



IQ12-04BPPKQ8S

INDUCTIVE PROXIMITY SENSORS

SICKSensor Intelligence.



Ordering information

Туре	part no.
IQ12-04BPPKQ8S	1055446

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

Illustration may differ



Detailed technical data

Features

Housing	Rectangular
Dimensions (W x H x D)	12 mm x 40 mm x 26 mm
Sensing range S _n	4 mm
Safe sensing range S _a	3.24 mm
Installation type	Flush
Switching frequency	2,000 Hz
Connection type	Cable with M12 male connector, 4-pin, 0.2 m
Switching output	PNP
Switching output detail	PNP
Output function	Complementary
Electrical wiring	DC 4-wire
Enclosure rating	IP68 ¹⁾

¹⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	\leq 3 V $^{2)}$
Time delay before availability	≤ 100 ms
Hysteresis	5 % 15 %

 $^{^{1)}}$ Of V_{S} .

²⁾ At L may

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

⁴⁾ Of Sr.

Reproducibility	≤ 2 % ³⁾ 4)
Temperature drift (of S _r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I _a	≤ 200 mA
No load current	10 mA
Cable material	PVC
Short-circuit 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_{S} .

Safety-related parameters

MTTF _D	1,491 years
DC _{avg}	0 %

Reduction factors

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

Installation note

Remark	Associated graphic see "Installation"
A	0 mm
В	12 mm
c	12 mm
D	12 mm
E	0 mm
F	32 mm
G	0 mm

Certificates

EU declaration of conformity	1
UK declaration of conformity	1
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓

²⁾ At I_a max.

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

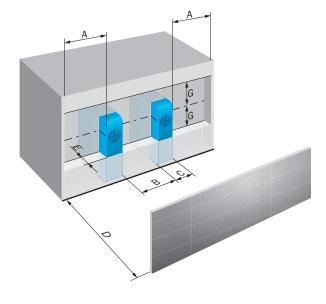
⁴⁾ Of Sr.

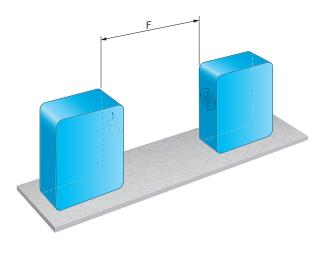
IQ12-04BPPKQ8S | IQB INDUCTIVE PROXIMITY SENSORS

China RoHS	✓
cULus certificate	✓

Classifications

Installation note

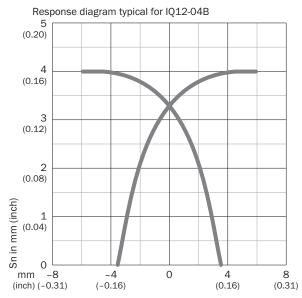




Connection diagram Cd-006



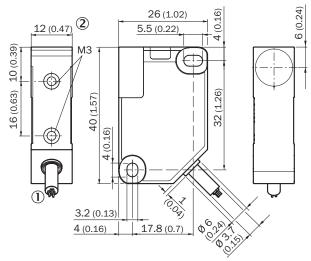
Response diagram



Distance of target edge to center of active face in mm (inch)

All dimensions in mm (inch)

Dimensional drawing IQ12, cable



Dimensions in mm (inch)

IQ12-04BPPKQ8S | IQB

INDUCTIVE PROXIMITY SENSORS

- ① Connection
- ② LED indicator 270°

Recommended accessories

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

	Brief description	Туре	part no.
connectors and cables			
	Connection type head A: Female connector, M12, 4-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm²	DOS-1204-G	6007302
	Connection type head A: Female connector, M12, 4-pin, angled, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: ≤ 0.75 mm²	DOS-1204-W	6007303
•	Connection type head A: Female connector, M12, 4-pin, straight Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Connection systems: Flying leads Note: This product is generally resistant to chemical cleaning agents (see ECOLAB). Please do not use cleaning agents of any other Kind., Not resistant against lactic acid & hydrogen peroxide (H2O2) Application: Hygienic and washdown zones	DOL-1204-G05MNI	6052615
6	Connection type head A: Female connector, M12, 4-pin, straight Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PP Description: Sensor/actuator cable, unshielded Connection systems: Flying leads Note: This product is generally resistant to chemical cleaning agents (see ECOLAB) and other chemical compounds such as H2O2 and CH2O2. Before permanent installation is carried out, the material's resistance to the cleaning agent being used must be checked., Resistant against lactic acid & hydrogen peroxide (H2O2) Application: Hygienic and washdown zones, Drag chain operation	DOL-1204-G05MRN	6058476
P	Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones	YF2A14-020VB3XLEAX	2096234
6	 Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones 	YF2A14-050VB3XLEAX	2096235
	Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones	YG2A14-020VB3XLEAX	2095895
	Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones	YG2A14-050VB3XLEAX	2095897
No.	 Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation 	YF2A14-050UB3XLEAX	2095608
-	 Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 0.6 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded 	YG2A14- C60VB3XLEAX	2145709

IQ12-04BPPKQ8S | IQB

INDUCTIVE PROXIMITY SENSORS

Brief description	Туре	part no.
Application: Zones with chemicals, Uncontaminated zones		
 Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 1 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones 	YG2A14-010VB3XLEAX	2145710
 Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 0.6 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones 	YF2A14- C60VB3XLEAX	2145707
 Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 1 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones 	YF2A14-010VB3XLEAX	2145708

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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."

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