Thermostatic valves

Thermostatic Valves

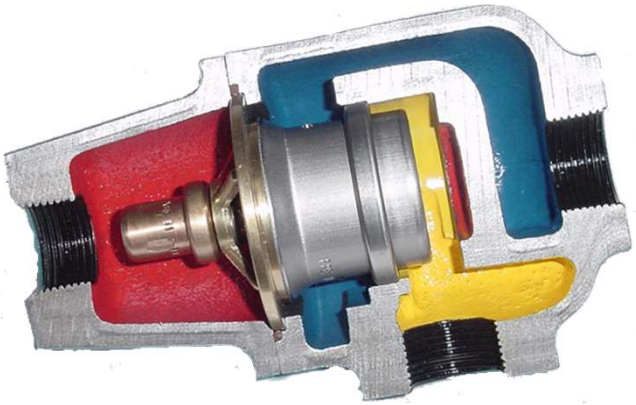
- Uses the principle of expanding and contracting of wax at changing flow temperatures

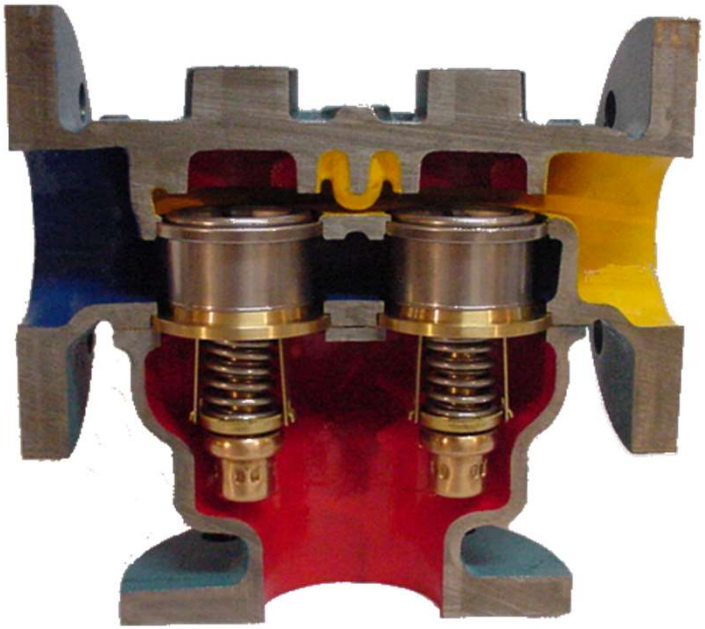
Thermostatic Valves

- Sizes – DN 15 – DN 150 (1/2” – 6”)
- Materials
  - Cast Iron – Most common
  - Ductile Iron – Where brittleness may be an issue
  - Bronze – Sea water applications
  - Aluminium – Specialist uses
  - Steel – Specialist uses
  - Stainless Steel – Oil & Gas and Offshore
- Produced in
  - CE, ATEX and PED.
  - EN (DIN) & ANSI flanges & thread connections

