

IMX30-50NPOZU2S

IIVI/

INDUCTIVE PROXIMITY SENSORS



Ordering information

Туре	part no.
IMX30-50NP0ZU2S	1119671

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

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

Illustration may differ



Detailed technical data

Features

Housing	Metric
Housing	Standard design
Thread size	M30 x 1.5
Diameter	Ø 30 mm
Sensing range S _n	50 mm
Safe sensing range S _a	40.5 mm
Installation type	Non-flush
Switching frequency	10 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	PNP
Switching output detail	PNP
Output function	NC
Electrical wiring	DC 3-wire
Enclosure rating	IP68 ¹⁾
Special features	Quadruple sensing range, Resistant against coolant lubricants, Visual adjustment indicator
Special applications	Zones with coolants and lubricants
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 l_a max.

 $^{^{2)}}$ Supply voltage U_{B} and constant ambient temperature Ta.

³⁾ Of Sr.

Time delay before availability	≤ 150 ms
Hysteresis	5 % 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	≤ 50 mA
Cable material	PUR
Conductor size	0.34 mm ²
Cable diameter	Ø 4.5 mm
Short-circuit protection	✓
Power-up pulse protection	✓
Shock and vibration resistance	30 g, 11 ms / 10 55 Hz, 1 mm
Display	
LED yel	ow Output state (on/off)
LED gre	en Stable on/off state
Ambient operating temperature	-25 °C +75 °C
Housing material	Nickel-plated brass
Sensing face material	Plastic, LCP
Housing length	60.2 mm
Thread length	43.7 mm
Tightening torque, max.	≤ 70 Nm
Protection class	III
UL File No.	E181493
Service interface	IO-Link as a service interface. The interface can only be used by SICK Service.

¹⁾ At I_a max.

Safety-related parameters

MTTFD	411 years
DC _{avg}	0 %
T _M (mission time)	20 years

Reduction factors

Note	The values are reference values which may vary
St37 steel (Fe)	1
Stainless steel (V2A, 304)	1.1
Aluminum (AI)	0.5
Copper (Cu)	0.3
Brass (Br)	0.6

²⁾ Supply voltage U_B and constant ambient temperature Ta.

³⁾ Of Sr.

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Installation note

Remark	Associated graphic see "Installation"
A	80 mm
В	30 mm
C	30 mm
D	150 mm
E	40 mm
F	150 mm

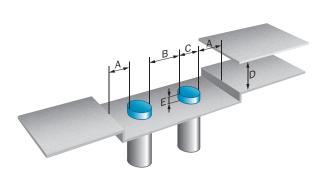
Certificates

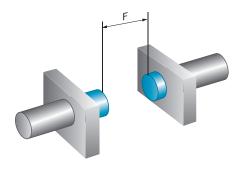
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cULus certificate	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

Classifications

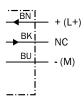
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ECLASS 6.0	27270101
ECLASS 6.2	27270101
ECLASS 7.0	27270101
ECLASS 8.0	27270101
ECLASS 8.1	27270101
ECLASS 9.0	27270101
ECLASS 10.0	27270101
ECLASS 11.0	27270101
ECLASS 12.0	27274001
ETIM 5.0	EC002714
ETIM 6.0	EC002714
ETIM 7.0	EC002714
ETIM 8.0	EC002714
UNSPSC 16.0901	39122230

Installation note Non-flush installation

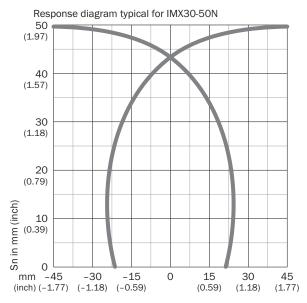




Connection diagram Cd-003



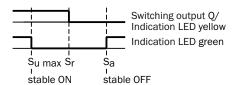
Response diagram



Distance of target edge to center of active face in mm (inch)

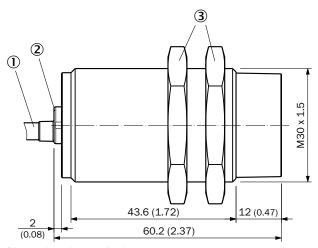
All dimensions in mm (inch)

Functional principle Installation aid



LED indicator green	LED indicator yellow	Status
ON	ON	Output is activated (ON), sensor in stable ON state
OFF	ON	Output is activated (ON), no object detected
OFF	OFF	Output is deactivated (OFF), object detected
ON	OFF	Output is deactivated (OFF), sensor in stable OFF state

Dimensional drawing IMX30, standard variant, cable, non-flush



Dimensions in mm (inch)

- ① Connection
- ② Display LED
- 3 fastening nuts (2x); width across 36, brass nickel-plated

Recommended accessories

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

	Brief description	Туре	part no.	
Mounting syst	Mounting systems			
40	 Description: Mounting bracket for M30 sensors Material: Steel Details: Steel, zinc coated Items supplied: Without mounting hardware 	BEF-WN-M30	5308445	
0	 Description: Mounting plate for M30 sensors Material: Steel Details: Steel, zinc coated Items supplied: Without mounting hardware 	BEF-WG-M30	5321871	
connectors an	nd cables			
	Connection type head A: Male connector, M12, 4-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² Application: Hygienic and washdown zones	STE-1204-GN	6028359	
	Connection type head A: Female connector, M12, 4-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² Application: Hygienic and washdown zones	DOS-1204-GN	6028357	
	Connection type head A: Female connector, M12, 4-pin, angled, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm² Application: Hygienic and washdown zones	DOS-1204-WN	6028358	

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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