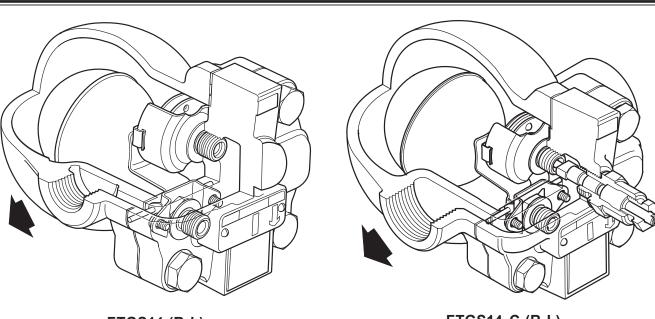


TI-P145-11 CMGT Issue 8



FTGS14 (R-L)

FTGS14-C (R-L) (with optional SLR)

Description

The FTGS14 ball float steam trap has an austenitic stainless steel body, stainless steel working internals and integral automatic air venting facility. The SG iron cover is electroless nickel-plated offering increased resistance to erosion. The FTGS14 can be maintained without disturbing the pipework.

Available options

| FTGS14 (R-L) | Horizontal connections with flow from right to left |
|--------------|-----------------------------------------------------|
| FTGS14 (L-R) | Horizontal connections with flow from left to right |
| FTGS14V | Vertical connections with flow from top to bottom |

Capsule

The BP99/32 capsule which is used in the FTGS14 is suitable for use on 150 °C superheat @ 0 bar g and 50 °C superheat @ 32 bar g.

Optional extras

A manually adjustable needle valve (designated 'C' on the nomenclature i.e. FTGS14-C) can be fitted to the trap. This option provides a steam lock release (SLR) feature in addition to the standard air vent. For further information please consult Spirax Sarco.

An **integral strainer screen** (designated 'X' on the nomenclature i.e. **FTGS14X**) can be fitted to the trap. For further information please consult Spirax Sarco.

Standards

This product fully complies with the requirements of the Pressure Equipment Directive (PED).

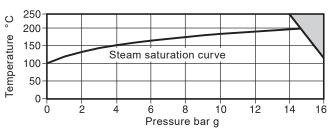
Certification

This product is available with a manufacturers Typical Test Report.

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

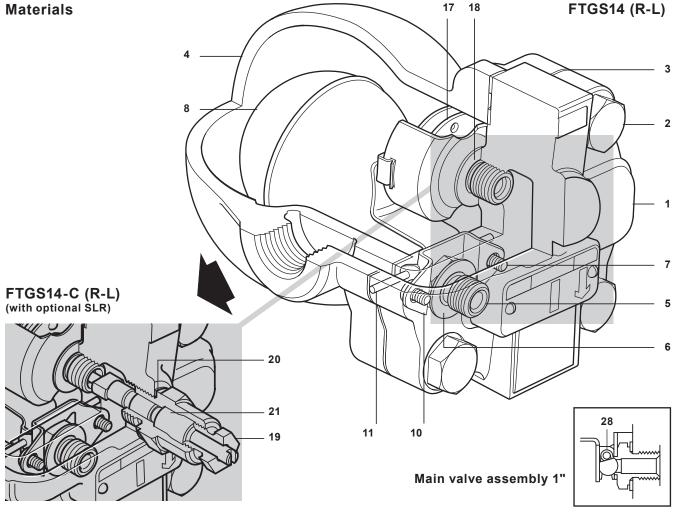
Sizes and pipe connections $\frac{1}{2}$, $\frac{3}{4}$ " and 1" screwed BSP and NPT.

