

# IME12-04BNSZWDK

INDUCTIVE PROXIMITY SENSORS



#### Ordering information

Туре	Part no.
IME12-04BNSZWDK	1060014

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

Illustration may differ



#### Detailed technical data

#### **Features**

Housing	Cylindrical thread design
Housing	Short-body
Thread size	M12 1
Diameter	Ø 12 mm
Sensing range S <sub>n</sub>	4 mm
Safe sensing range S <sub>a</sub>	3.24 mm
Installation type	Non-flush
Switching frequency	2,000 Hz
Connection type	Cable, 3-wire, 2.5 m
Switching output	NPN
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 <sup>1)</sup>

<sup>&</sup>lt;sup>1)</sup> According to EN 60529.

#### Mechanics/electronics

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Supply voltage	10 V DC 30 V DC
Ripple	≤ 10 %
Voltage drop	$\leq$ 2 V $^{1)}$
Current consumption	$\leq$ 10 mA $^{2)}$
Time delay before availability	≤ 100 ms
Hysteresis	5 % 15 %

 $<sup>^{1)}</sup>$  At I $_{\rm a}$  max.

<sup>&</sup>lt;sup>2)</sup> Without load.

 $<sup>^{</sup>m 3)}$  Ub and Ta constant.

<sup>&</sup>lt;sup>4)</sup> Of Sr.

Reproducibility	≤ 2 % <sup>3) 4)</sup>
Temperature drift (of S <sub>r</sub> )	± 10 %
EMC	According to EN 60947-5-2
Continuous current I <sub>a</sub>	≤ 200 mA
Cable material	PVC
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	Metal, Nickel-plated brass
Sensing face material	Plastic, Plastic
Housing length	44 mm
Thread length	29 mm
Tightening torque, max.	≤ 12 Nm
UL File No.	NRKH.E181493

<sup>&</sup>lt;sup>1)</sup> At I<sub>a</sub> max.

#### 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 Asset	ociated graphic see "Installation"
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#### Classifications

ECI@ss 5.0	27270101
ECI@ss 5.1.4	27270101
ECI@ss 6.0	27270101
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
ETIM 5.0	EC002714
ETIM 6.0	EC002714
UNSPSC 16.0901	39122230

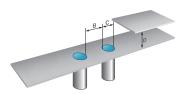
<sup>2)</sup> Without load.

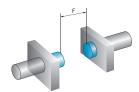
<sup>3)</sup> Ub and Ta constant.

<sup>&</sup>lt;sup>4)</sup> Of Sr.

#### Installation note

Flush installation





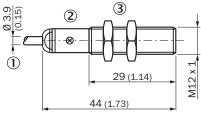
#### Connection diagram

cd-001



#### Dimensional drawing (Dimensions in mm (inch))

IME12 short-body, cable and cable with connector, flush



- ① Connection
- ② Indication LED
- 3 Fastening nuts (2x); width across 17, metal

#### Recommended accessories

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

	Brief description	Туре	Part no.
Universal bar clamp systems			
	Universal bar clamp for mounting bars with 12 mm diameter, Zinc diecast, without mounting plate and screws	BEF-KHS-KH3	5322626
Mounting brackets and plates			
	Mounting plate for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M12	5321869

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	Brief description	Туре	Part no.
90	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

#### 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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