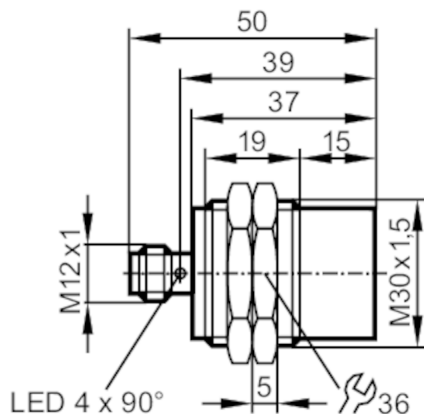




## Inductive NAMUR sensor

IIB2022-N/US/1G/1D



| Product characteristics                              |                                                                                                             |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Electrical design                                    | NAMUR                                                                                                       |
| Output function                                      | normally closed                                                                                             |
| Sensing range [mm]                                   | 22                                                                                                          |
| 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]                                   | 22                                                                                                          |
| Real sensing range Sr [mm]                           | 22 ± 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...70                                                                                                    |

# NI500A



## Inductive NAMUR sensor

IIB2022-N/US/1G/1D

|                                                                                                |  |                                                          |                     |
|------------------------------------------------------------------------------------------------|--|----------------------------------------------------------|---------------------|
| Protection                                                                                     |  | IP 67                                                    |                     |
| Tests / approvals                                                                              |  |                                                          |                     |
| Approval                                                                                       |  | BVS 04 ATEX E 091 X; IECEx BVS 06.0003                   |                     |
| ATEX marking                                                                                   |  | <div>II 1G Ex ia IIB T6 Ga</div>                         |                     |
|                                                                                                |  | <div>II 2G Ex ia IIC T6 Gb</div>                         |                     |
|                                                                                                |  | <div>II 1D Ex ia IIIC T 90°C Da</div>                    |                     |
| EMC                                                                                            |  | EN 60947-5-6                                             |                     |
| Shock/vibration resistance                                                                     |  | 30 g (11 ms) / 10-55 Hz (1 mm)                           |                     |
| MTTF [years]                                                                                   |  | 2455                                                     |                     |
| Safety classification                                                                          |  |                                                          |                     |
| Max. internal capacitance [nF]                                                                 |  | 250                                                      |                     |
| Max. internal inductance [μH]                                                                  |  | 120                                                      |                     |
| Mechanical data                                                                                |  |                                                          |                     |
| Weight [g]                                                                                     |  | 153.4                                                    |                     |
| Housing                                                                                        |  | threaded type                                            |                     |
| Mounting                                                                                       |  | non-flush mountable                                      |                     |
| Dimensions [mm]                                                                                |  | M30 x 1.5 / L = 50                                       |                     |
| Thread designation                                                                             |  | M30 x 1.5                                                |                     |
| Materials                                                                                      |  | brass special coating; sensing face: PBT; LED window: PA |                     |
| Displays / operating elements                                                                  |  |                                                          |                     |
| Display                                                                                        |  | switching status                                         | 4 x 90° LED, yellow |
| Accessories                                                                                    |  |                                                          |                     |
| Items supplied                                                                                 |  | lock nuts: 2                                             |                     |
| Remarks                                                                                        |  |                                                          |                     |
| Pack quantity                                                                                  |  | 1 pcs.                                                   |                     |
| Electrical connection - plug                                                                   |  |                                                          |                     |
| Connector: 1 x M12; coding: A                                                                  |  |                                                          |                     |
| <div></div> |  |                                                          |                     |

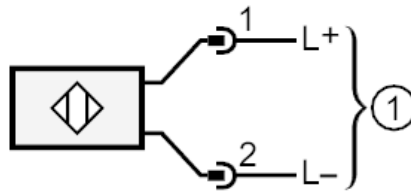
# NI500A



## Inductive NAMUR sensor

IIB2022-N/US/1G/1D

### Connection



1 = connection to NAMUR amplifiers