

# spirax sarco

## FTGS14

### Ball Float Steam Trap (Flanged)

TI-P145-18  
ST Issue 2

#### 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. This trap is supplied with horizontal flanged connections and 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

#### 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 European Pressure Equipment Directive 97/23/EC.

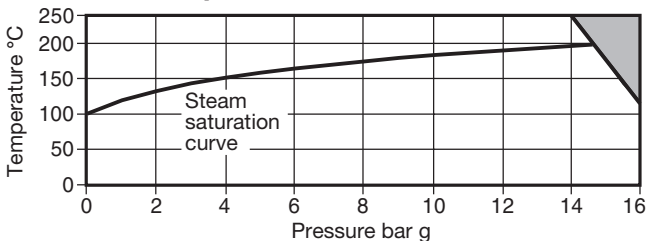
#### Certification

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

DN15, DN20 and DN25  
Flanged EN 1092 PN16, ASME (ANSI) 150 and JIS/KS 10.

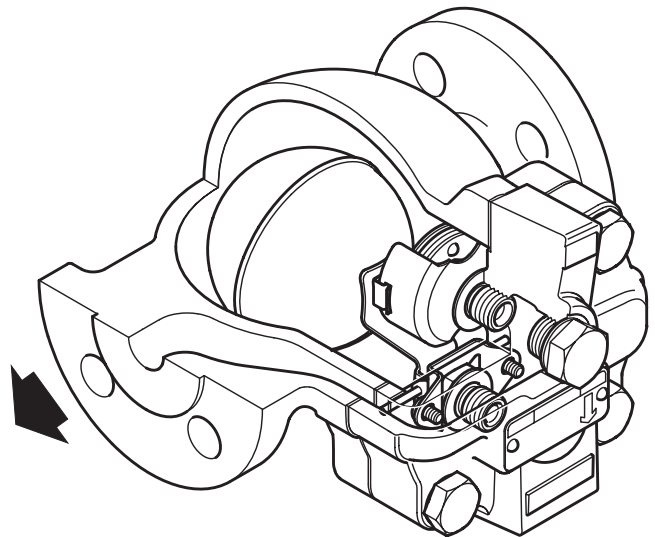
#### Pressure/temperature limits (ISO 6552)



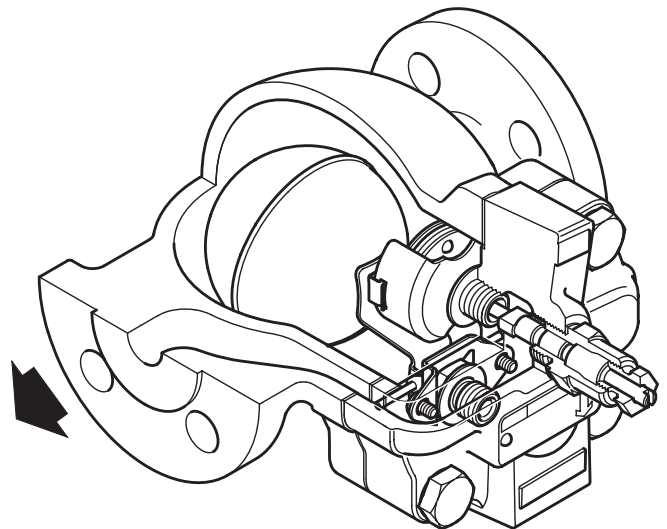
The product **must not** be used in this region.

Body design conditions		PN16
PMA	Maximum allowable pressure	16 bar g @ 120°C
TMA	Maximum allowable temperature	250°C
Minimum allowable temperature		-10°C
PMO	Maximum operating pressure for saturated steam service	14.6 bar g
TMO	Maximum operating temperature	250°C @ 13.8 bar g
Minimum operating temperature		0°C
	Maximum	FTGS14-4.5 4.5 bar
ΔPMX	differential pressure	FTGS14-10 10 bar
		FTGS14-14 14 bar

