

Tempering Valves

Series 21

Hoffman Specialty Tempering Valves are designed to control temperature in water mixing applications such as radiant floor heating, hot water heating and industrial processing. They can also be used to divert flow in cooling

systems. Series 21 Valves can be used for residential, industrial, commercial or institutional applications.

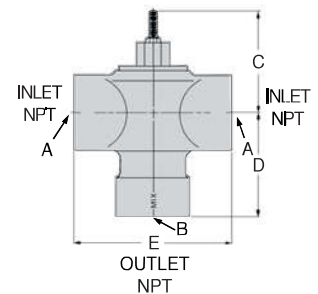
Series 21

- Fast acting, corrosion resistant actuator
- Solid filled thermostatic actuator exerts high operating force and provides reliable service
- Easy temperature adjustment
- No special tools required
- Cast brass body
- Adjustable temperature ranges
 - Model 21 140–200°F (60–93°C)
 - Model 21H 100–200°F (38–93°C)
 - Model 21LT 100–140°F (38–60°C)
- Maximum pressure 125 psig (8.6 bar)
- Maximum hot water supply temperature 235°F (113°C)

Model 21 provides wide temperature adjustment range for hot and cold water mixing.

Model 21H provides widest temperature adjustment range for radiant heating applications where accurate temperature control is less critical.


Model 21LT provides the greatest accuracy of temperature control.



Dimensions in. (mm)

NPT Size In. A	NPT Size In. B	C	D	E
3/4	3/4	2 3/4 (70)	1 7/8 (48)	3 3/4 (95)
1	1	2 3/4 (70)	2 (50)	4 (102)
1 1/4	1 1/4	3 7/8 (98)	3 7/8 (98)	5 1/4 (133)
1 1/2	1 1/2	3 7/8 (98)	3 7/8 (98)	5 1/4 (133)
2	2	3 7/8 (98)	3 7/8 (98)	6 (152)

⚠ WARNING

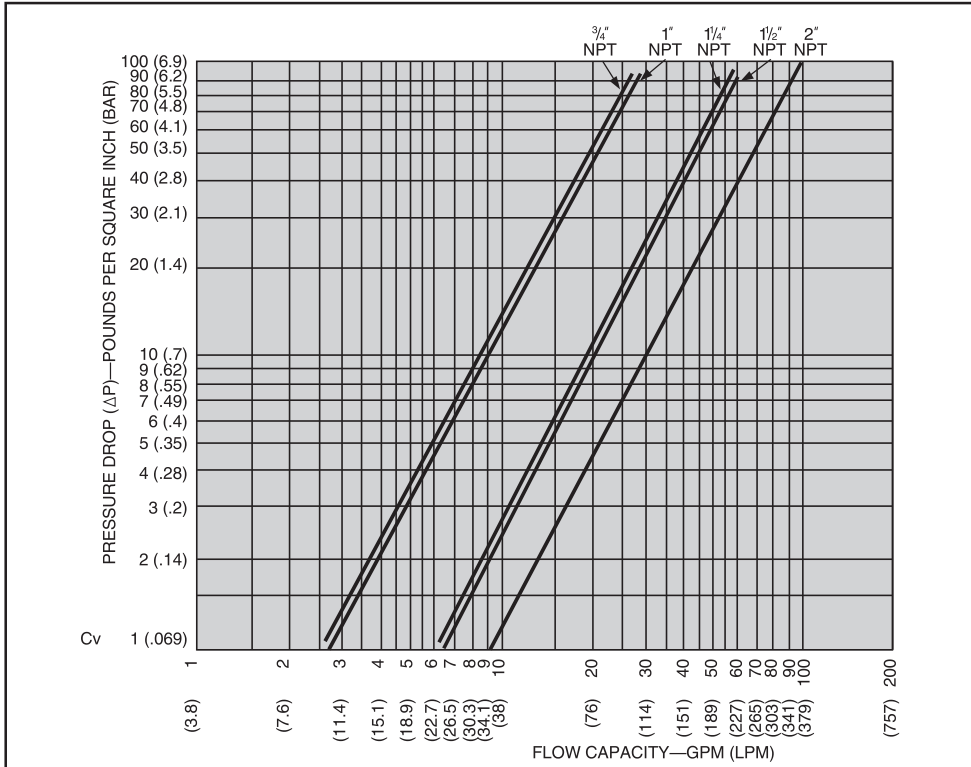


Do not use Tempering Valves as anti-scald devices. Tempering valves may need to be used in conjunction with an anti-scald device.

Failure to follow this warning could cause serious burns, personal injury or death.

Series 21 (continued)

Capacities



Ordering Information

Adjustable range of 140 to 200°F (60 to 93°C). Maximum supply temperature 235°F (113°C).

Model Number	Part Number	NPT Size in.	Weight lbs. (kg)
21	401239	¾	3 (1.4)
21	401242	1	3 (1.4)
21	401245	1¼	6 (2.7)
21	401248	1½	7 (3.2)
21	401251	2	9 (4.1)

Adjustable range of 100 to 200°F (38 to 93°C). Maximum supply temperature 235°F (113°C).

