

IMX30-25BPOZU2S

INDUCTIVE PROXIMITY SENSORS



Ordering information

Туре	Part no.
IMX30-25BPOZU2S	1119670

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

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





Detailed technical data

Features

reatures	
Housing	Metric
Housing	Standard design
Thread size	M30 x 1.5
Diameter	Ø 30 mm
Sensing range S _n	25 mm
Safe sensing range S _a	20.25 mm
Installation type	Quasi-flush
Switching frequency	25 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	≤ 2 V ¹⁾
Time delay before availability	≤ 150 ms

¹⁾ At I_a max.

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

³⁾ Of Sr.

Hysteresis $5 \% 15 \%$ Reproducibility $≤ 7 \%^{2) 3)$ Temperature drift (of S_r) $± 10 \%$ EMCAccording to EN 60947-5-2Continuous current I_a $≤ 200 \text{ mA}$ No load current $≤ 50 \text{ mA}$ Cable materialPURConductor size 0.34 mm^2 Cable diameter \emptyset 4.5 mmShort-circuit protection✓Power-up pulse protection✓Shock and vibration resistance $30 \text{ g}, 11 \text{ ms} / 10 \dots 55 \text{ Hz}, 1 \text{ mm}$
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 mm² Cable diameter Ø 4.5 mm Short-circuit protection ✓ Power-up pulse protection ✓
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Cable diameter Ø 4.5 mm Short-circuit protection ✓ Power-up pulse protection ✓
Short-circuit protection ✓ Power-up pulse protection ✓
Power-up pulse protection ✓
Shock and vibration resistance 30 of 11 ms / 10 55 Hz 1 mm
50 g, 11 lis/ 10 55 liz, 1 lilli
Indication
LED yellow Output state (on/off)
LED green 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 55.7 mm
Tightening torque, max. ≤ 70 Nm
Protection class
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

MTTF _D	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
Aluminum (AI)	0.3
Copper (Cu)	0.2
Brass (Br)	0.4

Installation note

Remark	Associated graphic see "Installation"
A	35 mm

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

³⁾ Of Sr.

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INDUCTIVE PROXIMITY SENSORS

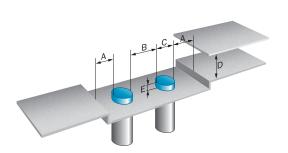
В	30 mm
С	30 mm
D	75 mm
E	10 mm
F	75 mm

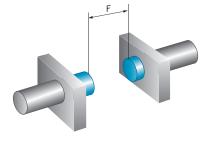
Classifications

ECLASS 5.0	27270101
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



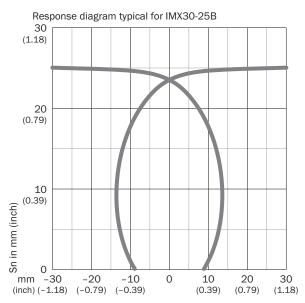


Connection diagram

Cd-003



Response diagram

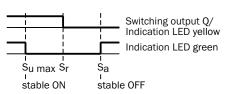


Distance of target edge to center of active face in mm (inch)

All dimensions in mm (inch)

Functional principle

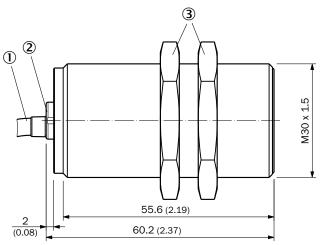
Installation aid



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 (Dimensions in mm (inch))

IMX30, standard variant, cable, quasi-flush



- 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 brackets and plates			
	 Description: Mounting plate for M30 sensors Material: Steel Details: Steel, zinc coated Items supplied: Without mounting hardware 	BEF-WG-M30	5321871
40	 Description: Mounting bracket for M30 sensors Material: Steel Details: Steel, zinc coated Items supplied: Without mounting hardware 	BEF-WN-M30	5308445
Others			
	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: 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, 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

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Brief description	Туре	Part no.
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 Note: For 2 cable connections Application: Hygienic and washdown zones	STE-1204-TN	6028360

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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