

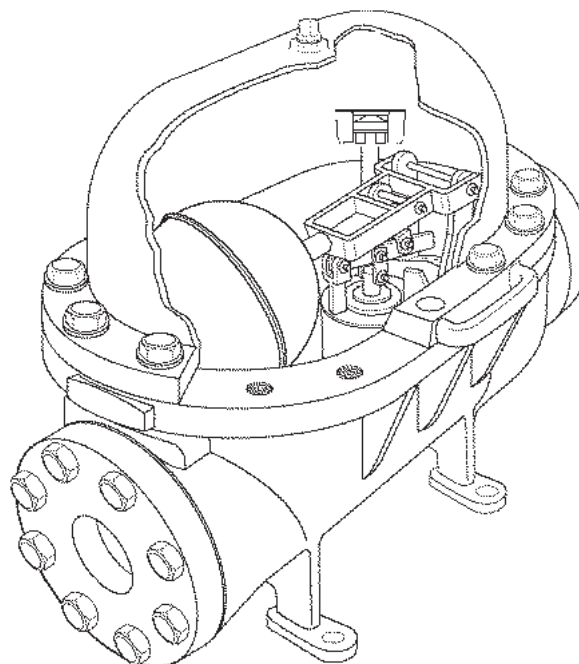


## Cast Steel Float and Thermostatic Steam Trap 3" (DN80) and 4" (DN100) FT450

### Description

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

Model	FT450	
PMO	450 psi g (31 bar g)	
Sizes	3" (DN80)	4" (DN100)
Connections	NPT, SW, Flanged	Flanged
Construction	Carbon steel body Stainless steel internals	



### Typical applications

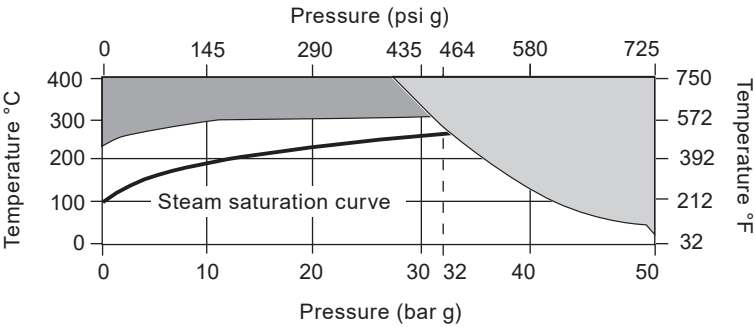
- Reboilers, heat exchangers and other large process equipment
- Large absorption chillers
- In combination with the Spirax Sarco 4" (DN100) Pressure Powered Pump™



