



Cert. No. LRQ 0963008

ISO 9001

spirax sarco

TI-P145-01

ST Issue 2

FTS14

Austenitic Stainless Steel Ball Float Steam Trap

Description

The FTS14 is an austenitic stainless steel ball float steam trap with an integral automatic air vent.

It provides efficient condensate drainage and prompt air removal to ensure process equipment operates to its maximum potential.

As standard the FTS14 has horizontal connections with flow from right to left (R-L). However its unique design allows the cover to be simply rotated to provide horizontal left to right (L-R) and vertical up or vertical down configurations.

Standards

This product fully complies with the requirements of the European Pressure Equipment Directive 97/23/EC.

Certification

This product is available with certification to EN 10204 3.1.B.

Note: All certification/inspection requirements must be stated at the time of order placement.

Sizes and pipe connections

1/2", 3/4" and 1"	Screwed BSP (BS 21 and DIN 2999) or NPT (ANSI B 1.20.1).
1/2", 3/4" and 1"	Socket weld ends to ANSI B 16.11, BS 3799 Class 3000 and DIN 3239
DN15, 20 and 25	Flanged ends to ANSI B 16.5 Class 150 and 300 or EN 1092-1 PN16/25.
1/2", 3/4" and 1"	Hygienic/sanitary clamp ends

Note: For alternative connections please consult Spirax Sarco.

Optional extras

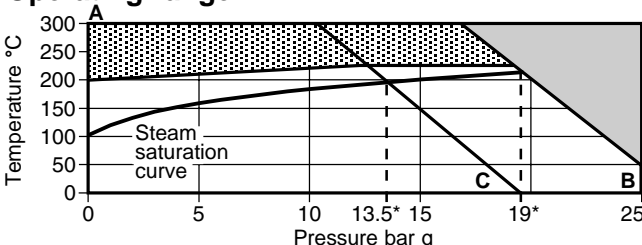
Internal strainer (FTS14X). A manually adjustable needle valve can be added for use as a steam lock release mechanism (FTS14-C). The cover can be tapped 1/8" BSP for installation of a temperature sensor. **Note:** All options are available at extra cost.

Limiting conditions (ISO 6552)

Body design conditions	PN25
PMA - Maximum allowable pressure	25 bar g
TMA - Maximum allowable temperature	300°C
TMO - Maximum operating temperature	225°C
Minimum operating temperature	-20°C

Note: For lower operating temperatures consult Spirax Sarco.
Designed for a maximum cold hydraulic test pressure of 37.5 bar g

Operating range



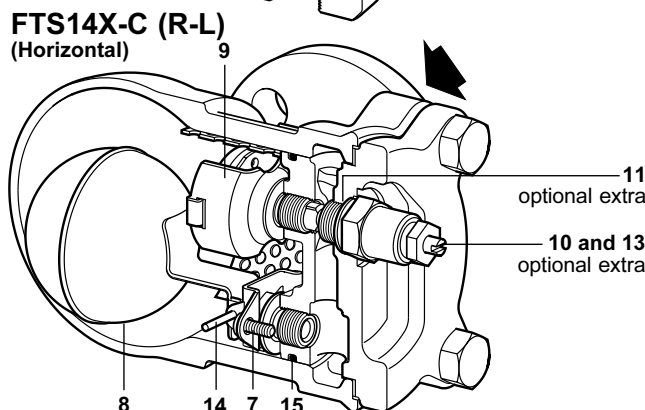
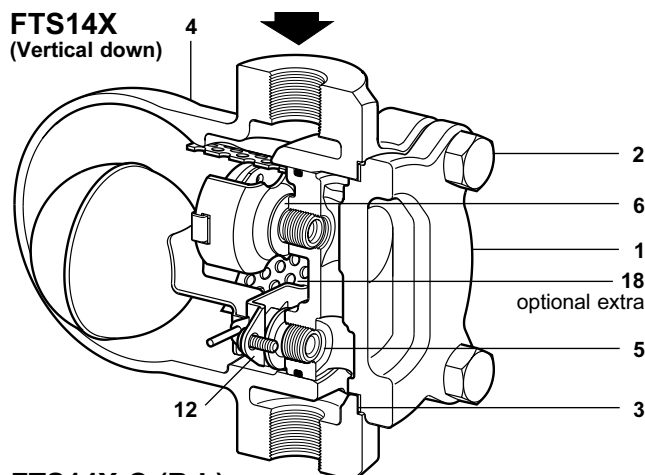
- The product must not be used in this region.
- ▨ The product should not be used in this region as damage to the internals may occur.

