

SICK.COM



DATA SHEET

IMR08-06NPSTC0S

IMR
Inductive proximity sensors

SICK Sensor Intelligence

INDUCTIVE PROXIMITY SENSORS

IMR08-06NPSTC0S

ORDERING INFORMATION

Type	part no.
IMR08-06NPSTC0S	6069274

Further device versions and accessories at www.sick.com/IMR



DETAILED TECHNICAL DATA

FEATURES

Housing	Metric
Housing	Standard design
Thread size	M8 x 1
Diameter	Ø 8 mm
Sensing range S_n	6 mm
Safe sensing range S_s	4.8 mm
Installation type	Non-flush
Switching frequency	1,000 Hz
Connection type	Male connector M12, 4-pin
Switching output	PNP
Switching output detail	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP68
Special features	Reduction factor 1, Magnetic-field-resistant, triple sensing range
Special applications	Welding range, Difficult application conditions
Items supplied	Mounting nut, brass, PTFE coating (2x) Washer, brass, PTFE coating, with locking teeth (2x)

MECHANICS/ELECTRONICS

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 %
Voltage drop	≤ 1.8 V ¹⁾
Hysteresis	3 % ... 15 %
Reproducibility	≤ 2 % ²⁾ ³⁾
Temperature drift (of S _r)	≤ ± 10 % ⁴⁾
Continuous current I _s	≤ 150 mA
No load current	≤ 15 mA
Off-state current	≤ 0.1 mA
Short-circuit protection	✓
Magnetic field strength	≤ 100 mT
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
Ambient operating temperature	-25 °C ... +70 °C
Housing material	PTFE coating, stainless steel
Sensing face material	Plastic, PTFE coating
Housing length	57 mm
Thread length	35 mm
Tightening torque, max.	Typ. 5 Nm
Protection class	II ⁵⁾
UL File No.	E191603

¹⁾ At I_s max.

²⁾ Supply voltage U_s and constant ambient temperature T_a.

³⁾ Of S_r.

⁴⁾ -25 °C ... +70 °C.

⁵⁾ Reference voltage: 50 V DC.

SAFETY-RELATED PARAMETERS

MTTF _D	139 years
DC _{avg}	0%
T _M (mission time)	20 years

REDUCTION FACTORS

Note	The values are reference values which may vary
Reduction factor	Reduction factor 1
Stainless steel (V2A, 304)	1
Aluminum (Al)	1
Copper (Cu)	1
Brass (Br)	1

INSTALLATION NOTE

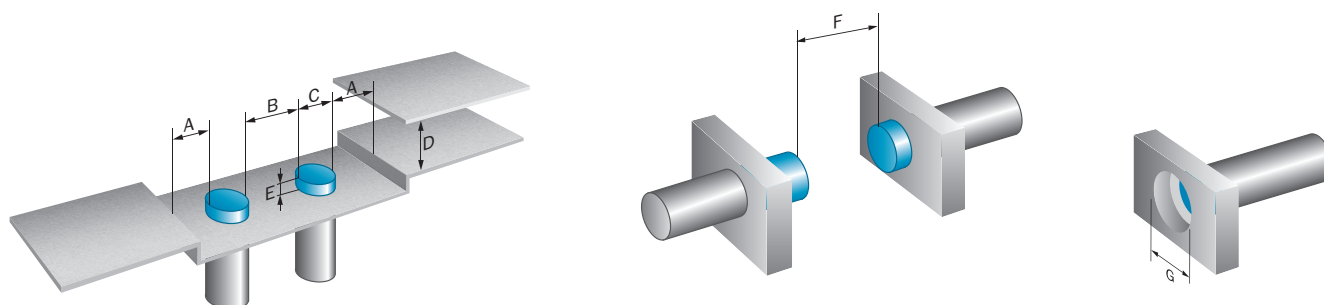
Remark	Associated graphic see "Installation"
A	8 mm
B	16 mm
C	8 mm
D	18 mm

E	12 mm
F	36 mm
G	24 mm

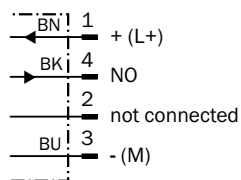
CERTIFICATES

EU declaration of conformity	✓
China RoHS	✓
China Compulsory Product Certification (CCC) exempt	✓
cULus certificate	✓

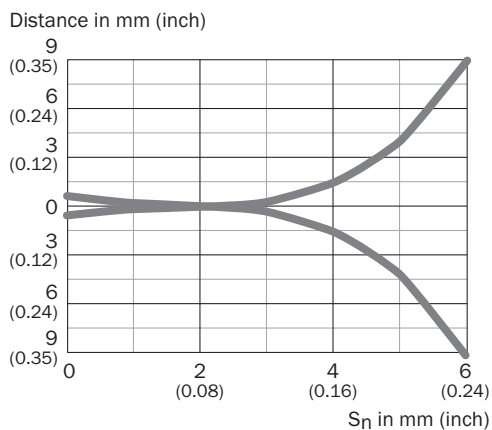
INSTALLATION NOTE

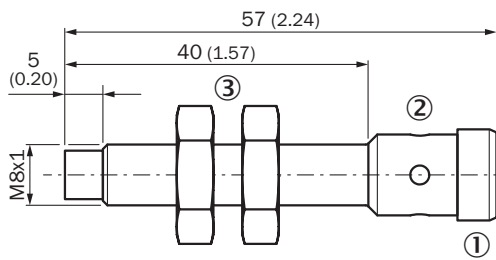


CONNECTION DIAGRAM CD-007



RESPONSE DIAGRAM



DIMENSIONAL DRAWING

Dimensions in mm (inch)

- ① M12 x 1
- ② LED output state, yellow
- ③ Fastening nuts (2 x); width across 13, stainless steel

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/6069274



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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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