

INDUCTIVE PROXIMITY SENSORS



IM12-04BPS-ZC1 | IM Standard

INDUCTIVE PROXIMITY SENSORS



Ordering information

Туре	Part no.
IM12-04BPS-ZC1	7900037

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



Detailed technical data

Features

Housing	Cylindrical thread design
Housing	Standard design
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range S _n	4 mm
Installation type	Flush
Switching frequency	1,000 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 1.2 V ²⁾
Time delay before availability	≤ 100 ms
Hysteresis	1 % 15 %
Reproducibility	≤ 5 % ^{3) 4)}
Temperature drift (of S _r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I _a	≤ 200 mA

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

²⁾ At I_a max.

- $^{\rm (3)}$ Ub and Ta constant.
- $^{4)}$ Of Sr.

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Short-circuit protection	✓
Reverse polarity protection	\checkmark
Power-up pulse protection	\checkmark
Shock and vibration resistance	30 g, 11 ms / 10 55 Hz, 1 mm
Ambient operating temperature	-25 °C +70 °C
Housing material	Brass, Nickel-plated brass
Sensing face material	Plastic
Housing length	65 mm
Thread length	43 mm
Tightening torque, max.	≤ 10 Nm

 $^{1)}$ Of V_S.

²⁾ At I_a max.

³⁾ Ub and Ta constant.

⁴⁾ Of Sr.

Safety-related parameters

MTTFD	192 years
DC _{avg}	0 %

Installation note

Remark	Associated graphic see "Installation"
A	6 mm
В	12 mm
c	12 mm
D	12 mm
E	2 mm
F	32 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

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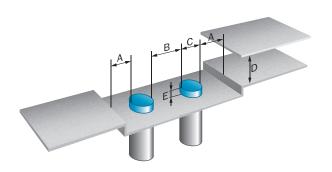
INDUCTIVE PROXIMITY SENSORS

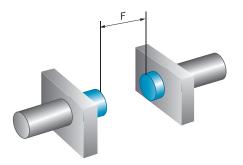
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Installation note

Non-flush installation

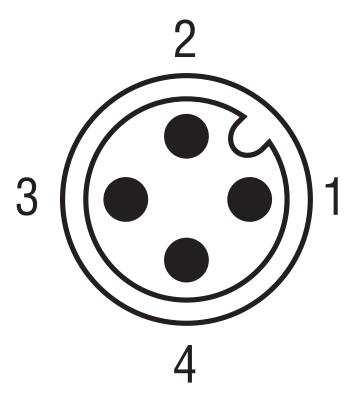




Connection type

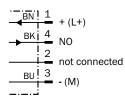


Connection diagram



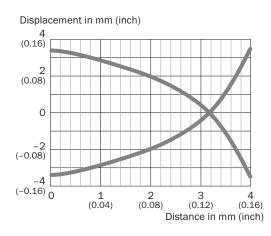
INDUCTIVE PROXIMITY SENSORS

Cd-007

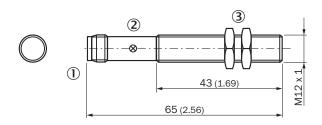


Characteristic curve

Response diagram



Dimensional drawing (Dimensions in mm (inch))



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

IM12-04BPS-ZC1 | IM Standard INDUCTIVE PROXIMITY SENSORS

Dref descriptiontypePart no.PIUg connectors and cablesDEF-WN-M12\$308447Plug connectors and cables020VB3XLEAX2096234Cable: Sensor/actuator cable, PVC, unshielded, 2 m020VB3XLEAX2096234Head A: female connector, M12, 4-pin, straight, A-coded050VB3XLEAX2096234Cable: Sensor/actuator cable, PVC, unshielded, 5 m050VB3XLEAX2095895Head A: female connector, M12, 4-pin, angled, A-coded020VB3XLEAX2095895Head A: female connector, M12, 4-pin, angled, A-coded050VB3XLEAX2095895Cable: Sensor/actuator cable, PVC, unshielded, 5 m050VB3XLEAX2095895Head A: female connector, M12, 4-pin, angled, A-coded050VB3XLEAX2095897Cable: Sensor/actuator cable, PVC, unshielded, 5 m050VB3XLEAX2095223Wead A: female connector, M12, 4-pin, angled, A-coded050VB3XLEAX2095223Cable: Sensor/actuator cable, PVC, unshielded, 5 m020VB3XLEAX2095223Cable: Sensor/actuator cable, PVC, unshielded, 5 m020VB3XLEAX2095223Cable: Sensor/actuator cable, PVC, unshielded, 5 m020VB3XLEAX2096223Cable: Sensor/actuator cable, PVC, unshielded, 5 m050VB3XLEAX2096223Cable: Sensor/actuator cable, PVC, unshielded, 5 m00SVB3XLEAX2096223Cable: unshielded5 m00SVB3XLEAX2096223Cable: unshielded5 m00SVB3XLEAX050VB3XLEAXCable: unshielded5 m00SVB3XLEAX050VB3XLEAXCable: unshielded5 m00S-1204-G6007303 <tr< th=""><th></th><th>Dutof de contextion</th><th>True</th><th>Dautura</th></tr<>		Dutof de contextion	True	Dautura
Plug connectors Instrume of the second state of the second s		Brief description	Туре	Part no.
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Cable: unshielded Cable: unshielded Head A: male connector, M12, 4-pin, angled STE-1204-W 6022084	1		DOS-1204-W	6007303
			STE-1204-G	6009932
		. –	STE-1204-W	6022084
Terminal and alignment brackets				
Clamping block for round sensors M12, without fixed stop, plastic (PA12), glass-fiber re- inforced, mounting hardware included 2051479			BEF-KH-M12	2051479
Clamping block for round sensors M12, with fixed stop, plastic (PA12), glass-fiber rein- forced, mounting hardware included 2051480			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."

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