

# IME12-06BPSZW5K

IME

INDUCTIVE PROXIMITY SENSORS

**SICK**  
Sensor Intelligence.



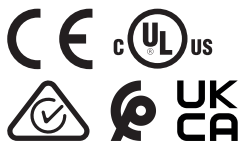
Ordering information

Type	part no.
IME12-06BPSZW5K	1088039

Included in delivery: BEF-MU-M12 (1)

Other models and accessories → [www.sick.com/IME](http://www.sick.com/IME)

Illustration may differ



Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M12 x 1
Diameter	Ø 12 mm
Sensing range $S_n$	6 mm
Safe sensing range $S_a$	4.86 mm
Installation type	Quasi-flush
Switching frequency	800 Hz
Connection type	Cable, 3-wire, 5 m
Switching output	PNP
Switching output detail	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>1)</sup> According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 %

<sup>1)</sup> At  $I_a$  max.

<sup>2)</sup> Supply voltage  $U_B$  and constant ambient temperature  $T_a$ .

<sup>3)</sup> Of  $S_r$ .

<b>Voltage drop</b>	$\leq 2 \text{ V}^{1)}$
<b>Time delay before availability</b>	$\leq 50 \text{ ms}$
<b>Hysteresis</b>	1 % ... 15 %
<b>Reproducibility</b>	$\leq 5 \text{ \%}^{2)}$ 3)
<b>Temperature drift (of <math>S_r</math>)</b>	$\pm 10 \text{ \%}$
<b>EMC</b>	According to EN 60947-5-2
<b>Continuous current <math>I_a</math></b>	$\leq 200 \text{ mA}$
<b>No load current</b>	$\leq 10 \text{ mA}$
<b>Cable material</b>	PVC
<b>Conductor size</b>	0.25 mm <sup>2</sup>
<b>Cable diameter</b>	Ø 3.9 mm
<b>Short-circuit protection</b>	✓
<b>Power-up pulse protection</b>	✓
<b>Shock and vibration resistance</b>	30 g, 11 ms/10 Hz ... 55 Hz, 1 mm
<b>Ambient operating temperature</b>	-25 °C ... +75 °C
<b>Ambient temperature, storage</b>	-25 °C ... +75 °C
<b>Housing material</b>	Brass, nickel-plated
<b>Sensing face material</b>	Plastic, PA 66
<b>Housing length</b>	44 mm
<b>Thread length</b>	29 mm
<b>Tightening torque, max.</b>	$\leq 12 \text{ Nm}$
<b>UL File No.</b>	NRKH.E181493

1) At  $I_a$  max.

2) Supply voltage  $U_B$  and constant ambient temperature  $T_a$ .

3) Of  $S_r$ .

### Safety-related parameters

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

### Reduction factors

<b>Note</b>	The values are reference values which may vary
<b>St37 steel (Fe)</b>	1
<b>Stainless steel (V2A, 304)</b>	Approx. 0.75
<b>Aluminum (Al)</b>	Approx. 0.52
<b>Copper (Cu)</b>	Approx. 0.45
<b>Brass (Br)</b>	Approx. 0.54

### Installation note

<b>Remark</b>	Associated graphic see "Installation"
<b>A</b>	6 mm
<b>B</b>	25 mm
<b>C</b>	12 mm

