

Datasheet
RS Stock No: 701-8231

Inductive Proximity Sensor



Detailed Technical data

Features

Housing	Cylindrical thread design
Housing	Standard
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range Sn	2 mm
Safe sensing range Sa	1.62 mm
Installation type	Flush
Switching frequency	2,000 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 Sr)	± 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	-30 °C ... +75 °C
Housing material	Metal, Nickel-plated brass
Sensing face material	Plastic, PA 66
Housing length	65 mm
Thread length	48 mm
Tightening torque, max.	≤ 12 Nm
Items supplied	Mounting nut, brass, nickel-plated (2x)
UL File No.	NRKH.E181493

1) At I_amax.

2) Without load.

3) U_b and T_a constant.

4) Of S_r.

Reduction Factors

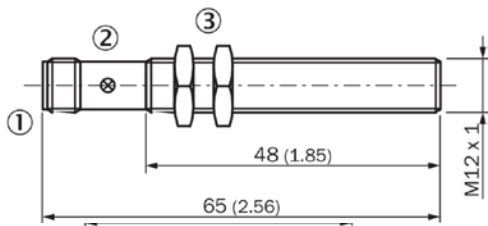
Note	The values are reference values which may vary
St37 steel (Fe)	1
Stainless steel (V2A, 304)	Approx. 0.8
Aluminum (Al)	Approx. 0.45
Copper (Cu)	Approx. 0.4
Brass (Br)	Approx. 0.4

Installation note

Remark	Associated graphic see "Installation" on next page
B	12 mm
C	12 mm
D	6 mm
F	16 mm

Dimensional drawing (Dimensions in mm (inch))

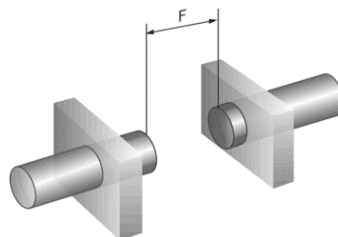
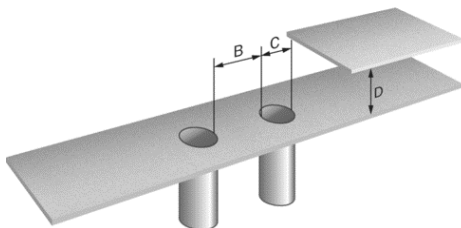
IME12 Standard, connector, flush



1. Connection
2. Indication LED
3. Fastening nuts (2x); width across 17, metal

Installation

Flush installation



Connection diagram

Cd-007

