Datasheet
RS Stock No: 164-6093

Inductive Proximity Sensor

Detailed Technical data

Features

Housing	Cylindrical thread design
Housing	Short-body
Thread size	M8 x 1
Diameter	Ø 8 mm
Sensing range Sn	1.5 mm
Safe sensing range Sa	1.215 mm
Installation type	Flush
Switching frequency	4,000 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	NPN
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 Ia	≤ 200 mA
Cable material	PVC
Conductor size	0.25 mm²
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	43 mm
Thread length	25 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.

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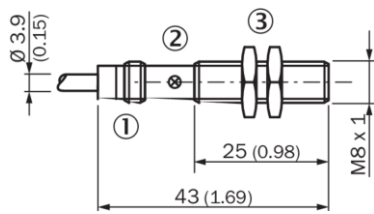
Note	The values are reference values which may vary
St37 steel (Fe)	1
Stainless steel (V2A, 304)	Approx. 0.8
Aluminum (Al)	Approx. 0.45
Copper (Cu)	Approx. 0.4
Brass (Br)	Approx. 0.4

Installation note

Remark	Associated graphic see "Installation" on next page
B	8 mm
C	8 mm
D	4.5 mm
F	12 mm

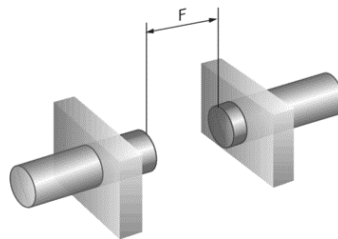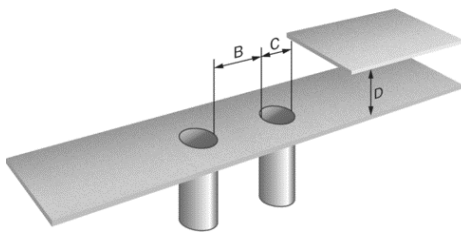## Dimensional drawing (Dimensions in mm (inch)

IME08 Short-body housing, cable, flush

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

Installation

Flush installation

Connection diagram

Cd-001

BN — + (L+)
BK — NO
BU — - (M)