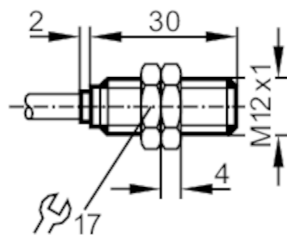




## Inductive NAMUR sensor

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 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]                          | 1200                                       |

## Monitoring range

|                            |          |
|----------------------------|----------|
| Sensing range [mm]         | 2        |
| Real sensing range Sr [mm] | 2 ± 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    |

## Tests / approvals

|              |                                                                         |
|--------------|-------------------------------------------------------------------------|
| Approval     | PTB 01 ATEX 2191; BVS 04 ATEX E 153 X; IECEx BVS 06.0003X; TIIS TC16107 |
| ATEX marking | Ex II 1G Ex ia IIC T6 Ga Ta -20...70°C                                  |

# NF5001



## Inductive NAMUR sensor

IF-2002-N/1D/1G

|                            |         |                                                |
|----------------------------|---------|------------------------------------------------|
|                            |         | II 1G Ex ia IIC T5 Ga Ta -20...80°C            |
|                            |         | II 1D Ex ia IIIC T200 90°C Da Ta: -20...70°C   |
|                            |         | II 1D Ex ia IIIC T200 100° 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]  | 126.45           |
| Housing            |      | Threaded type    |
| Mounting           |      | flush mountable  |
| Dimensions         | [mm] | M12 x 1 / L = 30 |
| Thread designation |      | M12 x 1          |
| Material           |      | PBT              |

### Accessories

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

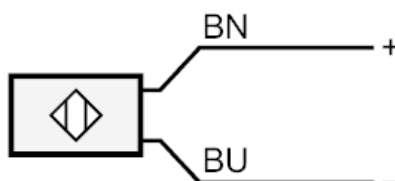
### Remarks

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

### Electrical connection

Cable: 2 m, PVC; 2 x 0.34 mm²

### Connection



Core colors :  
 BN = brown  
 BU = blue