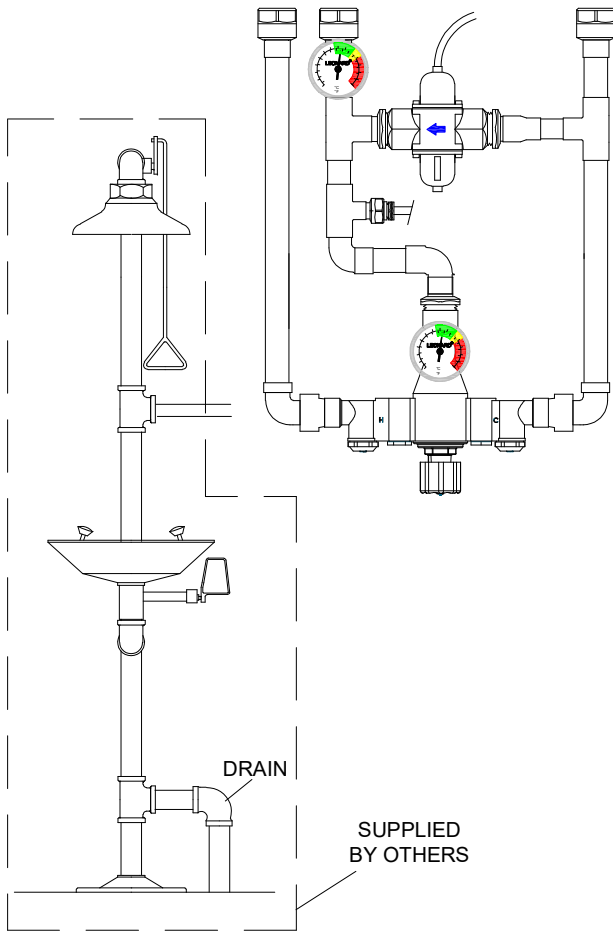


# EMERGENCY MIXING VALVE

## Emergency Mixing Valve for Drench or Combination Units EXL-850-LF

### Dual Manifold Emergency Mixing Valve System with Temperature Override Protection



- High Performance Emergency Mixing Valve designed for drench shower / eye / face wash applications
- Thermostatic Mixing Valve can be set to the correct temperature for the application
- Mixing valve will close down on failure of cold water supply
- Mixing valve with special internal cold water bypass capable of a minimum of 20 GPM (75.7 l/min) @ 30 PSI (2.1 Bar) upon failure of hot water supply
- Adjustable high temperature limit stop \* set for 90°F (32°C)
- Locking temperature regulator to prevent accidental movement
- Integral Checkstops on inlets
- Threaded 1" female NPT top inlets
- Threaded 1-1/4" female NPT top outlet
- Rough bronze finish
- Dial thermometers (range 0 to 140°F, -18 to 60°C)
- Compliance.....ANSI Z358.1
- Maximum supply temperature 180 °F (82°C)
- Maximum supply pressure 125 PSI (8.6 Bar)

**Primary Mixing Valve is certified to meet Low-Lead requirements of wetted surface area containing less than 0.25% lead by weight. All other fittings and components, the sum total of which comprise the wetted surface of this product, contain less than one quarter of one percent of lead by weight.**

### REDUNDANT THERMOSTATIC MIXING VALVE

- Stainless steel bellows thermostat is factory set @ 90°F, 32°C (adjustable from 40°F to 100°F, 4°C to 32°C) to allow cold water to enter the outlet side of the primary mixing valve.
- Remains fully closed until outlet temperature reaches 90°F
- Will keep maximum temperature at or below 90°F should primary valve allow water in excess of 90°F (32°C)

### OPTIONS:

\_\_\_ IT- Inlet thermometers (shipped loose)

### CABINET OPTIONS, SEE PAGE 3

**Primary Mixing Valve EXL-800-LF  
 ASSE 1071 Certified**



**Primary Mixing Valve EXL-800-LF  
 CSA Certified**



**WARNING:** Risk of cancer and reproductive harm from exposure to lead – See [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

