

IME12-06BPSZW2K

INDUCTIVE PROXIMITY SENSORS





Ordering information

| Туре | Part no. |
|-----------------|----------|
| IME12-06BPSZW2K | 1071214 |

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 | Short-body Short-body |
| 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 | PNP |
| 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 | ≤ 2 V ¹⁾ |

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

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

³⁾ Of Sr.

| Time delay before availability | ≤ 50 ms |
|---|---|
| Hysteresis | 1 % 15 % |
| Reproducibility | ≤ 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 44 mm |

 $^{^{1)}}$ At I_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. 0.75 |
| 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 |
| c | 12 mm |

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

³⁾ Of Sr.

IME12-06BPSZW2K | IME

INDUCTIVE PROXIMITY SENSORS

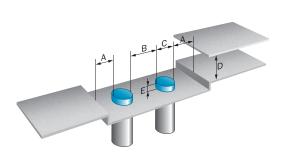
| D | 18 mm |
|---|-------|
| E | 2 mm |
| F | 60 mm |

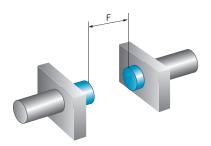
Classifications

| 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 diagram

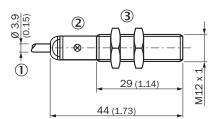
Cd-001



INDUCTIVE PROXIMITY SENSORS

Dimensional drawing (Dimensions in mm (inch))

IME12 short variant, 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 brackets and plates | | | |
| رانا | 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 $$ | BEF-KH-M12 | 2051479 |
| | Clamping block for round sensors M12, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included $$ | BEF-KHF-M12 | 2051480 |

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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.

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