

IME08-1B5NSZT0S

IME

INDUCTIVE PROXIMITY SENSORS



Ordering information

| Туре | part no. |
|-----------------|----------|
| IME08-1B5NSZT0S | 1040846 |

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

Illustration may differ



Detailed technical data

Features

| Housing | Metric |
|-----------------------------------|--|
| Housing | Standard design |
| Thread size | M8 x 1 |
| Diameter | Ø 8 mm |
| Sensing range S _n | 1.5 mm |
| Safe sensing range S _a | 1.215 mm |
| Installation type | Flush |
| Switching frequency | 4,000 Hz |
| Connection type | Connector M8, 3-pin |
| Switching output | NPN |
| Switching output detail | NPN |
| Output function | NO |
| Electrical wiring | DC 3-wire |
| Enclosure rating | IP67 ¹⁾ |
| Items supplied | Mounting nut, steel, nickel-plated (2 x) |

¹⁾ According to EN 60529.

Mechanics/electronics

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

¹⁾ At L may

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

³⁾ Of Sr.

| Time delay before availability | ≤ 100 ms |
|--|-------------------------------|
| Hysteresis | 5 % 15 % |
| Reproducibility | ≤ 2 % ²⁾ 3) |
| Temperature drift (of S _r) | ± 10 % |
| EMC | According to EN 60947-5-2 |
| Continuous current I _a | ≤ 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 | -25 °C +75 °C |
| Housing material | Brass, nickel-plated |
| Sensing face material | Plastic, PA 66 |
| Housing length | 50 mm |
| Thread length | 34 mm |
| Tightening torque, max. | ≤ 5 Nm |
| UL File No. | NRKH.E181493 |

 $^{^{1)}}$ At I $_{\rm a}$ max.

Safety-related parameters

| MTTF _D | 1,735 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

| Remark | Associated graphic see "Installation" |
|--------|---------------------------------------|
| В | 8 mm |
| c | 8 mm |
| D | 4.5 mm |
| F | 12 mm |

Certificates

| EU declaration of conformity | ✓ |
|--------------------------------|---|
| UK declaration of conformity | ✓ |
| ACMA declaration of conformity | ✓ |

 $^{^{\}rm 2)}$ Supply voltage $\rm U_B$ and constant ambient temperature Ta.

³⁾ Of Sr.

IME08-1B5NSZTOS | IME

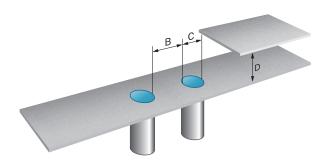
INDUCTIVE PROXIMITY SENSORS

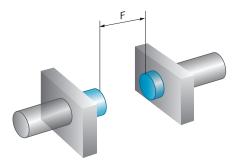
| Moroccan declaration of conformity | ✓ |
|------------------------------------|---|
| China RoHS | ✓ |
| cULus certificate | ✓ |

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 |
| | |

Installation note Flush installation





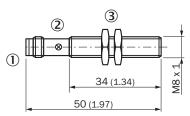
Connection type



Connection diagram Cd-002



Dimensional drawing IME08 Standard, connector, flush



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/IME

| | Brief description | Туре | part no. | |
|--------------|--|-------------|----------|--|
| Mounting sys | Mounting systems | | | |
| | Description: Clamping block for round sensors M8, with fixed stop Material: Plastic Details: Plastic (PA12), glass-fiber reinforced Items supplied: Mounting hardware included | BEF-KHF-M08 | 2051478 | |
| | Description: Clamping block for round sensors M8, without fixed stop Material: Plastic Details: Plastic (PA12), glass-fiber reinforced Items supplied: Mounting hardware included | BEF-KH-M08 | 2051477 | |
| | Description: Mounting bracket for M8 sensors Material: Steel Details: Steel, zinc coated Items supplied: Without mounting hardware | BEF-WN-M08 | 5321721 | |
| (010) | Description: Mounting plate for M8 sensors Material: Steel Details: Steel, zinc coated Items supplied: Without mounting hardware | BEF-WG-M08 | 5321722 | |

| | Brief description | Туре | part no. | | |
|---------------|---|------------------------|----------|--|--|
| connectors ar | connectors and cables | | | | |
| % | Connection type head A: Female connector, M8, 3-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: 0.14 mm² 0.5 mm² | DOS-0803-G | 7902077 | | |
| | Connection type head A: Female connector, M8, 3-pin, angled, A-coded Description: Unshielded Connection systems: Solder connection Permitted cross-section: ≤ 0.25 mm² | DOS-0803-W | 7902078 | | |
| | Connection type head A: Male connector, M8, 3-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: 0.14 mm² 0.5 mm² | STE-0803-G | 6037322 | | |
| · · | Connection type head A: Female connector, M8, 3-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones | YF8U13-020VA1XLEAX | 2095860 | | |
| 0 | Connection type head A: Female connector, M8, 3-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones | YF8U13-050VA1XLEAX | 2095884 | | |
| · · | Connection type head A: Female connector, M8, 3-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones | YF8U13-100VA1XLEAX | 2095885 | | |
| 3 | Connection type head A: Female connector, M8, 3-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones | YG8U13-020VA1XLEAX | 2096165 | | |
| 3 | Connection type head A: Female connector, M8, 3-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones | YG8U13-050VA1XLEAX | 2096166 | | |
| 3 | Connection type head A: Female connector, M8, 3-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones | YG8U13-100VA1XLEAX | 2096209 | | |
| | Connection type head A: Female connector, M8, 3-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 3-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YF8U13-050UA1XLEAX | 2094788 | | |
| No. | Connection type head A: Female connector, M8, 3-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 0.6 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded | YF8U13- C60VA1XLEAX | 2146368 | | |

IME08-1B5NSZTOS | IME INDUCTIVE PROXIMITY SENSORS

| | Brief description | Туре | part no. |
|---|--|------------------------|----------|
| | Application: Zones with chemicals, Uncontaminated zones | | |
| 3 | Connection type head A: Female connector, M8, 3-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 1 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones | YG8U13-010VA1XLEAX | 2146371 |
| 3 | Connection type head A: Female connector, M8, 3-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 3 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones | YG8U13-030VA1XLEAX | 2146372 |
| - | Connection type head A: Female connector, M8, 3-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 0.6 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones | YG8U13- C60VA1XLEAX | 2146370 |

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