

# spirax sarco®

## Cast/Ductile Iron Float & Thermostatic Steam Trap FT14, IFT14 and FT14C

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 ⇄	IFT14-4.5 FT14-4.5	IFT14-10 FT14-10	IFT14-14 FT14-14
<b>PMO</b>	65 psig	145 psig	200 psig
<b>Sizes</b>	IFT 1/2", 3/4", only 1/2", 3/4", 1" HC, 1-1/2", 2"		
<b>Connections</b>	NPT		
<b>Construction</b>	1/2", 3/4", 1" HC: Ductile Iron Body 1-1/2", 2": Cast Iron Body All: Stainless Steel Internals		
<b>Options FT14 only</b>	1/2", 3/4", 1": Combination (C) Air Vent and SLR (steam lock release)		

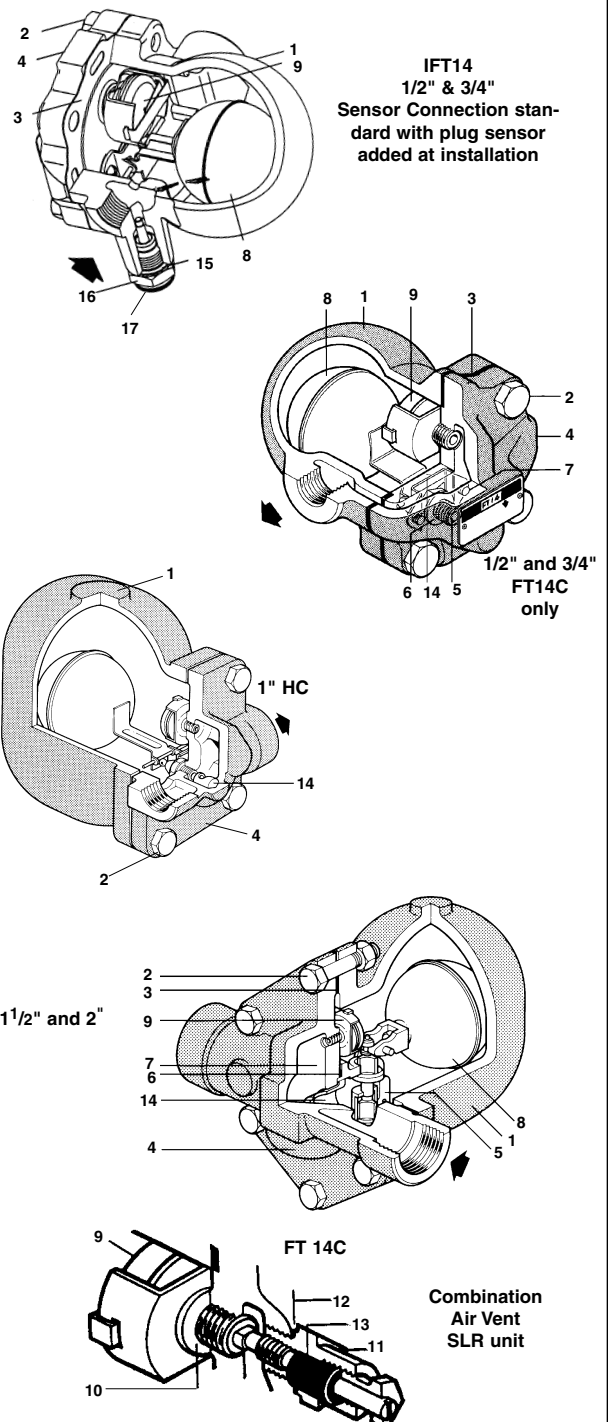
### Construction Materials

No.	Part	Material	
1	Body 1/2", 3/4", 1" 1-1/2", 2"	Ductile (SG) Iron Cast Iron	DIN 1693 GGG 40 DIN 1691 GG 25
2	Cover Bolting	Steel	BS 3692 Gr. 8.8
3	Cover Gasket	Nickel Reinforced Exfoliated Graphite	
4	Cover 1/2", 3/4", 1", 1-1/4" 1-1/2", 2"	Ductile (SG) Iron Cast Iron	DIN 1693 GGG 40 DIN 1691 GG 25
5	Valve Seat 1/2", 3/4" Valve Seat 1"	Stainless Steel Stainless Steel	BS 970 431 529 ASTM A276 Type 431
6	Main Valve Assy 1-1/2", 2" Valve Seat Gasket 1/2", 3/4", 1", 1-1/4"	Stainless Steel Stainless Steel	AISI 431 AISI 304
7	Main Valve Assy Screws 1/2", 3/4" Pivot Frame Assy Set Screws 1", 1-1/4" Main Valve Assy Bolts 1-1/2" Studs & Nuts 2"	Reinforced Exfoliated Graphite Stainless Steel Stainless Steel	BS 6105 CI A2-70 ANSI B 18.6.3 BS 970 304 516 BS 6105 A4-80
8	Ball Float & Lever	Stainless Steel	AISI 304
9	Air Vent	Stainless Steel	
10	Air Vent Seat Gasket	Stainless Steel	BS1449 304 516
11	SLR	Stainless Steel	BS 970 303 S21
12	SLR Unit Gasket 1", 1-1/2", 2"	Mild Steel	BS1449 CS4
13	SLR Seal	Stainless Steel	ASTM A276 Type 431
14	Erosion Deflector	Stainless Steel	ASTM A276 Type 431
15	Sensor Gasket	Stainless Steel	BS1449 304 516
16	Sensor SSSI, WLSI optional	Stainless Steel	BS1449 304 516
17	Blanking Plug standard (not shown)	Steel	
