



Illustration may differ



Ordering information

Type	Part no.
CQ28-10NPP-KW1S13	6068387

Other models and accessories → www.sick.com/CQ

Detailed technical data

Features

Housing	Rectangular
Dimensions (W x H x D)	28 mm x 46 mm x 5.5 mm
Sensing range S_n	1 mm ... 10 mm
Safe sensing range S_a	7.2 mm
Installation type	Non-flush
Switching frequency	10 Hz
Connection type	Cable with connector M12, 3-pin, 2 m ¹⁾
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Adjustment	Single teach-in button (Sensitivity)
Enclosure rating	IP68 ²⁾

¹⁾ Do not bend below 0 °C.

²⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 %
Voltage drop	≤ 2.5 V DC ¹⁾
Current consumption	12 mA ²⁾
Time delay before availability	≤ 300 ms

¹⁾ At I_a max.

²⁾ Without load.

³⁾ Of S_r .

⁴⁾ Supply voltage U_b and constant ambient temperature T_a .

⁵⁾ In EMC critical applications, conducted interference levels may lie within the frequency range of the oscillator. This can cause changes to the output signal. (See operating instructions.)

Reproducibility	≤ 5 % ^{3) 4)}
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2 ⁵⁾
Continuous current I_a	≤ 200 mA
Cable material	PUR
Conductor size	0.14 mm ²
Short-circuit protection	✓
Reverse polarity protection	✓
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
Ambient operating temperature	-20 °C ... +85 °C
Ambient temperature, storage	-40 °C ... +85 °C
Housing material	Plastic, PBT
Sensing face material	Plastic

1) At I_a max.

2) Without load.

3) Of S_r.

4) Supply voltage U_b and constant ambient temperature T_a.

5) In EMC critical applications, conducted interference levels may lie within 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	Approx. 0.4
Oil	Approx. 0.25
Glass	0.6
Ceramics	0.5
Alcohol	0.7
Wood	0.2 ... 0.7

Installation note

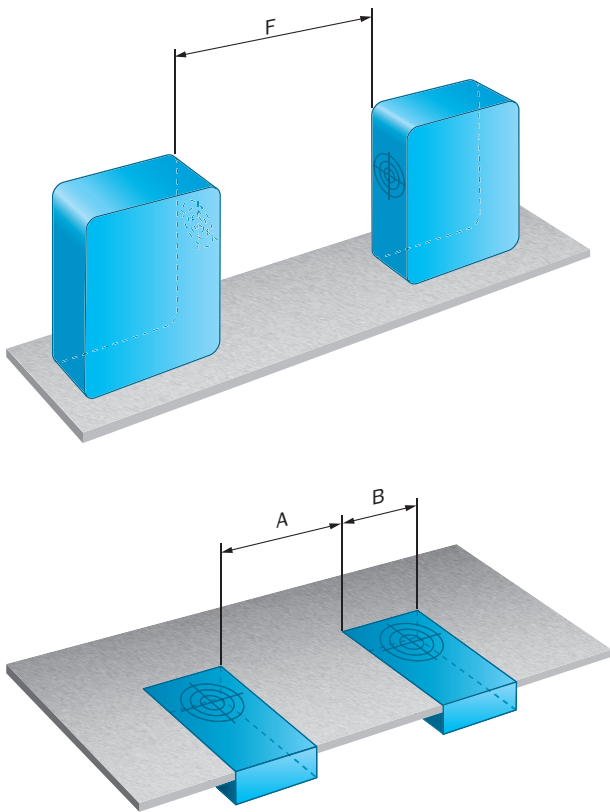
Remark	Associated graphic see "Installation"
A	27.6 mm
B	27.6 mm
F	6 x S _n (max. 60 mm)

Classifications

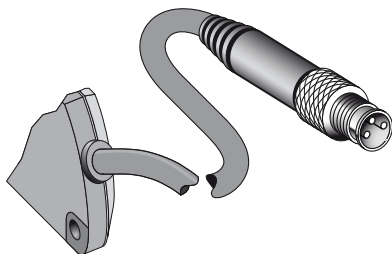
eCl@ss 5.0	27270102
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eCl@ss 6.0	27270102
eCl@ss 6.2	27270102
eCl@ss 7.0	27270102
eCl@ss 8.0	27270102
eCl@ss 8.1	27270102

eCl@ss 9.0	27270102
eCl@ss 10.0	27270102
eCl@ss 11.0	27270102
eCl@ss 12.0	27274201
ETIM 5.0	EC002715
ETIM 6.0	EC002715
ETIM 7.0	EC002715
ETIM 8.0	EC002715
UNSPSC 16.0901	39122230

Installation note



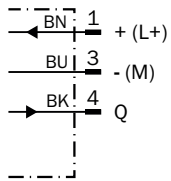
Connection type



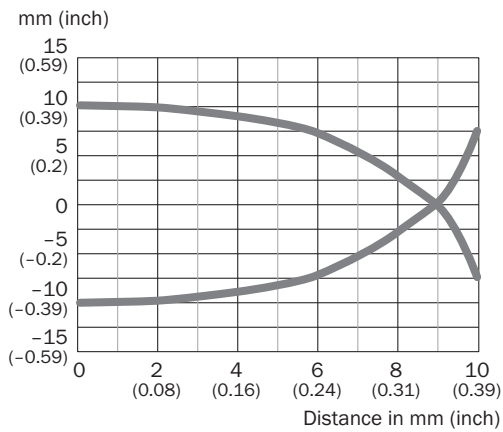
Connection diagram



Cd-045

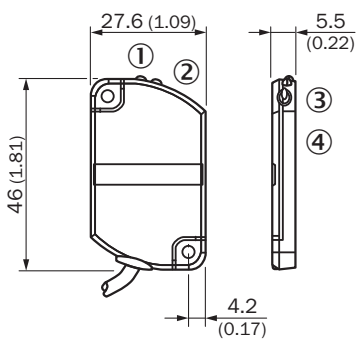


Response diagram



Dimensional drawing (Dimensions in mm (inch))

CQ28, cable with male connector



- ① LED indicator green
- ② LED indicator yellow
- ③ Teach-in button
- ④ Sensing face

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