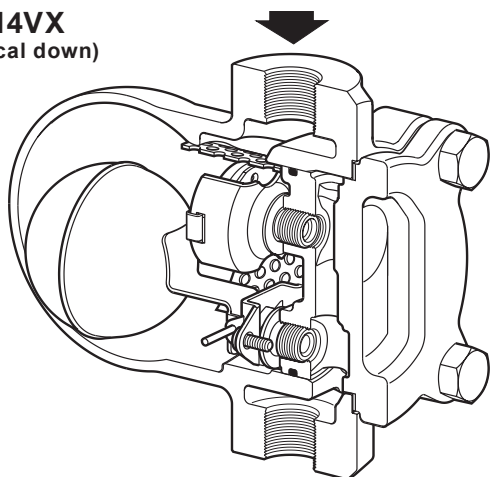




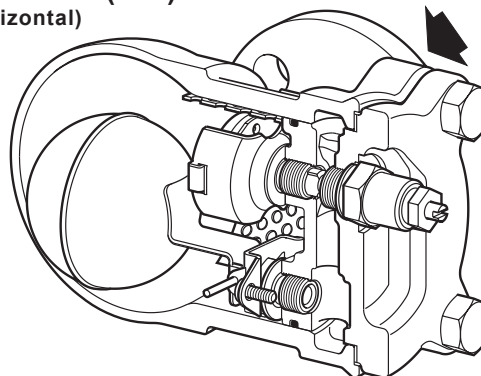
FTS14

Austenitic Stainless Steel Ball Float Steam Trap

FTS14VX
(Vertical down)



FTS14X-C (R-L)
(Horizontal)



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 Pressure Equipment Directive (PED).

Certification

This product is available with certification to EN 10204 3.1.

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

Sizes and pipe connections

| | |
|-----------------|---|
| ½", ¾" and 1" | Screwed BSP (BS 21 and DIN 2999) or NPT (ASME B 1.20.1). |
| ½", ¾" and 1" | Socket weld ends to ASME B 16.11, BS 3799 Class 3000 and DIN 3239 |
| DN15, 20 and 25 | Flanged ends to ASME B 16.5 Class 150 and 300 or EN 1092-1 PN16or PN25. |
| ½", ¾" and 1" | Tri-clamp ends (FTS14-4.5 only). |

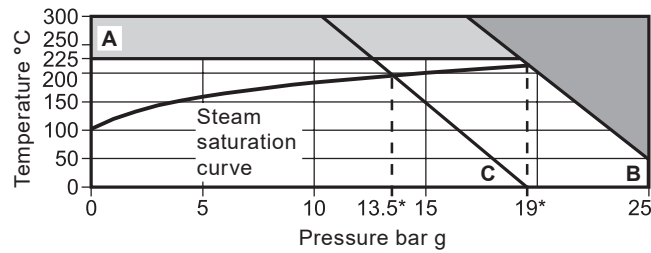
Note: For alternative connections please consult Spirax Sarco.


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 ½" BSP for installation of a temperature sensor.

Note: All options are available at extra cost.

Pressure/temperature limits (ISO 6552)



 The product **must not** be used in this region.

 The product should not be used in this region or beyond its operating range as damage to the internals may occur.

A - B Flanged PN16, PN25, ASME 300, screwed and socket weld.

A - C Flanged ASME 150.

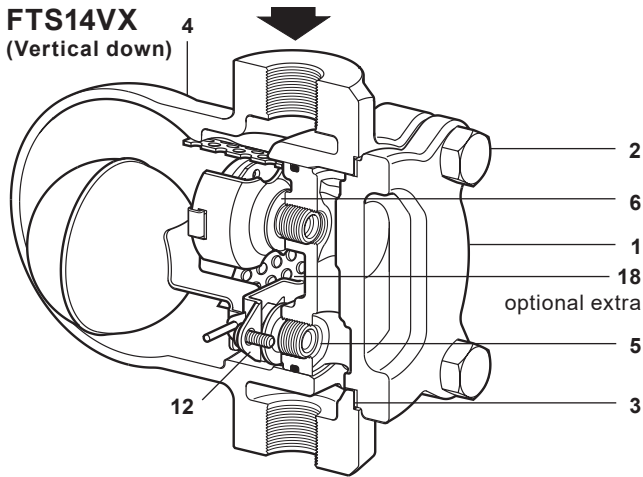
Note: Tri-clamp compatible end connections, used for hygienic/ sanitary applications, are only available on the FTS14-4.5.

