

## Inductive sensor

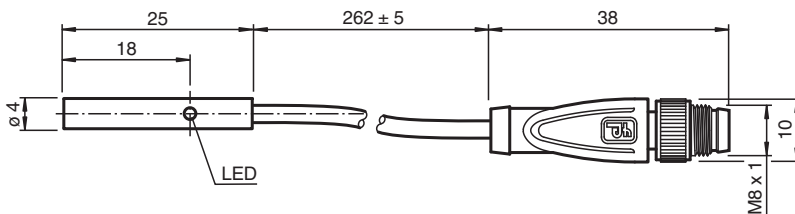
NBB0,8-4M25-E2-0,3M-V3



- Basic series
- 0.8 mm flush
- Cable with M8 plug



### 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 $r_{AI}$            |       | 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                           | $H$   | typ. 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                            |
| Functional safety related parameters |       |                                        |
| MTTF <sub>d</sub>                    |       | 1400 a                                 |

Release date: 2024-04-25 Date of issue: 2024-04-25 Filename: 224134\_eng.pdf

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

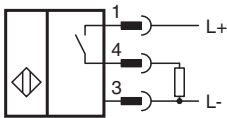
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

 **PEPPERL+FUCHS**

Technical Data

|                                          |   |                                                              |
|------------------------------------------|---|--------------------------------------------------------------|
| 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                          |   | fixed cable with plug                                        |
| Housing material                         |   | Stainless steel 1.4305 / AISI 303                            |
| Sensing face                             |   | PC                                                           |
| Degree of protection                     |   | IP67                                                         |
| Connector                                |   |                                                              |
| Threading                                |   | M8 x 1                                                       |
| Number of pins                           |   | 3                                                            |
| Cable                                    |   |                                                              |
| 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 | 0.3 m                                                        |
| Dimensions                               |   |                                                              |
| Length                                   |   | 25 mm                                                        |
| Diameter                                 |   | 4 mm                                                         |

Connection



Connection Assignment



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

## Connection Assignment

Wire colors in accordance with EN 60947-5-2

|   |    |         |
|---|----|---------|
| 1 | BN | (brown) |
| 3 | BU | (blue)  |
| 4 | BK | (black) |

## Mounting

