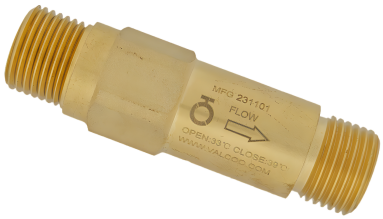
Thermal Circuit-Control Valve

THERMOSTATIC RECIRCULATION VALVE
HOT WATER FROM ANY TAP, ANY TIME

Application

Install a Thermal Circuit-Control valve on each hot water supply branch line immediately downstream of the last runout to a hot tap.



FP15GD-xxx-LT

FP15L-xxx

Operation

WINNING Thermal Circuit-Control Valves utilize a reliable self-contained WINNING Thermo Element which is sensitive to temperature and operates without any electrical power or air pressure. Typically in heat water system, when entering water temperature is below Thermal Circuit-Control Valve set point, the thermal actuator will begin to open the valve to establish a flow rate that will achieve set point. If the water temperature exceeds the set point, the valve will begin to throttle back to find the current equilibrium point. Continuously operating at the optimum temperature minimizes system heat-loss thereby saving energy. The valve with an integrated check valve must be installed with the flow arrow pointing in the correct direction (towards the return line).

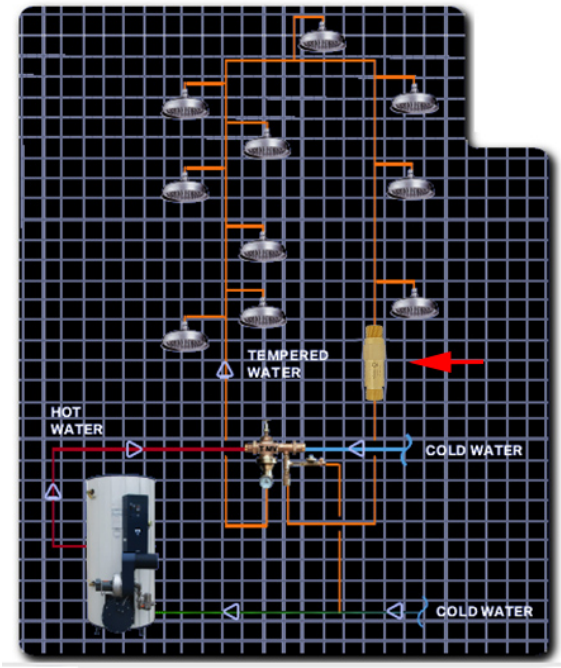
This constant, automatic response to water temperature enables each hot water branch to quickly and consistently deliver the right temperature of hot water to each connected fixture.

Design Features

- An check valve cartridge intigrated inside the valve
- Thermal actuator develops 40 lbs. of thrust to keep valve orifice free of deposits
- Brass body with G male connections
- Stainless return spring and Brass thermal actuator

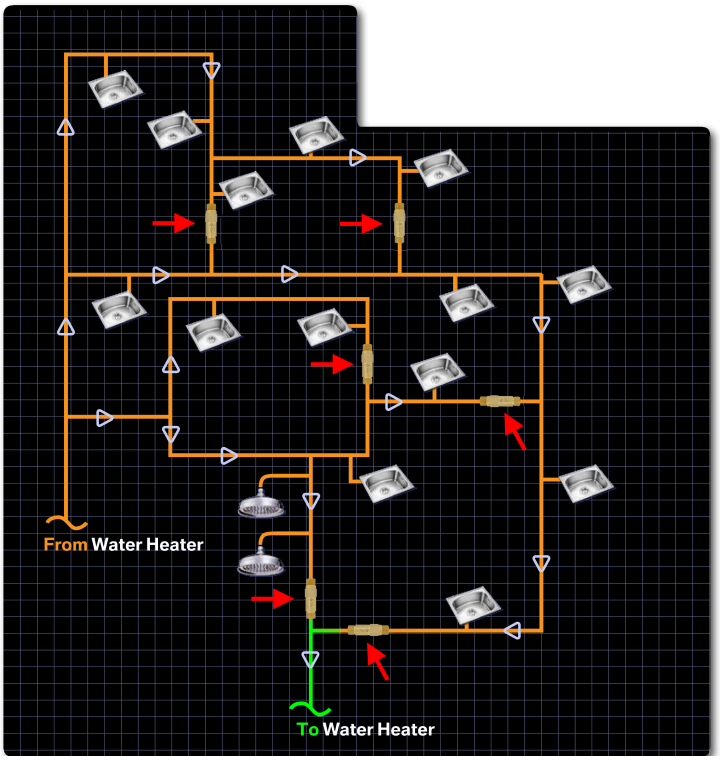
Advantages of installing the Thermal Circuit-Control valve

- get hot water where you need it at every turn of the tap automatically, reliably and economically.
- Eliminates the need to oversize system recirculating pumps to create constant flow through manually adjusted balancing valves.
- Minimizes heat-loss by reducing fluctuations in average temperature and gpm of the common return line.
- Lowers gpm flow in hot water return lines minimizing erosion-corrosion problems caused by excessive velocity.
- By having the union and check valve integrated, you save cost and labor, reduce the number of potential leak points, and have a more compressed, reliable assembly

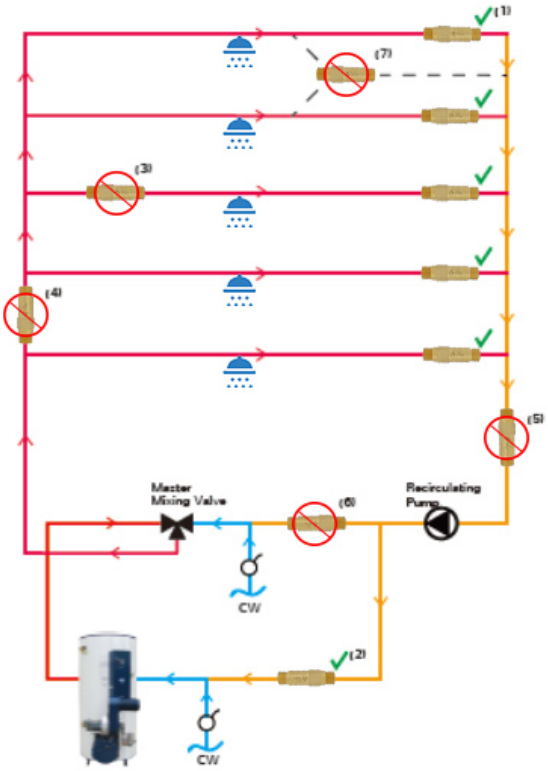


SINGLE CONTINUOUS DOMESTIC
HOT WATER SUPPLY LOOP (NO BRANCHES)

Thermal Circuit-Control Valve



BUILDINGS WITH WIDELY SPACED



MULTI-BRANCH DOMESTIC HOT WATER SYSTEM

Specifications

Model	Check Valve Cartridge	Flow Rate (Cv)	Ports	Material	Diameter (mm)	Length (mm)	Max Pressure (MPa)	Max Temp (°C)
FP15GD-xxx	NO	1.0	1/2″ M/F	Brass	25	63	1.0	95
FP15L-xxx	YES	1.0	1/2″ M/F	Brass	25	78.5	1.0	95
FP15GD-xxx-LT	YES	1.0	1/2″ M	Brass	25	84	1.0	95

Valve Selection:

Match the system piping size
Select a valve set temperature that corresponds to the hot water system's outlet temperature. (Customizable Set Temperature)
For example:
Hot water pipe: 1/2″
Hot water system temperature: 45°C

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