

# Hydrotherapy/Patient Care Controls/Dialysis Systems/ High Temperature Alarms



**Leonard  
Thermostatic Water  
Mixing Systems and  
Audio Visual High  
Temperature Alarms**



Control water temperature for patient bathing, hydrotherapy, specialized treatments, dialysis applications.



OR-1776D

LV-356-20-LF W/HA

AU-2000

# Hydrotherapy/Patient Care Controls/ Dialysis Systems/High Temperature Alarms

## Leonard Thermostatic Water Mixing Systems

- Copper encapsulated thermostatic control
- Adjustable high temperature limit stops set for 110°F (43°C)
- Outlet on/off volume control, vacuum breaker
- Optional dial thermometers, cabinet mounting
- Up to three sizes (depending upon the model specified)
- Factory-preassembled and tested systems
- Toll Free technical support

**Model XL-690-LF is ASSE 1069 Listed and 3rd Party certified as Lead Free**

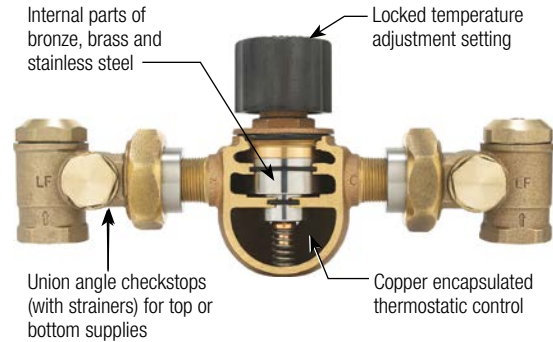
## LV/XL Series Thermostatic Water Mixing Valves

**All LV/XL Series Valves are furnished factory-assembled and tested with:**

Highly responsive copper encapsulated thermostatic assembly to control the intake of hot and cold water and regulate mixed water temperature

Integral check valves on hot and cold inlets, wall supports, and locking temperature regulators

Maximum supply pressure: 125 PSI



Note: LV-10-LF and LV-20-LF have integral checks

## Flow Capacities

Models	In	Out	Minimum Flow GPM	PRESSURE DROP										
				5	10	15	20	25	30	35	40	45	50	PSI
			L/MIN	0.3	0.7	1.0	1.4	1.7	2.1	2.4	2.8	3.1	3.4	BAR
TM-26-LF*	3/4"	3/4"	1.0	7	10	13	15	17	19	21	23	25	26	GPM
	(19.1mm)	(19.1mm)	(3.8)	26	38	49	57	64	72	80	87	95	98	L/MIN
LV-10-LF	1/2"	1/2"	1.0	4	6	7.5	8.8	10	11	12	13	14	15	GPM
	(12.7mm)	(12.7mm)	(3.8)	15	23	28	33	38	42	46	49	53	57	L/MIN
LV-20-LF*	3/4"	3/4"	1.0	6	9	12	14	16	18	20	22	24	25	GPM
	(19.1mm)	(19.1mm)	(3.8)	23	34	45	53	61	68	76	83	89	95	L/MIN
269-LF**	1/2"	1/2"	1.0	3.5	5.3	6.3	7	7.8	8.5	9.3	10	10.8	11.5	GPM
	(12.7mm)	(12.7mm)	(3.8)	13	20	24	27	30	32	35	38	41	44	L/MIN
369-LF**	3/4"	3/4"	1.0	4	5.8	6.8	7.5	8.3	9	9.8	10.5	11.3	12	GPM
	(19.1mm)	(19.1mm)	(3.8)	15	21	26	28	31	34	37	40	43	45	L/MIN
XL-670-LF***	1"	1 1/4"	2.5	5	10	20	35	39	41	48	55	59	62	GPM
	(25.4mm)	(31.6mm)	(9.5)	19	38	76	132	148	155	182	208	223	235	L/MIN
XL-690-LF****	1"	1 1/4"	1.0	5	10	20	35	39	41	48	55	59	62	GPM
	(25.4mm)	(31.6mm)	(3.8)	19	38	76	132	148	155	182	208	223	235	L/MIN
*ASSE 1017 listed and 3rd party certified as lead free **ASSE 1069 listed and 3rd party certified as lead free ***ASSE 1070 listed and 3rd party certified as lead free ****ASSE 1017 & 1069 listed and 3rd party certified as lead free				MAXIMUM FLOW CAPACITY										

**CAUTION!** All thermostatic water mixing valves have limitations. They will not provide the desired accuracy outside of their flow capacity range. Consult the above chart and make certain minimum flow is greater than as shown.