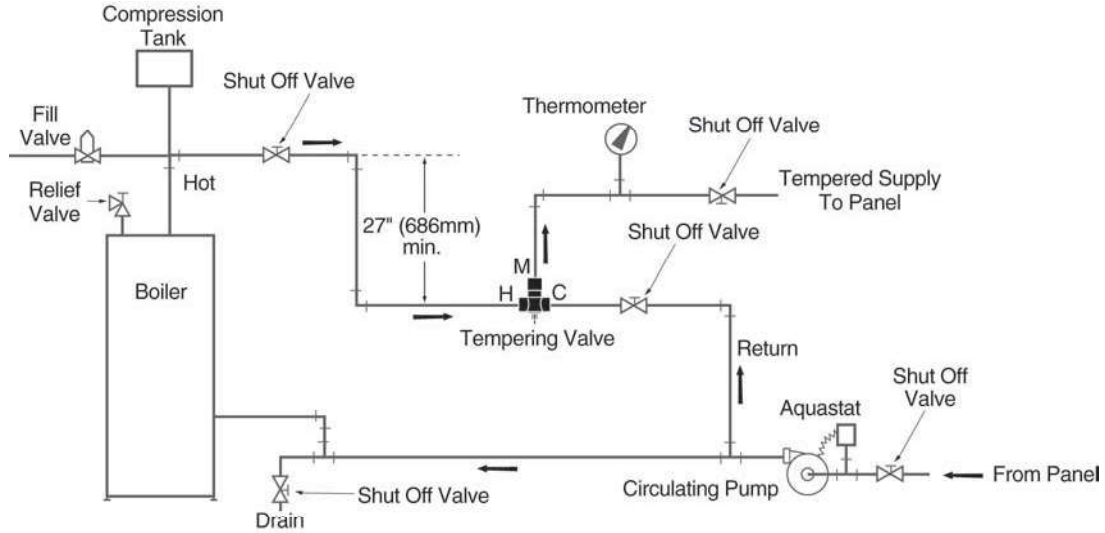
Model Number	Part Number	NPT Size in.	Weight lbs. (kg)
21H	401024	¾	3 (1.4)
21H	401030	1	3 (1.4)
21H	401033	1¼	6 (2.7)
21H	401048	1½	7 (3.2)
21H	401102	2	9 (4.1)

Adjustable range of 100 to 140°F (38 to 60°C). Maximum supply temperature 235°F (113°C).

Model Number	Part Number	NPT Size in.	Weight lbs. (kg)
21LT	401281	¾	3½ (1.6)
21LT	401284	1	3½ (1.6)
21LT	401287	1¼	6½ (2.9)
21LT	401290	1½	7½ (3.4)
21LT	401293	2	9½ (4.3)

Thermostatic Temperature Regulators (continued) Series 21 Applications

Panel Heating Installation

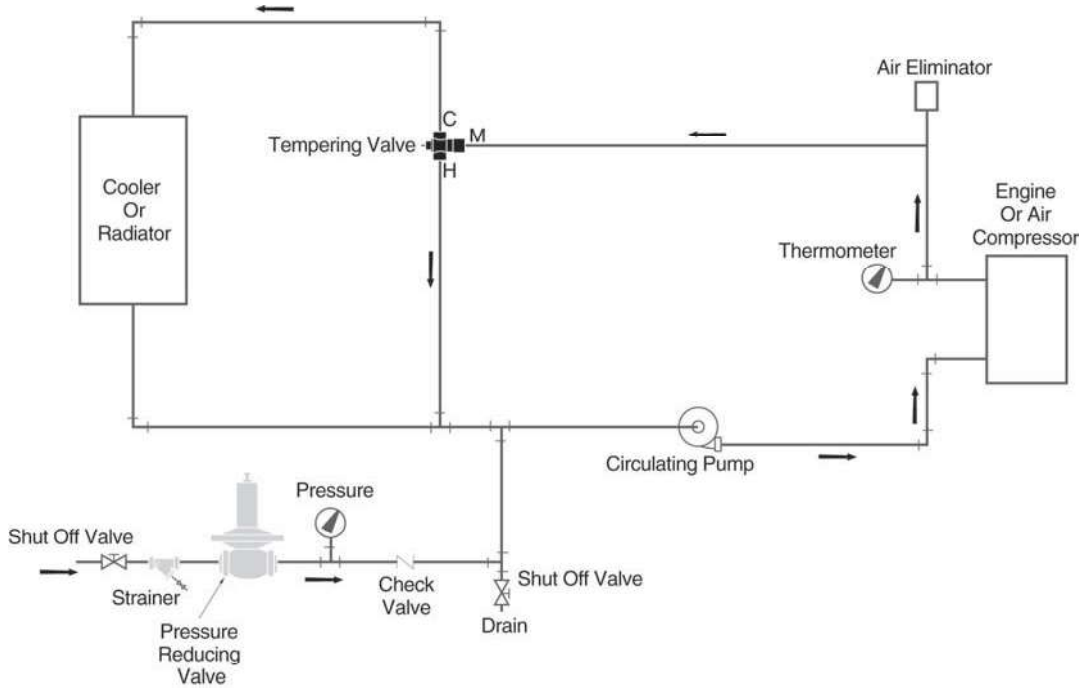


Note: Circulating pump, illustrated in the above application, circulate tempered water through the system. The aquastat shuts the circulating pump off if the tempered water exceeds the temperature set point, which is normally $\pm 5^{\circ}\text{F}$ ($\pm 2^{\circ}\text{C}$) of the tempering valve discharge.

Regulators

Thermostatic Temperature Regulators (continued)
Series 21 (continued)

Engine Jacket Temperature Control Installation



Radiant Heating Installation

