

HAT/RA-HP

HIGH PRESSURE IN-LINE TEMPERATURE CONTROL VALVE

BENEFITS

- Rated for higher pressure systems
- Controls fluid return temperatures
- Maintains constant discharge temperatures
- Improved system efficiency
- Unaffected by pressure variations
- Temperature actuated relief at set point

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
- Wrench flat for easy installation
- Ram-type plug for reliable shut-off
- Discharges minimum amount of water required to keep water temperature within safe limits

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, high pressure water pumps. It can also be used to regulate the flow of glycol, water or other media in critical cooling applications or to economically remove heat from equipment or a process.



OPERATION

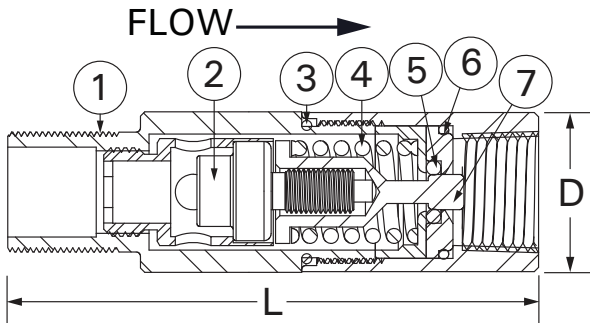
As the fluid temperature increases to within the operating range of the **HAT/RA-HP**, the thermal actuator modulates the valve open. If the fluid temperature is above the acceptable range, the valve will continue to modulate open allowing additional fluid discharge. As the outlet temperature falls slightly,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

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PARTS & MATERIALS



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

DIMENSIONS & CAPACITIES

SIZE (NPT)	D		L		Weight		C _v	Maximum Operating Pressure	Maximum Temperature
	in	mm	in	mm	Lb	Kg			
1/2"	1.13	29	3.75	95	1	0.45	0.74	1000 PSIG (69 BAR)	150°F over set point

ORDERING

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

NOTES

- Standard 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
 - Note: Closing temperature is typically 10°F below opening temperature
- Replace singular "X" with 1 for EPDM body seals; 2 for Viton body seals
- Seal material compatibility:
 - EPDM - air, water, steam, ketones and synthetic hydraulic oils
 - Viton - air, fuel, oil, gas and petroleum based hydraulic oils
- All HAT/RA-HP valves are factory tested and covered by a 36 month prorated warranty
- A #20 mesh strainer is recommended



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