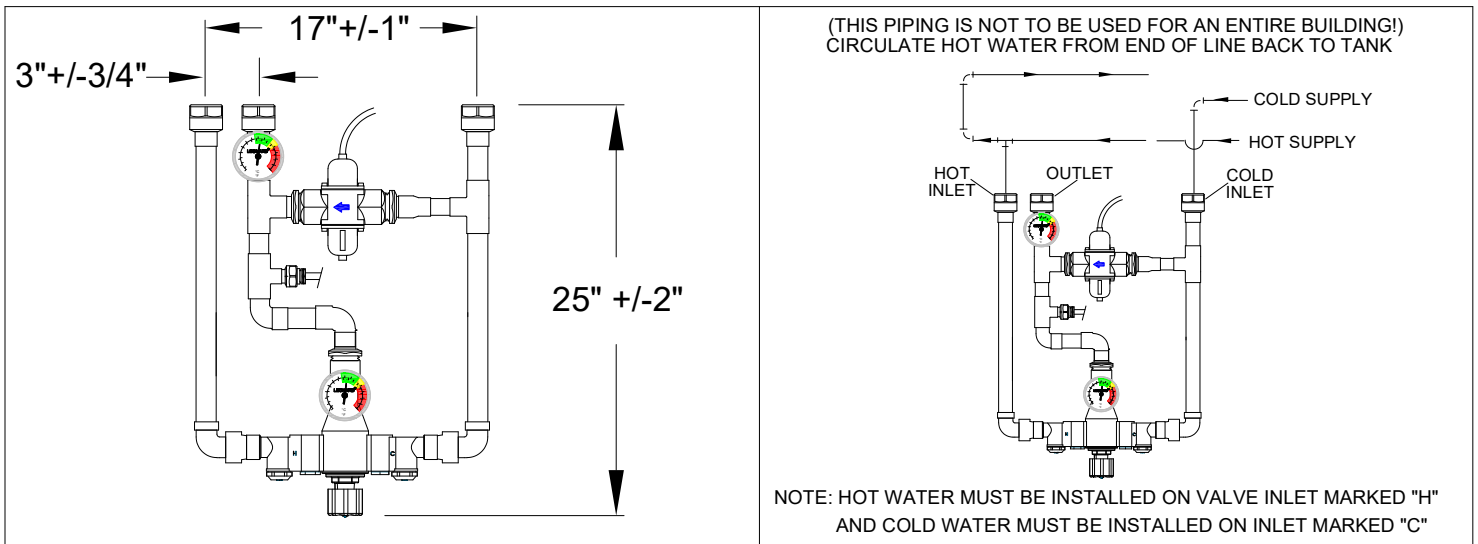
<b>Engineer's Approval</b>	Job # _____
	Arch/Eng. _____
	Contractor _____

**\*NOTE:** A limit stop, set for 90°F (32°C), is simply a mechanical setting to prevent excessive handle rotation. If incoming water is hotter than 135°F (57°C), the temperature of the factory test, the valve when turned to full HOT may deliver water in excess of 90°F and the limit stop **MUST BE RESET BY THE INSTALLER**



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# EXL-850-LF EMERGENCY WATER MIXING VALVE



**CAUTION!** It may be necessary to recirculate the tempered water to the drench / eye/face wash should the piping be exposed to excessive hot or cold conditions. Consult O&M for proper piping.

## FLOW CAPACITIES

MODEL	IN	OUT	MINIMUM FLOW (GPM) LMIN	INTERNAL COLD WATER BY-PASS AT 30 PSI DROP	PRESSURE DROP									PSI BAR
					5	10	15	20	25	30	35	40	45	
EXL-850-LF	1"	1-1/4"	3	20	21	29	35	41	46	51	56	59	61	GPM
			11.4	75.7	79	110	132	155	174	193	212	223	231	LMIN
MAXIMUM FLOW CAPACITY														

The Emergency drench eye/face wash Mixing Valve shall control and maintain the temperature of the water to the station . Unit shall be self contained and include a thermostatic water mixing valve, a dial thermometer on the outlet, angle checkstops, piping and fittings factory assembled and tested, top inlets and top outlet, unit set for 85°F (29°C) and a maximum temperature of 90°F (32°C). The redundant valve remains fully closed until outlet temperature reaches 90°F (32°C), and will keep the maximum temperature at 90°F should the primary valve allow water in excess of this temperature. Unit must be able to be set to the correct temperature for the specific contaminant but must be locked in place to prevent changing of the temperature by accident. Unit must be checked weekly for performance in conjunction with the requirements of ANSI Z358.1. Unit shall be able to flow a minimum flow of 20 GPM (76 l/min) at 30 PSI (2.1 Bar).

