

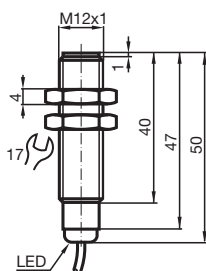


## Inductive sensor NBB2-12GK50-E0

- With increased sealing, protection class IP68 / IP69K



### Dimensions



### Technical Data

#### General specifications

|                            |       |                    |
|----------------------------|-------|--------------------|
| Switching function         |       | Normally open (NO) |
| Output type                |       | NPN                |
| 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                |

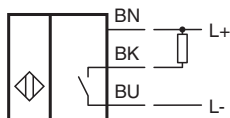
#### Nominal ratings

|                     |       |               |
|---------------------|-------|---------------|
| Operating voltage   | $U_B$ | 10 ... 30 V   |
| Switching frequency | $f$   | 0 ... 1500 Hz |

## 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 ... 200 mA                                                               |
| Off-state current                               | $I_r$ | 0 ... 0.5 mA typ.                                                          |
| No-load supply current                          | $I_0$ | $\leq 17 \text{ mA}$                                                       |
| Switching state indicator                       |       | LED, yellow                                                                |
| <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                                 |       | cablc PVC , 2 m                                                            |
| Core cross-section                              |       | 0.14 mm <sup>2</sup>                                                       |
| Housing material                                |       | PBT                                                                        |
| Sensing face                                    |       | PBT                                                                        |
| Degree of protection                            |       | IP68 / IP69K                                                               |
| Note                                            |       | use only delivered nuts                                                    |

## Connection



## Accessories

|                                                                                     |              |                        |
|-------------------------------------------------------------------------------------|--------------|------------------------|
|  | <b>BF 12</b> | Mounting flange, 12 mm |
|-------------------------------------------------------------------------------------|--------------|------------------------|