

## Overview

- Cylindrical standard housing for versatile use
- 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 | 4 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 75 %, aluminum 45 %, copper 40 % |
| Reference object               | Fe360 12 x 12 x 1 mm                                               |

### Electrical data

|                                       |                        |
|---------------------------------------|------------------------|
| Switching frequency                   | 2 kHz                  |
| Voltage supply range +Vs              | 6 ... 36 VDC           |
| Current consumption max.<br>(no load) | 10 mA                  |
| Output circuit                        | PNP make function (NO) |
| Voltage drop Vd                       | <2 VDC                 |
| Output current                        | 200 mA                 |
| Short circuit protection              | Yes                    |

### Electrical data

|                             |     |
|-----------------------------|-----|
| Reverse polarity protection | Yes |
|-----------------------------|-----|

### Mechanical data

|                         |                      |
|-------------------------|----------------------|
| Design                  | Cylindrical threaded |
| Material (sensing face) | PBT                  |
| Housing material        | Brass nickel plated  |
| Dimension               | 12 mm                |
| Housing length          | 50 mm                |
| Connection types        | Connector M12 4 pin  |
| Tightening torque max.  | 10 Nm                |
| Weight                  | 21 g                 |

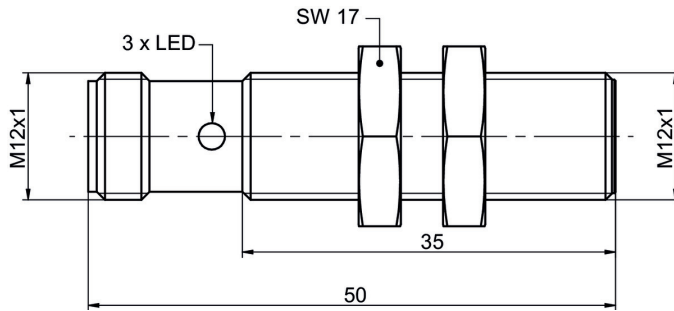
### Ambient conditions

|                       |                                                                        |
|-----------------------|------------------------------------------------------------------------|
| 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      |

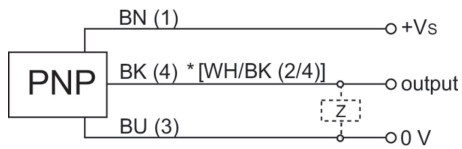
### Safe maximum values

|                          |            |
|--------------------------|------------|
| MTTF                     | 1320 years |
| Diagnostic coverage (DC) | 0 %        |

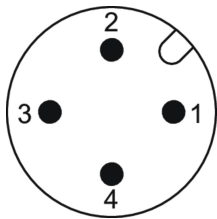
#### Dimension drawing



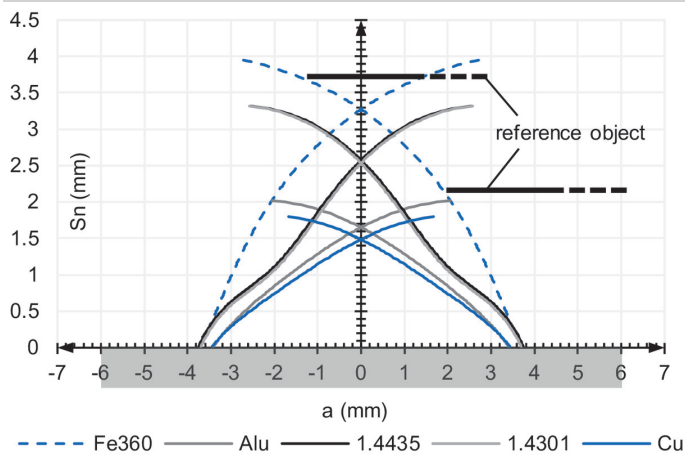
#### Connection diagram



#### Pin assignment



#### Response diagram



**Accessories****Mounting accessories**

|          |                                                   |
|----------|---------------------------------------------------|
| 10151720 | Sensofix series 12 round                          |
| 11707685 | Mounting rod with mounting plate holder<br>200 mm |
| 11707686 | Mounting rod with mounting plate holder<br>300 mm |
| 11707688 | Mounting rod 200 mm                               |
| 11707697 | Mounting rod 250 mm                               |
| 11707698 | Mounting rod with mounting plate holder<br>250 mm |
| 11707687 | Mounting rod 300 mm                               |
| 11707701 | Mounting plate series 300 and ø12 mm              |
| 11707702 | Mounting base                                     |
| 11707703 | Two-way connector                                 |