



## Inductive proximity sensors Rectangular housing, IQ10

IQ10-03BNOKW2S



**Model Name** > [IQ10-03BNOKW2S](#)  
**Part No.** > [1055452](#)



#### At a glance

- Tough VISTALTM housing
- SICK-ASIC technology
- 270° status display with extra-bright LED
- Extended sensing range of up to 6 mm
- Hotmelt molding
- Withstands high installation and tightening torque
- IP 68 enclosure rating

#### Your benefits

- Best mechanical and electronic stability for extra-long service life
- Highest levels of process reliability for your application
- Long service life that reduce maintenance costs thanks to SICK's ASIC technology and rugged VISTALTM housing
- Precise detection and high sensor accuracy enable fast handling and assembly processes
- Space-saving integration in every application
- Increased levels of protection against shock and vibration reduce maintenance costs
- Quick viewing of sensor status from any position in the room reduces mounting time and commissioning
- Safe, fast mounting without any need for readjustment saves installation time and maintenance costs



#### Features

|                           |                              |
|---------------------------|------------------------------|
| Housing:                  | Rectangular                  |
| Dimensions (W x H x D):   | 10 mm x 16 mm x 28 mm        |
| Sensing range Sn:         | 3 mm                         |
| Assured sensing range Sa: | 2.43 mm                      |
| Installation type:        | Flush                        |
| Switching frequency:      | 2,000 Hz                     |
| Output type:              | NPN                          |
| Output function:          | NC                           |
| Electrical wiring:        | DC 3-wire                    |
| Enclosure rating:         | IP 67 <sup>1)</sup><br>IP 68 |
| Connection type:          | Cable, 3-wire, 2 m           |

1) According to EN 60529

## Mechanics/electronics

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|                                 |                                        |
|---------------------------------|----------------------------------------|
| Supply voltage:                 | 10 V DC ... 30 V DC                    |
| Ripple:                         | $\leq 10\%$ <sup>1)</sup>              |
| Voltage drop:                   | $\leq 2\text{ V}$ <sup>2)</sup>        |
| Power consumption:              | $\leq 10\text{ mA}$ <sup>3)</sup>      |
| Time delay before availability: | $\leq 100\text{ ms}$                   |
| Hysteresis:                     | 5 % ... 15 %                           |
| Repeatability:                  | $\leq 2\%$ <sup>4)</sup> <sup>5)</sup> |
| Temperature drift (% of Sr):    | $\pm 10\%$                             |
| EMC:                            | According to EN 60947-5-2              |
| Output current I <sub>a</sub> : | $\leq 200\text{ mA}$                   |
| Cable material:                 | PVC                                    |
| Conductor cross-section:        | 0.25 mm <sup>2</sup>                   |
| Cable diameter:                 | Ø 3.7 mm                               |
| Short-circuit protection:       | ✓                                      |
| Reverse polarity protection:    | ✓                                      |
| Power-up pulse protection:      | ✓                                      |
| Shock/vibration:                | 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.:        | $\leq 1\text{ Nm}$                     |

1) Of V<sub>S</sub> <sup>2)</sup> At I<sub>a</sub> max <sup>3)</sup> Without load <sup>4)</sup> U<sub>b</sub> and T<sub>a</sub> constant <sup>5)</sup> Of Sr

## Reduction factors

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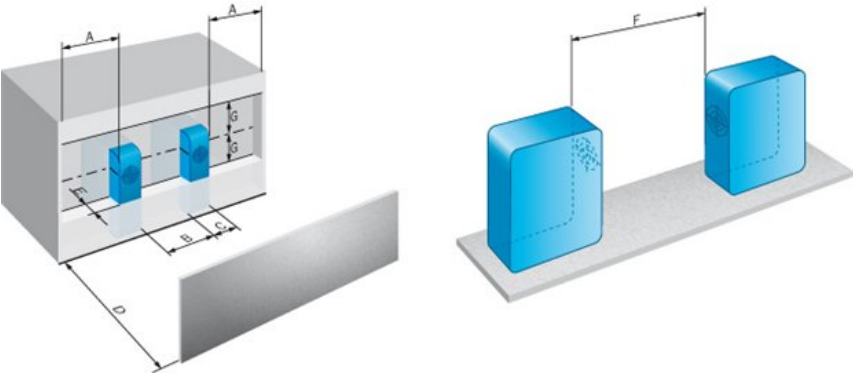
|                             |                                                |
|-----------------------------|------------------------------------------------|
| Note:                       | The values are reference values which may vary |
| Stainless steel (V2A, 304): | 0.75                                           |
| Copper (Cu):                | 0.35                                           |
| Aluminum (Al):              | 0.4                                            |
| Brass (Br):                 | 0.5                                            |

