

IQ08-02BPSKR9S

**INDUCTIVE PROXIMITY SENSORS** 



# 10 man 1015 to 1 man 100 to 1

# Ordering information

Туре	part no.
IQ08-02BPSKR9S	1070093

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

Illustration may differ



#### Detailed technical data

#### **Features**

Housing	Rectangular
Dimensions (W x H x D)	8 mm x 40 mm x 8 mm
Sensing range S <sub>n</sub>	2 mm
Safe sensing range S <sub>a</sub>	1.62 mm
Installation type	Flush
Switching frequency	2,000 Hz
Connection type	Cable with connector M8, 3-pin, with knurled nut, 0.3 m
Switching output	PNP
Switching output detail	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 <sup>1)</sup> IP68

<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>&</sup>lt;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.

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
Cable material	PVC
Conductor size	0.14 mm <sup>2</sup>
Cable diameter	Ø 2.9 mm
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.	≤ 1.5 Nm
UL File No.	NRKH.E348498

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

#### Safety-related parameters

MTTF <sub>D</sub>	1,730 years
DC <sub>avg</sub>	0 %
T <sub>M</sub> (mission time)	20 years

#### Reduction factors

Note	The values are reference values which may vary
Stainless steel (V2A, 304)	Approx. 0.7
Aluminum (AI)	Approx. 0.3
Copper (Cu)	Approx. 0.2
Brass (Br)	Approx. 0.3

#### Installation note

Remark	Associated graphic see "Installation"
Α	0 mm
В	10 mm
c	8 mm
D	6 mm
E	0 mm
F	16 mm
G	0 mm

 $<sup>^{2)}</sup>$  At I $_{\rm a}$  max.

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

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

# IQ08-02BPSKR9S | IQY

# INDUCTIVE PROXIMITY SENSORS

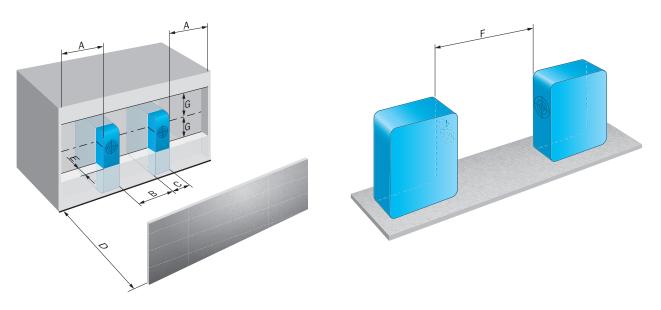
#### Certificates

EU declaration of conformity	✓
UK declaration of conformity	1
ACMA declaration of conformity	1
Moroccan declaration of conformity	1
China RoHS	1
cULus certificate	✓

#### 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 11.0 27270101 ECLASS 12.0 27274001 ETIM 5.0 EC002714 ETIM 6.0 EC002714		
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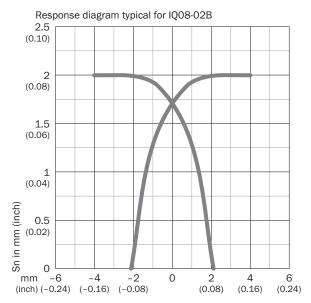
# Installation note



# Connection diagram Cd-002



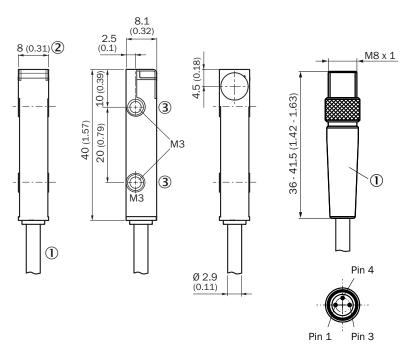
#### Response diagram



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

All dimensions in mm (inch)

#### Dimensional drawing IQ08, cable with male connector



Dimensions in mm (inch)

- ① Connection
- ② LED indicator 270°
- 3 Threaded mounting hole M3

#### Recommended accessories

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

	Brief description	Туре	part no.
connectors ar	nd cables		
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
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: 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

# 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:**

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