

**Overview**

- Cylindrical standard housing for versatile use
- Factor 1 - Same high distances on any metal
- 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
Special type	Factor 1
Nominal sensing distance Sn	4 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 12 x 12 x 1 mm

**Electrical data**

Switching frequency	2 kHz
Voltage supply range +Vs	5 ... 36 VDC
Current consumption max. (no load)	12 mA
Output circuit	PNP break function (NC)
Voltage drop Vd	<2 VDC
Output current	200 mA
Short circuit protection	Yes

**Electrical data**

Reverse polarity protection	Yes
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**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	25 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

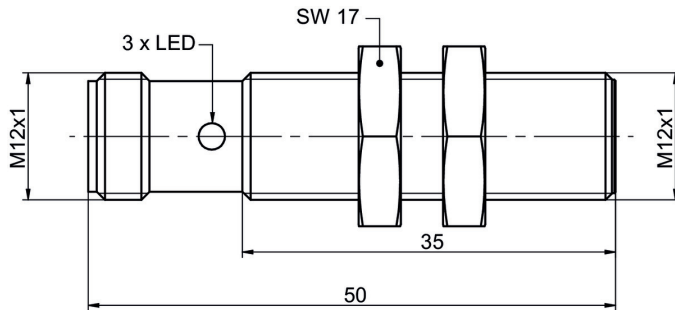
**Safe maximum values**

MTTF	775 years
Diagnostic coverage (DC)	0 %

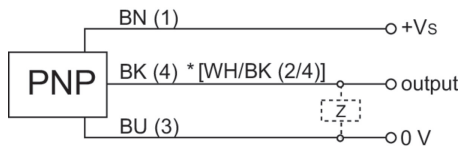
**Remarks**

- Same sensing distance on all metals (no reduction factor)

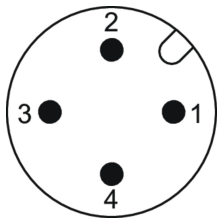
**Dimension drawing**



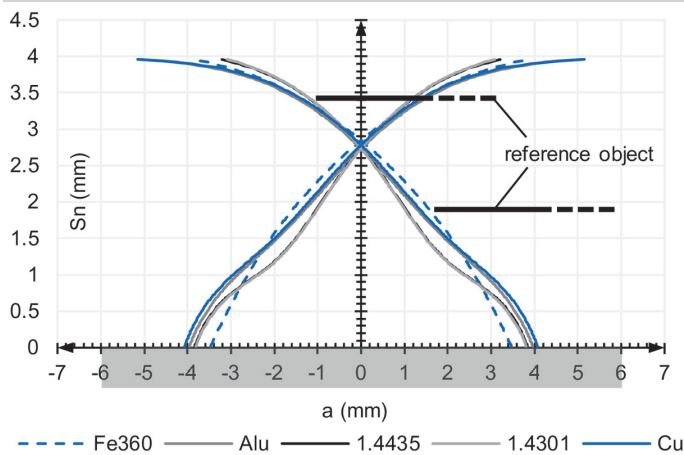
**Connection diagram**



**Pin assignment**



**Response diagram**



**IR12.P04F-F50.PC1Z.7BO**

Inductive proximity switch - factor 1 - all metals

Article number: 11119433

**Accessories****Mounting accessories**

10151720	Sensofix series 12 round
11707685	Mounting rod with mounting plate holder 200 mm
11707686	Mounting rod with mounting plate holder 300 mm
11707688	Mounting rod 200 mm
11707697	Mounting rod 250 mm
11707698	Mounting rod with mounting plate holder 250 mm
11707687	Mounting rod 300 mm
11707701	Mounting plate series 300 and $\varnothing$ 12 mm
11707702	Mounting base
11707703	Two-way connector