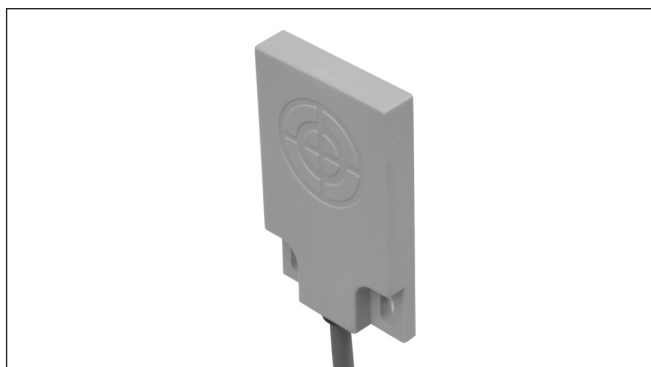


# Level Sensors

## Capacitive Level Detector

### Type CD50 CNF ..

CARLO GAVAZZI



- Basic capacitive water level sensor
- For water storage tanks in mini-pools and whirlpools
- Detection of excess water in the whirlpool tub
- Safety device to control the operation of the pump
- Mounting by screws or glued on the outside of any non-metallic tank
- Supply 10-30 VDC or 5 VDC

## Product Description

Capacitive level detectors. 3-wire DC sensors with open collector NPN or PNP transistor output. The sensors are available in a 5 VDC version and a 10-30 VDC version.

The sensing distance is fixed and works through a non-metallic wall of up to 20 mm of thickness.

## Ordering Key

**CD50 CNF 06 NO**

Capacitive proximity switch	_____
Housing style	_____
Housing size	_____
Housing material	_____
Housing length	_____
Detection principle	_____
Sensing distance	_____
Output type	_____
Output configuration	_____

## Type Selection

Supply	Housing size (mm)	Rated operating distance (S <sub>n</sub> )	Mounting	Ordering no. Transistor NPN/ cable, make switching	Ordering no. Transistor NPN/ cable, break switching	Ordering no. Transistor PNP/ cable, make switching
10-30 VDC	50 x 30 x 7	10 mm	M3 screws or glued	CD50CNF10NO	CD50CNF10NC	CD50CNF10PO
10-30 VDC	50 x 30 x 7	7 mm	M3 screws or glued		CD50CNF07NC	CD50CNF07PO
10-30 VDC	50 x 30 x 7	6 mm	M3 screws or glued	CD50CNF06NO		
5 VDC	50 x 30 x 7	5 mm	M3 screws or glued	CD50CNF05NO		

