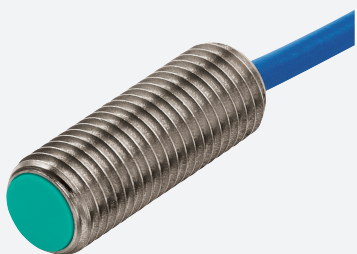


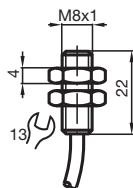
Inductive sensor  
NJ1,5-8GM-N-5M



- 1.5 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   | $s_n$                | 1.5 mm                |
| Installation               | flush                |                       |
| Assured operating distance | $s_a$                | 0 ... 1.215 mm        |
| Actual operating distance  | $s_r$                | 1.35 ... 1.65 mm typ. |
| 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 $\Omega$ ) |
|-----------------|-------|--------------------------------------|

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

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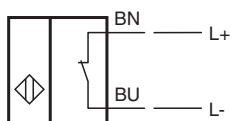
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 **PEPPERL+FUCHS**

## Technical Data

|                                                 |   |                                                                                             |
|-------------------------------------------------|---|---------------------------------------------------------------------------------------------|
| Switching frequency                             | f | 0 ... 5000 Hz                                                                               |
| Hysteresis                                      | H | 1 ... 10 typ. 5 %                                                                           |
| Suitable for 2:1 technology                     |   | yes , Reverse polarity protection diode not required                                        |
| Current consumption                             |   |                                                                                             |
| Measuring plate not detected                    |   | min. 3 mA                                                                                   |
| Measuring plate detected                        |   | ≤ 1 mA                                                                                      |
| <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 11.0037X                                                                          |
| 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                                                                          |
| EAC conformity                                  |   | TR CU 012/2011                                                                              |
| UL approval                                     |   |                                                                                             |
| Ordinary Location                               |   | E87056                                                                                      |
| Hazardous Location                              |   | E501628                                                                                     |
| Control drawing                                 |   | 116-0452                                                                                    |
| CSA approval                                    |   | cCSAus Listed, General Purpose                                                              |
| CCC approval                                    |   | CCC approval / marking not required for products rated ≤36 V                                |
| <b>Ambient conditions</b>                       |   |                                                                                             |
| Ambient temperature                             |   | -25 ... 100 °C (-13 ... 212 °F)                                                             |
| <b>Mechanical specifications</b>                |   |                                                                                             |
| Connection type                                 |   | cable PVC , 5 m                                                                             |
| Core cross-section                              |   | 0.14 mm <sup>2</sup>                                                                        |
| Housing material                                |   | Stainless steel 1.4305 / AISI 303                                                           |
| Sensing face                                    |   | PBT                                                                                         |
| Degree of protection                            |   | IP66 / IP67                                                                                 |
| Cable                                           |   |                                                                                             |
| Cable diameter                                  |   | 2.6 mm ± 0.2 mm                                                                             |
| Bending radius                                  |   | > 10 x cable diameter                                                                       |
| <b>General information</b>                      |   |                                                                                             |
| Use in the hazardous area                       |   | see instruction manuals                                                                     |

## Connection



Accessories

|                                                                                   |             |                       |
|-----------------------------------------------------------------------------------|-------------|-----------------------|
|  | <b>BF 8</b> | Mounting flange, 8 mm |
|-----------------------------------------------------------------------------------|-------------|-----------------------|

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