

INDUCTIVE PROXIMITY SENSORS



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Ordering information

Included in delivery: BEF-MU-M12 (2)

Other models and accessories → www.sick.com/IME

Туре

IME12-08NPSZCOS



Illustration may differ



Detailed technical data

Features

Housing	Cylindrical thread design
Housing	Standard
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range S _n	8 mm
Safe sensing range S _a	6.48 mm
Installation type	Non-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	$\leq 2 V^{(1)}$
Current consumption	10 mA ²⁾
Time delay before availability	≤ 100 ms
Hysteresis	5 % 15 %

 $^{1)}$ At I_a max.

²⁾ Without load.

 $^{\rm (3)}$ Ub and Ta constant.

⁴⁾ Of Sr.

Part no.

1040780

INDUCTIVE PROXIMITY SENSORS

Reproducibility	≤ 2 % ^{3) 4)}
Temperature drift (of S _r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current l _a	≤ 200 mA
Short-circuit protection	✓
Reverse polarity protection	✓
Power-up pulse protection	1
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	65 mm
Thread length	43 mm
Tightening torque, max.	≤ 12 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

MTTFD	2,327 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"	

Remark	Associated graphic see instantion
A	12 mm
В	24 mm
С	12 mm
D	24 mm
E	16 mm
F	64 mm

Classifications

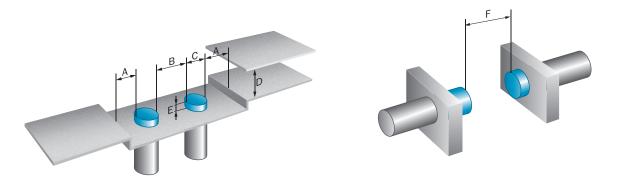
ECI@ss 5.0	27270101
ECI@ss 5.1.4	27270101

INDUCTIVE PROXIMITY SENSORS

ECI@ss 6.0	27270101
ECI@ss 6.2	27270101
ECI@ss 7.0	27270101
ECI@ss 8.0	27270101
ECI@ss 8.1	27270101
ECI@ss 9.0	27270101
ETIM 5.0	EC002714
ETIM 6.0	EC002714
UNSPSC 16.0901	39122230

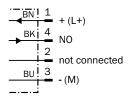
Installation note

Non-flush installation



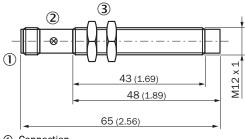
Connection diagram

Cd-007



Dimensional drawing (Dimensions in mm (inch))

IME12 Standard, connector, non-flush



- Connection
 Indication LED
- Fastening nuts (2x); width across 17, metal

Recommended accessories

Other models and accessories → www.sick.com/IME

	Brief description	Туре	Part no.
Mounting brac	ckets and plates		
	Mounting plate for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M12	5321869
40	Mounting bracket for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M12	5308447
Terminal and	alignment brackets		
	Clamping block for round sensors M12, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included $% \left(\frac{1}{2}\right) =0$	BEF-KH-M12	2051479
	Clamping block for round sensors M12, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M12	2051480
Plug connecto	ors and cables		
N	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YF2A14- 020VB3XLEAX	2096234
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF2A14- 050VB3XLEAX	2096235
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 10 m	YF2A14- 100VB3XLEAX	2096236
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YG2A14- 020VB3XLEAX	2095895
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YG2A14- 050VB3XLEAX	2095897
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 10 m	YG2A14- 100VB3XLEAX	2095898

INDUCTIVE PROXIMITY SENSORS

Brief description	Туре	Part no.
Head A: female connector, M12, 4-pin, straight Head B: - Cable: unshielded	DOS-1204-G	6007302
Head A: female connector, M12, 4-pin, angled Head B: - Cable: unshielded	DOS-1204-W	6007303

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

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