Baumer
Passion for Sensors

Inductive proximity switch

IR05.P1FS-F20.PC1Z.7SLU

Article number: 11725348

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	1.6 mm
Assured sensing distance Sa	≤ 81 % of Sn
Real sensing distance Sr	± 10 % von Sn
Temperature drift	± 10 % of Sr
Hysteresis	2 … 20 % of Sr
Output indicator	LED red
Correction factor typ.	Mild steel 100 %, stainless steel 65 %, aluminum 40 %, copper 35 %
Reference object	Fe360 5 x 5 x 1 mm
Electrical data	
Switching frequency	3 kHz
Voltage supply range +Vs	6 … 30 VDC
Current consumption max. (no load)	12 mA
Output circuit	PNP break function (NC)
Voltage drop Vd	<2 VDC
Output current	100 mA
Short circuit protection	Yes
Reverse polarity protection	Yes
Mechanical data	
Design	Cylindrical threaded
Material (sensing face)	POM

Mechanical data	
Housing material	Stainless steel (V2A)
Dimension	5 mm
Housing length	20 mm
Connection types	Flylead connector M8 3 pin
Tightening torque max.	1.4 Nm
Weight	17 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	2011 years
Diagnostic coverage (DC)	0 %
Cable	
Head A: Gender	Male
Head A: Angle cable outlet	0°
Head A: Coding	A
Head A: No. of poles	3
Head A: LED	No
Head A: Knurled nut material	Brass, surface Ni

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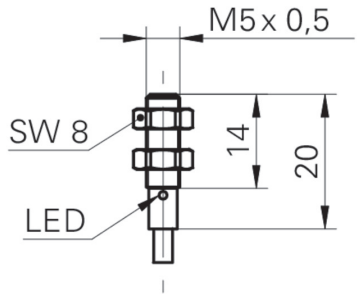
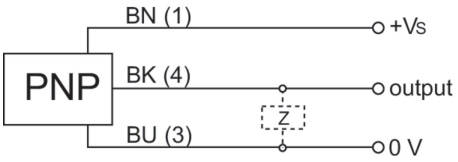
Cable	
Cable length	20 cm
Shielded	No
External sheath: Material	PUR
Cable diameter	2.8 mm

Cable	
Wire cross section	0.09 mm²
Insulation: Material	PP
Bending radius (fixed)	5 × outer diameter
Bending radius (mobile)	10 × outer diameter

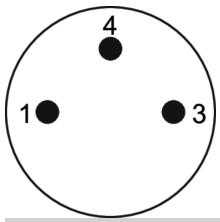
Dimension drawing



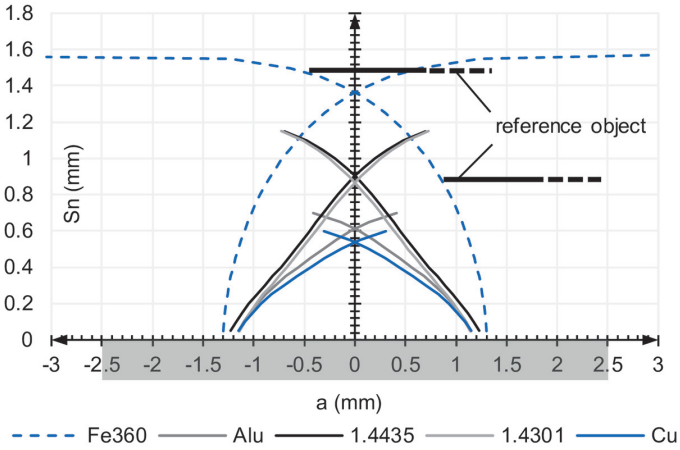
Connection diagram



Pin assignment



Response diagram



Variants of integration

Dimensions connector