

## TV/SC-A

### AMBIENT TEMPERATURE CONTROL VALVE

## BENEFITS

- Economically controls fluid flow
- Reduces operating and labor costs associated with winterization procedures
- Self-operating, no power or signal required
- Eliminates steam waste in tracing
- Standard tube connections for quick and easy installation
- Operating temperatures unaffected by pressure variations

## DESIGN FEATURES

- Exclusive **Thermoloid**® thermal actuator
- All stainless steel construction
- Compact, low mass - Fast response
- Corrosion resistant - Long service life
- Ram-type plug for tight reliable shutoff
- Narrow temperature band
- Wide choice of set-points available

## APPLICATIONS

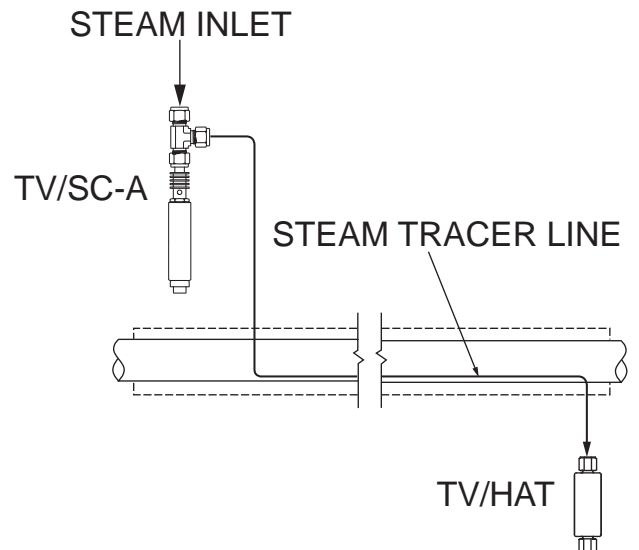
There are hundreds of applications for these compact, self-contained, automatic control valves. Ambient sensing valves can be used to turn on steam, air, gas or liquids compatible with Teflon® and stainless steel, in response to ambient temperature change. Applications include automation of steam trace lines, operation of pneumatically operated pumps for injection of antifreeze liquids and instrument enclosure control.

## OPERATION

A thermostatic element located at one end of the **TV/SC-A** (thermally isolated from the body of the valve), will open or close within a 10°F (5.6°C) differential (e.g. 35°-45°F, etc.) and control the flow of steam, gas, or fluid through the valve based on ambient temperature. The **TV/SC-A** opens on falling temperature. The **TV/SC-A** may also be used to control instrument enclosure temperatures (see TV/SC-I and ITCH product sheets).



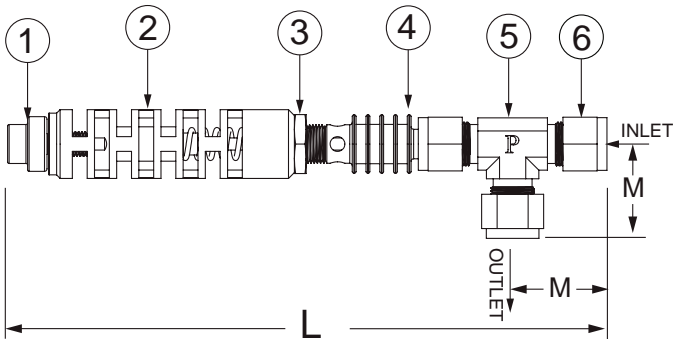
## TYPICAL INSTALLATION



# TV/SC-A

## AMBIENT TEMPERATURE CONTROL VALVE

### PARTS & MATERIALS



ITEM	DESCRIPTION	MATERIAL
1	THERMAL ACTUATOR	300 Series SS
2	ISOLATION EXTENSION	300 Series SS
3	CALIBRATION LOCKNUT	300 Series SS
4	YOKE	300 Series SS
5	TEE BODY	300 Series SS
6	TUBING COMPRESSION NUT	300 Series SS

### DIMENSIONS & CAPACITIES

TUB O.D. Size	L		M		Weight		$C_v$	Maximum Operating Pressure	Maximum Temperature	
	in	mm	in	mm	Lb	Kg			Valve End	Sensing End
3/8"	7.4	188	1.2	30	0.5	0.2	0.5	200 PSIG (13.8 BAR)	388°F (198°C)	150°F (66°C) over set-point limit 300°F(149°F)
1/2"	7.9	201	1.4	36	0.8	0.4	0.9			

### ORDERING

Part Number <sup>1,2</sup>	Description
713 - 0X1000 - XXX	3/8" TV/SC-A
714 - 0X1000 - XXX	1/2" TV/SC-A

#### NOTES

- Full open temperatures "XXX" available: 035°F, 040°F, 050°F, 055°F, 060°F, 065°F, 075°F, 085°F, 090°F, 095°F, 100°F, 105°F, 110°F, 120°F, 125°F, 130°F, 140°F, 150°F, 155°F, 160°F, 170°F, 180°F, 190°F, and 200°F.  
  - Note: Closing temperature is typically 10°F above opening temperature.
- O = Parker fittings are standard. 1 = Swagelok fittings are available.
- A #20 mesh strainer is recommended.
- Warranty information disclosed at [www.thermomegatech.com/terms-conditions/](http://www.thermomegatech.com/terms-conditions/)



ThermOmegaTech®, Inc.  
353 Ivyland Road  
Warminster, PA 18974

1-877-379-8258  
[www.ThermOmegaTech.com](http://www.ThermOmegaTech.com)

TV/SC-A  
5/29/2020