



Inductive proximity sensors  
Rectangular housing, IQ20

IQ20-07BPSDP0S



**Type** > [IQ20-07BSPDP0S](#)  
**Part No.** > [6042043](#)



**At a glance**

- Flat, compact design
- Long sensing distance up to 1.5 mm
- Easily visible indication LEDs
- Available in a metal housing
- Dimensions: 20 mm x 32 mm x 8 mm

**Your benefits**

- Reduced mechanical damage due to space-saving flat housing, which does not protrude from sensor
- Time-saving simple installation with one or two screws
- No restrictions on machine design



**Features**

Housing:	Rectangular
Dimensions (W x H x D):	20 mm x 32 mm x 8 mm
Sensing range Sn:	7 mm
Assured sensing range Sa:	5.67 mm
Installation type:	Flush
Switching frequency:	150 Hz
Output type:	PNP
Output function:	NO
Electrical wiring:	DC 3-wire
Enclosure rating:	IP 67 <sup>1)</sup>
Connection type:	Cable with connector M8, 3-pin, 0.3 m

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

**Mechanics/electronics**

Supply voltage:	10 V DC ... 30 V DC
Ripple:	≤ 10 % <sup>1)</sup>
Voltage drop:	< 2.5 V <sup>2)</sup>
Power consumption:	15 mA <sup>3)</sup>
Time delay before availability:	≤ 20 ms
Hysteresis:	1 % ... 15 %
Repeatability:	± 5 % <sup>4) 5)</sup>
Temperature drift (of Sr):	± 10 %

EMC:	According to EN 60947-5-2
Continuous current I <sub>a</sub> :	200 mA
Cable material:	PUR
Short-circuit protection:	✓
Reverse polarity protection:	✓
Shock and vibration resistance:	30 g, 11 ms / 10 ... 55 Hz, 1 mm
Ambient operating temperature:	-25 °C ... 70 °C
Housing material:	Metal, GD Zn
Sensing face material:	Plastic, PA12

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

### Reduction factors

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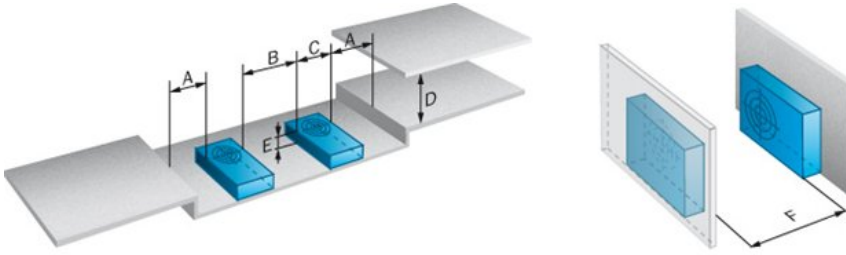
Note:	The values are reference values which may vary
Stainless steel (V2A, 304):	Ca. 0.7
Copper (Cu):	Ca. 0.3
Aluminum (Al):	Ca. 0.4
Brass (Br):	Ca. 0.4

### Installation note

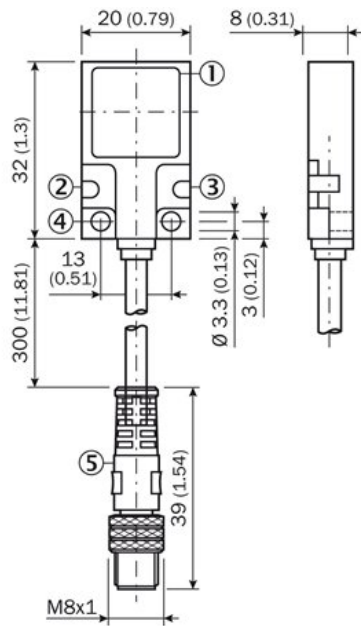
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A:	0 mm
B:	20 mm
C:	20 mm
D:	21 mm
E:	0 mm
F:	60 mm
Remark:	Associated graphic see "Installation"

## Installation note



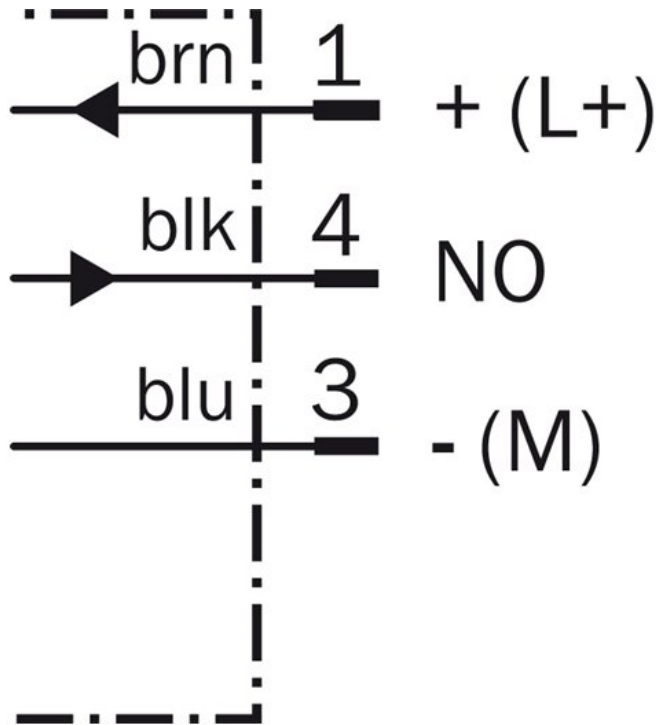
## Dimensional drawing



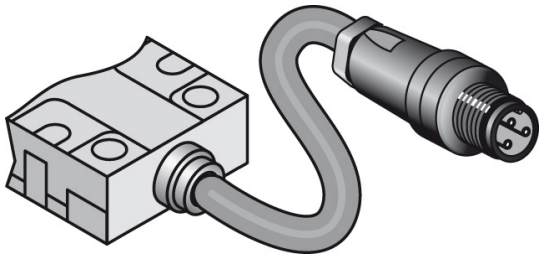
- |1| Sensing face
- |2| Operation status LED, green
- |3| Status LED, yellow
- |4| Mounting hole
- |5| Connection

All dimensions in mm (inch)

Connection diagram



Connection type



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