



Capacitive Proximity Sensors
Rectangular housing, CQ28

CQ28-10NNP-KW1S03



Model Name > CQ28-10NNP-KW1S03
Part No. > 6049010



At a glance

- PNP or NPN output versions are available
- Operating distance up to 10 mm
- High electromagnetic immunity
- Extra narrow rectangular housing (5.5 mm)
- Short-circuit reverse polarity and power-up pulse suppression protection
- IP 68 enclosure rating
- Programmable complementary output function as NO or NC
- Two LED status indicators for output and sensitivity

Your benefits

- Flat housing design saves installation space on the machine
- Time-saving installation on machine via zip tie or counter sunk screws
- Time-saving setup via control wire or a pushbutton
- High EMC immunity prevents false switching and increases throughput
- Non-contact level measurement, even through container or tank walls, which eliminates drilling holes and thus reduces installation time



Features

Design:	Rectangular
Dimensions (W x H x D):	28 mm x 46 mm x 5.5 mm
Sensing range Sn:	10 mm
Assured sensing range Sa:	7.2 mm
Installation type:	Non-flush
Switching frequency:	10 Hz
Output type:	NPN
Output function:	NC or NO
Electrical wiring:	DC 4-wire
Enclosure rating:	IP 68 ¹⁾
Electrical connection:	Cable with connector M8, 4-pin, 0.2 m ²⁾
Adjustment:	Single teach-in button cable, Sensitivity

¹⁾ According to EN 60529 ²⁾ Do not bend below 0 °C

Mechanics/electronics

Housing material:	Plastic
Supply voltage:	10 V DC ... 30 V DC
Residual ripple:	≤ 10 %
Voltage drop:	≤ 2.5 V DC ¹⁾
Power consumption:	≤ 12 mA ²⁾
Time delay before availability:	≤ 300 ms
Repeatability:	≤ 5 % ^{3) 4)}
Temperature drift (of Sr):	± 10 %
EMC:	According to EN 60947-5-2 ⁵⁾
Output current I _a :	≤ 200 mA
Cable material:	PVC
Short-circuit protection:	✓
Reverse polarity protection:	✓
Shock and vibration resistance:	30 g, 11 ms/10 ... 55 Hz, 1 mm
Ambient temperature operation:	-20 °C ... +85 °C
Ambient storage temperature:	-40 °C ... +85 °C
Housing cap material:	PBT

¹⁾ At I_a max ²⁾ Without load ³⁾ Of Sr ⁴⁾ U_b and T_a constant ⁵⁾ In EMC critical applications, conducted interference levels may lie in the frequency range of the oscillator. This can cause changes to the output signal.(see operating instructions)

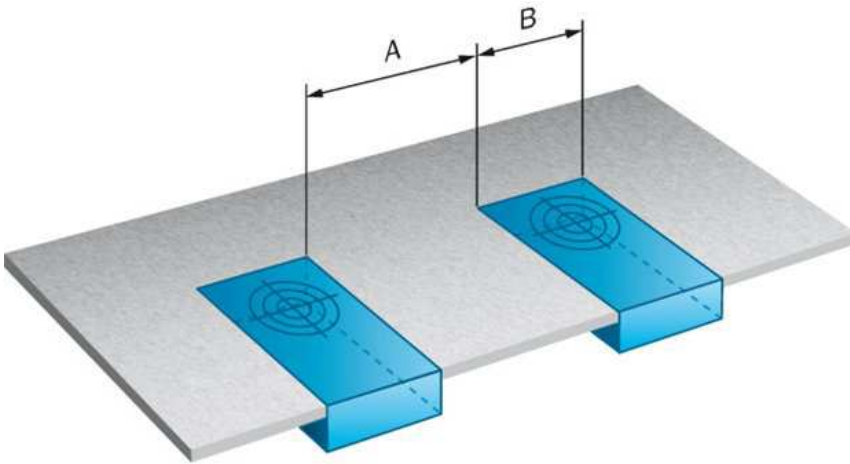
Reduction factors

Note:	The values are reference values which may vary
Metal:	1
Water:	1
PVC:	Ca. 0.4
Oil:	Ca. 0.25

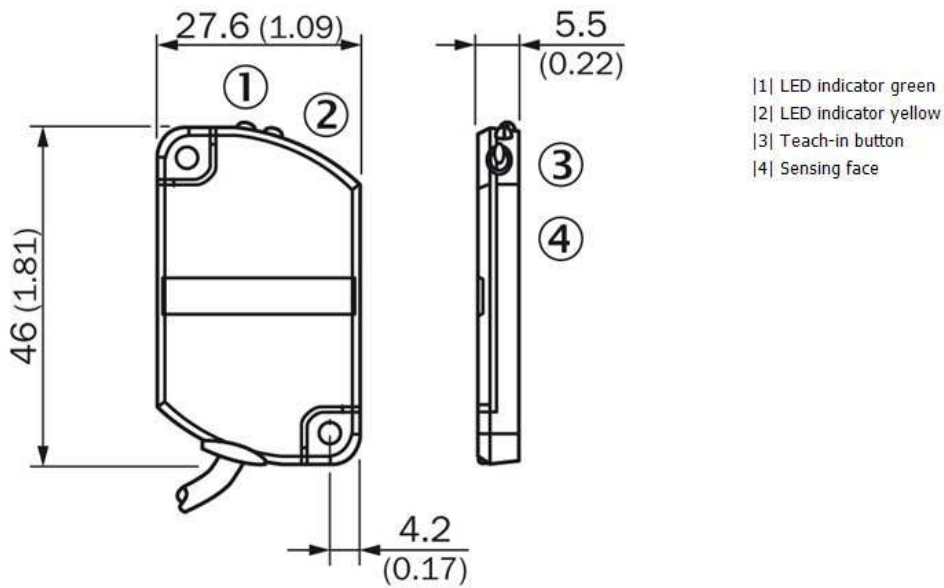
Installation note

Remark:	Associated graphic see "Installation"
A:	27.6 mm
B:	27.6 mm

Installation note

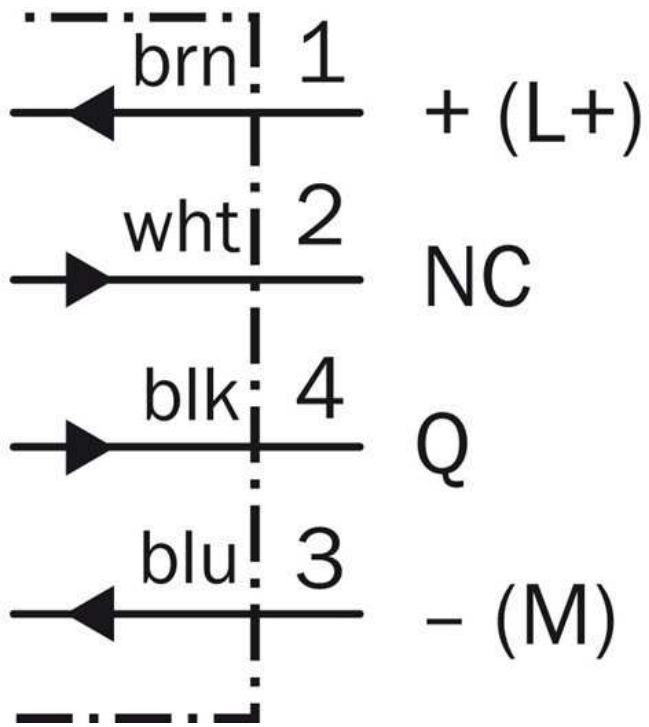


Dimensional drawing



All dimensions in mm (inch)

Connection diagram



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