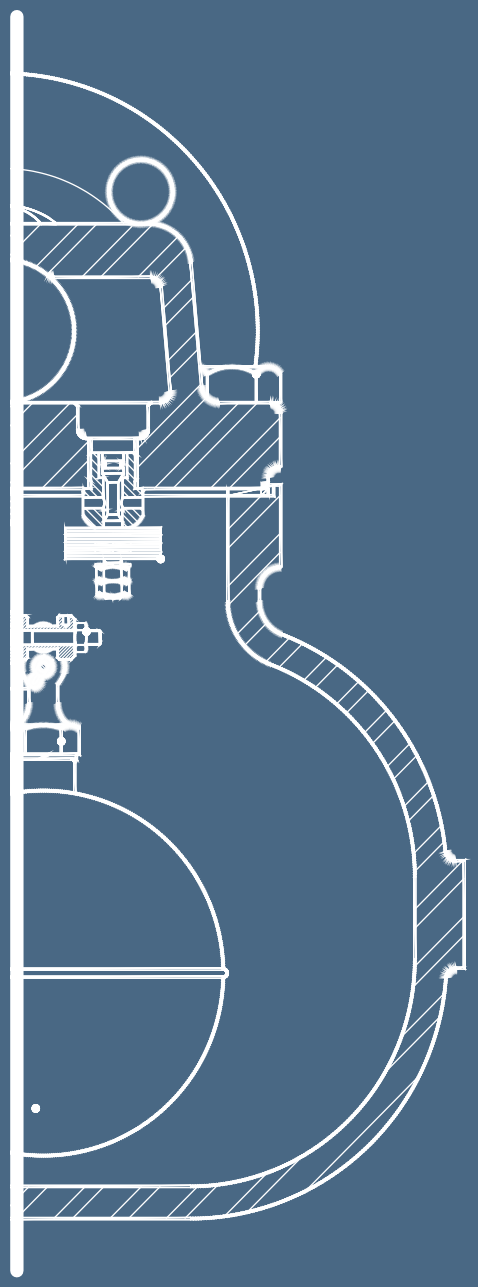


BVALVE®

Thermodynamic and Float traps

BVALVE

Adding real value

TRAPS

Key elements for the efficiency of the steam plant

CE 0052 TÜV NORD

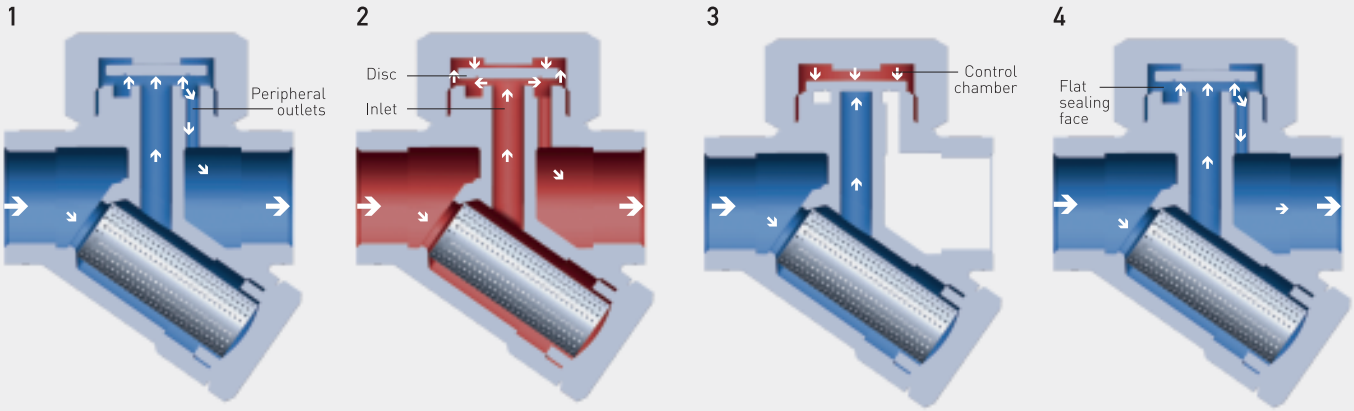
Steam traps are key elements for steam systems. This crucial component in the condensate loop connects steam usage with condensate return.

For the condensate purge out of the system (as well as air and other incondensable gases), steam traps are essential , allowing steam to keep as dry as possible to complete its task efficiently and economically.

