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Product data sheet




# IQ08-04NNSKW2S

IQY

**INDUCTIVE PROXIMITY SENSORS**

SICK
Sensor Intelligence.

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# IQ08-04NNSKW2S | IQY

INDUCTIVE PROXIMITY SENSORS



Illustration may differ

## Ordering information

| Type | Part no. |
|---|---|
| IQ08-04NNSKW2S | 1055500 |

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

## Detailed technical data

### Features

| | |
|---|---|
| **Housing** | Rectangular |
| **Dimensions (W x H x D)** | 8 mm x 40 mm x 8 mm |
| **Sensing range $S_n$** | 4 mm |
| **Safe sensing range $S_a$** | 3.24 mm |
| **Installation type** | Non-flush |
| **Switching frequency** | 2,000 Hz |
| **Connection type** | Cable, 3-wire, 2 m |
| **Switching output** | NPN |
| **Output function** | NO |
| **Electrical wiring** | DC 3-wire |
| **Enclosure rating** | IP67, IP68 [1] |

[1] According to EN 60529.

### Mechanics/electronics

| | |
|---|---|
| **Supply voltage** | 10 V DC ... 30 V DC |
| **Ripple** | ≤ 10 % [1] |
| **Voltage drop** | ≤ 2 V [2] |
| **Time delay before availability** | ≤ 100 ms |
| **Hysteresis** | 5 % ... 15 % |
| **Reproducibility** | ≤ 2 % [3] [4] |
| **Temperature drift (of $S_r$)** | ± 10 % |

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

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| | |
|---|---|
| **EMC** | According to EN 60947-5-2 |
| **Continuous current $I_a$** | ≤ 200 mA |
| **Cable material** | PVC |
| **Conductor size** | 0.14 mm² |
| **Cable diameter** | Ø 2.9 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 operating temperature** | –25 °C ... +75 °C |
| **Housing material** | Plastic, VISTAL® |
| **Sensing face material** | Plastic, VISTAL® |
| **Tightening torque, max.** | ≤ 1.5 Nm |
| **UL File No.** | NRKH.E348498 |

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

## Safety-related parameters

| | |
|---|---|
| **$MTTF_D$** | 1,730 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. 0.5 |
| **Copper (Cu)** | Approx. 0.4 |
| **Brass (Br)** | Approx. 0.5 |

## Installation note

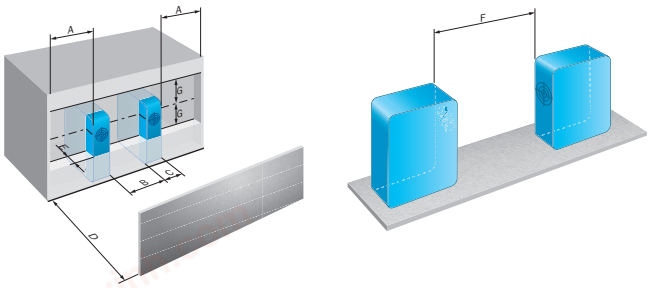
| | |
|---|---|
| **Remark** | Associated graphic see "Installation" |
| **A** | 4 mm |
| **B** | 24 mm |
| **C** | 8 mm |
| **D** | 12 mm |
| **E** | 20 mm |
| **F** | 32 mm |
| **G** | 8 mm |

## Classifications

| | |
|---|---|
| **eCl@ss 5.0** | 27270101 |
| **eCl@ss 5.1.4** | 27270101 |
| **eCl@ss 6.0** | 27270101 |

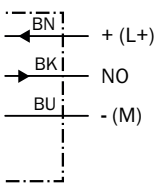
| | |
|---|---|
| **eCl@ss 6.2** | 27270101 |
| **eCl@ss 7.0** | 27270101 |
| **eCl@ss 8.0** | 27270101 |
| **eCl@ss 8.1** | 27270101 |
| **eCl@ss 9.0** | 27270101 |
| **eCl@ss 10.0** | 27270101 |
| **eCl@ss 11.0** | 27270101 |
| **eCl@ss 12.0** | 27274001 |
| **ETIM 5.0** | EC002714 |
| **ETIM 6.0** | EC002714 |
| **ETIM 7.0** | EC002714 |
| **ETIM 8.0** | EC002714 |
| **UNSPSC 16.0901** | 39122230 |

## Installation note




## Connection diagram

Cd-001

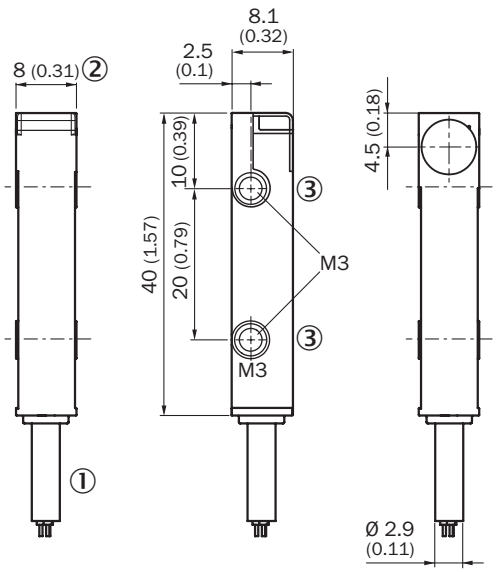


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## Dimensional drawing (Dimensions in mm (inch))

IQ08, cable




① Connection
② LED indicator 270°
③ Threaded mounting hole M3

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# SICK AT A GLANCE

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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."**

# WORLDWIDE PRESENCE:

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