IMX30-25BN0ZC0S

IMX

INDUCTIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.

IMX30-25BN0ZC0S | IMX

INDUCTIVE PROXIMITY SENSORS

Ordering information

Type	part no.
IMX30-25BN0ZC0S	1134197

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	25 mm
Safe sensing range S_a	20.25 mm
Installation type	Quasi-flush
Switching frequency	25 Hz
Connection type	Male connector M12, 4-pin
Switching output	NPN
Switching output detail	NPN
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 %

[1] At I_a max.

[2] Supply voltage U_B and constant ambient temperature Ta.

[3] Of Sr.

Voltage drop	≤ 2 V [1]
Time delay before availability	≤ 150 ms
Hysteresis	5 % ... 15 %
Reproducibility	≤ 7 % [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
Short-circuit protection	✓
Power-up pulse protection	✓
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
Display	
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	70.2 mm
Thread length	52.2 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.

[2] Supply voltage U_B and constant ambient temperature Ta.

[3] Of Sr.

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 (Al)	0.3
Copper (Cu)	0.2
Brass (Br)	0.4

Installation note

Remark	Associated graphic see "Installation"
A	35 mm

B	30 mm
C	30 mm
D	75 mm
E	10 mm
F	75 mm

Certificates

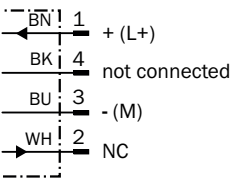| EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cULus certificate	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

Classifications

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
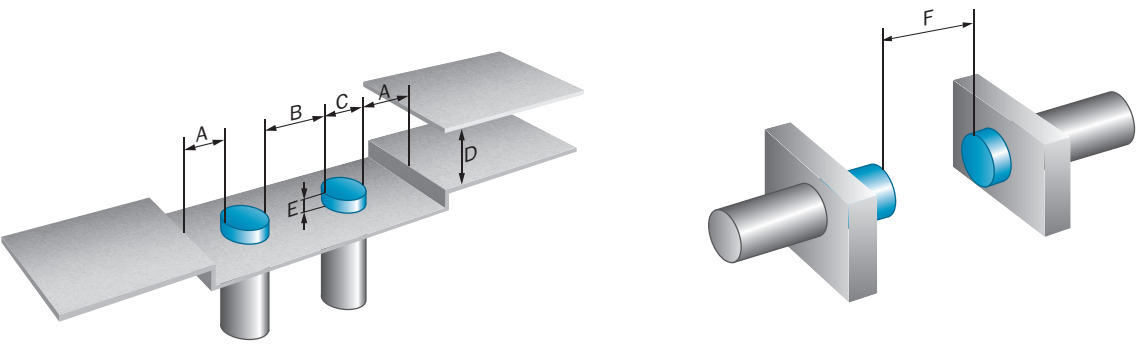
Connection diagram Cd-008

BN	1	+ (L+)
BK	4	not connected
BU	3	- (M)
WH	2	NC

Response diagram

Response diagram typical for IMX30-25B

Sn in mm (inch)

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

All dimensions in mm (inch)
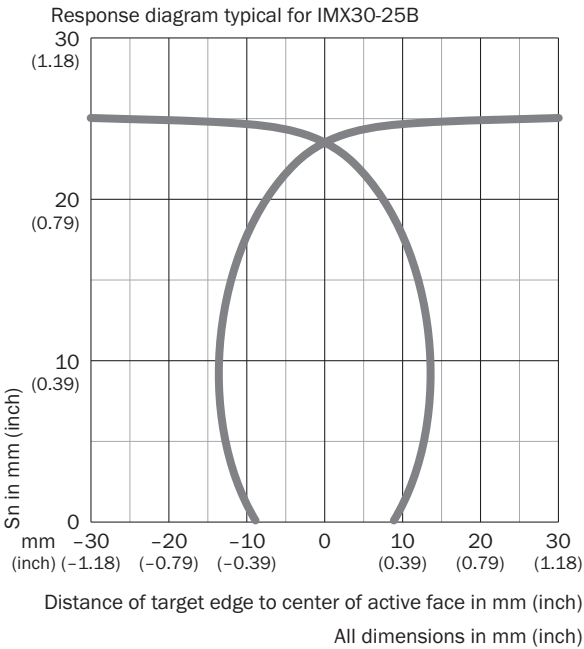
Functional principle Installation aid

