

## INSTALLATION INSTRUCTIONS

### 1/2", 1" and 2" Thermal Bypass Valves

(also applicable to other "special order" thermal bypass valves)

*Refer to the Thermal Bypass Sell Sheet for typical installation drawings.*

For special applications not shown, consult factory.

These valves provide automatic mixing or diverting operation through the use of a thermostatic element inside the valve. This thermostatic actuator will control the mixing or diverting of the hot and cold fluids within the specified temperature range.

The thermal bypass valves can be installed in any position consistent with the intended use. The operation of the thermal bypass valves is not sensitive to orientation.

**For Mixing:** cold inlet connects to C port, hot inlet to B port, A port is mixed outlet.

**For Diverting/Bypass:** connect inlet flow to A port, B port is the cold outlet, C port is the hot outlet.

Ports on some valves are marked "cold", "hot", "mix" which correspond respectively to C, B, A.

For most applications, pressure difference between the hot and cold ports should not exceed 10 psi.

TBV's are suitable for controlling the flow of any fluids compatible with the materials of construction and factory related operating pressure and temperature limits.


TBV's are not recommended for mixing steam and water; for steam/water mixing see bulletins describing the type STVM® valve.

#### **For domestic hot water applications**

Connect the cold water and hot water supplies to the correct connections on the valve, as shown on the Plumbing Diagrams for mixing or diverting on the thermal bypass sell sheet.

Typically there should be no shut-off valves installed between the cold water supply line and the cold water connection on the thermal bypass valve. A cold water service valve may be installed between the cold water supply line to the distribution system and the cold water line supplying both the water heater and the TBV.

In most plumbing applications, check valves should be installed on both the B and C ports, as shown on installation drawings.

 **WARNING:** This product can expose you to chemicals, for example lead, nickel, acrylonitrile, which are known to the State of CA to cause cancer, birth defects, or reproductive harm. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Warranty information disclosed at [www.thermomegatech.com/terms-conditions/](http://www.thermomegatech.com/terms-conditions/)