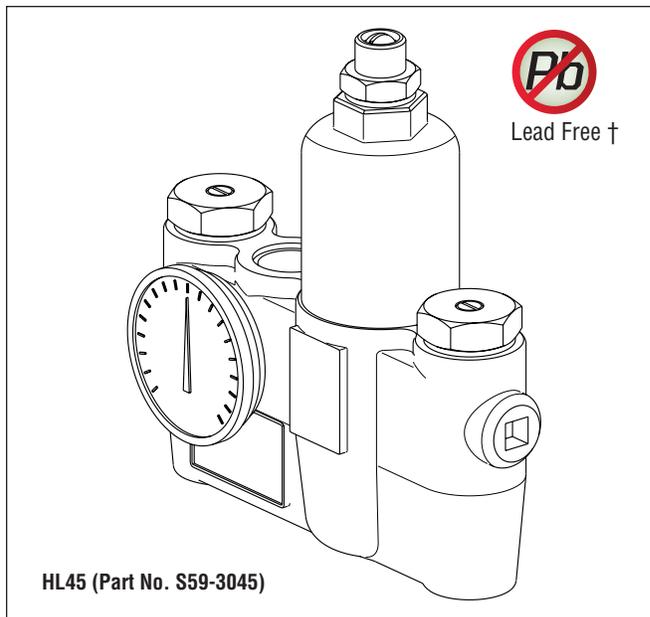




HL45, HL80 Thermostatic High-Low Valves

- Lead-Free Brass Design †
- Reliable Liquid-Filled Thermostat with 10 year warranty
- Integral Strainer Checkstops on Inlets
- Adjustable Set Point within Temperature Range
- Accurate Temperature Control to within $\pm 3^\circ$ F
- Positive Shutoff of Flow in the Event of Cold Supply Line Failure or Thermostat Failure
- Easy Installation and Serviceability
- Dirt and Lime Resistant
- Factory Assembled and Tested
- Universal Mounting Capability
- Dial Thermometer
- Cabinet Features:
 - 18 Gauge Body & Door
 - Left-Hand Hinge
 - Cylinder Lock
 - Inlet/Outlet Knock-Out Holes for Mounting Flexibility
 - Stainless Steel or Baked White Enamel Finishes
 - Surface-Mounted or Recessed Style with Flange



Valve Specifications

Maximum Operating Pressure

125 PSI (860 kPa)

Maximum Inlet Temperature

200° F (93° C)

Temperature Range

	Std.	Low	High	Set Point
	90° F (32° C) to 120° F (49° C)	70° F (21° C) to 100° F (38° C)	110° F (43° C) to 140° F (60° C)	110° F (43° C)
				80° F (27° C)
				130° F (54° C)

Flow Capacities – GPM (L/Min)

Model	Min* Flow	Pressure Drop – PSI (Bar)						
		5 (.5)	10 (1.0)	15 (1.5)	20 (2.0)	30 (2.5)	45 (3.0)	60 (4.0)
S59-3045	1.5 (5.5)	12.5 (58.0)	19.0 (89.0)	24.0 (115.0)	28.5 (137.0)	37.0 (157.0)	47.0 (175.0)	56.5 (209.0)
S59-3080	2.0 (7.5)	26.0 (110.0)	36.0 (157.0)	44.0 (193.0)	51.0 (223.5)	63.0 (250.5)	77.0 (275.0)	88.0 (318.0)

*Recirculation system only (See diagram on Page 2). When properly installed near the hot water source with a continuously operating recirculation pump, the valve will maintain set temperature with a .5 GPM (2.0 L/Min) draw from the plumbing system.

Code Compliance and Certifications

ASSE 1017 & cUPC certified. Complies with California Lead Plumbing Law.



