

# Inductive sensor

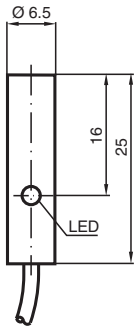
## NCB1,5-6,5M25-N0



- 1.5 mm flush
- NAMUR output
- Stainless steel housing
- Polarity reversal protected



### Dimensions



### Technical Data

#### General specifications

|                            |       |                       |
|----------------------------|-------|-----------------------|
| Switching function         |       | Normally closed (NC)  |
| Output type                |       | NAMUR                 |
| Rated operating distance   | $s_n$ | 1.5 mm                |
| Installation               |       | flush                 |
| Assured operating distance | $s_a$ | 0 ... 1.215 mm        |
| Actual operating distance  | $s_r$ | 1.35 ... 1.65 mm typ. |
| Reduction factor $r_{AI}$  |       | 0.22                  |
| Reduction factor $r_{Cu}$  |       | 0.19                  |
| Reduction factor $r_{304}$ |       | 0.65                  |
| Output type                |       | 2-wire                |

#### Nominal ratings

|                             |       |                                      |
|-----------------------------|-------|--------------------------------------|
| Nominal voltage             | $U_o$ | 8.2 V ( $R_i$ approx. 1 k $\Omega$ ) |
| Switching frequency         | $f$   | 0 ... 2000 Hz                        |
| Hysteresis                  | $H$   | 1 ... 10 % typ. 3 %                  |
| Reverse polarity protection |       | reverse polarity protected           |
| Short-circuit protection    |       | yes                                  |

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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## Technical Data

|                                                 |                                                      |
|-------------------------------------------------|------------------------------------------------------|
| Suitable for 2:1 technology                     | yes , Reverse polarity protection diode not required |
| Current consumption                             |                                                      |
| Measuring plate not detected                    | min. 3 mA                                            |
| Measuring plate detected                        | ≤ 1 mA                                               |
| Switching state indicator                       | LED, yellow                                          |
| <b>Functional safety related parameters</b>     |                                                      |
| MTTF <sub>d</sub>                               | 3330 a                                               |
| Mission Time (T <sub>M</sub> )                  | 20 a                                                 |
| Diagnostic Coverage (DC)                        | 0 %                                                  |
| <b>Compliance with standards and directives</b> |                                                      |
| Standard conformity                             |                                                      |
| NAMUR                                           | EN 60947-5-6:2000<br>IEC 60947-5-6:1999              |
| Standards                                       | EN IEC 60947-5-2                                     |
| <b>Approvals and certificates</b>               |                                                      |
| IECEX approval                                  |                                                      |
| Equipment protection level Gb                   | IECEX PTB 11.0037X                                   |
| Equipment protection level Da                   | IECEX PTB 11.0037X                                   |
| Equipment protection level Mb                   | IECEX PTB 11.0037X                                   |
| ATEX approval                                   |                                                      |
| Equipment protection level Gb                   | PTB 00 ATEX 2048 X                                   |
| Equipment protection level Da                   | PTB 00 ATEX 2048 X                                   |
| UL approval                                     | cULus Listed, General Purpose                        |
| CCC approval                                    |                                                      |
| Hazardous Location                              | 2020322315002256                                     |
| CML approval                                    | on request                                           |
| ANZEx                                           | 18.3018X                                             |
| <b>Ambient conditions</b>                       |                                                      |
| Ambient temperature                             | -25 ... 100 °C (-13 ... 212 °F)                      |
| Storage temperature                             | -40 ... 100 °C (-40 ... 212 °F)                      |
| <b>Mechanical specifications</b>                |                                                      |
| Connection type                                 | cable                                                |
| Housing material                                | Stainless steel 1.4305 / AISI 303                    |
| Sensing face                                    | LCP                                                  |
| Degree of protection                            | IP67                                                 |
| Cable                                           |                                                      |
| Wire end ferrules                               | yes                                                  |
| Cable diameter                                  | 2.6 mm ± 0.2 mm                                      |
| Bending radius                                  | > 10 x cable diameter                                |
| Material                                        | PVC                                                  |
| Color                                           | blue                                                 |
| Number of cores                                 | 2                                                    |
| Core cross section                              | 0.14 mm <sup>2</sup>                                 |
| Length                                          | L 2 m                                                |
| Dimensions                                      |                                                      |
| Length                                          | 25 mm                                                |
| Diameter                                        | 6.5 mm                                               |
| <b>General information</b>                      |                                                      |
| Use in the hazardous area                       | see instruction manuals                              |

## Connection Assignment

