

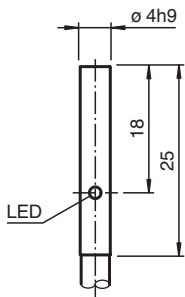
# Inductive sensor

## NBB1,5-4M25-E2

■ Basic series



### Dimensions



### Technical Data

#### General specifications

|                              |       |                    |
|------------------------------|-------|--------------------|
| Switching function           |       | Normally open (NO) |
| Output type                  |       | PNP                |
| Rated operating distance     | $s_n$ | 1.5 mm             |
| Installation                 |       | flush              |
| Output polarity              |       | DC                 |
| Assured operating distance   | $s_a$ | 0 ... 1.215 mm     |
| Reduction factor $r_{Al}$    |       | 0.46               |
| Reduction factor $r_{Cu}$    |       | 0.41               |
| Reduction factor $r_{304}$   |       | 0.89               |
| Reduction factor $r_{Brass}$ |       | 0.59               |
| Output type                  |       | 3-wire             |

#### Nominal ratings

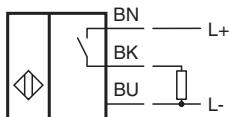
|                             |       |  |
|-----------------------------|-------|--|
| Operating voltage           | $U_B$ | 10 ... 30 V                            |
| Switching frequency         | $f$   | 0 ... 3000 Hz                          |
| Hysteresis                  | $H$   | 1 ... 15 %                             |
| Reverse polarity protection |       | reverse polarity protected             |
| Short-circuit protection    |       | yes                                    |
| Voltage drop                | $U_d$ | $\leq 3$ V                             |
| Operating current           | $I_L$ | 0 ... 200 mA                           |
| Off-state current           | $I_r$ | 0 ... 0.1 mA typ. 0.1 $\mu$ A at 25 °C |
| No-load supply current      | $I_o$ | $\leq 10$ mA                           |

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## Technical Data

|   |  |     |
|---|--|-----|
| Switching state indicator                       | LED, yellow  |     |
| <b>Compliance with standards and directives</b> |  |     |
| Standard conformity                             |  |     |
| Standards                                       | EN IEC 60947-5-2   |     |
| <b>Approvals and certificates</b>               |  |     |
| UL approval                                     | cULus Listed, General Purpose                                      |     |
| CCC approval                                    | CCC approval / marking not required for products rated $\leq 36$ V |     |
| <b>Ambient conditions</b>                       |  |     |
| Ambient temperature                             | -25 ... 70 °C (-13 ... 158 °F)                                     |     |
| <b>Mechanical specifications</b>                |  |     |
| Connection type                                 | cable  |     |
| Housing material                                | Stainless steel 1.4305 / AISI 303                                  |     |
| Sensing face                                    | POM  |     |
| Degree of protection                            | IP67   |     |
| <b>Cable</b>                                    |  |     |
| Wire end ferrules                               | yes  |     |
| Cable diameter                                  | 3 mm $\pm$ 0.2 mm  |     |
| Bending radius                                  | > 10 x cable diameter  |     |
| Material  | PVC  |     |
| Color   | grey   |     |
| Number of cores                                 | 3  |     |
| Core cross section                              | 0.14 mm <sup>2</sup>   |     |
| Length  | L  | 2 m |
| <b>Dimensions</b>                               |  |     |
| Length  | 25 mm  |     |
| Diameter  | 4 mm   |     |

## Connection



## Mounting

