

HAT/RA-HP

HIGH PRESSURE IN-LINE TEMPERATURE CONTROL VALVE



BENEFITS

- Rated for higher pressure systems
- Controls fluid return temperature
- Maintains constant discharge temperature
- Improves system efficiency
- Unaffected by pressure variations
- Temperature actuated relief at set point
- Discharges minimum amount of water required to keep water temperature within safe limits

DESIGN FEATURES

- All stainless steel body, fittings, spring, and plug
- · Corrosion resistant long service life
- · Operates in narrow temperature band
- Compact low mass fast response
- Ram-type plug for reliable shut-off
- Easy to install



TYPICAL APPLICATIONS

The *HAT/RA-HP* (Heat Actuated Trap/Reverse Acting - High Pressure) valve is commonly used as a thermal relief valve on fire pumps and high pressure water pumps. It may be used to regulate the flow of glycol, water or other media in critical cooling applications and to economically remove heat from equipment or a process.

OPERATION

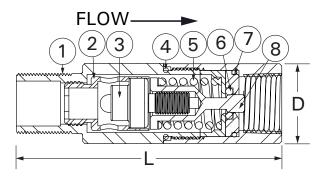
As the fluid temperature increases to within the operating range of the HAT/RA-HP, the thermal actuator modulates the valve open. If the fluid temperature is above the acceptable range, the valve will continue to modulate open allowing additional fluid discharge. As the outlet temperature falls, the valve then modulates toward the closed position, reducing flow. This modulating action maintains a relatively constant fluid temperature.

HAT/RA-HP

HIGH PRESSURE IN-LINE TEMPERATURE CONTROL VALVE



PARTS & MATERIALS



ITEM	DESCRIPTION	MATERIAL		
1	VALVE BODY	300 Series SS		
2	RETAINER	300 Series SS		
3	THERMAL ACTUATOR	300 Series SS		
4	BODY SEAL	EPDM or Viton ³		
5	OPERATING SPRING	300 Series SS		
6	PORT SEAL	PTFE		
7	SEAT RING SEAL	EPDM or Viton		
8	RAM-TYPE PLUG	300 Series SS		

DIMENSIONS & CAPACITIES

SIZE	D		L		Weight			Maximum Operating Maximum	Maximum
(NPT)	in	mm	in	mm	Lb	Kg	C_{v}	Pressure	Temperature
1/2″	1.1	28	3.8	97	1	0.5	0.7	1000 PSIG (69 BAR)	150°F (60°C) over set point

ORDERING

Part Number ^{1,2}	Description	
154 - 010X00 - XXX	1/2" HAT/RA-HP-M/F	

NOTES

- 1. Full open temperatures "XXX" available: 090°F, 095°F, 100°F, 105°F, 110°F, 125°F, 130°F, 140°F. Other temperatures available, consult factory
 - a. Note: Closing temperature is typically 10°F below opening temperature.
- 2. Replace singular "X" with 1 for EPDM body seals; 2 for Viton body seals
- 3. Seal material compatibility:
 - a. EPDM air, water, steam, ketones and synthetic hydraulic oils
 - b. Viton air, fuel, oil, gas and petroleum based hydraulic oils
- 4. A #20 mesh strainer is recommended.
- 5. Warranty information disclosed at www.thermomegatech.com/terms-conditions/