### 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.

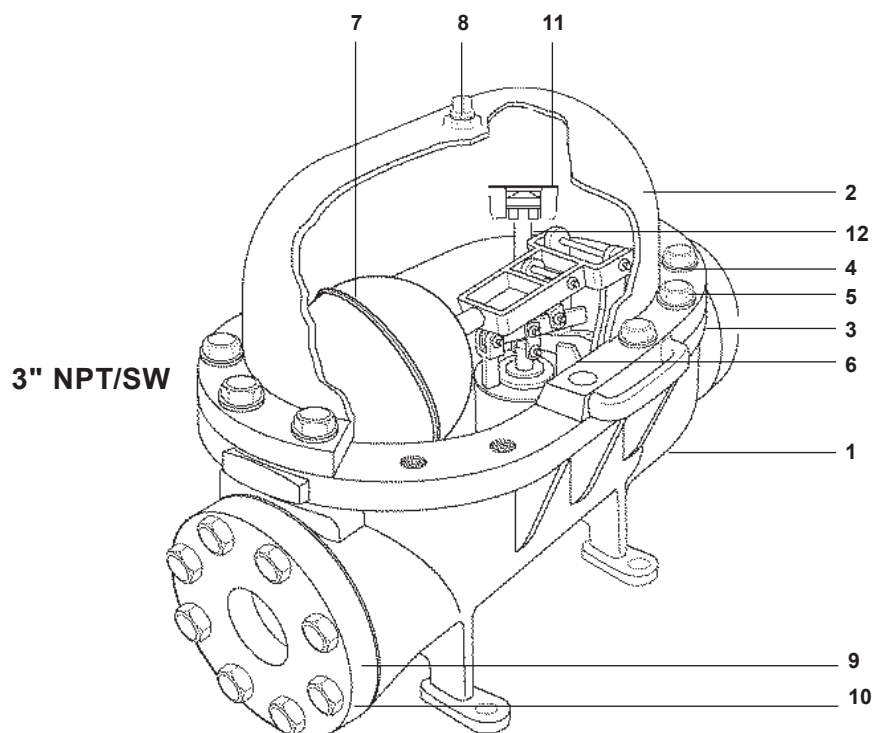
Pressure/temperature limits



-  The product **must not** be used in this region.
-  Use bi-metal air vent

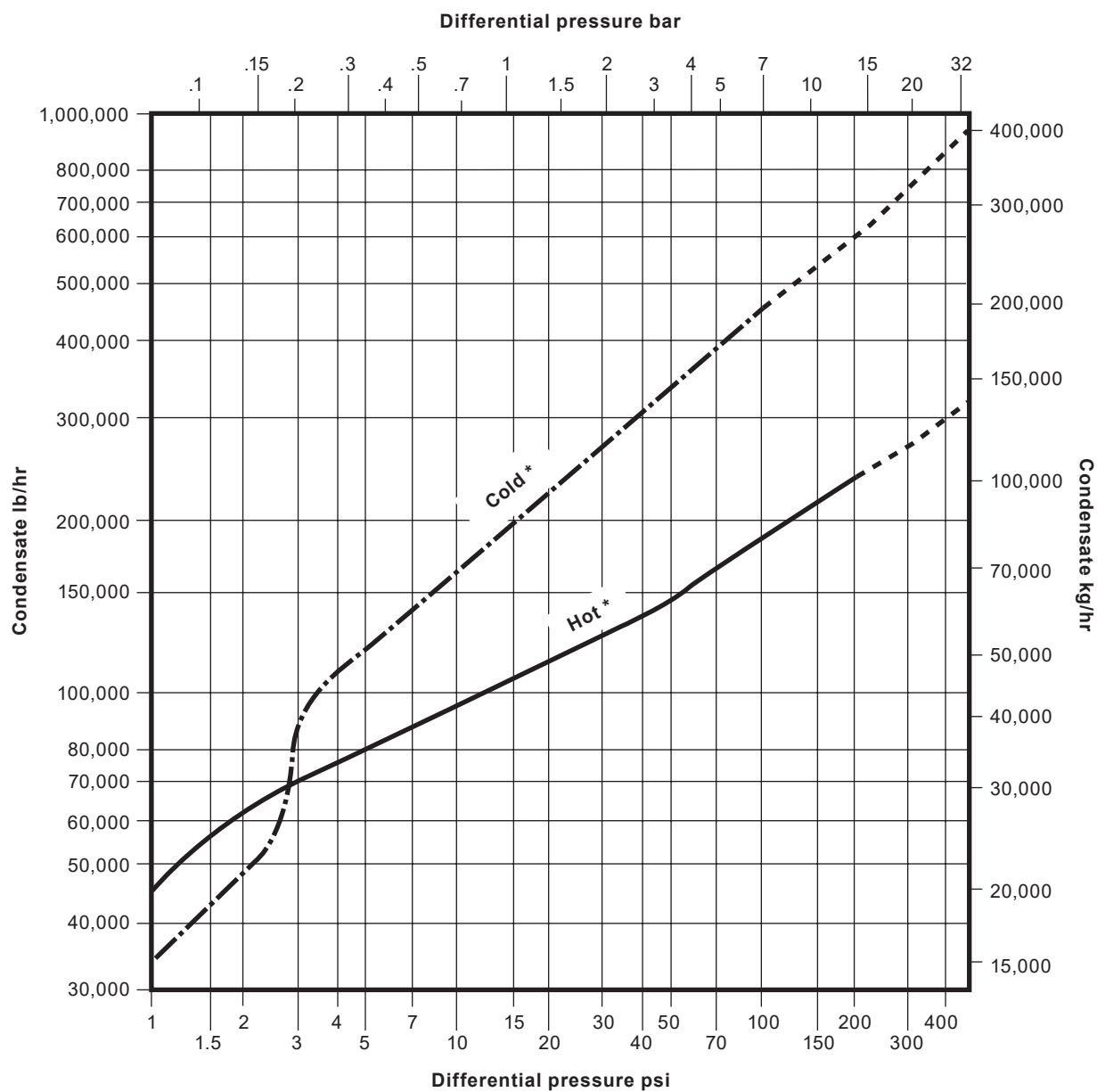
Maximum operating pressure		450 psi g	31 bar g
		Optional Bimetal	
Maximum operating temperature		650 °F @ 450 psi g	343 °C @ 31 bar g
		750 °F @ up to 375 psi g	400 °C @ up to 26 bar g
		450 psi g @ up to 650 °F	31 bar g @ up to 343 °C
PMA    Maximum allowable pressure		425 psi g @ 700 °F	29 bar g @ 371 °C
		375 psi g @ 750 °F	26 bar g @ 400 °C
TMA    Maximum allowable temperature		750 °F @ 375 psi g	400 °C @ 26 bar g