18	Inlet Baffle 1-1/2", 2" only (baffle not shown)	Stainless Steel	BS1449 304 516

### Typical Applications

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

**Capacities: see TIS 2.306**



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.

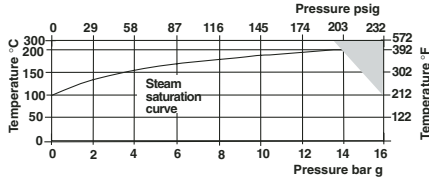
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# Cast/Ductile Iron Float & Thermostatic Steam Trap FT14, IFT14 and FT14C

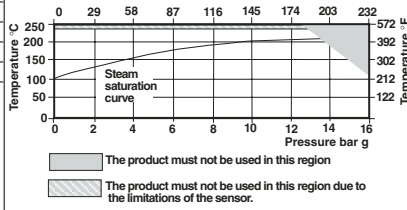
## Limiting conditions (ISO 6552)

Body design conditions	PN25 (1")	PN16 (1-1/2", 2")
PMA - Maximum allowable pressure	25 bar g	16 bar g
TMA - Maximum allowable temperature	300°C	220°C
Cold hydraulic test pressure	38 bar g	24 bar g

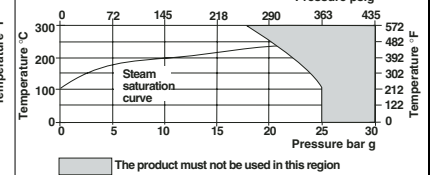
## Envelope Press Range 1-1/2" and 2" FT14



## Envelope Press Range 1/2" & 3/4" IFT14 & FT14



## Envelope Press Range 1" FT14 HC



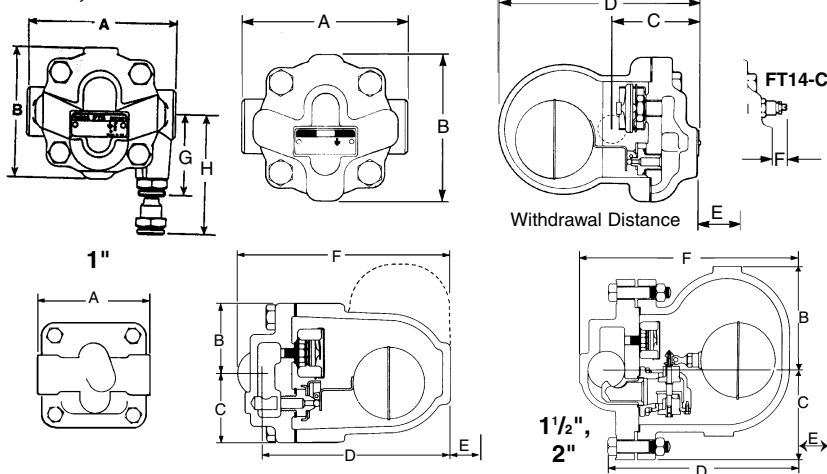
## Limiting conditions (ISO 6552) 1/2" & 3/4"

Maximum body design conditions	PN16
PMA - Maximum allowable pressure	16 bar g
TMA - Maximum allowable temperature	250°C
PMO - Maximum operating pressure	14 bar g
TMO - Maximum operating temperature	240°C
Cold hydraulic test pressure	24 bar g

## ΔPX-Maximum differential pressure

1/2", 3/4" & 1" HC	1-1/2" and 2"	ΔPX
IFT/FT 14 - 4.5	FT 14-4.5	65 psig 4.5 bar
IFT/FT 14 - 10	FT 14-10	145 psi 10 bar
IFT/FT 14 - 14	FT 14-14	200 psi 14 bar
1-1/2" and 2" traps are limited to a PMO equal to ΔPX		

## 1/2", 3/4" FT14 IFT14



## Sample Specification

Steam traps shall be of the mechanical ball float type having iron bodies, horizontal 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 45°F (25°C) of superheat and resisting waterhammer without sustaining damage. Internals of the trap shall be completely servicable without disturbing the piping. (Optional: The trap shall include an adjustable steam lock release unit.) 14C version.

