

**INDUCTIVE PROXIMITY SENSORS** 



INDUCTIVE PROXIMITY SENSORS



## Ordering information

Туре	Part no.
IME30-20NPOZCOS	1041050

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 <sub>n</sub>	20 mm
Safe sensing range S <sub>a</sub>	16.2 mm
Installation type	Non-flush
Switching frequency	500 Hz
Connection type	Male connector M12, 4-pin
Switching output	PNP
Output function	NC
Electrical wiring	DC 3-wire
Enclosure rating	IP67 <sup>1)</sup>
Items supplied	Mounting nut, brass, nickel-plated (2x)

 $^{\mbox{1)}}$  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
Hysteresis	5 % 15 %

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

 $^{\rm 2)}$  Ub and Ta constant.

<sup>3)</sup> Of Sr.

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Reproducibility	$\leq 2 \%^{2) (3)}$
Temperature drift (of S <sub>r</sub> )	± 10 %
EMC	According to EN 60947-5-2
Continuous current I <sub>a</sub>	≤ 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
Housing material	Brass, nickel-plated
Sensing face material	Plastic, PA 66
Housing length	71 mm
Thread length	41 mm
Tightening torque, max.	≤ 100 Nm
UL File No.	NRKH.E181493

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

<sup>2)</sup> Ub and Ta constant.

<sup>3)</sup> Of Sr.

## Safety-related parameters

MTTF <sub>D</sub>	1,735 years
DC <sub>avg</sub>	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

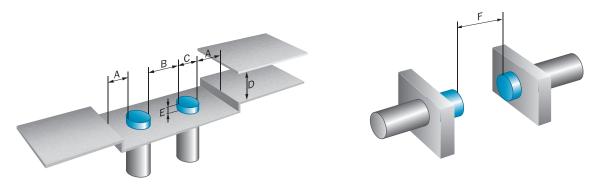
eCl@ss 5.0	27270101
eCl@ss 5.1.4	27270101

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eCl@ss 6.0	27270101
eCl@ss 6.2	27270101
eCl@ss 7.0	27270101
eCl@ss 8.0	27270101
eCl@ss 8.1	27270101
eCl@ss 9.0	27270101
eCl@ss 10.0	27270101
eCl@ss 11.0	27270101
eCl@ss 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

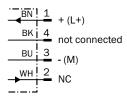


### Connection type



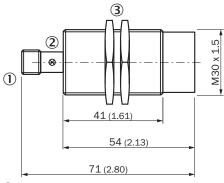
#### **Connection diagram**

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	Mounting brackets and plates			
	Mounting plate for M30 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M30	5321871	
~	Mounting bracket for M30 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M30	5308445	
Plug connectors and cables				
*	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YF2A14- 020VB3XLEAX	2096234	
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF2A14- 050VB3XLEAX	2096235	

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	Brief description	Туре	Part no.
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 10 m	YF2A14- 100VB3XLEAX	2096236
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YG2A14- 020VB3XLEAX	2095895
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YG2A14- 050VB3XLEAX	2095897
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 10 m	YG2A14- 100VB3XLEAX	2095898
	Head A: female connector, M12, 4-pin, straight Cable: unshielded	DOS-1204-G	6007302
	Head A: female connector, M12, 4-pin, angled Cable: unshielded	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.

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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