

## 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

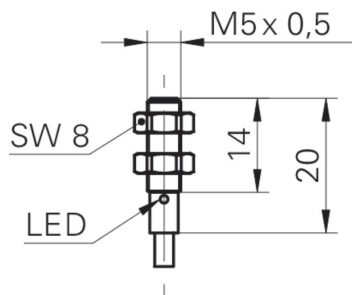
| General data                               |                                                                    | Mechanical data           |                                                                        |
|--------------------------------------------|--------------------------------------------------------------------|---------------------------|------------------------------------------------------------------------|
| Mounting type                              | Flush                                                              | Housing material          | Stainless steel (V2A)                                                  |
| Nominal sensing distance<br>S <sub>n</sub> | 1.6 mm                                                             | Dimension                 | 5 mm                                                                   |
| Assured sensing distance<br>S <sub>a</sub> | ≤ 81 % of S <sub>n</sub>                                           | Housing length            | 20 mm                                                                  |
| Real sensing distance S <sub>r</sub>       | ± 10 % von S <sub>n</sub>                                          | Connection types          | Cable, L=2 m                                                           |
| Temperature drift                          | ± 10 % of S <sub>r</sub>                                           | Tightening torque max.    | 1.4 Nm                                                                 |
| Hysteresis                                 | 2 ... 20 % of S <sub>r</sub>                                       | Weight                    | 17 g                                                                   |
| Output indicator                           | LED red                                                            | Ambient conditions        |                                                                        |
| Correction factor typ.                     | Mild steel 100 %, stainless steel 65 %, aluminum 40 %, copper 35 % | Operating temperature     | -25 ... +75 °C                                                         |
| Reference object                           | Fe360 5 x 5 x 1 mm                                                 | Storage temperature       | -40 ... +75 °C                                                         |
| Electrical data                            |                                                                    | Protection class          | IP 67                                                                  |
| Switching frequency                        | 3 kHz                                                              | Vibration resistance      | IEC 60068-2-6:2008 10 g at f = 10 - 2000 Hz, duration 150 min per axis |
| Voltage supply range +Vs                   | 6 ... 30 VDC                                                       | Shock resistance          | IEC 60068-2-27:2009 100 g / 6 ms, 10 jolts per axis and direction      |
| Current consumption max. (no load)         | 12 mA                                                              | Safe maximum values       |                                                                        |
| Output circuit                             | NPN make function (NO)                                             | MTTF                      | 1245 years                                                             |
| Voltage drop V <sub>d</sub>                | <2 VDC                                                             | Diagnostic coverage (DC)  | 0 %                                                                    |
| Output current                             | 100 mA                                                             | Cable                     |                                                                        |
| Short circuit protection                   | Yes                                                                | Cable length              | 200 cm                                                                 |
| Reverse polarity protection                | Yes                                                                | Shielded                  | No                                                                     |
| Mechanical data                            |                                                                    | External sheath: Material | PUR                                                                    |
| Design                                     | Cylindrical threaded                                               | Cable diameter            | 2.8 mm                                                                 |
| Material (sensing face)                    | POM                                                                | Wire cross section        | 0.09 mm <sup>2</sup>                                                   |
|                                            |                                                                    | Insulation: Material      | PP                                                                     |
|                                            |                                                                    | Bending radius (fixed)    | 5 × outer diameter                                                     |

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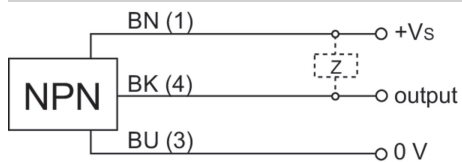
##### Cable

Bending radius (mobile) 10 × outer diameter

#### Dimension drawing



#### Connection diagram



#### Response diagram

