



TI-P021-03-US
Issue 1

Cast Iron Float and Thermostatic Steam Traps FT-15, FT-30, FT-75, FT-125

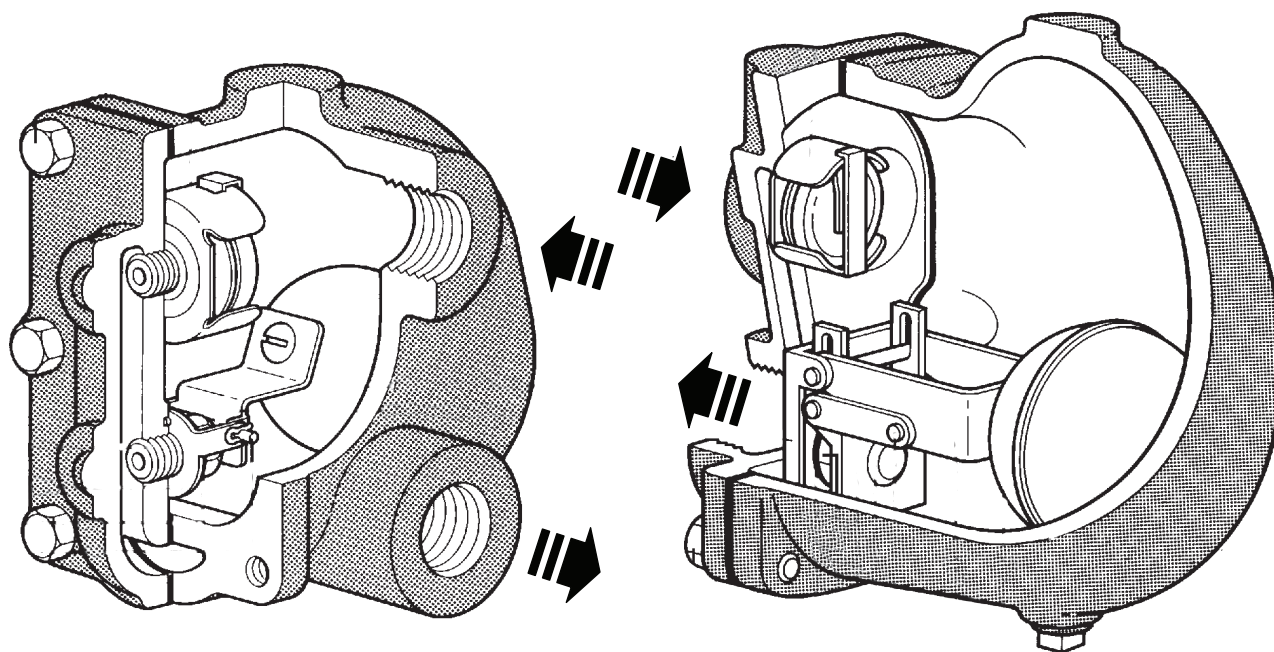
Description

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 balanced pressure thermostatic air vent.

Model	FT-15	FT-30	FT-75	FT-125
PMO	15 psi g (1.0 bar g)	30 psi g (2.1 bar g)	75 psi g (5.2 bar g)	125 psi g (8.6 bar g)
Sizes	$\frac{3}{4}$ ", 1", 1 $\frac{1}{4}$ ", 1 $\frac{1}{2}$ ", 2"			
Connections	NPT			
Construction	Cast Iron Body and Cover, Stainless Steel Internals			
Options	Gauge Glass, Vacuum Breaker			

Typical applications

All process equipment, particularly when controlled by modulating temperature control valves; unit heaters, air heating coils, heat exchangers and steam main drip stations.



