

THERMOSTATIC STEAM TRAPS

Balanced pressure thermostatic steam traps

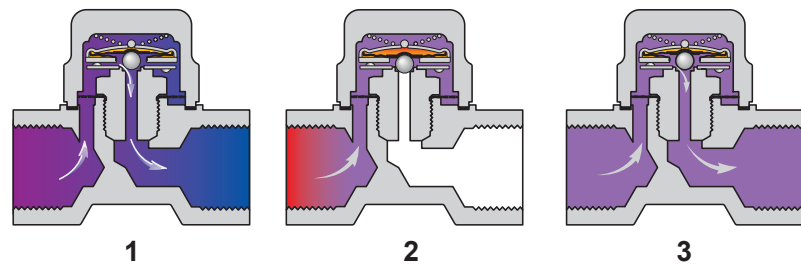
Spirax Sarco has been manufacturing balanced pressure thermostatic steam traps for over 100 years. Continuous investment in product development has resulted in steam trap design evolution, which leads the world.

How a balanced pressure thermostatic steam trap works

On start-up, cold air and condensate enter the trap. As the capsule is also cold, the valve is open and the air and condensate are discharged (1).

The capsule warms up as the condensate approaches steam temperature. Its liquid filling boils, and the resultant vapor pressure acting on the diaphragms pushes the valve head towards the seat (2), fully closing at the selected discharge temperature before any steam reaches the trap.

As the condensate within the trap cools, the vapor filling condenses and the internal capsule pressure falls. The valve reopens, discharges condensate and the cycle repeats (3).



User Benefits:

- Condensate is discharged at below steam saturation temperature, utilising sensible heat in the condensate and reducing flash steam losses.
- Automatically discharges air and other incondensable gases to aid rapid warm-up of plant.
- It automatically adjusts itself to variations of steam pressure up to its maximum operating pressure and can tolerate superheat up to limits shown for each trap model.
- Discharge temperature set by capsule selection – no requirement to adjust on site.
- Patented design of capsule manufactured using advanced technology to exacting quality standards.
- All stainless steel internals extend working life and reduces trap maintenance.

Balanced Pressure Thermostatic Brass, Bronze, Cast Iron, Forged Steel Steam Traps

Model	Connections	Flow Pattern	Body Material	Pressure (PSIG)	1/2"	3/4"	1"	Blow Down Valve Option	Strainer
RTA	NPT Union Inlet	Angle	Forged Brass	125	•	•	•	No	N/A
RTH	NPT Union Inlet	Straightway			•	•			
RTV	NPT Union	Vertical	Cast Bronze	•	•				
T-250	NPT	Angle	Cast Iron	250	•	•	•	No	Standard
T-250		Inline Horizontal			•	•			
BPC32	NPT, SW, ANSI 150 ANSI 300	Inline Horizontal	Carbon Steel	465	•	•	•	Yes	Standard
BPC32Y					•	•	•		
TM600, TM600L	NPT	Angle	Ductile Iron	600	•	•		No	N/A
TM600N	NPT, SW	Inline Horizontal	Cast Steel	600	•	•		No	Standard

Balanced Pressure Thermostatic Stainless Steel Steam Traps

Model	Connections	Flow Pattern	Body Material	Pressure (PSIG)	1/4"	3/8"	1/2"	3/4"	1"	Strainer
TSS300	NPT	Vertical or Horizontal	Stainless steel	300		•	•			Optional
DTS300										
MST21 & MST21H	NPT			300	•		•	•	•	Standard
SBC30LC	NPT			435			•	•		