



## Inductive proximity sensors Rectangular housing, IQ12

IQ12-08NPSKW5S



**Model Name** > [IQ12-08NPSKW5S](#)  
**Part No.** > [1062452](#)



**At a glance**

- Tough VISTALTM housing
- SICK-ASIC technology
- 270° status display with extra-bright LED
- Extended sensing range of up to 8 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**

|                           |                              |
|---------------------------|------------------------------|
| Design:                   | Rectangular                  |
| Dimensions (W x H x D):   | 12 mm x 26 mm x 40 mm        |
| Sensing range Sn:         | 8 mm                         |
| Assured sensing range Sa: | 6.48 mm                      |
| Installation type:        | Non-flush                    |
| Switching frequency:      | ± 2,000 Hz                   |
| Output type:              | PNP                          |
| Output function:          | NO                           |
| Electrical wiring:        | DC 3-wire                    |
| Enclosure rating:         | IP 67 <sup>1)</sup><br>IP 68 |
| Connection type:          | Cable, 3-wire, 5 m           |

1) According to EN 60529

## Mechanics/electronics

---

|                                 |  |
|---------------------------------|--|
| Supply voltage:                 | 10 V DC ... 30 V DC                    |
| Ripple:                         | $\leq 10\%$ <sup>1)</sup>              |
| Voltage drop:                   | $\leq 3\text{ V}$ <sup>2)</sup>        |
| Power consumption:              | $\leq 20\text{ mA}$ <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 and vibration resistance: | 30 g, 11 ms/10 ... 55 Hz, 1 mm         |
| Ambient temperature operation:  | -25 °C ... +75 °C                      |
| Sensing face material:          | Plastic, VISTAL                        |
| Tightening torque, max.:        | $\leq 1\text{ Nm}$                     |
| Housing material:               | Plastic, VISTAL                        |

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

---

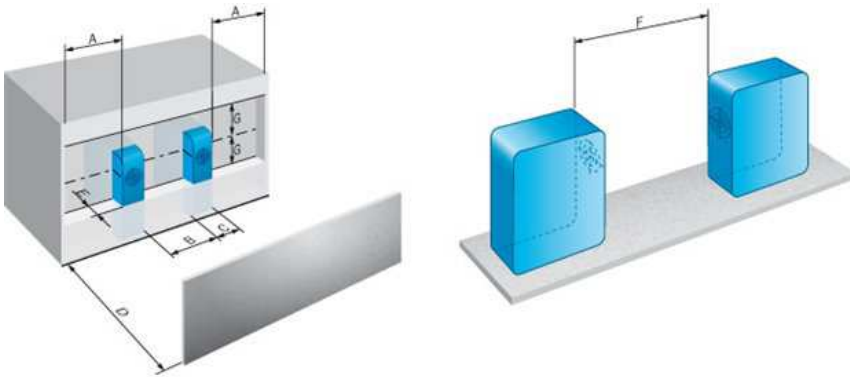
|                             |  |
|-----------------------------|--|
| Note:                       | The values are reference values which may vary |
| Stainless steel (V2A, 304): | $\pm 0.7$                                      |
| Copper (Cu):                | $\pm 0.4$                                      |
| Aluminum (Al):              | $\pm 0.5$                                      |
| Brass (Br):                 | $\pm 0.5$                                      |

## Installation note

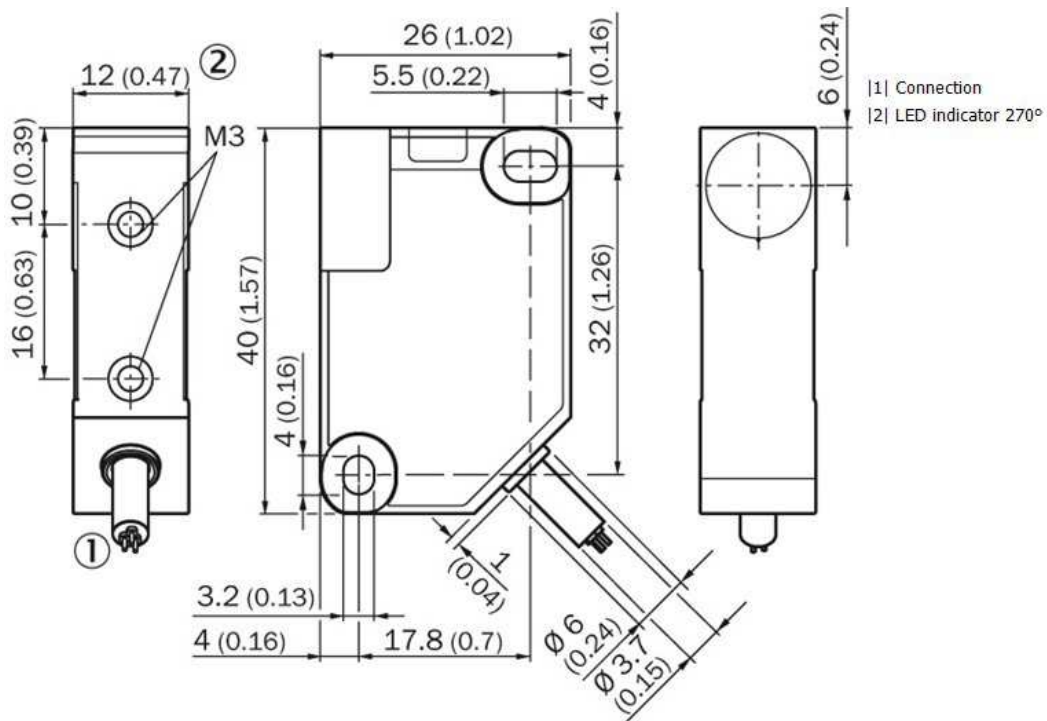
---

|         |                                       |
|---------|---------------------------------------|
| A:      | 10 mm                                 |
| B:      | 36 mm                                 |
| C:      | 12 mm                                 |
| D:      | 24 mm                                 |
| E:      | 16 mm                                 |
| F:      | 64 mm                                 |
| G:      | 16 mm                                 |
| Remark: | Associated graphic see "Installation" |

