

# IQ10-03BNOKR8S

**INDUCTIVE PROXIMITY SENSORS** 

**SICK**Sensor Intelligence.



# Ordering information

Туре	part no.
IQ10-03BNOKR8S	1062446

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	Cable with connector M8, 3-pin, with knurled nuts, 0.2 m
Switching output	NPN
Switching output detail	NPN
Output function	NC
Electrical wiring	DC 3-wire
Enclosure rating	IP68 <sup>1)</sup>

<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
Hysteresis	5 % 15 %

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

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

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

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

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
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

 $<sup>^{1)}</sup>$  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"
Α	0 mm
В	10 mm
C	10.3 mm
D	9 mm
E	0 mm
F	24 mm
G	0 mm

### Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cULus certificate	✓

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

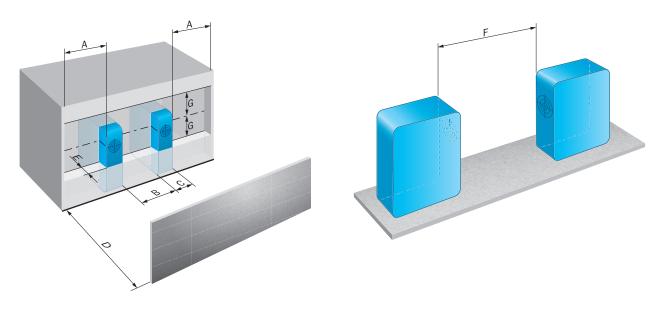
 $<sup>^{\</sup>rm 3)}$  Supply voltage  $\rm U_B$  and constant ambient temperature Ta.

<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

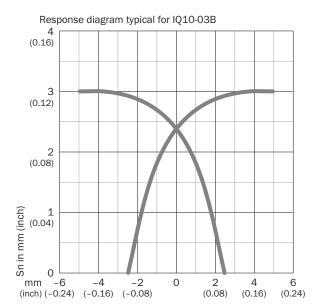
### Installation note



# Connection diagram Cd-003



## Response diagram



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

All dimensions in mm (inch)

# 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

