



IME08-03BNOZCOS

IME

INDUCTIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
IME08-03BNOZC0S	1074033

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

Detailed technical data

Features

Housing	Cylindrical thread design
Housing	Standard
Thread size	M8 1
Diameter	Ø 8 mm
Sensing range S_n	3 mm
Safe sensing range S_a	2.43 mm
Installation type	Quasi-flush
Switching frequency	1,000 Hz
Connection type	Male connector M12, 4-pin
Switching output	NPN
Output function	NC
Electrical wiring	DC 3-wire
Enclosure rating	IP67 ¹⁾
Special features	Triple sensing range

¹⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 %
Voltage drop	≤ 2 V ¹⁾
Current consumption	≤ 10 mA ²⁾
Time delay before availability	≤ 50 ms
Hysteresis	1 % ... 15 %

¹⁾ At I_a max.

²⁾ Without load.

³⁾ U_b and T_a constant.

⁴⁾ Of S_r .

Reproducibility	≤ 5 % ^{3) 4)}
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Current consumption, no load	≤ 10 mA
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
Ambient storage temperature	-25 °C ... +75 °C
Housing material	Metal, Nickel-plated brass
Sensing face material	Plastic, Plastic
Housing length	52 mm
Thread length	28 mm
Tightening torque, max.	≤ 5 Nm
UL File No.	NRKH.E181493

1) At I_a max.

2) Without load.

3) U_b and T_a constant.

4) Of S_r.

Reduction factors

Note	The values are reference values which may vary
St37 steel (Fe)	Approx. 1
Stainless steel (V2A, 304)	Approx. 0.75
Aluminum (Al)	Approx. 0.46
Copper (Cu)	Approx. 0.42
Brass (Br)	Approx. 0.56

Installation note

Remark	Associated graphic see "Installation"
A	3 mm
B	20 mm
C	8 mm
D	9 mm
E	1 mm
F	30 mm

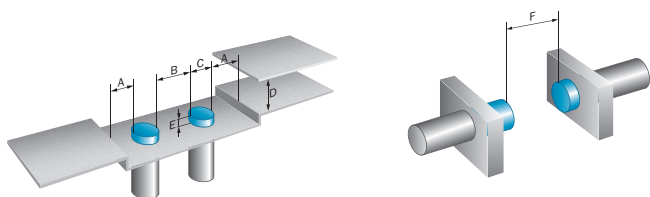
Classifications

ECl@ss 5.0	27270101
ECl@ss 5.1.4	27270101
ECl@ss 6.0	27270101
ECl@ss 6.2	27270101

ECl@ss 7.0	27270101
ECl@ss 8.0	27270101
ECl@ss 8.1	27270101
ECl@ss 9.0	27270101
ETIM 5.0	EC002714
ETIM 6.0	EC002714
UNSPSC 16.0901	39122230

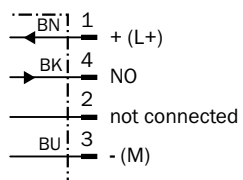
Installation note

Quasi-flush installation



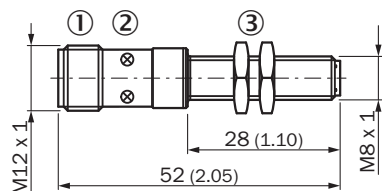
Connection diagram

cd-007



Dimensional drawing (Dimensions in mm (inch))

IME08 Standard, connector, M12, flush




- ① Connection
- ② Indication LED
- ③ Fastening nuts (2x); width across 13, metal

Recommended accessories

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

	Brief description	Type	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 M8 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M08	5321722
	Mounting bracket for M8 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M08	5321721
Terminal and alignment brackets			
	Clamping block for round sensors M8, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M08	2051477
	Clamping block for round sensors M8, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M08	2051478
Plug connectors and cables			
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: open cable ends Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YF2A14-020VB3XLEAX	2096234
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: open cable ends Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF2A14-050VB3XLEAX	2096235
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: open cable ends Cable: Sensor/actuator cable, PVC, unshielded, 10 m	YF2A14-100VB3XLEAX	2096236
	Head A: female connector, M8, 4-pin, straight, A-coded Head B: open cable ends Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m	YF8U14-020UA3XLEAX	2094791
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: open cable ends Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YG2A14-020VB3XLEAX	2095895
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: open cable ends Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YG2A14-050VB3XLEAX	2095897
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: open cable ends Cable: Sensor/actuator cable, PVC, unshielded, 10 m	YG2A14-100VB3XLEAX	2095898
	Head A: female connector, M8, 4-pin, angled, A-coded Head B: open cable ends Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m	YG8U14-020UA3XLEAX	2095589
	Head A: female connector, M8, 4-pin, straight, A-coded Head B: male connector, M8, 4-pin, straight, A-coded Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m	YF8U14-020UA3M8U14	2096347
	Head A: female connector, M12, 4-pin, straight Head B: - Cable: unshielded	DOS-1204-G	6007302

	Brief description	Type	Part no.
	Head A: female connector, M12, 4-pin, angled Head B: - Cable: unshielded	DOS-1204-W	6007303

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.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com