ThermOmegaTech®

HAT/SP

SCALD PROTECTION VALVE

BENEFITS

- HAT/SP temperatures up to 105°F meet ANSI Z358.1 standards
- Protects safety showers from over-temperature conditions, keeping personnel safe
- Self-operating, no power or signal required
- Two wrench flats for easy installation
- Discharges the minimum amount of water required
- Some valves are NSF/ANSI/CAN 61 & 372 Certified



DESIGN FEATURES

- Exclusive **Thermoloid**® thermal actuator
- Stainless steel body, fittings, spring, and plug
- Compact, low-mass - fast response
- Corrosion resistant - long service life
- Ram type plug for reliable and tight shutoff
- Installs in any orientation
- Optional integrated strainer protects against debris

APPLICATIONS

A safety hazard for plant personnel can occur when utilizing safety showers, facewash, or eyewash stations if overheating the pipes caused by solar radiation or steam/electric tracing results in extremely high temperatures at the point of use. The **HAT/SP** valve prevents this safety hazard.

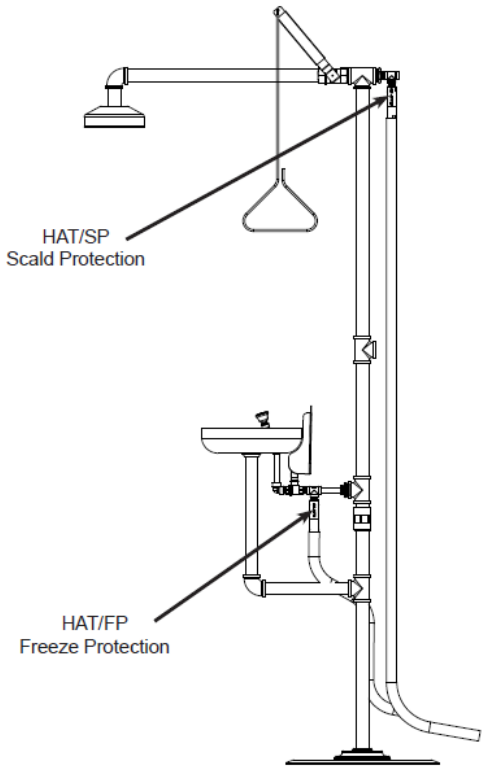
When installed in locations exposed to the same source of overheating as the system, the **HAT/SP** will be heated just as the pipe system. The valve will open to establish flow until the over-temperature water is eliminated and it will then modulate closed.

OPERATION

The **HAT/SP** should be installed at the highest point on a safety shower or face/eyewash station to monitor the temperature. The valve will initiate flow when its thermal actuator senses 98°F (36.7°C) and will remain open as long as the discharge water temperature is above 95°F (35°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.

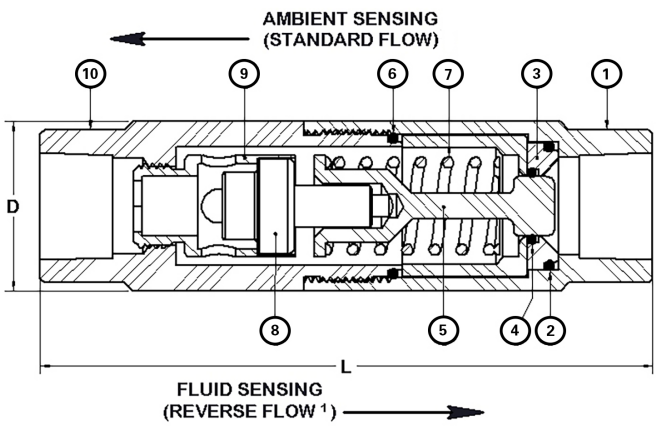
SAMPLE APPLICATION



HAT/SP

SCALD PROTECTION VALVE

PARTS & MATERIALS



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

DIMENSIONS & CAPACITIES

SIZE (NPT)	D		L		Weight		Port Size	C_v	Maximum Operating Pressure[1]	Maximum Temperature
	in	mm	in	mm	Lb	Kg				
1/2″	1.3	33	4.5	114	0.9	0.4	B	1.1	200 PSIG (13.8 BAR)	Range 150°F (83.3°C) over set-point with a limit of 300°F (149°C)
							C	1.5		
3/4″	1.5	38	5.5	140	1.4	0.6	D	2.0		

ORDERING

Part Number[2]	Description[3]
124 - 202100 - XXX	½″ HAT/SP-XXX-B-E (Ambient Sensing)
124 - 212100 - XXX	½″ HAT/SP-XXX-B-SS-E (Ambient Sensing)
124 - 802100 - XXX	½″ HAT/SP-XXX-B-RF-E (Fluid Sensing)
124 - 812100 - XXX	½″ HAT/SP-XXX-B-SS-RF-E (Fluid Sensing)
124 - 224100 - XXX	½″ HAT/SP-XXX-B-S6-E (Ambient Sensing)
124 - 824100 - XXX	½″ HAT/SP-XXX-B-S6-RF-E (Fluid Sensing)
124 - 302100 - XXX	½″ HAT/SP-XXX-C-E (Ambient Sensing)
124 - 312100 - XXX	½″ HAT/SP-XXX-C-SS-E (Ambient Sensing)[4]
124 - 702100 - XXX	½″ HAT/SP-XXX-C-RF-E[1] (Fluid Sensing)
124 - 712100 - XXX	½″ HAT/SP-XXX-C-SS-RF-E[1] (Fluid sensing)[4]
124 - 324100 - XXX	½″ HAT/SP-XXX-C-S6-E (Ambient Sensing)
124 - 724100 - XXX	½″ HAT/SP-XXX-C-S6-RF-E[1] (Fluid Sensing)
125 - 502100 - XXX	¾″ HAT/SP-XXX-D-E (Ambient Sensing)
125 - 512100 - XXX	¾″ HAT/SP-XXX-D-SS-E (Ambient Sensing)[4]
125 - 702100 - XXX	¾″ HAT/SP-XXX-D-RF-E[1] (Fluid Sensing)
125 - 712100 - XXX	¾″ HAT/SP-XXX-D-SS-RF-E[1] (Fluid Sensing)[4]