Certified to NSF/ANSI 372

† Wetted surface contains less than .25% lead

Engineer's Approval _____

Models (Must select one)

Model	Description
<input type="checkbox"/> S59-3045	HL45-Thermostatic Mixing Valve
<input type="checkbox"/> S59-3080	HL80-Thermostatic Mixing Valve

Optional Selections

Finish

C Chrome Plated

Thermostat

- L Low Range Thermostat
 H High Range Thermostat

Bracket

B Wall Mounting Bracket

Piped Assembly

- P Piped Assembly with Inlet and Outlet Shutoff
 N Piped Assembly with Outlet Shutoff

Cabinets

- SS Surface Mount Stainless Steel
 RS Recessed Stainless Steel
 SE Surface Mount White Enamel
 RE Recessed White Enamel
 W Plexi-glass Window in Door

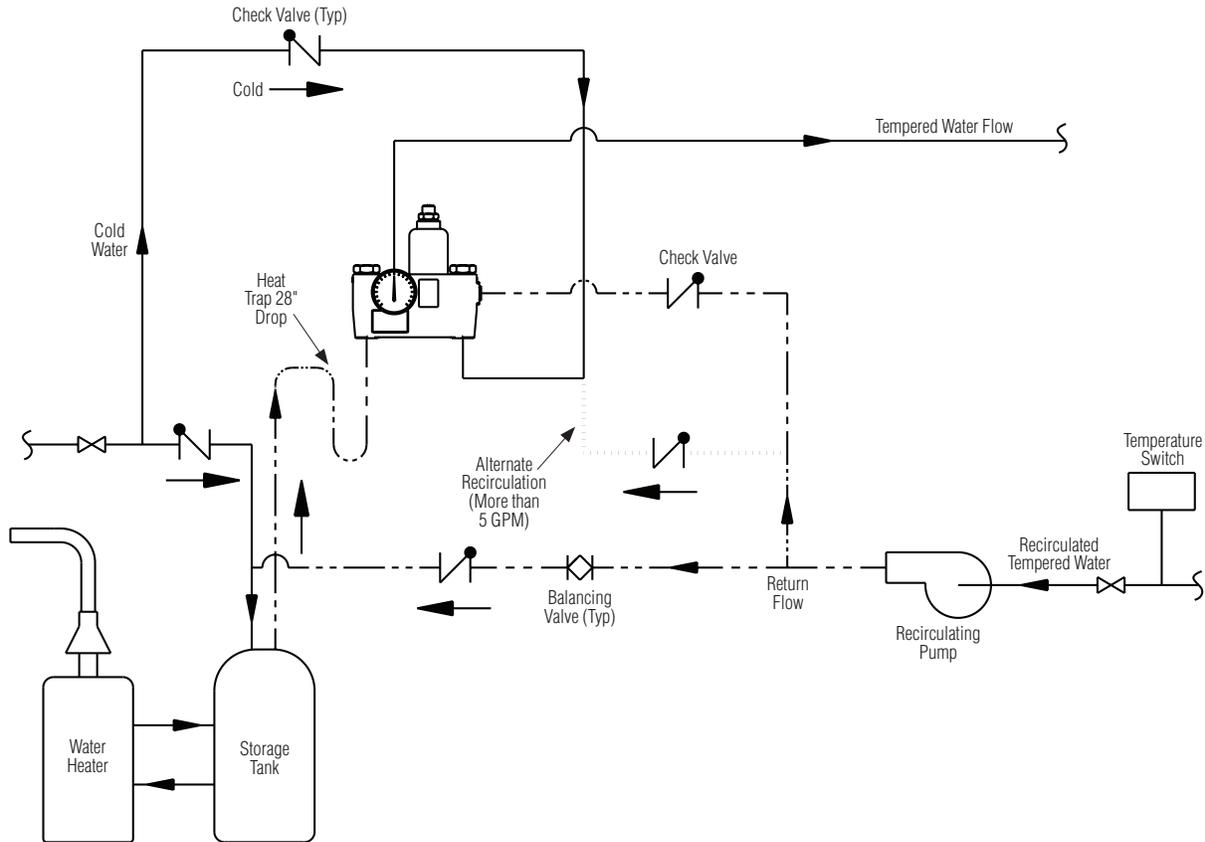
Standard product selections contained within this document are third party CERTIFIED to NSF/ANSI 372 meeting the Lead-Free content requirement. Any product configured with custom options will be COMPLIANT with NSF/ANSI 372 meeting the Lead-Free content requirement.



