

# IME12-06BPSZCOK

**INDUCTIVE PROXIMITY SENSORS** 



INDUCTIVE PROXIMITY SENSORS



## Ordering information

Туре	Part no.
IME12-06BPSZCOK	1071218

#### Included in delivery: BEF-MU-M12 (1)

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

Illustration may differ



## Detailed technical data

#### Features

Housing	Metric
Housing	Short-body
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range S <sub>n</sub>	6 mm
Safe sensing range S <sub>a</sub>	4.86 mm
Installation type	Quasi-flush
Switching frequency	800 Hz
Connection type	Male connector M12, 4-pin
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 <sup>1)</sup>
Special features	Triple sensing range
Items supplied	Mounting nut, brass, nickel-plated (2x)

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

### Mechanics/electronics

Supply voltage	10 V DC 30 V DC
Ripple	≤ 10 %
Voltage drop	$\leq 2 V^{(1)}$

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

 $^{2)}$  Supply voltage  $U_{B}$  and constant ambient temperature Ta.

<sup>3)</sup> Of Sr.

INDUCTIVE PROXIMITY SENSORS

Time delay before availability	≤ 50 ms
Hysteresis	1 % 15 %
Reproducibility	$\leq 5 \%^{(2)(3)}$
Temperature drift (of S <sub>r</sub> )	± 10 %
EMC	According to EN 60947-5-2
Continuous current I <sub>a</sub>	≤ 200 mA
No load current	≤ 10 mA
Short-circuit 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
Ambient temperature, storage	-25 °C +75 °C
Housing material	Brass, nickel-plated
Sensing face material	Plastic, PA 66
Housing length	46 mm
	22
Thread length	29 mm
Thread length Tightening torque, max.	29 mm ≤ 12 Nm

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

 $^{2)}\,\mbox{Supply voltage U}_{B}$  and constant ambient temperature Ta.

<sup>3)</sup> Of Sr.

## Safety-related parameters

MTTF <sub>D</sub>	1,735 years
DC <sub>avg</sub>	0 %

## **Reduction factors**

Note	The values are reference values which may vary
St37 steel (Fe)	1
Stainless steel (V2A, 304)	Approx. 0.75
Aluminum (AI)	Approx. 0.52
Copper (Cu)	Approx. 0.45
Brass (Br)	Approx. 0.54

## Installation note

Remark	Associated graphic see "Installation"
A	6 mm
В	25 mm
c	12 mm
D	18 mm
E	2 mm
F	60 mm

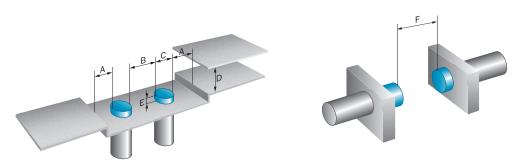
INDUCTIVE PROXIMITY SENSORS

## Classifications

ECLASS 5.0	27270101
	21210101
ECLASS 5.1.4	27270101
ECLASS 6.0	27270101
ECLASS 6.2	27270101
ECLASS 7.0	27270101
ECLASS 8.0	27270101
ECLASS 8.1	27270101
ECLASS 9.0	27270101
ECLASS 10.0	27270101
ECLASS 11.0	27270101
ECLASS 12.0	27274001
ETIM 5.0	EC002714
ETIM 6.0	EC002714
ETIM 7.0	EC002714
ETIM 8.0	EC002714
UNSPSC 16.0901	39122230

## Installation note

Quasi-flush installation



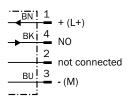
## Connection type



INDUCTIVE PROXIMITY SENSORS

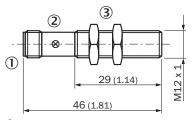
### **Connection diagram**

Cd-007



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

IME12 Short-body housing, connector, flush



① Connection

- ② Display LED
- $\bigcirc$  Fastening nuts (2x); width across 17, metal

#### **Recommended accessories**

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

	Brief description	Туре	Part no.
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 reinforced, mounting hardware included	BEF-KHF-M12	2051480
Others			
	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Description: Unshielded, Head A: female connector, M12, 4-pin, straight, unshielded, for power supply, for cable diameter 4 mm 6 mm Head B: -</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: ≤ 0.75 mm<sup>2</sup></li> </ul>	DOS-1204-G	6007302

INDUCTIVE PROXIMITY SENSORS

	Brief description	Туре	Part no.
	<ul> <li>Connection type head A: Female connector, M12, 4-pin, angled, A-coded</li> <li>Description: Unshielded, Head A: female connector, M12, 4-pin, angled, unshielded, for power supply, for cable diameter 3 mm 6.5 mm Head B: -</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: ≤ 0.75 mm<sup>2</sup></li> </ul>	DOS-1204-W	6007303
•	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YF2A14- 020VB3XLEAX	2096234
<b>\$</b>	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YF2A14- 050VB3XLEAX	2096235
•	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 10 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YF2A14- 100VB3XLEAX	2096236
3	<ul> <li>Connection type head A: Female connector, M12, 4-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YG2A14- 020VB3XLEAX	2095895
3	<ul> <li>Connection type head A: Female connector, M12, 4-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YG2A14- 050VB3XLEAX	2095897
3	<ul> <li>Connection type head A: Female connector, M12, 4-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 10 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YG2A14- 100VB3XLEAX	2095898

# 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

