

**Overview**

- Cylindrical standard housing for versatile use
- Factor 1 - Same high distances on any metal
- Extended sensing 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



Picture similar



**Technical data**

**General data**

|                             |   |
|-----------------------------|---|
| Mounting type               | Quasi-flush   |
| Special type                | Factor 1  |
| Nominal sensing distance Sn | 8 mm  |
| Assured sensing distance 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 100 %, aluminum 100 %, copper 100 % |
| Reference object            | Fe360 24 x 24 x 1 mm  |

**Electrical data**

|                                    |                         |
|------------------------------------|-------------------------|
| Switching frequency                | 500 Hz                  |
| Voltage supply range +Vs           | 5 ... 36 VDC            |
| Current consumption max. (no load) | 12 mA                   |
| Output circuit                     | NPN break function (NC) |
| 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               | 18 mm                |
| Housing length          | 60 mm                |
| Connection types        | Connector M12 4 pin  |
| Tightening torque max.  | 40 Nm                |
| Weight                  | 63 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      |

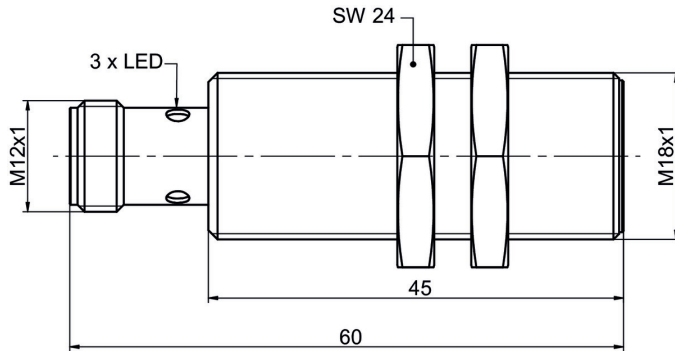
**Safe maximum values**

|                          |           |
|--------------------------|-----------|
| MTTF                     | 775 years |
| Diagnostic coverage (DC) | 0 %       |

**Remarks**

- Not for flush mounting in metals
- Same sensing distance on all metals (no reduction factor)

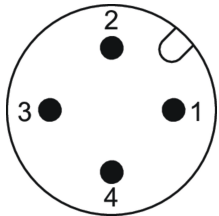
**Dimension drawing**



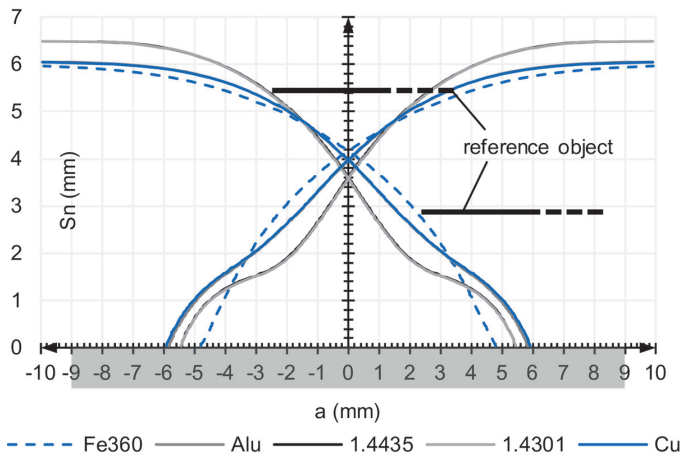
**Connection diagram**



**Pin assignment**



**Response diagram**



**Accessories****Mounting accessories**

|          |   |
|----------|---|
| 10151658 | Sensofix series 18                                |
| 11172096 | ZADAP-M18.STANDARD                                |
| 11171584 | ZADAP-M18.SHORT                                   |
| 11172095 | ZADAP-M18.LONG                                    |
| 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                               |
| 11707699 | Mounting plate series 500 and $\varnothing$ 18 mm |
| 11707702 | Mounting base                                     |
| 11707703 | Two-way connector                                 |