

IME18-12BPSZQ9KS24

IME

INDUCTIVE PROXIMITY SENSORS





Ordering information

Туре	part no.
IME18-12BPSZQ9KS24	1081179

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

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



Detailed technical data

Features

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

¹⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC 30 V DC
Ripple	≤ 10 %
Voltage drop	\leq 2 V $^{1)}$

¹⁾ At I may

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

³⁾ Of Sr.

Time delay before availability	≤ 50 ms
Hysteresis	1 % 15 %
Reproducibility	≤ 5 % ²⁾ 3)
Temperature drift (of S _r)	± 10 %
ЕМС	According to EN 60947-5-2
Continuous current I _a	≤ 200 mA
No load current	≤ 10 mA
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 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

¹⁾ At I₂ max

Safety-related parameters

MTTF _D	1,735 years
DC _{avg}	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
F	120 mm

 $^{^{2)}}$ Supply voltage U_{B} and constant ambient temperature Ta.

³⁾ Of Sr.

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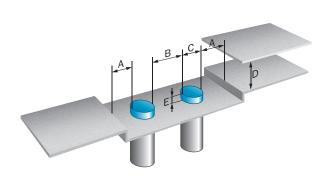
Certificates

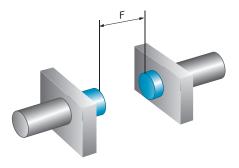
EU declaration of conformity	1
UK declaration of conformity	1
ACMA declaration of conformity	1
Moroccan declaration of conformity	√
China RoHS	√
cULus certificate	1

Classifications

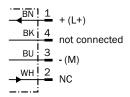
LASS 5.0	27270101
LASS 5.1.4	27270101
LASS 6.0	27270101
LASS 6.2	27270101
LASS 7.0	27270101
LASS 8.0	27270101
LASS 8.1	27270101
LASS 9.0	27270101
LASS 10.0	27270101
LASS 11.0	27270101
LASS 12.0	27274001
IM 5.0	EC002714
IM 6.0	EC002714
IM 7.0	EC002714
IM 8.0	EC002714
ISPSC 16.0901	39122230

Installation note Quasi-flush installation

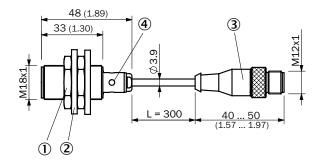




Connection diagram Cd-008



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

	Brief description	Туре	part no.
Mounting systems			
6 5	 Description: Clamping block for round sensors M18, with fixed stop Material: Plastic Details: Plastic (PA12), glass-fiber reinforced Items supplied: Mounting hardware included Suitable for: GR18, MH15V, V180-2, V18 	BEF-KHF-M18	2051482
6 5	 Description: Clamping block for round sensors M18, without fixed stop Material: Plastic Details: Plastic (PA12), glass-fiber reinforced Items supplied: Mounting hardware included Suitable for: GR18, MH15V, V180-2, V18 	BEF-KH-M18	2051481
	 Description: Mounting plate for M18 sensors Material: Steel Details: Steel, zinc coated Items supplied: Without mounting hardware Suitable for: GR18, V180-2, V18, W15, Z1, Z2 	BEF-WG-M18	5321870
40	 Description: Mounting bracket for M18 sensors Material: Steel Details: Steel, zinc coated Items supplied: Without mounting hardware Suitable for: GR18, V180-2, V18, W15, Z1, Z2 	BEF-WN-M18	5308446
40	Description: Mounting bracket for M18 sensors Material: Stainless steel Details: Stainless steel Items supplied: Without mounting hardware	BEF-WN-M18N	5320947
connectors an	d cables		
	 Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones 	YF2A14-050VB3XLEAX	2096235
	 Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation 	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."

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