Switching output Q/
Indication LED yellow

Indication LED green

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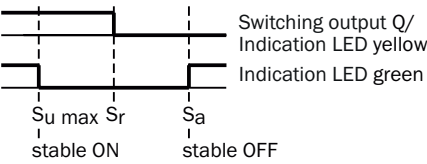
LED indicator green	LED indicator yellow	Status
ON	ON	Output is activated (ON), sensor in stable ON state
OFF	ON	Output is activated (ON), no object detected
OFF	OFF	Output is deactivated (OFF), object detected
ON	OFF	Output is deactivated (OFF), sensor in stable OFF state

Dimensional drawing IMX30, standard variant, plug, quasi-flush

8.9
(0.35)

52.2 (2.05)

70.2 (2.76)

M30 x 1.5
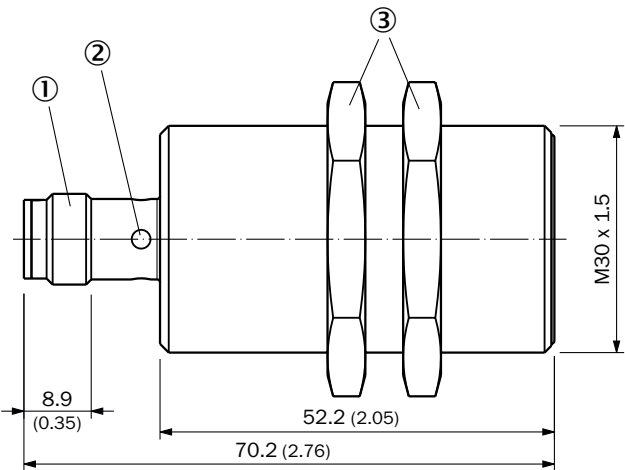
Dimensions in mm (inch)
① Connection
② Display LED
③ fastening nuts (2x); width across 36, brass nickel-plated

Recommended accessories

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

	Brief description	Type	part no.
Mounting systems			
	• **Description:** Mounting plate for M30 sensors • **Material:** Steel • **Details:** Steel, zinc coated • **Items supplied:** Without mounting hardware	BEF-WG-M30	5321871
	• **Description:** Mounting bracket for M30 sensors • **Material:** Steel • **Details:** Steel, zinc coated • **Items supplied:** Without mounting hardware	BEF-WN-M30	5308445

	Brief description	Type	part no.
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:** 0.6 m, 4-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, unshielded • **Application:** Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A14-C60UB3XLEAX	2145654
	• **Connection type head A:** Female connector, M12, 4-pin, straight, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 1 m, 4-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, unshielded • **Application:** Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A14-010UB3XLEAX	2145655
	• **Connection type head A:** Female connector, M12, 4-pin, straight, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 3 m, 4-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, unshielded • **Application:** Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A14-030UB3XLEAX	2145656
	• **Connection type head A:** Female connector, M12, 4-pin, angled, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 0.6 m, 4-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, unshielded • **Application:** Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YG2A14-C60UB3XLEAX	2145657
	• **Connection type head A:** Female connector, M12, 4-pin, angled, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 1 m, 4-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, unshielded • **Application:** Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YG2A14-010UB3XLEAX	2145658
	• **Connection type head A:** Female connector, M12, 4-pin, angled, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 0.6 m, 4-wire, PVC • **Description:** Sensor/actuator cable, unshielded • **Application:** Zones with chemicals, Uncontaminated zones	YG2A14-C60VB3XLEAX	2145709
	• **Connection type head A:** Female connector, M12, 4-pin, angled, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 1 m, 4-wire, PVC • **Description:** Sensor/actuator cable, unshielded • **Application:** Zones with chemicals, Uncontaminated zones	YG2A14-010VB3XLEAX	2145710
	• **Connection type head A:** Female connector, M12, 4-pin, straight, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 0.6 m, 4-wire, PVC • **Description:** Sensor/actuator cable, unshielded • **Application:** Zones with chemicals, Uncontaminated zones	YF2A14-C60VB3XLEAX	2145707
	• **Connection type head A:** Female connector, M12, 4-pin, straight, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 1 m, 4-wire, PVC • **Description:** Sensor/actuator cable, unshielded • **Application:** Zones with chemicals, Uncontaminated zones	YF2A14-010VB3XLEAX	2145708
	• **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, Uncontaminated zones	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:** 5 m, 4-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, unshielded • **Application:** Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A14-050UB3XLEAX	2095608

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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