

## ***VERTICAL LIQUID LEVEL CONTROLLERS***

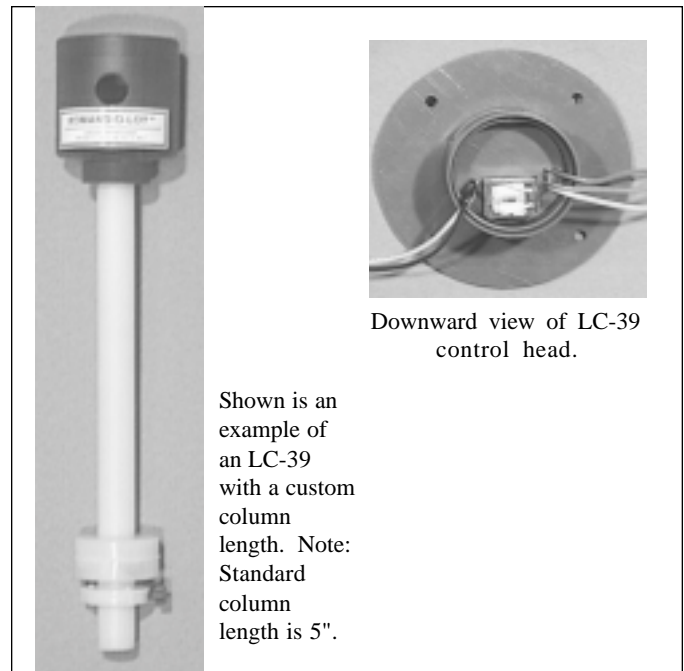
### **OPERATION**

The Series LC-39 is a float type, single point liquid level controller. The LC-39 has a single, factory hard wired, magnetically sensitive switch contained within the column. This switch is operated by magnetic elements located within the float as it is raised and lowered by the liquid. As the column switch opens and closes, the relay contained within the control head actuates. The relay is capable of handling up to 10 amps using a variety of voltages.

This unit is equipped with both a power lead ON when the float is resting on the stop ring and a power ON lead when the float is lifted above the stop ring. As the float rises and falls, the replaceable control head relay conducts electricity through a yellow and red lead respectively. For example; The red lead conducts power when the float is resting on the switch stop ring position. As the float rises, the red lead de-energizes and the yellow lead conducts electricity. As the float begins to descend, the yellow lead de-activates and the red lead becomes active.

### **SPECIAL FEATURES**

- ▣ Direct control eliminates external switching.
- ▣ Normally Closed and Normally Open wired at single point switch action.
- ▣ Low current in tank switching.
- ▣ Modular electrical components for easy Maintenance.
- ▣ All plastics construction prevents corrosion.
- ▣ Heat sealed, leak tight float and columns.



Downward view of LC-39 control head.

Shown is an example of an LC-39 with a custom column length. Note: Standard column length is 5".

### **APPLICATION**

The LC-39 is useful in controlling alarms, heaters, and large solenoid valves. This device is useful in shutting down heaters when the liquid level falls, which prevents heater elements from becoming exposed to air. The LC-39 is also useful when smaller switches cannot handle large alarm loads, such as strobe lights and electromechanical bells and horns. Similarly, very large solenoid valves can also be powered.

The LC-39 should not be used in conjunction with pumps and electrically actuated ball valves because the duration of the on point is not sufficient. Pumps and electrically actuated ball valves require a latching type level controller that allows a long on duration.

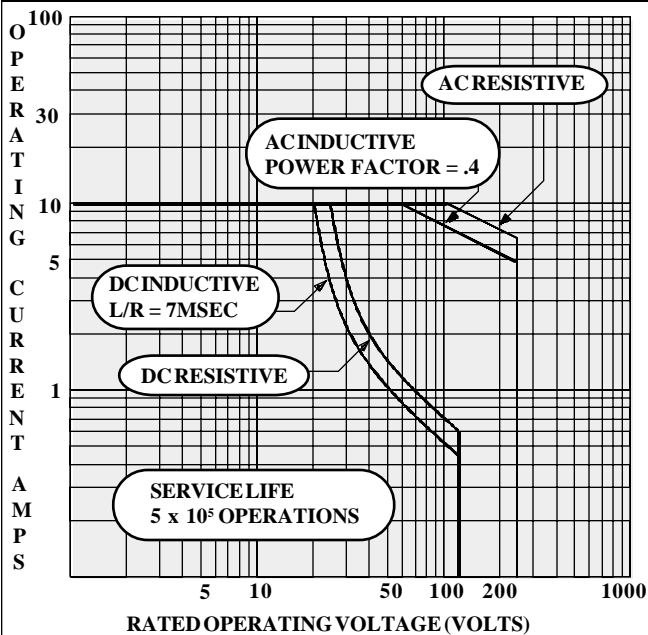
**Safe and Reliable Controller Selection** - In selecting a level controller, the total system design must be considered to assure safe, trouble-free performance. Controller function, material compatibility, adequate power ratings, proper installation, operation and maintenance are the responsibility of the system designer and user. Please feel free to ask for a copy of our Product Warranty.

