

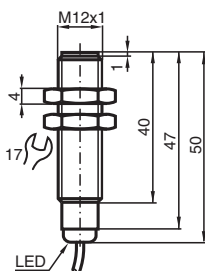


## Inductive sensor NBB2-12GK50-E2

- With increased sealing, protection class IP68 / IP69K
- Plastic housing



### Dimensions



### Technical Data

#### General specifications

|                            |       |                    |
|----------------------------|-------|--------------------|
| Switching function         |       | Normally open (NO) |
| Output type                |       | PNP                |
| Rated operating distance   | $s_n$ | 2 mm               |
| Installation               |       | flush              |
| Output polarity            |       | DC                 |
| Assured operating distance | $s_a$ | 0 ... 1.62 mm      |
| Reduction factor $r_{AI}$  |       | 0.3                |
| Reduction factor $r_{Cu}$  |       | 0.2                |
| Reduction factor $r_{304}$ |       | 0.7                |
| Output type                |       | 3-wire             |

#### Nominal ratings

|                             |       |                            |
|-----------------------------|-------|----------------------------|
| Operating voltage           | $U_B$ | 10 ... 30 V                |
| Switching frequency         | $f$   | 0 ... 1500 Hz              |
| Reverse polarity protection |       | reverse polarity protected |
| Short-circuit protection    |       | pulsing                    |
| Voltage drop                | $U_d$ | $\leq 3$ V                 |

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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

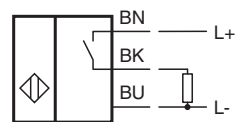
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

 **PEPPERL+FUCHS**

Technical Data

|                                          |       |                                                                    |
|------------------------------------------|-------|--------------------------------------------------------------------|
| Operating current                        | $I_L$ | 0 ... 200 mA                                                       |
| Off-state current                        | $I_r$ | 0 ... 0.5 mA typ. 0.1 $\mu$ A at 25 °C                             |
| No-load supply current                   | $I_0$ | $\leq$ 17 mA                                                       |
| Switching state indicator                |       | LED, yellow                                                        |
| Functional safety related parameters     |       |                                                                    |
| MTTF <sub>d</sub>                        |       | 1060 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 $\leq$ 36 V |
| Ambient conditions                       |       |                                                                    |
| Ambient temperature                      |       | -25 ... 70 °C (-13 ... 158 °F)                                     |
| Mechanical specifications                |       |                                                                    |
| Connection type                          |       | cable PVC , 2 m                                                    |
| Core cross section                       |       | 0.14 mm <sup>2</sup>                                               |
| Housing material                         |       | PBT                                                                |
| Sensing face                             |       | PBT                                                                |
| Degree of protection                     |       | IP68 / IP69K                                                       |
| Dimensions                               |       |                                                                    |
| Length                                   |       | 50 mm                                                              |
| Diameter                                 |       | 12 mm                                                              |
| Note                                     |       | use only delivered nuts                                            |

Connection



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