

# IQ06-03BPOKU2S

**INDUCTIVE PROXIMITY SENSORS** 



#### Ordering information

| Туре           | Part no. |
|----------------|----------|
| IQ06-03BP0KU2S | 6042023  |

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

Illustration may differ



#### Detailed technical data

#### **Features**

| Housing                           | Rectangular          |
|-----------------------------------|----------------------|
| Dimensions (W x H x D)            | 10 mm x 30 mm x 6 mm |
| Sensing range S <sub>n</sub>      | 3 mm                 |
| Safe sensing range S <sub>a</sub> | 2.43 mm              |
| Installation type                 | Flush                |
| Switching frequency               | 1,000 Hz             |
| Connection type                   | Cable, 3-wire, 2 m   |
| Switching output                  | PNP                  |
| Output function                   | NC                   |
| Electrical wiring                 | DC 3-wire            |
| Enclosure rating                  | IP67 <sup>1)</sup>   |

<sup>1)</sup> According to EN 60529.

#### Mechanics/electronics

| Supply voltage                         | 10 V DC 30 V DC           |
|--|---------------------------|
| Ripple                                 | ≤ 10 % <sup>1)</sup>      |
| Voltage drop                           | < 1.5 V <sup>2)</sup>     |
| Time delay before availability         | ≤ 10 ms                   |
| Hysteresis                             | 1 % 15 %                  |
| Reproducibility                        | ± 1 % <sup>3) 4)</sup>    |
| Temperature drift (of S <sub>r</sub> ) | ± 10 %                    |
| EMC                                    | According to EN 60947-5-2 |
| Continuous current I <sub>a</sub>      | ≤ 100 mA                  |

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

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

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

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

| Cable material                 | PUR                          |
|--------------------------------|------------------------------|
| Conductor size                 | 0.14 mm <sup>2</sup>         |
| 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                       |

<sup>1)</sup> Of V<sub>S</sub>.

#### Safety-related parameters

| MTTF <sub>D</sub>             | 1,328 years |
|-------------------------------|-------------|
| <b>DC</b> <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. 0.4                                    |
| Copper (Cu)                | Approx. 0.3                                    |
| Brass (Br)                 | Approx. 0.4                                    |

#### Installation note

| Remark | Associated graphic see "Installation" |
|--------|---------------------------------------|
| Α      | 1.5 mm                                |
| В      | 20 mm                                 |
| c      | 10 mm                                 |
| D      | 9 mm                                  |
| E      | 0 mm                                  |
| F      | 30 mm                                 |

#### 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 |

<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.

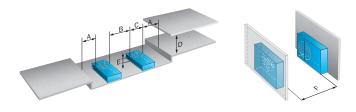
<sup>&</sup>lt;sup>4)</sup> Of Sr.

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#### INDUCTIVE PROXIMITY SENSORS

| 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 type



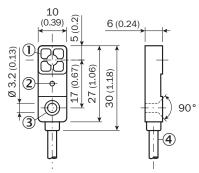
#### Connection diagram

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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