



IQ10-03BPSKT0SS21

INDUCTIVE PROXIMITY SENSORS



SCHOOL STATE OF THE PROPERTY O

Ordering information

| Туре | part no. |
|-------------------|----------|
| IQ10-03BPSKT0SS21 | 1119449 |

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 _n | 3 mm |
| Safe sensing range S _a | 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 ¹⁾ |
| Special characteristic | Increased ESD stability |

¹⁾ According to EN 60529.

Mechanics/electronics

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

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

²⁾ At L may

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

⁴⁾ Of Sr.

| Hysteresis | 5 % 15 % |
|--|------------------------------|
| 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 |
| 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 | 1,775 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) | 0.5 |

Installation note

| Remark | Associated graphic see "Installation" |
|--------|---------------------------------------|
| A | 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 | 1 |
|------------------------------------|---|
| UK declaration of conformity | 1 |
| ACMA declaration of conformity | 1 |
| Moroccan declaration of conformity | ✓ |

²⁾ At I_a max.

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

⁴⁾ Of Sr.

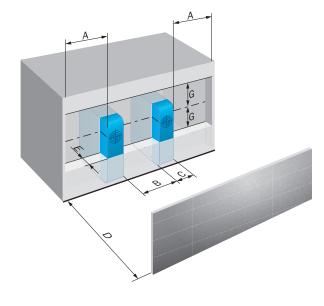
IQ10-03BPSKT0SS21 | IQB INDUCTIVE PROXIMITY SENSORS

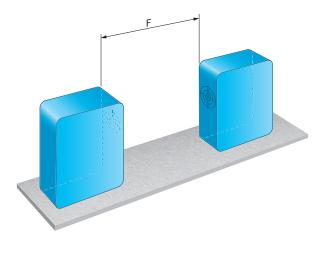
| China RoHS | ✓ |
|-------------------|---|
| cULus certificate | ✓ |

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 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

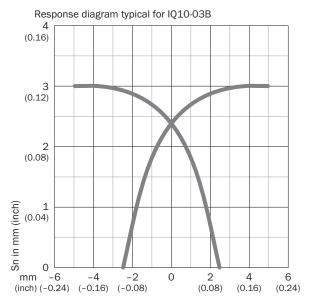




Connection diagram Cd-002



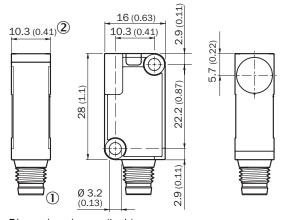
Response diagram



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 | | | |
| | Connection type head A: Female connector, M8, 3-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: 0.14 mm² 0.5 mm² | DOS-0803-G | 7902077 |
| | Connection type head A: Female connector, M8, 3-pin, angled, A-coded Description: Unshielded Connection systems: Solder connection Permitted cross-section: ≤ 0.25 mm² | DOS-0803-W | 7902078 |
| W.0 | Connection type head A: Female connector, M8, 3-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones | YF8U13-020VA1XLEAX | 2095860 |
| W.0 | Connection type head A: Female connector, M8, 3-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones | YF8U13-050VA1XLEAX | 2095884 |
| 3 | Connection type head A: Female connector, M8, 3-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones | YG8U13-020VA1XLEAX | 2096165 |
| | Connection type head A: Female connector, M8, 3-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones | YG8U13-050VA1XLEAX | 2096166 |
| No. | Connection type head A: Female connector, M8, 3-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 3-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YF8U13-050UA1XLEAX | 2094788 |
| W. | Connection type head A: Female connector, M8, 3-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 0.6 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones | YF8U13- C60VA1XLEAX | 2146368 |

SICK AT A GLANCE

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