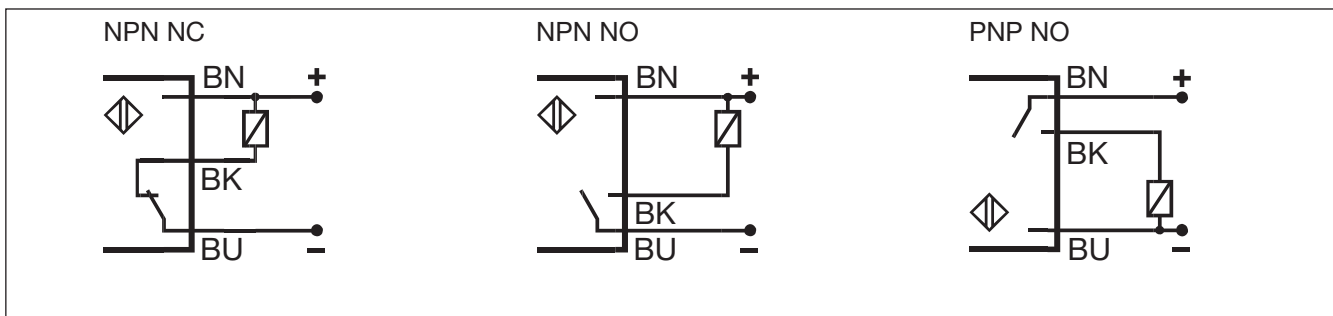
## Specifications

<b>Rated operation dist. (S<sub>n</sub>)</b> Fixed CD50CNF10XX Fixed CD50CNF07XX Fixed CD50CNF06NO Fixed CD50CNF05NO	10 mm (ref. st. 37 grounded) 7 mm (ref. st. 37 grounded) 6 mm (ref. st. 37 grounded) 5 mm (ref. st. 37 grounded)	<b>Output</b> CD50CNFXXNO  CD50CNFXXNC  CD50CNFXXPO	Open collector, NPN, make switching Open collector, NPN, break switching Open collector, PNP, make switching
<b>Rated operational volt. (U<sub>e</sub>)</b> Fixed CD50CNF10-07-06XX  Fixed CD50CNF05NO	10-30 VDC ± 10% (ripple included)  5 VDC ± 10% (ripple included)	<b>Environment</b> Degree of protection Operating temperature Storage temperature	IP 67 0 to +60°C (32 to +140°F) -30 to +75°C (-22 to +167°F)
<b>Ripple</b>	≤ 10%	<b>Housing material</b>	Noryl, grey
<b>Rated operational current (I<sub>e</sub>)</b> Continuous	≤ 50 mA	<b>Connection</b> Cable	2.0 m, 3 x 0.25 mm <sup>2</sup> grey PVC, oil proof
<b>No-load supply current (I<sub>o</sub>)</b>	≤ 10 mA	<b>Weight</b>	120 g
<b>Leakage current</b>	< 100 μA	<b>CE-marking</b>	Yes
<b>Voltage drop (U<sub>d</sub>) @ 50 mA</b>	1.5 V	IEC61000-4-2 IEC61000-3-2/ IEC61000-3-3 IEC61000-4-4 class B IEC61000-4-6	±4KV cont, ±8KV air 3V/m ±2KV 3Vrms*
<b>Frequency of operating cycles (f)</b> CD50CNF10XX CD50CNF07XX CD50CNF06XX CD50CNF05XX	10 Hz 10 Hz 10 Hz 10 Hz		

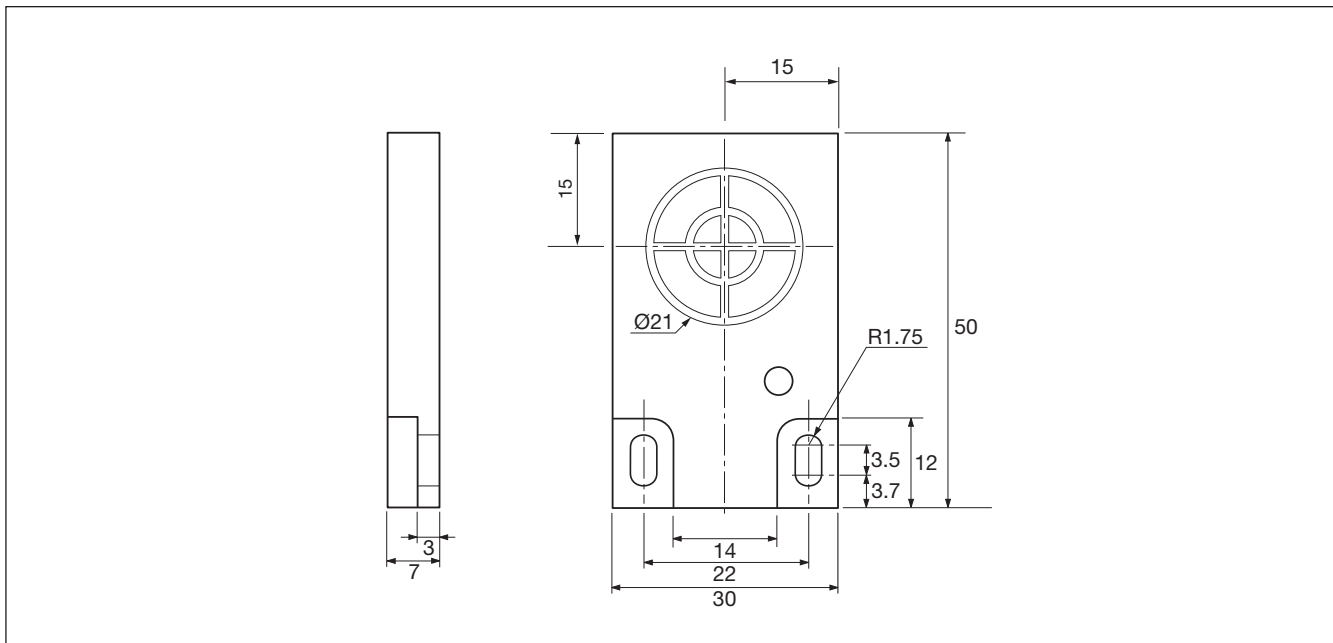
\*Not observed around the frequency: CD50CNF05xx: 400KHz - 760KHz, CD50CNF06xx: 600KHz - 1050KHz, CD50CNF07xx : 550KHz - 1100KHz, CD50CNF10xx: 2150KHz - 5050KHz.

Specifications are subject to change without notice (16.10.2020).

## Wiring Diagram



## Dimensions



## Delivery Contents

- Capacitive switch
- **Packaging:** Plastic bag