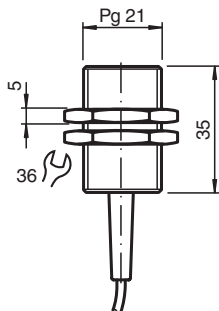


Inductive sensor NJ6-22-SN-G-10M

- 6 mm flush
- Usable up to SIL 3 acc. to IEC 61508
- ATEX approval Ex-i and Ex-nA/tc for zone 0-2 and zone 20-22
- Degree of protection IP68



Dimensions



Technical Data

General specifications

| | | |
|------------------------------|-------|---|
| Switching function | | Normally closed (NC) |
| Output type | | NAMUR with safety function |
| Rated operating distance | s_n | 6 mm |
| Installation | | flush |
| Assured operating distance | s_a | 0 ... 4.86 mm |
| Reduction factor r_{AI} | | 0.4 |
| Reduction factor r_{Cu} | | 0.3 |
| Reduction factor r_{304} | | 0.85 |
| Safety Integrity Level (SIL) | | up to SIL3 acc. to IEC 61508 Danger! In safety-related applications the sensor must be operated with a qualified fail safe interface from Pepperl+Fuchs, such as KFD2-SH-EX1. Consider the "exida Functional Safety Assessment" document which is available on www.pepperl-fuchs.com as an integral part of this product's documentation. |
| Output type | | 2-wire |

Nominal ratings

| | | |
|---------------------|-------|---------------|
| Nominal voltage | U_o | 8.2 V |
| Switching frequency | f | 0 ... 2000 Hz |

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

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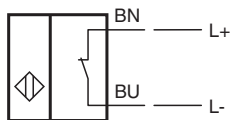
Singapore: +65 6779 9091
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PEPPERL+FUCHS

Technical Data

| | |
|---|---|
| Suitable for 2:1 technology | yes , with reverse polarity protection diode |
| Current consumption | |
| Measuring plate not detected | ≥ 3 mA |
| Measuring plate detected | ≤ 1 mA |
| Functional safety related parameters | |
| Safety Integrity Level (SIL) | SIL 3 |
| MTTF _d | 11850 a |
| Mission Time (T _M) | 20 a |
| Diagnostic Coverage (DC) | 0 % |
| Compliance with standards and directives | |
| Standard conformity | |
| NAMUR | EN 60947-5-6:2000 IEC 60947-5-6:1999 |
| Standards | EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012 |
| Approvals and certificates | |
| UL approval | cULus Listed, General Purpose |
| Ordinary Location | E87056 |
| Hazardous Location | E501628 |
| Control drawing | 116-0454 |
| CCC approval | CCC approval / marking not required for products rated ≤36 V |
| Ambient conditions | |
| Ambient temperature | -40 ... 100 °C (-40 ... 212 °F) |
| Mechanical specifications | |
| Connection type | cable silicone , 10 m |
| Core cross-section | 0.75 mm ² |
| Housing material | stainless steel (303/1.4305) |
| Sensing face | Valox (PBT) , green |
| Degree of protection | IP68 |
| Cable | |
| Cable diameter | 6 mm ± 0.2 mm |
| Bending radius | > 10 x cable diameter |
| General information | |
| Use in the hazardous area | see instruction manuals |

Connection



Application

**Danger!**

In safety-related applications the sensor must be operated with a qualified fail safe interface from Pepperl+Fuchs, such as KFD2-SH-EX1.

Consider the "exida Functional Safety Assessment" document which is available on www.pepperl-fuchs.com as an integral part of this product's documentation.