

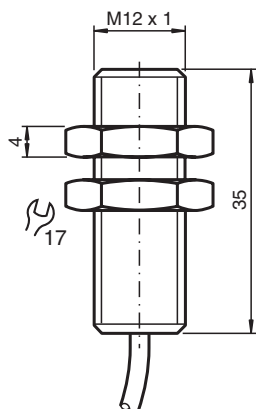


## Inductive sensor NJ2-12GM-N-5M

- Comfort series
- 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 <sub>n</sub> | 2 mm                                                 |
| Installation                      |                | flush                                                |
| Assured operating distance        | s <sub>a</sub> | 0 ... 1.62 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 V                                                  |
| Switching frequency               | f              | 0 ... 2000 Hz                                        |
| 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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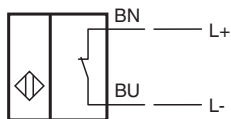
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**PEPPERL+FUCHS**

## Technical Data

|                                                 |                                                                                             |
|-------------------------------------------------|---------------------------------------------------------------------------------------------|
| Measuring plate detected                        | ≤ 1 mA                                                                                      |
| <b>Functional safety related parameters</b>     |                                                                                             |
| Safety Integrity Level (SIL)                    | SIL 2                                                                                       |
| MTTF <sub>d</sub>                               | 5887 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>               |                                                                                             |
| 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                                |
| ANZEx                                           | 18.3018X                                                                                    |
| <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                              | 0.34 mm <sup>2</sup>                                                                        |
| Housing material                                | Stainless steel 1.4305 / AISI 303                                                           |
| Sensing face                                    | PBT                                                                                         |
| Degree of protection                            | IP66 / IP67                                                                                 |
| Cable                                           |                                                                                             |
| Cable diameter                                  | 4.8 mm ± 0.2 mm                                                                             |
| Bending radius                                  | > 10 x cable diameter                                                                       |
| <b>General information</b>                      |                                                                                             |
| Scope of delivery                               | 2 self locking nuts in scope of delivery                                                    |
| Use in the hazardous area                       | see instruction manuals                                                                     |

## Connection



## Accessories

|                                                                                     |               |                                       |
|-------------------------------------------------------------------------------------|---------------|---------------------------------------|
|  | <b>EXG-12</b> | Quick mounting bracket with dead stop |
|-------------------------------------------------------------------------------------|---------------|---------------------------------------|

Accessories

|                                                                                   |              |                        |
|-----------------------------------------------------------------------------------|--------------|------------------------|
|  | <b>BF 12</b> | Mounting flange, 12 mm |
|-----------------------------------------------------------------------------------|--------------|------------------------|

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