

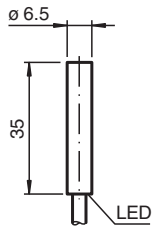


## Inductive sensor NBB2-6,5S35-E0-PUR

- 2 mm flush
- Increased operating distance
- Extended temperature range  
-40 ... +85 °C



### Dimensions



### Technical Data

#### General specifications

|                              |       |   |
|------------------------------|-------|---|
| Switching function           |       | Normally open (NO)  |
| Output type                  |       | NPN   |
| 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>6.5 mm x 6.5 mm x 1 mm |
| Reduction factor $r_{Al}$    |       | 0.15  |
| Reduction factor $r_{Cu}$    |       | 0.1   |
| Reduction factor $r_{304}$   |       | 0.5   |
| Reduction factor $r_{Brass}$ |       | 0.2   |
| 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 ... 0.2 mA               |
| No-load supply current      | $I_0$ | $\leq 10$ mA               |

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

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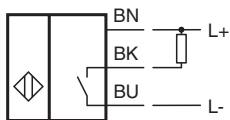
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**Technical Data**

|   |       |   |
|---|-------|---|
| Time delay before availability                  | $t_v$ | $\leq 100$ ms   |
| Switching state indicator                       |       | LED, yellow   |
| <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 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>               |       |   |
| UL approval                                     |       | cULus Listed, General Purpose   |
| CCC approval                                    |       | CCC approval / marking not required for products rated $\leq 36$ 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                                 |       | cable PUR , 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  |
| <b>Cable</b>                                    |       |   |
| Cable diameter                                  |       | 3.3 mm $\pm$ 0.15 mm  |
| Bending radius                                  |       | > 10 x cable diameter   |
| <b>Dimensions</b>                               |       |   |
| Length  |       | 35 mm   |
| Diameter  |       | 6.5 mm  |

**Connection**



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