

ECONO/HAT-RA

PUMP THERMAL RELIEF

BENEFITS

- Protects pump and pump seals from over-temperature damage
- Prevents potentially scalding water from being distributed to users
- Self-operating, no power or signal required
- Completely mechanical thermal relief for booster pumps and cooling jackets
- Temperature response is unaffected by pressure variations
- Wrench flats for easy installation
- Stainless steel valves are NSF/ANSI/CAN 61 & 372 Certified

DESIGN FEATURES

- Exclusive **Thermoloid®** thermal actuator
- Compact, low mass
- Corrosion resistant, long service life
- Ram-type plug for tight, reliable shutoff
- Narrow temperature band

APPLICATIONS

The **ECONO/HAT-RA** valve is perfect for thermal relief of booster pumps, controlling cooling water outlet temperature, and controlling flow of cooling water, glycol or other cooling media in applications requiring economical removal of heat from equipment or a process. Since the **ECONO/HAT-RA** valves open on rising temperatures, they can be used in many other thermal relief valve applications.

OPERATION

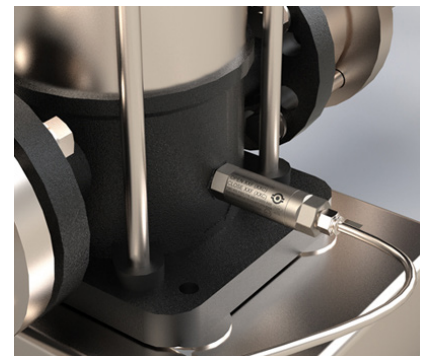
As the fluid temperature increases to within the operating range of the **ECONO/HAT-RA**, the thermal actuator modulates the valve open. If the fluid temperature is above the acceptable range, the valve will continue to modulate open allowing additional fluid discharge. As the outlet temperature falls 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.



SAMPLE APPLICATION



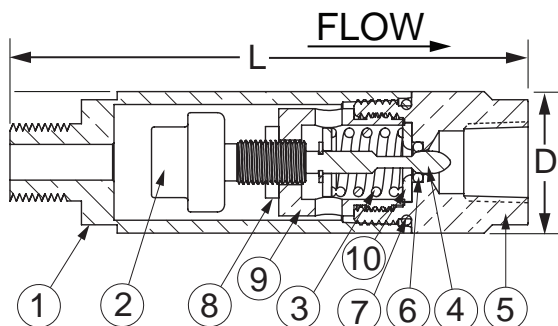
Booster Pump Skid



ECONO/HAT-RA

PUMP THERMAL RELIEF VALVE

PARTS & MATERIALS



| ITEM | DESCRIPTION | MATERIAL |
|------|---------------------|------------------------|
| 1 | VALVE BODY | Brass or 300 Series SS |
| 2 | THERMAL ACTUATOR | 300 Series SS |
| 3 | OPERATING SPRING | 300 Series SS |
| 4 | RAM-TYPE PLUG | 300 Series SS |
| 5 | SEAT FITTING | Brass or 300 Series SS |
| 6 | SEAT SEAL | BUNA |
| 7 | BODY SEAL | BUNA |
| 8 | CALIBRATION LOCKNUT | 300 Series SS |
| 9 | SEAT RETAINER | Brass or 300 Series SS |
| 10 | SEAT INSERT | Brass or 300 Series SS |

DIMENSIONS & CAPACITIES

| SIZE (NPT) | D | | L | | Weight | | C _v | Maximum Operating Pressure | Maximum Temperature |
|---------------|-----|----|-----|----|--------|-----|----------------|----------------------------------|------------------------|
| | in | mm | in | mm | Lb | Kg | | | |
| 1/4" Brass | 1.0 | 25 | 3.6 | 89 | 0.4 | 0.2 | 0.5 | 300 PSIG (20.7 BAR) | 250°F (121°C) |
| 1/4" SS | | | | | | | | 400 PSIG (27.6 BAR) | |

ORDERING

| Part Number | Description |
|--------------------|-------------------------------------|
| 242 - 000000 - XXX | 1/4" ECONO/HAT-RA M/F Brass |
| 242 - 010000 - XXX | 1/4" ECONO/HAT-RA M/F 300 Series SS |

NOTES

1. Full open temperatures "XXX" available: 040°F, 045°F, 050°F, 060°F, 070°F, 075°F, 085°F, 095°F, 100°F, 105°F, 110°F, 115°F, 120°F, 125°F, 130°F, 140°F, 150°F, 160°F, 170°F, 175°F, 180°F, 190°F, 200°F and 210°F.
2. Note: Closing temperature is typically 10°F below opening temperature.
3. A #20 mesh strainer is recommended.
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

ECONO/HAT-RA
5/3/2024

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