



**THEM-OMEGA-TECH**

**ISO 9001 CERTIFIED**

## MODEL TV/SC-A

AMBIENT TEMPERATURE CONTROL

FREEZE PROBLEMS?  
CALL THE GURU 1-877-FRZ-VALVE

### DESIGN FEATURES

- ◆ Narrow operating temperature band
- ◆ Compact low mass - fast response
- ◆ Ram-type plug for reliable shut off
- ◆ Unaffected by pressure variations
- ◆ Quick, easy installation
- ◆ Compatible with standard tubing and connections
- ◆ Long service life
- ◆ Direct acting (no pilot valve)



### ADVANTAGES

**TV/SC-A** type valves economically automate fluid flow in response to ambient temperature. Many setpoints are available from about 30°F to 240°F. Standard tubing connections allow quick installation at a low cost. These compact valves reduce energy waste, lower maintenance costs and are economical to operate. **TV/SC-A** valves are covered with our standard 36 month prorated warranty.

### APPLICATIONS

There are literally 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.

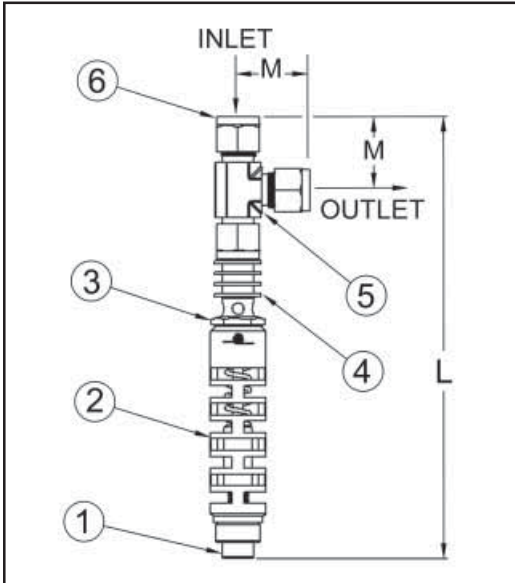
### OPERATION

At the designated set point, a thermostatic element located at one end of the valve (and 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 fact sheets).

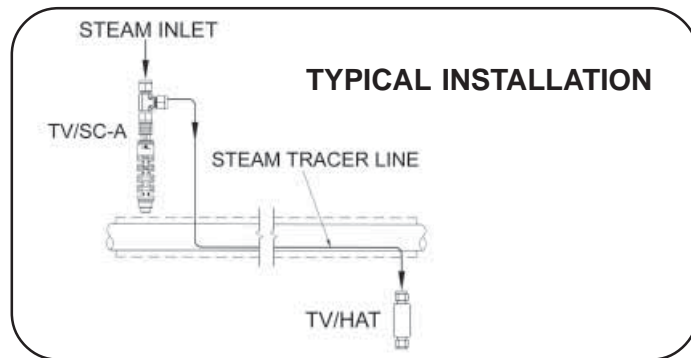
# MODEL TV/SC-A

## AMBIENT TEMPERATURE CONTROL VALVES

### PARTS AND MATERIALS



ITEM	DESCRIPTION	MATERIAL
1	THERMALACTUATOR	300 SERIES STAINLESS
2	ISOLATIONEXTENSION	300 SERIES STAINLESS
3	CALIBRATIONLOCKNUT	300 SERIES STAINLESS
4	YOKE	300 SERIES STAINLESS
5	BODY	300 SERIES STAINLESS
6	TUBING COMPRESSIONNUT	300 SERIES STAINLESS



### SPECIFICATIONS

Tube OD	L		M		Weight		Cv	Maximum Pressure	Maximum Temperature (note 2)	
	in	mm	in	mm	Lb	Kg			Valve End	Sensing End
3/8"	7.37	187	1.19	30	0.45	0.20	0.5	200 PSIG (13.8 BAR)	390°F (199°C)	150°F over setpoint
1/2"	7.88	200	1.38	35	0.75	0.34	0.9			

### TO ORDER, SPECIFY: (see note 1 for standard temperatures)

Part Number	Description
713-000000-XXX	3/8" TV/SC-A
713-001000-XXX	3/8" TV/SC-A (stainless steel extension)
714-000000-XXX	1/2" TV/SC-A
714-001000-XXX	1/2" TV/SC-A (stainless steel extension)

#### NOTES:

- Standard open set point 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, 125°F, 130°F, 140°F, 150°F, 155°F, 160°F, 170°F, 180°F, 190°F and 200°F.
- Closing temperature is typically 10°F above opening temperature.
- Acetal Isolation Extension to be used for applications up to 150°F maximum temperature. For applications above 150°F, stainless steel will be used.
- A #20 mesh strainer is recommended for use with all port sizes.

*Therm-Omega-Tech, Inc. reserves the right to change the design and specifications without notice*



**THERM-OMEGA-TECH, INC.**

353 Ivyland Road, Warminster, PA 18974-2205  
Phone: 215-674-9992 Fax: 215-674-8594

CALL THE VALVE GURU TOLL FREE

**1-877-FRZ-VALVE (379-8258)**

Visit our internet site at: <http://www.thermomegatech.com> email: [valves@thermomegatech.com](mailto:valves@thermomegatech.com)