



DATA SHEET

IQ80-50BPP-KC0

IQL
Inductive proximity sensors

SICK

Sensor Intelligence

INDUCTIVE PROXIMITY SENSORS

IQ80-50BPP-KC0

ORDERING INFORMATION

Type	part no.
IQ80-50BPP-KC0	6026473

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 92 mm x 40 mm
Sensing range S_n	50 mm
Safe sensing range S_a	40.5 mm
Installation type	Flush Non-flush Overflush
Switching frequency	70 Hz
Connection type	Male connector M12, 4-pin
Switching output	PNP
Switching output detail	PNP
Output function	Complementary
Electrical wiring	DC 4-wire
Enclosure rating	IP67 ¹⁾

¹⁾ According to EN 60529.

MECHANICS/ELECTRONICS

Supply voltage	10 V DC ... 36 V DC
Voltage drop	$\leq 2.5 \text{ V}$ ¹⁾
Hysteresis	3 % ... 20 %

¹⁾ With $I_a \text{ max}$ and $U_b 24 \text{ V}$.

Temperature drift (of S)	± 15 %
EMC	According to EN 60947-5-2
Continuous current I_c	≤ 250 mA
Short-circuit protection	✓
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
Ambient operating temperature	-25 °C ... +70 °C
Housing material	Zinc diecast, GD Zn
Sensing face material	Plastic, PPE

¹⁾ With I_a max and U_b 24 V.

SAFETY-RELATED PARAMETERS

MTTF _D	1,859 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. 0.85
Aluminum (Al)	Approx. 0.46
Copper (Cu)	Approx. 0.38
Brass (Br)	Approx. 0.48

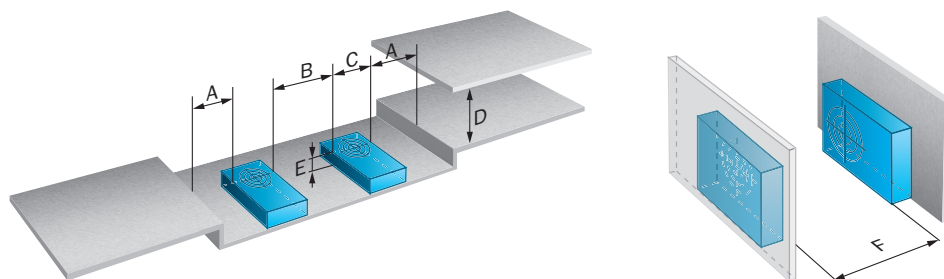
INSTALLATION NOTE

Remark	Associated graphic see "Installation"
A	0 mm
B	80 mm
C	80 mm
D	150 mm
E	0 mm
F	400 mm

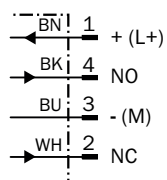
CERTIFICATES

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
China Compulsory Product Certification (CCC) exempt	✓

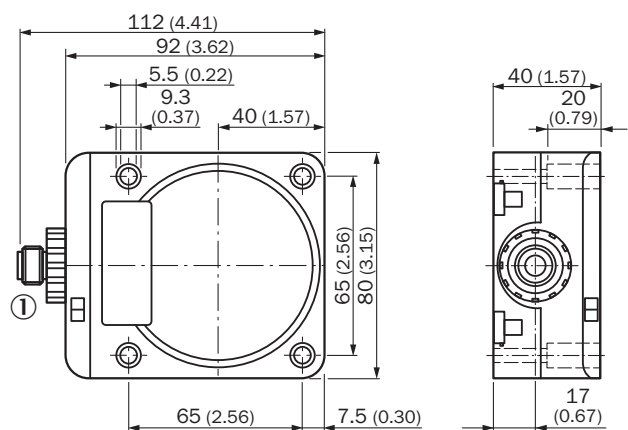
INSTALLATION NOTE



CONNECTION DIAGRAM CD-009



DIMENSIONAL DRAWING IQ80, DC 4-WIRE



Dimensions in mm (inch)

① Connection

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/6026473



SICK AG
WALDKIRCH
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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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