



### Model Number

**NBB10-30GK50-E0**

### Features

- **With increased sealing, protection class IP68 / IP69K**

### Accessories

#### BF 30

Mounting flange, 30 mm

## Technical Data

### General specifications

|                            |                    |
|----------------------------|--------------------|
| Switching function         | Normally open (NO) |
| Output type                | NPN                |
| Rated operating distance   | $s_n$ 10 mm        |
| Installation               | flush              |
| Output polarity            | DC                 |
| Assured operating distance | $s_a$ 0 ... 8.1 mm |
| Reduction factor $r_{AI}$  | 0.3                |
| Reduction factor $r_{CU}$  | 0.3                |
| Reduction factor $r_{304}$ | 0.8                |
| Output type                | 3-wire             |

### Nominal ratings

|                             |                                         |
|-----------------------------|-----------------------------------------|
| Operating voltage           | $U_B$ 10 ... 30 V                       |
| Switching frequency         | $f$ 0 ... 200 Hz                        |
| Reverse polarity protection | reverse polarity protected              |
| Short-circuit protection    | pulsing                                 |
| Voltage drop                | $U_d$ ≤ 3 V                             |
| Operating current           | $I_L$ 0 ... 200 mA                      |
| Off-state current           | $I_r$ 0 ... 0.5 mA typ. 0.1 μA at 25 °C |
| No-load supply current      | $I_0$ ≤ 20 mA                           |
| Switching state indicator   | all direction LED, yellow               |

### Functional safety related parameters

|                                |        |
|--------------------------------|--------|
| MTTF <sub>d</sub>              | 1374 a |
| Mission Time (T <sub>M</sub> ) | 20 a   |
| Diagnostic Coverage (DC)       | 0 %    |

### Ambient conditions

|                     |                                |
|---------------------|--------------------------------|
| Ambient temperature | -25 ... 70 °C (-13 ... 158 °F) |
|---------------------|--------------------------------|

### Mechanical specifications

|                      |                         |
|----------------------|-------------------------|
| Connection type      | cable PVC, 2 m          |
| Core cross-section   | 0.34 mm <sup>2</sup>    |
| Housing material     | PBT                     |
| Sensing face         | PBT                     |
| Degree of protection | IP68 / IP69K            |
| Note                 | use only delivered nuts |

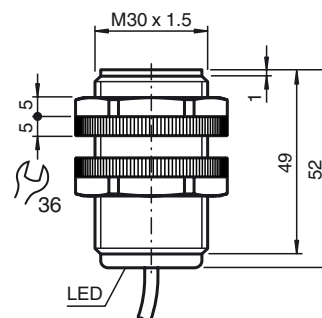
### Compliance with standards and directives

|                     |                                                                                             |
|---------------------|---------------------------------------------------------------------------------------------|
| Standard conformity |                                                                                             |
| Standards           | EN 60947-5-2:2007<br>EN 60947-5-2/A1:2012<br>IEC 60947-5-2:2007<br>IEC 60947-5-2 AMD 1:2012 |

### Approvals and certificates

|              |                                                              |
|--------------|--------------------------------------------------------------|
| UL approval  | cULus Listed, General Purpose                                |
| CSA approval | cCSAus Listed, General Purpose                               |
| CCC approval | CCC approval / marking not required for products rated ≤36 V |

## Dimensions



## Electrical Connection

