

# IME18-12BPSZW5K

IME

**INDUCTIVE PROXIMITY SENSORS** 





#### Ordering information

Туре	Part no.
IME18-12BPSZW5K	1088038

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

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



#### Detailed technical data

#### **Features**

reatures	
Housing	Cylindrical thread design
Housing	Short-body
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, 5 m
Switching output	PNP
Output function	NO
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 $_{\rm a}$  max.

 $<sup>^{2)}\,\</sup>mathrm{Supply}$  voltage Ub and constant ambient temperature Ta.

<sup>&</sup>lt;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	✓
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
Ambient temperature, storage	-25 °C +75 °C
Housing material	Brass, nickel-plated
Sensing face material	Plastic, PA 66
Housing length	48 mm
Thread length	33 mm
Tightening torque, max.	≤ 30 Nm
UL File No.	NRKH.E181493

 $<sup>^{1)}</sup>$  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"
Α	13.5 mm
В	35 mm
c	18 mm
D	36 mm
E	4 mm

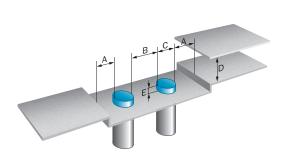
<sup>&</sup>lt;sup>2)</sup> Supply voltage Ub and constant ambient temperature Ta.

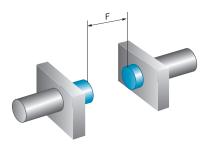
<sup>&</sup>lt;sup>3)</sup> Of Sr.

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

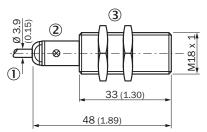
Cd-001



#### INDUCTIVE PROXIMITY SENSORS

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

IME18 Short-body housing, 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			
	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

## 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:**

Contacts and other locations -www.sick.com

