



# IM08-2N5NS-ZW1S03

IM Standard

**INDUCTIVE PROXIMITY SENSORS**

**SICK**  
Sensor Intelligence.

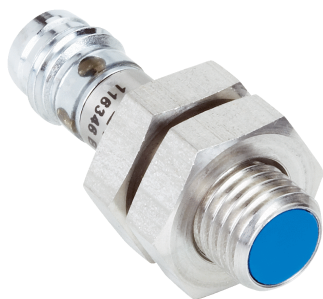


Illustration may differ



## Ordering information

Type	part no.
IM08-2N5NS-ZW1S03	6022650

Other models and accessories → [www.sick.com/IM\\_Standard](http://www.sick.com/IM_Standard)

## Detailed technical data

### Features

<b>Housing</b>	Metric
<b>Housing</b>	Standard design
<b>Thread size</b>	M8 x 1
<b>Diameter</b>	Ø 8 mm
<b>Sensing range <math>S_n</math></b>	2.5 mm
<b>Installation type</b>	Non-flush
<b>Switching frequency</b>	2,500 Hz
<b>Connection type</b>	Cable, 3-wire, 2 m
<b>Switching output</b>	NPN
<b>Switching output detail</b>	NPN
<b>Output function</b>	NO
<b>Electrical wiring</b>	DC 3-wire
<b>Enclosure rating</b>	IP67 <sup>1)</sup>
<b>Special characteristic</b>	Phoenix cable end sleeves

<sup>1)</sup> According to EN 60529.

### Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC
<b>Ripple</b>	≤ 10 % <sup>1)</sup>
<b>Voltage drop</b>	≤ 1.2 V <sup>2)</sup>
<b>Time delay before availability</b>	≤ 100 ms
<b>Hysteresis</b>	2 % ... 10 %
<b>Reproducibility</b>	≤ 2 % <sup>3)</sup> <sup>4)</sup>

<sup>1)</sup> Of  $V_S$ .

<sup>2)</sup> At  $I_a$  max.

<sup>3)</sup> Supply voltage  $U_B$  and constant ambient temperature  $T_a$ .

<sup>4)</sup> Of  $S_r$ .

<b>Temperature drift (of S<sub>r</sub>)</b>	± 10 %
<b>EMC</b>	According to EN 60947-5-2
<b>Continuous current I<sub>a</sub></b>	≤ 200 mA
<b>Cable material</b>	PVC
<b>Conductor size</b>	0.14 mm <sup>2</sup>
<b>Short-circuit protection</b>	✓
<b>Power-up pulse protection</b>	✓
<b>Shock and vibration resistance</b>	30 g, 11 ms / 10 ... 55 Hz, 1 mm
<b>Ambient operating temperature</b>	-25 °C ... +70 °C
<b>Housing material</b>	Brass, Nickel-plated brass
<b>Sensing face material</b>	Plastic
<b>Housing length</b>	45 mm
<b>Thread length</b>	36.2 mm
<b>Tightening torque, max.</b>	4 Nm

<sup>1)</sup> Of V<sub>S</sub>.

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

<sup>3)</sup> Supply voltage U<sub>B</sub> and constant ambient temperature T<sub>a</sub>.

<sup>4)</sup> Of S<sub>r</sub>.

## Installation note

<b>Remark</b>	Associated graphic see "Installation"
<b>A</b>	8 mm
<b>B</b>	16 mm
<b>C</b>	8 mm
<b>D</b>	7.5 mm
<b>E</b>	4 mm
<b>F</b>	20 mm