Choose the correct trap

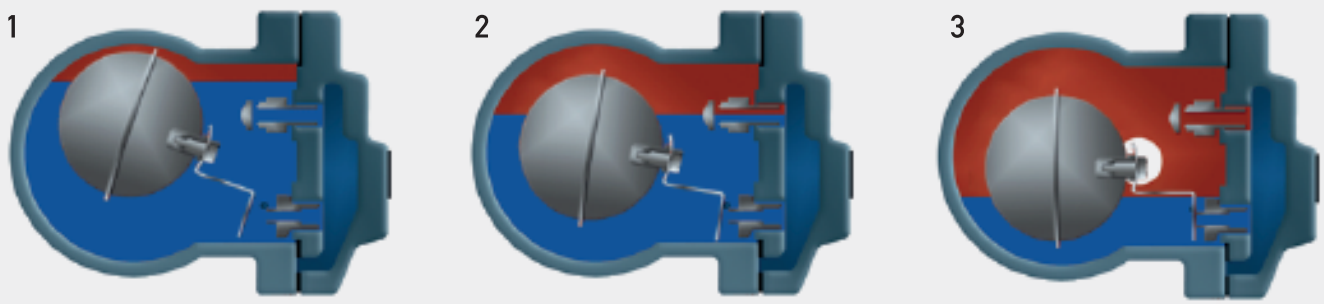
HOW IT WORKS

1. In the beginning cold condensate and air raise the disc for water and air to be discharge quickly.
2. When hot condensate flows into the trap, the trap still remains open as velocity and pressure above chamber is not strong enough to close it.
3. When Steam enters the trap, velocity increases which results in pressure drop under seat but at the same time pressure in chamber increases. The disc is pressed down and closes.
4. As long as steam does not condense the trap remains closed. Once condensate start to flow in the trap, pressure chamber starts to cool down and as a result trap opens.



HOW IT WORKS

1. In the begining of the process air is quickly discharged through air vent. Cold condensate fills the steam trap body. Water enters in the trap, the float rises and opens the valve. The cold condensate is discharged through the open valve and the open air vent.
2. When saturation temperature is reached, the air vent closes and at this point condensate is discharged only through the main valve. Steam loss is prevent due to water seal inside body that is formed by condensate.
3. How much valve is open depends on the level of the water that is inside valve. Condensate is discharged continuously. When air enters a trap the temperature cools down, which activates the air vent that opens slightly bellow saturation temperature. At this point air is discharged from the trap.

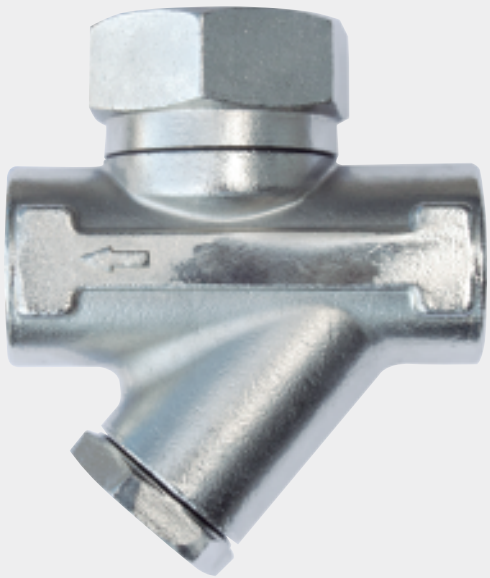


BVALVE
Adding real value

Thermodynamic traps

THERMODYNAMIC DISC TRAPS (1/2",3/4",1")

BV66 is compact and lightweight thermodynamic disc trap designed to efficently discharge condensate on applications with working pressure up to 42bar (609psi). Trap made of Stainless Steel with integrated strainer. Economical long-term performance on drip leg, tracing and process services.



SPECIFICATIONS

SIZE: 1/2" to 1"

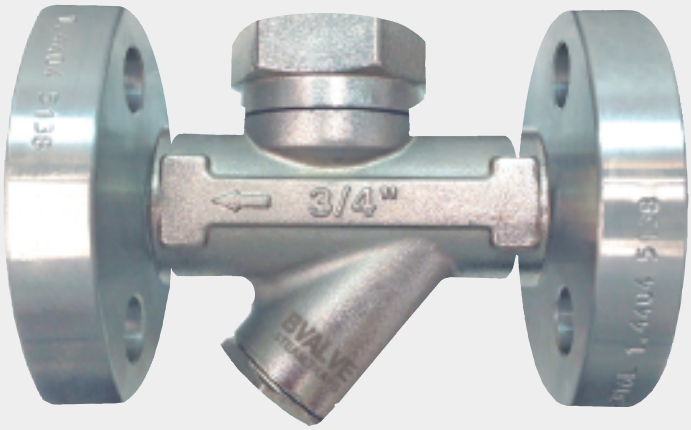
END CONNECTIONS: Threaded or Flanged

MAXIMUM OPERATING TEMPERATURE: 400ºC

OPERATING PRESSURE: 42 bar g.

