

HST

IN-LINE HIGH SAMPLE TEMPERATURE VALVE



BENEFITS

- Protects expensive and delicate sample analyzers
- Automatically resets when sample cools
- No outside power required
- Superior value vs. more expensive electric valves
- Easy installation

DESIGN FEATURES

- Self-operating thermal actuator controls flow based on fluid temperature
- Operating temperatures unaffected by variable inlet pressures
- Wide choice of setpoints available
- Ram-type plug provides tight shutoff
- Corrosion resistant: all stainless steel construction

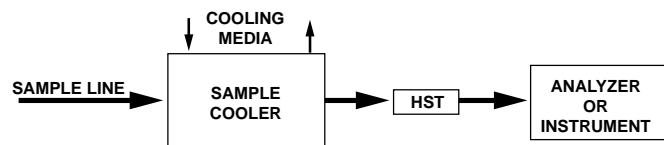
OPERATION

The **HST** (High Sample Temperature) safety shutoff valve is used to sense the sample temperature after the sample cooler. The sample passes through this normally open valve whenever the sample temperature is below the valve setpoint. If the sample temperature exceeds the valve setpoint, the **HST** closes to protect expensive and delicate analyzers and other instruments from overtemperature damage. When the **HST** cools below the setpoint, it will automatically reset open again. Low coolant flow or total loss of cooling water or unusually high sample temperatures are typical reasons why the **HST** self-operating protective device should be considered.



TYPICAL APPLICATION

Excessively hot samples can cause damage to expensive and sensitive hardware and electronics. For process analyzers and similar instrumentation, it is important to assure that the process samples are always below the maximum allowable temperature for such instruments. Sample coolers are commonly used to reduce sample temperatures to the acceptable limits. In the event of a loss of cooling fluid to the sample cooler, or if the desired sample temperature is exceeded for any reason, the **HST** valve will close to prevent equipment damage. **HST** valves are covered with our standard 36 month prorated warranty.

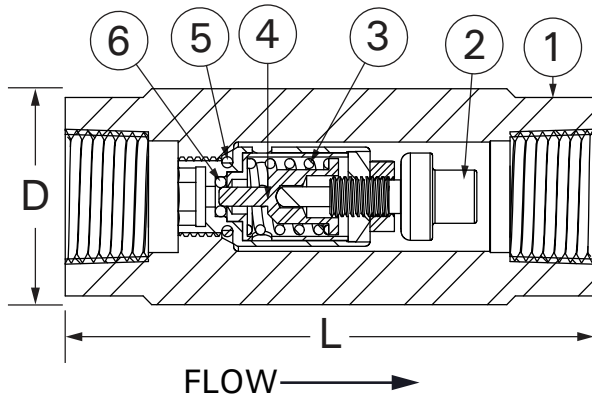


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PARTS & MATERIALS



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

DIMENSIONS & CAPACITIES

| SIZE (NPTF) | D | | L | | Weight | | C _v | Maximum Operating Pressure ² | Maximum Temperature |
|----------------|------|----|-----|----|--------|------|----------------|--|------------------------|
| | in | mm | in | mm | Lb | Kg | | | |
| 1/2" | 1.38 | 35 | 3.4 | 86 | 1.14 | 0.52 | 0.075 | 3000 PSIG (207 BAR) | 300°F (149°C) |

ORDERING

| Part Number ³ | Description ⁴ |
|--------------------------|--------------------------------------|
| 254-000000-XXX | 1/2" HST (EPDM Seals) |
| 254-001000-XXX | 1/2" HST (Viton [®] Seals) |
| 254-002000-XXX | 1/2" HST (Kalrez [®] Seals) |

NOTES

- Available in special materials eg. Monel, Inconel, duplex stainless steel, etc...
- Body rating: 3000PSIG at 600°F
- Full open temperatures "XXX" available: 100°F, 105°F, 115°F, 120°F, 125°F, 130°F, 140°F, 170°F, 185°F.
Other temperatures are available.
- Seal material compatibility:
 - EPDM - air, water, steam, ketones and synthetic hydraulic oils.
 - Viton[®] - air, fuel, oil, gas and petroleum based hydraulic oils.
 - Kalrez[®] - Special order option.
- Warranty information disclosed at www.thermomegatech.com/terms-conditions/

