

# IME08-02BPSZTOS

INDUCTIVE PROXIMITY SENSORS



# INDUCTIVE PROXIMITY SENSORS

# Ordering information

Туре	Part no.
IME08-02BPSZT0S	1040870

Included in delivery: BEF-MU-M08 (2)

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

Illustration may differ









#### Detailed technical data

#### **Features**

Housing	Cylindrical thread design
Housing	Standard
Thread size	M8 x 1
Diameter	Ø 8 mm
Sensing range S <sub>n</sub>	2 mm
Safe sensing range S <sub>a</sub>	1.62 mm
Installation type	Flush
Switching frequency	4,000 Hz
Connection type	Connector M8, 3-pin
Switching output	PNP
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

Supply voltage	10 V DC 30 V DC
Ripple	≤ 10 %
Voltage drop	≤ 2 V <sup>1)</sup>
Current consumption	10 mA <sup>2)</sup>
Time delay before availability	≤ 100 ms

 $<sup>^{1)}</sup>$  At  $I_a$  max.

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

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

 $<sup>^{5)}</sup>$  Can be used up to –30  $^{\circ}$  C with temperature drift (of Sr): ± 20 %.

Hysteresis	5 % 15 %
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
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 <sup>5)</sup>
Housing material	Brass, nickel-plated
Sensing face material	Plastic, PA 66
Housing length	50 mm
Thread length	34 mm
Tightening torque, max.	≤ 5 Nm
Items supplied	Mounting nut, brass, nickel-plated (2x)
UL File No.	NRKH.E181493

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

# Safety-related parameters

MTTF <sub>D</sub>	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. 0.8
Aluminum (AI)	Approx. 0.45
Copper (Cu)	Approx. 0.4
Brass (Br)	Approx. 0.4

# Installation note

Remark	Associated graphic see "Installation"
В	16 mm
C	8 mm
D	6 mm
F	16 mm

#### Classifications

ECI@ss 5.0	27270101
ECI@ss 5.1.4	27270101

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

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

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

 $<sup>^{5)}</sup>$  Can be used up to -30  $^{\circ}$  C with temperature drift (of Sr):  $\pm$  20 %.

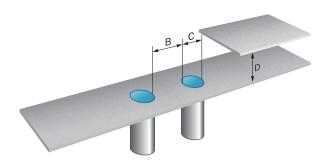
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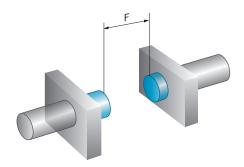
# INDUCTIVE PROXIMITY SENSORS

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
ECI@ss 10.0	27270101
ECI@ss 11.0	27270101
ETIM 5.0	EC002714
<b>ETIM</b> 6.0	EC002714
ETIM 7.0	EC002714
UNSPSC 16.0901	39122230

#### Installation note

#### Flush installation



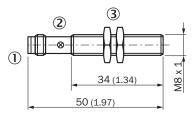


# Connection diagram

#### Cd-002

# Dimensional drawing (Dimensions in mm (inch))

IME08 Standard, connector, 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	Туре	Part no.	
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	
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	
ors and cables			
Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YF8U13- 020VA1XLEAX	2095860	
Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF8U13- 050VA1XLEAX	2095884	
Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 10 m	YF8U13- 100VA1XLEAX	2095885	
Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YG8U13- 020VA1XLEAX	2096165	
Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YG8U13- 050VA1XLEAX	2096166	
Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 10 m	YG8U13- 100VA1XLEAX	2096209	
	Mounting plate for M8 sensors, steel, zinc coated, without mounting hardware  Mounting blate for M8 sensors, steel, zinc coated, without mounting hardware  Mounting bracket for M8 sensors, steel, zinc coated, without mounting hardware  alignment brackets  Clamping block for round sensors M8, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included  Clamping block for round sensors M8, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included  ors and cables  Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads  Cable: Sensor/actuator cable, PVC, unshielded, 2 m  Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads  Cable: Sensor/actuator cable, PVC, unshielded, 5 m  Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads  Cable: Sensor/actuator cable, PVC, unshielded, 10 m  Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads  Cable: Sensor/actuator cable, PVC, unshielded, 2 m  Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads  Cable: Sensor/actuator cable, PVC, unshielded, 5 m  Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads  Cable: Sensor/actuator cable, PVC, unshielded, 5 m  Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads	Mounting plate for M8 sensors, steel, zinc coated, without mounting hardware  Mounting black for M8 sensors, steel, zinc coated, without mounting hardware  BEF-WG-M08  Mounting bracket for M8 sensors, steel, zinc coated, without mounting hardware  BEF-WN-M08  BEF-WN-M08  Clamping block for round sensors M8, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included  Clamping block for round sensors M8, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included  Ors and cables  Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads  Cable: Sensor/actuator cable, PVC, unshielded, 2 m  Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads  Cable: Sensor/actuator cable, PVC, unshielded, 5 m  Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads  Cable: Sensor/actuator cable, PVC, unshielded, 10 m  Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads  Cable: Sensor/actuator cable, PVC, unshielded, 2 m  Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads  Cable: Sensor/actuator cable, PVC, unshielded, 5 m  Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads  Cable: Sensor/actuator cable, PVC, unshielded, 5 m  Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads  Cable: Sensor/actuator cable, PVC, unshielded, 5 m  Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads  Cable: Sensor/actuator cable, PVC, unshielded, 5 m  Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads  Cable: Sensor/actuator cable, PVC, unshielded, 5 m	

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Brief description	Туре	Part no.
Head A: female connector, M8, 3-pin, straight Head B: - Cable: unshielded	DOS-0803-G	7902077
Head A: female connector, M8, 3-pin, angled Head B: - Cable: unshielded	DOS-0803-W	7902078

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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

