

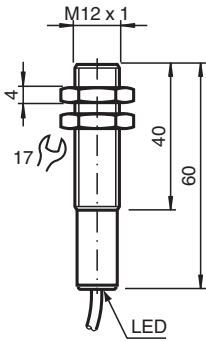
# Inductive sensor

## NBB2-12GK60-E2-5M PUR

■ Basic series



### 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 $r_{Al}$  |       | 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 ... 1000 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 ... 0.5 mA typ. 0.1 $\mu$ A at 25 °C |
| No-load supply current      | $I_0$ | $\leq 17$ mA                           |

Release date: 2025-01-10 Date of issue: 2025-01-10 Filename: 089903\_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

|   |  |
|---|--|
| Switching state indicator                       | LED, yellow  |
| <b>Compliance with standards and directives</b> |  |
| Standard conformity                             |  |
| Standards                                       | EN IEC 60947-5-2   |
| <b>Approvals and certificates</b>               |  |
| UL approval                                     | cULus Listed, General Purpose                                |
| CCC approval                                    | CCC approval / marking not required for products rated ≤36 V |
| <b>Ambient conditions</b>                       |  |
| Ambient temperature                             | -25 ... 70 °C (-13 ... 158 °F)                               |
| <b>Mechanical specifications</b>                |  |
| Connection type                                 | cable  |
| Housing material                                | PBT  |
| Sensing face                                    | PBT  |
| Degree of protection                            | IP68   |
| Cable   |  |
| Wire end ferrules                               | yes  |
| Cable diameter                                  | 4.8 mm ± 0.2 mm  |
| Bending radius                                  | > 10 x cable diameter  |
| Material  | PUR  |
| Color   | black  |
| Number of cores                                 | 3  |
| Core cross section                              | 0.34 mm <sup>2</sup>   |
| Length  | L 5 m  |
| Dimensions                                      |  |
| Length  | 60 mm  |
| Diameter  | 12 mm  |

## Connection

