

IM30-15N-N-ZWO

INDUCTIVE PROXIMITY SENSORS





Ordering information

Туре	part no.
IM30-15N-N-ZW0	6021129

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

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

Illustration may differ



Detailed technical data

Features

Housing	Metric
Thread size	M30 x 1.5
Diameter	Ø 30 mm
Sensing range S _n	15 mm
Safe sensing range S _a	12.15 mm
Installation type	Non-flush
Switching frequency	200 Hz
Connection type	Cable, 2-wire, 2 m
Switching output	NAMUR
Switching output detail	NAMUR
Output function	NC
Enclosure rating	IP67 ¹⁾
Special applications	Explosive areas
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ According to EN 60529.

Mechanics/electronics

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Supply voltage	7.5 V DC 25 V DC ¹⁾
Hysteresis	1 % 15 %
Temperature drift (of S _r)	± 10 %
EMC	According to EN 60947-5-6

 $^{^{1)}}$ When used outside the hazardous area.

 $^{^{2)}\ \}mbox{For connection to a separately certified intrinsically safe circuit only.}$

 $^{^{3)}}$ 1 k Ω .

Current consumption, sensor is activated	≤ 1 mA
• ′	≥ 2.2 mA
Current consumption, sensor is not activated	2 2.2 MA
Cable material	PVC
Conductor size	0.5 mm ²
Cable diameter	Ø 5.4 mm
Cable resistance	50 Ω
Shock and vibration resistance	30 g, 11 ms / 10 55 Hz, 1 mm
Ambient operating temperature	-20 °C +70 °C
Housing material	Brass, nickel-plated
Sensing face material	Plastic, PTB
Housing length	41 mm
Thread length	25 mm
Tightening torque, max.	≤ 50 Nm
Weight	+ 220 g
Type approval certificate	PTB 03 ATEX 2037
Ex area category	1G, 2G
Input voltage U _i max.	15 V ²⁾
Input power P _i max.	120 mW ²⁾
Input current I _i max.	50 mA ²⁾
Internal capacitance C _i max.	145 nF ²⁾
Internal inductance L _i max.	110 µH ²⁾
Nominal voltage	8.2 V DC ³⁾
Device labeling	II 1G Ex ia IIC T6 Ga Ta -20 °C $+70$ °C, II 2 G Ex ia IIC T6 Gb Ta: -20 °C $+70$ °C

 $^{^{1)}}$ When used outside the hazardous area.

Safety-related parameters

MTTF _D	7,515 years
DC _{avg}	0%
T _M (mission time)	20 years

Reduction factors

Note	The values are reference values which may vary
Stainless steel (V2A, 304)	Approx. 0.7
Aluminum (AI)	Approx. 0.4
Copper (Cu)	Approx. 0.3
Brass (Br)	Approx. 0.5

Installation note

Remark	Associated graphic see "Installation"
A	30 mm

 $^{^{2)}}$ For connection to a separately certified intrinsically safe circuit only.

³⁾ 1 kΩ.

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В	60 mm
c	30 mm
D	45 mm
E	30 mm
F	120 mm

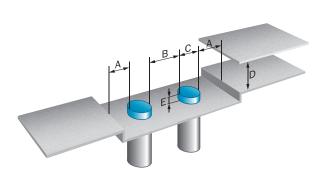
Certificates

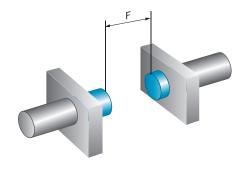
EU declaration of conformity	1
UK declaration of conformity	1
ACMA declaration of conformity	√
Moroccan declaration of conformity	1
China RoHS	√
CCC certificate	1
ATEX certificate	1

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 Non-flush installation





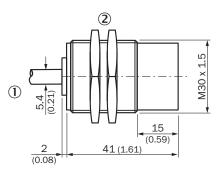
Connection type



Connection diagram Cd-012



Dimensional drawing IM30 Namur, non flush



Dimensions in mm (inch)

- ① Connection
- ② Fastening nuts (2x); width across 36, metal

Recommended accessories

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

Brief description	Туре	part no.
integration modules and adapters		
Description: NAMUR isolating amplifier, Cable fault detection, Switching outputs: 2 NO relay (1 per channel), Supply voltage: 24 V 230 V, Voltage type: AC/DC	EN2-2EX1	6041096
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
connectors and cables		
 Connection type head A: Male connector, M8, 3-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: 0.14 mm² 0.5 mm² 	STE-0803-G	6037322

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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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