## Installation note

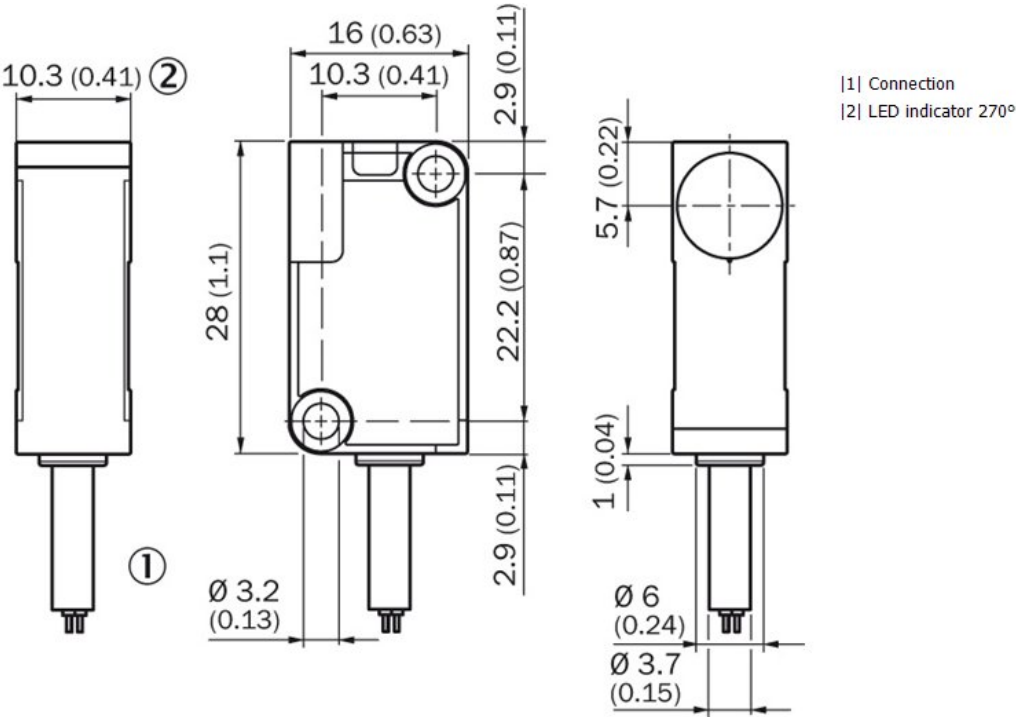
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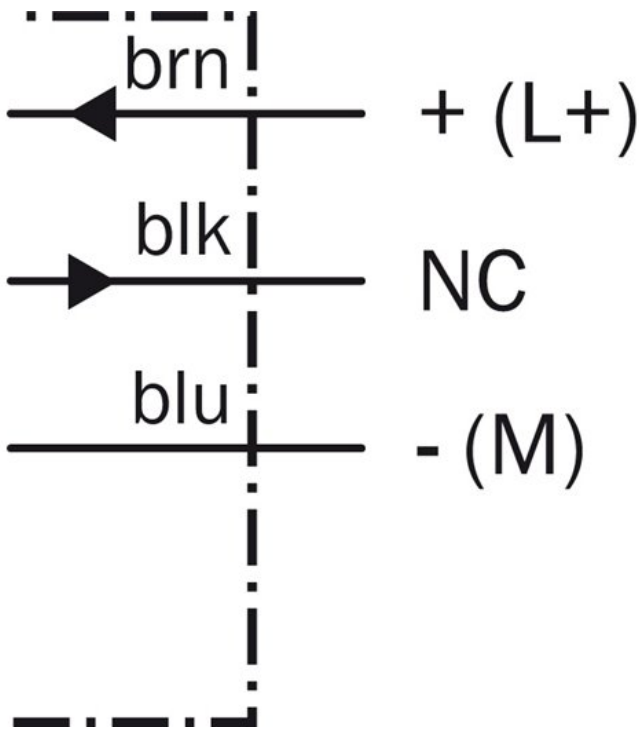
|         |                                       |
|---------|---------------------------------------|
| A:      | 0 mm                                  |
| B:      | 10 mm                                 |
| C:      | 10.3 mm                               |
| D:      | 9 mm                                  |
| E:      | 0 mm                                  |
| F:      | 24 mm                                 |
| G:      | 0 mm                                  |
| Remark: | Associated graphic see "Installation" |

Installation note



Dimensional drawing





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