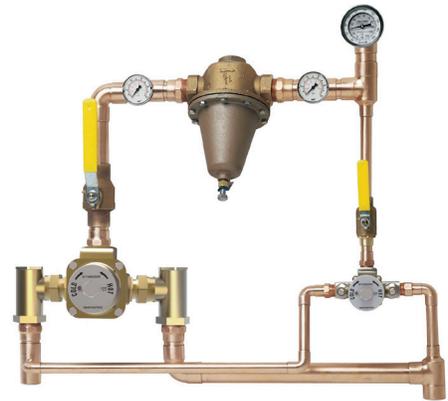


TempControl® Hi-Low Systems

- Fully factory assembled and tested.
- Lead free bronze and stainless steel components.
- Each controller contains a removable cartridge with stainless steel piston, thermal motor and Turbulator™.
- TEMPSIZE™ Sizing program and support.
- Entire valve control mechanism housed in a replaceable cartridge unit, minimizes service downtime when unit is serviced.



The TempControl Hi-Low System is a specialized system designed to address applications where there is a potential for pressure disturbances in the supply lines servicing the thermostatic mixing valve. The system is used when the valve is located outside the mechanical room of a building. Any thermostatic mixing valve, especially larger size valves, when flowing well below its rated capacity, may not maintain temperature within the desired range when the hot and cold supply lines servicing the valve are subjected to pressure disturbances.

In a mechanical room it is assumed that the supply pressures are stable and are not subject to pressure disturbances. As a result, we do not recommend Hi-Low systems in this location. Conversely, when a valve's intended location is indicated as being outside the mechanical room, it is assumed that there is a potential for pressure fluctuations in the hot and cold supply lines, great enough to effect

temperature control at low flow. Therefore, a Hi-Low System is recommended. (Consult TEMPSIZE™ Sizing Program for proper selection)

The TempControl Hi-Low System includes a large and a small TempControl thermostatic mixing valve that are piped in parallel to the hot and cold supply lines and a pressure reducing valve (PRV) on the outlet side of the larger valve. When there is a low demand, or draw on the system, the small valve handles the flow requirements. When demand increases, a greater pressure differential in the system is created. The PRV then opens to assist the smaller valve in meeting the higher flow requirements.

NOTE: If the system is designed so that a TempControl valve is not subjected to supply pressure disturbances, even though it is located outside the mechanical room, a single valve will operate properly.

TempControl® Hi-Low Systems Valve and Piping Assembly

Specification

7-_____ () inlets () outlets: TempControl Hi-Low system consists of two (2) lead free thermostatic controllers with check stops. Each controller contains a removable cartridge with stainless steel piston and thermal motor and Turbulator™, inlet manifold piping, pressure reducing valve (PRV), two (2) pressure gauges, two (2) ball valves, bi-metal dial thermometer 3" (76 mm) face, range 20° - 240°F (-7° -116°C), wall bracket, connecting piping and fittings to cabinet limits. Standard rough bronze and copper finish. Bottom supplies and top outlet. Factory assembled and tested.



Modifications: Suffix TOP: Top supplies (cannot be used with Suffix V) • Suffix STN: Satin spray finish • Suffix STN/POL: Satin spray with polished chrome highlight finish • Suffix V: Vacuum breaker

Flow Rate - gpm (L/min)										
Model #	Inlets	Outlets	Min Flow Rate	Pressure Differential						
				5 psi 34 kPa	10 psi 69 kPa	20 psi 138 kPa	25 psi 172 kPa	30 psi 207 kPa	45 psi 310 kPa	
7-200-102-PRV	3/4"	3/4"	0.5	8	15	24	28	31	38	gpm
	19mm	19mm	1.9	30.3	56.8	87.1	102.2	113.6	143.8	L/min
7-400-102-PRV	3/4"	1"	0.5	19	30	43	48	52	64	gpm
	19mm	25mm	1.9	68.2	113.6	162.8	181.7	196.9	242.2	L/min
7-500-102-PRV	1"	1-1/4"	0.5	23	41	56	62	67	81	gpm
	25mm	32mm	1.9	87.1	155.2	212	234.7	253.6	306.6	L/min
7-700-102-PRV	1-1/4"	1-1/2"	0.5	26	46	63	69	74	88	gpm
	32mm	38mm	1.9	98.4	174.2	238.5	261.2	280.1	333.1	L/min
7-900-102-PRV	1-1/2"	1-1/2"	0.5	31	58	82	91	97	115	gpm
	38mm	38mm	1.9	117.4	219.6	310.5	344.5	367.2	435.3	L/min
7-1000-102-PRV	1-1/2"	2"	0.5	39	70	106	118	128	151	gpm
	38mm	51mm	1.9	147.6	265.0	401.2	446.7	484.5	571.5	L/min
7-900-200-PRV	1-1/2"	1-1/2"	5	37	67	94	105	112	131	gpm
	38mm	38mm	18.9	140.1	253.6	352.2	393.7	420.2	495.9	L/min
7-1000-200-PRV	1-1/2"	2"	5	45	79	118	132	143	167	gpm
	38mm	51mm	18.9	170.3	299.0	442.9	495.9	537.5	632.1	L/min

*Model 7-102 has union check stops. Models 7-200 thru 7-700 have integral check stops. Models 7-900 and 7-1000 have separate check stops.