

# IME08-02BDSZY2K

**INDUCTIVE PROXIMITY SENSORS** 



#### Ordering information

Туре	Part no.
IME08-02BDSZY2K	1070432

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

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

Illustration may differ



#### Detailed technical data

#### **Features**

Housing	Metric
Housing	Short-body
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	Cable, 2-wire, 2 m, Oil-resistant
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	$\leq 4 V^{1}$ $\leq 4.5 V^{2}$

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

<sup>2)</sup> At Ia max.

 $<sup>^{\</sup>rm 3)}$  Supply voltage  $\rm U_B$  and constant ambient temperature Ta.

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

Time delay before availability	≤ 100 ms
Hysteresis	5 % 15 %
Reproducibility	≤ 2 % <sup>3) 4)</sup>
Temperature drift (of S <sub>r</sub> )	± 10 %
ЕМС	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
Cable material	PVC
Conductor size	0.25 mm <sup>2</sup>
Cable diameter	Ø 3.9 mm
Short-circuit protection	✓
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	43 mm
Thread length	25 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

<sup>&</sup>lt;sup>2)</sup> At I<sub>a</sub> max.

 $<sup>^{\</sup>rm 3)}$  Supply voltage  ${\rm U_B}$  and constant ambient temperature Ta.

<sup>4)</sup> Of Sr.

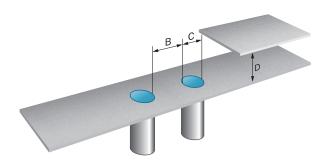
# IME08-02BDSZY2K | IME

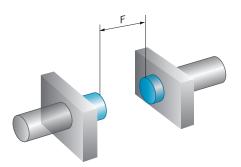
INDUCTIVE PROXIMITY SENSORS

F	16 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

Flush installation





### Connection diagram

Cd-012



#### Recommended accessories

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

	Brief description	Туре	Part no.
Mounting bra	ckets 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 $\frac{1}{2} \frac{1}{2} $	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

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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:**

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