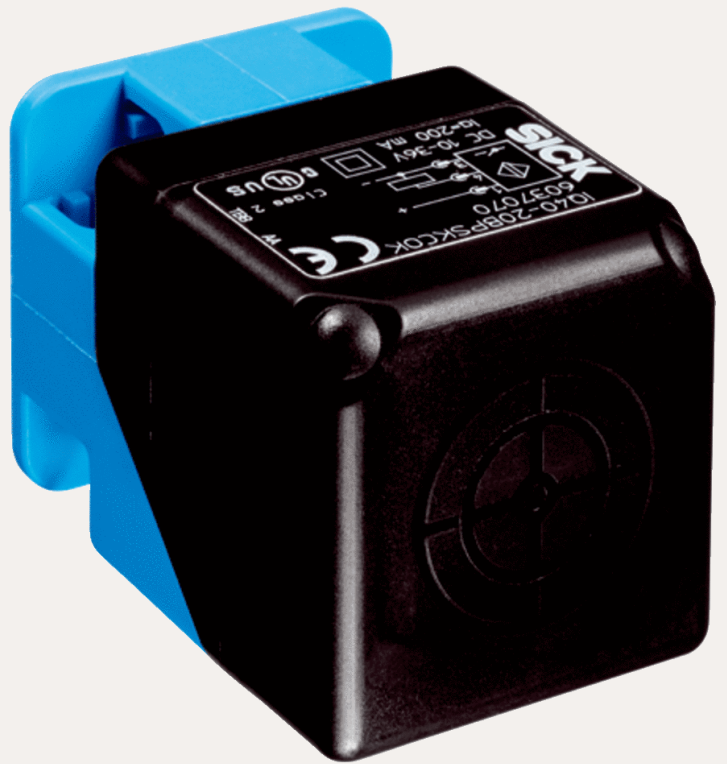




DATA SHEET

IQ40-40NPSK0K

IQ Standard
Inductive proximity sensors

SICK

Sensor Intelligence



INDUCTIVE PROXIMITY SENSORS

IQ40-40NPSKC0K

ORDERING INFORMATION

Type	part no.
IQ40-40NPSKC0K	6037071

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

DETAILED TECHNICAL DATA

FEATURES

Housing	Rectangular
Housing	Short-body
Dimensions (W x H x D)	40 mm x 40 mm x 66 mm
Sensing range S_n	40 mm
Safe sensing range S_a	32.4 mm
Installation type	Non-flush
Switching frequency	60 Hz
Connection type	Male connector M12, 4-pin ¹⁾
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 ²⁾
Special characteristic	Class 2 power source, as per cULus

¹⁾ Rotatable 270°, engaging.

²⁾ According to EN 60529.

MECHANICS/ELECTRONICS

Supply voltage	10 V DC ... 36 V DC
Voltage drop	≤ 2.5 V ¹⁾
Hysteresis	1 % ... 20 %
Temperature drift (of S_n)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Short-circuit protection	✓

¹⁾ With I_a max and U_b 24 V.

Reverse polarity protection	✓
Power-up pulse protection	✓
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
Ambient operating temperature	-25 °C ... +70 °C
Housing material	Plastic
Sensing face material	Plastic, PA6

¹⁾ With I_{a max} and U_b 24 V.

SAFETY-RELATED PARAMETERS

MTTF _D	2,988 years
DC _{avg}	0 %

REDUCTION FACTORS

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

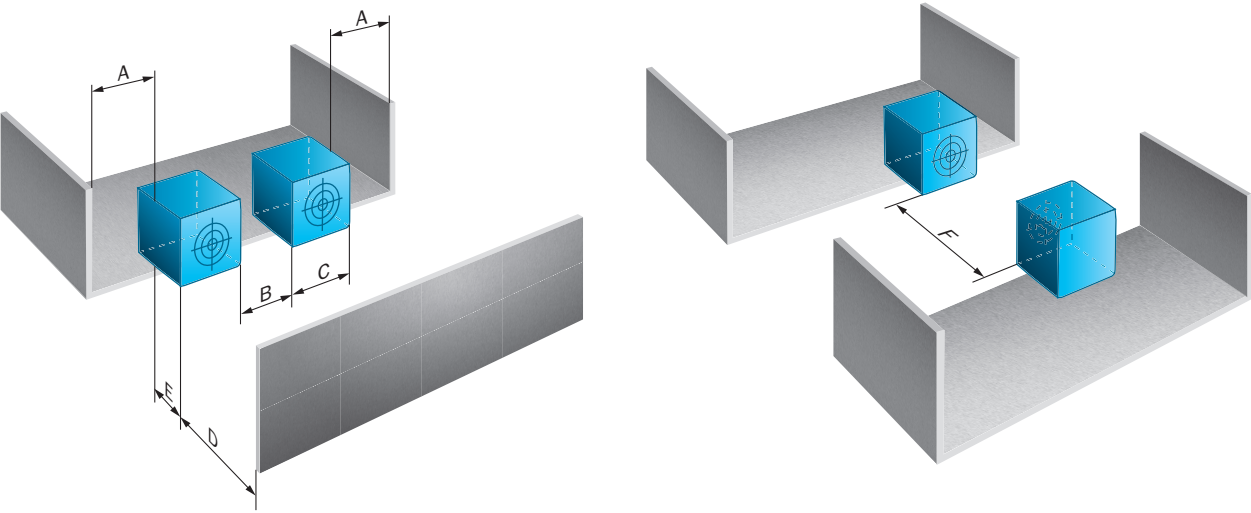
INSTALLATION NOTE

Remark	Associated graphic see "Installation"
A	80 mm
B	100 mm
C	40 mm
D	120 mm
E	40 mm
F	320 mm

