



# IME18-12BPSZQ9KS24

IME

INDUCTIVE PROXIMITY SENSORS

**SICK**  
Sensor Intelligence.

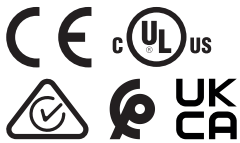


### Ordering information

Type	part no.
IME18-12BPSZQ9KS24	1081179

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

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



### Detailed technical data

#### Features

<b>Housing</b>	Metric
<b>Housing</b>	Short-body
<b>Thread size</b>	M18 x 1
<b>Diameter</b>	Ø 18 mm
<b>Sensing range <math>S_n</math></b>	12 mm
<b>Safe sensing range <math>S_a</math></b>	9.72 mm
<b>Installation type</b>	Quasi-flush
<b>Switching frequency</b>	500 Hz
<b>Connection type</b>	Cable with M12 male connector, 4-pin, 0.3 m
<b>Switching output</b>	PNP
<b>Switching output detail</b>	PNP
<b>Output function</b>	NO
<b>Electrical wiring</b>	DC 3-wire
<b>Enclosure rating</b>	IP67 <sup>1)</sup>
<b>Items supplied</b>	Mounting nut, brass, nickel-plated (2x) Washer, brass, nickel-plated (2 x)

<sup>1)</sup> According to EN 60529.

#### Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC
<b>Ripple</b>	≤ 10 %
<b>Voltage drop</b>	≤ 2 V <sup>1)</sup>

<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>Time delay before availability</b>	≤ 50 ms
<b>Hysteresis</b>	1 % ... 15 %
<b>Reproducibility</b>	≤ 5 % <sup>2)</sup> <sub>3)</sub>
<b>Temperature drift (of S<sub>r</sub>)</b>	± 10 %
<b>EMC</b>	According to EN 60947-5-2
<b>Continuous current I<sub>a</sub></b>	≤ 200 mA
<b>No load current</b>	≤ 10 mA
<b>Cable material</b>	PVC
<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>	48 mm
<b>Thread length</b>	33 mm
<b>Tightening torque, max.</b>	≤ 30 Nm
<b>UL File No.</b>	NRKH.E181493

<sup>1)</sup> At I<sub>a</sub> max.

<sup>2)</sup> Supply voltage U<sub>B</sub> and constant ambient temperature T<sub>a</sub>.

<sup>3)</sup> Of S<sub>r</sub>.

### 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. 0.78
<b>Aluminum (Al)</b>	Approx. 0.43
<b>Copper (Cu)</b>	Approx. 0.35
<b>Brass (Br)</b>	Approx. 0.47

### Installation note

<b>Remark</b>	Associated graphic see "Installation"
<b>A</b>	13.5 mm
<b>B</b>	35 mm
<b>C</b>	18 mm
<b>D</b>	36 mm
<b>E</b>	4 mm
<b>F</b>	120 mm

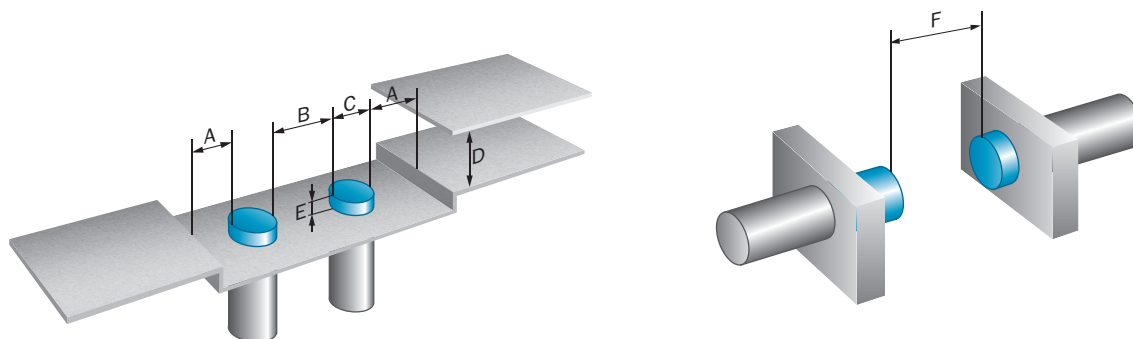
### Certificates

<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

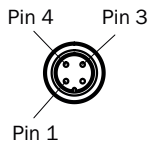
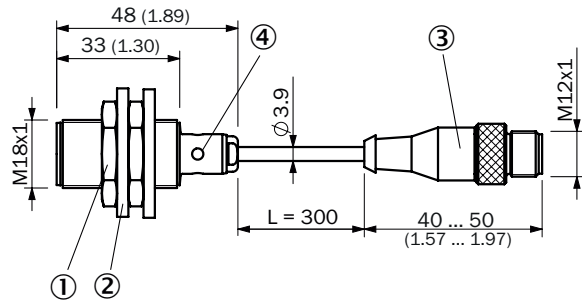
### Installation note Quasi-flush installation



Connection diagram Cd-008



Dimensional drawing IME18 short variant, cable with male connector, flush










Dimensions in mm (inch)

- ① fastening nuts (2x); width across 36, brass nickel-plated
- ② Two washers; nickel-plated brass
- ③ Connection
- ④ function indicator

### Recommended accessories

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

	Brief description	Type	part no.
<b>Mounting systems</b>			
	<ul style="list-style-type: none"> <li><b>Description:</b> Clamping block for round sensors M18, 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> <li><b>Suitable for:</b> GR18, MH15V, V180-2, V18</li> </ul>	BEF-KHF-M18	2051482
	<ul style="list-style-type: none"> <li><b>Description:</b> Clamping block for round sensors M18, 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> <li><b>Suitable for:</b> GR18, MH15V, V180-2, V18, IME18, IMX18, IMA18, IMB18, IMI18</li> </ul>	BEF-KH-M18	2051481
	<ul style="list-style-type: none"> <li><b>Description:</b> Mounting plate for M18 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> <li><b>Suitable for:</b> GR18, V180-2, V18, W15, Z1, Z2</li> </ul>	BEF-WG-M18	5321870
	<ul style="list-style-type: none"> <li><b>Description:</b> Mounting bracket for M18 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> <li><b>Suitable for:</b> GR18, V180-2, V18, W15, Z1, Z2</li> </ul>	BEF-WN-M18	5308446
	<ul style="list-style-type: none"> <li><b>Description:</b> Mounting bracket for M18 sensors</li> <li><b>Material:</b> Stainless steel</li> <li><b>Details:</b> Stainless steel</li> <li><b>Items supplied:</b> Without mounting hardware</li> </ul>	BEF-WN-M18N	5320947
<b>connectors and cables</b>			
	<ul style="list-style-type: none"> <li><b>Description:</b> Sensor/actuator cable, unshielded</li> <li><b>Connection type head A:</b> Female connector, M12, 4-pin, straight, A-coded</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 5 m, 4-wire, PVC</li> <li><b>Application:</b> Uncontaminated zones, Zones with chemicals</li> </ul>	YF2A14-050VB3XLEAX	2096235
	<ul style="list-style-type: none"> <li><b>Description:</b> Sensor/actuator cable, unshielded</li> <li><b>Connection type head A:</b> Female connector, M12, 4-pin, straight, A-coded</li> <li><b>Connection type head B:</b> Flying leads</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 5 m, 4-wire, PUR, halogen-free</li> <li><b>Application:</b> Drag chain operation, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A14-050UB3XLEAX	2095608

## 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)