HL45, HL80 Thermostatic High-Low Valves

Recirculation Diagram

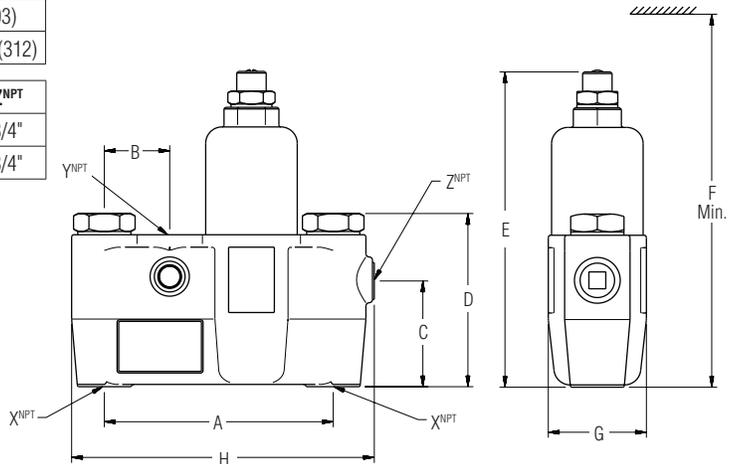
(mm)



Dimensions

Model	A	B	C	D	E
S59-3045	7" (178)	2" (51)	3-1/4" (84)	4-3/4" (119)	8" (203)
S59-3080	8-3/4" (224)	2-1/2" (64)	3-1/2" (89)	5-1/4" (135)	12-1/4" (312)

Model	F	G	H	X ^{NPT}	Y ^{NPT}	Z ^{NPT}
S59-3045	14" (356)	3-1/8" (79)	9-1/4" (234)	3/4"	1"	3/4"
S59-3080	19" (483)	3-5/8" (91)	11-3/8" (290)	1"	1-1/4"	3/4"



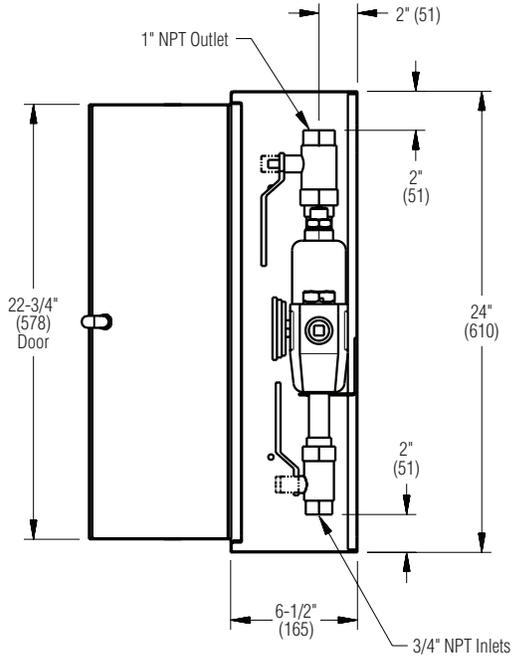


HL45, HL80 Thermostatic High-Low Valves

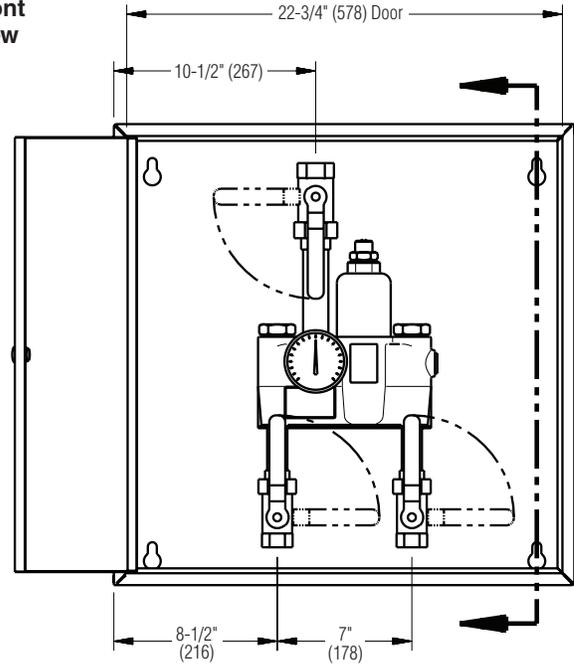
Dimensions — HL45 Surface-Mounted Cabinet

