

IM12-02BPS-ZCK

IM Standard

INDUCTIVE PROXIMITY SENSORS





Ordering information

Туре	Part no.
IM12-02BPS-ZCK	1017428

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

Illustration may differ



Detailed technical data

Features

Housing	Cylindrical thread design
Housing	Short-body
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range S _n	2 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 % ¹⁾
Voltage drop	\leq 1.5 V $^{2)}$
Time delay before availability	≤ 2 ms
Hysteresis	1 % 10 %
Reproducibility	≤ 1 % ^{3) 4)}
Temperature drift (of S _r)	± 10 %

 $^{^{1)}}$ Of V_{S} .

 $^{^{2)}}$ At I $_{\rm a}$ max.

³⁾ Supply voltage Ub and constant ambient temperature Ta.

⁴⁾ Of Sr.

EMC	According to EN 60947-5-2
Continuous current I _a	≤ 300 mA
Wire-break protection	✓
Short-circuit protection	✓
Reverse polarity protection	✓
Power-up pulse protection	✓
Shock and vibration resistance	30 g, 11 ms / 10 55 Hz, 1 mm
Ambient operating temperature	-25 °C +75 °C
Housing material	Brass, Nickel-plated brass
Sensing face material	Plastic
Housing length	45 mm
Thread length	32 mm
Tightening torque, max.	≤ 7 Nm

 $^{^{1)}}$ Of V_S .

Installation note

Remark	Associated graphic see "Installation"
Α	6 mm
В	12 mm
c	12 mm
D	6 mm
E	0 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
eCl@ss 10.0	27270101
eCl@ss 11.0	27270101
eCl@ss 12.0	27274001
ETIM 5.0	EC002714
ETIM 6.0	EC002714
ETIM 7.0	EC002714
ETIM 8.0	EC002714

²⁾ At I_a max.

 $^{^{\}rm 3)}$ Supply voltage Ub and constant ambient temperature Ta.

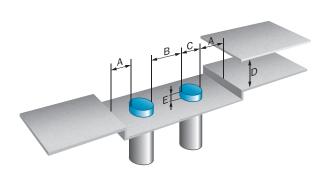
⁴⁾ Of Sr.

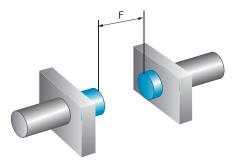
UNSPSC 16.0901

39122230

Installation note

Non-flush installation

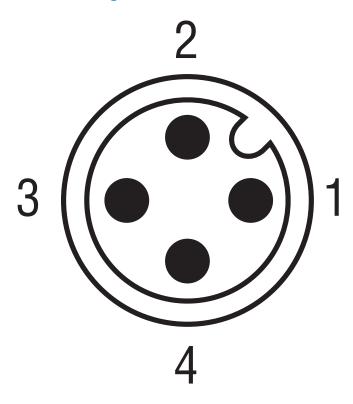




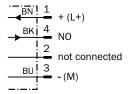
Connection type



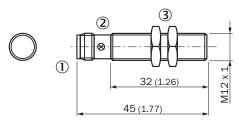
Connection diagram



Cd-007



Dimensional drawing (Dimensions in mm (inch))



- ① Connection
- ② Display LED
- Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	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	
Plug connecto	Plug connectors and cables			
	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	
3	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	
17	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m Only suitable for PNP sensors	YI2A14- 020VB3XLEAX	2096222	

IM12-02BPS-ZCK | IM Standard

INDUCTIVE PROXIMITY SENSORS

	Brief description	Туре	Part no.
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m Only suitable for PNP sensors	YI2A14- 050VB3XLEAX	2096223
	Head A: female connector, M12, 4-pin, straight Cable: unshielded	DOS-1204-G	6007302
	Head A: female connector, M12, 4-pin, angled Cable: unshielded	DOS-1204-W	6007303
W.S.	Head A: male connector, M12, 4-pin, straight Cable: unshielded	STE-1204-G	6009932
	Head A: male connector, M12, 4-pin, angled Cable: unshielded	STE-1204-W	6022084
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

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

