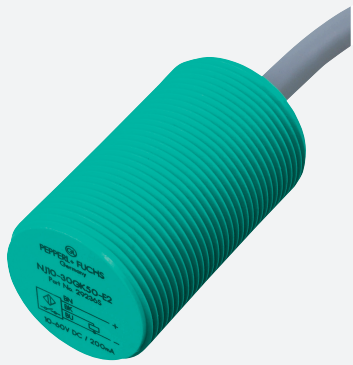


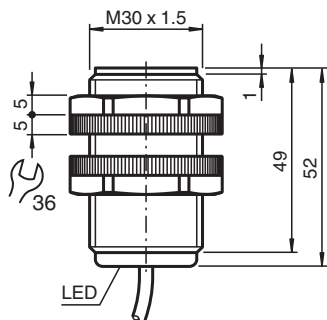


# Inductive sensor NJ15-30GK50-A2

■ 15 mm non-flush



## Dimensions



## Technical Data

### General specifications

|                              |       |                             |
|------------------------------|-------|-----------------------------|
| Switching function           |       | complementary               |
| Output type                  |       | PNP                         |
| Rated operating distance     | $s_n$ | 15 mm                       |
| Installation                 |       | non-flush                   |
| Output polarity              |       | DC                          |
| Assured operating distance   | $s_a$ | 0 ... 12.15 mm              |
| Actual operating distance    | $s_r$ | 13.5 ... 16.5 mm typ. 15 mm |
| Reduction factor $r_{Al}$    |       | 0.4                         |
| Reduction factor $r_{Cu}$    |       | 0.38                        |
| Reduction factor $r_{304}$   |       | 0.71                        |
| Reduction factor $r_{Brass}$ |       | 0.45                        |
| Output type                  |       | 4-wire                      |

### Nominal ratings

|                     |       |              |
|---------------------|-------|--------------|
| Operating voltage   | $U_B$ | 10 ... 60 V  |
| Switching frequency | $f$   | 0 ... 300 Hz |
| Hysteresis          | $H$   | typ. 5 %     |

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

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**PEPPERL+FUCHS**

## Technical Data

|                                                            |       |                                                                                  |
|------------------------------------------------------------|-------|----------------------------------------------------------------------------------|
| Reverse polarity protection                                |       | reverse polarity protected                                                       |
| Short-circuit protection                                   |       | pulsing                                                                          |
| Voltage drop                                               | $U_d$ | $\leq 2.8 \text{ V}$                                                             |
| Voltage drop at $I_L$                                      |       |                                                                                  |
| Voltage drop $I_L = 10 \text{ mA}$ , switching element on  | $U_d$ | $0.9 \dots 2.4 \text{ V typ. } 1.7 \text{ V}$                                    |
| Voltage drop $I_L = 20 \text{ mA}$ , switching element on  | $U_d$ | $0.9 \dots 2.4 \text{ V typ. } 1.7 \text{ V}$                                    |
| Voltage drop $I_L = 50 \text{ mA}$ , switching element on  | $U_d$ | $0.9 \dots 2.5 \text{ V typ. } 1.7 \text{ V}$                                    |
| Voltage drop $I_L = 100 \text{ mA}$ , switching element on | $U_d$ | $1 \dots 2.6 \text{ V typ. } 1.8 \text{ V}$                                      |
| Voltage drop $I_L = 200 \text{ mA}$ , switching element on | $U_d$ | $1.2 \dots 2.8 \text{ V typ. } 2 \text{ V}$                                      |
| Operating current                                          | $I_L$ | $0 \dots 400 \text{ mA}$                                                         |
| Off-state current                                          | $I_r$ | $0 \dots 0.5 \text{ mA typ. } 0.01 \text{ mA}$                                   |
| No-load supply current                                     | $I_0$ | $\leq 9 \text{ mA}$                                                              |
| Switching state indicator                                  |       | LED, yellow                                                                      |
| <b>Functional safety related parameters</b>                |       |                                                                                  |
| MTTF <sub>d</sub>                                          |       | 1120 a                                                                           |
| Mission Time ( $T_M$ )                                     |       | 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                                        |       | $-25 \dots 70 \text{ }^\circ\text{C}$ ( $-13 \dots 158 \text{ }^\circ\text{F}$ ) |
| Storage temperature                                        |       | $-25 \dots 85 \text{ }^\circ\text{C}$ ( $-13 \dots 185 \text{ }^\circ\text{F}$ ) |
| <b>Mechanical specifications</b>                           |       |                                                                                  |
| Connection type                                            |       | cable PVC, 2 m                                                                   |
| Core cross section                                         |       | $0.75 \text{ mm}^2$                                                              |
| Housing material                                           |       | PBT                                                                              |
| Sensing face                                               |       | PBT                                                                              |
| Degree of protection                                       |       | IP68                                                                             |
| Dimensions                                                 |       |                                                                                  |
| Length                                                     |       | 50 mm                                                                            |
| Diameter                                                   |       | 30 mm                                                                            |

## Connection