| | | |
|---|--|--------------------------|
| Body design conditions | | PN25 |
| PMA | Maximum allowable pressure | 25 bar g @ 50 °C |
| TMA | Maximum allowable temperature | 300 °C |
| Minimum allowable temperature | | 20 °C |
| PMO | Maximum operating pressure for saturated steam service | A - B 19 bar g |
| | | A - C 3.5 bar g |
| TMO | Maximum operating temperature | 225 °C @ 19 bar g |
| Minimum operating temperature | | 0 °C |
| Designed for a maximum cold hydraulic test pressure of: | | 37.5 bar g |
| | | FTS14-4.5 4.5 bar |
| ΔPMX | Maximum differential pressure | FTS14-10 10 bar |
| | | FTS14-14 14 bar |

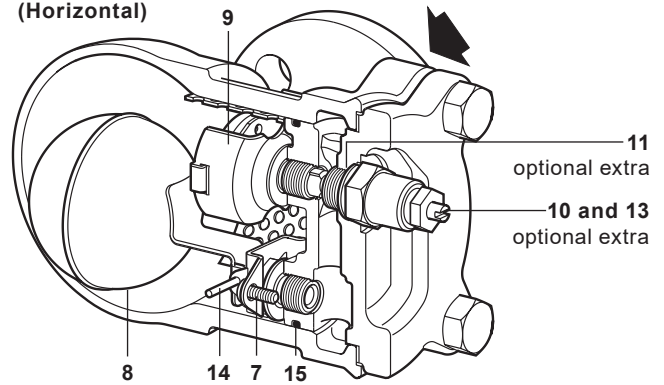
Note: For lower operating temperatures consult Spirax Sarco.

Materials

FTS14VX
(Vertical down)



FTS14X-C (R-L)
(Horizontal)



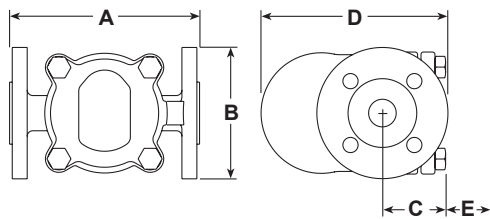
| No. | Part | Material | |
|-----|---------------------------------|---|---------------------------------------|
| 1 | Body | Austenitic stainless steel (316) | EN 10213-4 (1.4408) ASTM A351 CF8M |
| 2 | Cover bolts | Stainless steel | BS EN 3506 A2-70 |
| 3 | Cover gasket | Reinforced exfoliated graphite | |
| 4 | Cover | Austenitic stainless steel (316) | EN 10213-4 (1.4408) AS 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.

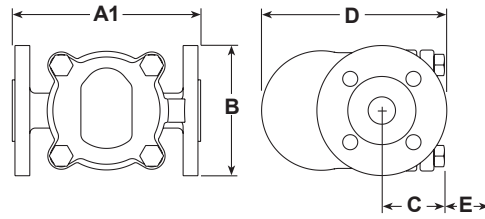
Dimensions/weights (approximate) in mm and kg

| Size | A | | A1 | | B | C | D | E | F | Weight | | |
|------|--------------|-----------|---------|----------|----------|-----|----|---------------------|---------|--------------|---------|------|
| | Screwed / SW | Tri-clamp | PN16/25 | ASME 150 | ASME 300 | | | Withdrawal distance | FTS14-C | Screwed / SW | Flanged | |
| 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 |

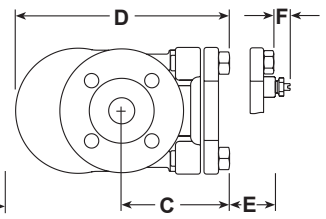
Screwed, Socket weld and Tri-clamp ends (all sizes)



