



## Model Number

**NBB10-30GM40-E2**

## Features

- Basic series
- 10 mm flush

## Accessories

### BF 30

Mounting flange, 30 mm

### EXG-30

Quick mounting bracket with dead stop

## Technical Data

### General specifications

|                            |       |                    |
|----------------------------|-------|--------------------|
| Switching function         |       | Normally open (NO) |
| Output type                |       | PNP                |
| Rated operating distance   | $s_n$ | 10 mm              |
| Installation               |       | flush              |
| Output polarity            |       | DC                 |
| Assured operating distance | $s_a$ | 0 ... 8.1 mm       |
| Actual operating distance  | $s_r$ | 9 ... 11 mm typ.   |
| Reduction factor $r_{Al}$  |       | 0.3                |
| Reduction factor $r_{Cu}$  |       | 0.2                |
| Reduction factor $r_{304}$ |       | 0.75               |
| Output type                |       | 3-wire             |

### Nominal ratings

|                             |       |                            |
|-----------------------------|-------|----------------------------|
| Operating voltage           | $U_B$ | 10 ... 30 V                |
| Switching frequency         | $f$   | 0 ... 200 Hz               |
| Hysteresis                  | $H$   | 3 ... 10 %                 |
| Reverse polarity protection |       | reverse polarity protected |
| Short-circuit protection    |       | pulsing                    |
| Voltage drop                | $U_d$ | $\leq 3$ V                 |
| Operating current           | $I_L$ | 0 ... 100 mA               |
| Lowest operating current    | $I_m$ | 2 mA                       |
| Switching state indicator   |       | all direction LED, yellow  |

### Functional safety related parameters

|                          |        |
|--------------------------|--------|
| MTTF <sub>d</sub>        | 1627 a |
| Mission Time ( $T_M$ )   | 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     | brass, nickel-plated |
| Sensing face         | PBT                  |
| Degree of protection | IP67                 |

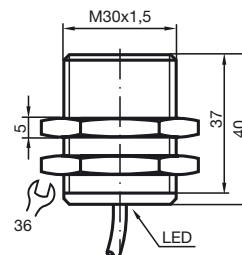
### Compliance with standards and directives

|                     |   |
|---------------------|---|
| 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 $\leq 36$ V |

## Dimensions



## Electrical Connection

