

# IM30-10BDS-ZC1

**IM Standard** 

**INDUCTIVE PROXIMITY SENSORS** 





### Ordering information

Туре	Part no.
IM30-10BDS-ZC1	6020328

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

Illustration may differ



### 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
Safe sensing range S <sub>a</sub>	8.1 mm
Installation type	Flush
Switching frequency	150 Hz
Connection type	Male connector M12, 4-pin
Output function	NO
Electrical wiring	DC 2-wire
Enclosure rating	IP67 <sup>1)</sup>

<sup>&</sup>lt;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) 3)</sup>
Temperature drift (of S <sub>r</sub> )	± 10 %
EMC	According to EN 60947-5-2

<sup>1)</sup> At I<sub>2</sub> max

 $<sup>^{2)}\,\</sup>mathrm{Supply}$  voltage Ub 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
Short-circuit protection	✓
Reverse polarity 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

 $<sup>^{1)}</sup>$  At  $I_{\rm a}$  max.

### Reduction factors

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

### Installation note

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

### Classifications

Gladomodelono	
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

 $<sup>^{2)}</sup>$  Supply voltage Ub and constant ambient temperature Ta.  $^{3)}$  Of Sr.

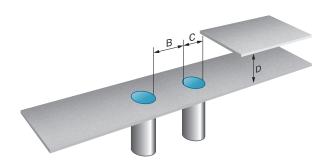
# IM30-10BDS-ZC1 | IM Standard

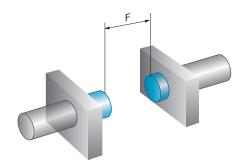
INDUCTIVE PROXIMITY SENSORS

ETIM 6.0	EC002714
ETIM 7.0	EC002714
ETIM 8.0	EC002714
UNSPSC 16.0901	39122230

#### Installation note

Flush installation

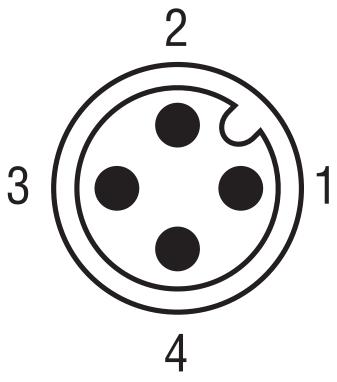




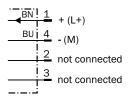
### Connection type



### Connection diagram

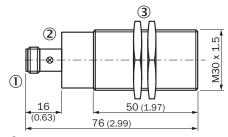


Cd-014



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

IM30, DC 2-wire, male connector, flush



- 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			
	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 bra	ckets 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	ors 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
	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
	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
	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
	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

### 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

