



Inductive proximity sensors  
Rectangular housing, IQ05

IQ05-0B8NS-ZU1



**Model Name** > [IQ05-0B8NS-ZU1](#)  
**Part No.** > [6020162](#)



**At a glance**

- Sensing distance of 0.8 mm
- Can be flush mounted
- High switching frequency
- Short-circuit protection (pulsed)
- Rugged, nickel-plated brass housing
- IP 67 enclosure rating
- Extremely small and space-saving

**Your benefits**

- Time- saving, easy installation in space-critical applications
- Reliable detection of fast handling and assembly processes
- Quick and easy installation saves time
- Compact housing provides a high degree of design freedom



**Features**

Design:	Rectangular
Dimensions (W x H x D):	5 mm x 5 mm x 25 mm
Sensing range Sn:	0.8 mm
Assured sensing range Sa:	0.648 mm
Installation type:	Flush
Switching frequency:	5,000 Hz
Switching output:	NPN
Output function:	NO
Electrical wiring:	DC 3-wire
Enclosure rating:	IP 67 <sup>1)</sup>
Connection type:	Cable, 3-wire, 2 m

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

**Mechanics/electronics**

Supply voltage:	10 V DC ... 30 V DC
Ripple:	≤ 20 % <sup>1)</sup>
Voltage drop:	≤ 2 V <sup>2)</sup>
Power consumption:	≤ 10 mA <sup>3)</sup>
Time delay before availability:	≤ 10 ms
Hysteresis:	1 % ... 10 %

Repeatability:	≤ 1.5 % <sup>4)</sup>
Temperature drift (of Sr):	± 10 %
EMC:	According to EN 60947-5-2
Output current I <sub>a</sub> :	≤ 200 mA
Cable material:	PUR
Conductor cross-section:	0.06 mm <sup>2</sup>
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 ... 70 °C
Housing material:	Metal, Chrome-plated brass
Sensing face material:	Plastic, Polyester

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> = 20 V DC ... 30 V DC, T<sub>a</sub> = 23 °C ± 5 °C

### Reduction factors

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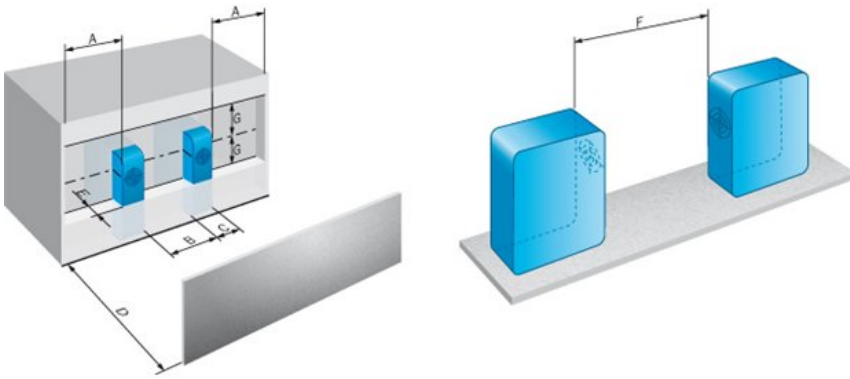
Note:	The values are reference values which may vary
Stainless steel (V2A, 304):	Ca. 0.85
Copper (Cu):	Ca. 0.6
Aluminum (Al):	Ca. 0.6
Brass (Br):	Ca. 0.7

