

# IMI30-10BNSNC0S

IMI

**INDUCTIVE PROXIMITY SENSORS** 





### Ordering information

Туре	Part no.
IMI30-10BNSNC0S	1093949

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

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

Illustration may differ



### Detailed technical data

#### **Features**

Housing	Metric
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	Male connector M12, 4-pin
Switching output	NPN
Output function	NO
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	$\leq$ 2 V $^{2)}$

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

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

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

Time delay before availability	≤ 300 ms
Hysteresis	1 % 20 %
Reproducibility	≤ 2 % <sup>3)</sup>
Temperature drift (of S <sub>r</sub> )	≤ 10 %
ЕМС	According to EN 60947-5-2
Continuous current I <sub>a</sub>	≤ 200 mA
No load current	≤ 10 mA
Short-circuit protection	✓
Power-up pulse protection	✓
Shock and vibration resistance	$100~{\rm g}/5~{\rm ms}/1000$ cycles; $150~{\rm g}/1$ Mio cycles; $10~{\rm Hz}55~{\rm Hz}, 1~{\rm mm}/55~{\rm Hz}500~{\rm Hz}/60~{\rm g}$
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	65.3 mm
Thread length	46.3 mm
Tightening torque, max.	≤ 100 Nm
Protection class	III

 $<sup>^{1)}</sup>$  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 (AI)	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

### Classifications

ECLASS 5.0	27270101
ECLASS 5.1.4	27270101

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

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

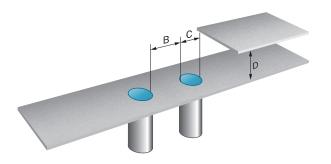
# IMI30-10BNSNCOS | IMI

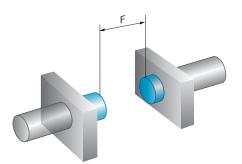
## INDUCTIVE PROXIMITY SENSORS

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

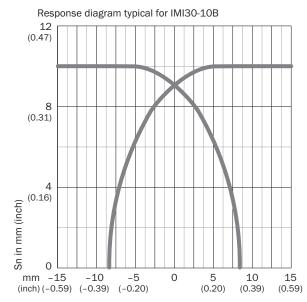




### Connection diagram

Cd-007

### Response diagram

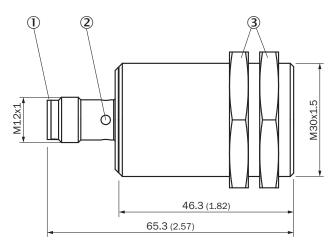


Distance of target edge to center of active face in mm (inch)

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

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