

Understanding and Installing Your Lorentz Low Water Probe

What is a Lorentz Low Water Probe?

A Lorentz Low Water Probe is a safety device designed to protect your Lorentz solar-powered pump from running dry. It detects the water level in your well or water source and automatically stops the pump when the water drops below a safe level. This prevents damage to the pump and ensures reliable operation.

Why is the Low Water Probe Important?

- **Prevents Pump Damage:** Stops the pump if the water level is too low, avoiding dry running.
- **Increases System Longevity:** Protects the motor and internal components from overheating or excessive wear.
- **Ensures Reliable Water Supply:** Avoids unnecessary downtime due to pump failures caused by low water levels.

How to Properly Install the Low Water Probe

1. Determine the Ideal Placement

- The probe should be **suspended inside the well, below the static water level** but **above the pump intake**.
- It should be placed at a depth where it will detect a low water condition before the pump starts pulling in air.

2. Secure the Probe in the Well

- Attach the probe to the drop pipe or a separate support cable to keep it in the correct position.
- Ensure the probe is hanging freely and not resting against the well casing or other obstructions.
- Use weather-resistant cable ties or clamps to secure the probe cable alongside the pump wiring.

3. Connect the Probe to the Controller

- Run the probe cable up the well and connect it to the low water sensor input on the Lorentz controller.
- Make sure the connections are secure and waterproof to prevent electrical faults.

- If needed, use a **junction box** at the wellhead to protect the connections from the elements.

4. Configure the System Settings

- Turn on the Lorentz controller and navigate to the sensor settings menu.
- Enable the low water cutoff function and set the appropriate delay to prevent false shutdowns from minor fluctuations.
- Test the system by simulating a low water condition (temporarily lifting the probe out of the water) and ensuring the pump stops as expected.

Troubleshooting Tips

- **Pump is shutting off too early.** Adjust the probe depth so it is slightly lower in the well.
- **Probe not stopping the pump.** Check the wiring connections and ensure the probe is installed in the correct input on the controller.
- **Erratic shutdowns.** Ensure the probe is not touching the well casing, as this can cause false signals.

By following these steps, your Lorentz Low Water Probe will effectively safeguard your solar pumping system, providing reliable water delivery while preventing costly damage. If you have any questions or need assistance, contact Cap Solar for expert support!