

INDUCTIVE PROXIMITY SENSORS



IME08-2N5PSZT0S | IME

INDUCTIVE PROXIMITY SENSORS

Ordering information

Included in delivery: BEF-MU-M08 (2)

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

Type IME08-2N5PSZTOS



Illustration may differ



Detailed technical data

Features

| Housing | Cylindrical thread design |
|-----------------------------------|---------------------------|
| Housing | Standard |
| Thread size | M8 x 1 |
| Diameter | Ø 8 mm |
| Sensing range S _n | 2.5 mm |
| Safe sensing range S _a | 2.025 mm |
| Installation type | Non-flush |
| Switching frequency | 4,000 Hz |
| Connection type | Connector M8, 3-pin |
| Switching output | PNP |
| Output function | NO |
| Electrical wiring | DC 3-wire |
| Enclosure rating | IP67 ¹⁾ |

¹⁾ According to EN 60529.

Mechanics/electronics

| Supply voltage | 10 V DC 30 V DC |
|--------------------------------|---------------------|
| Ripple | ≤ 10 % |
| Voltage drop | $\leq 2 V^{(1)}$ |
| Current consumption | 10 mA ²⁾ |
| Time delay before availability | ≤ 100 ms |
| Hysteresis | 5 % 15 % |

 $^{1)}$ At I_a max.

²⁾ Without load.

 $^{\rm (3)}$ Ub and Ta constant.

⁴⁾ Of Sr.

Part no.

1040854

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| Reproducibility | < 2 % ^{3) 4)} |
|--|---|
| Temperature drift (of S _r) | ± 10 % |
| EMC | According to EN 60947-5-2 |
| Continuous current l _a | ≤ 200 mA |
| Short-circuit protection | \checkmark |
| Reverse polarity protection | ✓ |
| Power-up pulse protection | ✓ |
| Shock and vibration resistance | 30 g, 11 ms/10 Hz 55 Hz, 1 mm |
| Ambient operating temperature | -25 °C +75 °C |
| Housing material | Metal, Nickel-plated brass |
| Sensing face material | Plastic, PA 66 |
| Housing length | 50 mm |
| Thread length | 30 mm |
| Tightening torque, max. | ≤ 5 Nm |
| Items supplied | Mounting nut, brass, nickel-plated (2x) |
| UL File No. | NRKH.E181493 |

- ¹⁾ At I_a max.
- ²⁾ Without load.
- ³⁾ Ub and Ta constant.
- ⁴⁾ Of Sr.

Safety-related parameters

| MTTFD | 2,327 years | | |
|----------------------------|--|--|--|
| DC _{avg} | 0% | | |
| 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 | | | |
| Bomark | Associated graphic see "Installation" | | |

| Remark | Associated graphic see "Installation" |
|--------|---------------------------------------|
| A | 8 mm |
| В | 16 mm |
| С | 8 mm |
| D | 7.5 mm |
| E | 6 mm |
| F | 20 mm |

Classifications

| ECI@ss 5.0 | 27270101 |
|--------------|----------|
| ECI@ss 5.1.4 | 27270101 |

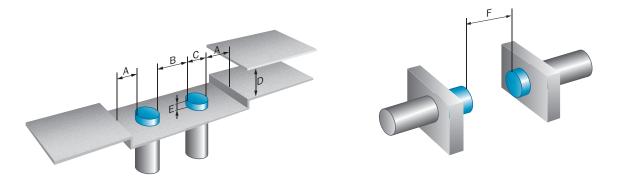
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| ECI@ss 6.0 | 27270101 |
|----------------|----------|
| ECI@ss 6.2 | 27270101 |
| ECI@ss 7.0 | 27270101 |
| ECI@ss 8.0 | 27270101 |
| ECI@ss 8.1 | 27270101 |
| ECI@ss 9.0 | 27270101 |
| ETIM 5.0 | EC002714 |
| ETIM 6.0 | EC002714 |
| UNSPSC 16.0901 | 39122230 |

Installation note

Non-flush installation



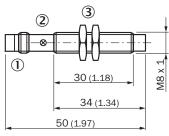
Connection diagram

Cd-002



Dimensional drawing (Dimensions in mm (inch))

IME08 standard, male connector, non-flush



1 Connection

② Indication LED

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

Recommended accessories

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

| | Brief description | Туре | Part no. | |
|---------------|---|------------------------|----------|--|
| Mounting bra | 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 | |
| Terminal and | alignment brackets | | | |
| | Clamping block for round sensors M8, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included | BEF-KH-M08 | 2051477 | |
| | Clamping block for round sensors M8, with fixed stop, plastic (PA12), glass-fiber rein- forced, mounting hardware included | BEF-KHF-M08 | 2051478 | |
| Plug connecto | ors and cables | | | |
| | Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m | YF8U13- 020VA1XLEAX | 2095860 | |
| | Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m | YF8U13- 050VA1XLEAX | 2095884 | |
| | Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 10 m | YF8U13- 100VA1XLEAX | 2095885 | |
| 3 | Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m | YG8U13- 020VA1XLEAX | 2096165 | |
| | Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m | YG8U13- 050VA1XLEAX | 2096166 | |
| | Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 10 m | YG8U13- 100VA1XLEAX | 2096209 | |

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| Brief description | Туре | Part no. |
|---|------------|----------|
| Head A: female connector, M8, 3-pin, straight Head B: - Cable: unshielded | DOS-0803-G | 7902077 |
| Head A: female connector, M8, 3-pin, angled Head B: - Cable: unshielded | DOS-0803-W | 7902078 |

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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.

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For us, that is "Sensor Intelligence."

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