

IME12-04NPSZW5K

IME

INDUCTIVE PROXIMITY SENSORS



INDUCTIVE PROXIMITY SENSORS



Ordering information

| Туре | Part no. |
|-----------------|----------|
| IME12-04NPSZW5K | 1042725 |

Illustration may differ

Included in delivery: BEF-MU-M12 (1)

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



Detailed technical data

Features

| Housing | Cylindrical thread design |
|-----------------------------------|---------------------------|
| Housing | Short-body |
| Thread size | M12 x 1 |
| Diameter | Ø 12 mm |
| Sensing range S _n | 4 mm |
| Safe sensing range S _a | 3.24 mm |
| Installation type | Non-flush |
| Switching frequency | 2,000 Hz |
| Connection type | Cable, 3-wire, 5 m |
| Switching output | PNP |
| Output function | NO |
| Electrical wiring | DC 3-wire |
| Enclosure rating | IP67 ¹⁾ |

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 | ≤ 100 ms |
| Hysteresis | 5 % 15 % |
| Reproducibility | ≤ 2 % ^{2) 3)} |
| Temperature drift (of S _r) | ± 10 % |
| ЕМС | According to EN 60947-5-2 |

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

 $^{^{2)}}$ Ub and Ta constant.

³⁾ Of Sr.

| Continuous current I _a | ≤ 200 mA |
|-----------------------------------|---|
| Cable material | PVC |
| Conductor size | 0.25 mm ² |
| Cable diameter | Ø 3.9 mm |
| Short-circuit protection | ✓ |
| 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 | 44 mm |
| Thread length | 24 mm |
| Tightening torque, max. | ≤ 12 Nm |
| Items supplied | Mounting nut, brass, nickel-plated (2x) |
| UL File No. | NRKH.E181493 |

 $^{^{1)}}$ At $I_{\rm a}$ 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. 0.8 | |
| Aluminum (AI) | Approx. 0.45 | |
| Copper (Cu) | Approx. 0.4 | |
| Brass (Br) | Approx. 0.4 | |

Installation note

| Remark | Associated graphic see "Installation" |
|--------|---------------------------------------|
| Α | 12 mm |
| В | 24 mm |
| c | 12 mm |
| D | 12 mm |
| E | 8 mm |
| F | 32 mm |

Classifications

| ECI@ss 5.0 | 27270101 |
|--------------|----------|
| ECI@ss 5.1.4 | 27270101 |
| ECI@ss 6.0 | 27270101 |

²⁾ Ub and Ta constant.

³⁾ Of Sr.

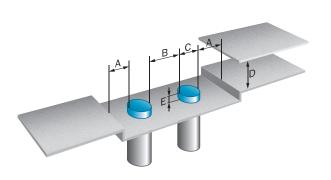
IME12-04NPSZW5K | IME

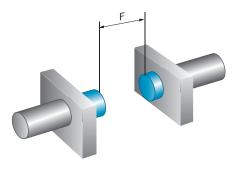
INDUCTIVE PROXIMITY SENSORS

| ECI@ss 6.2 | 27270101 |
|----------------|----------|
| ECI@ss 7.0 | 27270101 |
| ECI@ss 8.0 | 27270101 |
| ECI@ss 8.1 | 27270101 |
| ECI@ss 9.0 | 27270101 |
| ECI@ss 10.0 | 27270101 |
| ECI@ss 11.0 | 27270101 |
| ETIM 5.0 | EC002714 |
| ETIM 6.0 | EC002714 |
| ETIM 7.0 | EC002714 |
| ETIM 8.0 | EC002714 |
| UNSPSC 16.0901 | 39122230 |
| | |

Installation note

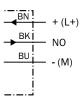
Non-flush installation





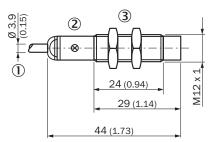
Connection diagram

Cd-001



Dimensional drawing (Dimensions in mm (inch))

IME12 Short-body housing, cable, non-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 | | | |
| | 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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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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