**WARNING! IT IS THE RESPONSIBILITY OF THE SPECIFIER TO DETERMINE THE DELIVERED WATER TEMPERATURE TO EACH SAFETY FIXTURE. A COMFORTABLE RANGE IS 60°F TO 90°F (15° TO 32°C). IN CIRCUMSTANCES WHERE A CHEMICAL REACTION IS ACCELERATED BY WATER TEMPERATURE, A MEDICAL ADVISOR SHOULD BE CONSULTED FOR THE OPTIMUM TEMPERATURE FOR EACH APPLICATION.**

**CAUTION! All thermostatic water mixing valves have limitations. They will NOT provide the desired accuracy outside of their flow capacity range. Consult the Flow Capacity Chart and DO NOT OVERSIZE. Minimum flow must be no less than indicated.**

Specifications are subject to change without notice!



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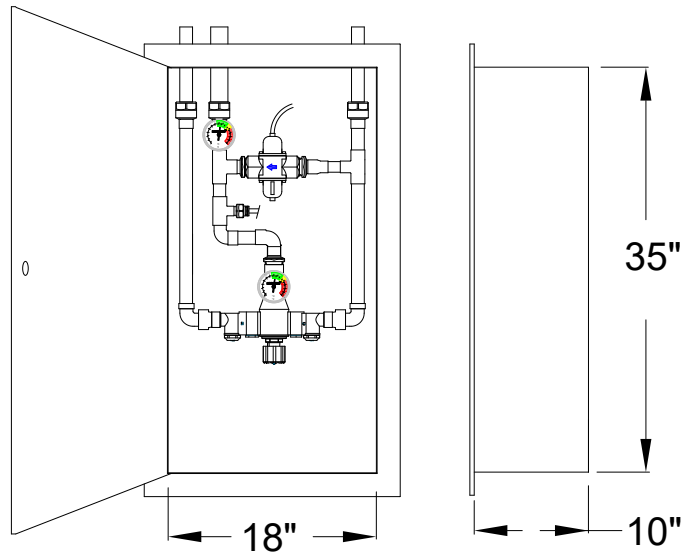
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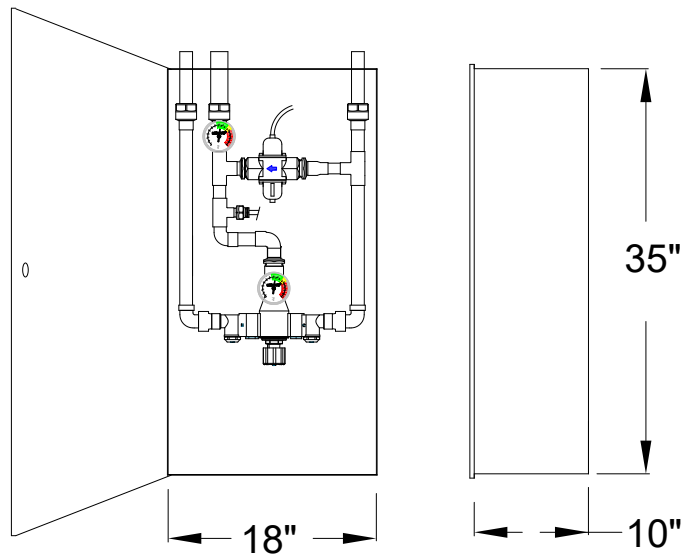
# CABINET OPTIONS

- \_\_\_\_\_ SUFFIX BWE REC- Steel, baked white enamel recessed
- \_\_\_\_\_ SUFFIX STSTL REC- Stainless Steel recessed cabinet
- \_\_\_\_\_ SUFFIX BWE EXP- Steel, baked white enamel exposed
- \_\_\_\_\_ SUFFIX STSTL EXP- Stainless Steel exposed cabinet
- \_\_\_\_\_ SUFFIX VIEW- Viewport in door to view thermometer
- \_\_\_\_\_ SUFFIX IT- Inlet thermometers

## EXL-850-LF-REC



## EXL-850-LF-EXP



Note: Leonard Valve Company reserves the right of product, or design modifications without notice or obligation.

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