



**INDUCTIVE PROXIMITY SENSORS** 



# IM30-10BPS-ZC1 | IM Standard

INDUCTIVE PROXIMITY SENSORS



## Ordering information

Туре	Part no.
IM30-10BPS-ZC1	6020278

Other models and accessories → www.sick.com/IM\_Standard





#### Detailed technical data

#### Features

Housing	Cylindrical thread design
Housing	Standard design
Thread size	M30 x 1.5
Diameter	Ø 30 mm
Sensing range S <sub>n</sub>	10 mm
Installation type	Flush
Switching frequency	200 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>

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

## Mechanics/electronics

Supply voltage	10 V DC 30 V DC
Ripple	< 10 % <sup>1)</sup>
Voltage drop	$\leq 1 V^{2}$
Time delay before availability	≤ 100 ms
Hysteresis	2 % 10 %
Reproducibility	$\leq 2 \%^{(3)(4)}$
Temperature drift (of S <sub>r</sub> )	± 10 %

## $^{1)}$ Of $\rm V_S.$

 $^{2)}$  At I<sub>a</sub> max.

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

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

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EMC	According to EN 60947-5-2
Continuous current I <sub>a</sub>	≤ 400 mA
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 +70 °C
Housing material	Brass, Nickel-plated brass
Sensing face material	Plastic
Housing length	76 mm
Thread length	50 mm
Tightening torque, max.	≤ 60 Nm

 $^{1)}$  Of V<sub>S</sub>.

<sup>2)</sup> At I<sub>a</sub> max.

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

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

#### Installation note

Remark	Associated graphic see "Installation"
A	10 mm
В	30 mm
c	30 mm
D	30 mm
E	0 mm
F	80 mm

### Classifications

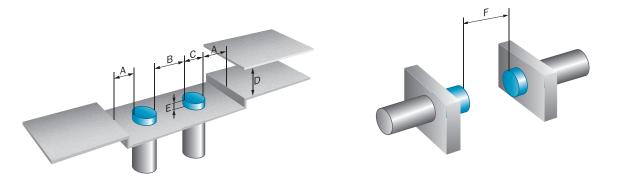
ECLASS 5.0	27270101
ECLASS 5.1.4	27270101
ECLASS 6.0	27270101
ECLASS 6.2	27270101
ECLASS 7.0	27270101
ECLASS 8.0	27270101
ECLASS 8.1	27270101
ECLASS 9.0	27270101
ECLASS 10.0	27270101
ECLASS 11.0	27270101
ECLASS 12.0	27274001
ETIM 5.0	EC002714
ETIM 6.0	EC002714
ETIM 7.0	EC002714
ETIM 8.0	EC002714
UNSPSC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

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#### Installation note

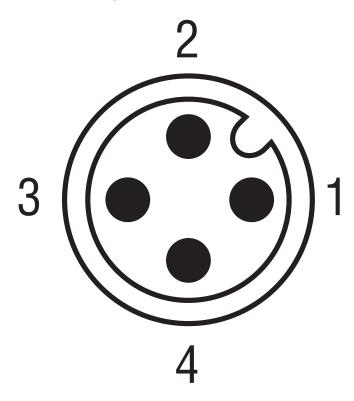
Non-flush installation



## Connection type



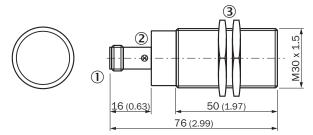
## **Connection diagram**



#### Cd-007



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



1 Connection

② Display LED

③ Fastening nuts (2x); width across 36, metal

#### **Recommended accessories**

Other models and accessories → www.sick.com/IM\_Standard

	Brief description	Туре	Part no.
Universal bar clamp systems			
6	Plate N10 for universal clamp bracket, M30, Zinc plated steel (sheet), Zinc die cast (clamping bracket), Universal clamp (5322626), mounting hardware	BEF-KHS-N10	2062372
Mounting brackets and plates			
	Mounting plate for M30 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M30	5321871
40	Mounting bracket for M30 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M30	5308445
Plug connecto	rs and cables		
	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight</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
	<ul> <li>Connection type head A: Female connector, M12, 4-pin, angled</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

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	Brief description	Туре	Part no.
	<ul> <li>Connection type head A: Male connector, M12, 4-pin, straight</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: ≤ 0.75 mm<sup>2</sup></li> </ul>	STE-1204-G	6009932
	<ul> <li>Connection type head A: Male connector, M12, 4-pin, angled</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: ≤ 0.75 mm<sup>2</sup></li> </ul>	STE-1204-W	6022084
Others			
<b>N</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: 2 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>	YF2A14- 020VB3XLEAX	2096234
<b>N</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</li> </ul>	YF2A14- 050VB3XLEAX	2096235
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</li> </ul>	YG2A14- 020VB3XLEAX	2095895
*	<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</li> </ul>	YG2A14- 050VB3XLEAX	2095897
0 <sup>E</sup>	<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, LED function display</li> <li>Note: Only suitable for PNP sensors</li> <li>Application: Zones with chemicals</li> </ul>	YI2A14- 020VB3XLEAX	2096222
0 <sup>E</sup>	<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, LED function display</li> <li>Note: Only suitable for PNP sensors</li> <li>Application: Zones with chemicals</li> </ul>	YI2A14- 050VB3XLEAX	2096223

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For us, that is "Sensor Intelligence."

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