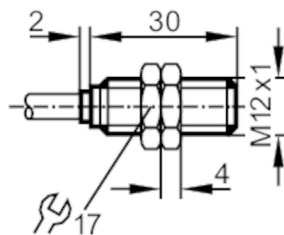




## Inductive NAMUR sensor

IF-2004-N/6M/1D/1G



### Product characteristics

|                    |                  |
|--------------------|------------------|
| Electrical design  | NAMUR            |
| Output function    | normally closed  |
| Sensing range [mm] | 4                |
| 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]                          | 1500                                       |

### Monitoring range

|                            |          |
|----------------------------|----------|
| Sensing range [mm]         | 4        |
| Real sensing range Sr [mm] | 4 ± 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                                  |

NF5010



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|                            |                                                |
|----------------------------|------------------------------------------------|
|                            | 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                                           |

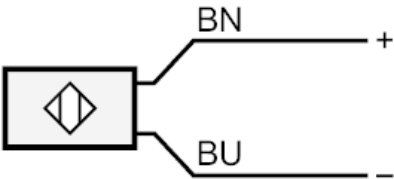
|                                |     |
|--------------------------------|-----|
| Safety classification          |     |
| Max. internal capacitance [nF] | 141 |
| Max. internal inductance [µH]  | 134 |

|                    |                     |
|--------------------|---------------------|
| Mechanical data    |                     |
| Weight [g]         | 243.5               |
| Housing            | Threaded type       |
| Mounting           | non-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: 6 m, PVC; 2 x 0.34 mm² |  |
| Connection                    |  |



BN = Core colors : brown  
BU = blue