

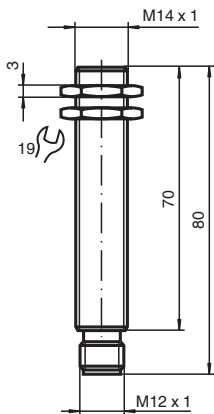
# Inductive sensor

## NJ2-11-N-G-V1-Y194329

■ 2 mm flush



### Dimensions



### Technical Data

#### General specifications

|                            |       |                      |
|----------------------------|-------|----------------------|
| Switching function         |       | Normally closed (NC) |
| Output type                |       | NAMUR                |
| Rated operating distance   | $s_n$ | 2 mm                 |
| Installation               |       | flush                |
| Assured operating distance | $s_a$ | 0 ... 1.62 mm        |
| Actual operating distance  | $s_r$ | 1.8 ... 2.2 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 ... 3000 Hz                        |
| Hysteresis                   | $H$   | 0.5 ... 3.5 typ. 2 %                 |
| Current consumption          |       |                                      |
| Measuring plate not detected |       | min. 3 mA                            |
| Measuring plate detected     |       | $\leq 1$ mA                          |

#### Functional safety related parameters

|                          |  |        |
|--------------------------|--|--------|
| MTTF <sub>d</sub>        |  | 5887 a |
| Mission Time ( $T_M$ )   |  | 20 a   |
| Diagnostic Coverage (DC) |  | 0 %    |

#### Compliance with standards and directives

|                     |
|---------------------|
| Standard conformity |
|---------------------|

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

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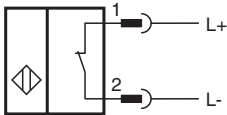
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PEPPERL+FUCHS

Technical Data

|                                   |                                         |
|-----------------------------------|-----------------------------------------|
| 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 Ga     | IECEX PTB 11.0037X                      |
| 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 Ga     | PTB 00 ATEX 2048 X                      |
| Equipment protection level Gb     | PTB 00 ATEX 2048 X                      |
| Equipment protection level Da     | PTB 00 ATEX 2048 X                      |
| UL approval                       |                                         |
| Ordinary Location                 | E87056                                  |
| Hazardous Location                | E501628                                 |
| Control drawing                   | 116-0452                                |
| 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                   | Connector plug                          |
| Housing material                  | Stainless steel 1.4305 / AISI 303       |
| Sensing face                      | PVDF                                    |
| Degree of protection              | IP68                                    |
| Connector                         |                                         |
| Threading                         | M12 x 1                                 |
| Number of pins                    | 4                                       |
| Dimensions                        |                                         |
| Length                            | 80 mm                                   |
| Diameter                          | 14 mm                                   |
| <b>General information</b>        |                                         |
| Use in the hazardous area         | see instruction manuals                 |

Connection



Wire colors in accordance with EN 60947-5-6

- |   |    |         |
|---|----|---------|
| 1 | BN | (brown) |
| 2 | BU | (blue)  |

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