

# IME12-08NPOZCOKS64

IME

**INDUCTIVE PROXIMITY SENSORS** 



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#### Ordering information

| Туре               | Part no. |
|--------------------|----------|
| IME12-08NPOZCOKS64 | 1109923  |

Included in delivery: BEF-MU-M12 (1)

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

Illustration may differ



#### Detailed technical data

#### **Features**

| Housing                           | Metric                                  |
|-----------------------------------|-----------------------------------------|
| Housing                           | Short-body Short-body                   |
| Thread size                       | M12 x 1                                 |
| Diameter                          | Ø 12 mm                                 |
| Sensing range S <sub>n</sub>      | 8 mm                                    |
| Safe sensing range S <sub>a</sub> | 6.48 mm                                 |
| Installation type                 | Non-flush                               |
| Switching frequency               | 2,000 Hz                                |
| Connection type                   | Male connector M12, 4-pin               |
| Switching output                  | PNP                                     |
| Output function                   | NC                                      |
| Electrical wiring                 | DC 3-wire                               |
| Enclosure rating                  | IP67 <sup>1)</sup>                      |
| Special characteristic            | Extended operating temperature          |
| Items supplied                    | Mounting nut, brass, nickel-plated (2x) |

<sup>&</sup>lt;sup>1)</sup> According to EN 60529.

#### Mechanics/electronics

| Supply voltage | 10 V DC 30 V DC    |
|----------------|--------------------|
| Ripple         | ≤ 10 %             |
| Voltage drop   | $\leq$ 2 V $^{1)}$ |

<sup>1)</sup> At L may

 $<sup>^{\</sup>rm 2)}$  Supply voltage  $U_{B}$  and constant ambient temperature Ta.

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

| Time delay before availability         | ≤ 100 ms                      |
|----------------------------------------|-------------------------------|
| Hysteresis                             | 5 % 15 %                      |
| Reproducibility                        | ≤ 2 % <sup>2) 3)</sup>        |
| Temperature drift (of S <sub>r</sub> ) | ± 20 %                        |
| EMC                                    | 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         | 30 g, 11 ms/10 Hz 55 Hz, 1 mm |
| Ambient operating temperature          | -30 °C +75 °C                 |
| Housing material                       | Brass, nickel-plated          |
| Sensing face material                  | Plastic, PA 66                |
| Housing length                         | 46 mm                         |
| Thread length                          | 24 mm                         |
| Tightening torque, max.                | ≤ 12 Nm                       |
| UL File No.                            | NRKH.E181493                  |

<sup>&</sup>lt;sup>1)</sup> At I<sub>a</sub> max.

#### Reduction factors

| Note                       | The values are reference values which may vary |
|----------------------------|------------------------------------------------|
| St37 steel (Fe)            | 1                                              |
| Stainless steel (V2A, 304) | Approx. 0.8                                    |
| Aluminum (AI)              | Approx. 0.45                                   |
| Copper (Cu)                | Approx. 0.4                                    |
| Brass (Br)                 | Approx. 0.4                                    |

#### Installation note

| Remark | Associated graphic see "Installation" |
|--------|---------------------------------------|
| A      | 12 mm                                 |
| В      | 24 mm                                 |
| c      | 12 mm                                 |
| D      | 24 mm                                 |
| E      | 16 mm                                 |
| F      | 64 mm                                 |

#### Classifications

| ECLASS 5.0   | 27270101 |
|--------------|----------|
| ECLASS 5.1.4 | 27270101 |
| ECLASS 6.0   | 27270101 |
| ECLASS 6.2   | 27270101 |
| ECLASS 7.0   | 27270101 |

 $<sup>^{2)}\,\</sup>mbox{Supply}$  voltage  $\mbox{U}_{\mbox{\footnotesize B}}$  and constant ambient temperature Ta.

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

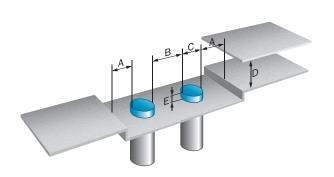
# IME12-08NPOZCOKS64 | IME

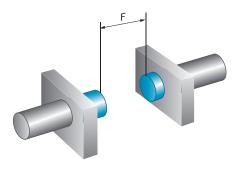
INDUCTIVE PROXIMITY SENSORS

| 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

Non-flush installation





#### Connection type

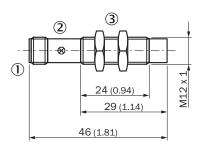


#### Connection diagram

Cd-008

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

IME12 Short-body housing, connector, non-flush



- ① Connection
- ② Display LED
- ③ Fastening nuts (2x); width across 17, metal

#### Recommended accessories

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

|                              | Brief description                                                                                                                                                                                                                                                                                                                               | Туре                   | Part no. |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------|
| Mounting brackets and plates |                                                                                                                                                                                                                                                                                                                                                 |                        |          |
| رانا                         | Mounting plate for M12 sensors, steel, zinc coated, without mounting hardware                                                                                                                                                                                                                                                                   | BEF-WG-M12             | 5321869  |
| 40                           | Mounting bracket for M12 sensors, steel, zinc coated, without mounting hardware                                                                                                                                                                                                                                                                 | BEF-WN-M12             | 5308447  |
| Terminal and                 | alignment brackets                                                                                                                                                                                                                                                                                                                              |                        |          |
|                              | Clamping block for round sensors M12, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included $$                                                                                                                                                                                                                 | BEF-KH-M12             | 2051479  |
|                              | Clamping block for round sensors M12, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included $$                                                                                                                                                                                                                    | BEF-KHF-M12            | 2051480  |
| Others                       |                                                                                                                                                                                                                                                                                                                                                 |                        |          |
|                              | Connection type head A: Female connector, M12, 4-pin, straight, A-coded     Description: Unshielded, Head A: female connector, M12, 4-pin, straight, unshielded, for power supply, for cable diameter 4 mm 6 mm Head B: -     Connection systems: Screw-type terminals     Permitted cross-section: ≤ 0.75 mm²                                  | DOS-1204-G             | 6007302  |
|                              | Connection type head A: Female connector, M12, 4-pin, angled, A-coded     Description: Unshielded, Head A: female connector, M12, 4-pin, angled, unshielded, for power supply, for cable diameter 3 mm 6.5 mm Head B: -     Connection systems: Screw-type terminals     Permitted cross-section: ≤ 0.75 mm²                                    | DOS-1204-W             | 6007303  |
|                              | <ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul> | YF2A14-<br>020VB3XLEAX | 2096234  |

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|     | Brief description                                                                                                                                                                                                                                                                                                                                | Туре                   | Part no. |
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|     | <ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 10 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul> | YF2A14-<br>100VB3XLEAX | 2096236  |
| 3   | <ul> <li>Connection type head A: Female connector, M12, 4-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>    | YG2A14-<br>020VB3XLEAX | 2095895  |
| 5   | <ul> <li>Connection type head A: Female connector, M12, 4-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>    | YG2A14-<br>050VB3XLEAX | 2095897  |
| *** | <ul> <li>Connection type head A: Female connector, M12, 4-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 10 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>   | YG2A14-<br>100VB3XLEAX | 2095898  |

## SICK AT A GLANCE

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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:**

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