

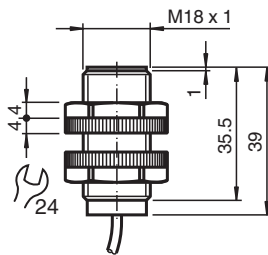
# Inductive sensor NJ8-18GK-N-10M



- 8 mm non-flush
- Usable up to SIL 2 acc. to IEC 61508
- NAMUR output
- 10 m connection cable



## Dimensions



## Technical Data

### General specifications

|                            |       |                      |
|----------------------------|-------|----------------------|
| Switching function         |       | Normally closed (NC) |
| Output type                |       | NAMUR                |
| Rated operating distance   | $s_n$ | 8 mm                 |
| Installation               |       | non-flush            |
| Assured operating distance | $s_a$ | 0 ... 6.48 mm        |
| Reduction factor $r_{AI}$  |       | 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 ... 200 Hz                         |
| Hysteresis                   | $H$   | 1 ... 7 % typ. 4 %                   |
| Current consumption          |       |                                      |
| Measuring plate not detected |       | min. 3 mA                            |
| Measuring plate detected     |       | $\leq 1$ mA                          |

Release date: 2025-06-13 Date of issue: 2025-06-17 Filename: 70133273\_eng.pdf

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

**PEPPERL+FUCHS**

## Technical Data

### Functional safety related parameters

|                              |       |
|------------------------------|-------|
| Safety Integrity Level (SIL) | SIL 2 |
|------------------------------|-------|

### Compliance with standards and directives

|                     |                                         |
|---------------------|-----------------------------------------|
| Standard conformity |                                         |
| NAMUR               | EN 60947-5-6:2000<br>IEC 60947-5-6:1999 |
| Standards           | EN IEC 60947-5-2                        |

### Approvals and certificates

|                               |                               |
|-------------------------------|-------------------------------|
| 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            |
| UL approval                   | cULus Listed, General Purpose |
| CCC approval                  |                               |
| Hazardous Location            | 2020322315002255              |
| CML approval                  | on request                    |
| ANZEx                         | 18.3018X                      |

### Ambient conditions

|                     |                                 |
|---------------------|---------------------------------|
| Ambient temperature | -25 ... 100 °C (-13 ... 212 °F) |
|---------------------|---------------------------------|

### Mechanical specifications

|                      |   |                       |
|----------------------|---|-----------------------|
| Connection type      |   | cable                 |
| Housing material     |   | PBT/PPS               |
| Sensing face         |   | PBT                   |
| Degree of protection |   | IP66 / IP68           |
| Cable                |   |                       |
| Wire end ferrules    |   | yes                   |
| Cable diameter       |   | 6 mm ± 0.2 mm         |
| Bending radius       |   | > 10 x cable diameter |
| Material             |   | PVC                   |
| Color                |   | blue                  |
| Number of cores      |   | 2                     |
| Core cross section   |   | 0.75 mm <sup>2</sup>  |
| Length               | L | 10 m                  |
| Dimensions           |   |                       |
| Length               |   | 39 mm                 |
| Diameter             |   | 18 mm                 |

### General information

|                           |                         |
|---------------------------|-------------------------|
| Scope of delivery         | Supplied with 2 nuts    |
| Use in the hazardous area | see instruction manuals |

## Connection Assignment

