Online data sheet



IME12-02BPSZC0S

IME

INDUCTIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.



Illustration may differ

Ordering information

Type	Part no.
IME12-02BPSZC0S	1040732

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

Detailed technical data

Features

Housing	Cylindrical thread design
Housing	Standard
Thread size	M12 1
Diameter	Ø 12 mm
Sensing range S_n	2 mm
Safe sensing range S_a	1.62 mm
Installation type	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	≤ 2 V [1]
Current consumption	≤ 10 mA [2]
Time delay before availability	≤ 100 ms

[1] At I_a max.
[2] Without load.
[3] Ub and Ta constant.
[4] Of Sr.

Hysteresis	5 % ... 15 %
Reproducibility	≤ 2 % [3) 4)]
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 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	65 mm
Thread length	48 mm
Tightening torque, max.	≤ 12 Nm
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"
B	12 mm
C	12 mm
D	6 mm
F	16 mm

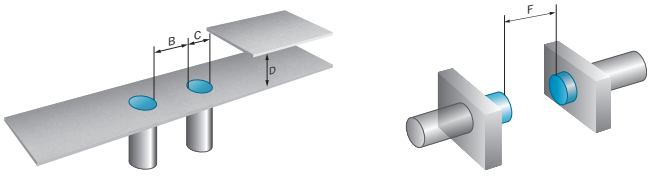
Classifications

ECl@ss 5.0	27270101
ECl@ss 5.1.4	27270101
ECl@ss 6.0	27270101
ECl@ss 6.2	27270101
ECl@ss 7.0	27270101
ECl@ss 8.0	27270101
ECl@ss 8.1	27270101

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

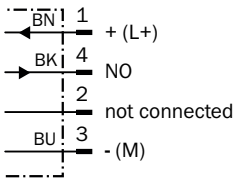
Installation note

Flush installation



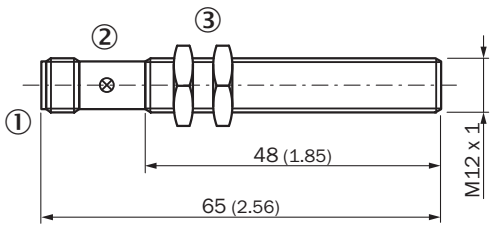
Connection diagram

Cd-007



Dimensional drawing (Dimensions in mm (inch))

IME12 Standard, connector, flush



① Connection
② Indication LED
③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Universal bar clamp systems			
	Universal bar clamp for mounting bars with 12 mm diameter, Zinc diecast, without mounting plate and screws	BEF-KHS-KH3	5322626
Mounting brackets and plates			
	Mounting plate for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M12	5321869
	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	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 connectors and cables			
	Head A: female connector, M12, 4-pin, straight Head B: open cable ends Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
	Head A: female connector, M12, 4-pin, straight Head B: open cable ends Cable: PVC, unshielded, 5 m	DOL-1204-G05M	6009866
	Head A: female connector, M12, 4-pin, straight Head B: open cable ends Cable: PVC, unshielded, 10 m	DOL-1204-G10M	6010543
	Head A: female connector, M12, 4-pin, angled Head B: open cable ends Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383
	Head A: female connector, M12, 4-pin, angled Head B: open cable ends Cable: PVC, unshielded, 5 m	DOL-1204-W05M	6009867
	Head A: female connector, M12, 4-pin, angled Head B: open cable ends Cable: PVC, unshielded, 10 m	DOL-1204-W10M	6010541
	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.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com