(mm)

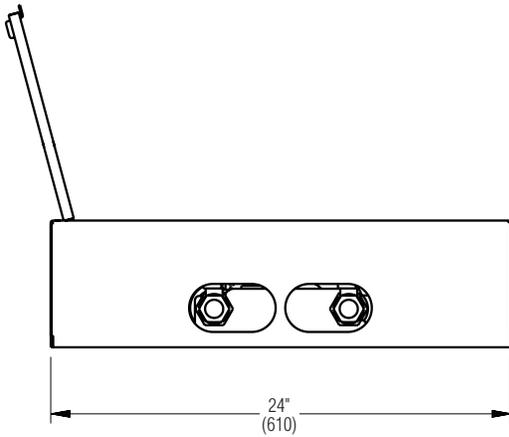
Side View



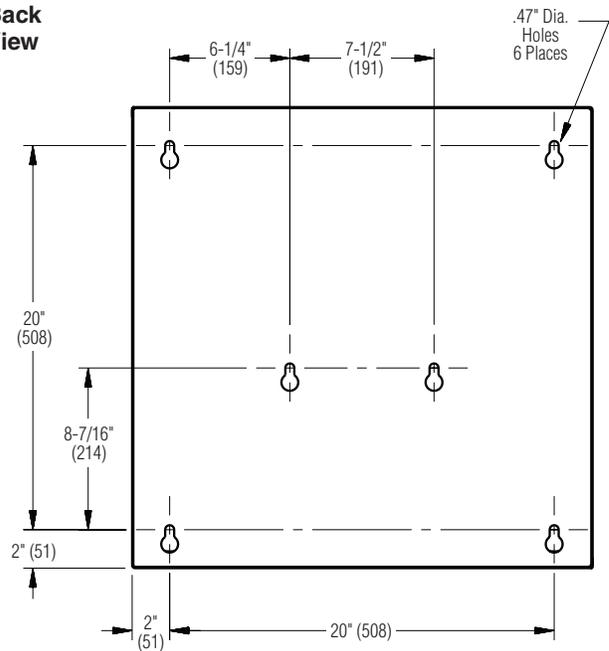
Front View



Bottom View



Back View



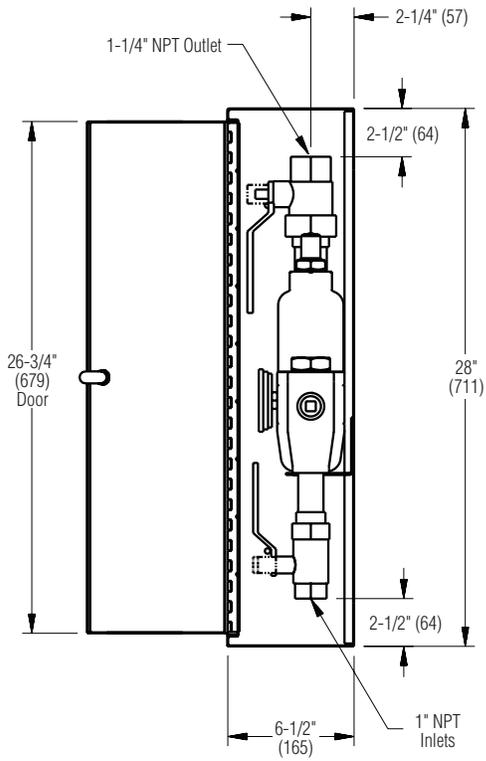


HL45, HL80 Thermostatic High-Low Valves

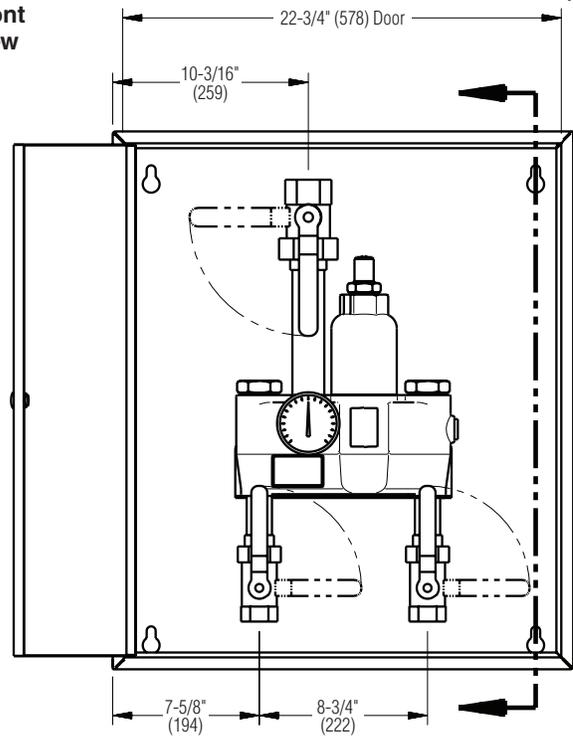
Dimensions — HL80 Surface-Mounted Cabinet

(mm)