Thermostatic Valves

- How they work

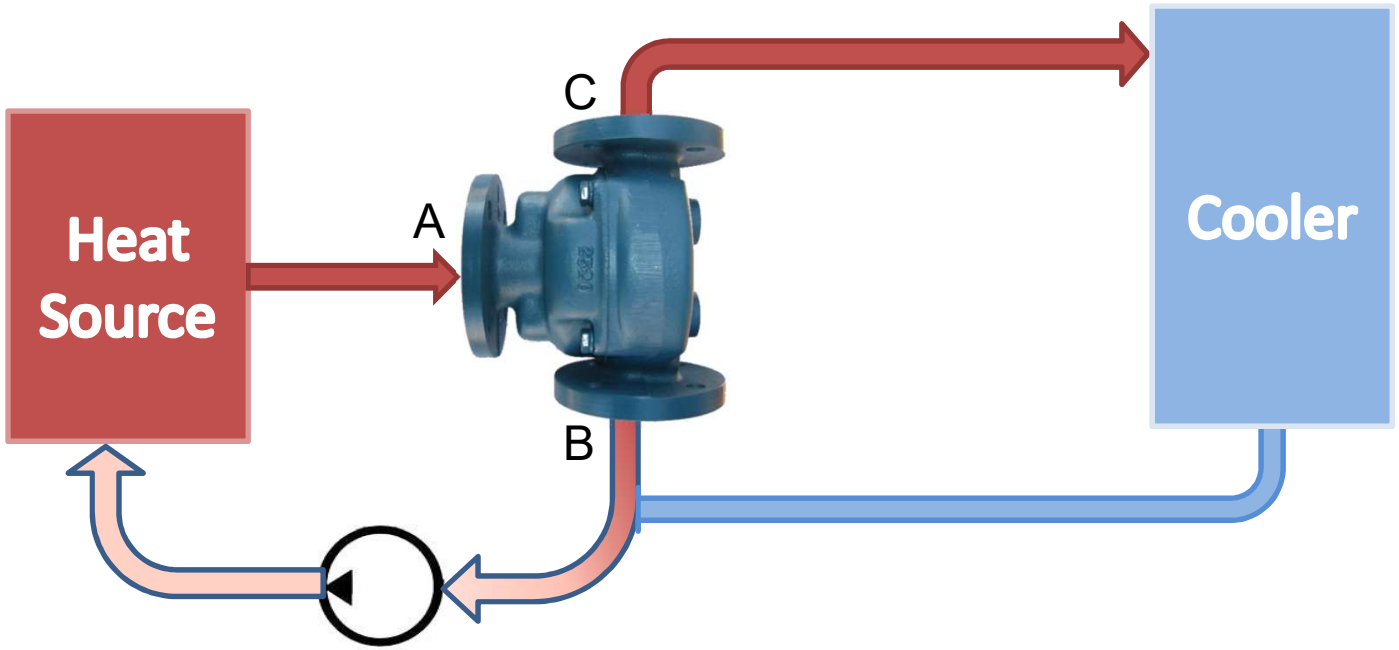




- **When the liquid reaches a predetermined temperature, the elements opens and divert the flow to a different port.**
- **Liquid flows from yellow to red and is diverted to blue once the predetermined temperature is reached.**

