CircuitSolver®

A ThermOmegaTech® brand

# Stay Out Of Hot Water With DTV!




## ThermOmegaTech's Drain Tempering Valve Keeps Drain Water Up to Code

Discharging water over 140°F from commercial equipment can result in failed inspections, costly fines, or piping and equipment damage. ThermOmegaTech's self-operating Drain Tempering Valve (DTV) offers a simple solution—automatically mixing in cold water when temperatures exceed the set point, then shutting off once cooled to conserve water.

Available in ½", ¾", and 1" brass or stainless steel, the DTV is a compact, reliable, & cost-effective way to temper hot effluent to safe, code-compliant levels.

## TYPICAL APPLICATIONS

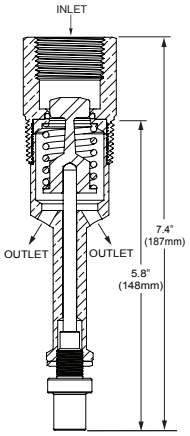
- Commercial Kitchens and Dishwashers
- Sterile Processing Equipment
- Mechanical Rooms

## MARKETS SERVED

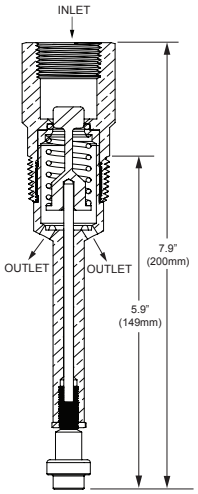
- Schools and Universities
- Restaurants and Brewpubs
- Hospitals and Healthcare Facilities
- Hotels and Hospitality

See ThermOmegaTech's DTV in action at CircuitSolver.com/DTV

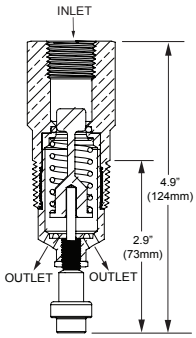
ThermOmegaTech® (877) 379-8258 | www.ThermOmegaTech.com



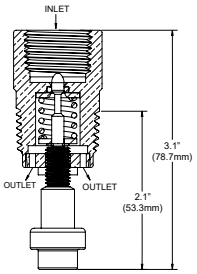

1″ DTV




¾″ DTV




½″ DTV




MINI DTV

## SPECIFICATIONS

Maximum Inlet Pressure.....125 PSIG (8.6 BAR)
Maximum Temperature.....250°F (121°C)
Full Open Temperatures.....120°F, 125°F, 130°F, 140°F
(48.9°C, 51.7°C, 54.4°C, 60°C)

Weight

| | |
|---|---|
| Mini ½″ | 0.4Lbs (0.18Kg) |
| ½″ | 1.1Lbs (0.5Kg) |
| ¾″ | 1.2Lbs (0.5Kg) |
| 1″ | 1.5Lbs (0.7Kg) |

Flow Coefficient

| | |
|---|---|
| Mini ½″ | 0.5 |
| ½″ | 2.0 |
| ¾″ | 2.0 |
| 1″ | 4.0 |

Size (NPT)

| | Water Inlet | Drain Connection |
|---|---|---|
| Mini ½″ | 3/4″ | |
| ½″ | 1″ | |
| ¾″ | 1″ | |
| 1″ | 1-1/4″ | |

## SAMPLE CALCULATION

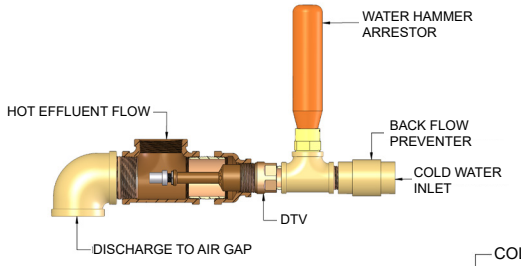
**How much effluent can be tempered with a 1″ DTV valve?**

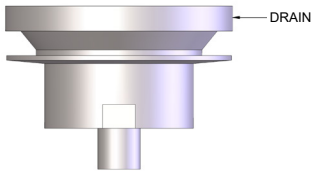
1) Flow capacity through cold water port of 1″ DTV with Cv = 4.0:
   CW GPM = Cv x sqrt pressure drop
   Assume 50 PSIG cold water pressure, drain pressure = 0 PSIG
   CW GPM = 4 x sqrt (50) = 28.3 GPM
   Assume for this example:
   Cold water temp = 60°F (CT)
   Hot effluent temp = 212°F (HT)
   Max. allowable drain temp = 140°F (MT)
2) Maximum effluent flow (GPM) that can be tempered:
   CW x (MT-CT)/(HT-MT)
   MT-CT = 80
   HT-MT = 72
   Maximum effluent flow rate = 28.3x 80/72 = 31.4 GPM

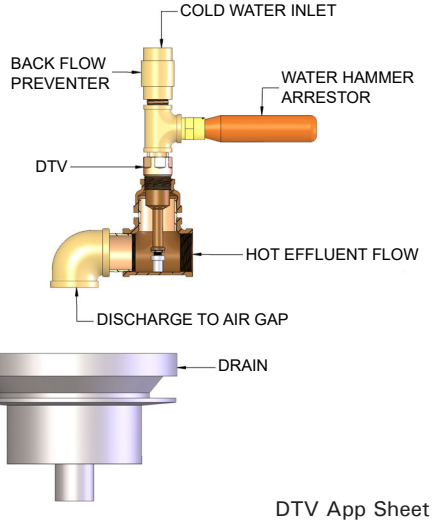
## BENEFITS

- Rugged, clog resistant valve design
- Easily installed using standard pipe fittings and tools
- Operates in any orientation
- Minimizes water waste
- Modulates to conserve cooling water
- Effluent tempering capacity limited only by cold water flow rate through DTV

## TYPICAL INSTALLATIONS




## ORDERING INFORMATION

| | |
|---|---|
| 325-000000-XXX | ½″ DTV Brass |
| 325-100000-XXX | ½″ DTV Stainless Steel |
| 326-000000-XXX | ¾″ DTV Brass |
| 326-100000-XXX | ¾″ DTV Stainless Steel |
| 327-000000-XXX | 1″ DTV Brass |
| 327-100000-XXX | 1″ DTV Stainless Steel |
| 328-000000-XXX | Mini ½″ DTV Brass |

### NOTES

**Install a water hammer arrestor between the DTV and check valve/ backflow preventer to prevent damage to the DTV. Failure to do so will void the warranty.** Optional arrestors and backflow preventers are available—contact us for details.