

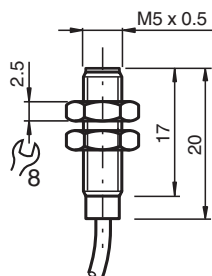
Inductive sensor  
NJ0,8-5GM-N-10M



- Comfort series
- Usable up to SIL 2 acc. to IEC 61508



Dimensions



Technical Data

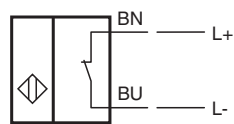
|                                   |                |                                                      |
|-----------------------------------|----------------|------------------------------------------------------|
| General specifications            |                |                                                      |
| Switching function                |                | Normally closed (NC)                                 |
| Output type                       |                | NAMUR                                                |
| Rated operating distance          | s <sub>n</sub> | 0.8 mm                                               |
| Installation                      |                | flush                                                |
| Assured operating distance        | s <sub>a</sub> | 0 ... 0.65 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                                                  |
| Operating voltage                 | U <sub>B</sub> | 5 ... 25 V                                           |
| Switching frequency               | f              | 0 ... 5000 Hz                                        |
| Hysteresis                        | H              | typ. %                                               |
| Suitable for 2:1 technology       |                | yes , Reverse polarity protection diode not required |

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

## Technical Data

|                                                 |  |                                                                                             |
|-------------------------------------------------|--|---------------------------------------------------------------------------------------------|
| Current consumption                             |  |                                                                                             |
| Measuring plate not detected                    |  | ≥ 3 mA at nominal voltage                                                                   |
| Measuring plate detected                        |  | ≤ 1 mA at nominal voltage                                                                   |
| <b>Functional safety related parameters</b>     |  |                                                                                             |
| MTTF <sub>d</sub>                               |  | 1050 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 11.0037X                                                                          |
| 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 , 10 m                                                                            |
| Core cross-section                              |  | 0.14 mm <sup>2</sup>                                                                        |
| Housing material                                |  | Stainless steel 1.4305 / AISI 303                                                           |
| Sensing face                                    |  | PBT                                                                                         |
| Degree of protection                            |  | 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 5</b> | Mounting flange, 5 mm |
|--|-------------|-----------------------|

Release date: 2020-07-01 Date of issue: 2020-07-01 Filename: 106336\_eng.pdf