



IQ80-50BPP-KC0

IQL

INDUCTIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
IQ80-50BPP-KC0	6026473

Other models and accessories → 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
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	≤ 2.5 V ¹⁾
Hysteresis	3 % ... 20 %
Temperature drift (of S_n)	± 15 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 250 mA
Short-circuit protection	✓
Reverse polarity protection	✓
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm

¹⁾ With I_a max and U_b 24 V.

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

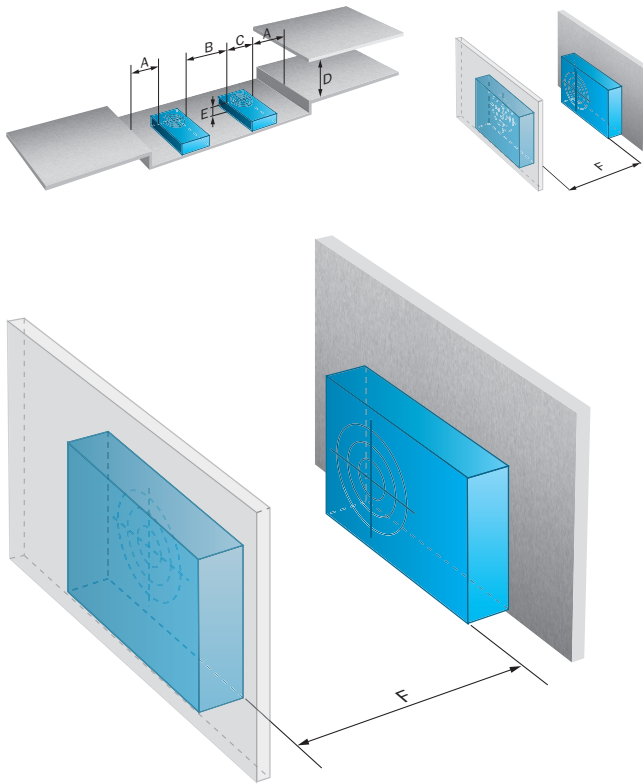
Installation note

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

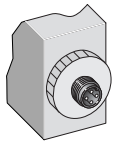
Classifications

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
eCl@ss 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

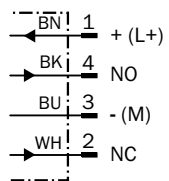


Connection type



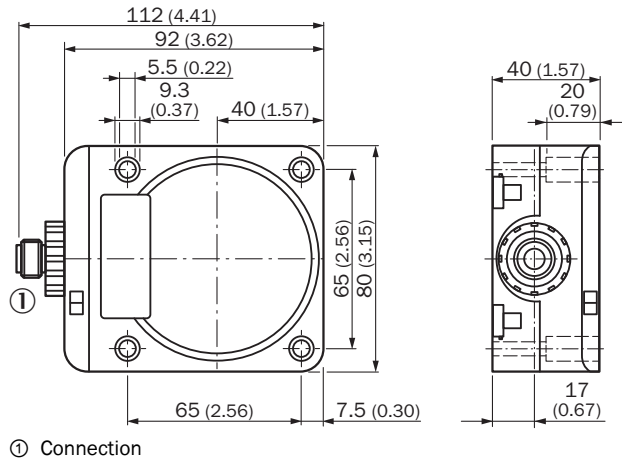
Connection diagram

Cd-009



Dimensional drawing (Dimensions in mm (inch))

IQ80, DC 4-wire



Recommended accessories

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

	Brief description	Type	Part no.
Plug connectors and cables			
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YF2A14-020VB3XLEAX	2096234
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF2A14-050VB3XLEAX	2096235
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 10 m	YF2A14-100VB3XLEAX	2096236
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YG2A14-020VB3XLEAX	2095895
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YG2A14-050VB3XLEAX	2095897
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m Only suitable for PNP sensors	YI2A14-020VB3XLEAX	2096222
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m Only suitable for PNP sensors	YI2A14-050VB3XLEAX	2096223

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

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.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com