

# IME12-10NNOZW2K

**INDUCTIVE PROXIMITY SENSORS** 



## IME12-10NNOZW2K | IME

INDUCTIVE PROXIMITY SENSORS



#### Ordering information

Туре	Part no.
IME12-10NNOZW2K	1071233

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

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

Illustration may differ



#### Detailed technical data

#### Features

Housing	Metric
Housing	Short-body
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range S <sub>n</sub>	10 mm
Safe sensing range S <sub>a</sub>	8.1 mm
Installation type	Non-flush
Switching frequency	400 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	NPN
Output function	NC
Electrical wiring	DC 3-wire
Enclosure rating	IP67 <sup>1)</sup>
Special features	Triple sensing range
Items supplied	Mounting nut, brass, nickel-plated (2x)

 $^{\mbox{1)}}$  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<sub>a</sub> max.

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

<sup>3)</sup> Of Sr.

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Time delay before availability	≤ 50 ms
Hysteresis	1%15%
Reproducibility	< 5 % <sup>2) 3)</sup>
Temperature drift (of S <sub>r</sub> )	± 10 %
EMC	According to EN 60947-5-2
Continuous current I <sub>a</sub>	≤ 200 mA
No load current	≤ 10 mA
Cable material	PVC
Conductor size	0.25 mm <sup>2</sup>
Cable diameter	Ø 3.9 mm
Short-circuit protection	✓
Power-up pulse protection	1
. etter alt hanee breteenen	•
Shock and vibration resistance	<ul> <li>✓</li> <li>30 g, 11 ms/10 Hz 55 Hz, 1 mm</li> </ul>
Shock and vibration resistance	30 g, 11 ms/10 Hz 55 Hz, 1 mm
Shock and vibration resistance Ambient operating temperature	30 g, 11 ms/10 Hz 55 Hz, 1 mm -25 °C +75 °C
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
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
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
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

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

 $^{2)}$  Supply voltage  $U_{\text{B}}$  and constant ambient temperature Ta.

<sup>3)</sup> Of Sr.

### Safety-related parameters

MTTFD	1,735 years
DC <sub>avg</sub>	0 %

#### **Reduction factors**

Note	The values are reference values which may vary
St37 steel (Fe)	1
Stainless steel (V2A, 304)	Approx. 0.68
Aluminum (AI)	Approx. 0.47
Copper (Cu)	Approx. 0.42
Brass (Br)	Approx. 0.5

#### Installation note

Remark	Associated graphic see "Installation"
A	15 mm
В	45 mm
c	12 mm
D	30 mm

## IME12-10NNOZW2K | IME

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E	13 mm
F	100 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

27270101

27270101

27270101

27274001

EC002714

EC002714

EC002714

EC002714

39122230

#### Installation note

UNSPSC 16.0901

ECLASS 9.0

ECLASS 10.0

ECLASS 11.0

ECLASS 12.0

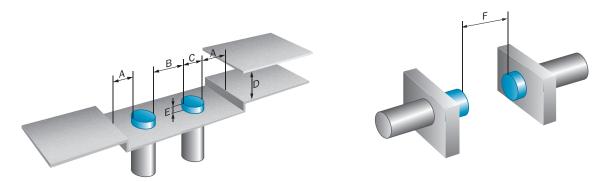
**ETIM 5.0** 

ETIM 6.0

ETIM 7.0

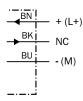
ETIM 8.0

Non-flush installation



#### **Connection diagram**

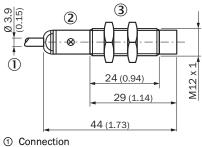
Cd-003



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

IME12 Short-body housing, cable, non-flush



- 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	ckets 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 re- inforced, mounting hardware included	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

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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