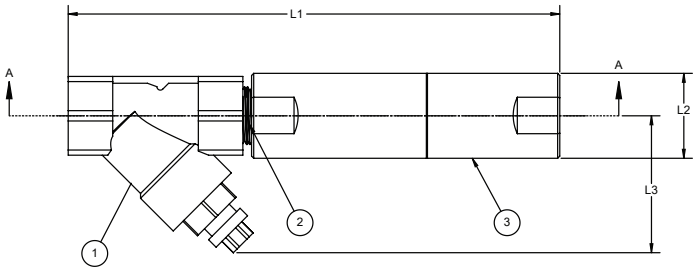
NOTES

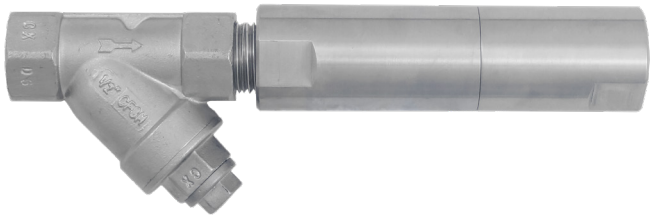
1. Reverse flow option for C-port is rated 150 PSIG (10.33 BAR); D-port is 70 PSIG (4.8 BAR)
2. Full open temperature, "XXX", is 105°F. Optional full open temperatures, "XXX": 95°F, 100°F, 110°F, and 115°F.
   a. ***Note: Closing temperature is typically 10°F below opening temperature.***
3. SS = 303 Stainless Steel and S6 = 316/316L Stainless Steel. Consult our engineering team if you require other materials.
4. This valve is NSF/ANSI/CAN 61 & 372 Certified.
5. A #20 mesh strainer is recommended.
6. Warranty information disclosed at www.thermomegatech.com/terms-conditions/

HAT/SP WITH STRAINER

SCALD PROTECTION VALVE

PARTS & MATERIALS





ITEM	DESCRIPTION	MATERIAL
1	WYE STRAINER	CF8M SS
2	PIPE NIPPLE	300 Series SS
3	HAT/SP VALVE	300 Series SS

DIMENSIONS & CAPACITIES

SIZE (NPT)	L1		L2		L3		Weight		Port Size	C_v	Maximum Operating Pressure[1]	Maximum Temperature
	in	mm	in	mm	in	mm	Lb	Kg				
1/2″	7.2	182	1.2	32	2.0	51	1.6	0.7	B	1.1	200 PSIG (13.8 BAR)	Range 150°F (83.3°C) over set-point with a limit of 300°F (149°C)
									C	1.5		
3/4″	9.0	228	1.5	38	2.4	60	2.8	1.3	D	2.0		

ORDERING

Part Number[2]	Description[3]
124 - 202101 - XXX	½″ HAT/SP-XXX-B-E With Y Strainer (Ambient Sensing)
124 - 212101 - XXX	½″ HAT/SP-XXX-B-SS-E With Y Strainer (Ambient Sensing)
124 - 802101 - XXX	½″ HAT/SP-XXX-B-RF-E With Y Strainer (Fluid Sensing)
124 - 812101 - XXX	½″ HAT/SP-XXX-B-SS-RF-E With Y Strainer (Fluid Sensing)
124 - 224101 - XXX	½″ HAT/SP-XXX-B-S6-E With Y Strainer (Ambient Sensing)
124 - 824101 - XXX	½″ HAT/SP-XXX-B-S6-RF-E With Y Strainer (Fluid Sensing)
124 - 302101 - XXX	½″ HAT/SP-XXX-C-E With Y Strainer (Ambient Sensing)
124 - 312101 - XXX	½″ HAT/SP-XXX-C-SS-E With Y Strainer (Ambient Sensing)
124 - 702101 - XXX	½″ HAT/SP-XXX-C-RF-E[1] With Y Strainer (Fluid Sensing)
124 - 712101 - XXX	½″ HAT/SP-XXX-C-SS-RF-E[1] With Y Strainer (Fluid Sensing)
125 - 502101 - XXX	¾″ HAT/SP-XXX-D-E With Y Strainer (Ambient Sensing)
125 - 512101 - XXX	¾″ HAT/SP-XXX-D-SS-E With Y Strainer (Ambient Sensing)
125 - 702101 - XXX	¾″ HAT/SP-XXX-D-RF-E[1] With Y Strainer (Fluid Sensing)
125 - 712101 - XXX	¾″ HAT/SP-XXX-D-SS-RF-E[1] With Y Strainer (Fluid Sensing)

NOTES

1. Reverse flow option for C-port is rated 150 PSIG (10.33 BAR); D-port is 70 PSIG (4.8 BAR)
2. Full open temperature, “XXX”, is 105°F. Optional full open temperatures, “XXX”: 95°F, 100°F, 110°F, and 115°F.
   a. ***Note: Closing temperature is typically 10°F below opening temperature.***
3. SS = 303 Stainless Steel and S6 = 316/316L Stainless Steel. Consult our engineering team if you require other materials.
4. Warranty information disclosed at www.thermomegatech.com/terms-conditions/

ThermOmegaTech®, Inc.
353 Ivyland Road
Warminster, PA 18974
1-877-379-8258
www.ThermOmegaTech.com

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