

# IQ10-03BPS-KT1 IQ Standard

**INDUCTIVE PROXIMITY SENSORS** 





# Ordering information

Туре	Part no.
IQ10-03BPS-KT1	7900205

Other models and accessories → www.sick.com/IQ\_Standard



# Detailed technical data

# **Features**

Housing	Rectangular
Dimensions (W x H x D)	10 mm x 16 mm x 28 mm
Sensing range S <sub>n</sub>	3 mm
Installation type	Flush
Switching frequency	3,000 Hz
Connection type	Connector M8, 3-pin
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 <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	$\leq$ 1.5 V $^{2)}$
Current consumption	10 mA <sup>3)</sup>
Time delay before availability	≤ 100 ms
Hysteresis	1 % 20 %
Reproducibility	≤ 5 % <sup>4) 5)</sup>
Temperature drift (of S <sub>r</sub> )	± 10 %

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

 $<sup>^{2)}</sup>$  At  $\rm I_a$  max.

<sup>3)</sup> Without load.

<sup>&</sup>lt;sup>4)</sup> Ub = 20 V DC ... 30 V DC, Ta = 23 °C  $\pm$  5 °C.

<sup>&</sup>lt;sup>5)</sup> Of Sr.

EMC	According to EN 60947-5-2
Continuous current I <sub>a</sub>	≤ 300 mA
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 +70 °C
Housing material	Plastic
Sensing face material	Plastic, PA

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

# Safety-related parameters

MTTF <sub>D</sub>	2,010 years
DC <sub>avg</sub>	0%

# Installation note

Remark	Associated graphic see "Installation"
A	7 mm
В	10 mm
c	10 mm
D	9 mm
E	8 mm
F	24 mm
G	12 mm

# Classifications

ECI@ss 5.0	27270101
ECI@ss 5.1.4	27270101
ECI@ss 6.0	27270101
ECI@ss 6.2	27270101
ECI@ss 7.0	27270101
ECI@ss 8.0	27270101
ECI@ss 8.1	27270101
ECI@ss 9.0	27270101
ETIM 5.0	EC002714
ETIM 6.0	EC002714
UNSPSC 16.0901	39122230

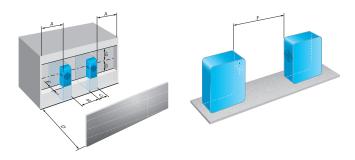
<sup>&</sup>lt;sup>2)</sup> At I<sub>a</sub> max.

<sup>3)</sup> Without load.

<sup>&</sup>lt;sup>4)</sup> Ub = 20 V DC ... 30 V DC, Ta = 23 °C  $\pm$  5 °C.

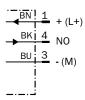
<sup>&</sup>lt;sup>5)</sup> Of Sr.

# Installation note



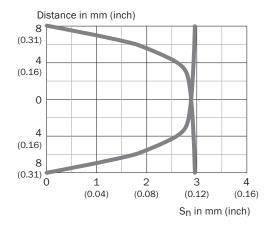
# Connection diagram

### Cd-002

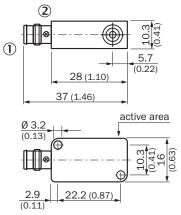


# Characteristic curve

# Response diagram



# Dimensional drawing (Dimensions in mm (inch))



- Connection
   Indication LED

### Recommended accessories

Other models and accessories → www.sick.com/IQ\_Standard

	Brief description	Туре	Part no.
Plug connecto	ors and cables		
	Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YF8U13- 020VA1XLEAX	2095860
	Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF8U13- 050VA1XLEAX	2095884
3	Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YG8U13- 020VA1XLEAX	2096165
	Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YG8U13- O5OVA1XLEAX	2096166

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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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