



## Options for UV-C systems

The reactors from Van Remmen UV Techniek have several additional equipment options. These options can make the reading, security or cleaning of the reactor easier. The reactor can be modified exactly according to your requirements and specifications. All standard options are explained in this brochure.

### UV sensor

For optimal control of the disinfection process a UV sensor can be used. The sensor can be mounted on (the wall of) the reactor and measures specific the intensity of light within the UV-C frequency (253.7 nm). This makes it possible to measure the aging of the UV lamp, as well as any build up on the quartz tube or change in the transmission of the treated liquid.

The UV sensor is connected to the central electronics in the control box. You will be warned if the intensity is insufficient, and the desired disinfection can no longer be achieved.



Standard UV sensor  
readout in %

### Temperature sensors

TSD or TSS

In circumstances where water does not continually flow through the UV reactor it can be necessary to implement a temperature monitoring device to prevent a high water temperature. When there is minimal flow, the heat produced by the UV lamp(s) can make the water temperature inside the chamber reach unacceptably high levels. The temperature sensor measures the temperature of the UV chamber. It is factory pre-set to a safe maximum level, meaning whenever this temperature is exceeded, the sensor will react in order to cool down the system.

- **Temperature sensor dump valve (TSD)**

If the safe temperature of the UV chamber is exceeded, the associated dump valve will open and allow water to flow to drain (or into a reservoir) thereby cooling the UV lamp. The valve opening duration can be changed to best suit your application, in order to minimise water wastage.

- **Temperature Safety Sensor (TSS)**

If the chamber reaches a high temperature, and a TSS is installed, the lamp will automatically be switched off. This is done to prevent damage to the UV system and components. The lamp will be switched back on automatically when the system cools down. The default factory setting is 40°C. If required, this can be changed during manufacturing.

