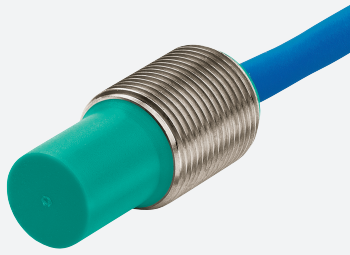


## Inductive sensor

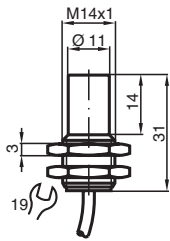
### NJ5-11-N-G-6M



- 5 mm non-flush
- Usable up to SIL 2 acc. to IEC 61508
- NAMUR output
- Stainless steel housing



## Dimensions



## Technical Data

| General specifications            |                |                                                      |
|-----------------------------------|----------------|------------------------------------------------------|
| Switching function                |                | Normally closed (NC)                                 |
| Output type                       |                | NAMUR                                                |
| Rated operating distance          | s <sub>n</sub> | 5 mm                                                 |
| Installation                      |                | non-flush                                            |
| Assured operating distance        | s <sub>a</sub> | 0 ... 4.05 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)                  |
| Switching frequency               | f              | 0 ... 3000 Hz                                        |
| Hysteresis                        | H              | typ. %                                               |
| Suitable for 2:1 technology       |                | yes , Reverse polarity protection diode not required |
| Current consumption               |                |                                                      |
| Measuring plate not detected      |                | min. 3 mA                                            |

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

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 **PEPPERL+FUCHS**

## Technical Data

|                                                 |                                         |
|-------------------------------------------------|-----------------------------------------|
| Measuring plate detected                        | ≤ 1 mA                                  |
| <b>Functional safety related parameters</b>     |                                         |
| Safety Integrity Level (SIL)                    | SIL 2                                   |
| 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 IEC 60947-5-2                        |
| <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                      |
| UL approval                                     | cULus Listed, General Purpose           |
| CCC approval                                    |                                         |
| Hazardous Location                              | 2020322315002255                        |
| CML approval                                    | on request                              |
| ANZEx                                           | 18.3018X                                |
| <b>Ambient conditions</b>                       |                                         |
| Ambient temperature                             | -25 ... 100 °C (-13 ... 212 °F)         |
| <b>Mechanical specifications</b>                |                                         |
| Connection type                                 | cable                                   |
| Housing material                                | Stainless steel 1.4305 / AISI 303       |
| Sensing face                                    | PVDF                                    |
| Degree of protection                            | IP68                                    |
| <b>Cable</b>                                    |                                         |
| 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 6 m                                   |
| <b>Dimensions</b>                               |                                         |
| Length                                          | 31 mm                                   |
| Diameter                                        | 14 mm                                   |
| <b>General information</b>                      |                                         |
| Use in the hazardous area                       | see instruction manuals                 |

## Connection

