

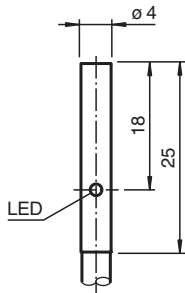
# Inductive sensor

## NBB0,8-4M25-E2-5M

■ Basic series



### Dimensions



### Technical Data

#### General specifications

|                            |       |                    |
|----------------------------|-------|--------------------|
| Switching function         |       | Normally open (NO) |
| Output type                |       | PNP                |
| Rated operating distance   | $s_n$ | 0.8 mm             |
| Installation               |       | flush              |
| Output polarity            |       | DC                 |
| Assured operating distance | $s_a$ | 0 ... 0.648 mm     |
| Reduction factor $r_{Al}$  |       | 0.45               |
| Reduction factor $r_{Cu}$  |       | 0.4                |
| Reduction factor $r_{304}$ |       | 0.77               |
| Output type                |       | 3-wire             |

#### Nominal ratings

|                             |       |  |
|-----------------------------|-------|--|
| Operating voltage           | $U_B$ | 10 ... 30 V                            |
| Switching frequency         | $f$   | 0 ... 3000 Hz                          |
| Hysteresis                  | $H$   | type 5 %                               |
| Reverse polarity protection |       | reverse polarity protected             |
| Short-circuit protection    |       | pulsing                                |
| 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      | $I_0$ | $\leq 10$ mA                           |
| Switching state indicator   |       | LED, yellow                            |

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

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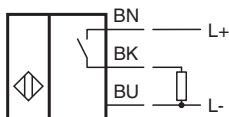
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## Technical Data

| Functional safety related parameters     |  |     |
|--|--|-----|
| MTTF <sub>d</sub>                        | 1400 a   |     |
| Mission Time (T <sub>M</sub> )           | 20 a   |     |
| Diagnostic Coverage (DC)                 | 0 %  |     |
| Compliance with standards and directives |  |     |
| Standard conformity                      |  |     |
| Standards                                | EN IEC 60947-5-2   |     |
| Approvals and certificates               |  |     |
| UL approval                              | cULus Listed, General Purpose                                |     |
| CCC approval                             | CCC approval / marking not required for products rated ≤36 V |     |
| Ambient conditions                       |  |     |
| Ambient temperature                      | -25 ... 70 °C (-13 ... 158 °F)                               |     |
| Mechanical specifications                |  |     |
| Connection type                          | cable  |     |
| Housing material                         | Stainless steel 1.4305 / AISI 303                            |     |
| Sensing face                             | PC   |     |
| Degree of protection                     | IP67   |     |
| Cable                                    |  |     |
| Wire end ferrules                        | yes  |     |
| Cable diameter                           | 3 mm - 0.2 mm  |     |
| Bending radius                           | > 12 x cable diameter  |     |
| Material                                 | PVC  |     |
| Color                                    | grey   |     |
| Number of cores                          | 3  |     |
| Core cross section                       | 0.14 mm <sup>2</sup>   |     |
| Length                                   | L  | 5 m |
| Dimensions                               |  |     |
| Length                                   | 25 mm  |     |
| Diameter                                 | 4 mm   |     |

## Connection



## Mounting