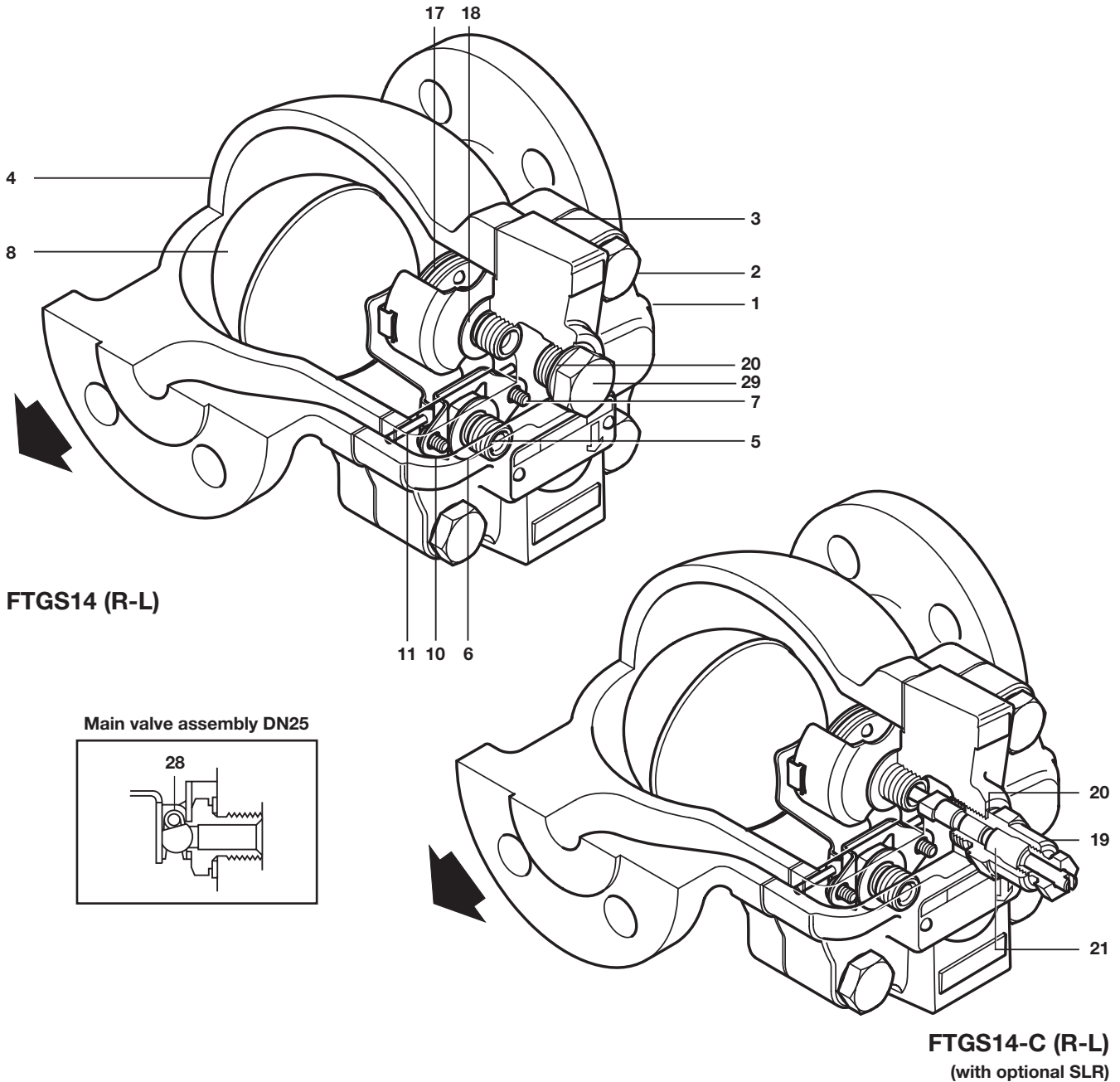
Designed for a maximum cold hydraulic test pressure of 24 bar g



FTGS14 (R-L)



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



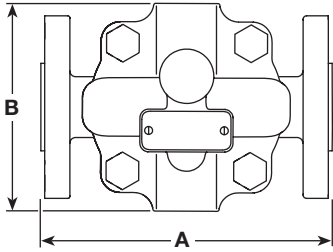
**Materials**

No.	Part	Material	
1	Body	Austenitic stainless steel	EN 10213-4 (1.4308) ASTM A351 CF8
2	Cover bolts	Steel	
3	Cover gasket	Reinforced exfoliated graphite	
4	Cover	Electroless nickel plated SG iron	DIN 1693 GGG 40
5	Valve seat	Stainless steel	
6	Valve seat gasket	Stainless steel	
7	Pivot frame assembly screws	Stainless steel	
8	Ball float and lever	Stainless steel	
10	Pivot frame	Stainless steel	
11	Pivot pin	Stainless steel	
17	Air vent assembly	Stainless steel	
18	Air vent seat gasket	Stainless steel	
19	SLR assembly	Stainless steel	
20	SLR gasket	Stainless steel	
21	SLR seal	Graphite	
28	Valve spring (DN25 only)	Stainless steel	
29	Body plug	Stainless steel	