Pressure/temperature limits (ISO 6552)



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

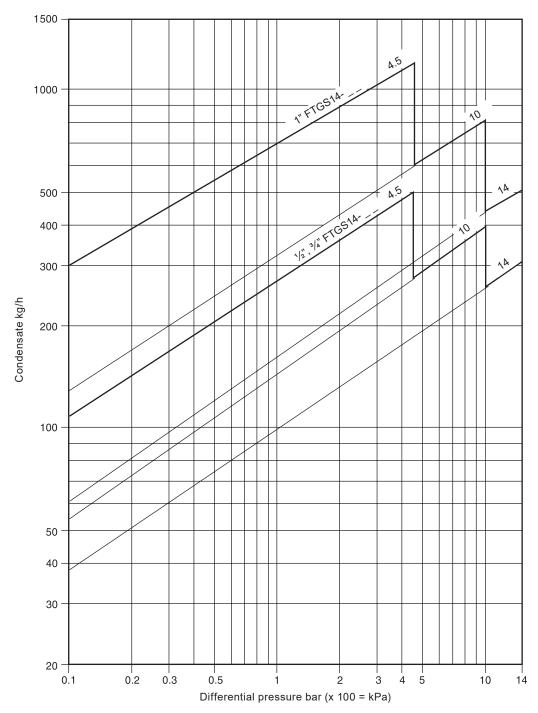
| Body design conditions | | PN16 | | |
|---------------------------------------|-------------------------------|---------|--|--|
| PMA Maximum allowable pressure | Maximum allowable pressure | | | |
| TMA Maximum allowable temperatu | Maximum allowable temperature | | | |
| Minimum allowable temperature | | -10 °C | | |
| PMO Maximum operating pressure fe | 14.6 bar g | | | |
| TMO Maximum operating temperatu | Maximum operating temperature | | | |
| Minimum operating temperature | | 0°0 | | |
| | FTGS14-4.5 | 4.5 bar | | |
| △PMX Maximum differential pressure | FTGS14-10 | 10 bar | | |
| | FTGS14-14 | 14 bar | | |
| Designed for a maximum cold hydraulic | 24 bar q | | | |



| Part | Material | |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Body | Austenitic stainless steel | EN 10213-4 (1.4308) ASTM A351 CF8 |
| Cover bolts | Steel | |
| Cover gasket | Reinforced exfoliated graphite | |
| Cover | Electroless nickel plated SG iron | DIN 1693 GGG 40 |
| Valve seat | Stainless steel | |
| Valve seat gasket | Stainless steel | |
| Pivot frame assembly screws | Stainless steel | |
| Ball float and lever | Stainless steel | |
| Pivot frame | Stainless steel | |
| Pivot pin | Stainless steel | |
| Air vent assembly | Stainless steel | |
| Air vent seat gasket | Stainless steel | |
| SLR assembly | Stainless steel | |
| SLR gasket | Stainless steel | |
| SLR seal | Graphite | |
| Valve spring (1" only) | Stainless steel | |
| | Cover bolts Cover gasket Cover Valve seat Valve seat gasket Valve seat gasket Pivot frame assembly screws Ball float and lever Pivot frame Pivot frame Pivot pin Air vent assembly Air vent seat gasket SLR assembly SLR gasket SLR seal | BodyAustenitic stainless steelCover boltsSteelCover gasketReinforced exfoliated graphiteCoverElectroless nickel plated SG ironValve seatStainless steelValve seat gasketStainless steelPivot frame assembly screwsStainless steelBall float and leverStainless steelPivot pinStainless steelAir vent assemblyStainless steelAir vent seat gasketStainless steelSLR gasketStainless steelSLR sealGraphite |

Note: Due to regional manufacturing differences some standard versions may be supplied with a 'C' type body with a stainless steel plug and gasket. If this configuration is specifically required it must be specified at the time of order placement.

Capacities



Additional cold water capacities from the thermostatic air vent under start-up conditions

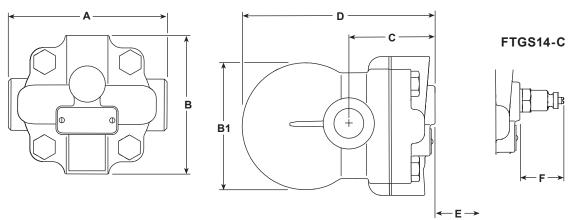
Capacities shown above are based on condensate at saturation temperature. Under start-up conditions when the condensate is cold the internal thermostatic air vent will be open and provides additional capacity to the main valve. The following table gives the minimum additional cold water capacities from the air vent.

