

## Overview

- Cylindrical miniature housing for limited installation space
- Lowest serial dispersion due to end-of-line calibration
- Robust even in demanding environments
- Temperature and long-term stable switching behavior



Picture similar



## Technical data

### General data

|                                |                                                                       |
|--------------------------------|-----------------------------------------------------------------------|
| Mounting type                  | Flush                                                                 |
| Nominal sensing distance<br>Sn | 2 mm                                                                  |
| Assured sensing distance<br>Sa | ≤ 81 % of Sn                                                          |
| Real sensing distance Sr       | ± 10 % von Sn                                                         |
| Temperature drift              | ± 10 % of Sr                                                          |
| Hysteresis                     | 3 ... 20 % of Sr                                                      |
| Output indicator               | LED red                                                               |
| Correction factor typ.         | Mild steel 100 %, stainless steel 60 %,<br>aluminum 25 %, copper 20 % |
| Reference object               | Fe360 6 x 6 x 1 mm                                                    |

### Electrical data

|                                       |                        |
|---------------------------------------|------------------------|
| Switching frequency                   | 5 kHz                  |
| Voltage supply range +Vs              | 6 ... 36 VDC           |
| Current consumption max.<br>(no load) | 12 mA                  |
| Output circuit                        | NPN make function (NO) |
| Voltage drop Vd                       | <2 VDC                 |
| Output current                        | 200 mA                 |
| Short circuit protection              | Yes                    |
| Reverse polarity protection           | Yes                    |

### Mechanical data

|        |                    |
|--------|--------------------|
| Design | Cylindrical smooth |
|--------|--------------------|

### Mechanical data

|                         |                       |
|-------------------------|-----------------------|
| Material (sensing face) | PBT                   |
| Housing material        | Stainless steel (V2A) |
| Dimension               | 6.5 mm                |
| Housing length          | 40 mm                 |
| Connection types        | Cable, L=2 m          |

### Ambient conditions

|                       |                                                                           |
|-----------------------|---------------------------------------------------------------------------|
| Operating temperature | -25 ... +75 °C                                                            |
| Storage temperature   | -25 ... +75 °C                                                            |
| Protection class      | IP 67                                                                     |
| Vibration resistance  | IEC 60068-2-6:2008 10 g at f = 10 - 2000<br>Hz, duration 150 min per axis |
| Shock resistance      | IEC 60068-2-27:2009 100 g / 6 ms, 10<br>jolts per axis and direction      |

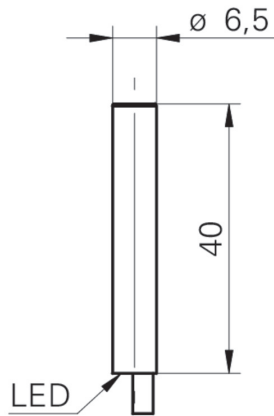
### Safe maximum values

|                          |            |
|--------------------------|------------|
| MTTF                     | 2198 years |
| Diagnostic coverage (DC) | 0 %        |

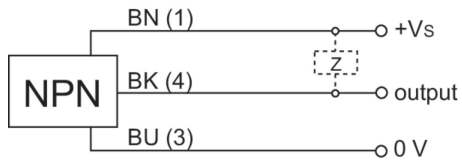
### Cable

|                           |                     |
|---------------------------|---------------------|
| Cable length              | 200 cm              |
| Shielded                  | No                  |
| External sheath: Material | PVC                 |
| Cable diameter            | 3.0 mm              |
| Insulation: Material      | PVC                 |
| Bending radius (fixed)    | 3 × outer diameter  |
| Bending radius (mobile)   | 10 × outer diameter |

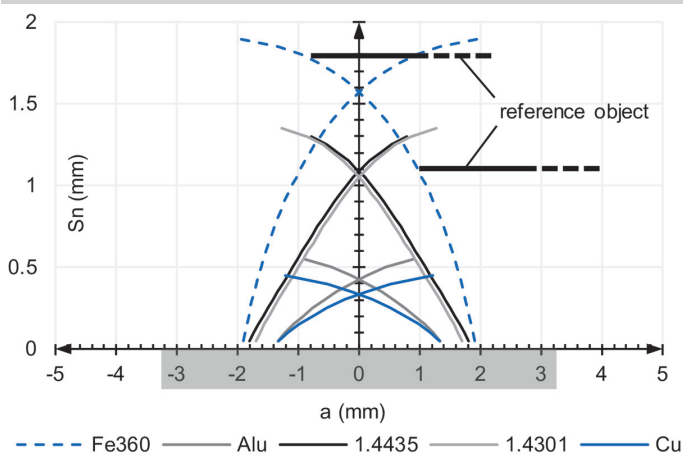
### Dimension drawing



### Connection diagram



### Response diagram



### Accessories

#### Mounting accessories

|          |          |
|----------|----------|
| 10109474 | 10109474 |
| 10117742 | 10117742 |