

## Automatic Temperature Controller

### MVHL (34HL) SERIES



### INNOVATION FROM APOLLO®...THE FIRST MULTIPLE-FIXTURE HI-LO MIXING VALVE THAT MEETS ASSE 1017 AND THE NEW ASSE 1069 STANDARD

Only Apollo® offers fast delivery on the first water temperature mixing assembly to meet ASSE 1017 and the strict performance levels required by the new ASSE 1069 Standard.

The new 34HL Automatic Temperature Control Mixing Valve uses proven Apollo thermostatic control to produce a consistent mix of water from low through high flow range.

This single assembly controls mixed water temperatures to multiple-outlet shower and sink installations. It's the ideal choice in new construction or retrofits in nursing homes, prisons, hospitals, schools, gymnasiums, airports and other facilities where constant safe water temperature needs to be maintained at several outlets without the use of independent ASSE 1016 shower valves.

#### FEATURES

- The Apollo 34HL Automatic Temperature Controller is an advanced thermostatic mixing valve capable of maintaining safe, consistent temperature control of water at low and high flows to within  $\pm 3.6^\circ$  F.
- The 34HL will provide consistent temperature control at flow rates as high as 60 GPM and as low as 1.5 GPM, including mid-range flow between high and low.
- This high quality Apollo valve performs its function without requiring recirculation pumps like other systems in order to achieve low flow control.
- Integral strainers and checks are provided at the hot and cold supply inlets for greater reliability and performance.
- These cast bronze thermostatic mixing valves are manufactured to the same exacting standards that have made the Apollo name famous for durability and reliability.

#### STANDARD APPROVALS

##### ASSE 1069 - Automatic Temperature Control Mixing Valves

This device will control outlet water temperature to individual or multiple fixtures within  $3.6^\circ$ F to reduce the risk of scalding or thermal shock. This device is intended to be installed where the bather has no access to the temperature adjustment, and where no further mixing occurs downstream of the device.

The Apollo 34HL ATC will meet the performance requirements of ASSE 1069 at flow as low as 1.5 GPM up through maximum flow rate.

##### ASSE 1017 - Temperature Actuated Mixing Valves for Hot Water Distribution Systems

This device will control outlet set water temperature to hot water distribution systems near the hot water source within  $3^\circ$ F below 2 GPM and within  $5^\circ$ F above 5 GPM.

#### PRODUCT SPECIFICATIONS

Maximum Static Pressure	150 psig (1034 kpa)
Maximum Water Temperature	200° F (93° C)
Minimum ASSE 1017 Flow	0.5 gpm (1.9 lpm)
Minimum ASSE 1069 Flow	1.5 gpm (5.7 lpm)
Temperature Adjustment Range	90° F - 140° F
Maximum Inlet Pressure Differential	30 psi (207kpa)
Inlet Connection	1" NPT
Outlet Connection	1-1/4" NPT
Temperature Gauge	0-200°F
Pressure Gauge	0-160 psi
Shipping Weight	36 lbs

#### OPTIONS

34HL10517	Nickel plated
34HLBOX01	Cabinet, flush mount, SS
34HLBOX02	Cabinet, flush mount, CS powder coat
34HLBOX03	Cabinet, wall mount, SS
34HLBOX04	Cabinet, wall mount, CS powder coat

