



IME08-1B5PSZTOKS44

IME

INDUCTIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.



Ordering information

| Type | part no. |
|--------------------|----------|
| IME08-1B5PSZTOKS44 | 1091110 |

Included in delivery: BEF-MU-M08N (1)

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

Illustration may differ



Detailed technical data

Features

| | |
|--|--|
| Housing | Metric |
| Housing | Short-body |
| 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 | PNP |
| Switching output detail | PNP |
| Output function | NO |
| Electrical wiring | DC 3-wire |
| Enclosure rating | IP67 ¹⁾ |
| Special characteristic | Including locking nuts |
| Items supplied | Mounting nut, V2A stainless steel, with locking teeth (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 Sr.

| | |
|--|--------------------------------------|
| Voltage drop | ≤ 2 V ¹⁾ |
| 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 | 41 mm |
| Thread length | 25 mm |
| Tightening torque, max. | ≤ 5 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 % |

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 | 8 mm |
| C | 8 mm |
| D | 4.5 mm |
| F | 12 mm |

Classifications

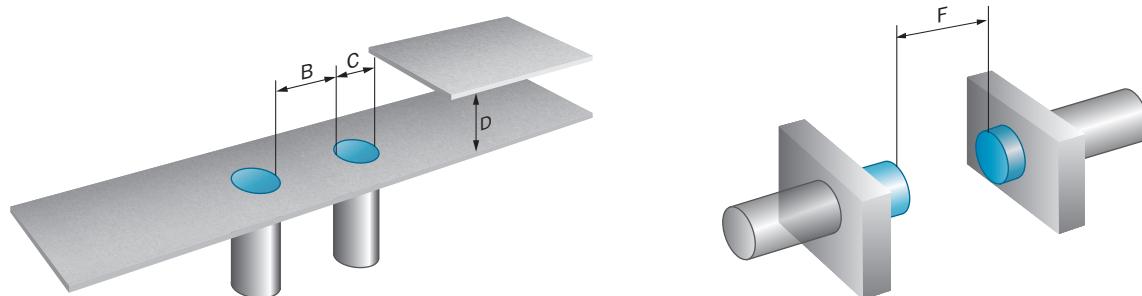
| | |
|-------------------|----------|
| ECLASS 5.0 | 27270101 |
|-------------------|----------|

| | |
|-----------------------|----------|
| 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 |

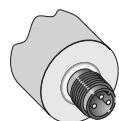
Certificates

| | |
|---|---|
| EU declaration of conformity | ✓ |
| UK declaration of conformity | ✓ |
| ACMA declaration of conformity | ✓ |
| Moroccan declaration of conformity | ✓ |
| China RoHS | ✓ |
| cULus certificate | ✓ |

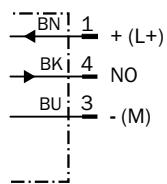
Installation note Flush installation



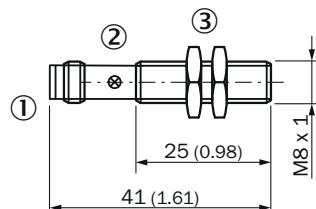
Connection type



Connection diagram Cd-002



Dimensional drawing IME08 Short-body housing, 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 | 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"> 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 |
|  | <ul style="list-style-type: none"> 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 |
|  | <ul style="list-style-type: none"> 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 |
|  | <ul style="list-style-type: none"> 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: Uncontaminated zones, Zones with chemicals | YF8U13-020VA1XLEAX | 2095860 |
|  | <ul style="list-style-type: none"> 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: Drag chain operation, Zones with oils and lubricants, Robot, Drag chain operation | YF8U13-050UA1XLEAX | 2094788 |
|  | <ul style="list-style-type: none"> 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: Uncontaminated zones, Zones with chemicals | YF8U13-050VA1XLEAX | 2095884 |
|  | <ul style="list-style-type: none"> 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: Uncontaminated zones, Zones with chemicals | YF8U13-100VA1XLEAX | 2095885 |
|  | <ul style="list-style-type: none"> 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: Uncontaminated zones, Zones with chemicals | YG8U13-020VA1XLEAX | 2096165 |
|  | <ul style="list-style-type: none"> 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: Uncontaminated zones, Zones with chemicals | YG8U13-050VA1XLEAX | 2096166 |
|  | <ul style="list-style-type: none"> 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 Application: Uncontaminated zones, Zones with chemicals | YF8U13-C60VA1XLEAX | 2146368 |

SICK AT A GLANCE

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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.

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."

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