



# FIRE PROTECTION SYSTEMS

## GENERAL INFORMATION:

The WLC Series may look like the competition but the unit is revolutionary in its design. The WLC Series is perfect in any application where water level management is important. It's use of a microprocessor to monitor all its probes for correct operation and then provides outputs to drive the power relays, the Building Automation System and a visual/audible output of the operational status. Using a very low voltage and current prevents WLC Series sensors from fouling or degrading over its lifetime.

All of Waterline Controls' models easily and quickly integrate with existing building automation systems or used as a stand alone. This allows the building operator to easily monitor and manage fire system holding tanks and to replenish, empty and refill the system or circulate as needed with the least amount of effort. Every unit we offer comes with a Lifetime Limited Warranty\*.

## STAND ALONE SYSTEM OR CONNECTS TO BUILDING MANAGEMENT SYSTEM.

## APPLICATIONS

Fire System Holding Tanks

- Initial install and replacement
- Software customized for special situations.

\* See Warranty for details



## COMMUNICATION WITH BUILDING MANAGEMENT

Building Automation dry contacts to tell building operator when:

- The controls lose power.
- Low water
- Lightning strikes
- High water
- Fill cycle ON and OFF
- Service Required of "Filling" depending upon the model.

## FEATURES

- Easy to install.
- Microprocessor controlled.
- Compensates for wave action.
- Easy-to-understand LED display.
- No moving parts or mechanical floats to break or rust.
- Modular Construction.
- One-Step Internal Testing system for the electronics.
- Built for easy troubleshooting.
- All controls have built in self-test systems for the electronics.
- Lifetime Limited Warranty\*
- Adjustable Sensor for water level in the tank.

\* See Warranty for details

## PRODUCT SPECIFICATIONS

- Accurately manages levels to within 1/8" of operating range.
- 30VDC, 24VAC or 110/220VAC - 50/60 Hz: specify voltage required when ordering.
- Separate power relay for each function.
- Dry contacts for are rated for .5 amps at 60 volts.
- Sensor wire should not be spliced. Standard Kit has 50 ft. length.
- Sensor wire available in: 50 ft., 100 ft., 150 ft., 200 ft., 250 ft., 300 ft. or longer lengths if needed.

*All FPT Kits include sensor with wire as specified, controller as specified with proper number of audible alarms, 4" sensor mounting with adjustable sleeve fitting, pipe clamp. (see diagram for sensor mounting)*

## SENSOR PROBES

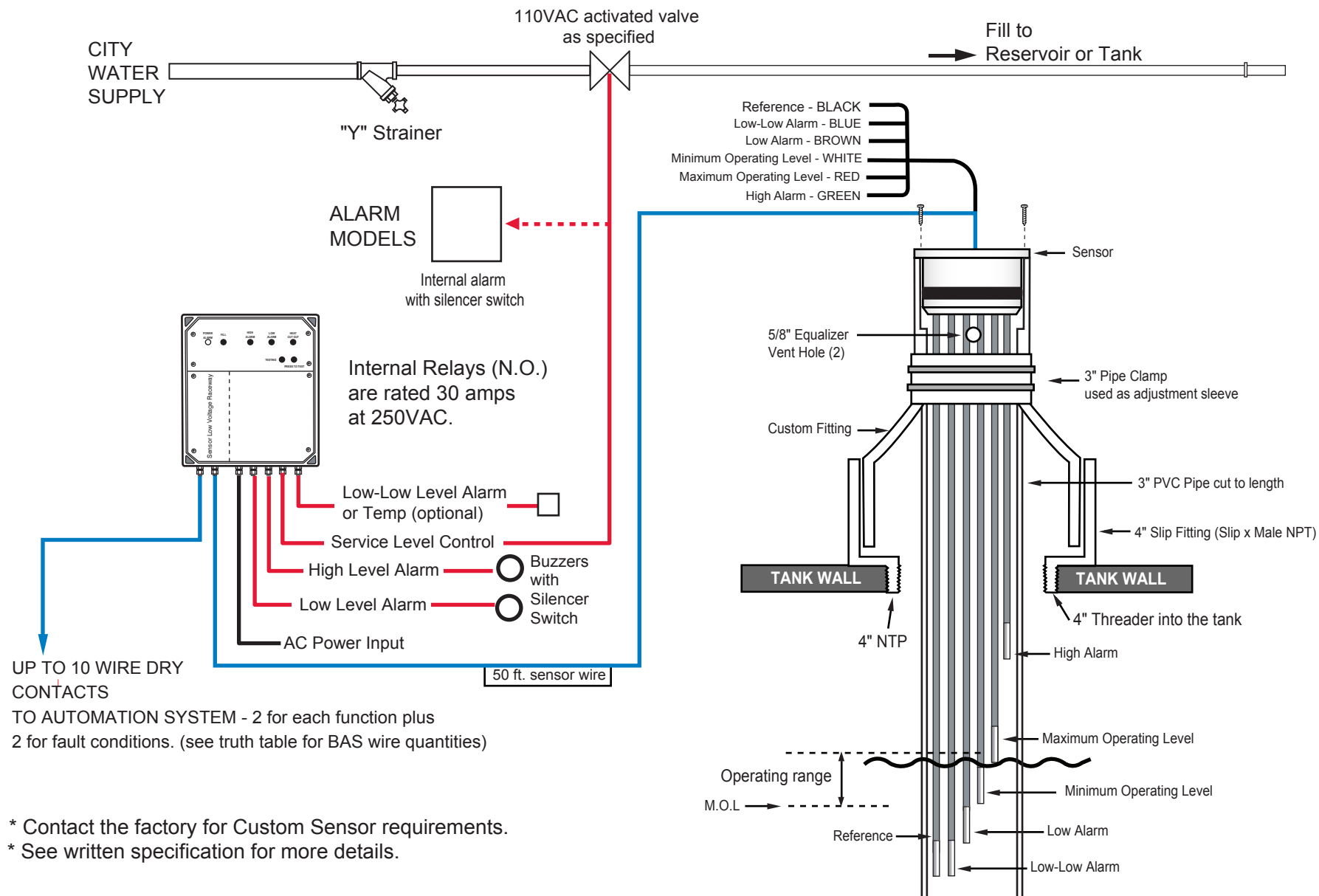
We make custom probes to fit any application. All sensor rod tips are threaded so Extensions can be added if needed.

