

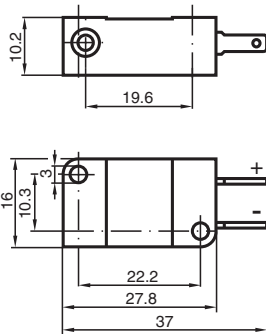
## Inductive sensor

### NJ2-V3-N-V5

- 2 mm flush
- Usable up to SIL 2 acc. to IEC 61508



## 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  |
| Reduction factor $r_{AI}$    |       | 0.25   |
| Reduction factor $r_{Cu}$    |       | 0.2  |
| Reduction factor $r_{304}$   |       | 0.7  |
| Output type                  |       | 2-wire   |
| <b>Nominal ratings</b>       |       |  |
| Nominal voltage              | $U_o$ | 8.2 V ( $R_i$ approx. 1 k $\Omega$ )                 |
| Switching frequency          | $f$   | 0 ... 1000 Hz  |
| Hysteresis                   | $H$   | typ. %   |
| Suitable for 2:1 technology  |       | yes , Reverse polarity protection diode not required |
| <b>Current consumption</b>   |       |  |
| Measuring plate not detected |       | $\geq 3$ mA  |

Release date: 2023-05-26 Date of issue: 2023-05-26 Filename: 70133094\_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

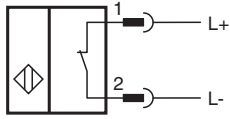
PEPPERL+FUCHS

## Technical Data

|   |   |
|---|---|
| Measuring plate detected                        | ≤ 1 mA  |
| <b>Functional safety related parameters</b>     |   |
| Safety Integrity Level (SIL)                    | SIL 2   |
| MTTF <sub>d</sub>                               | 11775 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 60947-5-2:2007<br>EN 60947-5-2/A1:2012<br>IEC 60947-5-2:2007<br>IEC 60947-5-2 AMD 1:2012 |
| <b>Approvals and certificates</b>               |   |
| IECEX approval                                  |   |
| Equipment protection level Ga                   | IECEX PTB 11.0021X  |
| Equipment protection level Gb                   | IECEX PTB 11.0021X  |
| Equipment protection level Da                   | IECEX PTB 11.0021X  |
| Equipment protection level Mb                   | IECEX PTB 11.0021X  |
| ATEX approval                                   |   |
| Equipment protection level Ga                   | PTB 00 ATEX 2032 X  |
| Equipment protection level Gb                   | PTB 00 ATEX 2032 X  |
| Equipment protection level Da                   | PTB 00 ATEX 2032 X  |
| UL approval                                     |   |
| Ordinary Location                               | E87056  |
| Hazardous Location                              | E501628   |
| Control drawing                                 | 116-0451  |
| CCC approval                                    |   |
| Hazardous Location                              | 2020322315002302  |
| NEPSI approval                                  |   |
| NEPSI certificate                               | GYJ16.1394X   |
| CML approval                                    |   |
| ANZEx   | 19.3001X  |
| Marine approval                                 | DNVGL TAA00001A5  |
| <b>Ambient conditions</b>                       |   |
| Ambient temperature                             | -25 ... 100 °C (-13 ... 212 °F)   |
| <b>Mechanical specifications</b>                |   |
| Connection type                                 | 4.8 mm Faston   |
| Core cross section                              | -   |
| Housing material                                | PBT   |
| Sensing face                                    | PBT   |
| Degree of protection                            | IP67  |
| <b>General information</b>                      |   |
| Use in the hazardous area                       | see instruction manuals   |

Release date: 2023-05-26 Date of issue: 2023-05-26 Filename: 70133094\_eng.pdf

## Connection



Release date: 2023-05-26 Date of issue: 2023-05-26 Filename: 70133094\_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