

# IMI08-02BNSNCOS

IMI

**INDUCTIVE PROXIMITY SENSORS** 





#### Ordering information

Туре	Part no.
IMI08-02BNSNC0S	1093887

Included in delivery: BEF-MU-M08N1(1)

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

Illustration may differ



#### Detailed technical data

#### **Features**

Housing	Cylindrical thread design
Thread size	M8 x 1
Diameter	Ø 8 mm
Sensing range S <sub>n</sub>	2 mm
Safe sensing range S <sub>a</sub>	1.62 mm
Installation type	Flush
Switching frequency	100 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 $^{2)}$
Time delay before availability	≤ 200 ms
Hysteresis	1 % 20 %

<sup>&</sup>lt;sup>1)</sup> Of V<sub>S</sub>.

<sup>&</sup>lt;sup>2)</sup> At I<sub>a</sub> 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
Short-circuit protection	✓
Reverse polarity protection	✓
Power-up pulse protection	✓
Shock and vibration resistance	$100\mathrm{g}/11\mathrm{ms}/1000$ cycles; $150\mathrm{g}/1$ Mio cycles; $10$ Hz $55$ Hz, $1\mathrm{mm}/55$ Hz $500$ Hz / $15\mathrm{g}$
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	70 mm
Thread length	43 mm
Tightening torque, max.	≤ 7 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. 0.57
Aluminum (AI)	Approx. 0.43
Copper (Cu)	Approx. 0.36
Brass (Br)	Approx. 0.51

#### Installation note

Remark	Associated graphic see "Installation"
В	6 mm
c	8 mm
D	6 mm
F	16 mm

#### Classifications

eCl@ss 5.0	27270101
eCl@ss 5.1.4	27270101
eCl@ss 6.0	27270101

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

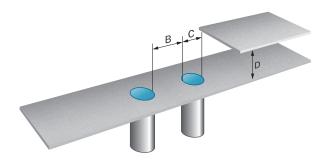
<sup>3)</sup> Of Sr.

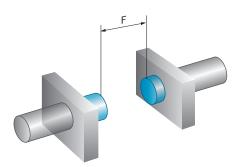
## INDUCTIVE PROXIMITY SENSORS

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

#### Installation note

Flush installation

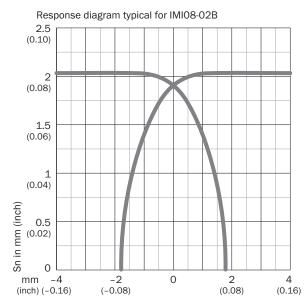




## Connection diagram

Cd-007

#### Response diagram

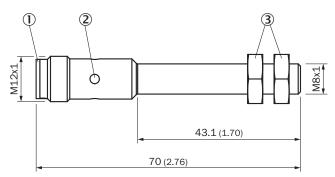


Distance of target edge to center of active face in mm (inch)

All dimensions in mm (inch)

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

IM08 Inox, flush



- ① Connection
- ② Display LED
- ③ Fastening nuts (2 x); width across 13, stainless steel V4A

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