IME12-06BNSZW2S

INDUCTIVE PROXIMITY SENSORS



IME12-06BNSZW2S | IME

INDUCTIVE PROXIMITY SENSORS



Ordering information

| Туре | Part no. |
|-----------------|----------|
| IME12-06BNSZW2S | 1071224 |

Included in delivery: BEF-MU-M12 (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 | M12 x 1 |
| Diameter | Ø 12 mm |
| Sensing range S _n | 6 mm |
| Safe sensing range S _a | 4.86 mm |
| Installation type | Quasi-flush |
| Switching frequency | 800 Hz |
| Connection type | Cable, 3-wire, 2 m |
| Switching output | NPN |
| Output function | NO |
| Electrical wiring | DC 3-wire |
| Enclosure rating | IP67 ¹⁾ |
| Special features | Triple sensing range |
| 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 | $\leq 2 V^{(1)}$ |

 $^{1)}$ At I_a max.

 $^{2)}\ensuremath{\,\text{Supply voltage U}_B}$ and constant ambient temperature Ta.

³⁾ Of Sr.

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| Time delay before availability | ≤ 50 ms |
|---|---|
| Hysteresis | 1%15% |
| Reproducibility | $\leq 5 \%^{(2)(3)}$ |
| Temperature drift (of S _r) | ± 10 % |
| EMC | According to EN 60947-5-2 |
| Continuous current I _a | ≤ 200 mA |
| No load current | ≤ 10 mA |
| Cable material | PVC |
| Conductor size | 0.25 mm ² |
| Cable diameter | Ø 3.9 mm |
| Short-circuit protection | ✓ |
| | |
| Reverse polarity protection | < |
| Reverse polarity protection Power-up pulse protection | ✓ ✓ |
| | |
| Power-up pulse protection | |
| Power-up pulse protection Shock and vibration resistance | ✓ 30 g, 11 ms/10 Hz 55 Hz, 1 mm |
| Power-up pulse protection Shock and vibration resistance Ambient operating temperature | ✓ 30 g, 11 ms/10 Hz 55 Hz, 1 mm -25 °C +75 °C |
| Power-up pulse protection Shock and vibration resistance Ambient operating temperature Ambient temperature, storage | ✓ 30 g, 11 ms/10 Hz 55 Hz, 1 mm -25 °C +75 °C -25 °C +75 °C |
| Power-up pulse protection Shock and vibration resistance Ambient operating temperature Ambient temperature, storage Housing material | ✓ 30 g, 11 ms/10 Hz 55 Hz, 1 mm -25 °C +75 °C -25 °C +75 °C Brass, nickel-plated |
| Power-up pulse protection Shock and vibration resistance Ambient operating temperature Ambient temperature, storage Housing material Sensing face material | ✓ 30 g, 11 ms/10 Hz 55 Hz, 1 mm -25 °C +75 °C -25 °C +75 °C Brass, nickel-plated Plastic, PA 66 |
| Power-up pulse protection Shock and vibration resistance Ambient operating temperature Ambient temperature, storage Housing material Sensing face material Housing length | ✓ 30 g, 11 ms/10 Hz 55 Hz, 1 mm -25 °C +75 °C -25 °C +75 °C Brass, nickel-plated Plastic, PA 66 63 mm |

¹⁾ At I_a max.

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

³⁾ Of Sr.

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. 0.75 |
| Aluminum (AI) | Approx. 0.52 |
| Copper (Cu) | Approx. 0.45 |
| Brass (Br) | Approx. 0.54 |

Installation note

| Remark | Associated graphic see "Installation" |
|--------|---------------------------------------|
| A | 6 mm |
| В | 25 mm |
| с | 12 mm |

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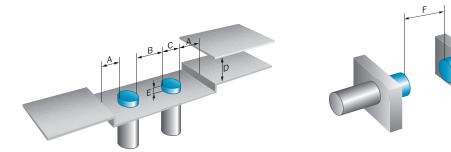
| D | 18 mm |
|---|-------|
| E | 2 mm |
| F | 60 mm |

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 |

Installation note

Quasi-flush installation

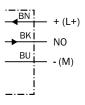


Connection type



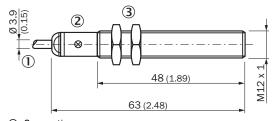
Connection diagram

Cd-001



Dimensional drawing (Dimensions in mm (inch))

IME12 standard, cable, flush



① Connection

- ② Display LED
- 3 Fastening nuts (2x); width across 17, 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 M12 sensors, steel, zinc coated, without mounting hardware | BEF-WG-M12 | 5321869 | |
| 40 | Mounting bracket for M12 sensors, steel, zinc coated, without mounting hardware | BEF-WN-M12 | 5308447 | |
| Terminal and alignment brackets | | | | |
| | Clamping block for round sensors M12, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included $% \left(\frac{1}{2}\right) =0$ | BEF-KH-M12 | 2051479 | |
| | Clamping block for round sensors M12, with fixed stop, plastic (PA12), glass-fiber rein- forced, mounting hardware included | BEF-KHF-M12 | 2051480 | |

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

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

