



**INDUCTIVE PROXIMITY SENSORS** 



## IM08-02BPO-ZT1 | IM Standard

INDUCTIVE PROXIMITY SENSORS



# Ordering information

Туре	Part no.
IM08-02BP0-ZT1	7900007

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





#### Detailed technical data

#### Features

Housing	Metric
Housing	Standard design
Thread size	M8 x 1
Diameter	Ø 8 mm
Sensing range S <sub>n</sub>	2 mm
Installation type	Flush
Switching frequency	3,000 Hz
Connection type	Connector M8, 3-pin
Switching output	PNP
Output function	NC
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	$\leq$ 1.2 V <sup>2)</sup>
Time delay before availability	≤ 100 ms
Hysteresis	2 % 15 %
Reproducibility	< 5 % <sup>3) 4)</sup>
Temperature drift (of S <sub>r</sub> )	± 10 %

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

 $^{2)}$  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>	≤ 200 mA
Short-circuit 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	50 mm
Thread length	35.3 mm
Tightening torque, max.	4 Nm

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

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

 $^{3)}\,\mbox{Supply voltage U}_B$  and constant ambient temperature Ta.

 $^{4)}$  Of Sr.

#### Safety-related parameters

MTTFD	152 years
DCavg	0 %

#### Installation note

Remark	Associated graphic see "Installation"
A	3.25 mm
В	8 mm
С	8 mm
D	6 mm
E	0 mm
F	16 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

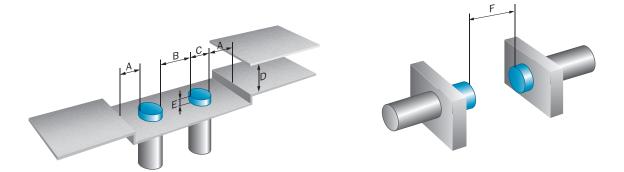
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ETIM 8.0	EC002714
UNSPSC 16.0901	39122230

#### Installation note

Non-flush installation

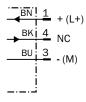


#### **Connection type**

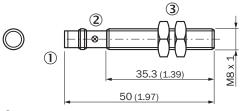


#### **Connection diagram**

Cd-004



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



 $<sup>\</sup>textcircled{1}$  Connection

② Display LED

③ Fastening nuts (2x); width across 13, metal

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#### **Recommended accessories**

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

	Brief description	Туре	Part no.
Mounting brackets and plates			
	Mounting plate for M8 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M08	5321722
	Mounting bracket for M8 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M08	5321721
Terminal and	alignment brackets		
	Clamping block for round sensors M8, without fixed stop, plastic (PA12), glass-fiber rein- forced, mounting hardware included	BEF-KH-M08	2051477
Others			
	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: 0.14 mm<sup>2</sup> 0.5 mm<sup>2</sup></li> </ul>	DOS-0803-G	7902077
×,	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Description: Unshielded</li> <li>Connection systems: Solder connection</li> <li>Permitted cross-section: ≤ 0.25 mm<sup>2</sup></li> </ul>	DOS-0803-W	7902078
	<ul> <li>Connection type head A: Male connector, M8, 3-pin, straight, A-coded</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: 0.14 mm<sup>2</sup> 0.5 mm<sup>2</sup></li> </ul>	STE-0803-G	6037322
×.	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>	YF8U13- 020VA1XLEAX	2095860
×.	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>	YF8U13- 050VA1XLEAX	2095884
3	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>	YG8U13- 020VA1XLEAX	2096165
3	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>	YG8U13- 050VA1XLEAX	2096166

# 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:

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Online data sheet