| ∆P (bar) | 0.5 | 1 | 2 | 3 | 4.5 | 7 | 10 | 14 | |
|---------------|-----------------------------------------------|-----|-----|-----|-----|-----|---------|-------|--|
| | Minimum additional cold water capacity (kg/h) | | | | | | | | |
| 1/2" and 3/4" | 70 | 140 | 250 | 380 | 560 | 870 | 1 130 | 1 500 | |
| 1" | 120 | 240 | 360 | 500 | 640 | 920 | 1 2 2 0 | 1 500 | |

Dimensions/weights (approximate) in mm and kg

| Size | Α | в | B1 | С | D | E Withdrawal distance | F | Weight |
|---------------|-----|-----|-----|----|-----|--------------------------|----|--------|
| 1/2" and 3/4" | 123 | 107 | 96 | 70 | 150 | 105 | 38 | 3.4 |
| 1" | 145 | 107 | 117 | 70 | 160 | 120 | 38 | 4.6 |

FTGS14



Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P145-12) supplied with the product.

Installation note

The FTGS14 must be installed with the direction of flow as indicated on the body and the arrow on the nameplate must point downwards with the float arm in a horizontal plane so that it rises and falls vertically. If required the flow orientation can be changed on site.

Disposal

This product is recyclable. No ecological hazard is anticipated with the disposal of this product providing due care is taken.

How to order

Example: 1 off Spirax Sarco ¹/₂" FTGS14-4.5 (L-R) ball float steam trap with screwed BSP connections and integral air vent.

Spare parts

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

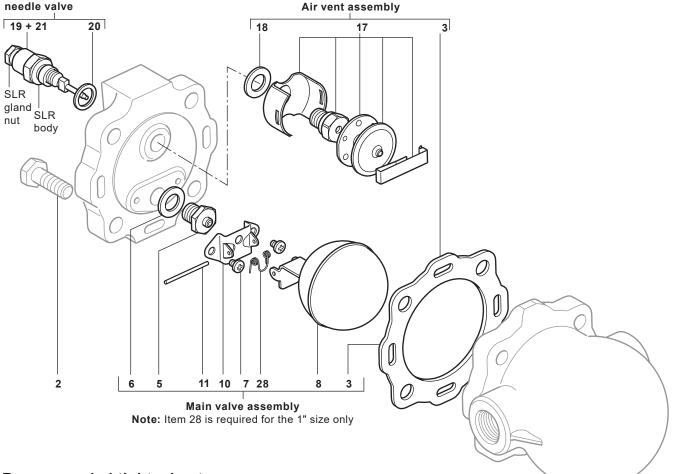
| Available spares | | | | | |
|--------------------------------------------------|-----------------------------------------------------|--|--|--|--|
| Maintenance kit | 3, 5, 6, 7 (2 off), 8, 10, 11, 17, 18, 28 (1" only) | | | | |
| Main valve assembly with float | 3, 5, 6, 7 (2 off), 8, 10, 11, 28 (1" only) | | | | |
| Air vent assembly | 3, 17, 18 | | | | |
| Manually adjustable needle valve (FTGS14-C only) | 19 + 21, 20 | | | | |
| Cover gasket (packet of 3) | 3 | | | | |

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.

Example: 1 - Main valve assembly for a Spirax Sarco ¹/₂" FTGS14-10 ball float steam trap.

Manually adjustable needle valve



Recommended tightening torques

| Item Part | | | or m | N m | lbf ft |
|-----------|----------------------------|-----------|----------|-----------|-----------|
| 2 | Cover bolts | 17 mm A/F | M10 x 30 | 47 - 50 | 35 - 37 |
| 5 | Main valve seat | 17 mm A/F | | 50 - 55 | 37 - 40 |
| 7 | Main valve assembly screws | Pozidrive | M4 x 6 | 2.5 - 3.0 | 1.8 - 2.2 |
| 17 | Air vent assembly | 17 mm A/F | | 50 - 55 | 37 - 40 |
| 19 | SLR body | 19 mm A/F | | 57 - 63 | 42 - 46 |
| | SLR gland nut | 13 mm A/F | | 3 - 5 | 2.2 - 3.7 |