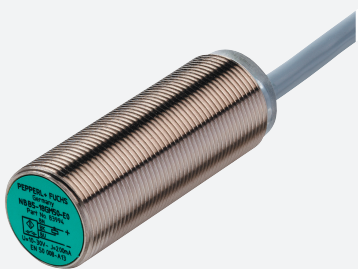


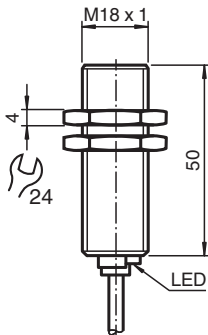
Inductive sensor  
NJ5-18GM50-E2-5M-3G-3D



- Comfort series
- 5 mm flush



Dimensions



Technical Data

|                              |       |                          |
|------------------------------|-------|--------------------------|
| General specifications       |       |                          |
| Switching function           |       | Normally open (NO)       |
| Output type                  |       | PNP                      |
| Rated operating distance     | $s_n$ | 5 mm                     |
| Installation                 |       | flush                    |
| Output polarity              |       | DC                       |
| Assured operating distance   | $s_a$ | 0 ... 4.05 mm            |
| Actual operating distance    | $s_r$ | 4.5 ... 5.5 mm typ. 5 mm |
| Reduction factor $r_{Al}$    |       | 0.2                      |
| Reduction factor $r_{Cu}$    |       | 0.13                     |
| Reduction factor $r_{304}$   |       | 0.62                     |
| Reduction factor $r_{Brass}$ |       | 0.26                     |
| Output type                  |       | 3-wire                   |
| Nominal ratings              |       |                          |
| Operating voltage            | $U_B$ | 10 ... 30 V DC           |
| Switching frequency          | $f$   | 0 ... 2000 Hz            |

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

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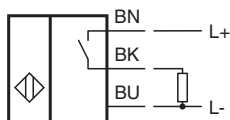
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 PEPPERL+FUCHS

## Technical Data

|                                                            |       |                                                                                             |
|------------------------------------------------------------|-------|---------------------------------------------------------------------------------------------|
| Hysteresis                                                 | H     | 3 ... 15 typ. 5 %                                                                           |
| Reverse polarity protection                                |       | reverse polarity protected                                                                  |
| Short-circuit protection                                   |       | pulsing                                                                                     |
| Voltage drop                                               | $U_d$ | $\leq 3 \text{ V}$                                                                          |
| Voltage drop at $I_L$                                      |       |                                                                                             |
| Voltage drop $I_L = 200 \text{ mA}$ , switching element on | $U_d$ | 1 ... 2 V typ. 1.5 V                                                                        |
| Operating current                                          | $I_L$ | $\leq 200 \text{ mA}$                                                                       |
| Off-state current                                          | $I_r$ | 0 ... 0.5 mA typ. 0.01 mA                                                                   |
| No-load supply current                                     | $I_0$ | $\leq 15 \text{ mA}$                                                                        |
| Time delay before availability                             | $t_v$ | $\leq 100 \text{ ms}$                                                                       |
| Switching state indicator                                  |       | LED, yellow                                                                                 |
| <b>Functional safety related parameters</b>                |       |                                                                                             |
| MTTF <sub>d</sub>                                          |       | 1504 a                                                                                      |
| Mission Time ( $T_M$ )                                     |       | 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, Class 2 Power Source                                         |
| 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)                                                              |
| Storage temperature                                        |       | -40 ... 85 °C (-40 ... 185 °F)                                                              |
| <b>Mechanical specifications</b>                           |       |                                                                                             |
| Connection type                                            |       | cable PVC, 5 m                                                                              |
| Core cross-section                                         |       | 0.5 mm <sup>2</sup>                                                                         |
| Housing material                                           |       | Stainless steel 1.4305 / AISI 303                                                           |
| Sensing face                                               |       | PBT                                                                                         |
| Degree of protection                                       |       | IP66 / IP67                                                                                 |
| Cable                                                      |       |                                                                                             |
| Bending radius                                             |       | > 10 x cable diameter                                                                       |
| <b>General information</b>                                 |       |                                                                                             |
| Scope of delivery                                          |       | 2 self locking nuts in scope of delivery                                                    |
| Use in the hazardous area                                  |       | see instruction manuals                                                                     |

## Connection



## Accessories

|                                                                                     |              |                        |
|-------------------------------------------------------------------------------------|--------------|------------------------|
|  | <b>BF 18</b> | Mounting flange, 18 mm |
|-------------------------------------------------------------------------------------|--------------|------------------------|

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 **PEPPERL+FUCHS**

Accessories



**EXG-18**

Quick mounting bracket with dead stop

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