## Certificates

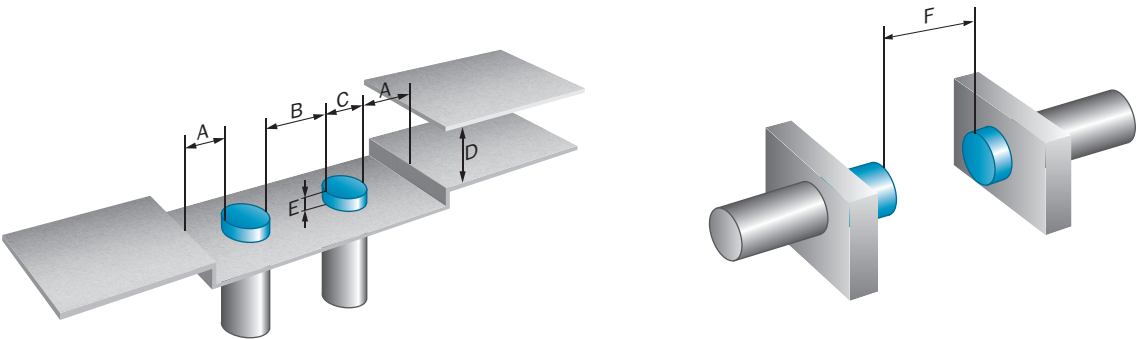
<b>EU declaration of conformity</b>	✓
<b>UK declaration of conformity</b>	✓
<b>Moroccan declaration of conformity</b>	✓
<b>China RoHS</b>	✓

## Classifications

<b>ECLASS 5.0</b>	27270101
<b>ECLASS 5.1.4</b>	27270101
<b>ECLASS 6.0</b>	27270101
<b>ECLASS 6.2</b>	27270101
<b>ECLASS 7.0</b>	27270101
<b>ECLASS 8.0</b>	27270101
<b>ECLASS 8.1</b>	27270101
<b>ECLASS 9.0</b>	27270101
<b>ECLASS 10.0</b>	27270101

<b>ECLASS 11.0</b>	27270101
<b>ECLASS 12.0</b>	27274001
<b>ETIM 5.0</b>	EC002714
<b>ETIM 6.0</b>	EC002714
<b>ETIM 7.0</b>	EC002714
<b>ETIM 8.0</b>	EC002714
<b>UNSPSC 16.0901</b>	39122230

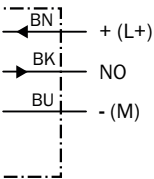
Installation note Non-flush installation



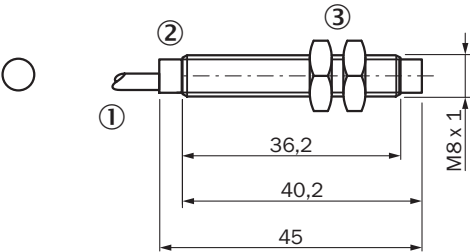
Connection type



Connection diagram Cd-001



Dimensional drawing



Dimensions in mm (inch)




① Connection

② Display LED

③ Fastening nuts (2x); width across 13, metal

Recommended accessories

Other models and accessories → [www.sick.com/IM\\_Standard](http://www.sick.com/IM_Standard)

	Brief description	Type	part no.
Mounting systems			
	<ul style="list-style-type: none"><li>• <b>Description:</b> Clamping block for round sensors M8, without fixed stop</li><li>• <b>Material:</b> Plastic</li><li>• <b>Details:</b> Plastic (PA12), glass-fiber reinforced</li><li>• <b>Items supplied:</b> Mounting hardware included</li></ul>	BEF-KH-M08	2051477
	<ul style="list-style-type: none"><li>• <b>Description:</b> Mounting plate for M8 sensors</li><li>• <b>Material:</b> Steel</li><li>• <b>Details:</b> Steel, zinc coated</li><li>• <b>Items supplied:</b> Without mounting hardware</li></ul>	BEF-WG-M08	5321722
	<ul style="list-style-type: none"><li>• <b>Description:</b> Mounting bracket for M8 sensors</li><li>• <b>Material:</b> Steel</li><li>• <b>Details:</b> Steel, zinc coated</li><li>• <b>Items supplied:</b> Without mounting hardware</li></ul>	BEF-WN-M08	5321721

## 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](http://www.sick.com)