## Proximity Sensors Capacitive Level Detector, Flat Pack Polycarbonate Housing Type VC 5510





- 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
- IP65

#### **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 desinfection fluid etc.

#### 

### **Type Selection**

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

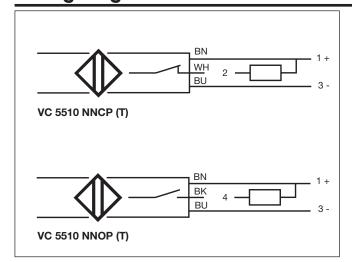
### **Specifications**

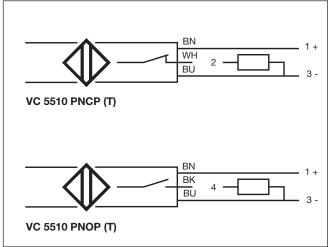
| Rated operation dist. (S <sub>n</sub> )                | 2-10 mm  |         |  |
|--|--|---------|--|
|  | factory set at 10 mm                               |         |  |
| Sensitivity  | Adj. single turn pot. meter                        |         |  |
| Effective operating dist. (S <sub>r</sub> )            | $0.9~x~S_n \leq S_r \leq 1.1~x~S_n$                |         |  |
| Usable operating dist. (S <sub>u</sub> )               | $0.8~x~S_r \leq S_u \leq 1.2~x~S_r$                | In      |  |
| Assured operating dist. (Sa)                           | $0 \leq S_a \leq 0.81 \ S_n$                       | E       |  |
| Hysteresis (H)   | 3-20% of sensing dist.                             | -i      |  |
| Rated operational volt. (U <sub>e</sub> )              | 5 to 30 VDC<br>(ripple included)                   | Te      |  |
| Ripple   | ≤ 10%  | _ (     |  |
| Rated operational current (I <sub>e</sub> ) Continuous | ≤ 100 mA   | H       |  |
| No-load supply current (I <sub>o</sub> )               | ≤ 10 mA  | (       |  |
| Voltage drop (U <sub>d</sub> )                         | ≤ 1.5 VDC at max. load                             | _       |  |
| Power ON delay<br>xNxP<br>xNxPT                        | Max. 40 ms<br>Max. 5 s                             | M<br>Al |  |
| Frequency of operating cycles xNxP xNxPT               | ≥ 15 Hz<br>> 0.1 Hz (depending upon<br>delay time) |         |  |

| t <sub>oN</sub> < 40 ms  |
|--|
| FF t <sub>OFF</sub> < 40 ms<br>ON 1s < t <sub>ON</sub> < 5 s (typ. 3 s)<br>FF 1s < t <sub>OFF</sub> < 5 s (typ. 3 s) |
| LED, red   |
| IP 65  |
| -0° to +50°C (+32° to +122°F)<br>-30° to +80°C (-22° to +176°F)  |
| PC/ABS, grey   |
| 1.5 m, 3 x 0.3 mm <sup>2</sup><br>grey PVC, oil proof  |
| 40 g   |
| UL   |
| Yes  |
| )  |

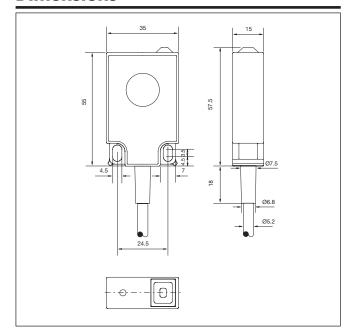


# **Wiring Diagrams**





#### **Dimensions**



# **Delivery Contents**

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

# **Mouser Electronics**

**Authorized Distributor** 

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#### Carlo Gavazzi:

<u>VC5510NNOP</u> <u>VC5510NNOPT</u> <u>VC5510PNCPT</u> <u>VC5510NNCP</u> <u>VC5510NNCPT</u> <u>VD</u> <u>VD1</u> <u>VC5510PNOP</u> VC5510PNCP VC5510PNOPT