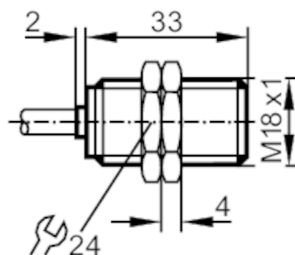




## Inductive NAMUR sensor

IG-2005-N/1D/1G



### Product characteristics

|                    |                  |
|--------------------|------------------|
| Electrical design  | NAMUR            |
| Output function    | normally closed  |
| Sensing range [mm] | 5                |
| Housing            | threaded type    |
| Dimensions [mm]    | M18 x 1 / L = 33 |

### 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]                          | 720                                        |

### Detection zone

|                            |          |
|----------------------------|----------|
| Sensing range [mm]         | 5        |
| Real sensing range Sr [mm] | 5 ± 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

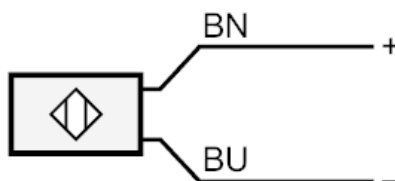
|                          |          |
|--------------------------|----------|
| Ambient temperature [°C] | -20...80 |
| Protection               | IP 67    |



## Inductive NAMUR sensor

IG-2005-N/1D/1G

| Tests / approvals                        |                                                                                                              |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Approval                                 | PTB 01 ATEX 2191; BVS 04 ATEX E153; TIIS TC16108; 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]                             | 4697                                                                                                         |
| Safety classification                    |                                                                                                              |
| Max. internal capacitance [nF]           | 145                                                                                                          |
| Max. internal inductance [μH]            | 45                                                                                                           |
| Mechanical data                          |                                                                                                              |
| Weight [g]                               | 147                                                                                                          |
| Housing                                  | threaded type                                                                                                |
| Mounting                                 | flush mountable                                                                                              |
| Dimensions [mm]                          | M18 x 1 / L = 33                                                                                             |
| Thread designation                       | M18 x 1                                                                                                      |
| Materials                                | PBT                                                                                                          |
| Accessories                              |                                                                                                              |
| Items supplied                           | lock nuts: 2                                                                                                 |
| Remarks                                  |                                                                                                              |
| Pack quantity                            | 1 pcs.                                                                                                       |
| Electrical connection                    |                                                                                                              |
| Cable: 2 m, PVC; 2 x 0.5 mm <sup>2</sup> |                                                                                                              |
| Connection                               |                                                                                                              |



BN = Core colours : brown  
BU = blue