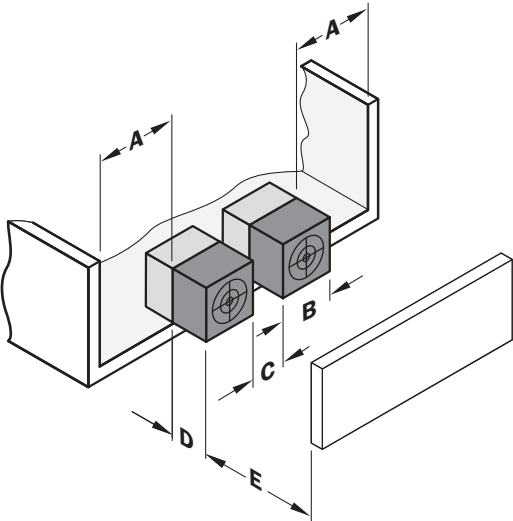
CLASSIFICATIONS

ECl@ss 5.0	27270101
ECl@ss 5.1.4	27270101
ECl@ss 6.0	27270101
ECl@ss 6.2	27270101
ECl@ss 7.0	27270101
ECl@ss 8.0	27270101
ECl@ss 8.1	27270101
ECl@ss 9.0	27270101
ECl@ss 10.0	27270101
ECl@ss 11.0	27270101
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ETIM 6.0	EC002714
ETIM 7.0	EC002714
ETIM 8.0	EC002714
UNSPSC 16.0901	39122230

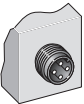
INSTALLATION NOTE



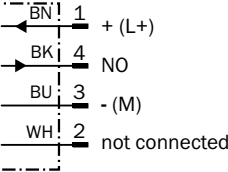
INSTALLATION NOTE



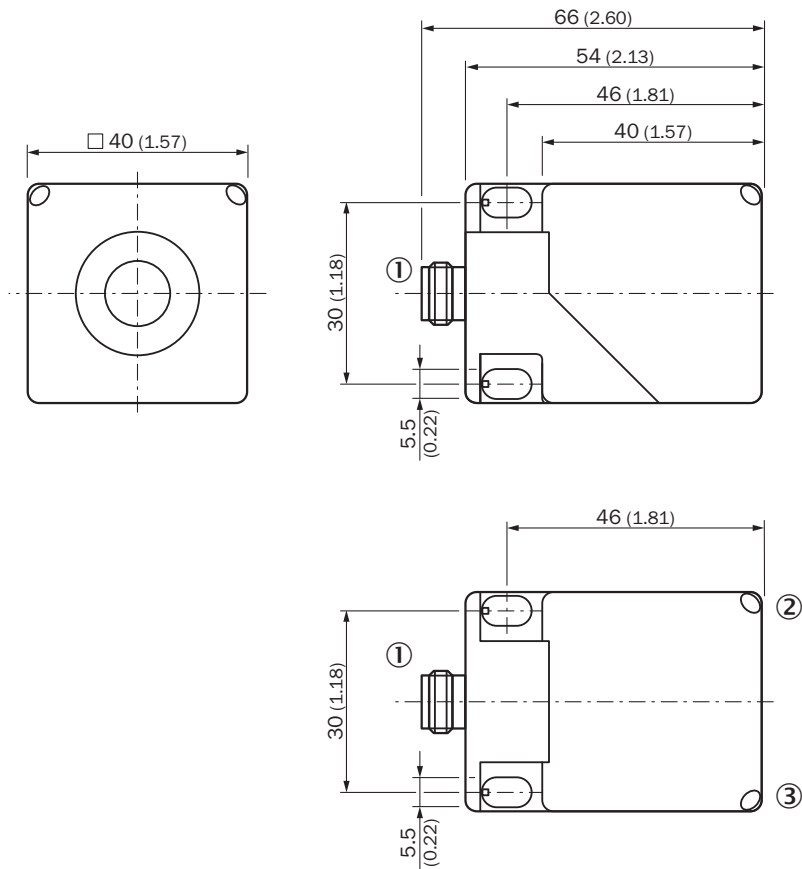
CONNECTION TYPE



CONNECTION DIAGRAM CD-011



DIMENSIONAL DRAWING



Dimensions in mm (inch)

- ① M12 connection diagram, 4-pin
- ② LED output state, yellow
- ③ operational status LED, green

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/6037071



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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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