spirax sarco

TI-P021-02-US Issue 1

# Cast Iron Float and Thermostatic Steam Traps FTI-15, FTI-30, FTI-75, FTI-125, FTI-200

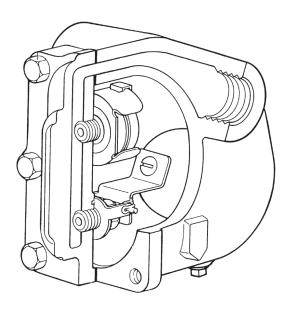
#### **Description**

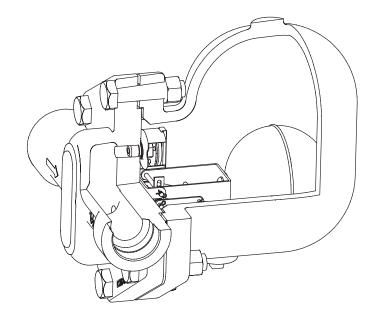
The Spirax Sarco FTI contains a float valve mechanism which modulates to discharge condensate continuously at steam temperature while non-condensible gases are released by a separate internal balanced pressure thermostatic air vent. The in-line piping connections simplify installation.

Model	FTI-15	FTI-30	FTI-75	FTI-125	FTI-200
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)	200 psi g (13.8 bar g)
Sizes	1/2", 3/4", 1", 1-1/2"				
Connections	NPT				
Construction	Cast Iron Body and Cover, Stainless Steel Internals				
Options	Gauge Glass, Vacuum Breaker				

#### Typical applications

Air heating coils, heat exchangers, steam main drip stations; small process equipment, particularly when controlled by a modulating temperature control valve; replacement of less efficient inverted bucket traps on unit heating equipment.





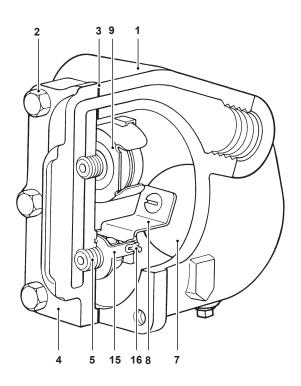
# Limiting operating conditions

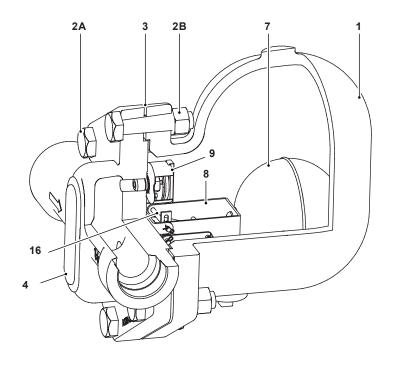
PMO Maximum operating pressure	FTI-15:	15 psi g	(1.0 bar g)
	FTI-30:	30 psi g	(2.1 bar g)
	FTI-75:	75 psi g	(5.2 bar g)
	FTI-125:	125 psi g	(8.6 bar g)
	FTI-200:	200 psi g	(13.8 bar g)
Maximum operating temperature all operating pressures		450 °F	(232 °C)

# Pressure shell design conditions

PMA	Maximum allowable pressure	200 psi g @ up to 450 °F	(13.8 bar g @ up to 232 °C)
TMA	Maximum allowable temperature	450 °F @ up to 200 psi g	(232 °C @ up to 13.8 bar g)

## **Materials**

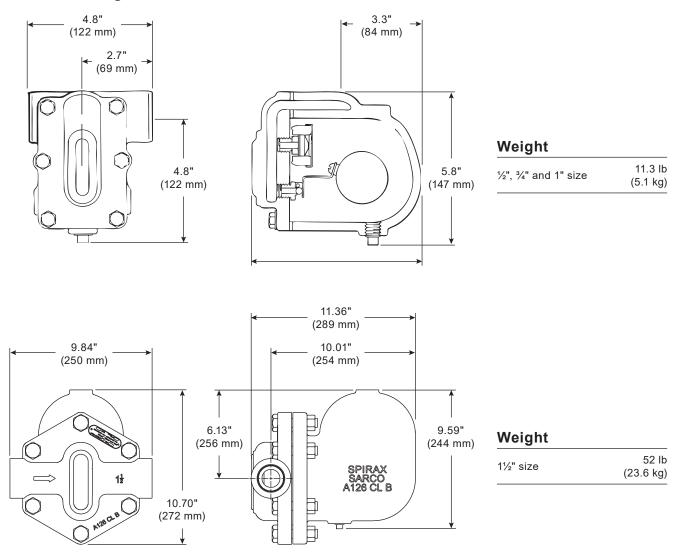




No.	Part	Material	
1	Body	Cast Iron	ASTM A126 CL B
2	Cover screws	Carbon Steel	ASTM A449
2A	Cover bolts	Alloy Steel	ASTM A 193 B7
2B	Cover nuts 3/4" & 1"	7/16 - 14 UNC-2A	ASTM A 194 2H
3	Cover gasket	Graphite	
4	Cover	Cast Iron	ASTM A126 CL B

No.	Part	Material
5	Valve seat	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
18	Valve head	Stainless steel

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



#### Sample specification

Steam traps shall be of the mechanical ball float type having cast iron bodies, NPT horizontal in-line connections, and all stainless steel internals. Incorporated into the trap body shall be a stainless steel balanced pressure thermostatic air vent capable of withstanding 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 and the float rises and falls vertically with the flow direction as indicated on the body. Refer to the IMI which accompanies the product 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 the IMI, which accompanies the product.

### **Spare Parts**

Gasket Kit : Cover-Seat Gasket(3 of each)	В, Е
Air Vent Kit	H, J, L, M, N, O
Complete Valve Mechanism Kit (less float)	C, D, E, F, G
Float Kit : Float, Washer, Screw	P

#### **Replacement Module**

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.

½", ¾", 1" FTI 15, 30, 75, 125, 200

