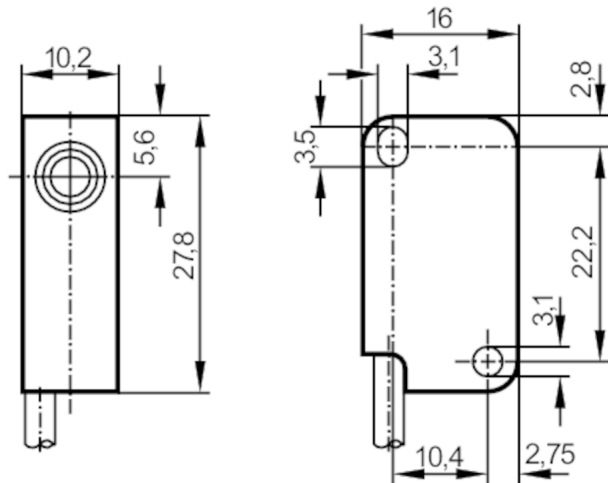


# NS5002



## Induktiver NAMUR-Sensor

IS-2002-N/OLED/1D/1G



### Product characteristics

|                    |                 |
|--------------------|-----------------|
| Electrical design  | NAMUR           |
| Output function    | normally closed |
| Sensing range [mm] | 2               |
| Housing            | rectangular     |
| Dimensions [mm]    | 28 x 10 x 16    |

### 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; (1k $\Omega$ )                                                                                         |
| Supply voltage DC [V]              | 7.5...30; (when used outside the hazardous area)                                                            |
| Current consumption [mA]           | < 1; (disabled; conductive: > 2,1)                                                                          |

### 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 $\pm$ 10 % |

### Accuracy / deviations

|                          |                                                                             |
|--------------------------|-----------------------------------------------------------------------------|
| Correction factor        | steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.4 / copper: 0.3 |
| Hysteresis [X01]         | 1...15                                                                      |
| Switch point drift [X01] | -10...10                                                                    |

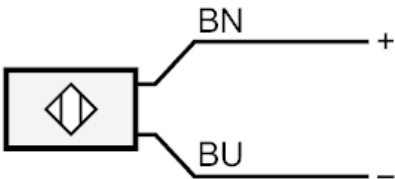
# NS5002



## Induktiver NAMUR-Sensor

IS-2002-N/OLED/1D/1G

| Operating conditions          |                                                           |              |
|-------------------------------|-----------------------------------------------------------|--------------|
| Ambient temperature           | [°C]                                                      | -20...70     |
| Protection                    |                                                           | IP 67        |
| Tests / approvals             |                                                           |              |
| Approval                      | PTB 01 ATEX 2191; BVS 04 ATEX E 153 X; IECEX BVS 06.0003X |              |
| ATEX marking                  | Ⓔ II 1G Ex ia IIB T6 Ga Ta -20...70°C                     |              |
|                               | Ⓔ II 1G Ex ia IIB T5 Ga Ta -20...80°C                     |              |
|                               | Ⓔ II 2G Ex ia IIC T6 Gb Ta -20...70°C                     |              |
|                               | Ⓔ II 2G Ex ia IIC T5 Gb 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                          | [ANN]                                                     | 4776         |
| Safety classification         |                                                           |              |
| Max. internal capacitance     | [nF]                                                      | 80           |
| Max. internal inductance      | [μH]                                                      | 110          |
| Mechanical data               |                                                           |              |
| Weight                        | [g]                                                       | 85           |
| Housing                       | rectangular                                               |              |
| Mounting                      | flush mountable                                           |              |
| Dimensions                    | [mm]                                                      | 28 x 10 x 16 |
| Materials                     | PBT                                                       |              |
| Remarks                       |                                                           |              |
| Pack quantity                 | 1 pcs.                                                    |              |
| Electrical connection         |                                                           |              |
| Cable: 2 m, PVC; 2 x 0.14 mm² |                                                           |              |
| Connection                    |                                                           |              |



BN = Core colours : brown  
BU = blue