

# IQ10-03BPSKT0SS02

**INDUCTIVE PROXIMITY SENSORS** 

**SICK**Sensor Intelligence.

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#### Ordering information

Туре	part no.
IQ10-03BPSKT0SS02	1062435

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
Safe sensing range S <sub>a</sub>	2.43 mm
Installation type	Flush
Switching frequency	2,000 Hz
Connection type	Connector M8, 3-pin
Switching output	PNP
Switching output detail	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP68 <sup>1)</sup>
Special characteristic	Different oscillator frequency

<sup>&</sup>lt;sup>1)</sup> According to EN 60529.

### Mechanics/electronics

Supply voltage	10 V DC 30 V DC
Ripple	≤ 10 % <sup>1)</sup>
Voltage drop	≤ 2 V <sup>2)</sup>
Time delay before availability	≤ 100 ms

 $<sup>^{1)}</sup>$  Of  $V_{S}$ .

<sup>2)</sup> At L may

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

<sup>&</sup>lt;sup>4)</sup> Of Sr.

Hysteresis	5 % 15 %
Reproducibility	≤ 2 % <sup>3)</sup> 4)
Temperature drift (of S <sub>r</sub> )	± 10 %
EMC	According to EN 60947-5-2
Continuous current I <sub>a</sub>	≤ 200 mA
No load current	10 mA
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

 $<sup>^{1)}</sup>$  Of  $V_{S}$ .

#### 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)	0.5

#### Installation note

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

#### Certificates

EU declaration of conformity	✓
UK declaration of conformity	<b>√</b>
ACMA declaration of conformity	1
Moroccan declaration of conformity	1
China RoHS	1
cULus certificate	1

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

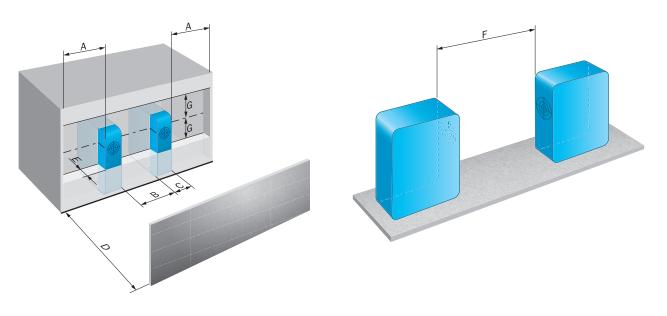
 $<sup>^{\</sup>rm 3)}$  Supply voltage  $\rm U_B$  and constant ambient temperature Ta.

<sup>&</sup>lt;sup>4)</sup> Of Sr.

#### 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
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

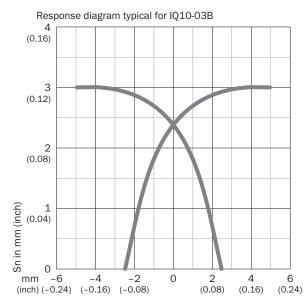
#### Installation note



## Connection diagram Cd-002



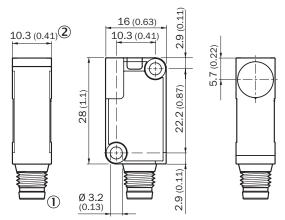
#### Response diagram



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

All dimensions in mm (inch)

# Dimensional drawing IQ10, connector



Dimensions in mm (inch)

- ① Connection
- ② LED indicator 270°

#### Recommended accessories

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

	Brief description	Туре	part no.
connectors and cables			
	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: 0.14 mm² 0.5 mm²</li> </ul>	DOS-0803-G	7902077
	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Description: Unshielded</li> <li>Connection systems: Solder connection</li> <li>Permitted cross-section: ≤ 0.25 mm²</li> </ul>	DOS-0803-W	7902078
No.	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YF8U13-020VA1XLEAX	2095860
W. (c)	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YF8U13-050VA1XLEAX	2095884
	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YG8U13-020VA1XLEAX	2096165
	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YG8U13-050VA1XLEAX	2096166
	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 3-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF8U13-050UA1XLEAX	2094788
No.	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 0.6 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YF8U13- C60VA1XLEAX	2146368

# 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

