

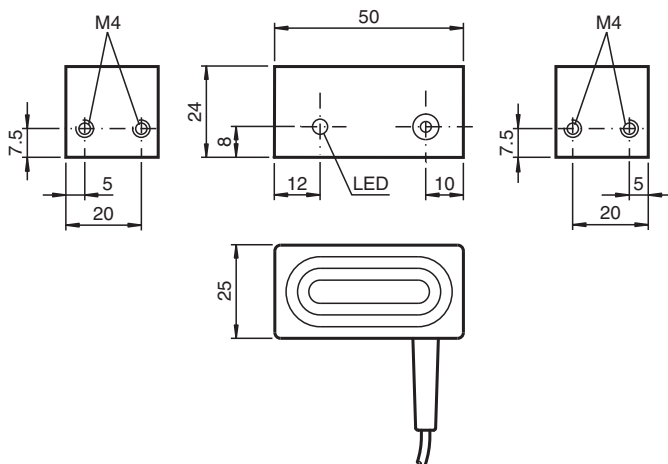
# Inductive sensor

## FJ7-N

■ 7 mm flush



### Dimensions



### Technical Data

| General specifications            |                |                                     |
|-----------------------------------|----------------|-------------------------------------|
| Switching function                |                | Normally closed (NC)                |
| Output type                       |                | NAMUR                               |
| Rated operating distance          | s <sub>n</sub> | 7 mm                                |
| Installation                      |                | flush                               |
| Assured operating distance        | s <sub>a</sub> | 0 ... 5.67 mm                       |
| Reduction factor r <sub>Al</sub>  |                | 0.4                                 |
| Reduction factor r <sub>Cu</sub>  |                | 0.3                                 |
| Reduction factor r <sub>304</sub> |                | 0.85                                |
| Output type                       |                | 2-wire                              |
| Nominal ratings                   |                |                                     |
| Nominal voltage                   | U <sub>o</sub> | 8.2 V (R <sub>i</sub> approx. 1 kΩ) |
| Operating voltage                 | U <sub>B</sub> | 5 ... 25 V                          |
| Switching frequency               | f              | 0 ... 200 Hz                        |
| Hysteresis                        | H              | typ. %                              |
| Current consumption               |                |                                     |
| Measuring plate not detected      |                | ≥ 3 mA at nominal voltage           |

Release date: 2024-05-27 Date of issue: 2024-05-31 Filename: 306134\_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

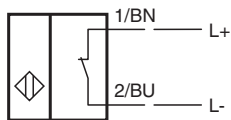
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

 **PEPPERL+FUCHS**

## Technical Data

|                                                 |   |                                 |
|-------------------------------------------------|---|---------------------------------|
| Measuring plate detected                        |   | ≤ 1 mA at nominal voltage       |
| Switching state indicator                       |   | LED, yellow                     |
| <b>Functional safety related parameters</b>     |   |                                 |
| MTTF <sub>d</sub>                               |   | 4080 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               |
| Standards                                       |   | EN IEC 60947-5-2                |
| <b>Approvals and certificates</b>               |   |                                 |
| IECEX approval                                  |   |                                 |
| Equipment protection level Gb                   |   | IECEX PTB 11.0021X              |
| Equipment protection level Mb                   |   | IECEX PTB 11.0021X              |
| ATEX approval                                   |   |                                 |
| Equipment protection level Gb                   |   | PTB 00 ATEX 2032 X              |
| Equipment protection level Gc (ic)              |   | PF13CERT2895 X                  |
| CCC approval                                    |   |                                 |
| Hazardous Location                              |   | 2020322315002304                |
| NEPSI approval                                  |   |                                 |
| NEPSI certificate                               |   | GYJ16.1394X                     |
| CML approval                                    |   | on request                      |
| ANZEx                                           |   | 19.3001X                        |
| <b>Ambient conditions</b>                       |   |                                 |
| Ambient temperature                             |   | -25 ... 100 °C (-13 ... 212 °F) |
| Cable, fixed                                    |   | -25 ... 80 °C (-13 ... 176 °F)  |
| <b>Mechanical specifications</b>                |   |                                 |
| Connection type                                 |   | cable                           |
| Housing material                                |   | brass, zinc plated              |
| Sensing face                                    |   | POM                             |
| Degree of protection                            |   | IP67                            |
| Cable                                           |   |                                 |
| Wire end ferrules                               |   | yes                             |
| Cable diameter                                  |   | 4.8 mm ± 0.2 mm                 |
| Bending radius                                  |   | > 10 x cable diameter           |
| Material                                        |   | PUR                             |
| Color                                           |   | blue                            |
| Number of cores                                 |   | 2                               |
| Core cross section                              |   | 0.34 mm <sup>2</sup>            |
| Length                                          | L | 2 m                             |
| <b>Dimensions</b>                               |   |                                 |
| Height                                          |   | 24 mm                           |
| Width                                           |   | 50 mm                           |
| Length                                          |   | 25 mm                           |
| <b>General information</b>                      |   |                                 |
| Use in the hazardous area                       |   | see instruction manuals         |

Connection



Release date: 2024-05-27 Date of issue: 2024-05-31 Filename: 306134\_eng.pdf