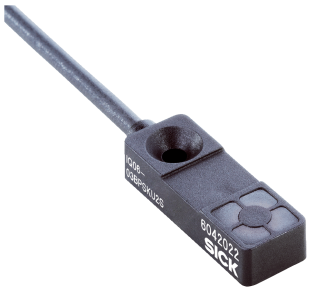
Product data sheet

# IQ06-03BNOKU2S

## IQM

**INDUCTIVE PROXIMITY SENSORS**

SICK
Sensor Intelligence.



## Ordering information

| Type | Part no. |
|---|---|
| IQ06-03BNOKU2S | 6042025 |

Other models and accessories ➜ www.sick.com/IQM

## Detailed technical data

### Features

| | |
|---|---|
| **Housing** | Rectangular |
| **Dimensions (W x H x D)** | 10 mm x 30 mm x 6 mm |
| **Sensing range $S_n$** | 3 mm |
| **Safe sensing range $S_a$** | 2.43 mm |
| **Installation type** | Flush |
| **Switching frequency** | 1,000 Hz |
| **Connection type** | Cable, 3-wire, 2 m |
| **Switching output** | NPN |
| **Output function** | NC |
| **Electrical wiring** | DC 3-wire |
| **Enclosure rating** | IP67 [1] |

[1] According to EN 60529.

### Mechanics/electronics

| | |
|---|---|
| **Supply voltage** | 10 V DC ... 30 V DC |
| **Ripple** | ≤ 10 % [1] |
| **Voltage drop** | < 1.5 V [2] |
| **Time delay before availability** | ≤ 10 ms |
| **Hysteresis** | 1 % ... 15 % |
| **Reproducibility** | ± 1 % [3] [4] |
| **Temperature drift (of $S_r$)** | ± 10 % |
| **EMC** | According to EN 60947-5-2 |
| **Continuous current $I_a$** | ≤ 100 mA |
| **Cable material** | PUR |

[1] Of $V_S$.
[2] At $I_a$ max.
[3] Supply voltage Ub and constant ambient temperature Ta.
[4] Of Sr.

| | |
|---|---|
| **Conductor size** | 0.14 mm² |
| **Cable diameter** | Ø 3 mm |
| **Short-circuit protection** | ✓ |
| **Shock and vibration resistance** | 30 g, 11 ms / 10 ... 55 Hz, 1 mm |
| **Ambient operating temperature** | –25 °C ... +70 °C |
| **Housing material** | Plastic, PA6 |
| **Sensing face material** | Plastic, PA6 |
| **Tightening torque, max.** | 0.6 Nm |

[1] Of $V_S$.
[2] At $I_a$ max.
[3] Supply voltage Ub and constant ambient temperature Ta.
[4] Of Sr.

## Safety-related parameters

| | |
|---|---|
| **$MTTF_D$** | 936 years |
| **$DC_{avg}$** | 0% |
| **$T_M$ (mission time)** | 20 years |

## Reduction factors

| | |
|---|---|
| **Note** | The values are reference values which may vary |
| **Stainless steel (V2A, 304)** | Approx. 0.7 |
| **Aluminum (Al)** | Approx. 0.4 |
| **Copper (Cu)** | Approx. 0.3 |
| **Brass (Br)** | Approx. 0.4 |

## Installation note

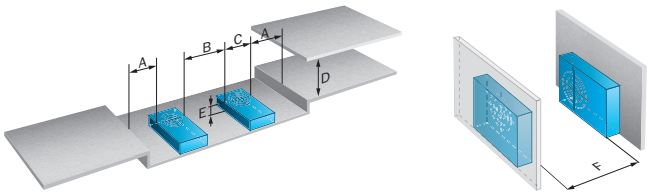
| | |
|---|---|
| **Remark** | Associated graphic see "Installation" |
| **A** | 1.5 mm |
| **B** | 20 mm |
| **C** | 10 mm |
| **D** | 9 mm |
| **E** | 0 mm |
| **F** | 30 mm |

## Classifications

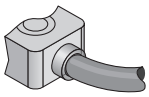
| | |
|---|---|
| **eCl@ss 5.0** | 27270101 |
| **eCl@ss 5.1.4** | 27270101 |
| **eCl@ss 6.0** | 27270101 |
| **eCl@ss 6.2** | 27270101 |
| **eCl@ss 7.0** | 27270101 |
| **eCl@ss 8.0** | 27270101 |
| **eCl@ss 8.1** | 27270101 |
| **eCl@ss 9.0** | 27270101 |
| **eCl@ss 10.0** | 27270101 |
| **eCl@ss 11.0** | 27270101 |

| | |
|---|---|
| **eCl@ss 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

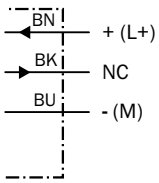



## Connection type



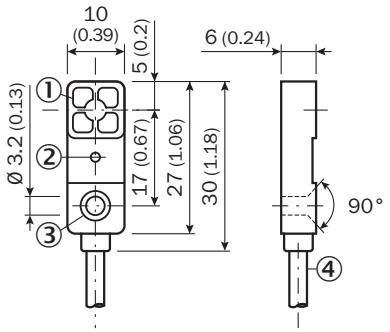
## Connection diagram

Cd-003



## Dimensional drawing (Dimensions in mm (inch))

IQ06




① Sensing face
② Function indicator (red)
③ Fixing hole
④ Connection

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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.”**

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