## 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. (The 1/2" and 3/4" FT14 only trap is supplied with right-to-left flow. If left-to-right or vertical flows are required, cover can be rotated as desired.) Refer to IMI 2.300 or IM-FO1-30 for IFT for complete instructions.

## Maintenance

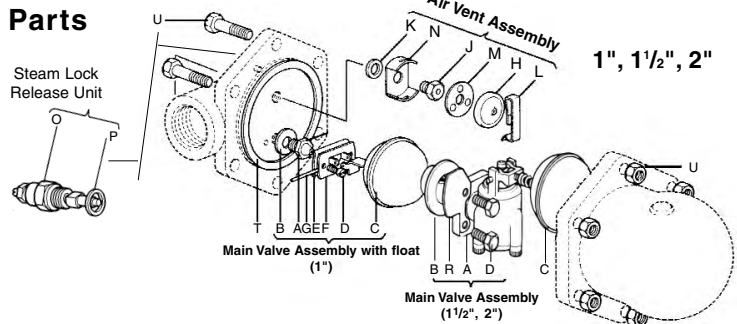
This product can be maintained without disturbing the piping connections. Complete isolation from both supply and return line is required before any servicing is performed. The trap should be disassembled periodically for inspection and cleaning of the valve head and seat, operating mechanism and air 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 IMI 2.300, or IM-FO1-30 for IFT which accompanies the product.**

## Dimensions (nominal) in inches and millimeters

Size	A	B	C	D	E	F	G	H	Weight
1/2", 3/4"	4.8 121	4.2 107	2.6 67	5.8 147	4.1 105	1.2 30	2.6 66	3.9 98	6.4 lb 2.9 kg
1"	4.7 120	4.3 110	3.2 80	7.7 195	6.3 160	8.6 220	-	-	15.0 lb 6.8 kg
1-1/2"	10.6 270	5.1 130	4.3 108	9.4 238	7.9 200	10.6 270	-	-	38.5 lb 17.5 kg
2"	11.9 300	5.4 138	4.9 125	9.8 250	7.8 200	11.3 288	-	-	52 lb 24 kg

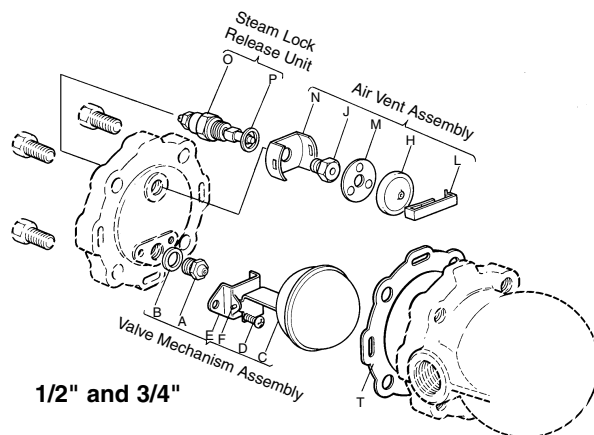
Main Valve Assembly with float	A,B,C,D (2 off), E,T
Air Vent Assembly	H, J, L, M, N, T
Steam Lock Release Unit and Air Vent Assembly FT14 only	O,P,H,J,L,M,N,T
Cover Gasket (Pkt of 3)	T

## Spare Parts



Main Valve Assy w/ Float (1")	A,B,C,D,E,F,G
Main Valve Assy w/ Erosion Deflector (1-1/2", 2")	A,B,D,R
Air Vent Assy (K not used on 1", 1-1/2", 2")	H,J,K,L,M,N
Steam Lock Release Unit (state SLR or C unit)	O,P
Three Complete sets of Gaskets	B,K,P,R,T
Set of Cover Bolts (set of 4) (1")	U
Set of Cover Bolts & Nuts (set of 6) (1-1/2", 2")	U
Ball Float (1-1/2", 2")	C

The erosion deflector on the 1" is pressed into the body during manufacture and not available as a spare.



1/2" and 3/4"