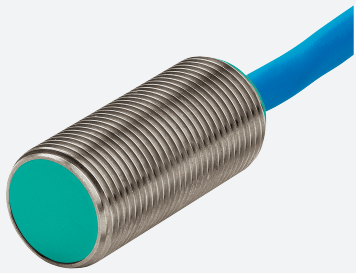


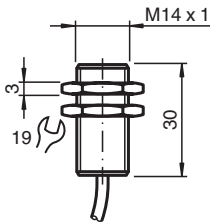
# Inductive sensor NJ2-11-SN-G-931



■ 2 mm flush



## Dimensions



## Technical Data

### General specifications

|                            |       |                            |
|----------------------------|-------|----------------------------|
| Switching function         |       | Normally closed (NC)       |
| Output type                |       | NAMUR with safety function |
| Rated operating distance   | $s_n$ | 2 mm                       |
| Installation               |       | flush                      |
| Assured operating distance | $s_a$ | 0 ... 1.62 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 $\Omega$ ) |
| Operating voltage            | $U_B$ | 5 ... 25 V                           |
| Switching frequency          | $f$   | 0 ... 3000 Hz                        |
| Current consumption          |       |                                      |
| Measuring plate not detected |       | $\geq 3$ mA at nominal voltage       |
| Measuring plate detected     |       | $\leq 1$ mA at nominal voltage       |

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

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 **PEPPERL+FUCHS**

## Technical Data

### Functional safety related parameters

|                                |  |        |
|--------------------------------|--|--------|
| MTTF <sub>d</sub>              |  | 7660 a |
| Mission Time (T <sub>M</sub> ) |  | 20 a   |
| Diagnostic Coverage (DC)       |  | 0 %    |

### 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 11.0092X            |
| Equipment protection level Da |  | IECEX PTB 11.0092X            |
| Equipment protection level Mb |  | IECEX PTB 11.0092X            |
| ATEX approval                 |  |                               |
| Equipment protection level Gb |  | PTB 00 ATEX 2049 X            |
| Equipment protection level Da |  | PTB 00 ATEX 2049 X            |
| UL approval                   |  | cULus Listed, General Purpose |

### Ambient conditions

|                     |  |                                 |
|---------------------|--|---------------------------------|
| Ambient temperature |  | -40 ... 100 °C (-40 ... 212 °F) |
|---------------------|--|---------------------------------|

### Mechanical specifications

|                      |   |                                   |
|----------------------|---|-----------------------------------|
| Connection type      |   | cable                             |
| Housing material     |   | Stainless steel 1.4305 / AISI 303 |
| Sensing face         |   | PBT                               |
| Degree of protection |   | IP68                              |
| Cable                |   |                                   |
| Cable diameter       |   | 4.8 mm ± 0.2 mm                   |
| Bending radius       |   | > 10 x cable diameter             |
| Material             |   | silicone                          |
| Core cross section   |   | 0.34 mm <sup>2</sup>              |
| Length               | L | 2 m                               |
| Dimensions           |   |                                   |
| Length               |   | 30 mm                             |
| Diameter             |   | 14 mm                             |

### General information

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

