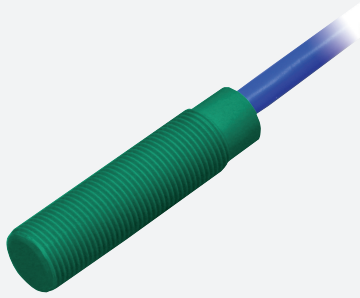


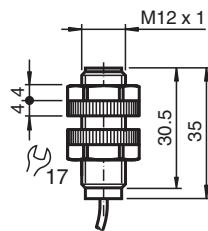
# Inductive sensor NJ4-12GK-N-10M



- Comfort series
- Usable up to SIL 2 acc. to IEC 61508



## Dimensions



## Technical Data

### General specifications

|                            |       |                      |
|----------------------------|-------|----------------------|
| Switching function         |       | Normally closed (NC) |
| Output type                |       | NAMUR                |
| Rated operating distance   | $s_n$ | 4 mm                 |
| Installation               |       | non-flush            |
| Assured operating distance | $s_a$ | 0 ... 3.24 mm        |
| Reduction factor $r_{Al}$  |       | 0.4                  |
| Reduction factor $r_{Cu}$  |       | 0.3                  |
| Reduction factor $r_{304}$ |       | 0.85                 |
| Output type                |       | 2-wire               |

### Nominal ratings

|                              |       |                                      |
|------------------------------|-------|--------------------------------------|
| Nominal voltage              | $U_o$ | 8.2 V ( $R_i$ approx. 1 k $\Omega$ ) |
| Switching frequency          | $f$   | 0 ... 1500 Hz                        |
| Current consumption          |       |                                      |
| Measuring plate not detected |       | min. 3 mA                            |
| Measuring plate detected     |       | $\leq 1$ mA                          |

### Functional safety related parameters

Release date: 2020-07-13 Date of issue: 2020-07-13 Filename: 106414\_eng.pdf

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

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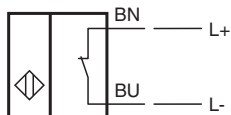
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 **PEPPERL+FUCHS**

## Technical Data

|                                                 |                                                                                             |
|-------------------------------------------------|---------------------------------------------------------------------------------------------|
| MTTF <sub>d</sub>                               | 11774 a                                                                                     |
| Mission Time (T <sub>M</sub> )                  | 20 a                                                                                        |
| Diagnostic Coverage (DC)                        | 0 %                                                                                         |
| <b>Compliance with standards and directives</b> |                                                                                             |
| Standard conformity                             |                                                                                             |
| NAMUR                                           | EN 60947-5-6:2000<br>IEC 60947-5-6:1999                                                     |
| 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>               |                                                                                             |
| IECEX approval                                  |                                                                                             |
| Equipment protection level Gb                   | IECEX PTB 11.0037X                                                                          |
| Equipment protection level Da                   | IECEX PTB 11.0037X                                                                          |
| Equipment protection level Mb                   | IECEX PTB 11.0037X                                                                          |
| ATEX approval                                   |                                                                                             |
| Equipment protection level Gb                   | PTB 00 ATEX 2048 X                                                                          |
| Equipment protection level Da                   | PTB 00 ATEX 2048 X                                                                          |
| EAC conformity                                  | TR CU 012/2011                                                                              |
| UL approval                                     | cULus Listed, General Purpose                                                               |
| CSA approval                                    | cCSAus Listed, General Purpose                                                              |
| CCC approval                                    | CCC approval / marking not required for products rated ≤36 V                                |
| <b>Ambient conditions</b>                       |                                                                                             |
| Ambient temperature                             | -25 ... 100 °C (-13 ... 212 °F)                                                             |
| <b>Mechanical specifications</b>                |                                                                                             |
| Connection type                                 | cable                                                                                       |
| Housing material                                | PBT                                                                                         |
| Sensing face                                    | PBT                                                                                         |
| Degree of protection                            | IP66 / IP68                                                                                 |
| Cable                                           |                                                                                             |
| Cable diameter                                  | 4.8 mm ± 0.2 mm                                                                             |
| Bending radius                                  | > 10 x cable diameter                                                                       |
| Material                                        | PVC                                                                                         |
| Core cross-section                              | 0.34 mm <sup>2</sup>                                                                        |
| Length                                          | L 10 m                                                                                      |
| <b>General information</b>                      |                                                                                             |
| Use in the hazardous area                       | see instruction manuals                                                                     |

## Connection



## Accessories

**BF 12**

Mounting flange, 12 mm