**NOTE:** The valve model must be selected based upon the following:

- Maximum system demand for mixed water (see Leonard's exclusive CASPAK® Sizing Program at [www.leonardvalve.com](http://www.leonardvalve.com))
- System pressure drop†
- Designer's estimated minimum mixed water flow requirement

† System pressure drop = the pressure available at the inlet of the mixing valve minus the pressure required to operate the farthest fixture, i.e., faucet or shower valve, in the building

## Dialysis Systems

### Thermostatic Mixing Station For Dialysis Applications

Leonard OR-1776A systems are special thermostatic mixing valve stations designed exclusively for dialysis applications. They deliver controlled lower flow water temperatures using Leonard's TAP Thermostatic Water Mixing Valve powered by the exclusive DURA-trol® solid bi-metal thermostat. The outlet assembly includes an atmospheric vacuum breaker, dial thermometer, on-off valve and quick coupler with dust cover. All components are factory-assembled and tested.

#### OR-1776A Thermostatic Mixing Station

- TAP Photomaster® with DURA-trol® solid bi-metal thermostat
- Adjustable high temperature limit stop set for 110°F (43°C)
- Maximum operating pressure 125 PSI (860 kPa)
- Temperature selector handle with scale: Cold-Hot
- Combination angle checkstops on inlets
- Outlet vacuum breaker (atmospheric type), dial thermometer (25 to 125°F, 0 to 50°C), volume control/shutoff, quick coupler with dust cover
- Stainless steel cabinet with all rounded corners, 2" waste
- Factory-assembled and tested

#### Option:

Suffix **RPZ** Reduced pressure principle assembly



#### OR-1776D

Stainless steel cabinet with rounded corners, fixed flange, 2" waste, hinged door (left side), cylinder lock.



#### OR-1775 Manual Station for Dialysis Applications

The water outlet assembly includes an atmospheric vacuum breaker, volume control/shutoff and stainless steel quick coupler with dust cover. The unit is mounted in a stainless steel recessed cabinet with drain, door with cylinder lock, and panel with vandal resistant screws.

## Flow Capacities

Models	In	Out	Minimum Flow GPM	PRESSURE DROP							PSI
				5	10	20	30	40	45	50	
			L/MIN	0.3	0.7	1.4	2.1	2.8	3.1	3.4	BAR
OR-1776A	1/2"	1/2"	0.5	2.0	2.9	5.3	6.9	8.3	8.7	9.0	GPM
	(12.7mm)	(12.7mm)	1.89	7.6	11	20	26	31	33	34	L/MIN

## Cabinet Assemblies

### Standard Features:

Recessed stainless steel cabinet, 12 gauge door, left hand hinge, 16 gauge body, lock, chrome plated valve/piping, factory-assembled and tested

### Optional Features:

Steel cabinet, baked white enamel finish, exposed cabinet, rough bronze valve/piping, unassembled components

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### LV-296 (Whirlpool Bath, Arm-Leg, Hip, Lower Lumbar Bath, Sitz Bath, Autopsy Table)

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#### LV-296-10-LF

#### LV-296-20-LF

Bottom inlets, single side outlet with thermometer, vacuum breaker

#### XL-296-670-LF

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LV-296-10-LF

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### LV-177A (Perineal Bath, Therapeutic Tub, Hygiene Pier Pattern Bath)

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#### LV-177A-10-LF

#### XL-177A-670-LF

Bottom inlets, double outlet with separate on/off valves, one outlet to tub, one outlet to vacuum breaker, 6 ft. rubber hose, rose spray

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LV-177A-10-LF

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### LV-203 (Supervised Patient Shower/Bath, Sitz Bath, Autopsy Table)

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#### LV-203-10-LF

#### LV-203-20-LF

Bottom inlets, single top outlet with thermometer

#### XL-186-670-LF

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LV-203-10-LF

## Exposed Assemblies

### LV-356 (Whirlpool Bath, Arm-Leg-Hip-Lower Lumbar Bath)

#### LV-356-10-LF

Bottom inlets, single side outlet less thermometer, with vacuum breaker

#### LV-356-20-LF

#### XL-356-670-LF



LV-356-20-LF

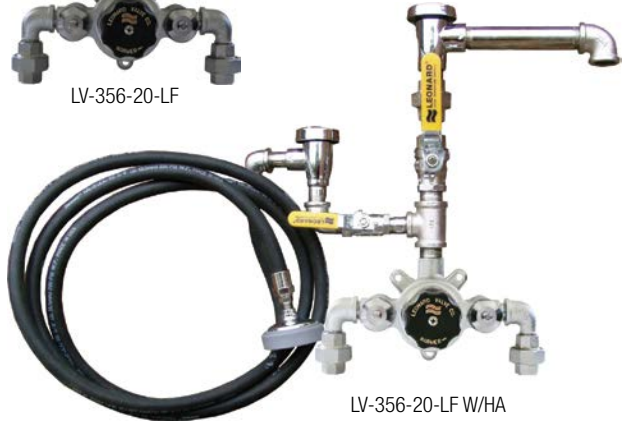
### LV-356-W/HA (With Washout Hose Assembly)

