

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

Construction Materials

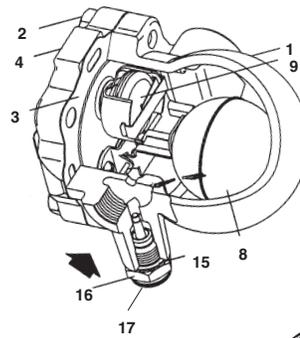
| No. | Part | Material |
|-----|--|---|
| 1 | Body 1/2", 3/4", 1" 1-1/2", 2" | Ductile (SG) Iron Cast Iron DIN 1693 GGG 40 DIN 1691 GG 25 |
| 2 | Cover Bolting | Steel BS 3692 Gr. 8.8 |
| 3 | Cover Gasket | Nickel Reinforced Exfoliated Graphite |
| 4 | Cover 1/2", 3/4", 1", 1-1/4" 1-1/2", 2" | Ductile (SG) Iron Cast Iron DIN 1693 GGG 40 |
| 5 | Valve Seat 1/2", 3/4" Valve Seat 1" Main Valve Assy 1-1/2", 2" | Stainless Steel Stainless Steel Stainless Steel |
| 6 | Valve Seat Gasket 1/2", 3/4" 1", 1-1/4" Main Valve Assy Gasket 1-1/2", 2" | Stainless Steel Reinforced Exfoliated Graphite |
| 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" | Stainless Steel Stainless Steel Stainless Steel Stainless Steel M4 x 6 mm M5 x 20 mm M6 x 20 mm M8 x 20 mm |
| 8 | Ball Float & Lever | Stainless Steel |
| 9 | Air Vent | Stainless Steel |
| 10 | Air Vent Seat Gasket | Stainless Steel |
| 11 | SLR | Stainless Steel |
| 12 | SLR Unit Gasket 1", 1-1/2", 2" | Mild Steel |
| 13 | SLR Seal | Stainless Steel |
| 14 | Erosion Deflector | Stainless Steel |
| 15 | Sensor Gasket | Stainless Steel |
| 16 | Sensor SSLI, WLSI optional | Stainless Steel |
| 17 | Blanking Plug standard (not shown) | Steel |
| 18 | Inlet Baffle 1-1/2", 2" only (baffle not shown) | Stainless Steel |

Typical Applications

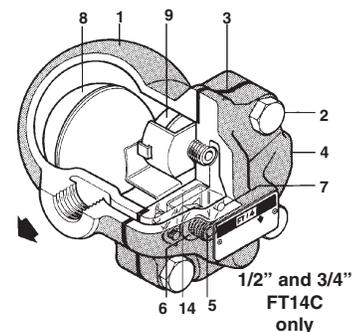
All process equipment, particularly when controlled by modulating temperature control valves; also for unit heaters, air heating coils, heat exchangers and steam main drip stations

Capacities: see TIS 2.306

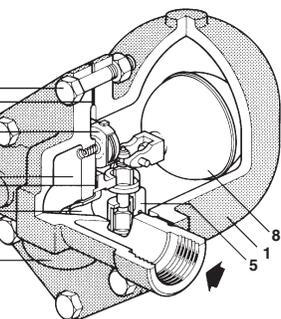
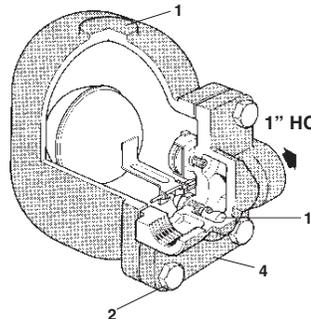
Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.
In the interests of development and improvement of the product, we reserve the right to change the specification.



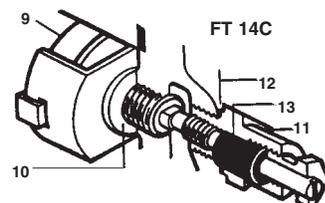
IFT14
1/2" & 3/4"
Sensor Connection standard with plug sensor added at installation



1/2" and 3/4"
FT14C
only



1/2" and 2"



