INSTALLATION INSTRUCTIONS
HAT/FP & IC/FP FREEZE PROTECTION VALVES

If installed and maintained as recommended, the ThermOmegaTech® HAT/FP and IC/FP valves will yield reliable and trouble free service. ***It is important that before installing you read these instructions carefully.***

REMEMBER: These Freeze Protection valves are full open at its stated temperature and full closed approximately 10°F above its stated temperature. Unless otherwise stated, these valves are supplied at their greatest standard Cv or flow rate. Smaller Cv's are available on request. See the product sheets.

For the **IC version**, the valve should be installed into a minimum 1" Tee with a 1" x 3/4" NPT reducer bushing or a 1-1/4" x ¾" x 1-1/4" NPT reducer Tee (no bushing) with adequate internal clearance.

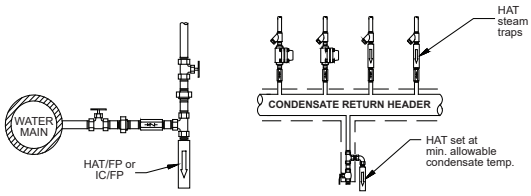
Never undersize installations. A #20 mesh strainer is recommended to use with all port sizes.

CAUTIONS

• Use only standard and proper connections • Do not over-tighten connections
• Always test after installation and before use • Always test before winter and summer seasons
• Test at regular intervals

FREEZE PROTECTION VALVES MAY SERVE AS PRIMARY PROTECTION ON UNTRACED SYSTEMS, OR AS A FAIL-SAFE BACKUP FOR TRACED WATER SYSTEMS:

Always place freeze valves at low points or where water will tend to be static or prone to accumulate or dead leg. Keep outlet piping short and discharge to a large diameter drain or ditch.

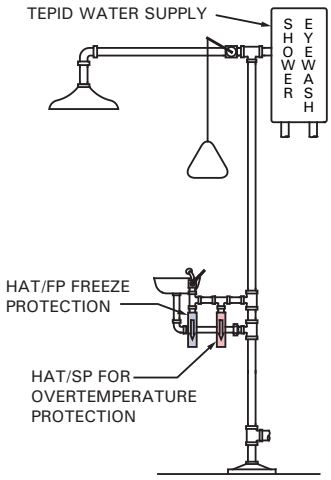


Never create an "ice patch" hazard by discharging to a slab or walkway. A preferred method of installation is to place the valve close to the point of discharge and connect with a run of piping from the line to be protected to the inlet side of the Freeze Protection valve.

Source and inlet piping may be insulated and/or traced, but never insulate or trace the valve body.

ON SAFETY SHOWERS AND EYEWASH STATIONS

Always keep pipe length short (with close nipple) between inflow piping and operating valve and place the Freeze Protection valve close to the operating valve.



REMEMBER: It is the flow of water that keeps the pipe from freezing (even short dead legs will freeze in severe conditions)

ON STEAM LINE APPLICATIONS

For saturated steam line freeze protection, the recommended uninsulated dead leg pipe lengths are:
0 to 50 psig = 18 to 28 inches
50 to 100 psig = 3.5 ft
100 to 200 psig = 5 ft
200 to 300 psig = 6.5 ft

Fill with water before startup if possible as you would a steam gauge siphon.

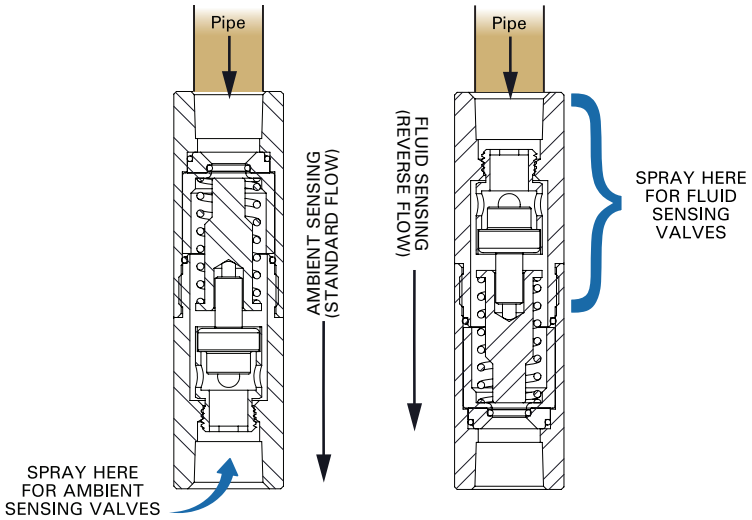
ON SOLAR APPLICATIONS

When using Freeze Protection valves in a solar application a minimum 12" long dead leg must be added prior to the valve to help reduce residual high temperatures that approach or go over 300°F.

TO TEST FOR OPERATION WHILE IN LINE

Use freeze spray sparingly, applying short 3-second bursts for Ambient Sensing valves where the actuator faces the outlet. For Water Sensing orientations, cool the outer half of the valve body connected to the piping (opposite the outlet) until the valve begins to drip.

Cooling may also be performed using CO_2 or an ice-water slurry. The valve will begin to run or drip until warm water reaches the actuator. Once flow is established, verify that the valve closes off bubble-tight.



TO TEST FOR PROPER SET-POINT

Remove from system and place entire valve in an ice and water slurry at 33-34°F (0.6-1.1°C). The valve should open fully within 5 minutes. Move the valve to an ice and water slurry at 40-42°F (4.4-5.6°C). The valve should close bubble tight.

It should be understood that the use of these valves is not a substitute for regular and routine scrutiny of safe conditions. Installation and use of this product is outside the control of ThermOmegaTech® and is the sole responsibility of the end user. ThermOmegaTech® makes no guaranties, either expressed or implied, in connection with its installation or use.

Proper Use: Use ThermOmegaTech® products only as specified to ensure performance, safety, and regulatory compliance.
No Modifications: Do not modify ThermOmegaTech® products, as changes may void warranties and violate regulations (e.g., RoHS, REACH).
Proper Disposal: Dispose of end-of-life products per local hazardous substance regulations; contact ThermOmegaTech® or recycling facilities for guidance.

⚠ 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

Warranty information disclosed at www.thermomegatech.com/terms-conditions/

353 Ivyland Road • Warminster, PA 18974-2205 • Phone: 1-877-379-8258 • www.ThermOmegaTech.com