# IME18-08BDOZY2S

**INDUCTIVE PROXIMITY SENSORS** 



### IME18-08BD0ZY2S | IME

INDUCTIVE PROXIMITY SENSORS



#### Ordering information

Туре	Part no.
IME18-08BD0ZY2S	1068258

Included in delivery: BEF-MU-M18 (1)

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



#### Detailed technical data

#### Features

Housing	Cylindrical thread design
Housing	Standard design
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S <sub>n</sub>	8 mm
Safe sensing range S <sub>a</sub>	6.48 mm
Installation type	Flush
Switching frequency	1,000 Hz
Connection type	Cable, 2-wire, 2 m, Oil-resistant
Output function	NC
Electrical wiring	DC 2-wire
Enclosure rating	IP67 <sup>1)</sup>
Items supplied	Mounting nut, brass, nickel-plated (2x)

<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.

 $^{2)}$  At I<sub>a</sub> max.

 $^{\rm 3)}$  Supply voltage Ub and constant ambient temperature Ta.

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

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Hysteresis	5 % 15 %
Reproducibility	$\leq 2 \%^{(3)(4)}$
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
Cable material	PVC
Conductor size	0.25 mm <sup>2</sup>
Cable diameter	Ø 3.9 mm
Short-circuit protection	$\checkmark$
Short-circuit protection Reverse polarity protection	✓ ✓
Reverse polarity protection	✓
Reverse polarity protection Power-up pulse	✓ ≤ 5 ms
Reverse polarity protection Power-up pulse Shock and vibration resistance	✓ ≤ 5 ms 30 g, 11 ms/10 Hz 55 Hz, 1 mm
Reverse polarity protection Power-up pulse Shock and vibration resistance Ambient operating temperature	✓ ≤ 5 ms 30 g, 11 ms/10 Hz 55 Hz, 1 mm -25 °C +75 °C
Reverse polarity protection Power-up pulse Shock and vibration resistance Ambient operating temperature Housing material	✓ ≤ 5 ms 30 g, 11 ms/10 Hz 55 Hz, 1 mm -25 °C +75 °C Brass, nickel-plated
Reverse polarity protection Power-up pulse Shock and vibration resistance Ambient operating temperature Housing material Sensing face material	✓ ≤ 5 ms 30 g, 11 ms/10 Hz 55 Hz, 1 mm -25 °C +75 °C Brass, nickel-plated Plastic, PA 66
Reverse polarity protection Power-up pulse Shock and vibration resistance Ambient operating temperature Housing material Sensing face material Housing length	✓ ≤ 5 ms 30 g, 11 ms/10 Hz 55 Hz, 1 mm -25 °C +75 °C Brass, nickel-plated Plastic, PA 66 67 mm

<sup>1)</sup> At I<sub>a</sub> = 30 mA.

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

<sup>3)</sup> Supply voltage Ub and constant ambient temperature Ta.

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

#### 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 (Al)	Approx. 0.45
Copper (Cu)	Approx. 0.4
Brass (Br)	Approx. 0.4
Installation note	
Remark	Associated graphic see "Installation"
В	36 mm
c	18 mm

24 mm

D

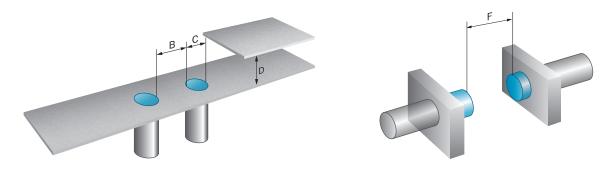
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F	64 mm
Classifications	
ECLASS 5.0	27270101
ECLASS 5.1.4	27270101
ECLASS 6.0	27270101
ECLASS 6.2	27270101
ECLASS 7.0	27270101
ECLASS 8.0	27270101
ECLASS 8.1	27270101
ECLASS 9.0	27270101
ECLASS 10.0	27270101
ECLASS 11.0	27270101
ECLASS 12.0	27274001
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 type



INDUCTIVE PROXIMITY SENSORS

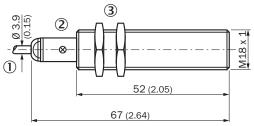
#### **Connection diagram**

Cd-012



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

IME18 standard, cable, flush



① Connection

② Display LED

③ Fastening nuts (2x); width across 24, metal

#### **Recommended accessories**

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

	Brief description	Туре	Part no.	
Mounting brackets and plates				
	Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870	
40	Mounting bracket for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446	
Terminal and alignment brackets				
NOS.	Clamping block for round sensors M18, without fixed stop, plastic (PA12), glass-fiber re- inforced, mounting hardware included	BEF-KH-M18	2051481	
	Clamping block for round sensors M18, with fixed stop, plastic (PA12), glass-fiber rein- forced, mounting hardware included	BEF-KHF-M18	2051482	

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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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