



Illustration may differ



Ordering information

Type	Part no.
CQ28-10NPP-KW1S02	6037194

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 M8 male connector, 4-pin, 230 mm ¹⁾
Switching output	PNP
Output function	NC or NO
Electrical wiring	DC 4-wire
Adjustment	Single teach-in button (Sensitivity) Cable (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	PVC
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.).

Safety-related parameters

MTTF_D	1,112 years
DC_{avg}	0 %
T_M (mission time)	20 years

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

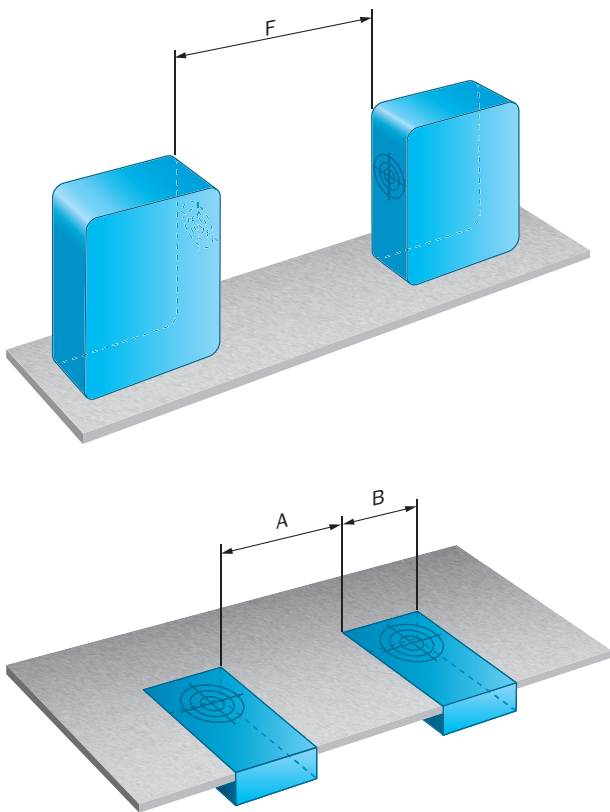
Remark	Associated graphic see "Installation"
A	27.6 mm
B	27.6 mm

Classifications

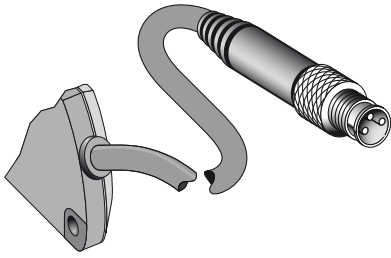
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eCl@ss 8.0	27270102
eCl@ss 8.1	27270102
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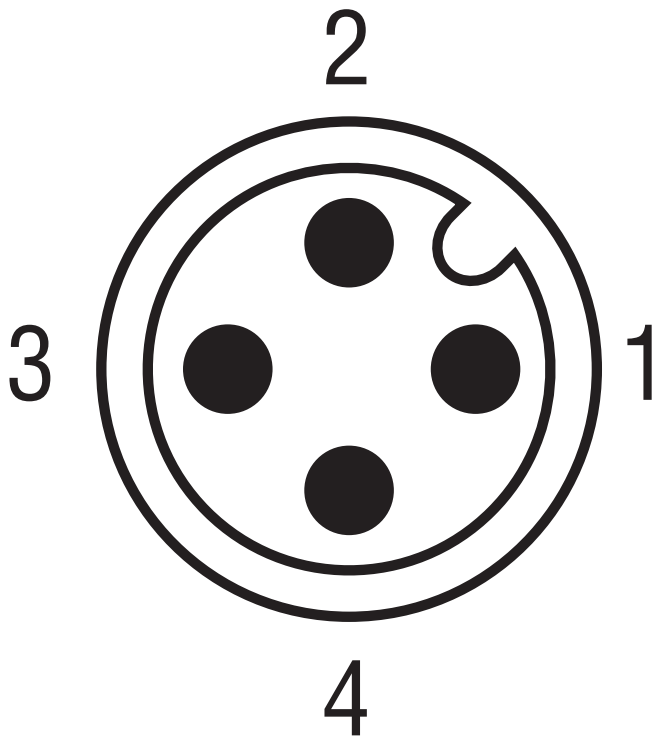
Installation note



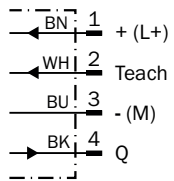
Connection type



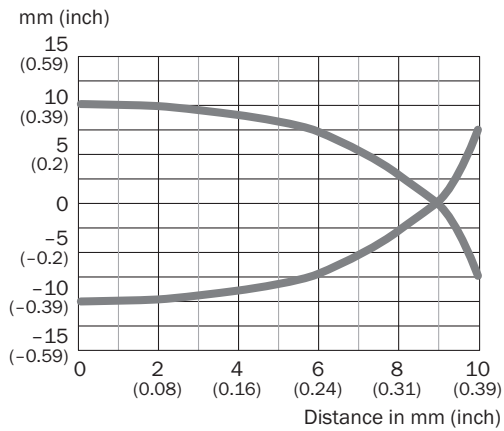
Connection diagram



Cd-092

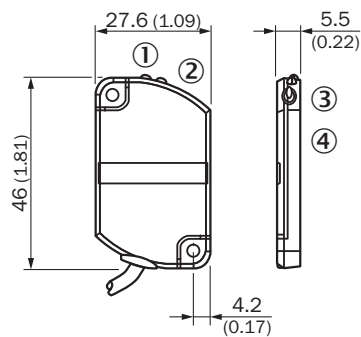


Response diagram



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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