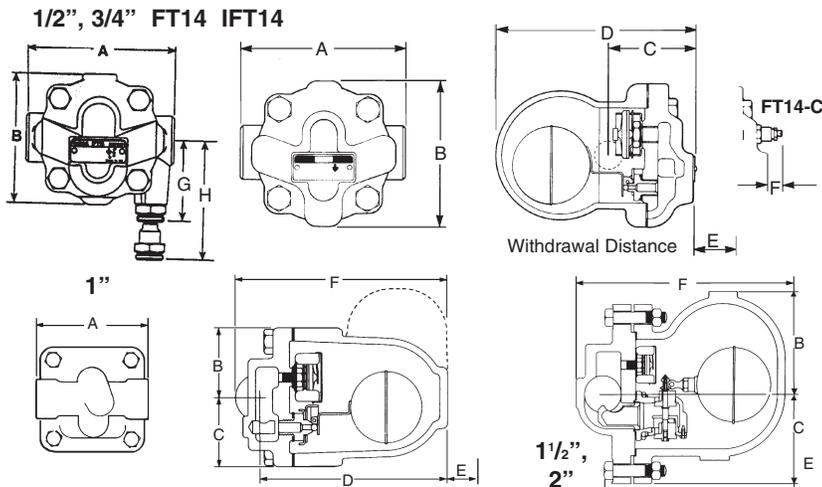
FT 14C
Combination
Air Vent
SLR unit

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

Limiting Operating Conditions

| | |
|---|--------------------|
| Max operating pressure (PMO) IFT14-4.5 ,FT14-4.5,FT14C-4.5 | 65 psig (4.5 barg) |
| Max operating pressure (PMO) IFT14-10, FT14-10, FT14C-10 | 145 psig (10 barg) |
| Max operating pressure (PMO) IFT14-14 ,FT14-14, FT14C-14 | 200 psig (14 barg) |

| | |
|---|---|
| Max operating temperature (TMO) IFT14 1/2", 3/4" FT14C | 482°F(250°C) @ 188 psig (13 barg) 392°F (200°C) @ 200 psig (14 barg) |
| Max operating temperature (TMO) 1" FT14HC | 482°F(250°C) @ 200 psig (14 barg) |
| Max operating temperature (TMO) 1-1/2", 2" FT14 | 428°F(220°C) @ 195 psig (13.5 barg) 392°F (200°C) @ 200 psig (14 barg) |
| Minimum allowable temperature All IFT, FT14, FT14C | 14°F (-10°C) |



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 |

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 serviceable without disturbing the piping. (Optional: The trap shall include an adjustable steam lock release unit.) 14C version.

Installation

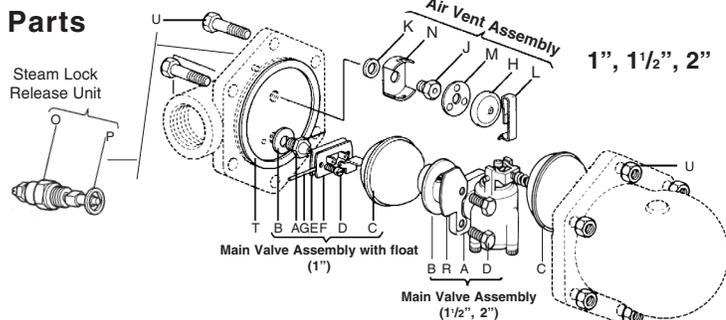
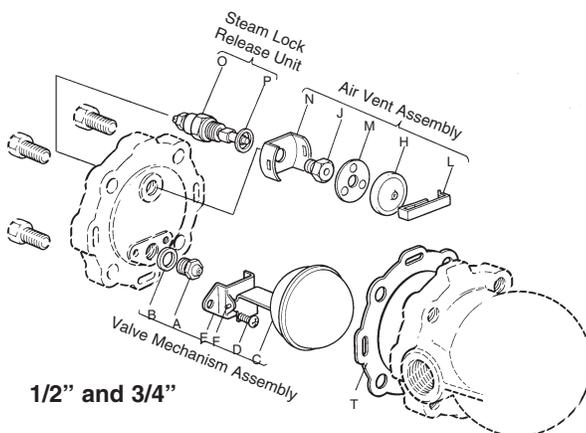
A pipeline strainer should be installed ahead of any steam trap. Full port isolating valves should be placed to permit servicing. The trap should be installed below the drainage point of the equipment with a collecting leg before the trap, in a position so that the float arm is in a horizontal plane 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.

| | |
|---|------------------|
| 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.

TI-2-320-US 3.12