

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

Mounting type	Flush
Nominal sensing distance Sn	1 mm
Assured sensing distance Sa	≤ 81 % of Sn
Real sensing distance Sr	± 10 % von Sn
Temperature drift	- 5 % / + 10 % (+10 ... +60 °C) - 5 % / + 15 % (-10 ... +70 °C)
Hysteresis	2 ... 20 % of Sr
Output indicator	LED red
Correction factor typ.	Mild steel 100 %, stainless steel 70 %, aluminum 45 %, copper 35 %
Reference object	Fe360 3 x 3 x 1 mm

Electrical data

Switching frequency	4 kHz
Voltage supply range +Vs	6 ... 30 VDC
Current consumption max. (no load)	10 mA
Output circuit	NPN make function (NO)
Voltage drop Vd	<2 VDC
Output current	100 mA
Short circuit protection	Yes
Reverse polarity protection	Yes

Mechanical data

Design	Cylindrical smooth
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Mechanical data

Material (sensing face)	POM
Housing material	Stainless steel (V2A)
Dimension	3 mm
Housing length	16 mm
Connection types	Flylead connector M8 3 pin
Weight	7 g

Ambient conditions

Operating temperature	-10 ... +75 °C
Storage temperature	-25 ... +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	1437 years
Diagnostic coverage (DC)	0 %

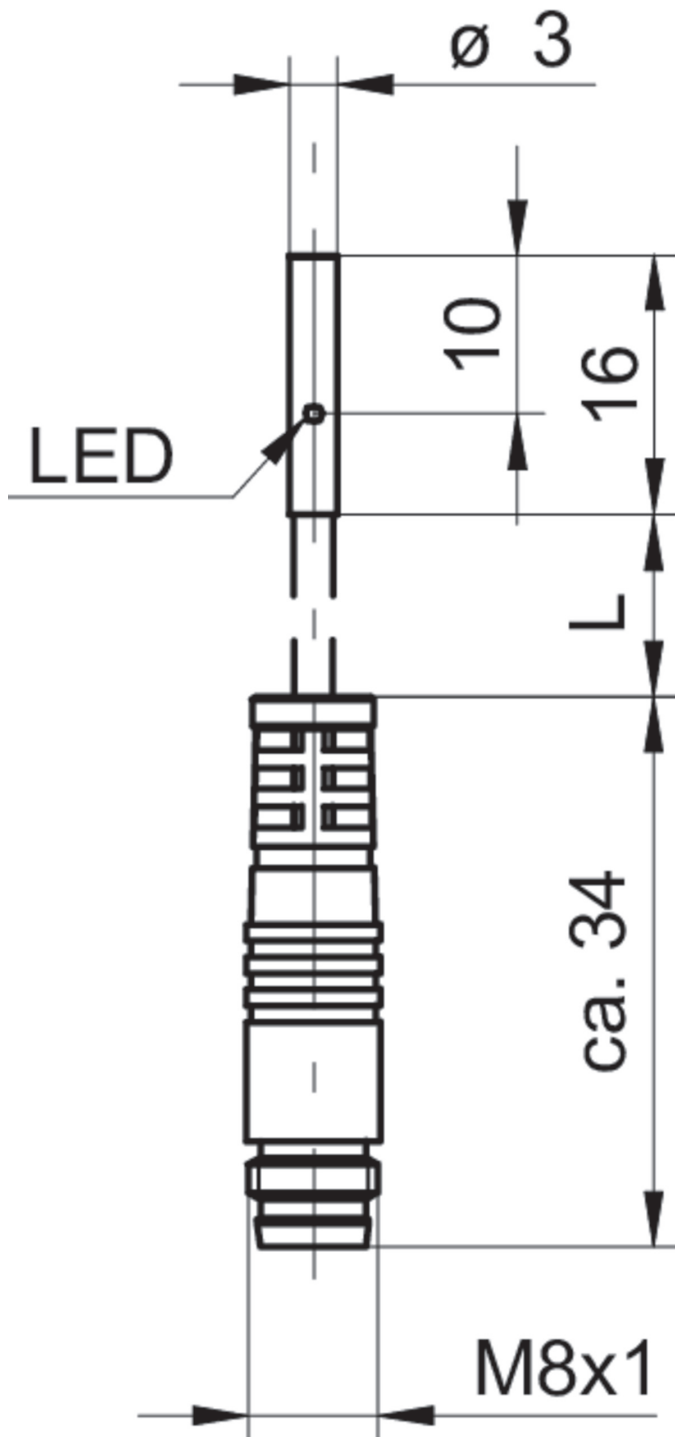
Cable

Head A: Connection	M8
Head A: Gender	Male
Head A: Angle cable outlet	0°
Head A: Coding	A
Head A: No. of poles	3
Head A: LED	No

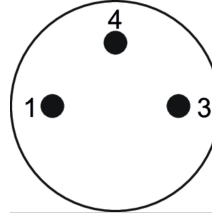
Technical data

Cable		Cable	
Head A: Knurled nut material	Brass, surface Ni	Wire cross section	0.08 mm ²
Cable length	20 cm	Insulation: Material	PP
Shielded	No	Bending radius (fixed)	3 × outer diameter
External sheath: Material	PUR	Bending radius (mobile)	10 × outer diameter
Cable diameter	2.4 mm		

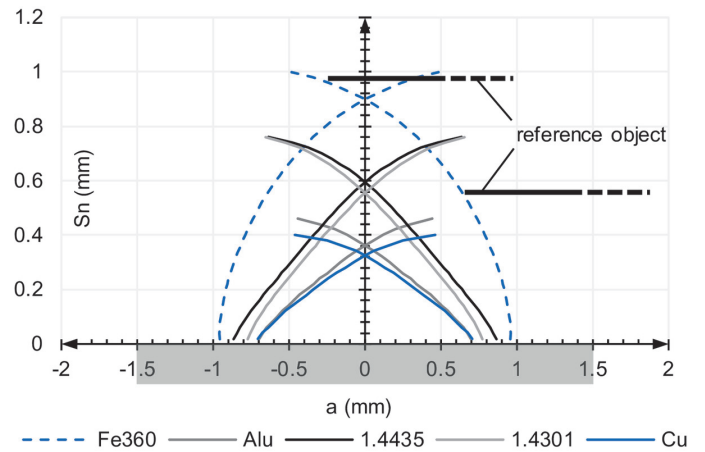
Dimension drawing



Pin assignment



Response diagram



Accessories

Mounting accessories

10137021

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Connection diagram

