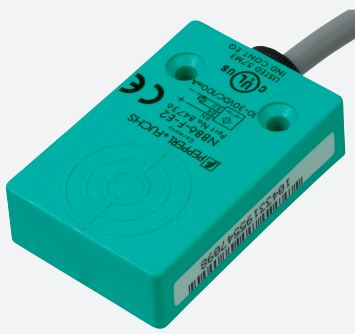


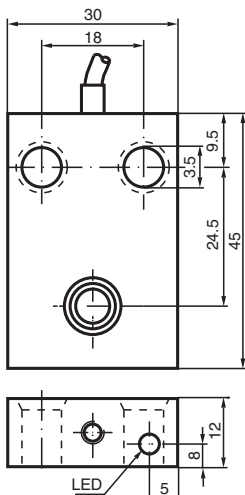


## Inductive sensor NJ6-F-E-5M

- 6 mm flush
- 3-wire DC
- Polarity reversal protected
- 5 meter connection cable



### Dimensions



### Technical Data

#### General specifications

|                            |       |                     |
|----------------------------|-------|---------------------|
| Rated operating distance   | $s_n$ | 6 mm                |
| Installation               |       | flush               |
| Output polarity            |       | DC                  |
| Assured operating distance | $s_a$ | 0 ... 4.8 mm        |
| Actual operating distance  | $s_r$ | 5.4 ... 6.6 mm typ. |
| Reduction factor $r_{Al}$  |       | 0.22                |
| Reduction factor $r_{Cu}$  |       | 0.2                 |
| Reduction factor $r_{304}$ |       | 0.7                 |
| Output type                |       | 3-wire              |

#### Nominal ratings

|                             |       |                            |
|-----------------------------|-------|----------------------------|
| Operating voltage           | $U_B$ | 10 ... 60 V DC             |
| Switching frequency         | $f$   | 0 ... 500 Hz               |
| Hysteresis                  | $H$   | 0 ... 0.3 mm typ. 5 %      |
| Reverse polarity protection |       | reverse polarity protected |
| Short-circuit protection    |       | pulsing                    |
| Voltage drop                | $U_d$ | $\leq 3$ V                 |

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

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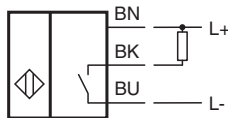
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**PEPPERL+FUCHS**

# Technical Data

|                                                 |       |                                                   |
|-------------------------------------------------|-------|---------------------------------------------------|
| Operating current                               | $I_L$ | 0 ... 200 mA                                      |
| Off-state current                               | $I_r$ | $\leq 0.5$ mA                                     |
| No-load supply current                          | $I_0$ | $\leq 20$ mA                                      |
| Time delay before availability                  | $t_v$ | $\leq 15$ ms                                      |
| Switching state indicator                       |       | LED, yellow                                       |
| <b>Functional safety related parameters</b>     |       |                                                   |
| MTTF <sub>d</sub>                               |       | 990 a                                             |
| Mission Time (T <sub>M</sub> )                  |       | 20 a                                              |
| Diagnostic Coverage (DC)                        |       | 0 %                                               |
| <b>Compliance with standards and directives</b> |       |                                                   |
| Standard conformity                             |       |                                                   |
| Standards                                       |       | EN IEC 60947-5-2                                  |
| <b>Approvals and certificates</b>               |       |                                                   |
| UL approval                                     |       | cULus Listed, General Purpose                     |
| CCC approval                                    |       | Certified by China Compulsory Certification (CCC) |
| <b>Ambient conditions</b>                       |       |                                                   |
| Ambient temperature                             |       | -25 ... 70 °C (-13 ... 158 °F)                    |
| <b>Mechanical specifications</b>                |       |                                                   |
| Connection type                                 |       | cable                                             |
| Core cross section                              |       | 0.34 mm <sup>2</sup>                              |
| Housing material                                |       | PBT                                               |
| Sensing face                                    |       | PBT                                               |
| Degree of protection                            |       | IP67                                              |
| Cable                                           |       |                                                   |
| Wire end ferrules                               |       | yes                                               |
| Cable diameter                                  |       | 4.8 mm $\pm$ 0.2 mm                               |
| Bending radius                                  |       | > 10 x cable diameter                             |
| Material                                        |       | PUR                                               |
| Color                                           |       | black                                             |
| Number of cores                                 |       | 3                                                 |
| Core cross section                              |       | 0.34 mm <sup>2</sup>                              |
| Length                                          | L     | 5 m                                               |
| Mass                                            |       | 178 g                                             |
| Dimensions                                      |       |                                                   |
| Height                                          |       | 30 mm                                             |
| Width                                           |       | 45 mm                                             |
| Length                                          |       | 12 mm                                             |

# Connection



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