



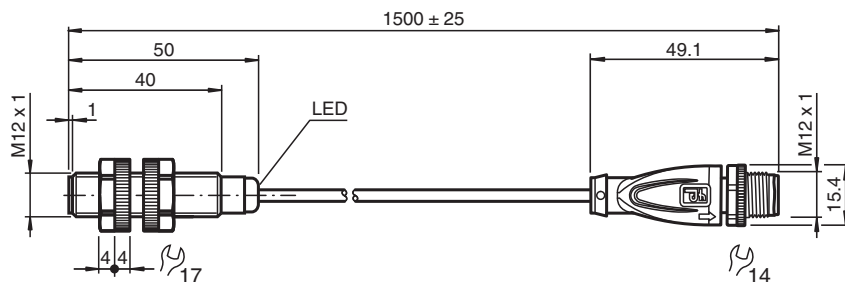
## Inductive sensor

NBN4-12GK50-E2-1,5M-V1

- 4 mm non-flush
- With increased sealing, protection class IP68 / IP69K



### Dimensions



### Technical Data

#### General specifications

|                            |       |                    |
|----------------------------|-------|--------------------|
| Switching function         |       | Normally open (NO) |
| Output type                |       | PNP                |
| Rated operating distance   | $s_n$ | 4 mm               |
| Installation               |       | non-flush          |
| Output polarity            |       | DC                 |
| Assured operating distance | $s_a$ | 0 ... 3.24 mm      |
| Reduction factor $r_{Al}$  |       | 0.5                |
| Reduction factor $r_{Cu}$  |       | 0.4                |
| Reduction factor $r_{304}$ |       | 0.8                |
| Output type                |       | 3-wire             |

#### Nominal ratings

|                             |       |                                   |
|-----------------------------|-------|-----------------------------------|
| Operating voltage           | $U_B$ | 10 ... 30 V                       |
| Switching frequency         | $f$   | 0 ... 1200 Hz                     |
| Reverse polarity protection |       | reverse polarity protected        |
| Short-circuit protection    |       | pulsing                           |
| Voltage drop                | $U_d$ | ≤ 3 V                             |
| Operating current           | $I_L$ | 0 ... 200 mA                      |
| Off-state current           | $I_r$ | 0 ... 0.5 mA typ. 0.1 μA at 25 °C |
| No-load supply current      | $I_0$ | ≤ 17 mA                           |
| Switching state indicator   |       | LED, yellow                       |

#### Compliance with standards and directives

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

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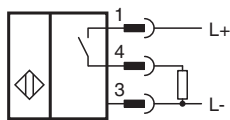
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**PEPPERL+FUCHS**

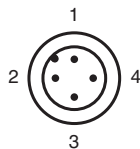
Technical Data

|                            |   |                                                              |
|----------------------------|---|--------------------------------------------------------------|
| Standard conformity        |   |                                                              |
| Standards                  |   | EN IEC 60947-5-2                                             |
| Approvals and certificates |   |                                                              |
| UL approval                |   | cULus Listed, General Purpose                                |
| 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            |   | fixed cable with plug                                        |
| Housing material           |   | PBT                                                          |
| Sensing face               |   | PBT                                                          |
| Degree of protection       |   | IP68 / IP69K                                                 |
| Connector                  |   |                                                              |
| Threading                  |   | M12 x 1                                                      |
| Tightening torque          |   | ≤ 0.6 Nm                                                     |
| Number of pins             |   | 3                                                            |
| Cable                      |   |                                                              |
| Cable diameter             |   | 3.5 mm ± 0.1 mm                                              |
| Bending radius             |   | > 10 x cable diameter                                        |
| Material                   |   | PUR                                                          |
| Color                      |   | grey                                                         |
| Number of cores            |   | 3                                                            |
| Core cross section         |   | 0.14 mm <sup>2</sup>                                         |
| Length                     | L | 1.5 m                                                        |
| Dimensions                 |   |                                                              |
| Length                     |   | 50 mm                                                        |
| Diameter                   |   | 12 mm                                                        |
| Note                       |   | use only delivered nuts                                      |

Connection



Connection Assignment



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## Connection Assignment

Wire colors in accordance with EN 60947-5-2

|   |    |         |
|---|----|---------|
| 1 | BN | (brown) |
| 2 | WH | (white) |
| 3 | BU | (blue)  |
| 4 | BK | (black) |