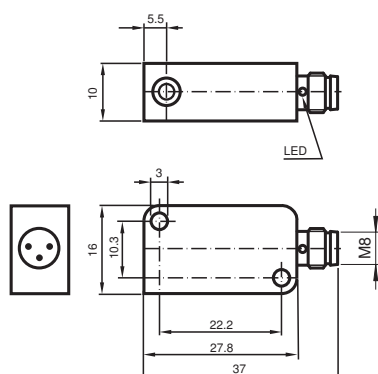


## Inductive sensor NBN6-V3-E0-V3

- 6 mm non-flush
- 3-wire DC



### Dimensions



### Technical Data

#### General specifications

|                            |       |                    |
|----------------------------|-------|--------------------|
| Switching function         |       | Normally open (NO) |
| 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                |

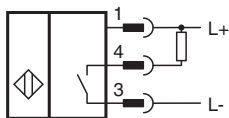
#### Nominal ratings

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

Technical Data

|                                          |       |                                                                           |
|------------------------------------------|-------|---------------------------------------------------------------------------|
| Reverse polarity protection              |       | reverse polarity protected                                                |
| Short-circuit protection                 |       | pulsing                                                                   |
| Voltage drop                             | $U_d$ | $\leq 3\text{ V}$                                                         |
| Operating current                        | $I_L$ | 0 ... 100 mA                                                              |
| Off-state current                        | $I_r$ | 0 ... 0.5 mA typ. 0.1 $\mu\text{A}$ at 25 °C                              |
| No-load supply current                   | $I_0$ | $\leq 15\text{ mA}$                                                       |
| 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 60947-5-2:2007<br>IEC 60947-5-2:2007                                   |
| Approvals and certificates               |       |                                                                           |
| CCC approval                             |       | CCC approval / marking not required for products rated $\leq 36\text{ V}$ |
| Ambient conditions                       |       |                                                                           |
| Ambient temperature                      |       | -25 ... 70 °C (-13 ... 158 °F)                                            |
| Mechanical specifications                |       |                                                                           |
| Connection type                          |       | Connector M8 x 1 , 3-pin                                                  |
| Housing material                         |       | PBT                                                                       |
| Sensing face                             |       | PBT                                                                       |
| Degree of protection                     |       | IP67                                                                      |

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

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

Accessories

|                                                                                   |              |                                                   |
|-----------------------------------------------------------------------------------|--------------|---------------------------------------------------|
|  | V3-WM-2M-PUR | Female cordset single-ended, M8, 3-pin, PUR cable |
|-----------------------------------------------------------------------------------|--------------|---------------------------------------------------|

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