spirax sarco

Cast Steel Float & Thermostatic Steam Trap 3" (DN80) and 4" (DN100) FT450

The trap contains a float valve mechanism which modulates to discharge condensate continuously at steam temperature, while non-condensible gases are released by a separate internal thermostatic air

| Model | FT450 | | |
|--------------|--|------------|--|
| РМО | 450 psig (31 barg) | | |
| Sizes | 3" (DN80) | 4" (DN100) | |
| Connections | NPT, SW, Flanged | Flanged | |
| Construction | Carbon Steel Body Stainless Steel Internals | | |

Compliance

This product fully complies with the requirements of the European Pressure Equipment Directive 2014/68/EU, and carries the CE mark when so required.

Certification

This product is available with certification to EN 10204 3.1. Designed in accordance with ASME VIII Div 1. **Note:** All certification/inspection requirements must be stated at the time of order placement.

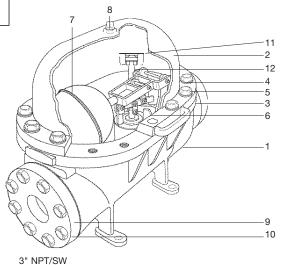
Construction Materials

| No. | Part | Material | |
|-----|-----------------------|--------------------------|--------------------|
| 1 | Body | Cast Carbon Steel | ASTM A216 WCB |
| 2 | Cover | Cast Carbon Steel | ASTM A216 WCB |
| 3 | Cover Gasket | Graphite with SS insert | |
| 4 | Cover Bolts | Alloy Steel | ASTM A193 GR B7 |
| 5 | Lockwashers | Steel | |
| 6 | Main Valve Assembly | Stainless Steel | |
| | Valve Mech. Gasket | Graphite | |
| | Valve Mech. Screws | Stainless Steel | |
| 7 | Float | Stainless Steel | ASTM A240 Type 304 |
| 8 | Cover Plug (3/4" NPT) | Steel | |
| | Drain Plug (3/4" NPT) | Steel | |
| 9 | Companion Flange | Forged Steel | |
| 10 | Flange Bolts | Alloy Steel | ASTM A193 GR B7 |
| 11 | Air Vent Assembly | Stainless Steel | |
| | Air Vent Head | Stailess Steel | |
| | Air Vent Seal | Stainless Steel | |
| 11A | Air Vent | Stainless Steel & Bimeta | I RAU Type RR |
| 12 | Air Vent Pipe | Stainless Steel | |
| | | | |

Capacities Differential Pressure bar 1,000,000 400,000 \(\bar{\xi}\) 800,000 700.000 300,000 600.000 500,000 200,000 400,000 150,000 300.000 100.000 200,000 70.000 150,000 50 000 100,000 40,000 80.000 70.000 30,000 60.000 50.000 20,000 40,000 15.000 30,000 30 40 50 70 100 150 200 300 400 Differential Pressure psi * In this region the trap capacity may exceed the flow capacity of the connection piping.

Typical Applications

- Reboilers, heat exchangers and other large process equipment
- Large absorption chillers
- In combination with the Spirax Sarco 4" (DN100) Pressure Powered Pump™



Limiting Operating Conditions

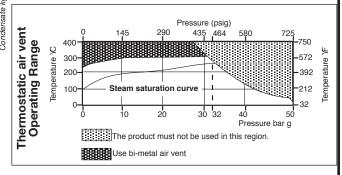
Max. Operating Pressure 450 psig (31 barg)

Max. Operating Temperature Opt

Optional Bimetal

650°F (343°C) at 450 psig (31 barg)

750°F (400°C) at operating pressures below 375 psig (26 barg)



Pressure Shell Design Conditions

 PMA
 450 psig/up to 650°F
 (31 barg/up to 343°C)

 Max. allowable pressure
 425 psig/700°F
 (29 barg/371°C)

 375 psig/750°F
 (26barg/400°C)

TMA

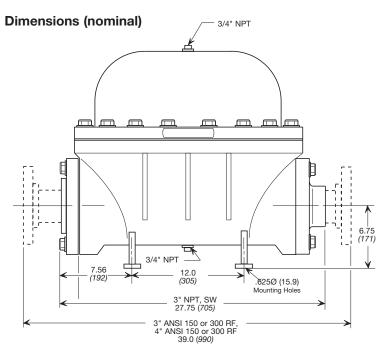
Max. allowable temperature 750°F/0-375 psig (400°C/0-26 barg)

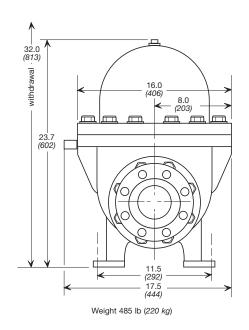
Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.

In the interests of development and improvement of the product, we reserve the right to change the specification.

TI-2-3041-US 10.16

Cast Steel Float & Thermostatic Steam Trap 3" (DN80) and 4" (DN100) FT450





Sample Specification

Steam traps shall be of the mechanical ball float type having cast steel bodies with stainless steel internal parts. The piping connections shall be horizontal inline, and the body shall incorporate mounting legs with drilled pads. The traps shall have an integral thermostatic air vent. The trap body shall be horizontally split and all internal parts shall be completely serviceable without disturbing the inlet and outlet piping.

Installation

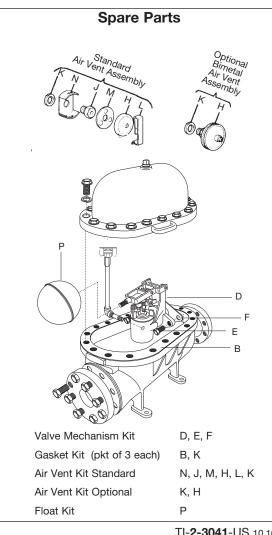
The trap should be located below and close to the equipment drain point. A pipeline strainer should be installed ahead of the trap, and full port isolating valves should be placed to permit servicing. The mounting legs should be bolted to a firm horizontal support. Access above the trap must be provided for servicing. Complete installation instructions are given in IMI 2.3041.

Maintenance

This product can be maintained without disturbing the piping connections. Complete isolation from both supply and return line is required before any servic-

The trap should be disassembled periodically for inspection and cleaning of the valve mechanism and air vent.

Complete installation and maintenance instructions are given in IMI 2.3041, which accompanies the product.



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Sarco,

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