Thermostatic Valves

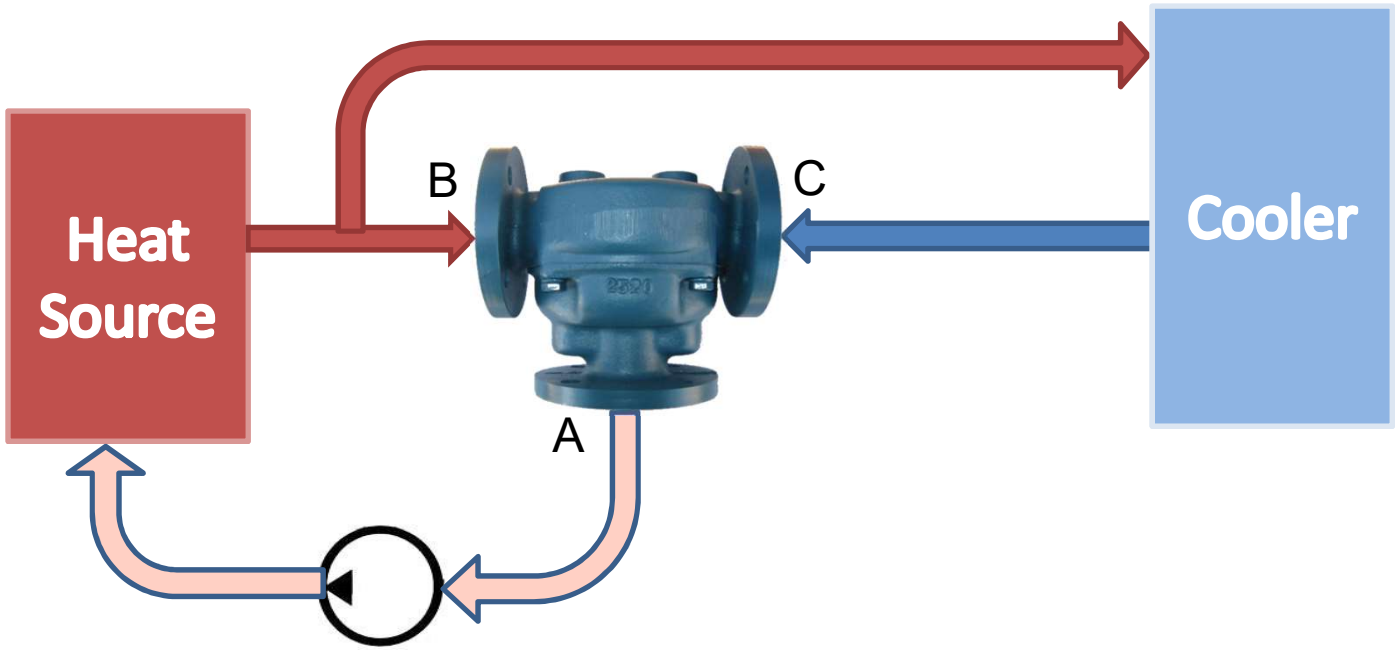
- Diverting System



- **The liquid bypasses the cooler when cold so the system reaches the desired operating temperature quickly.**

Thermostatic Valves

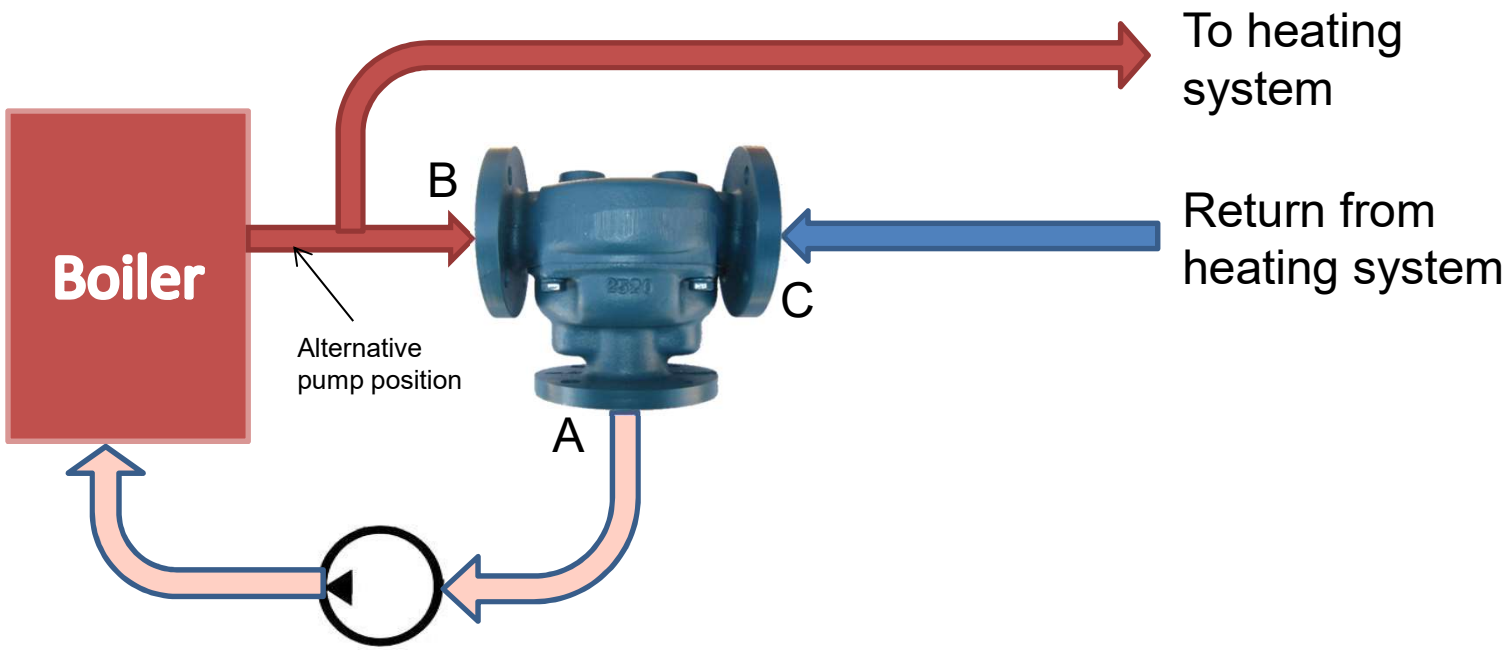
- Mixing System



- **Hot water from the heat source and cold water from the cooler are mixed in the valve.**

Thermostatic Valves

- Boiler Return



- **Hot water from the boiler and return water from the heating system are mixed in the valve.**

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Thank you for your attention