

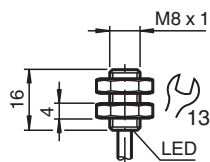


## Inductive sensor NBB2-8GS16-E2

- 2 mm flush
- Increased operating distance
- Stainless steel version
- Extended temperature range



### Dimensions



### Technical Data

#### General specifications

|                              |       |                                                                           |
|------------------------------|-------|---------------------------------------------------------------------------|
| Switching function           |       | Normally open (NO)                                                        |
| Output type                  |       | PNP                                                                       |
| Rated operating distance     | $s_n$ | 2 mm                                                                      |
| Installation                 |       | flush                                                                     |
| Output polarity              |       | DC                                                                        |
| Assured operating distance   | $s_a$ | 0 ... 1.62 mm                                                             |
| Actuating element            |       | mild steel, e. g. 1.0037, SR235JR (formerly St37-2)<br>8 mm x 8 mm x 1 mm |
| Reduction factor $r_{Al}$    |       | 0.2                                                                       |
| Reduction factor $r_{Cu}$    |       | 0.1                                                                       |
| Reduction factor $r_{304}$   |       | 0.55                                                                      |
| Reduction factor $r_{Brass}$ |       | 0.25                                                                      |
| Output type                  |       | 3-wire                                                                    |

#### Nominal ratings

|                                |       |                            |
|--------------------------------|-------|----------------------------|
| Operating voltage              | $U_B$ | 5 ... 30 V                 |
| Switching frequency            | $f$   | 0 ... 6000 Hz              |
| Hysteresis                     | $H$   | typ. 5%                    |
| Reverse polarity protection    |       | reverse polarity protected |
| Short-circuit protection       |       | pulsing                    |
| Voltage drop                   | $U_d$ | $\leq 1.5$ V               |
| Operating current              | $I_L$ | 0 ... 100 mA               |
| Off-state current              | $I_r$ | 0.01 mA                    |
| No-load supply current         | $I_0$ | $\leq 10$ mA               |
| Time delay before availability | $t_v$ | $\leq 100$ ms              |
| Switching state indicator      |       | LED, yellow                |

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

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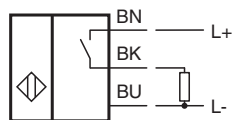
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**PEPPERL+FUCHS**

Technical Data

|                                                 |  |                                                              |
|-------------------------------------------------|--|--------------------------------------------------------------|
| <b>Functional safety related parameters</b>     |  |                                                              |
| MTTF <sub>d</sub>                               |  | 960 a                                                        |
| Mission Time (T <sub>M</sub> )                  |  | 20 a                                                         |
| Diagnostic Coverage (DC)                        |  | 0 %                                                          |
| <b>Compliance with standards and directives</b> |  |                                                              |
| Standard conformity                             |  |                                                              |
| Standards                                       |  | EN IEC 60947-5-2                                             |
| <b>Approvals and certificates</b>               |  |                                                              |
| UL approval                                     |  | cULus Listed, General Purpose, Class 2 Power Source          |
| CCC approval                                    |  | CCC approval / marking not required for products rated ≤36 V |
| <b>Ambient conditions</b>                       |  |                                                              |
| Ambient temperature                             |  | -40 ... 85 °C (-40 ... 185 °F)                               |
| Storage temperature                             |  | -40 ... 85 °C (-40 ... 185 °F)                               |
| <b>Mechanical specifications</b>                |  |                                                              |
| Connection type                                 |  | cablc PVC , 2 m                                              |
| Core cross section                              |  | 0.14 mm <sup>2</sup>                                         |
| Housing material                                |  | Stainless steel 1.4305 / AISI 303                            |
| Sensing face                                    |  | LCP                                                          |
| Degree of protection                            |  | IP65 / IP66 / IP67                                           |
| Cable                                           |  |                                                              |
| Cable diameter                                  |  | 3.5 mm ± 0.1 mm                                              |
| Bending radius                                  |  | > 10 x cable diameter                                        |
| Mass                                            |  | 58 g                                                         |
| Dimensions                                      |  |                                                              |
| Length                                          |  | 16 mm                                                        |
| Diameter                                        |  | 8 mm                                                         |
| <b>General information</b>                      |  |                                                              |
| Scope of delivery                               |  | 2 hex nuts included                                          |

Connection



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