

# IME18-12BNOZW2S

IME

**INDUCTIVE PROXIMITY SENSORS** 





#### Ordering information

Туре	Part no.
IME18-12BNOZW2S	1071259

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

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



#### Detailed technical data

#### Features

reatures	
Housing	Metric
Housing	Standard design
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S <sub>n</sub>	12 mm
Safe sensing range S <sub>a</sub>	9.72 mm
Installation type	Quasi-flush
Switching frequency	500 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	NPN
Output function	NC
Electrical wiring	DC 3-wire
Enclosure rating	IP67 <sup>1)</sup>
Special features	Triple sensing range
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	$\leq 2 V^{1}$
Time delay before availability	≤ 50 ms

<sup>1)</sup> At I may

 $<sup>^{\</sup>rm 2)}$  Supply voltage  $U_{B}$  and constant ambient temperature Ta.

<sup>3)</sup> Of Sr

Hysteresis	1 % 15 %
Reproducibility	≤ 5 % <sup>2) 3)</sup>
Temperature drift (of S <sub>r</sub> )	± 10 %
EMC	According to EN 60947-5-2
Continuous current I <sub>a</sub>	≤ 200 mA
No load current	≤ 10 mA
Cable material	PVC
Conductor size	0.25 mm <sup>2</sup>
Cable diameter	Ø 3.9 mm
Short-circuit 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 operating temperature  Ambient temperature, storage	-25 °C +75 °C -25 °C +75 °C
Ambient temperature, storage	-25 °C +75 °C
Ambient temperature, storage Housing material	-25 °C +75 °C Brass, nickel-plated
Ambient temperature, storage  Housing material  Sensing face material	-25 °C +75 °C  Brass, nickel-plated  Plastic, PA 66
Ambient temperature, storage  Housing material  Sensing face material  Housing length	-25 °C +75 °C  Brass, nickel-plated  Plastic, PA 66  67 mm

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

# Safety-related parameters

MTTF <sub>D</sub>	1,735 years
<b>DC</b> <sub>avg</sub>	0 %

#### Reduction factors

Note	The values are reference values which may vary
St37 steel (Fe)	1
Stainless steel (V2A, 304)	Approx. 0.78
Aluminum (AI)	Approx. 0.43
Copper (Cu)	Approx. 0.35
Brass (Br)	Approx. 0.47

#### Installation note

Remark	Associated graphic see "Installation"
A	13.5 mm
В	35 mm
C	18 mm
D	36 mm
E	4 mm

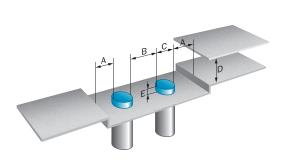
 $<sup>^{\</sup>rm 2)}$  Supply voltage  $\rm U_B$  and constant ambient temperature Ta.

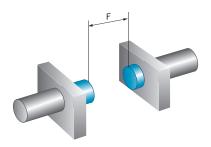
<sup>&</sup>lt;sup>3)</sup> Of Sr.

F	120 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

Quasi-flush installation





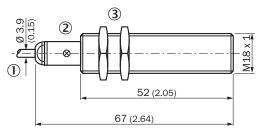
### Connection diagram

Cd-003



#### 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 bra	ckets 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			
	Clamping block for round sensors M18, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included $$	BEF-KH-M18	2051481
	Clamping block for round sensors M18, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M18	2051482

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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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