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# FLOW SWITCH AND MANIFOLD ASSEMBLIES

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## Model Numbers

- 34750 – pH/ORP Manifold Assembly (For Economy Electrode)
- 34751 – pH/ORP Manifold Assembly (For Flat Surface Electrode)
- 34752 – Cooling Tower Probe & Manifold Assembly
- 35136 – Cooling Tower Probe & Manifold Assembly (For AC & DC1000-1B Controllers)

**WARNING:** These assemblies are designed for use with water only. They are not intended for use with chemicals. All chemical feed must be done downstream of the manifold.



***Failure to heed this warning could destroy the manifold!***

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## Automatic Operation

The LMI Flow Switch ensures the shutdown of Liquitron® Controller outputs in the event of system flow interruption.

## Backflow Prevention

The LMI Flow Switch incorporates a check valve to prevent backflow.

## Specifications

Max. Temperature _____	140°F (60°C)
Max. Pressure _____	100 psi (6.9 bar)
Min. Flow _____	0.75 GPM (170 L/H)
Transmitter _____	Reed Switch (Flow Switch)
Cable Length _____	10 ft (3 m)
Materials _____	Schedule 80 PVC Fittings

## General

The LMI series of Manifolds are designed for use with *Conductivity, pH* and *ORP Wall Mount Controllers*. They are intended to be installed in a bypass line of a cooling tower or other industrial water treatment system.

The flow switch will interrupt controller operation if flow is insufficient. The flow switch incorporates a check valve to prevent backflow.

## Operation

During operation, the switch will interrupt controller operation in the event that water flow decreases to less than 0.75 GPM (170 L/H) in the bypass line. This causes all output functions of the controller to cease, including shut down of all metering pumps. Control functions will automatically restart when water flow increases to 0.75 GPM or greater.

## Plumbing Connections

Inlet and outlet connections are 3/4" FSLIP.

**Note:** The flow switch must be installed with arrows pointing upwards.

## pH/ORP Electrode Installation

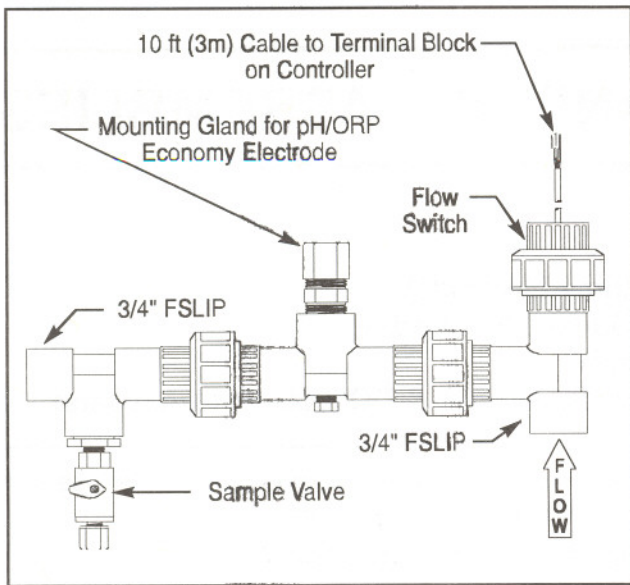
**Note:** The pH electrode must be installed vertically (Figures 1 and 2 on back).

## Conductivity Installation

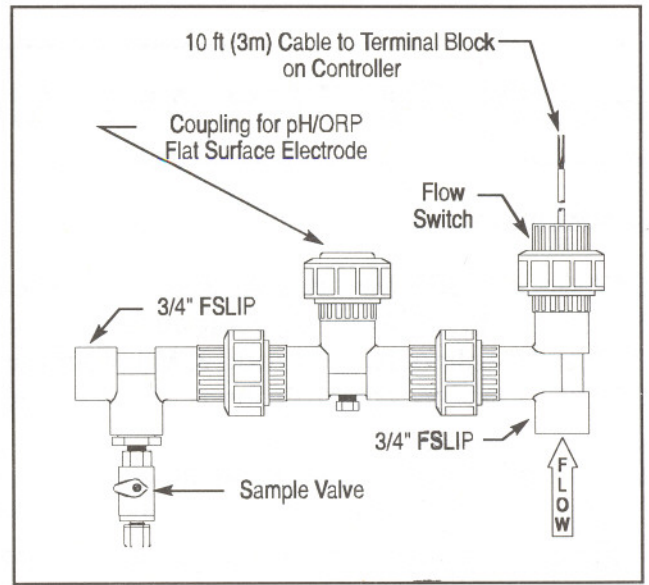
The conductivity probe is connected to the controller by means of a cable with 4-pin connector. The flow switch is connected to the controller by hard wiring to the terminal block or some versions are equipped with a mini-plug.

