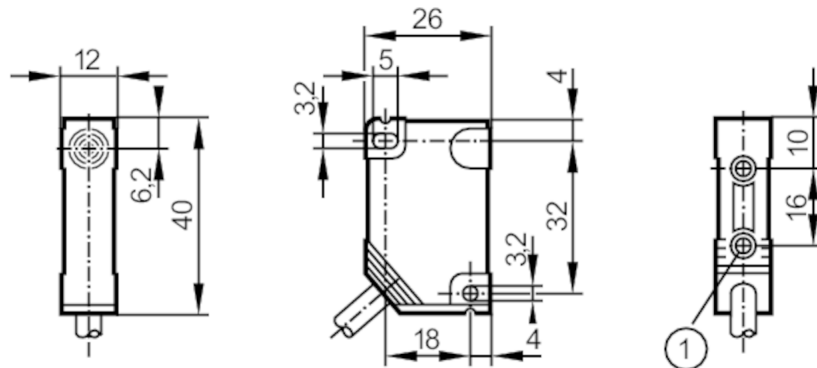




## Inductive NAMUR sensor

IN-2002-N/1D/1G/2G



- 1 threaded bush M3 Depth 5.8 mm  
Tightening torque maximum 1.2 Nm screw fixing class 8.8  
when brass insert in contact with counterpart



### 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                   | II                                                                                                          |

### 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]                          | 800                                        |

### 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    |

# NN5001



## Inductive NAMUR sensor

IN-2002-N/1D/1G/2G

| Tests / approvals          |                                                                                                              |
|----------------------------|--------------------------------------------------------------------------------------------------------------|
| Approval                   | PTB 01 ATEX 2191; BVS 04 ATEX E153; IECEx BVS 06.0003                                                        |
| ATEX marking               |  II 1G Ex ia IIB T6 Ga      |
|                            |  II 2G Ex ia IIC T6 Gb      |
|                            |  II 1D Ex ia IIIC T 90°C Da |
| EMC                        | EN 60947-5-6                                                                                                 |
| Shock/vibration resistance | 30 g (11 ms) / 10-55 Hz (1 mm)                                                                               |
| MTTF [years]               | 5029                                                                                                         |

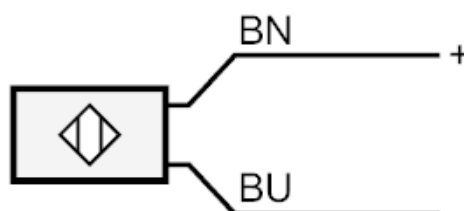
| Safety classification          |     |
|--------------------------------|-----|
| Max. internal capacitance [nF] | 110 |
| Max. internal inductance [μH]  | 135 |

| Mechanical data |                 |
|-----------------|-----------------|
| Weight [g]      | 148.2           |
| Housing         | rectangular     |
| Mounting        | flush mountable |
| Dimensions [mm] | 40 x 12 x 26    |
| Materials       | PBT             |

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

| Electrical connection                    |  |
|------------------------------------------|--|
| Cable: 2 m, PVC; 2 x 0.5 mm <sup>2</sup> |  |

### Connection



Core colours :

BN = brown  
BU = blue