

# IQ10-03BPPKQ8S

**INDUCTIVE PROXIMITY SENSORS** 



## IQ10-03BPPKQ8S | IQB

INDUCTIVE PROXIMITY SENSORS



## Ordering information

Туре	Part no.
IQ10-03BPPKQ8S	1055467

Other models and accessories -> www.sick.com/IQB

Illustration may differ



## Detailed technical data

#### Features

Housing	Rectangular
Dimensions (W x H x D)	10 mm x 28 mm x 16 mm
Sensing range S <sub>n</sub>	3 mm
Installation type	Flush
Switching frequency	2,000 Hz
Connection type	Cable with M12 male connector, 4-pin, 0.2 m
Switching output	PNP
Output function	Complementary
Electrical wiring	DC 4-wire
Enclosure rating	IP68 <sup>1)</sup>

<sup>1)</sup> According to EN 60529.

### Mechanics/electronics

Supply voltage	10 V DC 30 V DC
Ripple	< 10 % <sup>1)</sup>
Voltage drop	$\leq$ 3 V <sup>2)</sup>
Time delay before availability	≤ 100 ms
Hysteresis	5 % 15 %
Reproducibility	≤ 2 % <sup>3) 4)</sup>
Temperature drift (of S <sub>r</sub> )	± 10 %

 $^{1)}$  Of V<sub>S</sub>.

 $^{2)}$  At I<sub>a</sub> max.

 $^{\rm 3)}$  Supply voltage  $U_B$  and constant ambient temperature Ta.

<sup>4)</sup> Of Sr.

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EMC	According to EN 60947-5-2
Continuous current I <sub>a</sub>	≤ 200 mA
No load current	10 mA
Cable material	PVC
Short-circuit protection	✓
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 +75 °C
Housing material	Plastic, VISTAL®
Sensing face material	Plastic, VISTAL®
Tightening torque, max.	≤ 1 Nm

 $^{1)}$  Of V<sub>S</sub>.

<sup>2)</sup> At I<sub>a</sub> max.

 $^{3)}$  Supply voltage  ${\rm U}_{\rm B}$  and constant ambient temperature Ta.

<sup>4)</sup> Of Sr.

## Safety-related parameters

MTTF <sub>D</sub>	1,491 years
DC <sub>avg</sub>	0 %
T <sub>M</sub> (mission time)	20 years
Deduction feators	

#### Reduction factors

Stainless steel (V2A, 304)	0.7
Aluminum (Al)	0.4
Copper (Cu)	0.3
Brass (Br)	0.5

## Installation note

Remark	Associated graphic see "Installation"
A	0 mm
В	10 mm
c	10.3 mm
D	9 mm
E	0 mm
F	24 mm
G	0 mm

## Classifications

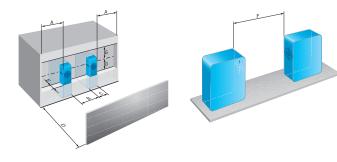
ECLASS 5.0	27270101
ECLASS 5.1.4	27270101
ECLASS 6.0	27270101
ECLASS 6.2	27270101
ECLASS 7.0	27270101
ECLASS 8.0	27270101

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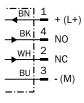
ECLASS 8.1	27270101
ECLASS 9.0	27270101
ECLASS 10.0	27270101
ECLASS 11.0	27270101
ECLASS 12.0	27274001
ETIM 5.0	EC002714
ETIM 6.0	EC002714
ETIM 7.0	EC002714
ETIM 8.0	EC002714
UNSPSC 16.0901	39122230

## Installation note



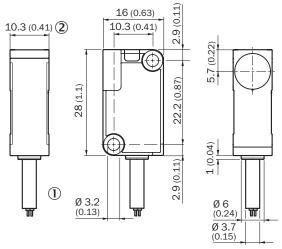
## **Connection diagram**

Cd-006



### Dimensional drawing (Dimensions in mm (inch))

## IQ10, cable



#### ① Connection

② LED indicator 270°

## **Recommended accessories**

Other models and accessories -> www.sick.com/IQB

	Brief description	Туре	Part no.
Plug connectors and cables			
	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight</li> <li>Description: Unshielded, Head A: female connector, M12, 4-pin, straight, unshielded, for power supply, for cable diameter 4 mm 6 mm Head B: -</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: ≤ 0.75 mm<sup>2</sup></li> </ul>	DOS-1204-G	6007302
A Co	<ul> <li>Connection type head A: Female connector, M12, 4-pin, angled</li> <li>Description: Unshielded, Head A: female connector, M12, 4-pin, angled, unshielded, for power supply, for cable diameter 3 mm 6.5 mm Head B: -</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: ≤ 0.75 mm<sup>2</sup></li> </ul>	DOS-1204-W	6007303
	<ul> <li>Connection type head A: Male connector, M12, 4-pin, straight</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: ≤ 0.75 mm<sup>2</sup></li> </ul>	STE-1204-G	6009932
	<ul> <li>Connection type head A: Male connector, M12, 4-pin, angled</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: ≤ 0.75 mm<sup>2</sup></li> </ul>	STE-1204-W	6022084
Others			
<b>N</b>	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>	YF2A14- 020VB3XLEAX	2096234

# IQ10-03BPPKQ8S | IQB INDUCTIVE PROXIMITY SENSORS

	Brief description	Туре	Part no.
<b>E</b>	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>	YF2A14- 050VB3XLEAX	2096235
5	<ul> <li>Connection type head A: Female connector, M12, 4-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>	YG2A14- 020VB3XLEAX	2095895
5	<ul> <li>Connection type head A: Female connector, M12, 4-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>	YG2A14- 050VB3XLEAX	2095897

## 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



Online data sheet