*PMO Maximum operating pressure for steam service.
A - B Flanged PN16/25, ANSI 300, screwed and socket weld.
A - C Flanged ANSI 150.

Note: For hygienic/sanitary clamp ends the maximum pressure and/or temperature may be restricted by the gasket or clamp used.

ΔPMX - Maximum differential pressure

FTS14 - 4.5	FTS14 - 10	FTS14 - 14
4.5 bar	10 bar	14 bar



Materials

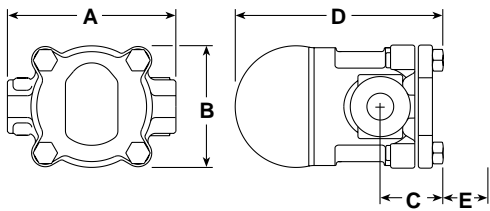
No. Part	Material
1 Body	Austenitic stainless steel (316) EN 10213-4 (1.4408) ASTM A351 CF8M
2 Cover bolts	Stainless steel BS EN 3506 A2-70
3 Cover gasket	Reinforced exfoliated graphite
4 Cover	Austenitic stainless steel (316) EN 10213-4 (1.4408) ASTM A351 CF8M
5 Main valve seat	Stainless steel BS 970 431 S29
6 Main valve/air vent seat gasket	Stainless steel
7 Main valve assembly screws	Stainless steel
8 Ball float and lever	Stainless steel BS 1449 304 S16
9 Air vent assembly	Stainless steel
10 SLR assembly	Stainless steel
11 SLR gasket	Stainless steel
12 Pivot frame	Stainless steel
*13 SLR seal	Graphite
*14 Pivot	Stainless steel
15 'O' ring	Grey Viton complies with FDA CFR Title 21, Para 177, Section 2600
*16 Valve spring (1" only)	Stainless steel
17 Sensor blanking plug	Stainless steel (optional extra)
18 Strainer screen	Stainless steel (optional extra)

Note: Items 16 and 17 cannot be shown.

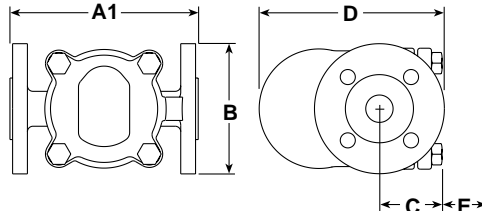
Dimensions/weights (approximate) in mm and kg

Size	A		A1			B	C	D	E	F	Weight	
	Screwed/SW	Clamp ends	PN16/25	ANSI 150	ANSI 300						Withdrawal distance	FTS14-C
½"	135	180	-	-	-	97	48	162	135	22	3.75	-
¾"	135	180	-	-	-	97	48	162	135	22	3.75	-
1"	139	200	-	-	-	113	51	179	145	22	4.25	-
DN15	-	-	150	147	194	97	77	162	135	22	-	5.00
DN20	-	-	150	147	194	102	77	162	135	22	-	5.00
DN25	-	-	160	160	204	113	62	179	145	22	-	6.25

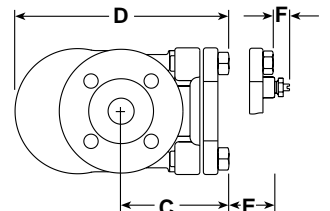
Screwed, socket welded and clamp ends (all sizes)



