

# Level Sensors

## Capacitive Level Detector

### Type VC 5510

CARLO GAVAZZI



- Adjustable sensing distance 2-10 mm
- Rated operational voltage: 5 to 30 VDC
- Output: DC 100 mA, NPN or PNP
- Output: ON/OFF delay or no delay
- Make or break switching function
- LED indication when activated
- 1.5 m PVC cable
- IP 65

## Product Description

Capacitive level detector in flat pack housing, size 35 x 55 x 15 mm. Easy mounting with two M4 screws. Typical applications are in whirlpools (jacuzzis) for switching ON/-

OFF the heating element, starting and stopping the air pump, controlling the level of the water, the level of the disinfection fluid etc.

## Ordering Key

**VC 55 10 NNOPT**

Type \_\_\_\_\_  
Housing \_\_\_\_\_  
Range \_\_\_\_\_  
Output type \_\_\_\_\_  
Housing material \_\_\_\_\_  
Output ON/OFF delay \_\_\_\_\_

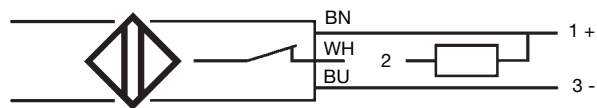
## Type Selection

Housing dimensions W x H x D	Rated operating dist. (S <sub>n</sub> )	Output	Ordering no. NPN Make switching	Ordering no. NPN Break switching	Ordering no. PNP Make switching	Ordering no. PNP Break switching
35 x 55 x 15	10 mm	No delay	VC 5510 NNOP	VC 5510 NNCP	VC 5510 PNOP	VC 5510 PNCP
35 x 55 x 15	10 mm	ON/OFF delay	VC 5510 NNOPT	VC 5510 NNCPT	VC 5510 PNOPT	VC 5510 PNCPT

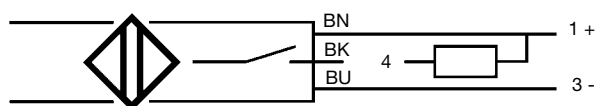
## Specifications

<b>Rated operation dist. (S<sub>n</sub>)</b>	2-10 mm factory set at 10 mm	<b>Frequency of operating cycles (delay times)</b>	> 0.1 Hz (depending upon delay time)
<b>Sensitivity</b>	Adj. single turn pot. meter	<b>Delay</b> xNxPT	<b>ON</b> $1_s < t_{ON} < 5_s$ (typ.3s)
<b>Effective operating dist. (S<sub>r</sub>)</b>	$0.9 \times S_n \leq S_r \leq 1.1 \times S_n$	<b>OFF</b>	$1_s < t_{OFF} < 5_s$ (typ.3s)
<b>Usable operating dist. (S<sub>u</sub>)</b>	$0.8 \times S_r \leq S_u \leq 1.2 \times S_r$	<b>Indication when activated</b>	LED, red
<b>Assured operating dist. (S<sub>a</sub>)</b>	$0 \leq S_a \leq 0.81 S_n$	<b>Environment</b> Degree of protection	IP 65
<b>Hysteresis (H)</b>	3-20% of sensing dist.	<b>Temperature</b> Operating temperature Storage temperature	-0° to +50°C (+32° to +122°F) -30° to +80°C (-22° to +176°F)
<b>Rated operational volt. (U<sub>e</sub>)</b>	5 to 30 VDC (ripple included)	<b>Housing material</b>	PC/ABS, grey
<b>Ripple</b>	≤ 10%	<b>Connection</b> Cable	1.5 m, 3 x 0.3 mm <sup>2</sup> grey PVC, oil proof
<b>Rated operational current (I<sub>e</sub>)</b> Continuous	≤ 100 mA	<b>Weight</b>	40 g
<b>No-load supply current (I<sub>o</sub>)</b>	≤ 10 mA	<b>Approvals</b>	UL
<b>Voltage drop (U<sub>d</sub>)</b>	≤ 1.5 VDC at max. load	<b>CE-marking</b>	Yes
<b>Power ON delay</b> xNxP xNxPT	Max. 40 ms Max. 5 s		

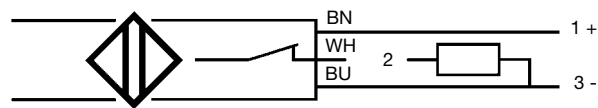
## Wiring Diagrams



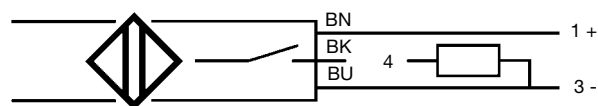
VC 5510 NNCP (T)



VC 5510 NNOP (T)

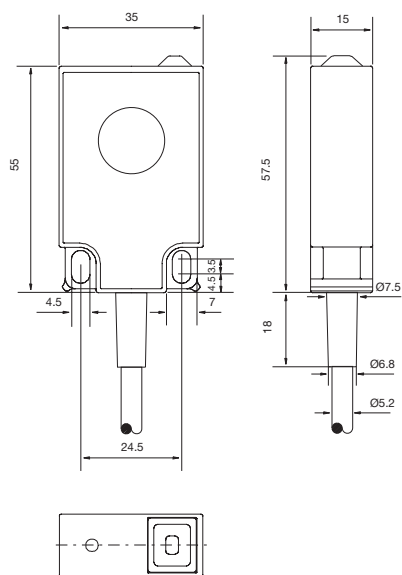


VC 5510 PNCP (T)



VC 5510 PNOP (T)

## Dimensions



## Delivery Contents

- Capacitive switch: VC 5510 ....
- **Packaging:** plastic bag