All $\frac{3}{4}$ ", 1"
1 $\frac{1}{4}$ " FT-15, FT-30

All 1 $\frac{1}{2}$ ", 2"
1 $\frac{1}{4}$ " FT-75, FT-125

Capacities

See TI-P038-07-US

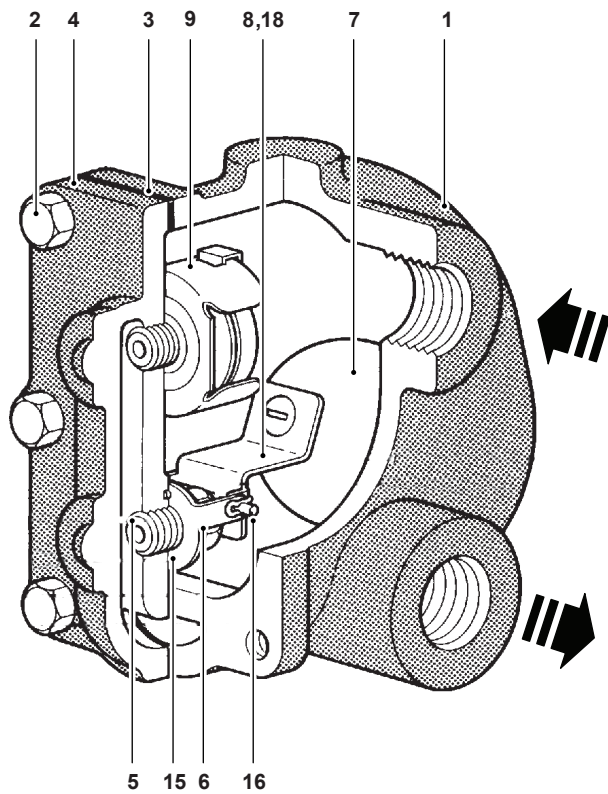
Limiting operating conditions

PMO	Maximum Operating Pressure	FT-15:	15 psi g	(1.0 bar g)
		FT-30:	30 psi g	(2.1 bar g)
		FT-75:	75 psi g	(5.2 bar g)
		FT-125:	125 psi g	(8.6 bar g)
Maximum Operating Temperature at all operating pressures			450 °F	(232 °C)

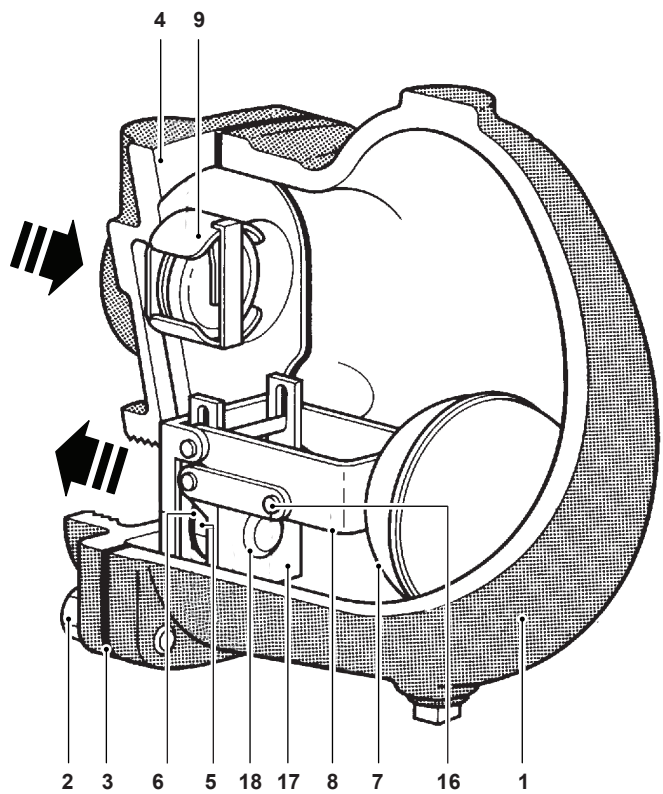
Pressure shell design conditions

PMA	Maximum allowable pressure	125 psi g @ 450 °F	(9 bar g @ 232 °C)
TMA	Maximum allowable temperature	450 °F @ 125 psi g	(232 °C @ 9 bar g)

Materials



**All ¾", 1"
1¼" FT-15, FT-30**

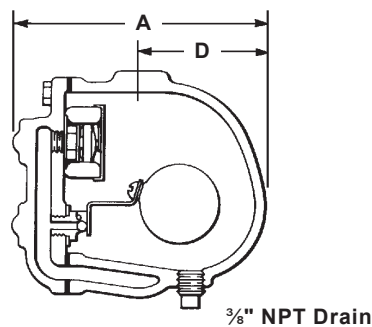
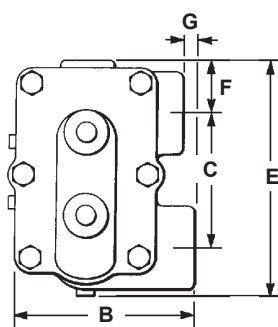


