

# IM12-02BPS-ZUA

**IM Standard** 

**INDUCTIVE PROXIMITY SENSORS** 





#### Ordering information

Туре	Part no.
IM12-02BPS-ZUA	1025488

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

Illustration may differ



#### Detailed technical data

#### **Features**

Housing	Metric
Housing	Standard design
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range S <sub>n</sub>	2 mm
Installation type	Flush
Switching frequency	2,000 Hz
Connection type	Cable, 3-wire, 3 m
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-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 % <sup>1)</sup>
Voltage drop	$\leq$ 1.5 V $^{2)}$
Time delay before availability	≤ 2 ms
Hysteresis	1 % 10 %
Reproducibility	≤ 1 % <sup>3) 4)</sup>
Temperature drift (of S <sub>r</sub> )	± 10 %

 $<sup>^{1)}</sup>$  Of  $V_{S}$ .

<sup>2)</sup> At Ia max.

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

<sup>&</sup>lt;sup>4)</sup> Of Sr.

EMC	According to EN 60947-5-2
Continuous current I <sub>a</sub>	≤ 300 mA
Cable material	PUR/PVC
Conductor size	0.25 mm <sup>2</sup>
Wire-break protection	✓
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 +75 °C
Housing material	Brass, Nickel-plated brass
Sensing face material	Plastic
Housing length	35 mm
Thread length	35 mm
Tightening torque, max.	7 Nm

 $<sup>^{1)}</sup>$  Of  $V_S$ .

## Safety-related parameters

MTTF <sub>D</sub>	2,519 years
DC <sub>avg</sub>	0 %

#### Installation note

Remark	Associated graphic see "Installation"
Α	6 mm
В	12 mm
c	12 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

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

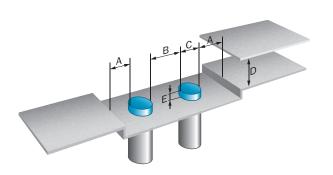
 $<sup>^{\</sup>rm 3)}$  Supply voltage  $\rm U_B$  and constant ambient temperature Ta.

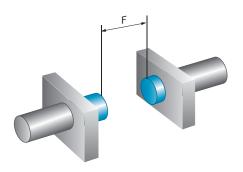
<sup>&</sup>lt;sup>4)</sup> Of Sr.

ETIM 5.0	EC002714
ETIM 6.0	EC002714
ETIM 7.0	EC002714
ETIM 8.0	EC002714
UNSPSC 16.0901	39122230

#### Installation note

Non-flush installation





## Connection type



#### Connection diagram

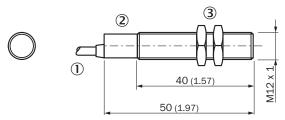
Cd-001



Cd-003



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



- ① Connection
- ② Display LED③ Fastening nuts (2x); width across 17, metal

#### Recommended accessories

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

	Brief description	Туре	Part no.
Mounting brackets and plates			
رانا	Mounting plate for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M12	5321869
40	Mounting bracket for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M12	5308447
Terminal and alignment brackets			
	Clamping block for round sensors M12, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included $$	BEF-KH-M12	2051479
	Clamping block for round sensors M12, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	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."

## **WORLDWIDE PRESENCE:**

Contacts and other locations -www.sick.com

