

# HAT/FP

#### FREEZE PROTECTION VALVE

### **BENEFITS**

- Protects against freeze damage
- Primary protection or fail-safe backup
- Self operating no power or signal required
- Discharges minimum amount of water required
- Two wrench flats for easy installation

### **DESIGN FEATURES**

- Exclusive Thermoloid® thermal actuator
- Stainless steel body, fittings, and plugs
- Compact and low mass Fast response
- Corrosion resistant long service life
- Ram-type plug for reliable shutoff
- Narrow temperature band



## **APPLICATIONS**

Relying on manually opening valves for freeze protection allows for human error or plugging of partially cracked valves. This annually accounts for large amounts of freeze damage resulting in huge monetary losses associated with repairing damaged equipment, piping, as well as system downtime.

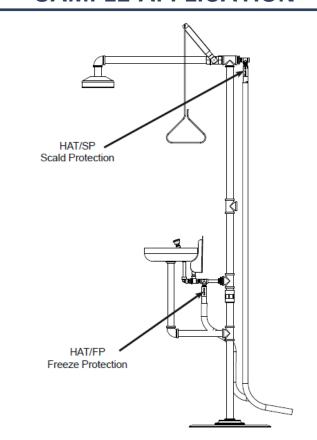
The self-actuating HAT/FP valve eliminates the human errors associated with manual valves. The automatic **HAT/FP** valve is ideal for the protection of piping, valves, fittings, pumps, safety showers, condensate systems, fire lines, spray nozzles, or as backup protection on traced systems.

## **OPERATION**

The HAT/FP will initiate flow when the thermostatic actuator senses 35°F (1.7°C) and will remain open as long as the discharge water temperature is below 40°F (4.4°C).

When installed in the ambient sensing position (standard flow), the actuator will respond to ambient temperature to initiate flow and then respond to water temperature once flow is established; when installed in the fluid sensing position (reverse flow), the actuator will always respond to water temperature.

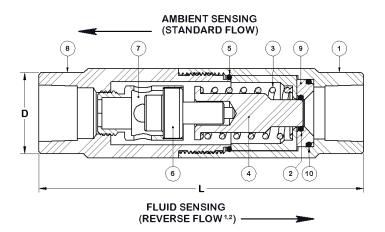
## SAMPLE APPLICATION



## HAT/FP

### FREEZE PROTECTION VALVE

## **PARTS & MATERIALS**



ITEM	DESCRIPTION	MATERIAL		
1	BODY - HALF	300 Series SS		
2	SEAT SEAL	FEP Encapsulated Viton		
3	OPERATING SPRING	300 Series SS		
4	RAM-TYPE PLUG	300 Series SS		
5	BODY SEAL	EPDM		
6	THERMAL ACTUATOR	Brass or SS		
7	ACTUATOR CARRIER	Brass or SS		
8	BODY - HALF	300 Series SS		
9	SEAT INSERT	300 Series SS		
10	SEAT INSERT SEAL	EPDM		

## **DIMENSIONS & CAPACITIES**

ĺ	SIZE (NPT)	D		L		Weight		Port		Maximum	Maximum
		in	mm	in	mm	Lb	Kg	Size	C <sub>v</sub>	Operating Pressure <sup>1&amp;2</sup>	Temperature
	1/2"	1.3	33	4.5	114	0.9	0.4	В	0.8	300 PSIG (20.7 BAR)	300°F (149°C)
	1/2"	1.3	33	4.5	114	0.9	0.4	С	1.3		
ſ	3/4"	1.5	38	5.5	140	1.4	0.6	D	2		

## **ORDERING**

Part Number	Description				
114 - 212100 - 035	½" HAT/FP-35-B-SS-E (Ambient Sensing)				
114 - 812100 - 035	½" HAT/FP-35-B-SS-RF-E1 (Fluid Sensing)				
114 - 302100 - 035	½" HAT/FP-35-C-E (Ambient Sensing)				
114 - 702100 - 035	½" HAT/FP-35-C-RF-E2 (Fluid Sensing)				
114 - 312100 - 035	½" HAT/FP-35-C-SS-E (Ambient Sensing)				
114 - 712100 - 035	½" HAT/FP-35-C-SS-RF-E2 (Fluid Sensing)				
115 - 502100 - 035	%" HAT/FP-35-D-E (Ambient Sensing)				
115 - 512100 - 035	¾" HAT/FP-35-D-SS-E (Ambient Sensing)				
115 - 712100 - 035	¾" HAT/FP-35-D-SS-RF-E2 (Fluid Sensing)				

#### **NOTES**

- 1. Reverse flow option for B port is rated for 200 PSIG (13.8 BAR).
- 2. Reverse flow option for C & D ports are rated for 150 PSIG (10.3 BAR).
- 3. 316 SS and other materials are available. Consult our engineers for more information.
- 4. Full open/close temperatures: 35°F (1.7°C)/40°F (4.4°C).
- 5. A #20 mesh strainer is recommended.
- 6. Warranty information disclosed at www.thermomegatech.com/terms-conditions/

