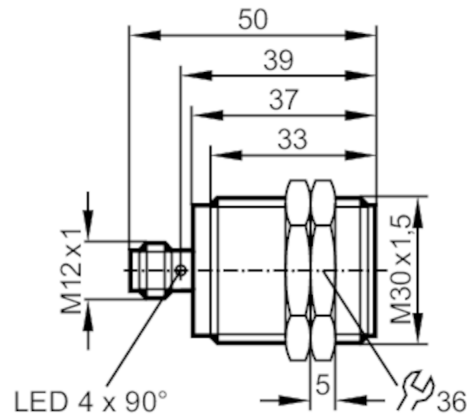


NI501A



Inductive NAMUR sensor

IIB2015BN/US/1G/1D



Product characteristics

| | |
|--------------------|--------------------|
| Electrical design | NAMUR |
| Output function | normally closed |
| Sensing range [mm] | 15 |
| Housing | threaded type |
| Dimensions [mm] | M30 x 1.5 / L = 50 |

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] | 100 |

Detection zone

| | |
|----------------------------|-----------|
| Sensing range [mm] | 15 |
| Real sensing range Sr [mm] | 15 ± 10 % |
| Operating distance [mm] | 0...12.15 |

Accuracy / deviations




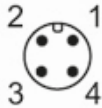
| | |
|------------------------------|---|
| Correction factor | steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.4 / copper: 0.3 |
| Hysteresis [% of Sr] | 1...15 |
| Switch point drift [% of Sr] | -10...10 |

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Inductive NAMUR sensor

IIB2015BN/US/1G/1D

| Operating conditions | | |
|---|------------------|--|
| Ambient temperature | [°C] | -20...70 |
| Protection | | IP 67 |
| Tests / approvals | | |
| Approval | | BVS 04 ATEX E 091 X; 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] | 2514 |
| Safety classification | | |
| Max. internal capacitance | [nF] | 230 |
| Max. internal inductance | [µH] | 210 |
| Mechanical data | | |
| Weight | [g] | 88.5 |
| Housing | | threaded type |
| Mounting | | flush mountable |
| Dimensions | [mm] | M30 x 1.5 / L = 50 |
| Thread designation | | M30 x 1.5 |
| Materials | | brass special coating; sensing face: PBT; plug: PA |
| Displays / operating elements | | |
| Display | switching status | 4 x 90° LED, yellow |
| Accessories | | |
| Accessories (supplied) | | lock nuts: 2 |
| Remarks | | |
| Pack quantity | | 1 pcs. |
| Electrical connection - plug | | |
| Connector: 1 x M12 | | |
|  | | |

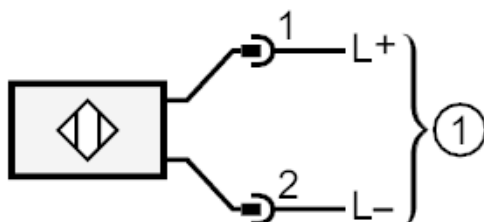
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Connection



1 = connection to NAMUR amplifiers