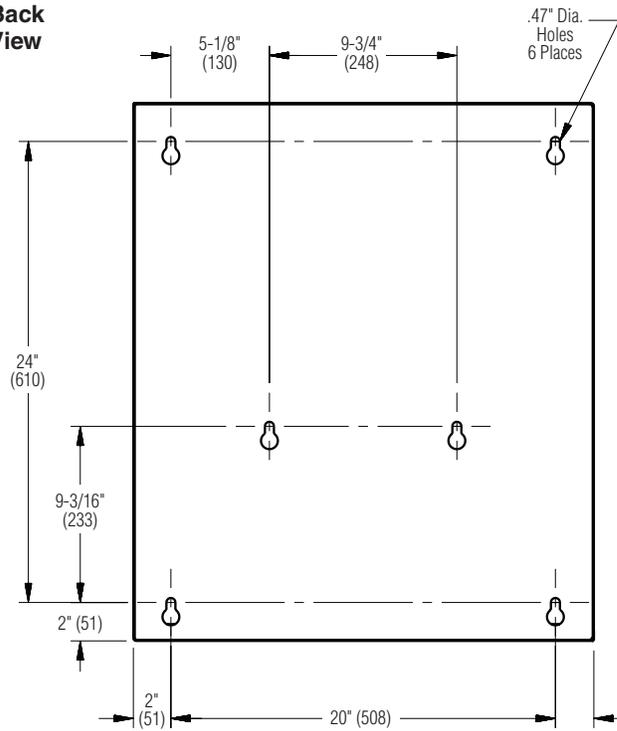
Side View



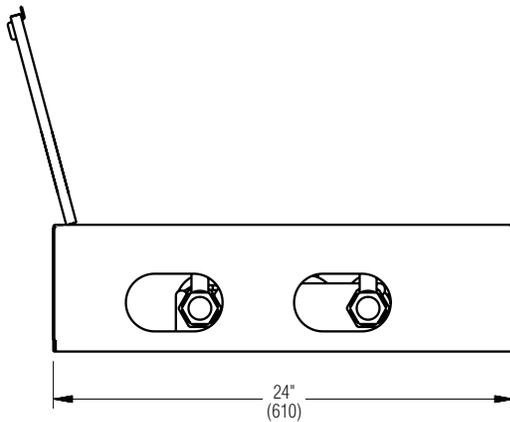
Front View



Back View



Bottom View

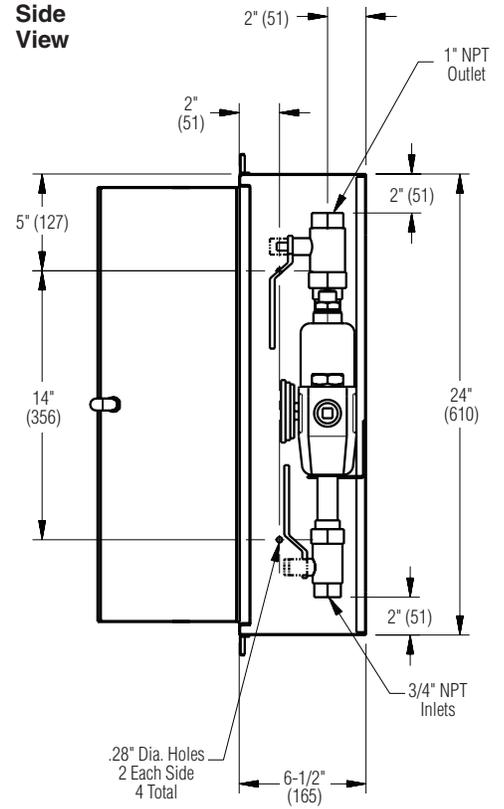
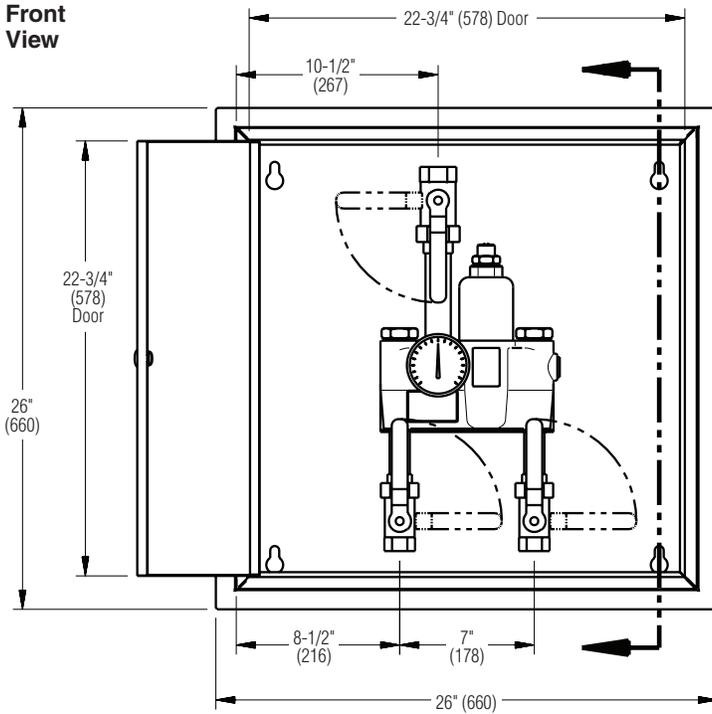




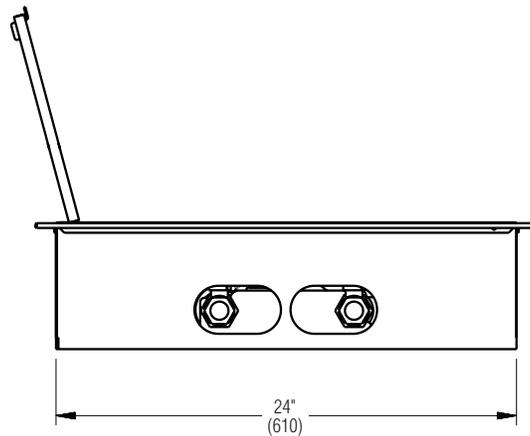
HL45, HL80 Thermostatic High-Low Valves

Dimensions — HL45 Recessed Cabinet

(mm)



Bottom View





HL45, HL80 Thermostatic High-Low Valves

Dimensions — HL80 Recessed Cabinet

(mm)