### Installation note

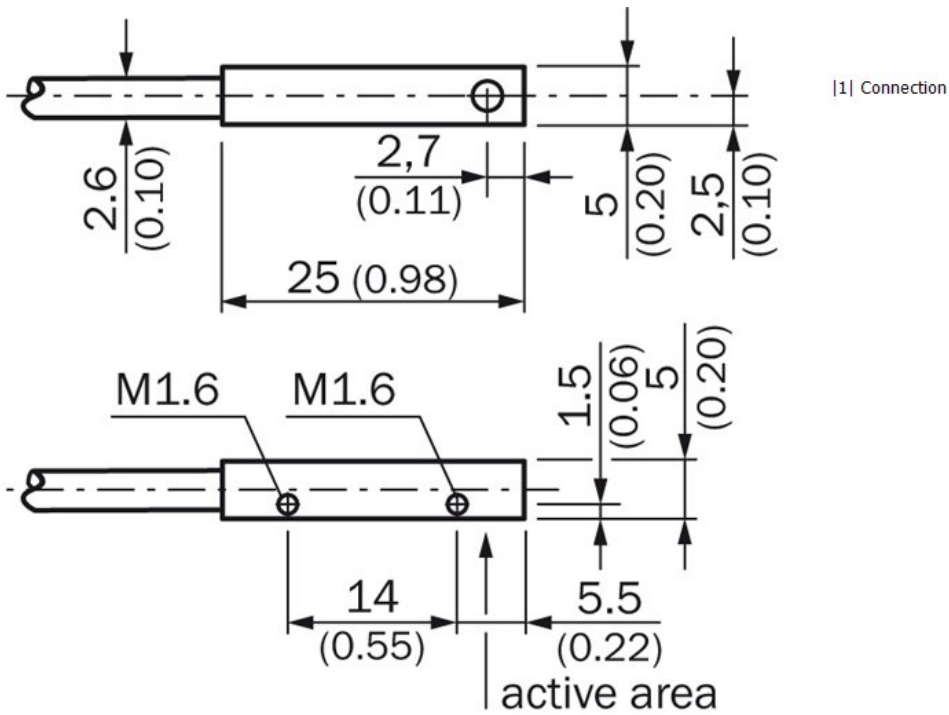
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A:	0.8 mm
B:	0 mm
C:	5 mm
D:	2.4 mm
E:	0 mm
F:	7 mm
G:	3,3 mm
Remark:	Associated graphic see "Installation"

## Installation note

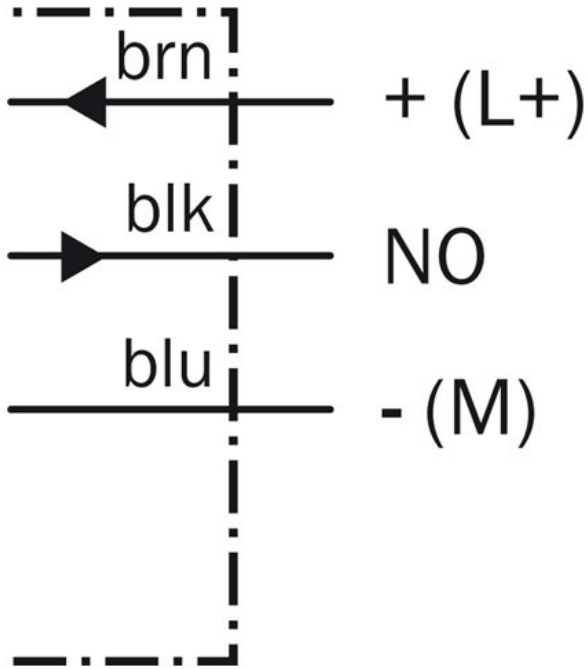


## Dimensional drawing



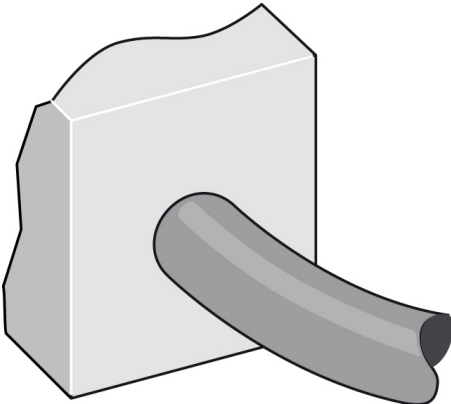
Connection diagram

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Connection type

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