



## Float Switches – Pump Up vs. Pump Down & Normally Open vs. Normally Closed

A Pump Up opens the circuit on the rise.

A Pump Down closes the circuit on the rise.

Sometimes the terms 'Normally Open' and 'Normally Closed' are used to describe float switches. Please use the following identities:

- Normally Open = Pump Down
- Normally Closed = Pump Up

A pump with an LCB (Linear Current Booster or pump controller, used with all PV-direct Conergy surface pumps except the SunCentric) will continue to run when the float switch circuit is open. With an LCB, a closed float switch circuit will shut the pump off.

With no controller: Pump will not run when circuit is open. Pump will run when circuit is closed.

So, to shut pump off when the tank is **full**:

- Use Pump Up when no LCB is used.
- Use Pump Down when using an LCB.

To shut pump off when the tank is **empty**:

- Use Pump Up when using an LCB.
- Use Pump Down when no LCB is used.

As of 11/27/2007:

All our float switches are certified safe for drinking water applications, EXCEPT those rated for 25 Amps (DSP-11007 and DSP-11009). The 25A units contain mercury and risk contaminating the system if they were to break.

Windy says that the current ratings that we give to the float switches we sell are based on 28VDC operation. So, the rating for our float switches are really only for 24VDC nominal systems and the current ratings should be halved when used with 48V systems. This ratio is not precise, but it has shown itself to yield accurate results. Keep in mind that the current rating of a float comes into play only with SunCentric pumps. All other Conergy surface pumps use an LCB when in PV-direct systems. In these cases the float wires connect to the LCB float terminals, and the power to the pump does not pass through the float.