

Tempering Valves

Series 21

Hoffman Specialty Tempering Valves are designed to control temperature in water mixing applications such as radiant floor heating, domestic hot water 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)

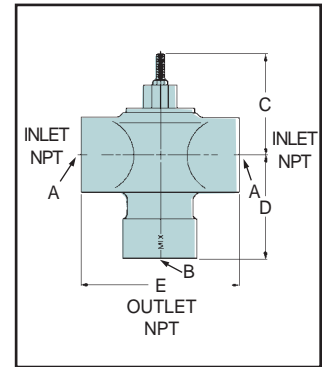
Model 21 provides wide temperature adjustment range for hot and cold water mixing in applications other than domestic hot water.

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 in mixing domestic water.



Series 21



Dimensions in. (mm)

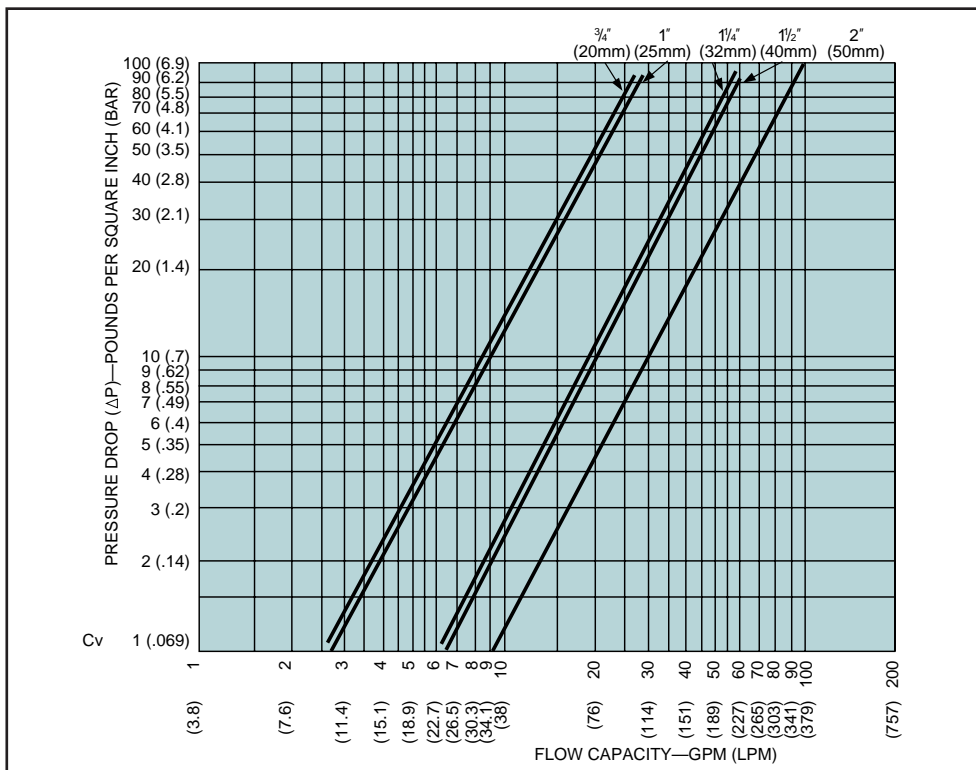
A	B	C	D	E
¾ (20)	¾ (20)	2¾ (70)	1⅞ (48)	3¾ (95)
1 (25)	1 (25)	2¾ (70)	2 (50)	4 (102)
1¼ (32)	1¼ (32)	3⅞ (98)	3⅞ (98)	5¼ (133)
1½ (40)	1½ (40)	3⅞ (98)	3⅞ (98)	5¼ (133)
2 (50)	2 (50)	3⅞ (98)	3⅞ (98)	6 (152)

⚠ WARNING	
	<p>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.</p>

Thermostatic Temperature Regulators (continued)

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. (mm)	Weight lbs. (kg)
21	401239	3/4 (20)	3 (1.4)
21	401242	1 (25)	3 (1.4)
21	401245	1 1/4 (32)	6 (2.7)
21	401248	1 1/2 (40)	7 (3.2)
21	401251	2 (50)	9 (4.1)

