

## Model Number

**NBB2-V3-E0**

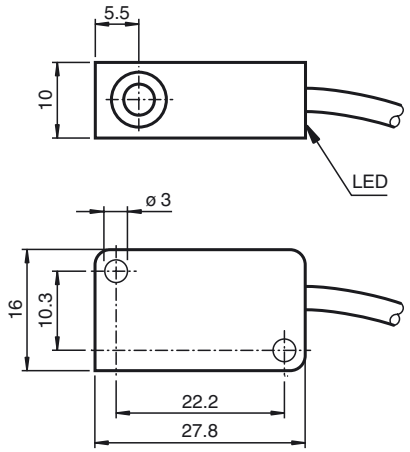
## Features

- **Basic series**
- **2 mm flush**
- **3-wire DC**

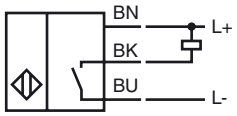
## Technical Data

| | | |
|---|---|---|
| **General specifications** | | |
| Switching element function | | NPN NO |
| Rated operating distance | $s_n$ | 2 mm |
| Installation | | flush |
| Output polarity | | DC |
| Assured operating distance | $s_a$ | 0 ... 1.62 mm |
| Reduction factor $r_{Al}$ | | 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 |
| Reverse polarity protection | | reverse polarity protected |
| Short-circuit protection | | pulsing |
| Voltage drop | $U_d$ | ≤ 3 V |
| Operating current | $I_L$ | 0 ... 100 mA |
| Off-state current | $I_r$ | 0 ... 0.5 mA typ. 0.1 µA at 25 °C |
| No-load supply current | $I_0$ | ≤ 15 mA |
| Switching state indicator | | LED, yellow |
| **Functional safety related parameters** | | |
| $MTTF_d$ | | 3560 a |
| Mission Time ($T_M$) | | 20 a |
| Diagnostic Coverage (DC) | | 0 % |
| **Ambient conditions** | | |
| Ambient temperature | | -25 ... 70 °C (-13 ... 158 °F) |
| **Mechanical specifications** | | |
| Connection type | | cable PVC , 130 mm |
| Core cross-section | | 0.14 $mm^2$ |
| Housing material | | PBT |
| Sensing face | | PBT |
| Degree of protection | | IP67 |
| **Compliance with standards and directives** | | |
| Standard conformity | | |
| Standards | | EN 60947-5-2:2007<br>IEC 60947-5-2:2007 |
| **Approvals and certificates** | | |
| UL approval | | cULus Listed, General Purpose |
| CSA approval | | cCSAus Listed, General Purpose |
| CCC approval | | CCC approval / marking not required for products rated ≤36 V |

## Dimensions




## Electrical Connection

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