

**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		Electrical data	
Mounting type	Flush	Reverse polarity protection	Yes
Special type	Factor 1	Mechanical data	
Nominal sensing distance Sn	4 mm	Design	Cylindrical threaded
Assured sensing distance Sa	≤ 81 % of Sn	Material (sensing face)	PBT
Real sensing distance Sr	± 10 % von Sn	Housing material	Brass nickel plated
Temperature drift	± 10 % of Sr	Dimension	12 mm
Hysteresis	3 ... 20 % of Sr	Housing length	50 mm
Output indicator	LED red	Connection types	Connector M12 4 pin
Correction factor typ.	Mild steel 100 %, stainless steel 100 %, aluminum 100 %, copper 100 %	Tightening torque max.	10 Nm
Reference object	Fe360 12 x 12 x 1 mm	Weight	25 g
Electrical data		Ambient conditions	
Switching frequency	2 kHz	Operating temperature	-25 ... +75 °C
Voltage supply range +Vs	5 ... 36 VDC	Storage temperature	-40 ... +75 °C
Current consumption max. (no load)	12 mA	Protection class	IP 67
Output circuit	NPN break function (NC)	Vibration resistance	IEC 60068-2-6:2008 10 g at f = 10 - 2000 Hz, duration 150 min per axis
Voltage drop Vd	<2 VDC	Shock resistance	IEC 60068-2-27:2009 100 g / 6 ms, 10 jolts per axis and direction
Output current	200 mA	Safe maximum values	
Short circuit protection	Yes	MTTF	775 years
		Diagnostic coverage (DC)	0 %

**Remarks**

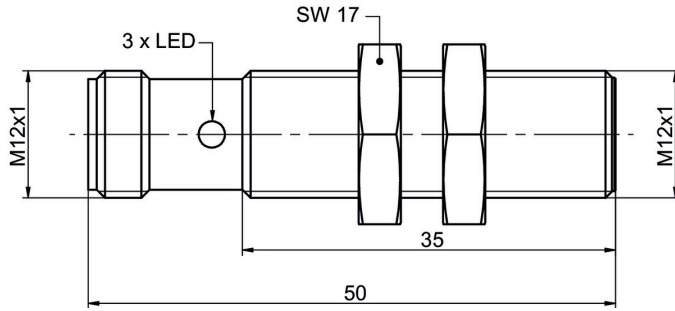
- Same sensing distance on all metals (no reduction factor)

# IR12.P04F-F50.NC1Z.7BO

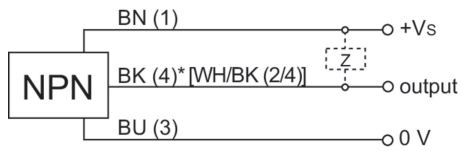
Inductive proximity switch - factor 1 - all metals

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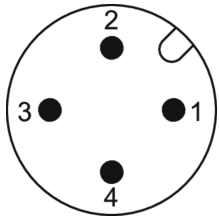
## Dimension drawing



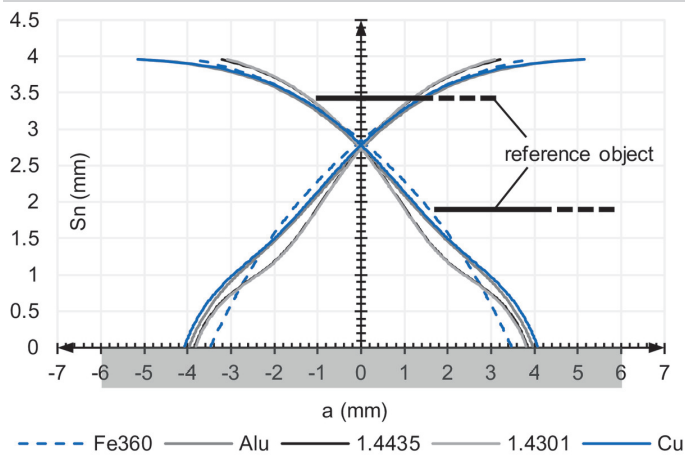
## Connection diagram



## Pin assignment



## Response diagram



**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