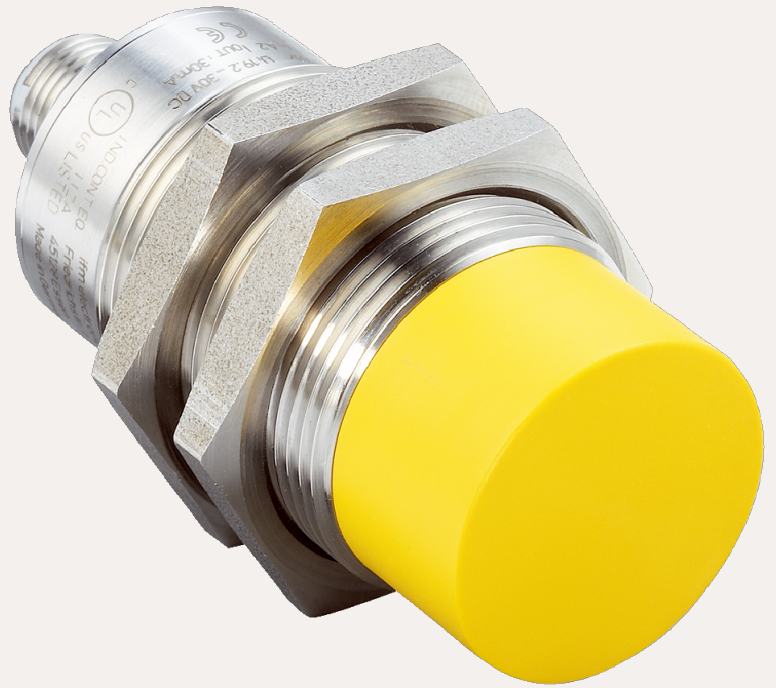




DATA SHEET

IN30-E0208K

IN3000 Direct
Non-contact safety switches



NON-CONTACT SAFETY SWITCHES

IN30-E0208K

ORDERING INFORMATION

Type	part no.
IN30-E0208K	6044655

Further device versions and accessories at www.sick.com/IN3000_Direct



DETAILED TECHNICAL DATA

FEATURES

Sensor principle	Inductive
Number of safe outputs	2
Housing diameter	M30
Enable zone	1 mm ... 15 mm ¹⁾
Assured switch off distance S _{ar}	22 mm
Actuation directions	5
Active sensor surfaces	1

¹⁾ Values apply for steel (FE360).

SAFETY-RELATED PARAMETERS

Safety integrity level	SIL 2 (IEC 61508)
Category	Category 2 (EN ISO 13849)
Performance level	PL d (EN ISO 13849)
PFH _d (mean probability of a dangerous failure per hour)	1.0 x 10 ⁻⁷
T _M (mission time)	10 years (EN ISO 13849) ¹⁾ 20 years (EN ISO 13849) ²⁾
Type	Type 3 (EN ISO 14119)
Actuator coding level	Uncoded (EN ISO 14119)

¹⁾ At -25 °C ... +70 °C and 5 % ... 95 % relative air humidity.

²⁾ At +10 °C ... +40 °C and 5 % ... 70 % relative air humidity.

FUNCTIONS

Safe series connection	With Flexi Loop (with diagnostics)
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INTERFACES

Connection type	Plug connector, M12, 4-pin
Coupling nut material	Stainless steel
Display elements	LEDs
Power indication	✓
Status display	✓

ELECTRONICS

Protection class	III (EN 50178)
Supply voltage V_s	24 V DC (19.2 V DC ... 28.8 V DC)
Type of output	Semiconductor
Response time	≤ 1 ms

MECHANICS

Design	Cylindrical
Housing diameter	M30
Housing length	70 mm
Weight	+ 0.19 kg
Material	Housing V4A (housing), PBT (cover)
Installation type	Non-flush

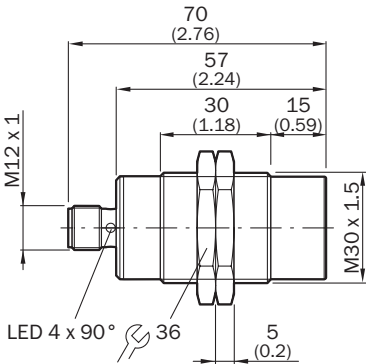
AMBIENT DATA

Enclosure rating	IP65, IP67 (IEC 60529)
Ambient operating temperature	-25 °C ... +70 °C
Storage temperature	-25 °C ... +70 °C

CERTIFICATES

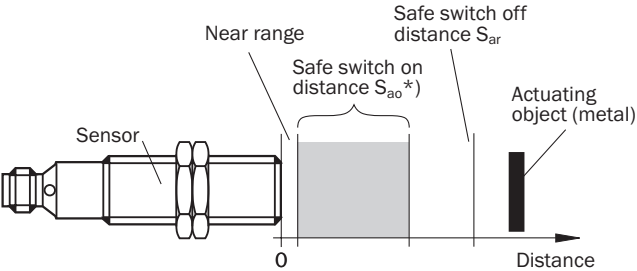
EU declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓

DIMENSIONAL DRAWING



Dimensions in mm (inch)

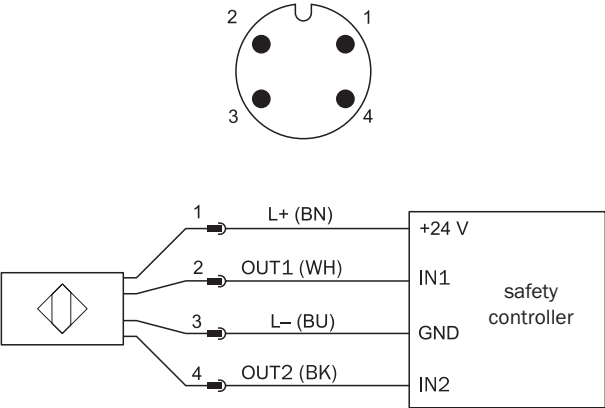
RESPONSE RANGE



Material of the actuating object	Safe switch on distance S _{ao} *)	Safe switch off distance S _{ar}
Steel FE360	1.0 mm ... 15.0 mm	22 mm
Stainless steel 1.4302	0 mm ... 11.4 mm	
AlMg 3G22	0 mm ... 6.8 mm	
CuZn 37	0 mm ... 7.2 mm	
Cu	0 mm ... 5.5 mm	

*) Typical values for damping with a reference target plate of 45 x 45 x 1 mm and non-flush installation according to IEC 60947-5-2 at an ambient temperature of 20 °C.

PINOUTS



Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/6044655



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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

SICK
Sensor Intelligence