

IME12-04BPOZQDSS52

INDUCTIVE PROXIMITY SENSORS



Ordering information

Туре	part no.
IME12-04BPOZQDSS52	1090475

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	Standard design
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	Flush
Switching frequency	2,000 Hz
Connection type	Cable with M12 male connector, 4-pin, 0.6 m
Switching output	PNP
Switching output detail	PNP
Output function	NC
Electrical wiring	DC 3-wire
Enclosure rating	IP67 ¹⁾
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ 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 $^{1)}$

¹⁾ At L may

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

³⁾ Of Sr.

Time delay before availability	≤ 100 ms
Hysteresis	5 % 15 %
Reproducibility	≤ 2 % 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
Cable diameter	Ø 3.9 mm
Short-circuit 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	63 mm
Thread length	48 mm
Tightening torque, max.	≤ 12 Nm
UL File No.	NRKH.E181493

¹⁾ At Ia 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"
В	24 mm
c	12 mm
D	12 mm
F	32 mm

Certificates

EU declaration of conformity	✓
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 $^{^{2)}\,\}mbox{Supply}$ voltage $\mbox{U}_{\mbox{\footnotesize B}}$ and constant ambient temperature Ta.

³⁾ Of Sr.

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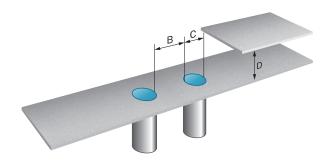
INDUCTIVE PROXIMITY SENSORS

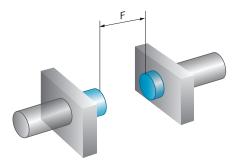
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cULus certificate	✓

Classifications

CLASS 5.0	27270101
CLASS 5.1.4	27270101
CLASS 6.0	27270101
CLASS 6.2	27270101
CLASS 7.0	27270101
CLASS 8.0	27270101
CLASS 8.1	27270101
CLASS 9.0	27270101
CLASS 10.0	27270101
CLASS 11.0	27270101
CLASS 12.0	27274001
TIM 5.0	EC002714
TIM 6.0	EC002714
TIM 7.0	EC002714
TIM 8.0	EC002714
NSPSC 16.0901	39122230

Installation note Flush installation

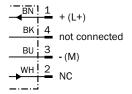




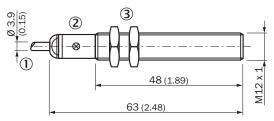
Connection type



Connection diagram Cd-008



Dimensional drawing IME12 standard, cable with male connector, flush



Dimensions in mm (inch)

- 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 syst	Mounting systems				
	 Description: Clamping block for round sensors M12, with fixed stop Material: Plastic Details: Plastic (PA12), glass-fiber reinforced Items supplied: Mounting hardware included 	BEF-KHF-M12	2051480		
	 Description: Mounting plate for M12 sensors Material: Steel Details: Steel, zinc coated Items supplied: Without mounting hardware 	BEF-WG-M12	5321869		
40	 Description: Mounting bracket for M12 sensors Material: Steel Details: Steel, zinc coated Items supplied: Without mounting hardware 	BEF-WN-M12	5308447		
	 Description: Clamping block for round sensors M12, without fixed stop Material: Plastic Details: Plastic (PA12), glass-fiber reinforced Items supplied: Mounting hardware included 	BEF-KH-M12	2051479		

	Brief description	Туре	part no.
connectors and cables			
6	Connection type head A: Female connector, M12, 4-pin, straight Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Connection systems: Flying leads Note: This product is generally resistant to chemical cleaning agents (see ECOLAB). Please do not use cleaning agents of any other Kind., Not resistant against lactic acid & hydrogen peroxide (H2O2) Application: Hygienic and washdown zones	DOL-1204-G05MNI	6052615
•	Connection type head A: Female connector, M12, 4-pin, straight Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PP Description: Sensor/actuator cable, unshielded Connection systems: Flying leads Note: This product is generally resistant to chemical cleaning agents (see ECOLAB) and other chemical compounds such as H2O2 and CH2O2. Before permanent installation is carried out, the material's resistance to the cleaning agent being used must be checked., Resistant against lactic acid & hydrogen peroxide (H2O2) Application: Hygienic and washdown zones, Drag chain operation	DOL-1204-G05MRN	6058476
	 Connection type head A: Female connector, M12, 4-pin, angled, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-W	6007303
	 Connection type head A: Female connector, M12, 4-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-G	6007302
	 Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones 	YF2A14-050VB3XLEAX	2096235
No.	 Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation 	YF2A14-050UB3XLEAX	2095608
	 Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 0.6 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones 	YG2A14- C60VB3XLEAX	2145709
	Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 1 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones	YG2A14-010VB3XLEAX	2145710
P	Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 0.6 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones	YF2A14- C60VB3XLEAX	2145707
	Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 1 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones	YF2A14-010VB3XLEAX	2145708

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