

# IM30-10BDS-ZW1

IM Standard

**INDUCTIVE PROXIMITY SENSORS** 





# Ordering information

Туре	part no.
IM30-10BDS-ZW1	6020326

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

Illustration may differ



### Detailed technical data

### **Features**

Housing	Metric
Housing	Standard design
Thread size	M30 x 1.5
Diameter	Ø 30 mm
Sensing range S <sub>n</sub>	10 mm
Safe sensing range S <sub>a</sub>	8.1 mm
Installation type	Flush
Switching frequency	150 Hz
Connection type	Cable, 2-wire, 2 m
Output function	NO
Electrical wiring	DC 2-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 %
Voltage drop	$\leq 2.8 \text{ V}^{-1)}$
Time delay before availability	≤ 50 ms
Hysteresis	2 % 10 %
Reproducibility	≤ 2 % <sup>2)</sup> 3)
Temperature drift (of S <sub>r</sub> )	± 10 %
EMC	According to EN 60947-5-2

<sup>1)</sup> At I<sub>a</sub> max

 $<sup>^{2)}</sup>$  Supply voltage  $\mathrm{U}_{\mathrm{B}}$  and constant ambient temperature Ta.

<sup>&</sup>lt;sup>3)</sup> Of Sr.

Continuous current I <sub>a</sub>	≤ 100 mA
Off-state current	≤ 0.8 mA
Minimum load current	≥ 3 mA
Cable material	PVC
Conductor size	0.34 mm <sup>2</sup>
Short-circuit 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	60 mm
Thread length	50 mm
Tightening torque, max.	60 Nm

 $<sup>^{1)}</sup>$  At  $I_a$  max.

### Reduction factors

Note	The values are reference values which may vary
Stainless steel (V2A, 304)	Approx. 0.75
Aluminum (Al)	Approx. 0.45
Copper (Cu)	Approx. 0.35
Brass (Br)	Approx. 0.5

### Installation note

Remark	Associated graphic see "Installation"
Α	10 mm
В	30 mm
c	30 mm
D	30 mm
F	80 mm

### Certificates

EU declaration of conformity	1
UK declaration of conformity	1
Moroccan declaration of conformity	1
China RoHS	1

### 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

 $<sup>^{\</sup>rm 2)}$  Supply voltage  $\rm U_B$  and constant ambient temperature Ta.

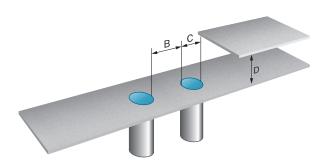
<sup>3)</sup> Of Sr.

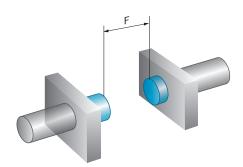
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ECLASS 8.1	27270101
ECLASS 9.0	27270101
ECLASS 10.0	27270101
ECLASS 11.0	27270101
ECLASS 12.0	27274001
ETIM 5.0	EC002714
ETIM 6.0	EC002714
ETIM 7.0	EC002714
ETIM 8.0	EC002714
UNSPSC 16.0901	39122230

### Installation note Flush installation





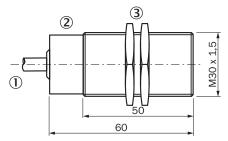
### Connection type



# Connection diagram Cd-012



### Dimensional drawing IM30, DC 2-wire, cable, flush



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.
Mounting systems			
0	<ul> <li>Description: Mounting plate for M30 sensors</li> <li>Material: Steel</li> <li>Details: Steel, zinc coated</li> <li>Items supplied: Without mounting hardware</li> </ul>	BEF-WG-M30	5321871
<b>6</b>	<ul> <li>Description: Mounting bracket for M30 sensors</li> <li>Material: Steel</li> <li>Details: Steel, zinc coated</li> <li>Items supplied: Without mounting hardware</li> </ul>	BEF-WN-M30	5308445
	<ul> <li>Description: Plate N10 for universal clamp bracket, M30</li> <li>Material: Steel, zinc diecast</li> <li>Details: Zinc plated steel (sheet), Zinc die cast (clamping bracket)</li> <li>Items supplied: Universal clamp (5322626), mounting hardware</li> <li>Usable for: M30 round sensors</li> </ul>	BEF-KHS-N10	2062372
connectors and cables			
	<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 mm² 0.5 mm²</li> </ul>	STE-0803-G	6037322

# 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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