

# HST

## IN-LINE HIGH SAMPLE TEMPERATURE VALVE

### BENEFITS

- Automatically controls flow based on fluid temperature
- Protects expensive and delicate sample analyzers
- Automatically resets when sample cools
- Self-operating, no power or signal required
- Superior value vs. more expensive electric valves
- Easy installation

### DESIGN FEATURES

- Exclusive **Thermoloid**® thermal actuator
- All stainless steel construction - corrosion resistant
- Ram-type plug provides tight shutoff
- Operating temperatures unaffected by variable inlet pressures
- Wide choice of set-points available

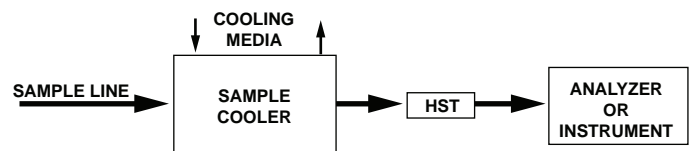
### OPERATION

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 set-point. If the sample temperature exceeds the valve set-point, the **HST** closes to protect expensive and delicate analyzers and other instruments from over-temperature damage. When the **HST** cools below the set-point, 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.



### APPLICATION

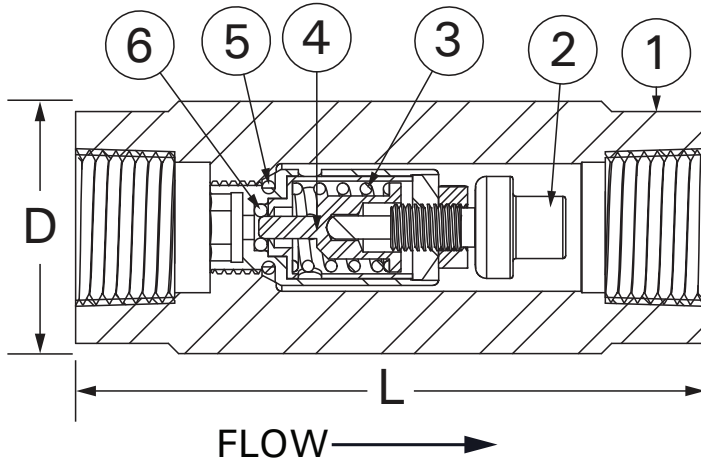
Excessively hot samples can cause damage to expensive and sensitive hardware and electronics. For process analyzers and similar instrumentation, it is important to assure that the process samples fluids are always below the maximum allowable temperature for such instruments. Sample coolers are commonly 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.



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### PARTS & MATERIALS



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

### DIMENSIONS & CAPACITIES

SIZE (NPT)	D		L		Weight		C <sub>v</sub>	Maximum Operating Pressure <sup>2</sup>	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 <sup>3</sup>	Description <sup>4</sup>
254-000000-XXX	1/2" HST (EPDM Seals)
254-001000-XXX	1/2" HST (Viton <sup>®</sup> Seals)
254-002000-XXX	1/2" HST (Kalrez <sup>®</sup> Seals)

#### NOTES

- Available in special materials eg. Monel, Inconel, duplex stainless steel, etc...
- Body rating: 3000 PSIG 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<sup>®</sup> - air, fuel, oil, gas and petroleum based hydraulic oils.
  - Kalrez<sup>®</sup> - Special order option.
- Warranty information disclosed at [www.thermomegatech.com/terms-conditions/](http://www.thermomegatech.com/terms-conditions/)



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