Datasheet

RS PRO INDUCTIVE PROXIMITY SENSORS

Stock No: 2066150

Detailed technical data

Features

Housing	Cylindrical thread design
Housing	Standard
Thread size	M8 x 1
Diameter	Ø 8 mm
Sensing range S_n	2 mm
Safe sensing range S_a	1.62 mm
Installation type	Flush
Switching frequency	4,000 Hz
Connection type	Male connector M12, 4-pin
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 1)

1) According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 %
Voltage drop	≤ 2 V 1)
Current consumption	10 mA 2)
Time delay before availability	≤ 100 ms
Hysteresis	5 % ... 15 %
Reproducibility	≤ 2 % 3) 4)
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Short-circuit protection	✓
Reverse polarity protection	✓

Power-up pulse protection	✓
Shock and vibration resistance	30 g, 11 ms/10 Hz ... 55 Hz, 1 mm
Ambient operating temperature	–25 °C ... +75 °C
Housing material	Brass, nickel-plated
Sensing face material	Plastic, PA 66
Housing length	52 mm
Thread length	28 mm
Tightening torque, max.	≤ 5 Nm
Items supplied	Mounting nut, brass, nickel-plated (2x)
UL File No.	NRKH.E181493

1) At $I_a$max.

2) Without load.

3) Ub and Ta constant.

4) Of Sr.

Safety-related parameters

$MTTF_D$	1,735 years
DC_{avg}	0%

Reduction factors
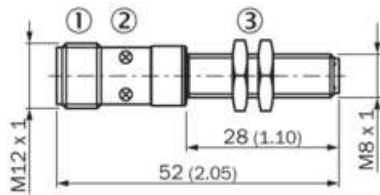
Note	The values are reference values which may vary
St37 steel (Fe)	1
Stainless steel (V2A, 304)	Approx. 0.8
Aluminum (Al)	Approx. 0.45
Copper (Cu)	Approx. 0.4
Brass (Br)	Approx. 0.4

Installation note

Remark	Associated graphic see "Installation"
B	16 mm
C	8 mm
D	6 mm
F	16 mm

Dimensional drawing (Dimensions in mm (inch))

Standard, connector, flush

M12 x 1

28 (1.10)

52 (2.05)

M8 x 1

1 Connection
2 Indication LED
3 Fastening nuts (2x); width across 13, metal

Connection type

Connection diagram

Cd-007

BN 1 + (L+)
BK 4 NO
    2 not connected
BU 3 - (M)
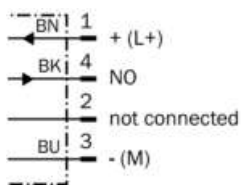
Instruction for installation

Flush installation