

# IME30-20NPOZCOS

**INDUCTIVE PROXIMITY SENSORS** 



#### Illustration may differ



# Ordering information

Туре	Part no.
IME30-20NPOZCOS	1041050

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

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

#### 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)

<sup>&</sup>lt;sup>1)</sup> According to EN 60529.

### Mechanics/electronics

Supply voltage	10 V DC 30 V DC
Ripple	≤ 10 %
Voltage drop	≤ 2 V <sup>1)</sup>
Time delay before availability	≤ 125 ms

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

 $<sup>^{2)}</sup>$  Ub and Ta constant.

<sup>&</sup>lt;sup>3)</sup> Of Sr.

Hysteresis	5 % 15 %
Reproducibility	≤ 2 % <sup>2) 3)</sup>
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	<b>√</b>
Reverse polarity protection	<b>√</b>
Power-up pulse protection	<b>√</b>
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  $I_{\rm a}$  max.

# Safety-related parameters

MTTF <sub>D</sub>	1,735 years
<b>DC</b> <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"
Α	30 mm
В	60 mm
c	30 mm
D	60 mm
E	40 mm
F	160 mm

#### Classifications

eCl@ss 5.0	27270101
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<sup>&</sup>lt;sup>2)</sup> Ub and Ta constant.

<sup>&</sup>lt;sup>3)</sup> Of Sr.

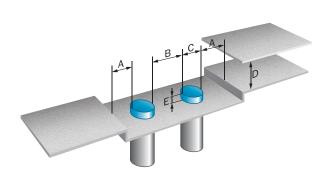
# IME30-20NPOZCOS | IME

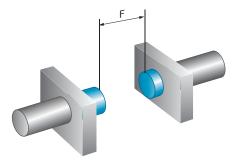
# INDUCTIVE PROXIMITY SENSORS

Cl@ss <b>5.1.4</b>	27270101
Cl@ss 6.0 2	27270101
Cl@ss 6.2	27270101
Cl@ss 7.0	27270101
Cl@ss 8.0	27270101
Cl@ss 8.1	27270101
Cl@ss 9.0 2	27270101
Cl@ss 10.0 2	27270101
Cl@ss 11.0 2	27270101
Cl@ss 12.0 2	27274001
<b>FIM 5.0</b>	EC002714
FIM 6.0	EC002714
ΓΙΜ <b>7.0</b> Ε	EC002714
TIM 8.0	EC002714
NSPSC 16.0901 3	39122230

#### Installation note

Non-flush installation



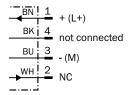


# Connection type



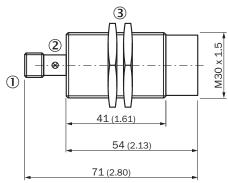
#### Connection diagram

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  $\Rightarrow$  www.sick.com/IME

	Brief description	Туре	Part no.
Mounting brackets and plates			
	Mounting plate for M30 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M30	5321871
<b>R</b>	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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# INDUCTIVE PROXIMITY SENSORS

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

# 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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