

# Inductive sensor

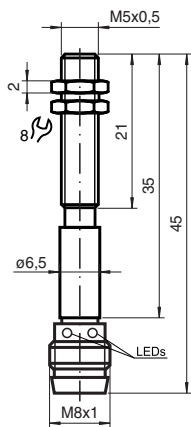
## NBB0,8-5GM25-E2-V3



- Basic series
- 0.8 mm flush



### 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 $r_{304}$ |       | 0.85               |
| Output type                |       | 3-wire             |
| Nominal ratings            |       |                    |
| Operating voltage          | $U_B$ | 10 ... 30 V        |
| Switching frequency        | $f$   | 0 ... 3000 Hz      |

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

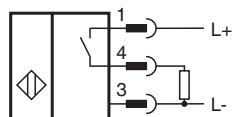
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

**PEPPERL+FUCHS**

Technical Data

|                                                 |       |                                                                           |
|-------------------------------------------------|-------|---------------------------------------------------------------------------|
| Reverse polarity protection                     |       | reverse polarity protected                                                |
| Short-circuit protection                        |       | pulsing                                                                   |
| Voltage drop                                    | $U_d$ | $\leq 3\text{ V}$                                                         |
| Operating current                               | $I_L$ | 0.1 ... 100 mA                                                            |
| Off-state current                               | $I_r$ | 0 ... 0.1 mA                                                              |
| No-load supply current                          | $I_0$ | $\leq 15\text{ mA}$                                                       |
| Switching state indicator                       |       | LED, yellow                                                               |
| <b>Functional safety related parameters</b>     |       |                                                                           |
| MTTF <sub>d</sub>                               |       | 1402 a                                                                    |
| Mission Time (T <sub>M</sub> )                  |       | 20 a                                                                      |
| Diagnostic Coverage (DC)                        |       | 0 %                                                                       |
| <b>Compliance with standards and directives</b> |       |                                                                           |
| Standard conformity                             |       |                                                                           |
| Standards                                       |       | EN 60947-5-2:2007<br>IEC 60947-5-2:2007                                   |
| <b>Approvals and certificates</b>               |       |                                                                           |
| UL approval                                     |       | cULus Listed, General Purpose                                             |
| CSA approval                                    |       | cCSAus Listed, General Purpose                                            |
| CCC approval                                    |       | CCC approval / marking not required for products rated $\leq 36\text{ V}$ |
| <b>Ambient conditions</b>                       |       |                                                                           |
| Ambient temperature                             |       | -25 ... 70 °C (-13 ... 158 °F)                                            |
| <b>Mechanical specifications</b>                |       |                                                                           |
| Connection type                                 |       | Connector M8 x 1 , 3-pin                                                  |
| Housing material                                |       | Stainless steel 1.4305 / AISI 303                                         |
| Sensing face                                    |       | PBT                                                                       |
| Degree of protection                            |       | IP67                                                                      |

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

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

Accessories

|                                                                                   |                     |                                                   |
|-----------------------------------------------------------------------------------|---------------------|---------------------------------------------------|
|  | <b>BF 5</b>         | Mounting flange, 5 mm                             |
|  | <b>V3-WM-2M-PUR</b> | Female cordset single-ended, M8, 3-pin, PUR cable |

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