance [μH]  | 340 |

### Mechanical data

|                    |                  |
|--------------------|------------------|
| Weight [g]         | 119.5            |
| Housing            | threaded type    |
| Mounting           | flush mountable  |
| Dimensions [mm]    | M12 x 1 / L = 30 |
| Thread designation | M12 x 1          |
| Materials          | PBT              |

### Accessories

|                |              |
|----------------|--------------|
| Items supplied | lock nuts: 2 |
|----------------|--------------|

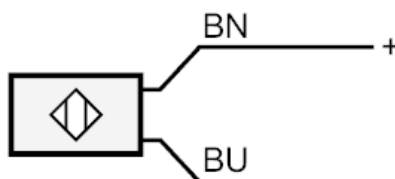
### Remarks

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

### Electrical connection

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

### Connection



BN = Core colours :  
brown  
BU = blue