



**THEM-OMEGA-TECH**

**ISO 9001 CERTIFIED**

# MODEL HAT/MIX-R

## TEMPERING, MIXING, AND DIVERTING

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

### DESIGN FEATURES

- ◆ All stainless steel body
- ◆ Corrosion resistant - long service life
- ◆ Clog resistant design
- ◆ Narrow temperature band
- ◆ Easy installation
- ◆ Installs in any orientation
- ◆ Modulation throughout range to conserve cooling fluid yet will temper large quantities of hot fluid



### ADVANTAGES

Controls cooling of hot fluid to desired level before return to system or discharge to sewer. Flow through design facilitates discharge. Automatic temperature compensation conserves tempering fluid.

### APPLICATIONS

Can be used in applications where the fluid must be tempered, for example, the discharge of condensate or boiler blowdown with cooler water before piping to a sewer or return system.

### TYPICAL USES

- ◆ Condensate discharge from steam traps
- ◆ Condensate return headers
- ◆ Boiler blowdown drain lines
- ◆ Process discharge tempering

### OPERATION

The hot fluid connects to the side, pass through connection on the **HAT/MIX-R** valve. This connection is never regulated so it always remains open regardless of temperature or valve position.

The hot fluid flow then passes over the thermal actuator which controls the cold fluid inlet port for tempering. If the hot liquid temperature is above the valve setpoint, the cold fluid port is open. As the hot liquid cools, the valve automatically modulates to reduce the cold fluid inlet flow. If the hot fluid is below the specified temperature, the cold fluid inlet port is closed, since no additional cooling is required.

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### PARTS AND MATERIALS

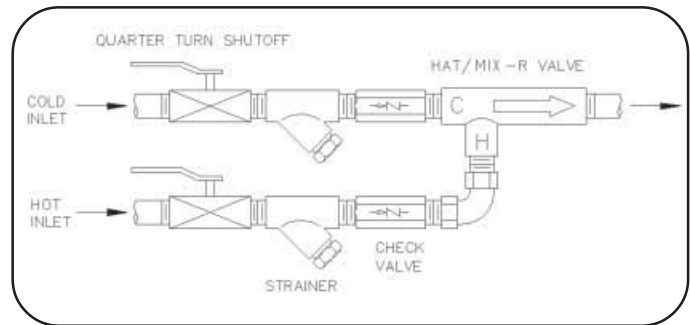
	ITEM	DESCRIPTION	MATERIAL
	1	TUBULAR BODY	300 SERIES STAINLESS
	2	HOT INLET FITTING	300 SERIES STAINLESS
	3	SEAT SEAL	PTFE
	4	OPERATING SPRING	300 SERIES STAINLESS
	5	RAM-TYPE PLUG	300 SERIES STAINLESS
	6	THERMAL ACTUATOR	BRASS or SS
	7	ACTUATOR CARRIER	BRASS or SS
	8	OUTLET FITTING	300 SERIES STAINLESS
9	COLD INLET FITTING	300 SERIES STAINLESS	

### SPECIFICATIONS

Size (NPTF)	W		M		L		Weight		Inlet Cv		Maximum Pressure	Maximum Temperature
	in	mm	in	mm	in	mm	Lb	Kg	Cold	Hot		
1/2"	1.70	43	1.5	38	4.5	114	0.79	0.36	1.5	2.2	200 PSIG (13.8 BAR)	150°F <sup>o</sup> over setpoint
3/4"	1.80	46	1.8	46	5.5	140	1.3	0.59	2.0	4.0		

### TO ORDER SPECIFY:

Part Number	Description
324-000000-XXX	1/2 HAT/MIX-R
324-100000-XXX	1/2 HAT/MIX-R -SS (all SS)
335-000000-XXX	3/4 HAT/MIX-R
335-100000-XXX	3/4 HAT/MIX-R-SS (all SS)



### NOTES:

- Standard open temperatures "XXX" available: 040F, 045F, 050F, 060F, 070F, 075F, 085F, 095F, 100F, 105F, 110F, 115F, 120F, 125F, 130F, 140F, 150F, 160F, 170F, 175F, 180F, 190F, 200F and 210F.
- Cold inlet closing temperature is typically 10F below opening temperature.
- Cold stream pressure should be at least 10 PSI (0.7 BAR) higher than hot stream pressure.
- 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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