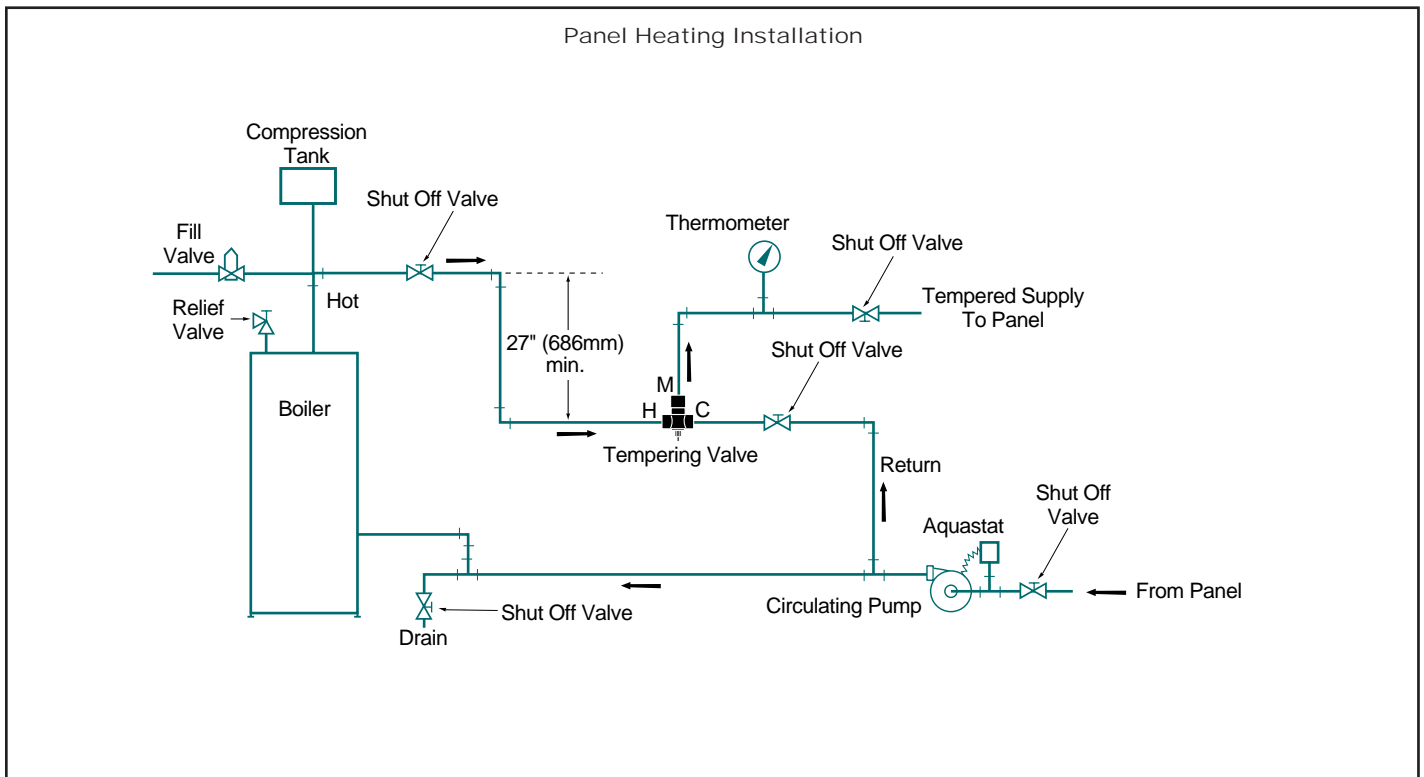
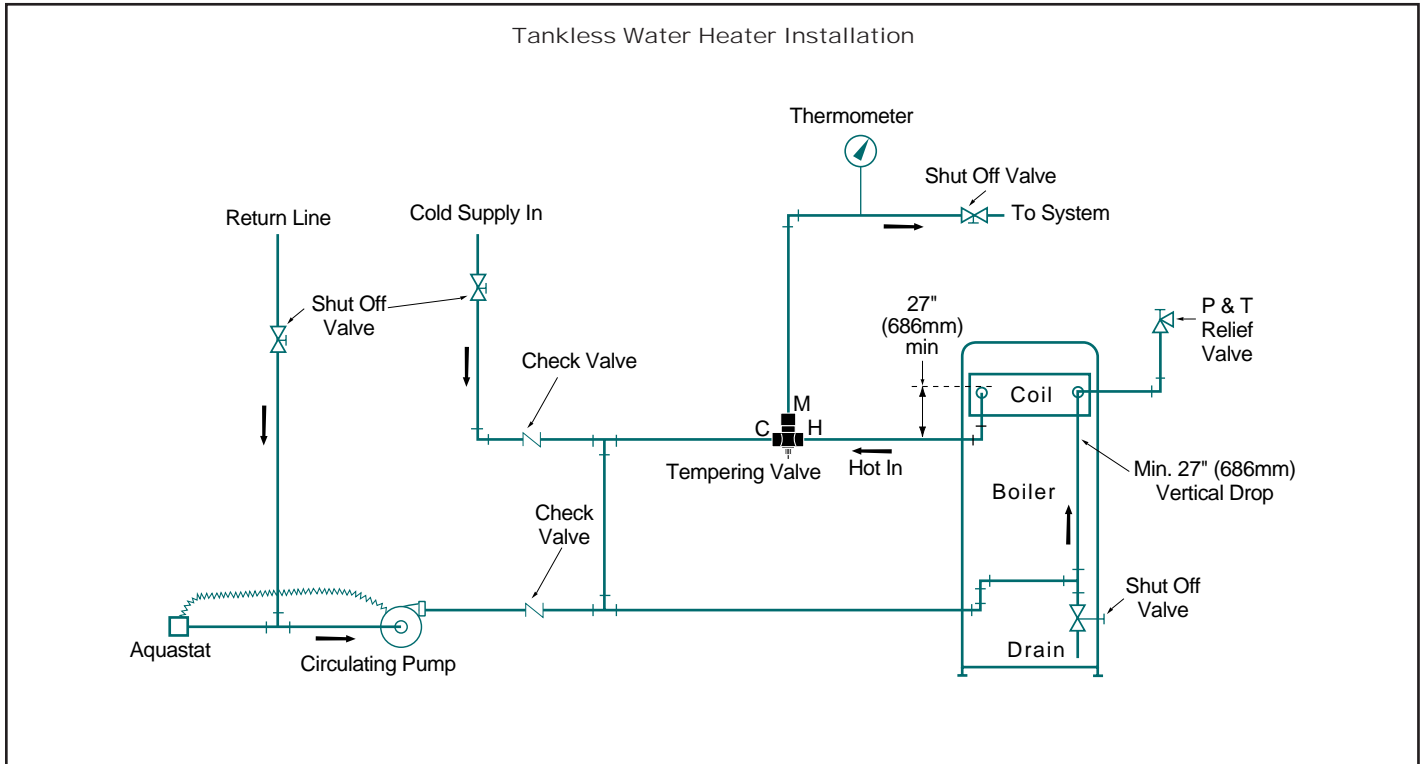
Adjustable range of 100 to 200°F (38 to 93°C). Maximum supply temperature 235°F (113°C).

Model Number	Part Number	NPT Size in. (mm)	Weight lbs. (kg)
21H	401024	3/4 (20)	3 (1.4)
21H	401030	1 (25)	3 (1.4)
21H	401033	1 1/4 (32)	6 (2.7)
21H	401048	1 1/2 (40)	7 (3.2)
21H	401102	2 (50)	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. (mm)	Weight lbs. (kg)
21LT	401281	3/4 (20)	3 1/2 (1.6)
21LT	401284	1 (25)	3 1/2 (1.6)
21LT	401287	1 1/4 (32)	6 1/2 (2.9)
21LT	401290	1 1/2 (40)	7 1/2 (3.4)
21LT	401293	2 (50)	9 1/2 (4.3)

Series 21 Applications



Note: Circulating pumps, illustrated in the above applications, 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.

Thermostatic Temperature Regulators (continued)

Series 21 (continued)

Regulators

