

THERMODYNAMIC STREAM TRAP

SPECIFICATION

Steam trap shall be of thermodynamic design. Body shall be of all stainless construction and hardened throughout. Seat shall be integral to body. Cover shall seal to body without gaskets or seals. Trap shall be suitable for pressures through 600 psi and available in 3/8" through 1".

MAXIMUM OPERATING CONDITIONS

PMO: Max. Operating Pressure	TMO: Max. Operating Temperature	600 psig (41.3 barg)
PMA: Max. Allowable Pressure	TMA: Max. Allowable Temperature	800°F (426°C) 600 psig (41.3 barg)
		800°F (426°F)

MATERIALS OF CONSTRUCTION

Body & Cap	420F SS ASTM A743 CA40F
Disc.....	AISI 420 SS
Blow Down Valve.....	304/316SS
Screen	Stainless Steel
Connections: 3/8" – 1" NPT	

APPLICATIONS

- Steam Tracing
- Drips
- Heating

OPERATION

Incoming air and condensate flow through the trap body and into the control chamber. Line pressure raises the disc off the seat allowing complete discharge. When flashing condensate enters the cartridge, flow velocity increases, creating low pressure underneath the disc. Flashing condensate at high velocity strikes the inside wall of the disc chamber and is deflected.

To the top of the disc causing a pressure buildup. The disc is forced down onto the seat by this pressure imbalance. The trap remains closed as flashed vapor in the control chamber keeps the disc seated. Pressure inside the cap is not lowered until the trapped flash vapor condenses due to body radiation. Condensing steam lowers the pressure above the disc. Disc is then lifted and the cycle repeated.



FEATURES

Pressures To 600 PSIG
Temperatures to 426°C

- Compact Design** — Hardened stainless steel disc is the only moving part.
- Inexpensive** — Low initial cost is less expensive than repairable technologies.
- Simplifies Installation** — Works in any position.
- Rugged** -
 - Handles water hammer and superheat.
- Reliable, Efficient Operation** — Blast discharge helps to eliminate dirt buildup and provides tight shutoff
- Freeze resistant** — Self draining design prevents freezing.
- All Stainless Steel Construction** — Resists both internal and external corrosion.
- Easy to Monitor** — Audible discharge cycle makes checking operation simple.