<b>D</b>	18 mm
<b>E</b>	2 mm
<b>F</b>	60 mm

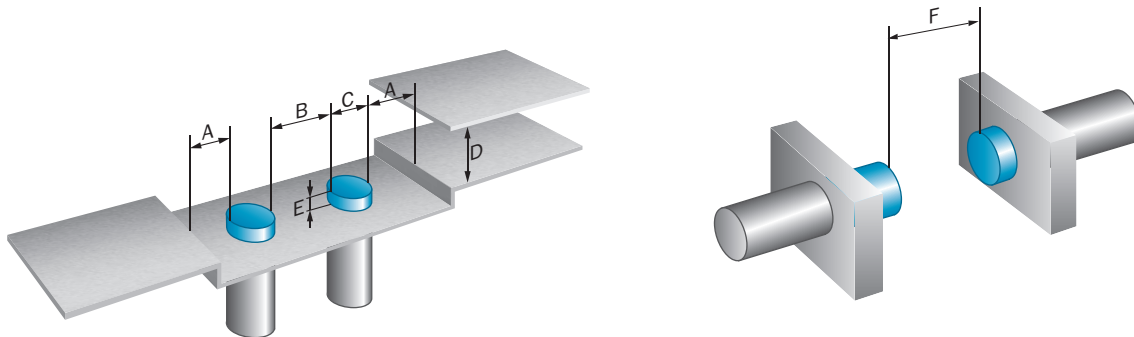
#### Certificates

<b>EU declaration of conformity</b>	✓
<b>UK declaration of conformity</b>	✓
<b>ACMA declaration of conformity</b>	✓
<b>Moroccan declaration of conformity</b>	✓
<b>China-RoHS</b>	✓
<b>cULus certificate</b>	✓

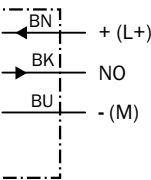
#### Classifications

<b>ECLASS 5.0</b>	27270101
<b>ECLASS 5.1.4</b>	27270101
<b>ECLASS 6.0</b>	27270101
<b>ECLASS 6.2</b>	27270101
<b>ECLASS 7.0</b>	27270101
<b>ECLASS 8.0</b>	27270101
<b>ECLASS 8.1</b>	27270101
<b>ECLASS 9.0</b>	27270101
<b>ECLASS 10.0</b>	27270101
<b>ECLASS 11.0</b>	27270101
<b>ECLASS 12.0</b>	27274001
<b>ETIM 5.0</b>	EC002714
<b>ETIM 6.0</b>	EC002714
<b>ETIM 7.0</b>	EC002714
<b>ETIM 8.0</b>	EC002714
<b>UNSPSC 16.0901</b>	39122230

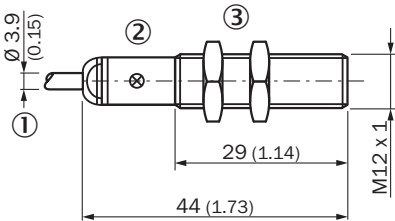
#### Installation note Quasi-flush installation



Connection diagram Cd-001



Dimensional drawing IME12 short variant, cable, flush



- Dimensions in mm (inch)
- ① Connection
  - ② Display LED
  - ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

Other models and accessories → [www.sick.com/IME](http://www.sick.com/IME)

	Brief description	Type	part no.
Mounting systems			
	<ul style="list-style-type: none"><li><b>Description:</b> Clamping block for round sensors M12, with fixed stop</li><li><b>Material:</b> Plastic</li><li><b>Details:</b> Plastic (PA12), glass-fiber reinforced</li><li><b>Items supplied:</b> Mounting hardware included</li></ul>	BEF-KHF-M12	2051480
	<ul style="list-style-type: none"><li><b>Description:</b> Mounting plate for M12 sensors</li><li><b>Material:</b> Steel</li><li><b>Details:</b> Steel, zinc coated</li><li><b>Items supplied:</b> Without mounting hardware</li></ul>	BEF-WG-M12	5321869
	<ul style="list-style-type: none"><li><b>Description:</b> Mounting bracket for M12 sensors</li><li><b>Material:</b> Steel</li><li><b>Details:</b> Steel, zinc coated</li><li><b>Items supplied:</b> Without mounting hardware</li></ul>	BEF-WN-M12	5308447
	<ul style="list-style-type: none"><li><b>Description:</b> Clamping block for round sensors M12, without fixed stop</li><li><b>Material:</b> Plastic</li><li><b>Details:</b> Plastic (PA12), glass-fiber reinforced</li><li><b>Items supplied:</b> Mounting hardware included</li></ul>	BEF-KH-M12	2051479

## 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](http://www.sick.com)