ThermOmegaTech®

TV/SC-A & TV/SC-AR

AMBIENT TEMPERATURE CONTROL VALVE

BENEFITS

- Self-operating, no power or signal required
- Economically controls fluid flow
- Reduces operating and labor costs associated with winterization procedures
- 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, glycol, air, gas or liquids compatible with Teflon® and stainless steel, in response to ambient temperature change.

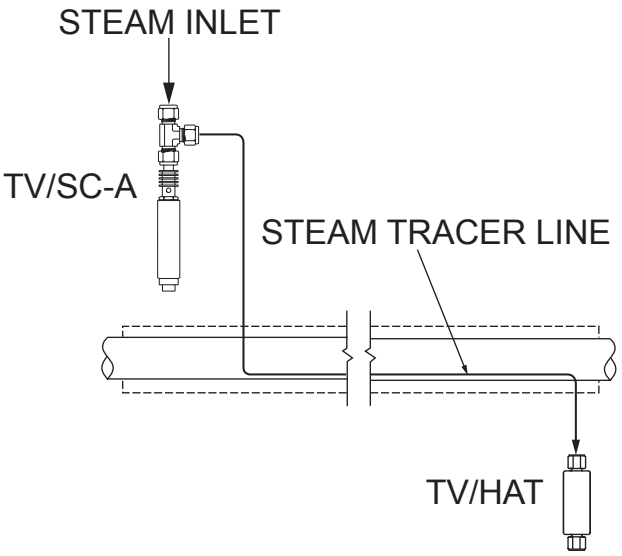
Applications include automation of steam trace lines, operation of pneumatically operated pumps for injection of antifreeze liquids and instrument or analyzer enclosure temperature control.

OPERATION

The **TV/SC-A** is designed to regulate heating fluid where as the **TV/SC-AR** regulates cooling fluid. A thermostatic element located at one end of the valve (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, 110°- 120°F etc.) to control the flow of steam, gas, or fluid through the valve based on ambient temperature.

The **TV/SC-A** opens on falling temperature where as the **TV/SC-AR** opens on rising temperature.

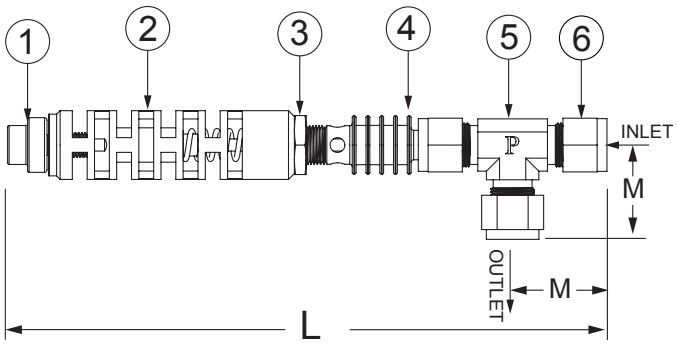
TYPICAL INSTALLATION



TV/SC-A AND TV/SC-AR

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)	Range 150°F (83.3°C) over set-point with a limit of 300°F (149°C)
1/2″	7.9	201	1.4	36	0.8	0.4	0.9			

ORDERING

Part Number[1,2]	Description
713 - 0X1000 - XXX	3/8″ TV/SC-A
714 - 0X1000 - XXX	1/2″ TV/SC-A
723 - 0X1000 - XXX	3/8″ TV/SC-AR
724 - 0X1000 - XXX	1/2″ TV/SC-AR

NOTES

1. Full open temperatures “XXX” available:
   a. A Series: 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
   b. AR Series: 040°F, 045°F, 050°F, 060°F, 070°F, 075°F, 085°F, 095°F, 100°F, 105°F, 110°F, 115°F, 120°F, 125°F, 130°F, 140°F, 150°F, 160°F, 170°F, 175°F, 180°F, 190°F, 200°F, and 210°F.
   c. Note: Closing temperature is typically 10°F above opening temperature.
2. Single X: O = Parker fittings are standard. 1 = Swagelok fittings are available.
3. A #20 mesh strainer is recommended.
4. Warranty information disclosed at www.thermomegatech.com/terms-conditions/

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Because of continuous improvements, ThermOmegaTech®, Inc. reserves the right to change the design and specifications without notice