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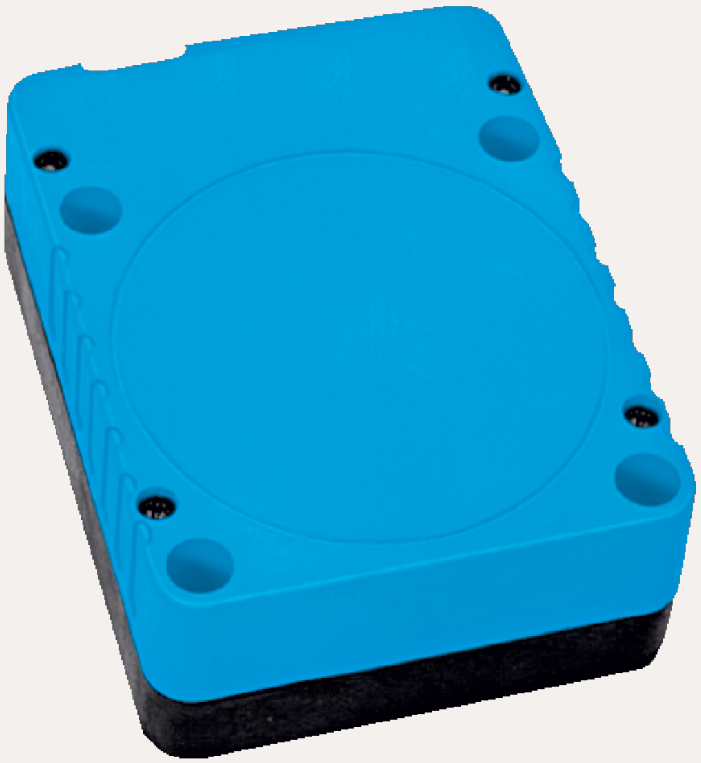
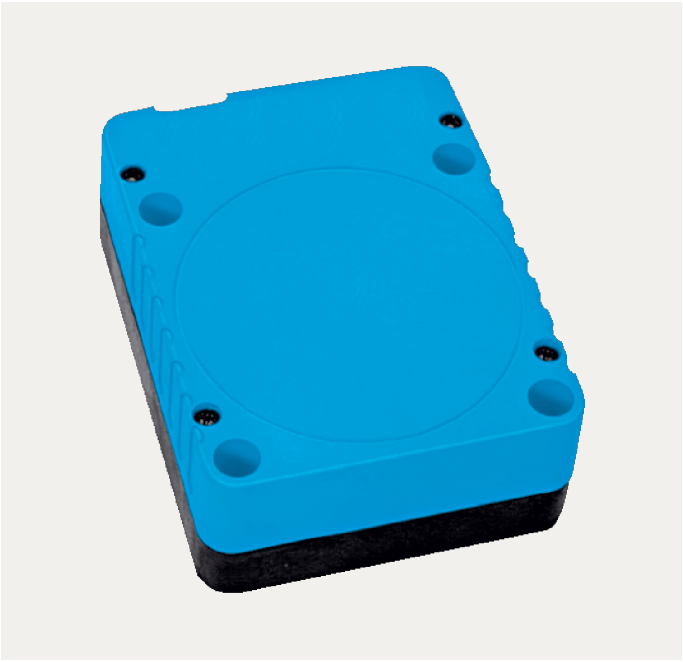


DATA SHEET

IQ80-60NUP-KK0

IQL
Inductive proximity sensors

SICK Sensor Intelligence



INDUCTIVE PROXIMITY SENSORS

IQ80-60NUP-KK0

ORDERING INFORMATION

Type	part no.
IQ80-60NUP-KK0	7902138

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

DETAILED TECHNICAL DATA

FEATURES

Housing	Rectangular
Housing	Standard design
Dimensions (W x H x D)	80 mm x 105 mm x 40 mm
Sensing range S_n	60 mm
Safe sensing range S_a	48.6 mm
Installation type	Non-flush
Switching frequency	4 Hz
Connection type	Terminal connection with M20 gland
Output function	NC or NO
Electrical wiring	AC/DC 2-wire
Enclosure rating	IP65 [1]

[1] According to EN 60529.

