

INDUCTIVE PROXIMITY SENSORS



INDUCTIVE PROXIMITY SENSORS



Ordering information

Туре	Part no.
IME30-20NNOZCOS	1041058

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	Standard design
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	Non-flush
Switching frequency	500 Hz
Connection type	Male connector M12, 4-pin
Switching output	NPN
Output function	NC
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	$\leq 2 V^{(1)}$
Time delay before availability	≤ 125 ms

 $^{1)}$ At I_a max.

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

³⁾ Of Sr.

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Hysteresis	5 % 15 %
Reproducibility	≤ 2 % ^{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	\checkmark
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
Housing material	Brass, nickel-plated
Sensing face material	Plastic, PA 66
Housing length	71 mm
	41 mm
Thread length	
Thread length Tightening torque, max.	≤ 100 Nm

¹⁾ At I_a max.

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

³⁾ Of Sr.

Safety-related parameters

MTTFD	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 (AI)	Approx. 0.45
Copper (Cu)	Approx. 0.4
Brass (Br)	Approx. 0.4

Installation note

Remark	Associated graphic see "Installation"
A	30 mm
В	60 mm
C	30 mm
D	60 mm
E	40 mm
F	160 mm

Classifications

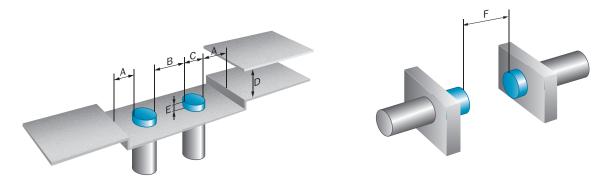
ECLASS 5.0	27270101

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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

Non-flush installation



Connection type



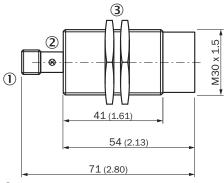
Connection diagram

Cd-008



Dimensional drawing (Dimensions in mm (inch))

IME30 Standard, connector, non-flush



1 Connection

② Display LED

③ Fastening nuts (2x); width across 36, metal

Recommended accessories

Other models and accessories -> www.sick.com/IME

	Brief description	Туре	Part no.
Mounting bra	ckets and plates		
	Mounting plate for M30 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M30	5321871
10	Mounting bracket for M30 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M30	5308445
Plug connectors and 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: 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
	 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

SICK AT A GLANCE

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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.

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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