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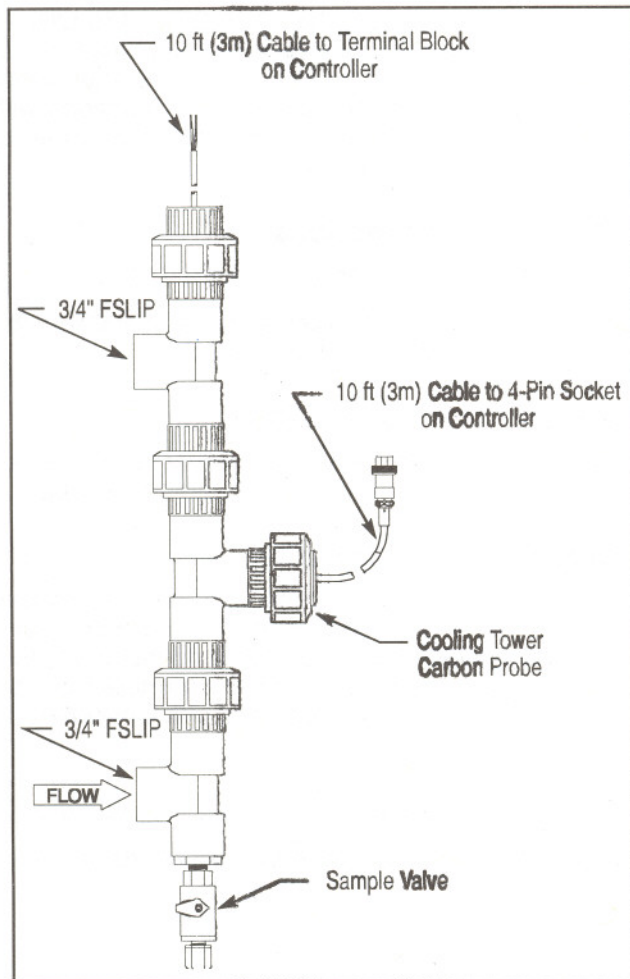
See the LMI *Conductivity, pH, and ORP Controller Instruction Manuals* for complete installation instructions.



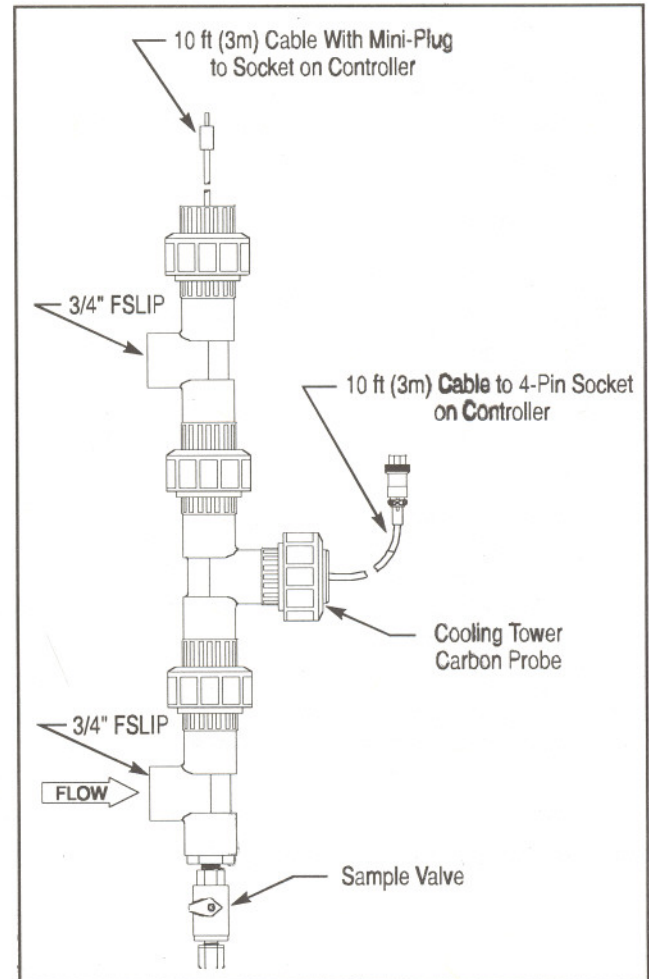
**Fig. 1 Manifold (pH and ORP)**  
**Model No. 34750**



**Fig. 2 Manifold (pH and ORP)**  
**Model No. 34751**



**Fig. 1 Manifold (Conductivity)**  
**Model No. 34752**



**Fig. 2 Manifold (Conductivity)**  
**Model No. 35136**  
**(For AC & DC1000-1B Controllers)**