



CQ35-25NPP-KW1

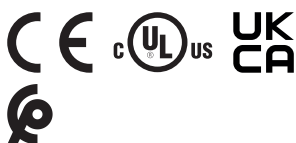
CQ

CAPACITIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

| Type | Part no. |
|----------------|----------|
| CQ35-25NPP-KW1 | 6020478 |

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

Detailed technical data

Features

| | |
|--|--|
| Housing | Rectangular |
| Dimensions (W x H x D) | 35 mm x 69.5 mm x 15 mm |
| Sensing range S_n | 4 mm ... 25 mm |
| Safe sensing range S_a | 18 mm |
| Installation type | Non-flush |
| Switching frequency | 50 Hz |
| Connection type | Cable, 4-wire, 2 m ¹⁾ |
| Switching output | PNP |
| Output function | Complementary |
| Electrical wiring | DC 4-wire |
| Adjustment | Potentiometer Sensitivity (270°) |
| Enclosure rating | IP67 ²⁾ |
| Items supplied | Screwdriver for potentiometer adjustment (1 x) |

¹⁾ Do not bend below 0 °C.

²⁾ According to EN 60529.

Mechanics/electronics

| | |
|-----------------------|---------------------|
| Supply voltage | 10 V DC ... 36 V DC |
|-----------------------|---------------------|

¹⁾ Of U_B .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Of S_r .

⁵⁾ Supply voltage U_B and constant ambient temperature T_a .

⁶⁾ 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.).

| | |
|---|---|
| Ripple | ≤ 10 % ¹⁾ |
| Voltage drop | ≤ 2.5 V DC ²⁾ |
| Current consumption | 10 mA ³⁾ |
| Time delay before availability | ≤ 100 ms |
| Hysteresis | 4 % ... 20 % |
| Reproducibility | ≤ 5 % ^{4) 5)} |
| Temperature drift (of S_r) | ± 10 % |
| EMC | According to EN 60947-5-2 ⁶⁾ |
| Continuous current I_a | ≤ 200 mA |
| Cable material | PVC |
| Conductor size | 0.34 mm ² |
| Short-circuit protection | ✓ |
| Power-up pulse protection | ✓ |
| Shock and vibration resistance | 30 g, 11 ms / 10 ... 55 Hz, 1 mm |
| Ambient operating temperature | -25 °C ... +75 °C |
| Housing material | Plastic, PC |
| Sensing face material | Plastic |
| UL File No. | NRKH.E191603 |

¹⁾ Of U_B.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Of S_r.

⁵⁾ Supply voltage U_B and constant ambient temperature T_a.

⁶⁾ 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 | 897 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

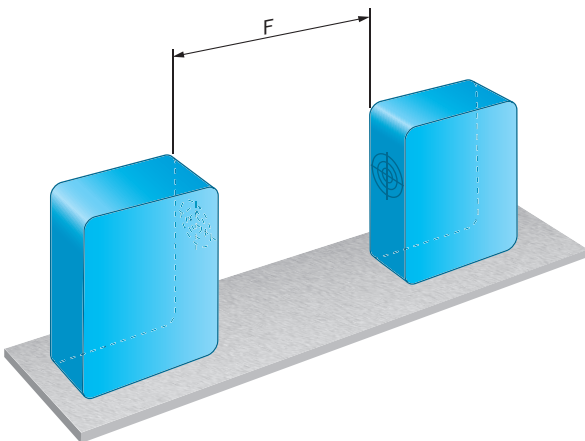
| | |
|---------------|---------------------------------------|
| Remark | Associated graphic see "Installation" |
|---------------|---------------------------------------|

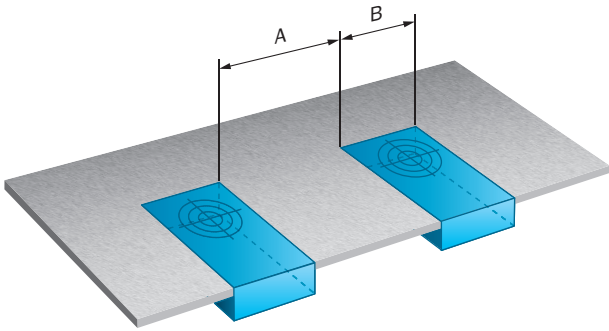
| | |
|----------|----------------------------------|
| A | 35 mm |
| B | 35 mm |
| F | 6 x S _n (max. 150 mm) |

Classifications

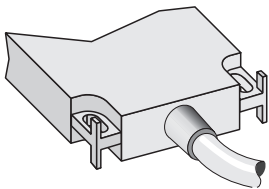
| | |
|-----------------------|----------|
| ECLASS 5.0 | 27270102 |
| ECLASS 5.1.4 | 27270102 |
| ECLASS 6.0 | 27270102 |
| ECLASS 6.2 | 27270102 |
| ECLASS 7.0 | 27270102 |
| ECLASS 8.0 | 27270102 |
| ECLASS 8.1 | 27270102 |
| ECLASS 9.0 | 27270102 |
| ECLASS 10.0 | 27270102 |
| ECLASS 11.0 | 27270102 |
| ECLASS 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



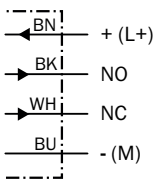


Connection type



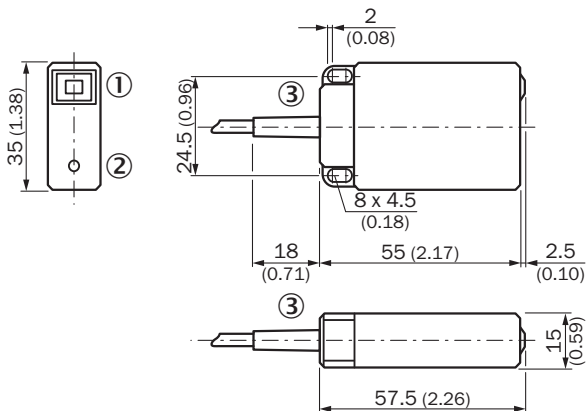
Connection diagram

Cd-005



Dimensional drawing (Dimensions in mm (inch))

CQ35, cable



- ① Display LED
- ② Potentiometer
- ③ Connection

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