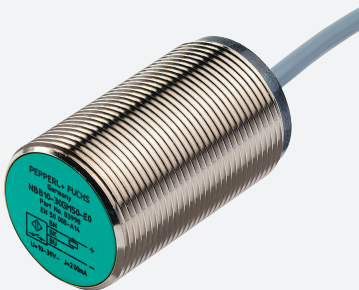


# Inductive sensor

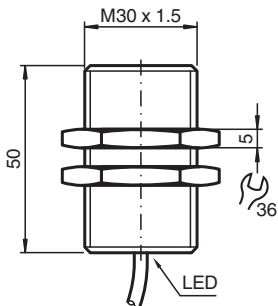
## NBB10-30GM50-E0-Y241316



- Basic series
- 10 mm flush



### Dimensions



### Technical Data

|                                   |                |                            |
|-----------------------------------|----------------|----------------------------|
| General specifications            |                |                            |
| Switching function                |                | Normally open (NO)         |
| Output type                       |                | NPN                        |
| Rated operating distance          | s <sub>n</sub> | 10 mm                      |
| Installation                      |                | flush                      |
| Output polarity                   |                | DC                         |
| Assured operating distance        | s <sub>a</sub> | 0 ... 8.1 mm               |
| Reduction factor r <sub>Al</sub>  |                | 0.3                        |
| Reduction factor r <sub>Cu</sub>  |                | 0.3                        |
| Reduction factor r <sub>304</sub> |                | 0.8                        |
| Output type                       |                | 3-wire                     |
| Nominal ratings                   |                |                            |
| Operating voltage                 | U <sub>B</sub> | 10 ... 30 V                |
| Switching frequency               | f              | 0 ... 200 Hz               |
| Hysteresis                        | H              | typ. 5%                    |
| Reverse polarity protection       |                | reverse polarity protected |

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

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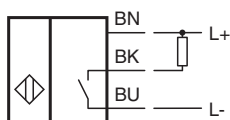
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**PEPPERL+FUCHS**

## Technical Data

|                                                 |       |                                                                                             |
|-------------------------------------------------|-------|---------------------------------------------------------------------------------------------|
| Short-circuit protection                        |       | pulsing                                                                                     |
| Voltage drop                                    | $U_d$ | $\leq 3 \text{ V}$                                                                          |
| Operating current                               | $I_L$ | 0 ... 200 mA                                                                                |
| Off-state current                               | $I_r$ | $\leq 10 \mu\text{A}$                                                                       |
| No-load supply current                          | $I_0$ | $\leq 20 \text{ mA}$                                                                        |
| Switching state indicator                       |       | all direction LED, yellow                                                                   |
| <b>Functional safety related parameters</b>     |       |                                                                                             |
| MTTF <sub>d</sub>                               |       | 1374 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 $\leq 36 \text{ V}$                  |
| <b>Ambient conditions</b>                       |       |                                                                                             |
| Ambient temperature                             |       | -25 ... 70 °C (-13 ... 158 °F)                                                              |
| <b>Mechanical specifications</b>                |       |                                                                                             |
| 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                                                                                        |
| <b>General information</b>                      |       |                                                                                             |
| Scope of delivery                               |       | 2 toothed lock washers                                                                      |

## Connection



## Accessories

|                                                                                     |               |                                       |
|-------------------------------------------------------------------------------------|---------------|---------------------------------------|
|  | <b>BF 30</b>  | Mounting flange, 30 mm                |
|  | <b>EXG-30</b> | Quick mounting bracket with dead stop |