

# IME08-02BDSZT0S

INDUCTIVE PROXIMITY SENSORS



# 32

#### Ordering information

Туре	Part no.
IME08-02BDSZT0S	1067109

Included in delivery: BEF-MU-M08 (1)

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

Illustration may differ



#### Detailed technical data

#### **Features**

Housing	Cylindrical thread design
Housing	Standard design
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
Output function	NO
Electrical wiring	DC 2-wire
Enclosure rating	IP67 <sup>1)</sup>
Items supplied	Mounting nut, brass, nickel-plated (2x)

<sup>&</sup>lt;sup>1)</sup> According to EN 60529.

#### Mechanics/electronics

Supply voltage	10 V DC 30 V DC
Ripple	≤ 10 %
Voltage drop	$\leq 4 V^{1}$ $\leq 4.5 V^{2}$
Time delay before availability	≤ 100 ms

 $<sup>^{1)}</sup>$  At I<sub>a</sub> = 30 mA.

 $<sup>^{2)}</sup>$  At I $_{\rm a}$  max.

 $<sup>^{</sup>m 3)}$  Ub and Ta constant.

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

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>	≤ 100 mA
Off-state current	≤ 0.8 mA
Minimum load current	≥ 3 mA
Short-circuit protection	<b>√</b>
Reverse polarity protection	<b>√</b>
Power-up pulse	≤ 5 ms
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	50 mm
Thread length	34 mm
Tightening torque, max.	≤ 5 Nm
UL File No.	NRKH.E181493

 $<sup>^{1)}</sup>$  At I<sub>a</sub> = 30 mA.

#### Safety-related parameters

MTTF <sub>D</sub>	1,103 years
DC <sub>avg</sub>	0 %
T <sub>M</sub> (mission time)	20 years

#### 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

eCl@ss 5.0	27270101
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<sup>&</sup>lt;sup>2)</sup> At I<sub>a</sub> max.

 $<sup>^{</sup>m 3)}$  Ub and Ta constant.

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

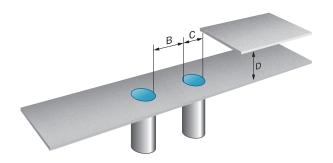
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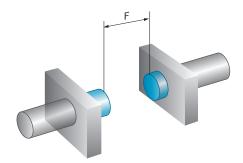
#### INDUCTIVE PROXIMITY SENSORS

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
eCl@ss 10.0	27270101
eCl@ss 11.0	27270101
eCl@ss 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

#### Flush installation



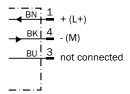


#### Connection type



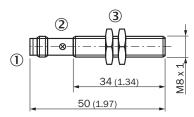
#### Connection diagram

#### Cd-241



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

IME08 Standard, connector, flush



- ① Connection
- ② Display 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 bra			
	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
Plug connectors 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
3	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, 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

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#### INDUCTIVE PROXIMITY SENSORS

	Brief description	Туре	Part no.
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

#### 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:**

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