### Installations:

- A licensed electrician can install the control box and sensors in less than one hour.
- 110VAC Solenoid required for fill models. (We recommend any type of slow closing valve)
- Sensor slips into a 4" fitting in a tank.
- The sensor cable should be installed in a grounded metal conduit in order to prevent spurious signals from interfering with the sensor operation.

# UNIVERSAL DIAGRAM FOR ALL MODELS

## Service Level Fill Control with Low and High Alarm



- \* Contact the factory for Custom Sensor requirements.
- \* See written specification for more details.

1. The 3" PVC Pipe needs to be at least 2" longer than the longest Sensor tip.
2. Adjustment occurs by moving the 3" PVC Pipe up or down and tightening the clamp so it rests on the Custom Fitting.

## MODELS

### SELECTION TABLE

\*All controls have built-in self testing systems.

ALARM MODELS	DESCRIPTION	PROBE CONFIG.	AUDIBLE ALARMS	OPTIONS	BMS DRY CONTACTS								POWER RELAY				SELF TEST
					TOTAL NUMBER	FAULT	POWER LOSS	LOW ALARM	HIGH ALARM	LOW-LOW ALARM	SERVICE LEVEL	BAS WIRES	LOW ALARM	HIGH ALARM	LOW-LOW ALARM	SERVICE LEVEL	
FPT-30A	Low Water Alarm Only	3 PROBE	1	TEMP	3	X	X				X	6				X	X
FPT-45A	Low Water and Service Level Alarms Only	4 PROBE	2	TEMP	5	X	X	X			X	6	X			X	X
FPT-50A	Service Level Alarm With Low And High Alarm	5 PROBE	3	TEMP	7	X	X	X	X		X	8	X	X		X	X
FPT-60A	Service Level Alarm with Low and High Alarm & Low Low Alarm	6 PROBE	3	TEMP	9	X	X	X	X	X	X	10	X	X	X	X	X
<b>CONTROLS MODELS</b>																	
FTP-30	Fill only	3 PROBE		TEMP	3	X	X				X	6				X	X
FPT-45	Service level Fill Control with Low Alarm	4 PROBE	1	TEMP	5	X	X	X			X	6	X			X	X
FPT-50	Service Level Fill Control with Low and High Alarm	5 PROBE	2	TEMP	7	X	X	X	X		X	8	X	X		X	X
FPT-60	Service Level Fill Control with Low and High Alarm	6 PROBE	2	TEMP	9	X	X	X	X	X	X	10	X	X	X	X	X

The low alarm is activated when the water level falls below the low alarm point and remains activated until the water level rises above the level point. The service level is activated when the water level falls below the lower service level point and deactivates when the water level rises above the upper service water level point. This differential is set by an installer. The high water level activates when the water level rises above the high level point and deactivates when the water level falls below the upper service level point.

NOTES: For each function there are two sets of "dry Contacts"; two each for the service level Fill/Alarm, two each for the Low Water, two each for the High Alarm. All audible alarms each have a silencer switch.

## FUNCTIONAL WIRING DIAGRAM

Service Level Fill Control or Alarm with Low and High Alarm (Total Dry Contacts 8) (Total Audible Alarms 2)

