

Inductive sensor

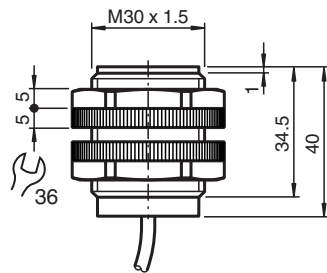
NJ5-30GK-S1N



- Nonferrous targets
- 5 mm flush in ST37 / 1.0037
- 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 open (NO) |
| Output type | | NAMUR with safety function |
| Rated operating distance | S_n | 5 mm |
| Installation | | flush in mild steel |
| Assured operating distance | S_a | 0 ... 4.05 mm |
| Reduction factor r_{AI} | | 1 |
| Reduction factor r_{Cu} | | 1 |
| Reduction factor r_{304} | | 0 |
| 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 ... 150 Hz |

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

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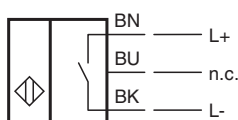
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PEPPERL+FUCHS

Technical Data

| | | |
|---|--|---|
| Suitable for 2:1 technology | | yes , with reverse polarity protection diode |
| Current consumption | | |
| Measuring plate not detected | | ≤ 1 mA |
| Measuring plate detected | | ≥ 3 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 | | |
| 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 | | |
| EAC conformity | | TR CU 012/2011 |
| FM approval | | |
| Control drawing | | 116-0165 |
| 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 | | -25 ... 100 °C (-13 ... 212 °F) |
| Mechanical specifications | | |
| Connection type | | cablc silicone , 2 m |
| Core cross-section | | 0.75 mm ² |
| Housing material | | Crastin (PBT), black |
| Sensing face | | Crastin (PBT), black |
| Degree of protection | | IP68 |
| Cable | | |
| Cable diameter | | 6.8 mm ± 0.2 mm |
| Bending radius | | > 10 x cable diameter |
| Note | | only for non-ferrous metal |
| General information | | |
| Use in the hazardous area | | see instruction manuals |

Connection



Accessories

| | | |
|---|--------------|------------------------|
|  | BF 30 | Mounting flange, 30 mm |
|---|--------------|------------------------|

Application

**Danger!**

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