



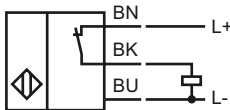
### Model Number

NBN12-18GM35-E3

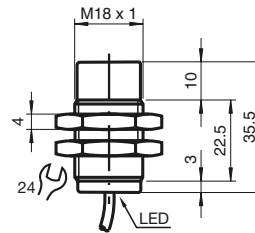
### Features

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

### Connection



## Dimensions



## Technical Data

### General specifications

|                            |       |               |
|----------------------------|-------|---------------|
| Switching element function | PNP   | NC            |
| Rated operating distance   | $s_n$ | 12 mm         |
| Installation               |       | non-flush     |
| Output polarity            |       | DC            |
| Assured operating distance | $s_a$ | 0 ... 9.72 mm |
| Reduction factor $r_{AI}$  |       | 0.35          |
| Reduction factor $r_{Cu}$  |       | 0.35          |
| Reduction factor $r_{304}$ |       | 0.7           |

### Nominal ratings

|                                   |       |                            |
|-----------------------------------|-------|----------------------------|
| Operating voltage                 | $U_B$ | 10 ... 30 V                |
| Switching frequency               | $f$   | 0 ... 300 Hz               |
| Hysteresis                        | $H$   | type 5 %                   |
| Reverse polarity protection       |       | reverse polarity protected |
| Short-circuit protection          |       | pulsing                    |
| Voltage drop                      | $U_d$ | $\leq 2.5$ V               |
| Operating current                 | $I_L$ | 0 ... 100 mA               |
| No-load supply current            | $I_0$ | $\leq 12$ mA               |
| Indication of the switching state |       | all direction LED, yellow  |

### Functional safety related parameters

|                          |        |
|--------------------------|--------|
| MTTF <sub>d</sub>        | 2090 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                  |
| 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 | Products with a maximum operating voltage of $\leq 36$ V do not bear a CCC marking because they do not require approval. |