



**THEM-OMEGA-TECH**

**ISO 9001 CERTIFIED**

## ITCH ASSEMBLY

INSTRUMENT TEMPERATURE COIL HEATER ASSEMBLY

**FREEZE PROBLEMS?  
CALL THE GURU 1-877-FRZ-VALV**

### DESIGN FEATURES

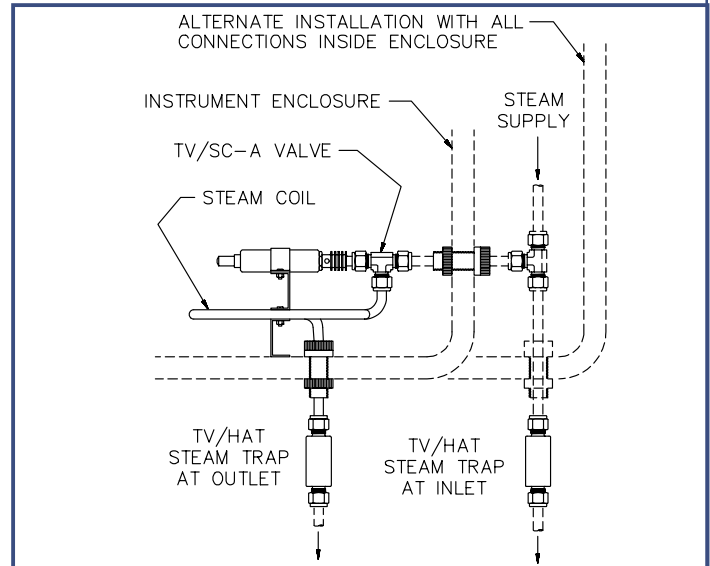
- ◆ Complete kit provides quick, easy installation
- ◆ Eliminates danger of overheating
- ◆ 100% factory tested
- ◆ Direct acting (No pilot valve)
- ◆ Can maintain enclosure temperature within 2°F (1.1°C) of control point
- ◆ Self-operating, eliminates explosion hazard
- ◆ All stainless steel body, fittings, springs, plug, heating coil and brackets.
- ◆ Ram-type plug for reliable tight shutoff
- ◆ Unaffected by pressure
- ◆ Long service life (36 month pro rated warranty)
- ◆ Compatible with standard tubing and tubing connections

### ADVANTAGES

**ITCH Assemblies** will maintain enclosure temperature accurately over a wide range of ambient temperatures with steam supply pressures from 15 psig to 200 psig (1.0 to 13.8 BAR) without danger of overheating delicate instruments. No special NEMA-7 or -9 housings are required even in potentially explosive environments. Enclosure temperatures can be maintained within 2°F (1.1°C) for pennies a day.

### OPERATION

At the designated control point, a thermostatic element located at one end of the **TV/SC-A** valve portion of the **ITCH Assembly** regulates the steam supply to the heater coil to accurately maintain the desired temperature, operating like the thermostat in an oven. The **TV/HAT** at the valve inlet keeps the steam supply hot, right up to the valve. Heat radiating from the steam coil heater reaches the actuator causing it to quickly close the steam supply when the desired temperature is reached, regardless of ambient. The **TV/HAT** at the outlet of the steam coil regulates outflow based on the condensate temperature, for maximum economy. The **ITCH Assembly** comes complete with steam coil, mounting bracket, and **TV/SC-A** valve assembly, two **TV/HAT** valves, and two weather-tight bulkhead fittings for 3/8 tubing connections. **TV/SC-A** and **TV/SC-I** valves (with external connections) are also available separately.



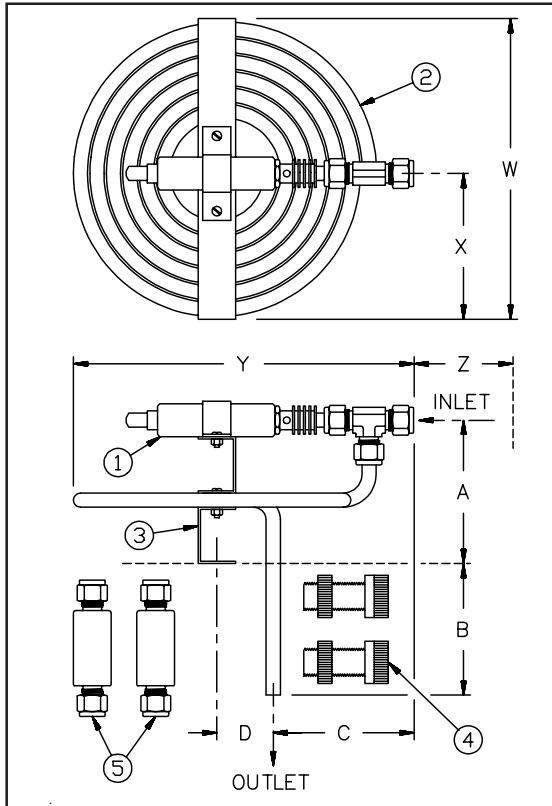
### APPLICATIONS

The Therm-Omega-Tech **ITCH Assembly** assures accurate temperature control in an instrument or analyzer enclosure. This self-contained unit provides a reliable, economical alternative to costly, hazardous electric heating. The compact thermostatic control valve senses enclosure temperature and automatically regulates the flow of steam to the steam coil to maintain the desired temperature to within 2°F (1.1°C) of the desired control point. These economical valves are available with set points from 35°F to 200°F (1.7°C to 93.3°C).

# ITCH ASSEMBLY

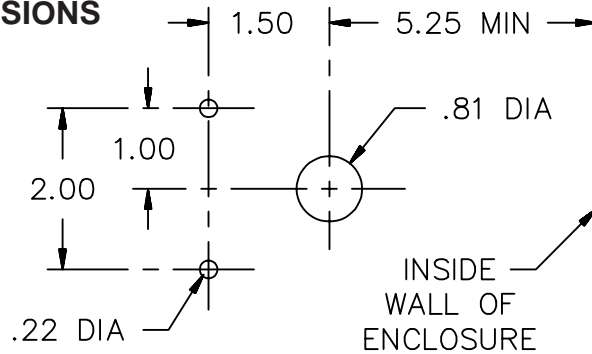
## INSTRUMENT TEMPERATURE COIL HEATER

### PARTS AND MATERIALS



ITEM	DESCRIPTION	MATERIAL
1	TV/SC-A VALVE	SEE CATALOG PAGE
2	STEAM COIL	300 SERIES STAINLESS
3	MOUNTING BRACKET	300 SERIES STAINLESS
4	BULKHEAD FITTING	ACETAL
5	TV/HAT	SEE CATALOG PAGE

### MOUNTING DIMENSIONS



### SPECIFICATIONS:

Tube OD	A		B		C		D		W		X		Y		Z		Cv	Maximum Pressure PSIG (BAR)	Maximum Temperature
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm					
3/8"	3.8	97	3.5	89	3.8	97	1.5	38	8.0	203	4.0	102	9.0	229	1.5	38	0.5	200 (13.8)	250°F (121°C)

### TO ORDER SPECIFY:

Part Number	Description
753-000000-XXX	3/8 ITCH Assembly

### NOTES:

1. Standard open set point temperatures "XXX" available: 035F, 040F, 050F, 055F, 060F, 065F, 075F, 085F, 090F, 095F, 100F, 105F, 110F, 125F, 130F, 140F, 150F, 155F, 160F, 170F, 180F, 190F and 200F.

2. Closing temperature is typically 10F above opening temperature.

3. 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*



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CALL THE VALVE GURU TOLL FREE

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