## LC-39 CONTROLLER SPECIFICATIONS

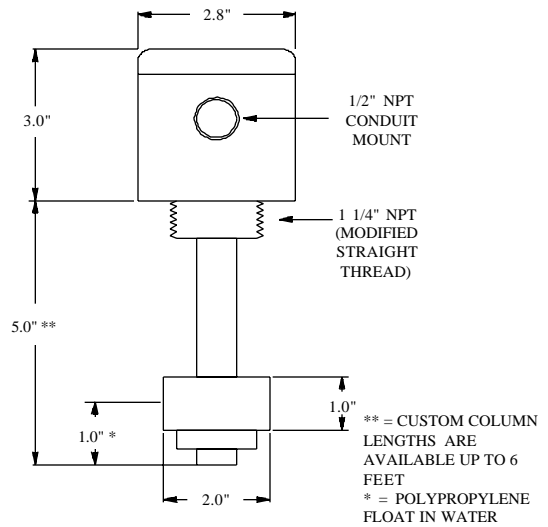
**WETTED MATERIAL:** Polypropylene (PP), Polyvinylidene Fluoride (PVDF)  
**CONTROL HOUSING:** Polyvinyl Chloride (PVC)  
**ELASTOMERS:** CAP / Buna-N  
**ELECTRICAL:** SEE chart below - Replaceable load contactor - 1.6 VA / 1.4 watt switching power with ground protection  
**WIRE:** 16 AWG oil and heat resistant  
**MOUNTING ATTITUDE:** +/- 20 degrees.  
**BUOYANCY:** 33% IN WATER, 40% (PP), 20% (PVDF)

**COLUMN / TANK CLEARANCE:** Flush in clean liquid. 3 inches from the bottom of the tank in precipitate or sediment bearing liquids.  
**MOUNTING BRACKETS:** Rectangular, round, expansion bushings and bulkhead adapters optional  
**TEMPERATURE RANGE:** Wetted section; PP 180° F, PVDF 230° F, PVC control heads and electronics within not to exceed 120° F.  
**ANTI - TURBULENCE SHROUD:** Optional

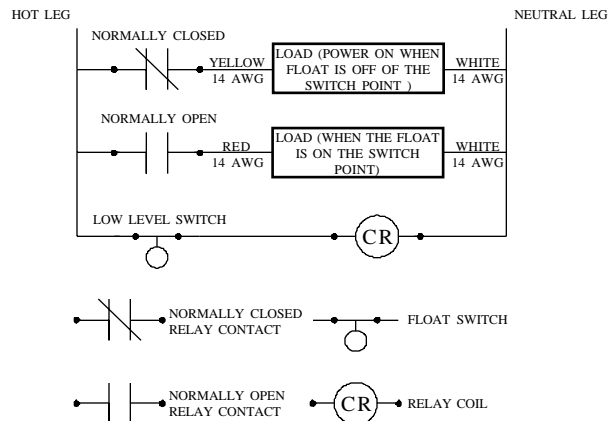
### MAXIMUM SWITCHING CAPACITY



### LC-39 DIMENSIONS



### LC-39 JIC SCHEMATIC



PART NUMBER	VOLTAGE	CURRENT
LC-39 ■ -D012	12	DC
LC-39 ■ -D024	24	DC
LC-39 ■ -D048	48	DC
LC-39 ■ -D110	100/110	DC
LC-39 ■ -A012	12	AC
LC-39 ■ -A024	24	AC
LC-39 ■ -A120	110/120	AC

■ = WET END MATERIAL SECTION  
 P = POLYPROPYLENE  
 F = POLYVINYLIDENE FLUORIDE

NOTE: ALL OF THE ABOVE ARE FOR SINGLE PHASE USE.

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