



### Model Number

NBN3-8GM30-E0-V1

### Features

- Basic series
- 3 mm non-flush
- Increased operating distance

### Accessories

#### BF 8

Mounting flange, 8 mm

#### V1-G

Female connector, M12, 4-pin, field attachable

#### V1-W

Female connector, M12, 4-pin, field attachable

#### V1-G-2M-PUR

Female cordset, M12, 4-pin, PUR cable

#### V1-W-2M-PUR

Female cordset, M12, 4-pin, PUR cable

## Technical Data

### General specifications

|                            |       |               |    |
|----------------------------|-------|---------------|----|
| Switching element function |       | NPN           | NO |
| Rated operating distance   | $s_n$ | 3 mm          |    |
| Installation               |       | non-flush     |    |
| Output polarity            |       | DC            |    |
| Assured operating distance | $s_a$ | 0 ... 2.43 mm |    |
| Reduction factor $r_{Al}$  |       | 0.5           |    |
| Reduction factor $r_{Cu}$  |       | 0.5           |    |
| Reduction factor $r_{304}$ |       | 0.75          |    |

### Nominal ratings

|                             |       |  |  |
|-----------------------------|-------|--|--|
| Operating voltage           | $U_B$ | 10 ... 30 V                            |  |
| Switching frequency         | $f$   | 0 ... 2000 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 ... 100 mA                           |  |
| Off-state current           | $I_r$ | 0 ... 0.5 mA typ. 0.1 $\mu$ A at 25 °C |  |
| No-load supply current      | $I_0$ | $\leq 15$ mA                           |  |
| Switching state indicator   |       | Multihole-LED, yellow                  |  |

### Functional safety related parameters

|                          |        |
|--------------------------|--------|
| MTTF <sub>d</sub>        | 2790 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   | Connector M12 x 1, 4-pin |
| Housing material  | brass, nickel-plated     |
| Sensing face      | PBT                      |
| Protection degree | IP67                     |

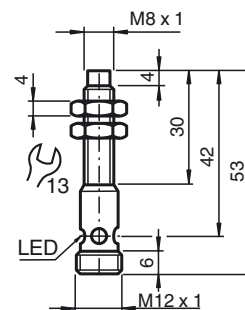
### Compliance with standards and directives

|                     |   |
|---------------------|---|
| Standard conformity |   |
| Standards           | EN 60947-5-2:2007<br>IEC 60947-5-2:2007 |

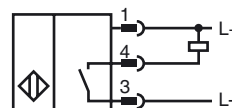
### Approvals and certificates

|              |  |
|--------------|--|
| 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



## Pinout



Wire colors in accordance with EN 60947-5-2

|   |    |         |
|---|----|---------|
| 1 | BN | (brown) |
| 2 | WH | (white) |
| 3 | BU | (blue)  |
| 4 | BK | (black) |