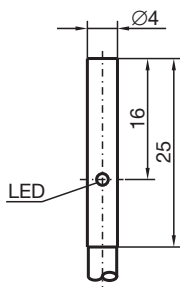


Inductive sensor  
NBB0,8-4M25-E2

0.8 mm flush



Dimensions



Technical Data

|                                   |                |                    |
|-----------------------------------|----------------|--------------------|
| General specifications            |                |                    |
| Switching function                |                | Normally open (NO) |
| Output type                       |                | PNP                |
| Rated operating distance          | s <sub>n</sub> | 0.8 mm             |
| Installation                      |                | flush              |
| Output polarity                   |                | DC                 |
| Assured operating distance        | s <sub>a</sub> | 0 ... 0.648 mm     |
| Reduction factor r <sub>Al</sub>  |                | 0.45               |
| Reduction factor r <sub>Cu</sub>  |                | 0.4                |
| Reduction factor r <sub>304</sub> |                | 0.77               |
| Output type                       |                | 3-wire             |
| Nominal ratings                   |                |                    |
| Operating voltage                 | U <sub>B</sub> | 10 ... 30 V        |

## Technical Data

|                             |                |                                   |
|-----------------------------|----------------|-----------------------------------|
| Switching frequency         | f              | 0 ... 3000 Hz                     |
| Hysteresis                  | H              | typ. 5%                           |
| Reverse polarity protection |                | reverse polarity protected        |
| Short-circuit protection    |                | pulsing                           |
| Voltage drop                | U <sub>d</sub> | ≤ 3 V                             |
| Operating current           | I <sub>L</sub> | 0 ... 200 mA                      |
| Off-state current           | I <sub>r</sub> | 0 ... 0.1 mA typ. 0.1 µA at 25 °C |
| No-load supply current      | I <sub>0</sub> | ≤ 10 mA                           |
| Switching state indicator   |                | LED, yellow                       |

### 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 60947-5-2:2007<br>EN 60947-5-2/A1:2012<br>IEC 60947-5-2:2007<br>IEC 60947-5-2 AMD 1:2012 |

### Approvals and certificates

|              |  |                                                              |
|--------------|--|--------------------------------------------------------------|
| UL approval  |  | cULus Listed, General Purpose                                |
| CSA approval |  | cCSAus Listed, General Purpose                               |
| CCC approval |  | CCC approval / marking not required for products rated ≤36 V |

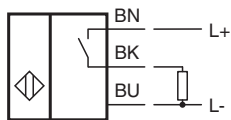
### Ambient conditions

|                     |  |                                |
|---------------------|--|--------------------------------|
| Ambient temperature |  | -25 ... 70 °C (-13 ... 158 °F) |
|---------------------|--|--------------------------------|

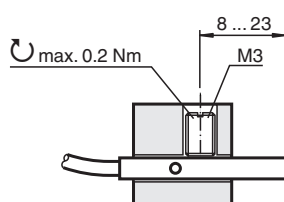
### Mechanical specifications

|                      |  |                                   |
|----------------------|--|-----------------------------------|
| Connection type      |  | cablе PVC , 2 m                   |
| Core cross-section   |  | 0.14 mm <sup>2</sup>              |
| Housing material     |  | Stainless steel 1.4305 / AISI 303 |
| Sensing face         |  | PC                                |
| Degree of protection |  | IP67                              |
| Cable                |  |                                   |
| Cable diameter       |  | 3 mm - 0.2 mm                     |
| Bending radius       |  | > 12 x cable diameter             |

## Connection



## Mounting



Accessories

|                                                                                   |             |                       |
|-----------------------------------------------------------------------------------|-------------|-----------------------|
|  | <b>BF 4</b> | Mounting flange, 4 mm |
|-----------------------------------------------------------------------------------|-------------|-----------------------|

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