MECHANICS/ELECTRONICS

Supply voltage	20 V AC/DC ... 250 V AC/DC
Voltage drop	≤ 6.5 V (AC)
Hysteresis	1 % ... 15 %
Reproducibility	≤ 10 % [1] [2] [3]
Temperature drift (of S_r)	± 10 %
EMC	As per EN 55011, class B According to EN 60947-5-2
Continuous current I_a	≤ 350 mA [4] ≤ 250 mA [5] ≤ 100 mA [6]
Off-state current	≤ 2.5 mA (AC 250 V)
Minimum load current	> 5 mA
Short-time withstand current	2.2 A [7]
Cable gland clamping area	M20 1.5
Wire size	≤ 2.5 mm²
Short-circuit protection	[8]
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
Ambient operating temperature	–25 °C ... +80 °C
Housing material	Plastic, PPE
Sensing face material	Plastic, PPE
Protection class	II
Rated insulation voltage U_i	250 V AC
Usage category	AC-140 [9] DC-13 [10]
Contamination rating	3
Rated impulse withstand voltage	4 kV

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

[2] Of Sr.

[3] Repeatability (T_a not constant).

[4] AC (+50 °C).

[5] AC (+80 °C).

[6] DC.

[7] 20 ms / 0.5 Hz.

[8] Miniature fuse to IEC 60217-2 Sheet 1, ≤ 2 A (quick-blow).

[9] Control of small electromagnetic loads with holding currents < 200 mA.

[10] Control of solenoids.

SAFETY-RELATED PARAMETERS

$MTTF_D$	736 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 (Al)	Approx. 0.3
Copper (Cu)	Approx. 0.2
Brass (Br)	Approx. 0.4

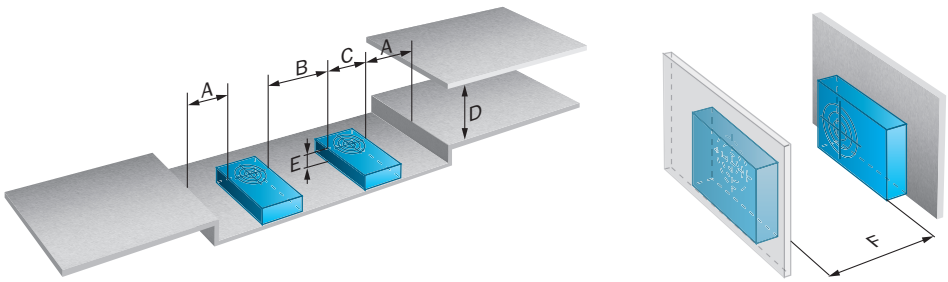
INSTALLATION NOTE

Remark	Associated graphic see "Installation"
A	160 mm
B	160 mm
C	80 mm
D	150 mm
E	40 mm
F	480 mm

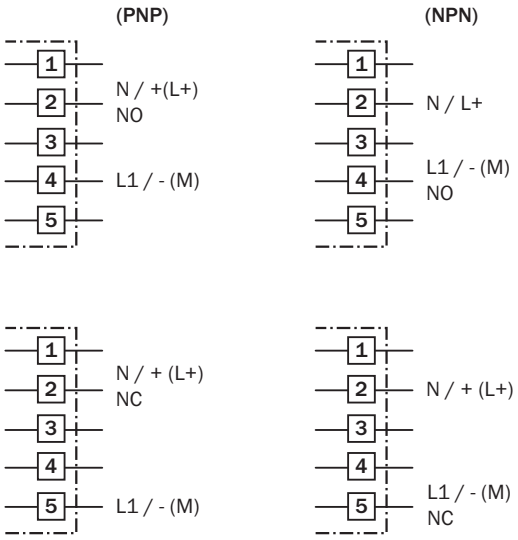
CERTIFICATES

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
CCC certificate	✓

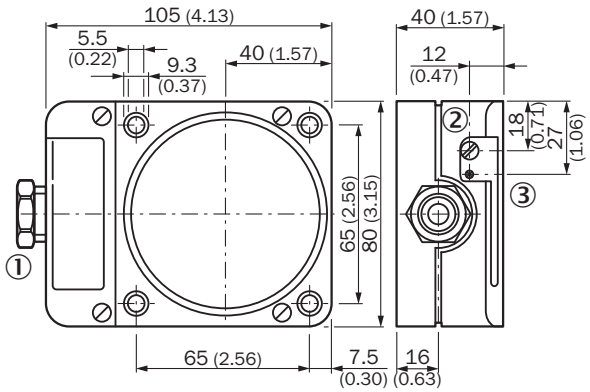
INSTALLATION NOTE



CONNECTION DIAGRAM CD-025



DIMENSIONAL DRAWING IQ80, AC/DC 2-WIRE



Dimensions in mm (inch)
① Connection
② Potentiometer
③ Display LED

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/7902138

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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

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