



IME12-04BPSZQDK

IME

INDUCTIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	part no.
IME12-04BPSZQDK	1056892

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

Other models and accessories → 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	4 mm
Installation type	Flush
Switching frequency	2,000 Hz
Connection type	Cable with M12 male connector, 4-pin, 150 mm
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)

¹⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 %
Voltage drop	≤ 2 V ¹⁾
Time delay before availability	≤ 100 ms

¹⁾ At I_a max.

²⁾ Supply voltage U_B and constant ambient temperature T_a .

³⁾ Of S_r .

Hysteresis	5 % ... 15 %
Reproducibility	$\leq 2 \%$ ²⁾ ³⁾
Temperature drift (of S_r)	$\pm 10 \%$
EMC	According to EN 60947-5-2
Continuous current I_a	$\leq 200 \text{ mA}$
No load current	$\leq 10 \text{ mA}$
Cable diameter	$\varnothing 3.9 \text{ mm}$
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
Housing material	Brass, nickel-plated
Sensing face material	Plastic, PA 66
Housing length	44 mm
Thread length	29 mm
Tightening torque, max.	$\leq 12 \text{ Nm}$
UL File No.	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

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. 0.8
Aluminum (Al)	Approx. 0.45
Copper (Cu)	Approx. 0.4
Brass (Br)	Approx. 0.4

Installation note

Remark	Associated graphic see "Installation"
B	24 mm
C	12 mm
D	12 mm
F	32 mm

Certificates

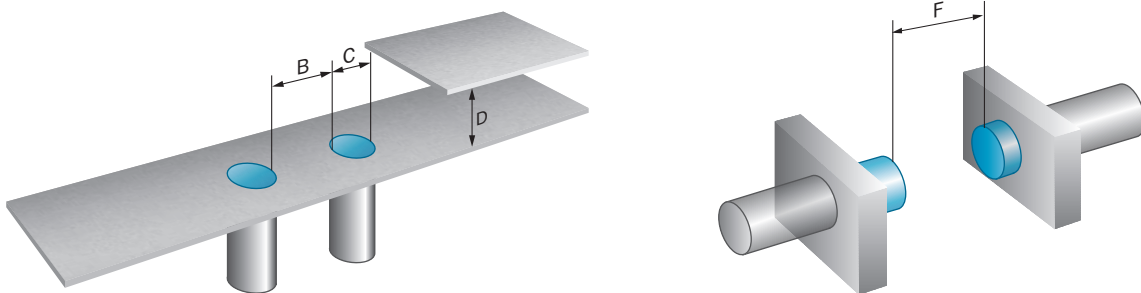
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓

Moroccan declaration of conformity	✓
China-RoHS	✓
cULus certificate	✓

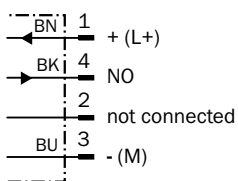
Classifications

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

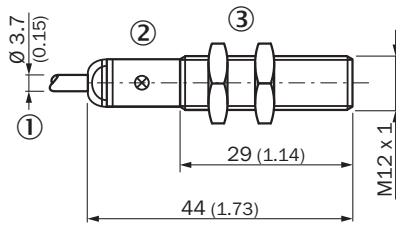
Installation note Flush installation



Connection diagram Cd-007



Dimensional drawing IME12 short variant, cable with male connector, 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

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

	Brief description	Type	part no.
connectors and cables			
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: $\leq 0.75 \text{ mm}^2$ 	DOS-1204-G	6007302
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: $\leq 0.75 \text{ mm}^2$ • Application: Hygienic and washdown zones 	DOS-1204-GN	6028357
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: $\leq 0.75 \text{ mm}^2$ 	DOS-1204-W	6007303
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: $\leq 0.75 \text{ mm}^2$ • Application: Hygienic and washdown zones 	DOS-1204-WN	6028358
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals, Untaminated zones 	YF2A14-020VB3XLEAX	2096234
	<ul style="list-style-type: none"> • 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, Untaminated zones 	YF2A14-050VB3XLEAX	2096235
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 10 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals, Untaminated zones 	YF2A14-100VB3XLEAX	2096236
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals, Untaminated zones 	YG2A14-020VB3XLEAX	2095895
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, 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, Untaminated zones 	YG2A14-050VB3XLEAX	2095897
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 10 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals, Untaminated zones 	YG2A14-100VB3XLEAX	2095898
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 0.6 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals, Untaminated zones 	YG2A14-C60VB3XLEAX	2145709
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 1 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded 	YG2A14-010VB3XLEAX	2145710

	Brief description	Type	part no.
	<ul style="list-style-type: none"> • Application: Zones with chemicals, Uncontaminated zones • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 0.6 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals, Uncontaminated zones 	YF2A14-C60VB3XLEAX	2145707
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 1 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals, Uncontaminated zones 	YF2A14-010VB3XLEAX	2145708

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