MAXIMUM BACK PRESSURE:
Must not exceed 80% of inlet pressure.

INSTALLATION: Horizontal pipe for an appropiate use.



APLICATIONS

· Steam mains drips, tracers.

· Constant-pressure, constant-load applications.

· Installations subject to ambient conditions below freezing.

MAIN CHARACTERISTICS

Easy in-line inspection and maintenance.
Simple one-piece thermodynamic cartridge which can be inspected and replaced without having to remove the steam trap from the line.

Single moving part
Simple and effective design uses just one moving part to enhaze minimal maintenance and long operating life.

All parts made in Stainless Steel
Body material and trim are made in stainless Steel. To avoid oxidation body Surface is nickel plated.

High capacities
Optimized porting configuration provides higher flow capacities than other cartridge designs.

Rugged design
Withstands the effects of water hammer, vibration and corrosive environments.

Float traps

FLOAT TRAP WITH THERMOSTATIC AIR VENT

Inline, straight through body design, which eliminates the staggered piping usually associated with this type of steam trap. Stainless Steel float and a simple lever mechanism to open or close the valve in correlation to the amount of condensate present. The opening is proportional to the condensate rate and is unaffected by instantaneous pressure changes

SPECIFICATIONS

SIZE: DN15-DN50

END CONNECTIONS:
Flanged PN16 or Threaded BSPP

MAX. PRESSURE ALLOWED: 25bar

MAX.TEMPERATURE ALLOWED: 300ºC

MAX. OPERATING PRESSURE: 16bar

MAX. DIFFERENTIAL PRESSURE:
4,5bar / 10bar / 14bar

MAX. OPERATING TEMPERATURE: 250ºC

APLICATIONS

- Steam header, drain separator
- Heat exchangers with high and variable heat-transfer rates, tank and unit heaters
- Jacketed kettle
- Plate heat exchanger requring large condensate discharge and quick air-venting
- When a condensate pump is required Batch processes that require frequent start-up of an air -filled system.

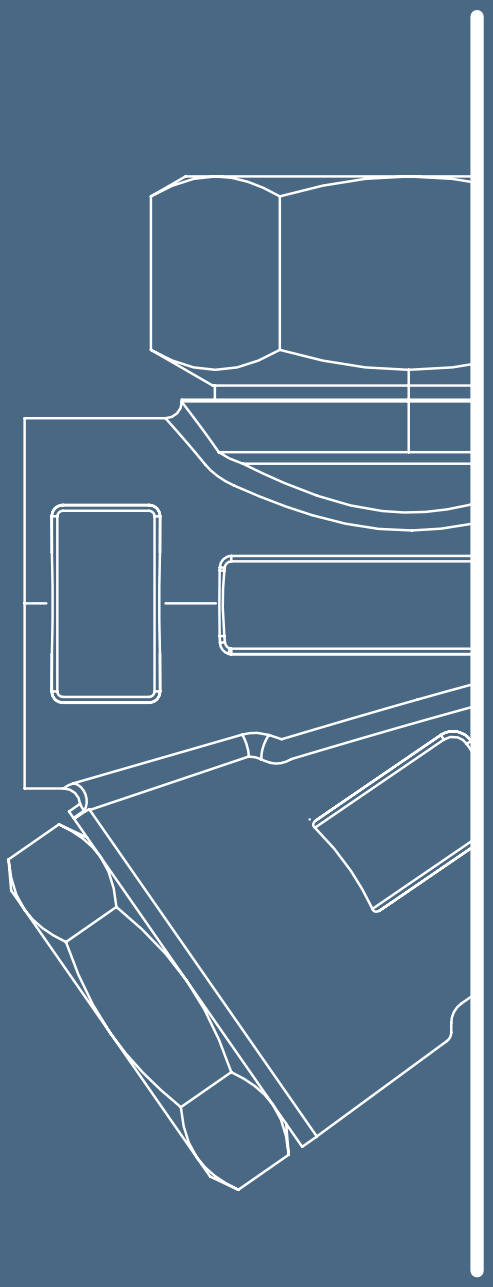
MAIN CHARACTERISTICS

Straight through body design which eliminates staggered piping usually associated with this type of seat trap.

Simple and reliable construction. In-line maintenance – all parts.

Steam cannot reach condensate discharge valve with normal, **clean operation**.

Continuons discharge. Discharge of condensate at steam temperature.



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