# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

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# IME12-04BNSZCOK

**INDUCTIVE PROXIMITY SENSORS** 



INDUCTIVE PROXIMITY SENSORS

Ordering information

Type IME12-04BNSZCOK

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



Illustration may differ



#### Detailed technical data

#### Features

Housing	Cylindrical thread design
Housing	Short-body
Thread size	M12 1
Diameter	Ø 12 mm
Sensing range S <sub>n</sub>	4 mm
Safe sensing range S <sub>a</sub>	3.24 mm
Installation type	Flush
Switching frequency	2,000 Hz
Connection type	Male connector M12, 4-pin
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	$\leq 2 V^{(1)}$
Current consumption	10 mA <sup>2)</sup>
Time delay before availability	≤ 100 ms

 $^{1)}$  At I<sub>a</sub> max.

<sup>2)</sup> Without load.

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

<sup>4)</sup> Of Sr.

Part no.

1040771

INDUCTIVE PROXIMITY SENSORS

Hysteresis	5 % 15 %
Reproducibility	$\leq 2 \%^{(3)(4)}$
Temperature drift (of S <sub>r</sub> )	± 10 %
EMC	According to EN 60947-5-2
Continuous current I <sub>a</sub>	≤ 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	-25 °C +75 °C
Housing material	Metal, Nickel-plated brass
Sensing face material	Plastic, Plastic
Housing length	46 mm
Thread length	29 mm
Tightening torque, max.	≤ 12 Nm
UL File No.	NRKH.E181493

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

<sup>2)</sup> Without load.

<sup>3)</sup> Ub and Ta constant.

<sup>4)</sup> 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"
В	24 mm
С	12 mm
D	12 mm
F	32 mm

#### Classifications

ECI@ss 5.0	27270101
ECI@ss 5.1.4	27270101
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

INDUCTIVE PROXIMITY SENSORS

ECI@ss 9.0	27270101
ETIM 5.0	EC002714
ETIM 6.0	EC002714
UNSPSC 16.0901	39122230

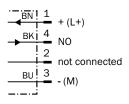
#### Installation note

Flush installation



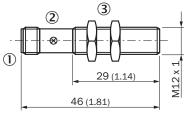
#### **Connection diagram**

Cd-007



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

IME12 Short-body housing, connector, flush



① Connection

- ② Indication LED
- ③ Fastening nuts (2x); width across 17, metal

INDUCTIVE PROXIMITY SENSORS

#### **Recommended accessories**

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

	Brief description	Туре	Part no.	
Universal bar	Universal bar clamp systems			
Ì	Universal bar clamp for mounting bars with 12 mm diameter, Zinc diecast, without mounting plate and screws	ВЕ <b>F</b> -КНS-КНЗ	5322626	
Mounting bra	Mounting brackets 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 rein- forced, mounting hardware included	BEF-KHF-M12	2051480	
Plug connecto	ors and cables			
<b>N</b>	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 E Cable: Head A Head A Head A Head A Head A Head A Head A	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	
	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	D0S-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."

## WORLDWIDE PRESENCE:

Contacts and other locations www.sick.com



Online data sheet

