

INDUCTIVE PROXIMITY SENSORS



INDUCTIVE PROXIMITY SENSORS



Ordering information

Туре	Part no.
IME30-20BPSZCOK	1071285

Included in delivery: BEF-MU-M30 (1)

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

Illustration may differ



Detailed technical data

Features

Housing	Cylindrical thread design
Housing	Short-body
Thread size	M30 x 1.5
Diameter	Ø 30 mm
Sensing range S _n	20 mm
Safe sensing range S _a	16.2 mm
Installation type	Quasi-flush
Switching frequency	200 Hz
Connection type	Male connector M12, 4-pin
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 ¹⁾
Special features	Triple sensing range
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	$\leq 2 V^{(1)}$

 $^{1)}$ At I_a max.

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

³⁾ Of Sr.

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Time delay before availability	≤ 200 ms
Warm-up time	60 s
Hysteresis	1%15%
Reproducibility	< 5 % ^{2) 3)}
Temperature drift (of S _r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I _a	≤ 200 mA
No load current	≤ 10 mA
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
	20 0
Ambient temperature, storage	-25 °C +75 °C
Ambient temperature, storage Housing material	
. , -	-25 °C +75 °C
Housing material	-25 °C +75 °C Brass, nickel-plated
Housing material Sensing face material	-25 °C +75 °C Brass, nickel-plated Plastic, PA 66
Housing material Sensing face material Housing length	-25 °C +75 °C Brass, nickel-plated Plastic, PA 66 52 mm
Housing material Sensing face material Housing length Thread length	-25 °C +75 °C Brass, nickel-plated Plastic, PA 66 52 mm 35 mm

 $^{1)}$ At I_a max.

 $^{(2)}$ Supply voltage Ub and constant ambient temperature Ta. $^{(3)}$ Of Sr.

Safety-related parameters

MTTFD	1,735 years
DC _{avg}	0 %
Deduction fostere	

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. 0.35
Copper (Cu)	Approx. 0.27
Brass (Br)	Approx. 0.38

Installation note

Remark	Associated graphic see "Installation"
A	33 mm
В	80 mm
c	30 mm
D	60 mm
E	6 mm
F	200 mm

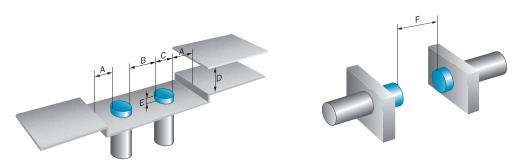
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Classifications

ECLASS 5.0	27270101
	21210101
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



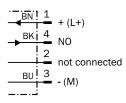
Connection type



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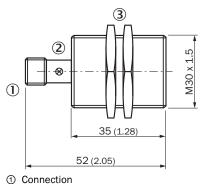
Connection diagram

Cd-007



Dimensional drawing (Dimensions in mm (inch))

IME30 Short-body housing, connector, flush



② Display LED

Fastening nuts (2x); width across 36, metal

Recommended accessories

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

	Brief description	Туре	Part no.	
Mounting bra	Mounting brackets and plates			
	Mounting plate for M30 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M30	5321871	
40	Mounting bracket for M30 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M30	5308445	
Plug connectors and cables				
N	 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 	YF2A14- 020VB3XLEAX	2096234	

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	Brief description	Туре	Part no.
	 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 	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: 10 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YF2A14- 100VB3XLEAX	2096236
3	 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 	YG2A14- 020VB3XLEAX	2095895
	 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 	YG2A14- 050VB3XLEAX	2095897
	 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 	YG2A14- 100VB3XLEAX	2095898
	 Connection type head A: Female connector, M12, 4-pin, straight Description: Unshielded, Head A: female connector, M12, 4-pin, straight, unshielded, for power supply, for cable diameter 4 mm 6 mm Head B: - Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-G	6007302
X ₀	 Connection type head A: Female connector, M12, 4-pin, angled Description: Unshielded, Head A: female connector, M12, 4-pin, angled, unshielded, for power supply, for cable diameter 3 mm 6.5 mm Head B: - Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² 	DOS-1204-W	6007303

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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.

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For us, that is "Sensor Intelligence."

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