

## Overview

- Cylindrical miniature housing for limited installation space
- Extended switching distance for maximum reliability
- Lowest serial dispersion due to end-of-line calibration
- Robust even in demanding environments
- Temperature and long-term stable switching behavior
- PUR cable with high chemical resistance



*Picture similar*



## Technical data

### General data

|                                |                                                                    |
|--------------------------------|--------------------------------------------------------------------|
| Mounting type                  | Flush                                                              |
| Nominal sensing distance<br>Sn | 1.6 mm                                                             |
| Assured sensing distance<br>Sa | ≤ 81 % of Sn                                                       |
| Real sensing distance Sr       | ± 10 % von Sn                                                      |
| Temperature drift              | ± 10 % of Sr                                                       |
| Hysteresis                     | 2 ... 20 % of Sr                                                   |
| Output indicator               | LED red                                                            |
| Correction factor typ.         | Mild steel 100 %, stainless steel 65 %, aluminum 40 %, copper 35 % |
| Reference object               | Fe360 4.6 x 4.6 x 1 mm                                             |

### Electrical data

|                                       |                        |
|---------------------------------------|------------------------|
| Switching frequency                   | 3 kHz                  |
| Voltage supply range +Vs              | 6 ... 30 VDC           |
| Current consumption max.<br>(no load) | 12 mA                  |
| Output circuit                        | NPN make function (NO) |
| Voltage drop Vd                       | <2 VDC                 |
| Output current                        | 100 mA                 |
| Short circuit protection              | Yes                    |
| Reverse polarity protection           | Yes                    |

### Mechanical data

|                         |                    |
|-------------------------|--------------------|
| Design                  | Cylindrical smooth |
| Material (sensing face) | LCP                |

### Mechanical data

|                        |                            |
|------------------------|----------------------------|
| Housing material       | Stainless steel (V2A)      |
| Dimension              | 4 mm                       |
| Housing length         | 20 mm                      |
| Connection types       | Flylead connector M8 3 pin |
| Tightening torque max. | 1.2 Nm                     |
| Weight                 | 22 g                       |

### Ambient conditions

|                       |                                                                        |
|-----------------------|------------------------------------------------------------------------|
| Operating temperature | -25 ... +75 °C                                                         |
| Storage temperature   | -40 ... +75 °C                                                         |
| Protection class      | IP 67                                                                  |
| Vibration resistance  | IEC 60068-2-6:2008 10 g at f = 10 - 2000 Hz, duration 150 min per axis |
| Shock resistance      | IEC 60068-2-27:2009 100 g / 6 ms, 10 jolts per axis and direction      |

### Safe maximum values

|                          |            |
|--------------------------|------------|
| MTTF                     | 1245 years |
| Diagnostic coverage (DC) | 0 %        |

### Cable

|                              |                   |
|------------------------------|-------------------|
| Head A: Gender               | Male              |
| Head A: Angle cable outlet   | 0°                |
| Head A: Coding               | A                 |
| Head A: No. of poles         | 3                 |
| Head A: LED                  | No                |
| Head A: Knurled nut material | Brass, surface Ni |

#### Technical data

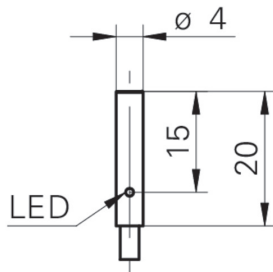
##### Cable

|                           |        |
|---------------------------|--------|
| Cable length              | 20 cm  |
| Shielded                  | No     |
| External sheath: Material | PUR    |
| Cable diameter            | 2.8 mm |

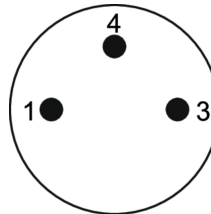
##### Cable

|                         |                       |
|-------------------------|-----------------------|
| Wire cross section      | 0.095 mm <sup>2</sup> |
| Insulation: Material    | PP                    |
| Bending radius (fixed)  | 5 × outer diameter    |
| Bending radius (mobile) | 10 × outer diameter   |

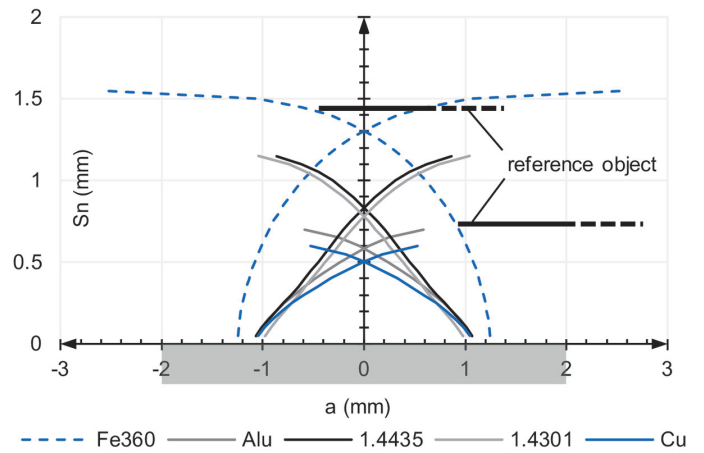
#### Dimension drawing



#### Pin assignment

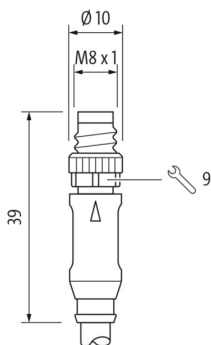


#### Response diagram



#### Variants of integration

##### Dimensions connector



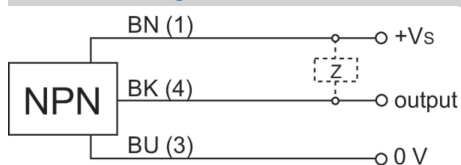
#### Accessories

##### Mounting accessories

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#### Connection diagram



## Accessories

### Mounting accessories