#### LV-356-10-LF W/HA

Bottom inlets, aux. 1/2" outlet with vacuum breaker 9 ft. rubber hose, rose spray, hook, side outlet with vacuum breaker

#### LV-356-20-LF W /HA

#### XL-356-670-LF W/HA



LV-356-20-LF W/HA

### LV-504 (Whirlpool Bath, Arm-Leg-Hip-Lower Lumbar Bath, Sitz Bath, Shampoo Table)

#### LV-504-10-LF

Bottom inlets, single side outlet, thermometer, with vacuum breaker

#### LV-504-20-LF

#### XL-504-670-LF



LV-504-10-LF

### XL-262 (Full Body Immersion and Underwater Treatment Bath/Tank, Hubbard Tank)

#### XL-262-670-LF

Bottom inlets, single top/back outlet with thermometer, vacuum breaker

#### XL-262-690-LF



XL-262-690-LF

## Concealed Assemblies

### 7600-C-60-1

Concealed 7600 thermostatic water mixing valve, 1.5 to 4 GPM, outlet dial thermometer with flange, elevated vacuum breaker, 6 ft. rubber hose, plain end, wall hook



7600-C-60-1

### 7600-C-60-7

Concealed 7600 thermostatic water mixing valve with outlet dial thermometer with flange, only



### M-20-C-60-1

Concealed M-20-C thermostatic water mixing valve, 1 to 11 GPM, outlet dial thermometer with flange, elevated vacuum breaker, 6 ft. rubber hose, plain end, wall hook



M-20-C-60-1

### M-20-C-60-7

Concealed M-20-C thermostatic water mixing valve with outlet dial thermometer with flange, only



# Hydrotherapy/Patient Care Controls/ Dialysis Systems/High Temperature Alarms

## High Temperature Alarms

### AU-2000 Audio Visual High Temperature Alarm

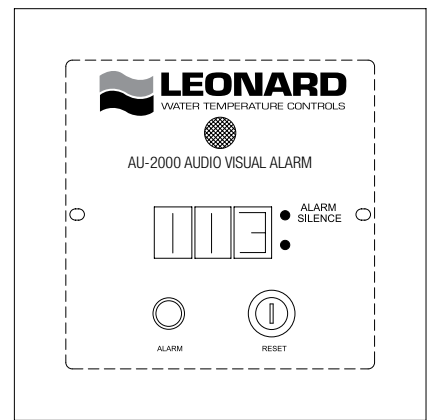
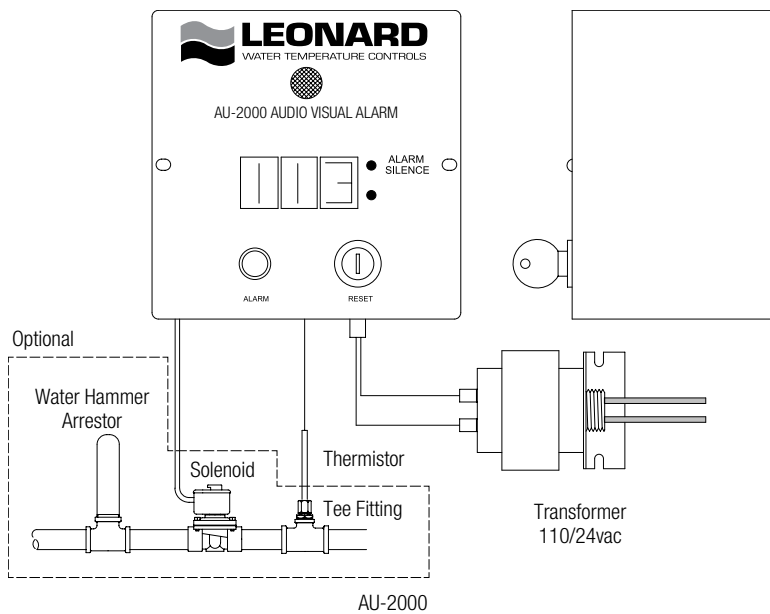
- Designed to monitor tempered water lines or hot water supply lines
- Alarm light activates, buzzer sounds, optional solenoid valve shuts water down when set point is reached
- Microprocessor based temperature controller
- LED display for easy viewing
- °F or °C temperature display
- Stainless steel thermistor sensor (sensor failure shuts down controller)
- Keyed reset switch to reactivate solenoid and allow resetting of water temperature
- Red alarm light, buzzer
- 110/24VAC transformer
- Pre-assembled in steel enclosure with stainless steel panel type cover

### Option

Suffix **FL** With stainless steel cover for recessed installation



AU-2000



AU-2000-FL

**WARNING:** Hot Water In Excess Of 110°F (43°C) Is Dangerous!! Note: Solenoid Provided By Others

Note: All specifications are subject to change without notice!



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