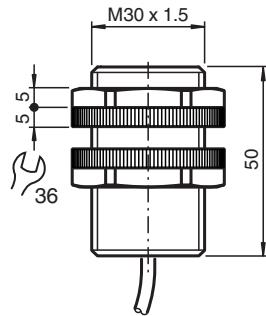


# Inductive sensor NJ10-30GK50-E2

■ 10 mm flush



## Dimensions



## Technical Data

### General specifications

|                              |       |                        |
|------------------------------|-------|------------------------|
| Switching function           |       | Normally open (NO)     |
| Output type                  |       | PNP                    |
| Rated operating distance     | $s_n$ | 10 mm                  |
| Installation                 |       | flush                  |
| Output polarity              |       | DC                     |
| Assured operating distance   | $s_a$ | 0 ... 8.1 mm           |
| Actual operating distance    | $s_r$ | 9 ... 11 mm typ. 10 mm |
| Reduction factor $r_{Al}$    |       | 0.22                   |
| Reduction factor $r_{Cu}$    |       | 0.19                   |
| Reduction factor $r_{304}$   |       | 0.66                   |
| Reduction factor $r_{Brass}$ |       | 0.33                   |
| Output type                  |       | 3-wire                 |

### Nominal ratings

|                     |       |                   |
|---------------------|-------|-------------------|
| Operating voltage   | $U_B$ | 10 ... 60 V       |
| Switching frequency | $f$   | 0 ... 800 Hz      |
| Hysteresis          | $H$   | 1 ... 15 typ. 5 % |

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

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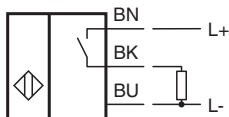
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## Technical Data

|   |       |   |
|---|-------|---|
| Reverse polarity protection                       |       | reverse polarity protected                        |
| Short-circuit protection                          |       | pulsing   |
| Voltage drop                                      | $U_d$ | $\leq 2.8$ V                                      |
| Voltage drop at $I_L$                             |       |   |
| Voltage drop $I_L = 10$ mA, switching element on  | $U_d$ | 0.9 ... 2.4 V typ. 1.7 V                          |
| Voltage drop $I_L = 20$ mA, switching element on  | $U_d$ | 0.9 ... 2.4 V typ. 1.7 V                          |
| Voltage drop $I_L = 50$ mA, switching element on  | $U_d$ | 0.9 ... 2.5 V typ. 1.7 V                          |
| Voltage drop $I_L = 100$ mA, switching element on | $U_d$ | 1 ... 2.6 V typ. 1.8 V                            |
| Voltage drop $I_L = 200$ mA, switching element on | $U_d$ | 1.2 ... 2.8 V typ. 2 V                            |
| Operating current                                 | $I_L$ | 0 ... 200 mA                                      |
| Off-state current                                 | $I_r$ | 0 ... 0.5 mA typ. 0.01 mA                         |
| No-load supply current                            | $I_0$ | $\leq 9$ mA                                       |
| Time delay before availability                    | $t_v$ | $\leq 50$ ms                                      |
| Switching state indicator                         |       | -   |
| <b>Compliance with standards and directives</b>   |       |   |
| Standard conformity                               |       |   |
| Standards   |       | EN 60947-5-2:2007<br>IEC 60947-5-2:2007           |
| <b>Approvals and certificates</b>                 |       |   |
| UL approval                                       |       | cULus Listed, General Purpose                     |
| CSA approval                                      |       | cCSAus Listed, General Purpose                    |
| CCC approval                                      |       | Certified by China Compulsory Certification (CCC) |
| <b>Ambient conditions</b>                         |       |   |
| Ambient temperature                               |       | -25 ... 70 °C (-13 ... 158 °F)                    |
| Storage temperature                               |       | -25 ... 85 °C (-13 ... 185 °F)                    |
| <b>Mechanical specifications</b>                  |       |   |
| Connection type                                   |       | cable PVC , 2 m                                   |
| Core cross-section                                |       | 0.75 mm <sup>2</sup>                              |
| Housing material                                  |       | PBT   |
| Sensing face                                      |       | PBT   |
| Degree of protection                              |       | IP68  |

## Connection



## Accessories

|   |               |                                       |
|---|---------------|---------------------------------------|
|  | <b>BF 30</b>  | Mounting flange, 30 mm                |
|  | <b>EXG-18</b> | Quick mounting bracket with dead stop |