# COMMERCIAL PRODUCTS CATALOG

## Automatic Temperature Controller

### MVHL (34HL) SERIES (CONT.)

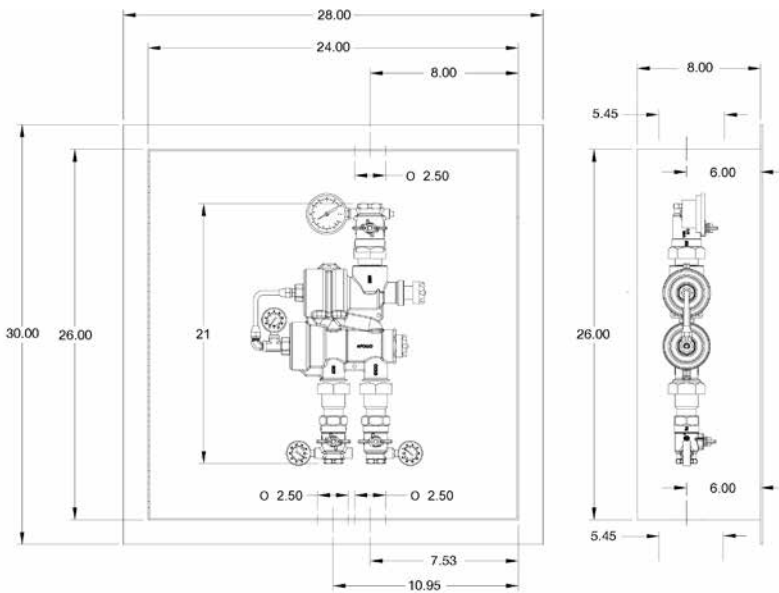
#### OPERATION

- The 34HL design is patented with a variable fluid flow assembly and dual thermal actuated controls for either low or high flow conditions.
- The passages are calibrated to control water temperature during all flow conditions without a “dead zone” between low and high flow.
- The 34HL also provides fluid shutoff as required by ASSE 1069 in the case that either the hot or cold supply lines fail (or are shut off for any reason) to prevent scalding or thermal shock.
- The valve can be tamper-resistant to limit the water temperature from exceeding safe conditions as required by ASSE 1069.
- The valve also meets the requirements of ASSE 1017 for Point of Source Applications.

This device will service end-use fixture fittings, including but not limited to, gang showers and sitz baths, by supplying tempered water at a preset temperature through a single supply pipe and will meet ASSE standard 1069 2005. ASSE 1069 devices are designed to reduce the risk of scalding and thermal shock during changes in hot or cold water supply pressure or temperature, or loss of cold water supply.

Model	Series	Min. Flow to ASSE 1069	Pressure Drop Across Valve			
			10 psi (69 kpa)	20 psi (138 kpa)	30 psi (207 kpa)	45 psi (310 kpa)
MVHL1	34HL10501	1.5 gpm	22 gpm	42 gpm	52 gpm	60 gpm
		6 lpm	83 lpm	159 lpm	197 lpm	227 lpm

Figure 1: Typical Valve Dimensions with Stainless Steel Recessed Cabinet Option



#### To order Repair Kits:

- Major (low side) – 34HL105RKL1
- O-Ring (low side) – 34HL105RKL2
- Handle – 34HL105RKH
- Major (high side) – 34HL105RKH1
- O-Ring (high side) – 34HL105RKH2

#### OPTIONS:

- 34HL10517 - Nickel plated automatic temperature controller
- 34HLBOX01 - Cabinet, flush mount, SS
- 34HLBOX02 - Cabinet, flush mount, CS powder coat
- 34HLBOX03 - Cabinet, wall mount, SS
- 34HLBOX04 - Cabinet, wall mount, CS powder coat

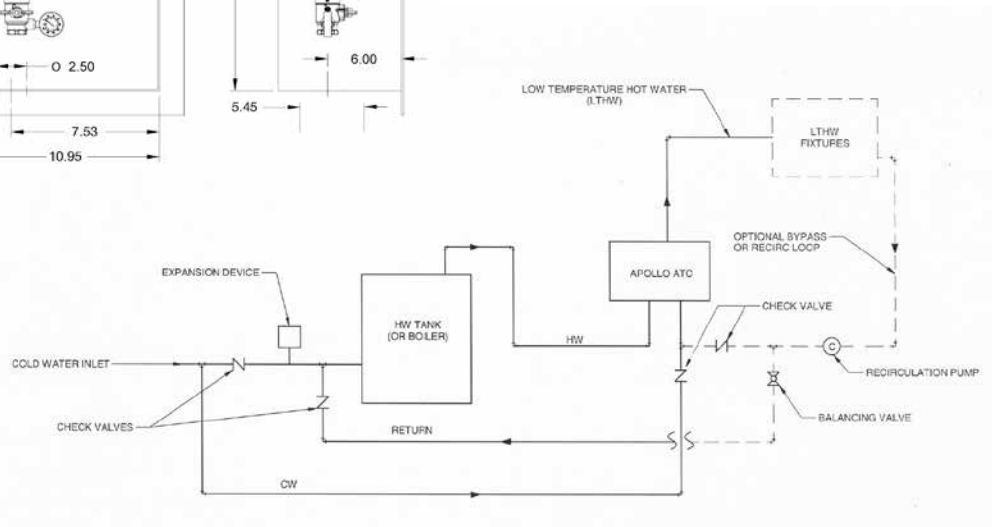


Figure 2: Typical Installation with Optional Recirculation Loop