

Datasheet  
**RS Stock No: 701-8250**

## Inductive Proximity Sensor



### Detailed Technical data

#### Features

Housing	Cylindrical thread design
Housing	Short-body
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range Sn	4 mm
Safe sensing range Sa	3.24 mm
Installation type	Non-flush
Switching frequency	2,000 Hz
Connection type	Cable, 3 wire, 2m
Switching output	NPN
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 <sup>1)</sup>

<sup>1)</sup> According to EN 60529.

## Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 %
Voltage drop	≤ 2 V <sup>1)</sup>
Current consumption	10 mA <sup>2)</sup>
Time delay before availability	≤ 100 ms
Hysteresis	5 % ... 15 %
Reproducibility	≤ 2 % <sup>3) 4)</sup>
Temperature drift (of Sr)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I <sub>a</sub>	≤ 200 mA
Cable material	PVC
Conductor size	0.25 mm <sup>2</sup>
Cable diameter	Ø 3.9 mm
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	Metal, Nickel-plated brass
Sensing face material	Plastic, PA 66
Housing length	44 mm
Thread length	24 mm
Tightening torque, max.	≤ 12 Nm
Items supplied	Mounting nut, brass, nickel-plated (2x)
UL File No.	NRKH.E181493

1) At I<sub>a</sub>max.

2) Without load.

3) U<sub>b</sub> and T<sub>a</sub> constant.

4) Of Sr.

## Reduction Factors

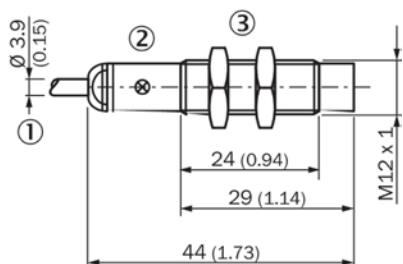
Note	The values are reference values which may vary
St37 steel (Fe)	1
Stainless steel (V2A, 304)	Approx. 0.8
Aluminum (Al)	Approx. 0.45
Copper (Cu)	Approx. 0.4
Brass (Br)	Approx. 0.4

## Installation note

Remark	Associated graphic see "Installation" on next page
A	12 mm
B	24 mm
C	12 mm
D	12 mm
E	8 mm
F	32 mm

## Dimensional drawing (Dimensions in mm (inch))

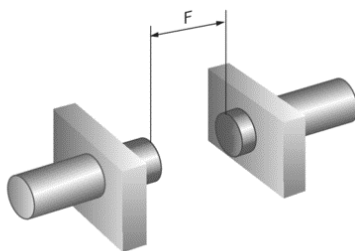
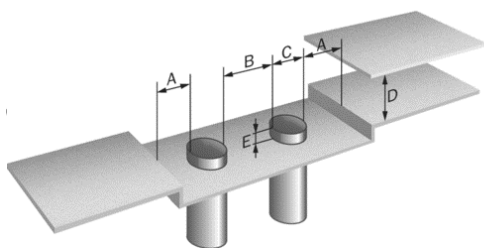
IME12 Short-body housing, cable, non-flush



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

## Installation

Non-flush installation



## Connection diagram

Cd-001

