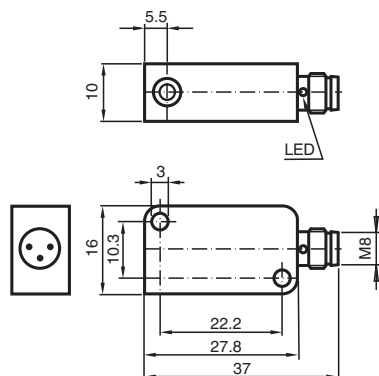


## Inductive sensor NBN6-V3-E1-V3

- 6 mm non-flush
- 3-wire DC



### Dimensions



### Technical Data

#### General specifications

|                            |       |                      |
|----------------------------|-------|----------------------|
| Switching function         |       | Normally closed (NC) |
| Output type                |       | NPN                  |
| Rated operating distance   | $s_n$ | 6 mm                 |
| Installation               |       | non-flush            |
| Output polarity            |       | DC                   |
| Assured operating distance | $s_a$ | 0 ... 4.8 mm         |
| Reduction factor $r_{AI}$  |       | 0.35                 |
| Reduction factor $r_{Cu}$  |       | 0.2                  |
| Reduction factor $r_{304}$ |       | 0.7                  |
| Output type                |       | 3-wire               |

#### Nominal ratings

|                             |       |                                        |
|-----------------------------|-------|----------------------------------------|
| Operating voltage           | $U_B$ | 10 ... 30 V DC                         |
| Switching frequency         | $f$   | 0 ... 1000 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                           |

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

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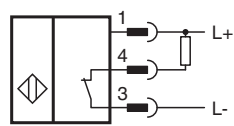
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**PEPPERL+FUCHS**

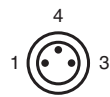
Technical Data

|                                          |                                                              |
|------------------------------------------|--------------------------------------------------------------|
| Switching state indicator                | LED, yellow                                                  |
| Functional safety related parameters     |                                                              |
| MTTF <sub>d</sub>                        | 1920 a                                                       |
| Mission Time (T <sub>M</sub> )           | 20 a                                                         |
| Diagnostic Coverage (DC)                 | 0 %                                                          |
| Compliance with standards and directives |                                                              |
| Standard conformity                      |                                                              |
| Standards                                | EN IEC 60947-5-2                                             |
| Approvals and certificates               |                                                              |
| CCC approval                             | CCC approval / marking not required for products rated ≤36 V |
| Ambient conditions                       |                                                              |
| Ambient temperature                      | -25 ... 70 °C (-13 ... 158 °F)                               |
| Mechanical specifications                |                                                              |
| Connection type                          | Connector plug M8 x 1 , 3-pin                                |
| Housing material                         | PBT                                                          |
| Sensing face                             | PBT                                                          |
| Degree of protection                     | IP67                                                         |
| Tightening torque, fastening screws      | ≤ 0.4 Nm                                                     |
| Dimensions                               |                                                              |
| Height                                   | 10.2 mm                                                      |
| Width                                    | 27.8 mm                                                      |
| Length                                   | 16 mm                                                        |

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

|   |    |         |
|---|----|---------|
| 1 | BN | (brown) |
| 3 | BU | (blue)  |
| 4 | BK | (black) |

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