WLC 3000 – WLC 6880
Controller and Sensor Specifications

Waterline Controls WLC Series Units are manufactured and supplied as a unit, including sensor with wire, controller and mounting assembly parts. A properly sized slow closing solenoid valve must be supplied and are available from Waterline Controls or can be supplied by others. The level control system consists of solid-state parts with non-corrosive components and is suitable for use outdoors in an industrial application or indoors in a mechanical room environment. The units have automation monitoring outputs, fine control, ease of operation, ease of service and accessibility. The Control Panel comes with a Limited Lifetime Warranty.

The system is automatically controlled within a 1-1/2" range identified as "the operating range" (this range can be changed by a custom ordered probe or by cutting rods or adding to the rods in the field) and is comprised of a sensor mounted inside a 3" sensor housing with wire attached, that is suitable to be placed in a wet environment and installed at the water level. A separate control panel, which is to be mounted outside of the wet environment within a distance of less than 50 feet (1,000 feet is the maximum length of a sensor wire that can be supplied). A solenoid valve supplied and installed in-line shall provide make-up water.

Stainless Steel Sensor Mounting: The 3" sensor housing shall be installed according to the drawings and can be mounted internally or externally. The sensor head can be mounted at the water level in a safe and convenient location according to the drawings using the "U" bolts and mounting bracket provided for an interior mount or the external static pipe for the external mount. The sensor head and its assembly will consist of 3 inch PVC pipe, up to six pre-cut ¼" round stainless steel probes with 14/-20 threads to allow them to be extended (the number of rods depends on the model selected). The adjustment of the sensing system shall be accomplished by moving the 3" PVC mounting sleeve up or down in its mounting bracket and "U" bolt for an internal mount or with a riser pipe for the external mount.

PVC Sensor Mounting: The 3" sensor housing shall be installed according to the drawings. The sensor head shall be mounted inside the catch basin area at the water level in a safe and convenient location according to the drawings. The sensor head and its assembly will consist of 3 inch PVC pipe, four pre-cut ¼" round stainless steel probes. The adjustment of the sensing system shall be accomplished by moving the 3" PVC mounting sleeve up or down. The 3" Static PIPE will have A PVC "TEE": to allow water to move through the pipe evenly.

The Control Panel is certified by an independent third party testing facility (e.g., UL or ETL) to meet Standard UL508 or equivalent for the country in which it is installed. The control panel draws no more than 0.25AMPS at 110VAC or 0.125 Amps at 220VAC. All power relays (Form C) are rated at 30Amps at 250VAC for the normally open relays and 20Amps at 250VAC for all the normally closed relays. All four level outputs have a corresponding set of normally open dry contacts (Form A) rated at 0.5Amps at 60Volts to be connected to an automation system. The Control Panel is of modular construction, such that relays that control the above features can be removed and replaced without replacing the PCB or transformer.

The Solenoid valve shall be sized according to the drawings and shall be normally closed, 110VAC at 0.9Amps at a peak and can be purchased from Waterline Controls or others.

Indicators: The control panel has LED light for each function, a self-test button which cycles through and turns on each water level function in sequence for at least 10 seconds to allow for trouble-shooting as needed. This trouble-shooting feature operates without removing wires or disconnecting the sensing probes. This feature will be automatic and activated by pushing a button. There is an indicator (a Yellow LED) to indicate that this feature is operating. There is an indicator which tells the operator when the controller loses power and when there is debris fouling the probes, and an automatic reset system if the fill valve stays on for longer than six hours without turning off. There is a corresponding set of dry contacts that alerts (Closing a dry contact for a power loss and flashing a dry contact when there is debris fouling the probe) the automation system.