

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	Cylindrical thread design
Housing	Short-body
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range S _n	10 mm
Safe sensing range S _a	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 ¹⁾
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_a max.

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

³⁾ Of Sr.

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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	\checkmark
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.

 $^{\rm 2)}$ 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. 0.68
Aluminum (Al)	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
С	12 mm

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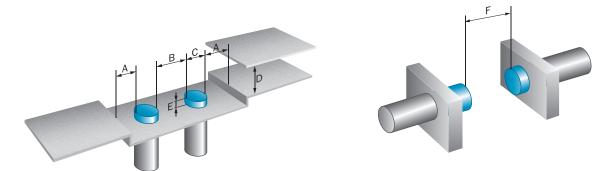
D	30 mm
E	13 mm
F	100 mm

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
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

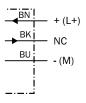
Installation note

Non-flush installation



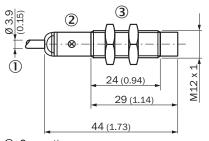
Connection diagram

Cd-003



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 re- inforced, 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.

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

