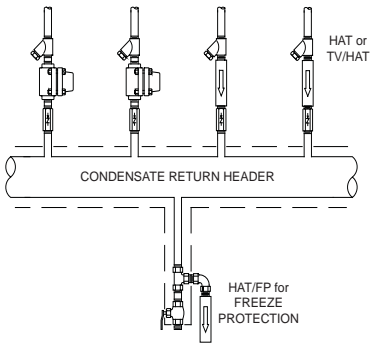


## INSTALLATION INSTRUCTIONS HAT & TV/HAT STEAM TRAPS

If installed and maintained as recommended, the **Therm-Omega-Tech HAT** and **TV/HAT** valves will yield reliable and trouble free service. **IMPORTANT:** Before installation, please read and understand this sheet.

**REMEMBER:** These valves are fully open at their stated temperature and fully closed at approximately 10°F higher. Unless otherwise stated, these valves are supplied at their standard Cv or flow rate. Smaller or larger Cv's are available on request. Outflow temperatures will be the same regardless of steam pressure; therefore, greater backup will occur at higher pressures. These valves will not cycle, but will modulate, which makes them ideal for heat trace applications where overtemperature is undesirable. If condensate outflow is to be used to warm or freeze protect a small device, you must provide several feet of bare tubing ahead of (upstream of) the valve to provide the condensate. A #20 mesh strainer is recommended to use with all port sizes.



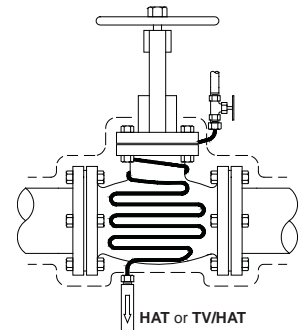
### AS A STEAM TRAP REPLACEMENT:

The **HAT** and **TV/HAT** can be used to replace some traps. In general, they may be used in any light load situation, such as: \* Steam tracing \* Ahead of block valves in steam lines \* Drip traps on distribution lines \* Start-up vents for water hammer plagued systems.

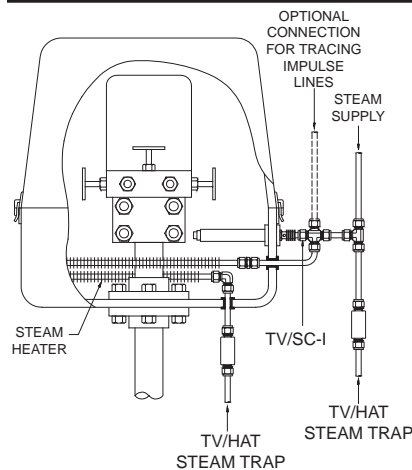
**NOTE:** In the condensate return header application illustrated, the **HAT** and **TV/HAT** must be used with a check valve downstream if the header is not at atmospheric pressure.

### TRACING A CONTROL VALVE OR PUMP CASE:

The **HAT** and **TV/HAT** can be used to efficiently trace any number of critical components. Because the valve regulates condensate outflow temperature, any available steam pressure up to 300 PSI may be used without worry that the tracer will be too hot for the process or component.



### TRACE DELICATE INSTRUMENTS IN FLEXIBLE OR RIGID ENCLOSURES:



Together with the **TV/SC-I** (as shown in the accompanying illustration) or **ITCH** kit, the **TV/HAT** can be used to provide accurate temperature control in an instrument enclosure or analyzer housing. The **TV/HAT** on the steam inlet keeps the supply line hot right up to the enclosure. For maximum economy, the **TV/HAT** on the outlet removes the condensate in the heater only when it falls below the desired temperature. **HAT** or **TV/HAT** valves may also be used to trace delicate sample lines without worry of overtemperature or available steam pressure.

**Therm-Omega-Tech** also manufactures **HAT** valves in temperature ranges that will regulate steam or fluid outflow temperature for many applications, including freeze protection of: Safety showers and/or eyewash stations, pipe runs, water mains; backup protection of traced mains, or for bare pipe runs from an insulated and traced main. Reverse acting models (**HAT/RA**, **HAT/SP**) that provide overtemperature (scald) protection and cooling water control are also manufactured. Available pipe sizes: 1/2 and 3/4 NPT, 1/4, 3/8 and 1/2 tube compression fittings. Various Cv's are available also.

### 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

### WARRANTIES AND DISCLAIMERS:

**Therm-Omega-Tech Inc.** warrants this product to be free from defects in material and workmanship for a period of 36 months. Cost of replacement will be prorated on the basis of the issue date of each unit. Units found to be defective will be replaced on a one to one basis, FOB Warminster, PA USA. Installation and use of this product is outside the control of **Therm-Omega-Tech Inc.**; therefore, **Therm-Omega-Tech Inc.** disclaims any and all liabilities arising from its installation and or use, and furthermore, **Therm-Omega-Tech Inc.** makes no guarantees, either expressed or implied, in connection with its installation or use.

HAT-TV\_IMI  
REV: 10/07/14