**All 1½", 2"
1¼" FT-75, FT-125**

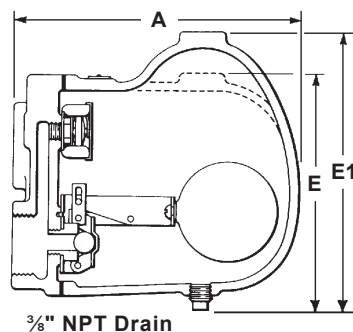
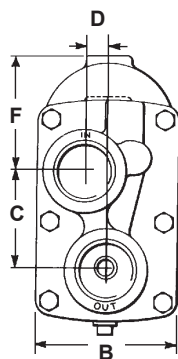
No.	Part	Material	
1	Body	Cast Iron	ASTM A126 CL B
2	Cover Screws	Carbon steel	ASTM A449
3	Cover Gasket	Graphite	
4	Cover	Cast Iron	ASTM A126 CL B
5	Valve Seat	Stainless steel	
6	Valve Seat Gasket	Stainless steel	
7	Ball Float	Stainless steel	
8	Float Arm	Stainless steel	
	Air Vent Assembly	Stainless steel	
9	Air Vent Head	Stainless steel	
	Air Vent Seat	Stainless steel	
15	Seat Bracket	Stainless steel	
16	Pivot Pins	Stainless steel	
17	Head Bracket, Stop, Link	Stainless steel	
18	Valve Head	Stainless steel	

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

All $\frac{3}{4}$ ", 1"
1- $\frac{1}{4}$ " FT-15, FT-30



All 1- $\frac{1}{2}$ ", 2"
1- $\frac{1}{4}$ " FT-75, FT-125



Size	A	B	C	D	E	E1	F	G	Weight
$\frac{3}{4}$ ", 1"	6.2 (157)	4.6 (117)	3.3 (84)	3 (76)	5.75 (146)		1.3 (33)	0.3 (7.6)	9 lb (4.1 kg)
1- $\frac{1}{4}$ "* 1- $\frac{1}{2}$ "	8.5 (216)	4.25 (108)	3 (76)	0.7 (18)		8.4 (213)	3.5 (89)		18 lb (8.2 kg)
2"	9.8 (249)	4.9 (124)	4.9 (124)	0.12 (3)	9.1 (231)		1.9 (48)		26 lb (11.8 kg)
*1- $\frac{1}{4}$ " (FT-15, FT-30	6.2 (157)	4.7 (119)	3 (76)	2.8 (71)	5.75 (146)		1.5 (38)	0.3 (7.6)	9.3 lb (4.2 kg)

Sample specification

Steam traps shall be of the mechanical ball float type having cast iron bodies, NPT connections, and all stainless steel internals. Incorporated into the trap body shall be a stainless steel balanced pressure thermostatic air vent capable of withstanding up to 450 °F (232 °C) and resisting waterhammer without sustaining damage. Internals of the trap shall be completely servicable without disturbing the piping.

Installation

A pipeline strainer should be installed ahead of any steam trap. Full port isolating valves should be placed to permit servicing. The trap should be installed below the drainage point of the equipment with a collecting leg before the trap, in a position so that the float arm is in a horizontal plane so that the float rises and falls vertically, and with the direction of flow as indicated on the body. Refer to IM-2-300 for complete instructions.

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 head and seat, operating mechanism and air vent.

Worn or damaged parts should be replaced using a complete valve mechanism assembly and/or air vent assembly.

Complete installation and maintenance instructions are given in IM-2-300, which accompanies the product.

Spare parts

Gasket Kit (3 of each)	B, E
Air Vent Kit	H, J, L, M, N, O
Valve Mechanism Kit (less float)	C, D, E, F, (G)
Float Kit	P
Replacement Module	
$\frac{3}{4}$ ", 1", 1- $\frac{1}{4}$ " FT-15 $\frac{3}{4}$ ", 1", 1- $\frac{1}{4}$ " FT-30 $\frac{3}{4}$ ", 1", FT-15, FT-125	Consists of: Air Vent Assembly and Valve Mechanism (w/Float) attached to a Cover and supplied with a Cover Gasket, Nameplate and a set of Cover Bolts. (Assembled)