## Installation note

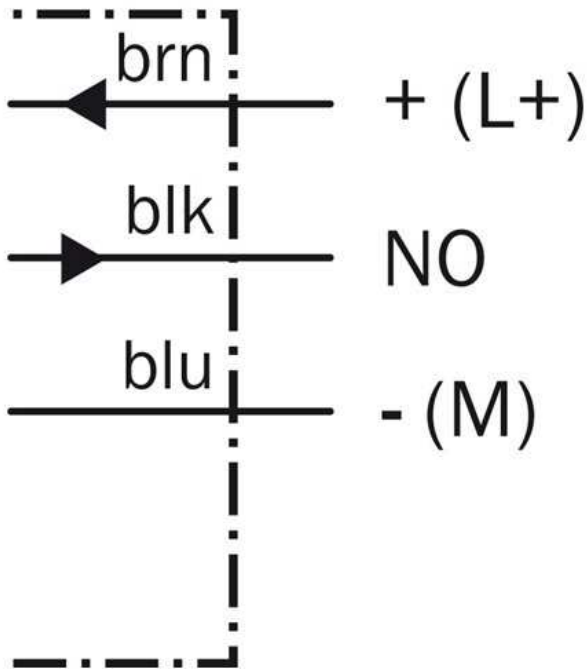


## Dimensional drawing



Connection diagram

---



**Australia**

Phone +61 3 9457 0600  
1800 33 48 02 – tollfree  
E-Mail sales@sick.com.au

**Belgium/Luxembourg**

Phone +32 (0)2 466 55 66  
E-Mail info@sick.be

**Brasil**

Phone +55 11 3215-4900  
E-Mail marketing@sick.com.br

**Canada**

Phone +1 905 771 14 44  
E-Mail information@sick.com

**Česká republika**

Phone +420 2 57 91 18 50  
E-Mail sick@sick.cz

**China**

Phone +86 4000 121 000  
E-Mail info.china@sick.net.cn  
Phone +852-2153 6300  
E-Mail ghk@sick.com.hk

**Danmark**

Phone +45 45 82 64 00  
E-Mail sick@sick.dk

**Deutschland**

Phone +49 211 5301-301  
E-Mail info@sick.de

**España**

Phone +34 93 480 31 00  
E-Mail info@sick.es

**France**

Phone +33 1 64 62 35 00  
E-Mail info@sick.fr

**Great Britain**

Phone +44 (0)1727 831121  
E-Mail info@sick.co.uk

**India**

Phone +91-22-4033 8333  
E-Mail info@sick-india.com

**Israel**

Phone +972-4-6881000  
E-Mail info@sick-sensors.com

**Italia**

Phone +39 02 27 43 41  
E-Mail info@sick.it

**Japan**

Phone +81 (0)3 5309 2112  
E-Mail support@sick.jp

**Magyarország**

Phone +36 1 371 2680  
E-Mail office@sick.hu

**Nederland**

Phone +31 (0)30 229 25 44  
E-Mail info@sick.nl

**Norge**

Phone +47 67 81 50 00  
E-Mail sick@sick.no

**Österreich**

Phone +43 (0)22 36 62 28 8-0  
E-Mail office@sick.at

**Polska**

Phone +48 22 837 40 50  
E-Mail info@sick.pl

**România**

Phone +40 356 171 120  
E-Mail office@sick.ro

**Russia**

Phone +7-495-775-05-30  
E-Mail info@sick.ru

**Schweiz**

Phone +41 41 619 29 39  
E-Mail contact@sick.ch

**Singapore**

Phone +65 6744 3732  
E-Mail sales.gsg@sick.com

**Slovenija**

Phone +386 (0)1-47 69 990  
E-Mail office@sick.si

**South Africa**

Phone +27 11 472 3733  
E-Mail info@sickautomation.co.za

**South Korea**

Phone +82 2 786 6321/4  
E-Mail info@sickkorea.net

**Suomi**

Phone +358-9-25 15 800  
E-Mail sick@sick.fi

**Sverige**

Phone +46 10 110 10 00  
E-Mail info@sick.se

**Taiwan**

Phone +886 2 2375-6288  
E-Mail sales@sick.com.tw

**Türkiye**

Phone +90 (216) 528 50 00  
E-Mail info@sick.com.tr

**United Arab Emirates**

Phone +971 (0) 4 88 65 878  
E-Mail info@sick.ae

**USA/México**

Phone +1(952) 941-6780  
1 (800) 325-7425 – tollfree  
E-Mail info@sickusa.com

More representatives and agencies  
at [www.sick.com](http://www.sick.com)