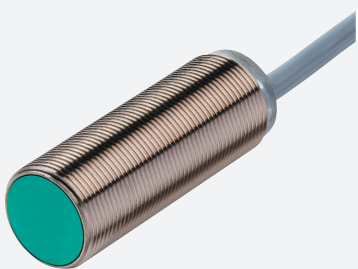


# Inductive sensor

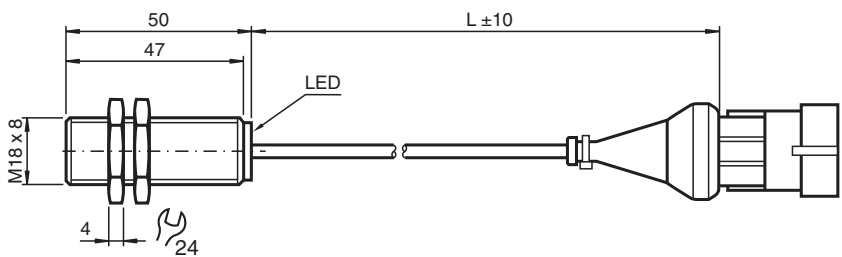
## NBB8-18GM50-E2-Y250240



- Basic series
- 8 mm flush
- Increased operating distance



### Dimensions



### Technical Data

| General specifications      |       |                            |
|-----------------------------|-------|----------------------------|
| Switching function          |       | Normally open (NO)         |
| Output type                 |       | PNP                        |
| Rated operating distance    | $s_n$ | 8 mm                       |
| Installation                |       | flush                      |
| Output polarity             |       | DC                         |
| Assured operating distance  | $s_a$ | 0 ... 6.48 mm              |
| Reduction factor $r_{Al}$   |       | 0.45                       |
| Reduction factor $r_{Cu}$   |       | 0.4                        |
| Reduction factor $r_{304}$  |       | 0.7                        |
| Nominal ratings             |       |                            |
| Operating voltage           | $U_B$ | 10 ... 30 V                |
| Switching frequency         | $f$   | 0 ... 500 Hz               |
| Hysteresis                  | $H$   | typ. 5%                    |
| Reverse polarity protection |       | reverse polarity protected |
| Short-circuit protection    |       | pulsing                    |

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

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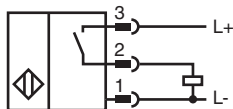
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**PEPPERL+FUCHS**

## Technical Data

|                                          |                |                                                                                                       |
|------------------------------------------|----------------|-------------------------------------------------------------------------------------------------------|
| Voltage drop                             | U <sub>d</sub> | ≤ 3 V                                                                                                 |
| Operating current                        | I <sub>L</sub> | 0 ... 200 mA                                                                                          |
| Off-state current                        | I <sub>r</sub> | 0 ... 0.5 mA typ. 0.1 μA at 25 °C                                                                     |
| No-load supply current                   | I <sub>0</sub> | ≤ 15 mA                                                                                               |
| Time delay before availability           | t <sub>v</sub> | ≤ 20 ms                                                                                               |
| Switching state indicator                | LED, yellow    |                                                                                                       |
| Functional safety related parameters     |                |                                                                                                       |
| MTTF <sub>d</sub>                        |                | 1190 a                                                                                                |
| Mission Time (T <sub>M</sub> )           |                | 20 a                                                                                                  |
| Diagnostic Coverage (DC)                 |                | 0 %                                                                                                   |
| Compliance with standards and directives |                |                                                                                                       |
| Standard conformity                      |                |                                                                                                       |
| Standards                                |                | EN 60947-5-2:2007<br>IEC 60947-5-2:2007                                                               |
| Approvals and certificates               |                |                                                                                                       |
| CCC approval                             |                | CCC approval / marking not required for products rated ≤36 V                                          |
| Ambient conditions                       |                |                                                                                                       |
| Ambient temperature                      |                | -25 ... 70 °C (-13 ... 158 °F)                                                                        |
| Mechanical specifications                |                |                                                                                                       |
| Connection type                          |                | Cable connector PVC , L = 500 mm                                                                      |
| Connection assembly                      |                | AMP pin housing 282105-1<br>AMP sealing 281934-4<br>AMP crimp 282404-1<br>Cable bushing: MTA 45.20921 |
| Core cross-section                       |                | 0.34 mm <sup>2</sup>                                                                                  |
| Housing material                         |                | brass, nickel-plated                                                                                  |
| Sensing face                             |                | PBT                                                                                                   |
| Degree of protection                     |                | IP67                                                                                                  |

## Connection



## Accessories

|                                                                                     |               |                                       |
|-------------------------------------------------------------------------------------|---------------|---------------------------------------|
|  | <b>BF 18</b>  | Mounting flange, 18 mm                |
|  | <b>EXG-18</b> | Quick mounting bracket with dead stop |