

# IMI30-10BNONU2S

**INDUCTIVE PROXIMITY SENSORS** 





## Ordering information

Туре	Part no.
IMI30-10BNONU2S	1093955

Included in delivery: BEF-MU-M30N1(1)

Other models and accessories → www.sick.com/IMI

Illustration may differ



#### Detailed technical data

#### **Features**

Housing	Cylindrical thread 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	50 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	NPN
Output function	NC
Electrical wiring	DC 3-wire
Enclosure rating	IP68, IP69K <sup>1)</sup>
Special features	Sensing face made of stainless steel V4A, Resistant to cleaning agents
Special applications	Hygienic and washdown zones, Difficult application conditions
Items supplied	Mounting nut, V4A stainless steel (2x)

<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	≤ 2 V <sup>2)</sup>
Time delay before availability	≤ 300 ms
Hysteresis	1 % 20 %

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

<sup>&</sup>lt;sup>2)</sup> With I max.

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

Reproducibility	≤ 2 % <sup>3)</sup>
Temperature drift (of S <sub>r</sub> )	≤ 10 %
EMC	According to EN 60947-5-2
Continuous current I <sub>a</sub>	≤ 200 mA
No load current	≤ 10 mA
Cable material	PUR
Conductor size	0.34 mm <sup>2</sup>
Cable diameter	Ø 4.5 mm
Short-circuit protection	✓
Reverse polarity protection	✓
Power-up pulse protection	✓
Shock and vibration resistance	$100\mathrm{g}/5$ ms / $1000$ cycles; 150 g / 1 Mio cycles; 10 Hz 55 Hz, 1 mm / 55 Hz 500 Hz / 60 g
Ambient operating temperature	-25 °C +75 °C
Housing material	Stainless steel V4A, DIN 1.4404 / AISI 316L
Sensing face material	Stainless steel V4A, DIN 1.4404 / AISI 316L
Housing length	60.3 mm
Thread length	55.8 mm
Tightening torque, max.	≤ 100 Nm
Protection class	III
UL File No.	E181493

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

## Safety-related parameters

MTTF <sub>D</sub>	1,892 years
DC <sub>avg</sub>	0 %

#### **Reduction factors**

Note	The values are reference values which may vary
St37 steel (Fe)	Approx. 1
Stainless steel (V2A, 304)	Approx. 0.52
Aluminum (Al)	Approx. 0.16
Copper (Cu)	Approx. 0
Brass (Br)	Approx. 0.22

#### Installation note

Remark	Associated graphic see "Installation"
В	25 mm
c	24 mm
D	20 mm
F	80 mm

<sup>&</sup>lt;sup>2)</sup> With I max.

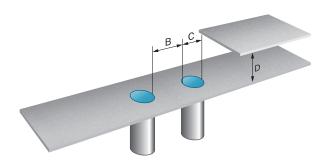
<sup>&</sup>lt;sup>3)</sup> Of Sr.

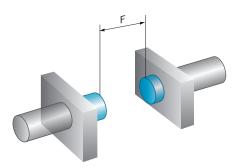
#### Classifications

FOL 400 F 0	07070404
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

#### Installation note

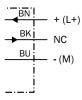
Flush installation



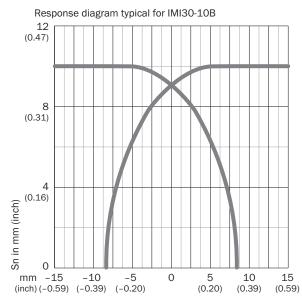


## Connection diagram

Cd-003



#### Response diagram

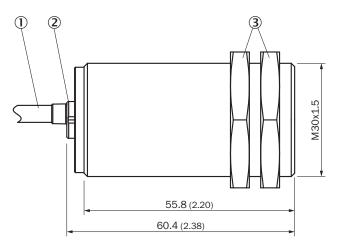


Distance of target edge to center of active face in mm (inch)

All dimensions in mm (inch)

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

IM30 Inox, flush



- ① Connection
- ② Display LED
- ③ Fastening nuts (2 x); width across 36, stainless steel V4A

#### Recommended accessories

Other models and accessories → www.sick.com/IMI

	Brief description	Туре	Part no.	
Plug connecto	Plug connectors and cables			
	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: ≤ 0.75 mm²</li> <li>Application: Hygienic and washdown zones</li> </ul>	DOS-1204-GN	6028357	
	<ul> <li>Connection type head A: Female connector, M12, 4-pin, angled</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: ≤ 0.75 mm²</li> <li>Application: Hygienic and washdown zones</li> </ul>	DOS-1204-WN	6028358	
	<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 mm²</li> <li>Application: Hygienic and washdown zones</li> </ul>	STE-1204-GN	6028359	
	Connection type head A: Male connector, M12, 4-pin, straight Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² Note: For 2 cable connections Application: Hygienic and washdown zones	STE-1204-TN	6028360	

## SICK AT A GLANCE

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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

