

# Inductive sensor

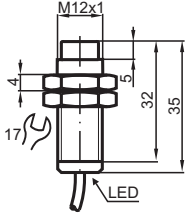
## NBN7-12GM35-E2



- 7 mm non-flush
- Increased operating distance



### Dimensions



### Technical Data

#### General specifications

|                            |       |                    |
|----------------------------|-------|--------------------|
| Switching function         |       | Normally open (NO) |
| Output type                |       | PNP                |
| Rated operating distance   | $s_n$ | 7 mm               |
| Installation               |       | non-flush          |
| Output polarity            |       | DC                 |
| Assured operating distance | $s_a$ | 0 ... 5.67 mm      |
| Reduction factor $r_{Al}$  |       | 0.48               |
| Reduction factor $r_{Cu}$  |       | 0.45               |
| Reduction factor $r_{304}$ |       | 0.72               |
| Output type                |       | 3-wire             |

#### Nominal ratings

|                   |       |             |
|-------------------|-------|-------------|
| Operating voltage | $U_B$ | 10 ... 30 V |
|-------------------|-------|-------------|

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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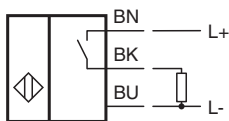
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PEPPERL+FUCHS


## Technical Data

|   |       |   |
|---|-------|---|
| Switching frequency                             | f     | 0 ... 300 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  |
| No-load supply current                          | $I_0$ | $\leq 15$ mA  |
| Switching state indicator                       |       | all direction LED, yellow   |
| <b>Functional safety related parameters</b>     |       |   |
| MTTF <sub>d</sub>                               |       | 1770 a  |
| Mission Time (T <sub>M</sub> )                  |       | 20 a  |
| Diagnostic Coverage (DC)                        |       | 0 %   |
| <b>Compliance with standards and directives</b> |       |   |
| 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 |
| <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 $\leq 36$ 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                                |       | brass, nickel-plated  |
| Sensing face                                    |       | PBT   |
| Degree of protection                            |       | IP67  |
| Cable   |       |   |
| Cable diameter                                  |       | 3.5 mm $\pm$ 0.2 mm   |
| Bending radius                                  |       | > 10 x cable diameter   |

## Connection



## Accessories

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