

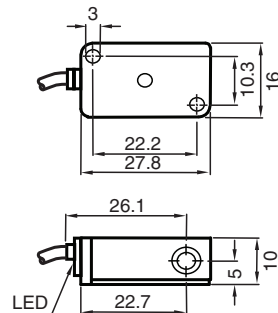


## Inductive sensor NBN4-V3-E0

- 3-wire DC
- 4 mm non-flush



### Dimensions



### Technical Data

#### General specifications

|                            |       |                    |
|----------------------------|-------|--------------------|
| Switching function         |       | Normally open (NO) |
| Output type                |       | NPN                |
| Rated operating distance   | $s_n$ | 4 mm               |
| Installation               |       | non-flush          |
| Output polarity            |       | DC                 |
| Assured operating distance | $s_a$ | 0 ... 3.24 mm      |

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

**PEPPERL+FUCHS**

## Technical Data

|                                                 |       |                                                                    |
|-------------------------------------------------|-------|--------------------------------------------------------------------|
| Reduction factor $r_{Al}$                       |       | 0.35                                                               |
| Reduction factor $r_{Cu}$                       |       | 0.2                                                                |
| Reduction factor $r_{304}$                      |       | 0.7                                                                |
| Output type                                     |       | 3-wire                                                             |
| <b>Nominal ratings</b>                          |       |                                                                    |
| Operating voltage                               | $U_B$ | 10 ... 30 V DC                                                     |
| Switching frequency                             | $f$   | 0 ... 500 Hz                                                       |
| Reverse polarity protection                     |       | reverse polarity protected                                         |
| Short-circuit protection                        |       | pulsing                                                            |
| Voltage drop                                    | $U_d$ | $\leq 3$ V                                                         |
| Operating current                               | $I_L$ | 0 ... 100 mA                                                       |
| Off-state current                               | $I_r$ | 0 ... 0.5 mA typ. 0.1 $\mu$ A at 25 °C                             |
| No-load supply current                          | $I_0$ | $\leq 15$ mA                                                       |
| Switching state indicator                       |       | LED, yellow                                                        |
| <b>Functional safety related parameters</b>     |       |                                                                    |
| MTTF <sub>d</sub>                               |       | 3560 a                                                             |
| Mission Time ( $T_M$ )                          |       | 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                                      |
| CCC approval                                    |       | CCC approval / marking not required for products rated $\leq 36$ V |
| <b>Ambient conditions</b>                       |       |                                                                    |
| Ambient temperature                             |       | -25 ... 70 °C (-13 ... 158 °F)                                     |
| <b>Mechanical specifications</b>                |       |                                                                    |
| Connection type                                 |       | cable                                                              |
| Housing material                                |       | PBT                                                                |
| Sensing face                                    |       | PBT                                                                |
| Degree of protection                            |       | IP67                                                               |
| Cable                                           |       |                                                                    |
| Wire end ferrules                               |       | yes                                                                |
| Cable diameter                                  |       | 3 mm + 0.3 mm                                                      |
| Bending radius                                  |       | > 10 x cable diameter                                              |
| Material                                        |       | PVC                                                                |
| Color                                           |       | grey                                                               |
| Number of cores                                 |       | 3                                                                  |
| Core cross section                              |       | 0.14 mm <sup>2</sup>                                               |
| Length                                          | $L$   | 130 mm                                                             |
| Mass                                            |       | 10 g                                                               |
| Tightening torque, fastening screws             |       | $\leq 0.4$ Nm                                                      |
| <b>Dimensions</b>                               |       |                                                                    |
| Height                                          |       | 10.2 mm                                                            |
| Width                                           |       | 27.8 mm                                                            |
| Length                                          |       | 16 mm                                                              |

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## Connection