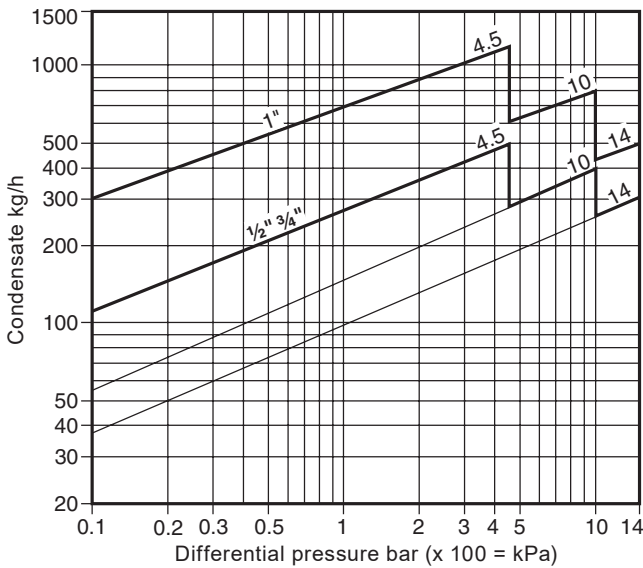
Flanged DN25



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.

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.

Spare parts

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

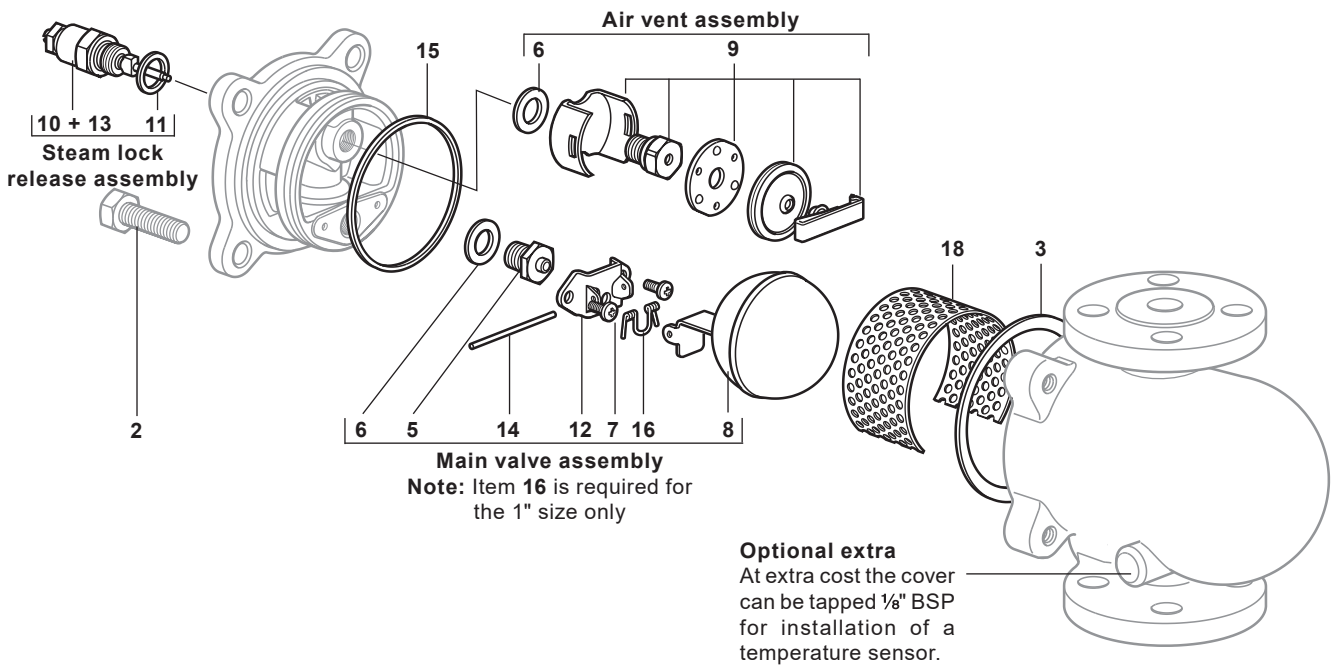
Available spares

| | |
|--------------------------|---|
| 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 | Part |  or  mm | N m |
|------|-------------------------------|--|-----------|
| 2 | Cover bolts | M10 x 30 | 20 - 25 |
| 5 | Main valve seat | 17 A/F | 50 - 55 |
| 7 | Main valve assembly screws | pozidrive M4 x 6 | 2.5 - 3.0 |
| 9 | Air vent assembly | 17 A/F | 50 - 55 |
| 10 | SLR assembly, gasket and seal | 19 A/F | 35 - 40 |
| 17 | Sensor blanking plug | 11 A/F | 15 - 20 |