



# IQ25-05BPSDU2S

IQV

INDUCTIVE PROXIMITY SENSORS

**SICK**  
Sensor Intelligence.



## Ordering information

Type	part no.
IQ25-05BPSDU2S	6042046

Other models and accessories → [www.sick.com/IQV](http://www.sick.com/IQV)



## Detailed technical data

### Features

<b>Housing</b>	Rectangular
<b>Dimensions (W x H x D)</b>	25 mm x 50 mm x 10 mm
<b>Sensing range <math>S_n</math></b>	5 mm
<b>Safe sensing range <math>S_a</math></b>	4.05 mm
<b>Installation type</b>	Flush
<b>Switching frequency</b>	500 Hz
<b>Connection type</b>	Cable, 3-wire, 2 m
<b>Switching output</b>	PNP
<b>Switching output detail</b>	PNP
<b>Output function</b>	NO
<b>Electrical wiring</b>	DC 3-wire
<b>Enclosure rating</b>	IP67 <sup>1)</sup>

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

### Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC
<b>Ripple</b>	≤ 15 % <sup>1)</sup>
<b>Voltage drop</b>	≤ 2.5 V <sup>2)</sup>
<b>Time delay before availability</b>	≤ 50 ms
<b>Hysteresis</b>	1 % ... 15 %
<b>Reproducibility</b>	± 5 % <sup>3)</sup> <sup>4)</sup>
<b>Temperature drift (of <math>S_r</math>)</b>	± 10 %
<b>EMC</b>	According to EN 60947-5-2

<sup>1)</sup> Of  $V_S$ .

<sup>2)</sup> At  $I_a$  max.

<sup>3)</sup> Supply voltage  $U_B$  and constant ambient temperature  $T_a$ .

<sup>4)</sup> Of  $S_r$ .

<b>Continuous current <math>I_a</math></b>	≤ 200 mA
<b>Cable material</b>	PUR
<b>Conductor size</b>	0.34 mm <sup>2</sup>
<b>Cable diameter</b>	Ø 4.6 mm
<b>Short-circuit protection</b>	✓
<b>Shock and vibration resistance</b>	30 g, 11 ms / 10 ... 55 Hz, 1 mm
<b>Ambient operating temperature</b>	-25 °C ... +70 °C
<b>Housing material</b>	Aluminum, GD Zn
<b>Sensing face material</b>	Plastic, PBT

1) Of  $V_S$ .

2) At  $I_a$  max.

3) Supply voltage  $U_B$  and constant ambient temperature  $T_a$ .

4) Of  $S_r$ .

### Safety-related parameters

<b>MTTF<sub>D</sub></b>	1,488 years
<b>DC<sub>avg</sub></b>	0%
<b>T<sub>M</sub> (mission time)</b>	20 years

### Reduction factors

<b>Note</b>	The values are reference values which may vary
<b>Stainless steel (V2A, 304)</b>	Approx. 0.7
<b>Aluminum (Al)</b>	Approx. 0.4
<b>Copper (Cu)</b>	Approx. 0.3
<b>Brass (Br)</b>	Approx. 0.4

### Installation note

<b>Remark</b>	Associated graphic see "Installation"
<b>A</b>	0 mm
<b>B</b>	25 mm
<b>C</b>	25 mm
<b>D</b>	15 mm
<b>E</b>	0 mm
<b>F</b>	75 mm

### Certificates

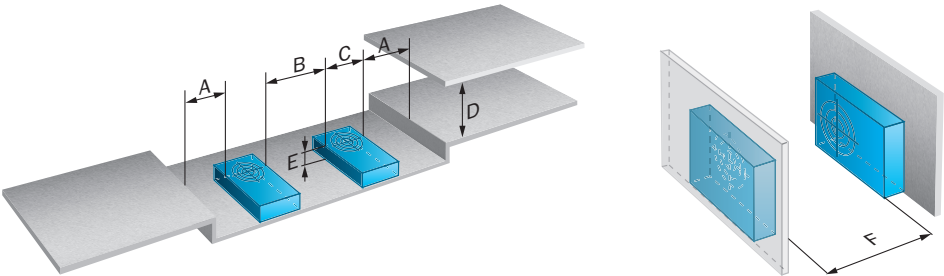
<b>EU declaration of conformity</b>	✓
<b>China RoHS</b>	✓
<b>cULus certificate</b>	✓

### Classifications

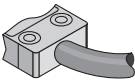
<b>ECLASS 5.0</b>	27270101
<b>ECLASS 5.1.4</b>	27270101
<b>ECLASS 6.0</b>	27270101
<b>ECLASS 6.2</b>	27270101

<b>ECLASS 7.0</b>	27270101
<b>ECLASS 8.0</b>	27270101
<b>ECLASS 8.1</b>	27270101
<b>ECLASS 9.0</b>	27270101
<b>ECLASS 10.0</b>	27270101
<b>ECLASS 11.0</b>	27270101
<b>ECLASS 12.0</b>	27274001
<b>ETIM 5.0</b>	EC002714
<b>ETIM 6.0</b>	EC002714
<b>ETIM 7.0</b>	EC002714
<b>ETIM 8.0</b>	EC002714
<b>UNSPSC 16.0901</b>	39122230

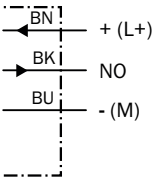
Installation note



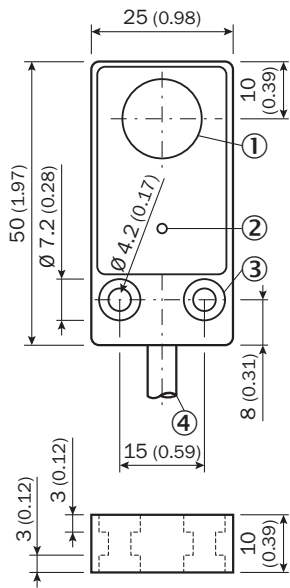
Connection type



Connection diagram Cd-001



## Dimensional drawing IQ25



Dimensions in mm (inch)

- ① Sensing face
- ② Function signal indicator (green)
- ③ fixing hole
- ④ Connection

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

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:

Contacts and other locations –[www.sick.com](http://www.sick.com)