## Materials



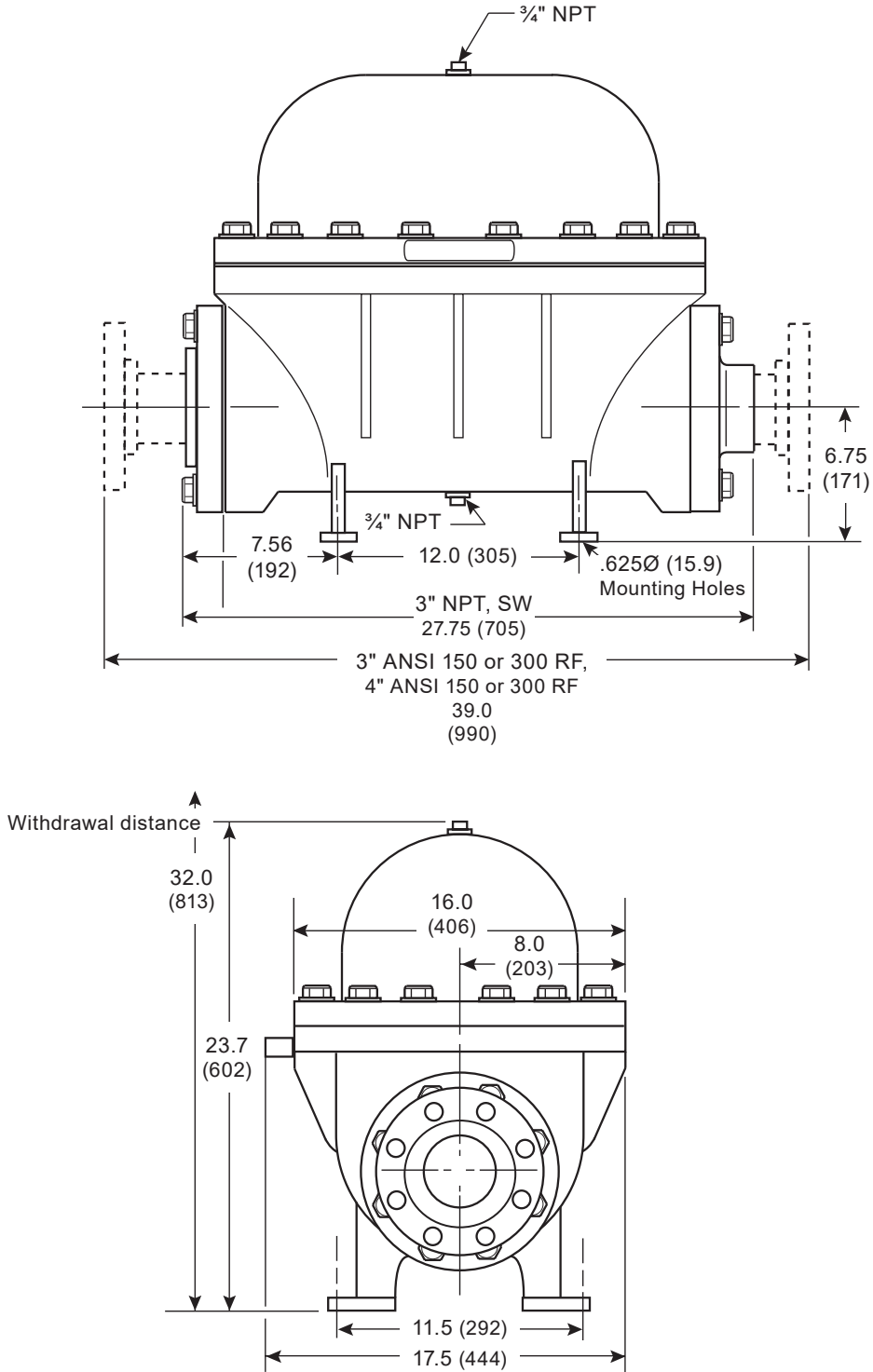
No.	Part	Material	
1	Body	Cast carbon steel	ASTM A216 WCB
2	Cover	Cast carbon steel	ASTM A216 WCB
3	Cover gasket	Graphite with SS insert	
4	Cover bolts	Alloy Steel	ASTM A193 GR B7
5	Lockwashers	Steel	
6	Main valve assembly	Stainless steel	
	Valve mechanical gasket	Graphite	
	Valve mechanical screws	Stainless 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	
11A	Air vent	Stainless steel and bimetal	RAU Type RR
12	Air vent pipe	Stainless steel	

## Capacities



\* In this region the trap capacity may exceed the flow capacity of the connection piping.

### Dimensions/weights (approximate) in inches (mm) and lbs (kg)



## Weight

485 lb  
(220 kg)

## 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 in-line, 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 IM-F01-30-US.

## Maintenance

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

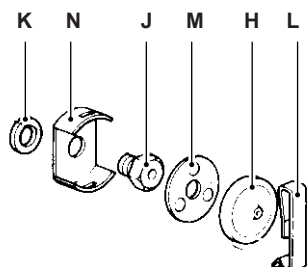
The trap should be disassembled periodically for inspection and cleaning of the valve mechanism and air vent.

Complete installation and maintenance instructions are given in IM-F01-30-US, which accompanies the product.

## Spare parts

Valve mechanism kit	D, E, F
Gasket kit (pkt of 3 each)	B, K
Air vent kit Standard	N, J, M, H, L, K
Air vent kit optional	K, H
Float kit	P

Standard air vent assembly



Optional bimetal air vent assembly

