

# IM08-04NNO-ZTK

**IM Standard** 

**INDUCTIVE PROXIMITY SENSORS** 





## Ordering information

| Туре           | Part no. |
|----------------|----------|
| IM08-04NNO-ZTK | 6025872  |

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

Illustration may differ



#### Detailed technical data

#### Features

| Harrain w                    | Outline during the wood of place in the |
|------------------------------|---|
| Housing                      | Cylindrical thread design               |
| Housing                      | Short-body                              |
| Thread size                  | M8 x 1                                  |
| Diameter                     | Ø 8 mm                                  |
| Sensing range S <sub>n</sub> | 4 mm                                    |
| Installation type            | Non-flush                               |
| Switching frequency          | 2,500 Hz                                |
| Connection type              | Connector M8, 3-pin                     |
| Switching output             | NPN                                     |
| Output function              | NC                                      |
| Electrical wiring            | DC 3-wire                               |
| Enclosure rating             | IP67 <sup>1)</sup>                      |

 $<sup>^{1)}</sup>$  According to EN 60529.

#### Mechanics/electronics

| Supply voltage                         | 10 V DC 30 V DC        |
|--|------------------------|
| Ripple                                 | ≤ 10 % <sup>1)</sup>   |
| Voltage drop                           | $\leq$ 1.2 V $^{2)}$   |
| Time delay before availability         | ≤ 5 ms                 |
| Hysteresis                             | 1 % 20 %               |
| Reproducibility                        | ≤ 5 % <sup>3) 4)</sup> |
| Temperature drift (of S <sub>r</sub> ) | ± 10 %                 |

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

<sup>2)</sup> At I may

 $<sup>^{\</sup>rm 3)}$  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> | ≤ 200 mA                     |
| Short-circuit protection          | ✓                            |
| Reverse polarity protection       | ✓                            |
| Power-up pulse protection         | ✓                            |
| Shock and vibration resistance    | 30 g, 11 ms / 10 55 Hz, 1 mm |
| Ambient operating temperature     | -25 °C +70 °C                |
| Housing material                  | Brass, Nickel-plated brass   |
| Sensing face material             | Plastic                      |
| Housing length                    | 40 mm                        |
| Thread length                     | 21.3 mm                      |
| Tightening torque, max.           | 4 Nm                         |

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

## Installation note

| Remark | Associated graphic see "Installation" |
|--------|---------------------------------------|
| Α      | 8 mm                                  |
| В      | 16 mm                                 |
| c      | 8 mm                                  |
| D      | 12 mm                                 |
| E      | 8 mm                                  |
| F      | 24 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 |
| ETIM 5.0       | EC002714 |
| ETIM 6.0       | EC002714 |
| ETIM 7.0       | EC002714 |
| ETIM 8.0       | EC002714 |
| UNSPSC 16.0901 | 39122230 |

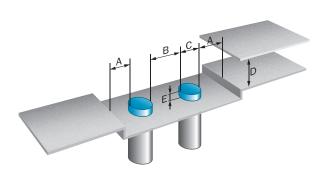
<sup>&</sup>lt;sup>2)</sup> At I<sub>a</sub> max.

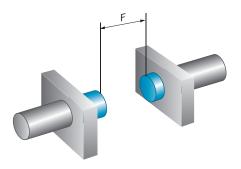
 $<sup>^{\</sup>rm 3)}$  Supply voltage  $\rm U_B$  and constant ambient temperature Ta.

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

#### Installation note

Non-flush installation





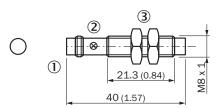
#### Connection type



#### Connection diagram

Cd-004

#### 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

|                              | Brief description  | Туре                   | Part no. |  |  |
|------------------------------|--|------------------------|----------|--|--|
| Mounting brackets and plates |  |                        |          |  |  |
|                              | Mounting plate for M8 sensors, steel, zinc coated, without mounting hardware   | BEF-WG-M08             | 5321722  |  |  |
|                              | Mounting bracket for M8 sensors, steel, zinc coated, without mounting hardware   | BEF-WN-M08             | 5321721  |  |  |
| Plug connec                  | tors and cables  |                        |          |  |  |
|                              | <ul> <li>Connection type head A: Female connector, M8, 3-pin, straight</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: 0.14 mm² 0.5 mm²</li> </ul>  | DOS-0803-G             | 7902077  |  |  |
|                              | <ul> <li>Connection type head A: Female connector, M8, 3-pin, angled</li> <li>Description: Unshielded</li> <li>Connection systems: Solder connection</li> <li>Permitted cross-section: ≤ 0.25 mm²</li> </ul>   | DOS-0803-W             | 7902078  |  |  |
|                              | <ul> <li>Connection type head A: Male connector, M8, 3-pin, straight</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: 0.14 mm² 0.5 mm²</li> </ul>  | STE-0803-G             | 6037322  |  |  |
| Terminal and                 | d alignment brackets   |                        |          |  |  |
|                              | Clamping block for round sensors M8, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included  | BEF-KH-M08             | 2051477  |  |  |
| Others                       |  |                        |          |  |  |
| N. Co.                       | <ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul> | YF8U13-<br>020VA1XLEAX | 2095860  |  |  |
|                              | <ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul> | YF8U13-<br>050VA1XLEAX | 2095884  |  |  |
| 3                            | <ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>   | YG8U13-<br>020VA1XLEAX | 2096165  |  |  |
| 3                            | <ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>   | YG8U13-<br>050VA1XLEAX | 2096166  |  |  |

## SICK AT A GLANCE

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