Flanged DN25

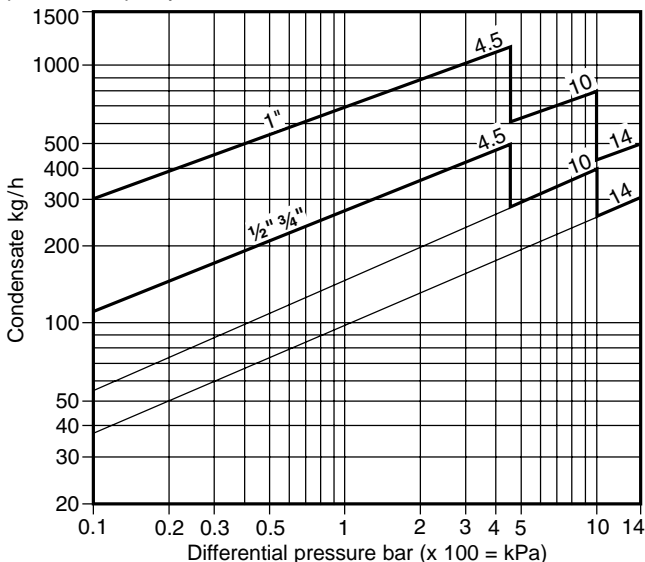


Flanged DN15, 20 and FTS14-C



Capacities

Note. Capacities shown are based on discharge at saturation temperature. When discharging sub-cooled condensate the air vent provides extra capacity. Under start-up conditions the thermostatic air vent will be open, and will provide additional condensate capacity to the main valve assembly. On 4.5 bar units this will provide a minimum of 50% increased capacity above the hot condensate figures shown. On 10 and 14 bar units this will be a minimum increase of 100% on the published capacity.



Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P145-02) supplied with the product.

Spare parts

The spare parts available are shown in heavy outline. Parts drawn in broken line are not supplied as spares.

Available spares

Maintenance kit 3, 5, 6 (2 off), 7 (2 off), 8, 9, 12, 14, 15, 16 (1" only), 18	
Gasket set (packet of 3)	3, 15

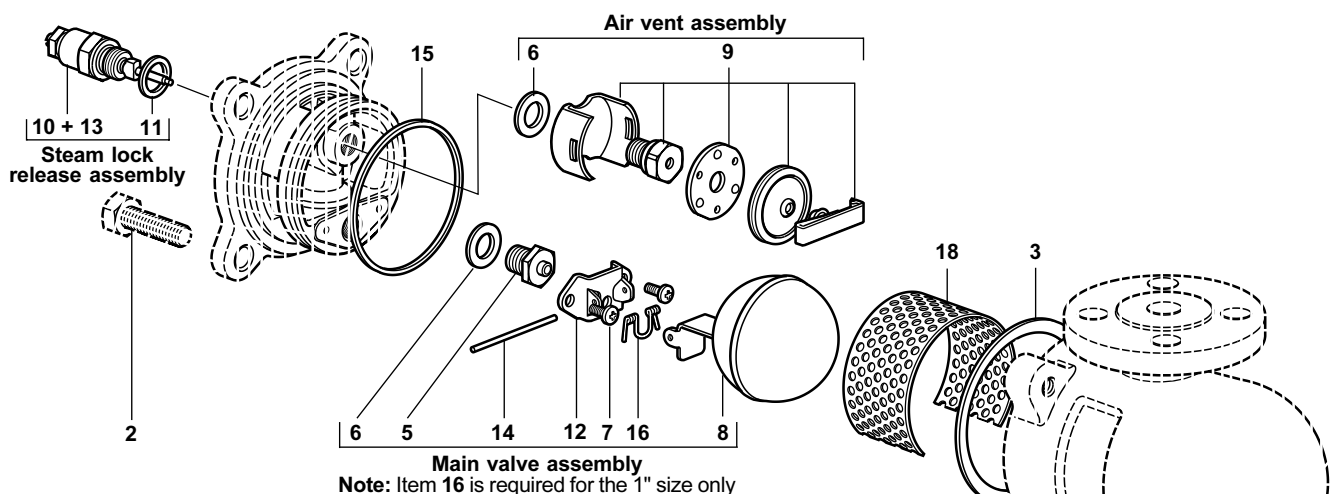
How to order spares

Always order spares by using the description given in the column headed 'Available spares' and state the size, type of trap and pressure range i.e. 4.5, 10 or 14 bar.

Example: 1 - Maintenance kit for a Spirax Sarco ½" FTS14-4.5 steam trap.

Recommended tightening torques

Item	or mm	N m
2	M10 x 30	20 - 25
5	17 A/F	50 - 55
7	Pozidrive M4 x 6	2.5 - 3.0
9	17 A/F	50 - 55
10	19 A/F	35 - 40
17 sensor blanking plug	11 A/F	15 - 20



How to order

Example: 1 off Spirax Sarco ½" FTS14X-4.5 R-L (right to left) stainless steel float trap fitted with screwed BSP connections. Trap is maintainable in line. Fitted with integral air vent and strainer screen.

Optional extra

At extra cost the cover can be tapped ⅛" BSP for installation of a temperature sensor.