

IME

INDUCTIVE PROXIMITY SENSORS



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Ordering information

| Туре | Part no. |
|-----------------|----------|
| IME30-15BNSZCOS | 1041038 |

Included in delivery: BEF-MU-M30 (1)

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

Illustration may differ



Detailed technical data

Features

| Housing | Cylindrical thread design |
|-----------------------------------|---|
| Housing | Standard design |
| Thread size | M30 x 1.5 |
| Diameter | Ø 30 mm |
| Sensing range S _n | 15 mm |
| Safe sensing range S _a | 12.15 mm |
| Installation type | Flush |
| Switching frequency | 500 Hz |
| Connection type | Male connector M12, 4-pin |
| Switching output | NPN |
| Output function | NO |
| Electrical wiring | DC 3-wire |
| Enclosure rating | IP67 ¹⁾ |
| Items supplied | Mounting nut, brass, nickel-plated (2x) |

¹⁾ According to EN 60529.

Mechanics/electronics

| Supply voltage | 10 V DC 30 V DC |
|--------------------------------|------------------|
| Ripple | ≤ 10 % |
| Voltage drop | $\leq 2 V^{(1)}$ |
| Time delay before availability | ≤ 125 ms |

 $^{1)}$ At I_a max.

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

³⁾ Of Sr.

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| Hysteresis | 3 % 15 % |
|--|-------------------------------|
| Reproducibility | ≤ 2 % ^{2) 3)} |
| Temperature drift (of S _r) | ± 10 % |
| EMC | According to EN 60947-5-2 |
| Continuous current l _a | ≤ 200 mA |
| No load current | ≤ 10 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 | Brass, nickel-plated |
| Sensing face material | Plastic, PA 66 |
| Housing length | 71 mm |
| Thread length | 54 mm |
| Tightening torque, max. | ≤ 100 Nm |
| ngittening torque, max. | |

¹⁾ At I_a max.

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

³⁾ Of Sr.

Safety-related parameters

| MTTFD | 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 | 60 mm |
| c | 30 mm |
| D | 45 mm |
| F | 120 mm |

Classifications

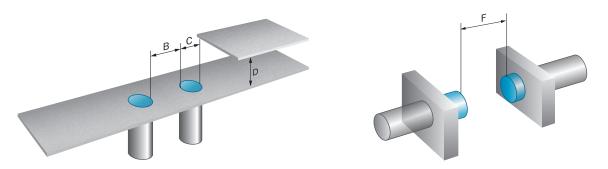
| ECLASS 5.0 | 27270101 |
|--------------|----------|
| ECLASS 5.1.4 | 27270101 |
| ECLASS 6.0 | 27270101 |

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| 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

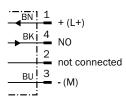


Connection type



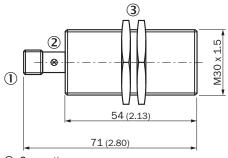
Connection diagram

Cd-007



Dimensional drawing (Dimensions in mm (inch))

IME30 Standard, connector, flush



① Connection

② Display LED

③ Fastening nuts (2x); width across 36, 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 M30 sensors, steel, zinc coated, without mounting hardware | BEF-WG-M30 | 5321871 | |
| 10 | Mounting bracket for M30 sensors, steel, zinc coated, without mounting hardware | BEF-WN-M30 | 5308445 | |
| Plug connected | ors and cables | | | |
| | Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals | YF2A14- 020VB3XLEAX | 2096234 | |
| | Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals | YF2A14- 050VB3XLEAX | 2096235 | |
| | Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals | YF2A14- 100VB3XLEAX | 2096236 | |
| 3 | Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals | YG2A14- 020VB3XLEAX | 2095895 | |

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| | Brief description | Туре | Part no. |
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| | Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals | YG2A14- 050VB3XLEAX | 2095897 |
| | Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals | YG2A14- 100VB3XLEAX | 2095898 |
| | Connection type head A: Female connector, M12, 4-pin, straight 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 |
| 1 | Connection type head A: Female connector, M12, 4-pin, angled 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 |

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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Online data sheet

