



Inductive proximity sensors
Rectangular housing, IQ20

IQ20-07BPPDQ0S



Type > [IQ20-07BPPDQ0S](#)
Part No. > [6042045](#)



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:	Complementary
Electrical wiring:	DC 4-wire
Enclosure rating:	IP 67 ¹⁾
Connection type:	Cable with connector M12, 4-pin, 0.3 m

¹⁾ According to EN 60529

Mechanics/electronics

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

EMC:	According to EN 60947-5-2
Continuous current I _a :	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_S 2) At I_a max 3) Without load 4) U_b and T_a constant 5) Of S_r

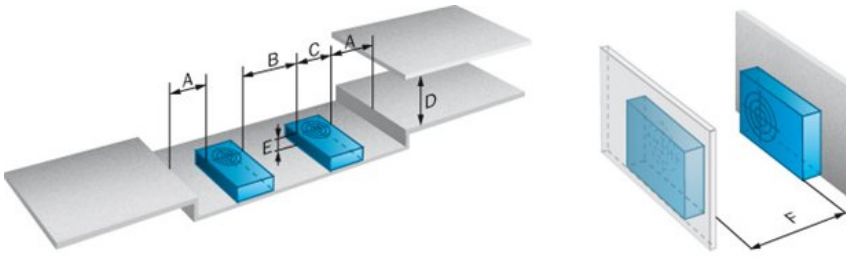
Reduction factors

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

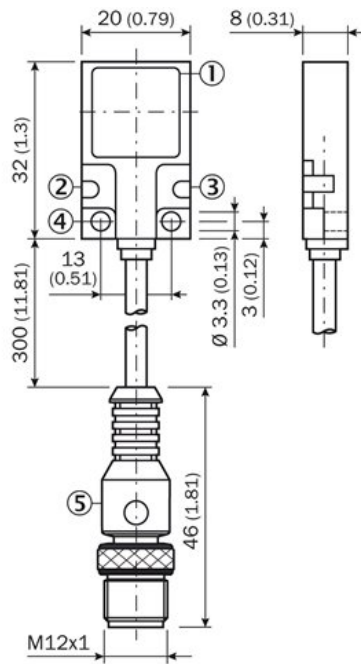
Installation note

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



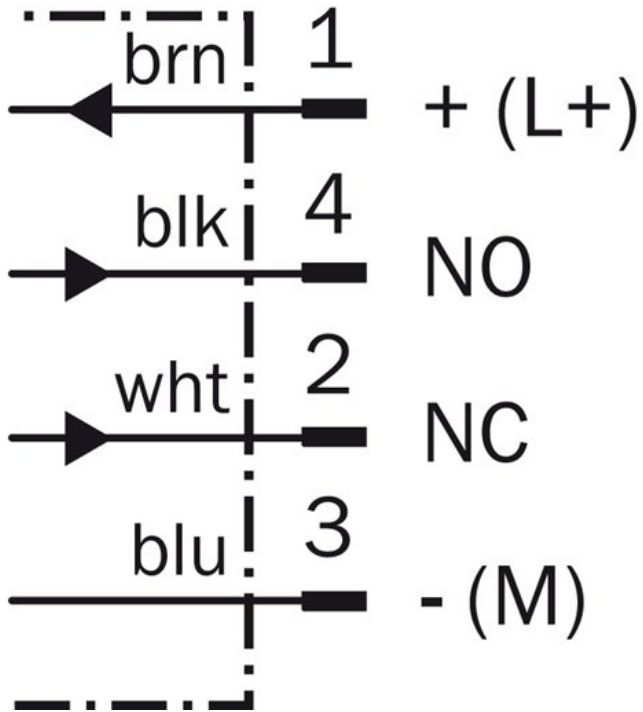
Dimensional drawing



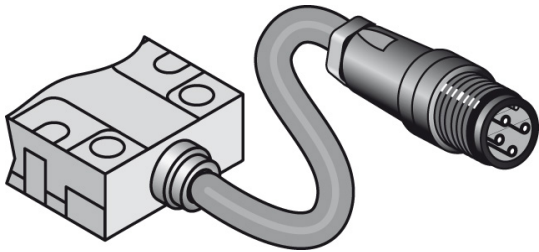
- 1| Sensing face
- 2| Operation status LED, green
- 3| Status LED, yellow
- 4| Mounting hole
- 5| Connection

All dimensions in mm (inch)

Connection diagram



Connection type



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