



IME08-02BPOVT0SS08

IME

INDUCTIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.



Ordering information

| Type | part no. |
|--------------------|----------|
| IME08-02BPOVTOSS08 | 1048214 |

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 | 2 mm |
| Safe sensing range S_a | 1.62 mm |
| Installation type | Flush |
| Switching frequency | 4,000 Hz |
| Connection type | Connector M8, 3-pin |
| Switching output | PNP |
| Switching output detail | PNP |
| Output function | NC |
| Electrical wiring | DC 3-wire |
| Enclosure rating | IP65 ¹⁾ |
| Special characteristic | Continuous thread with 2 LEDs |
| Items supplied | Mounting nut, V2A stainless steel (2x) |

¹⁾ According to EN 60529.

Mechanics/electronics

| | |
|-----------------------|---------------------|
| Supply voltage | 10 V DC ... 30 V DC |
| Ripple | ≤ 10 % |

¹⁾ At I_a max.

²⁾ Supply voltage U_B and constant ambient temperature T_a .

³⁾ Of S_r .

| | |
|---|--|
| Voltage drop | $\leq 2 \text{ V}^{1)}$ |
| Time delay before availability | $\leq 100 \text{ ms}$ |
| Hysteresis | 5 % ... 15 % |
| Reproducibility | $\leq 2 \%$ ²⁾ ₃₎ |
| Temperature drift (of S_r) | $\pm 10 \%$ |
| EMC | According to EN 60947-5-2 |
| Continuous current I_a | $\leq 200 \text{ mA}$ |
| No load current | $\leq 10 \text{ mA}$ |
| 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 | Stainless steel V2A, DIN 1.4305 / AISI 303 |
| Sensing face material | Plastic, PA 66 |
| Housing length | 56 mm |
| Thread length | 52 mm |
| Tightening torque, max. | $\leq 7 \text{ Nm}$ |
| UL File No. | NRKH.E181493 |

¹⁾ At I_a max.

²⁾ Supply voltage U_B and constant ambient temperature T_a.

³⁾ Of S_r.

Safety-related parameters

| | |
|-------------------------------------|-------------|
| MTTF_D | 1,735 years |
| DC_{avg} | 0 % |
| T_M (mission time) | 20 years |

Reduction factors

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

Installation note

| | |
|---------------|---------------------------------------|
| Remark | Associated graphic see "Installation" |
| B | 16 mm |
| C | 8 mm |
| D | 6 mm |
| F | 16 mm |

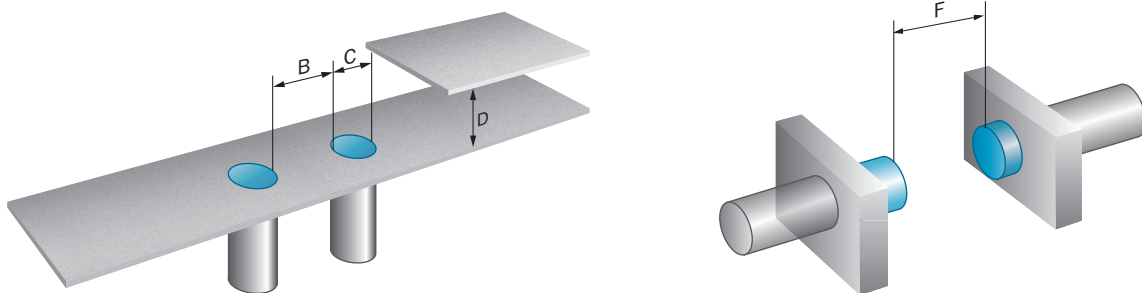
Certificates

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

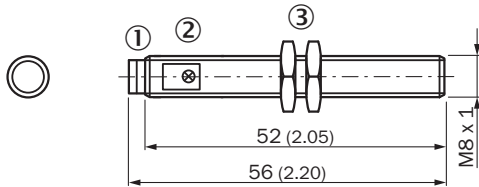
Installation note Flush installation



Connection diagram Cd-004



Dimensional drawing IME08 Standard, connector, flush







Dimensions in mm (inch)


- ① Connection
- ② Display LED
- ③ Fastening nuts (2 x); width across 13, stainless steel V2A

Recommended accessories

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

| | Brief description | Type | part no. |
|---|--|-------------|----------|
| Mounting systems | | | |
|  | <ul style="list-style-type: none"> • 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 |
|  | <ul style="list-style-type: none"> • 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 |
|  | <ul style="list-style-type: none"> • Description: Mounting bracket for M8 sensors • Material: Steel • Details: Steel, zinc coated • Items supplied: Without mounting hardware | BEF-WN-M08 | 5321721 |
|  | <ul style="list-style-type: none"> • Description: Mounting plate for M8 sensors • Material: Steel • Details: Steel, zinc coated • Items supplied: Without mounting hardware | BEF-WG-M08 | 5321722 |

| | Brief description | Type | part no. |
|---|---|--------------------|----------|
| connectors and cables | | | |
|  | <ul style="list-style-type: none"> Description: Unshielded Connection type head A: Male connector, M8, 3-pin, straight, A-coded Connection systems: Screw-type terminals Permitted cross-section: 0.14 mm² ... 0.5 mm² | STE-0803-G | 6037322 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded 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 Application: Uncontaminated zones, Zones with chemicals | YF8U13-020VA1XLEAX | 2095860 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded 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 Application: Drag chain operation, Zones with oils and lubricants, Robot, Drag chain operation | YF8U13-050UA1XLEAX | 2094788 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded 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 Application: Uncontaminated zones, Zones with chemicals | YF8U13-050VA1XLEAX | 2095884 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded 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 Application: Uncontaminated zones, Zones with chemicals | YF8U13-100VA1XLEAX | 2095885 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded 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 Application: Uncontaminated zones, Zones with chemicals | YG8U13-020VA1XLEAX | 2096165 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded 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 Application: Uncontaminated zones, Zones with chemicals | YG8U13-050VA1XLEAX | 2096166 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded 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 Application: Uncontaminated zones, Zones with chemicals | YG8U13-100VA1XLEAX | 2096209 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded 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 Application: Uncontaminated zones, Zones with chemicals | YF8U13-C60VA1XLEAX | 2146368 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded 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 Application: Uncontaminated zones, Zones with chemicals | YG8U13-010VA1XLEAX | 2146371 |
|  | <ul style="list-style-type: none"> Description: Sensor/actuator cable, unshielded 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 | YG8U13-030VA1XLEAX | 2146372 |

| | Brief description | Type | part no. |
|---|--|--------------------------------|----------------|
|  | <ul style="list-style-type: none"> • Application: Uncontaminated zones, Zones with chemicals • Description: Sensor/actuator cable, unshielded • 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 • Application: Uncontaminated zones, Zones with chemicals | <p>YG8U13- C60VA1XLEAX</p> | <p>2146370</p> |

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