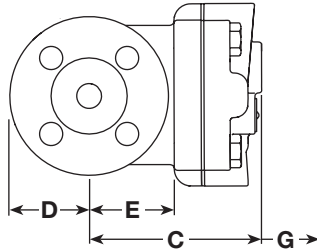
**Dimensions/weights (approximate) in mm and kg**

Size	A PN/ASME	A JIS/KS	B	C	D	E	F	G Withdrawal distance	Weight
DN15	150	150	107	102	51	47	38	105	4.7
DN20	150	150	107	102	53	47	38	105	5.2
DN25	160	170	125	65	100	10	38	120	6.8

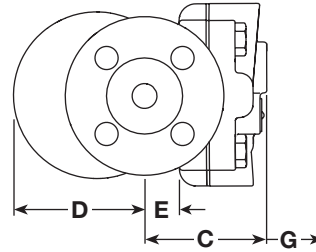
**FTGS14**



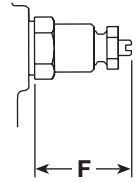
**DN15 and DN20**



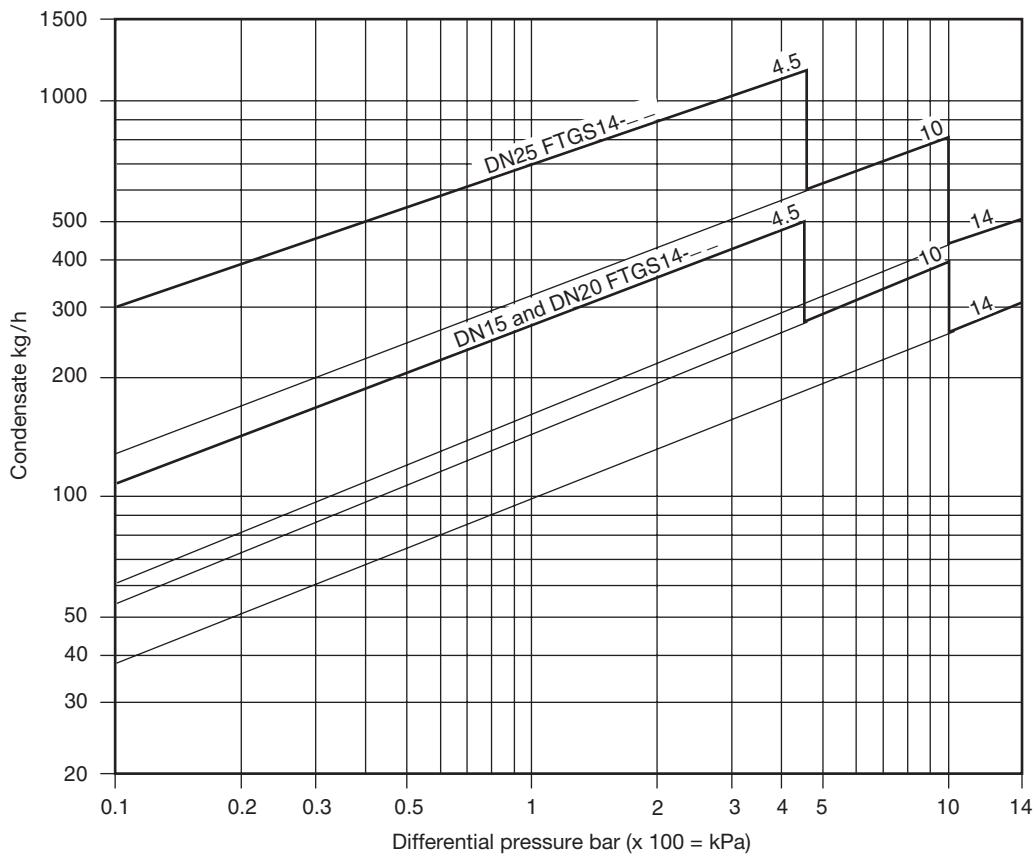
**DN25**



**FTGS14-C**



**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.

ΔP (bar)	0.5	1	2	3	4.5	7	10	14
<b>Minimum additional cold water capacity (kg/h)</b>								
DN15 and DN20	70	140	250	380	560	870	1130	1500
DN25	120	240	360	500	640	920	1220	1500

**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 with the float arm in a horizontal plain so that it rises and falls vertically. If required the flow orientation can be changed on site by simply rotating the cover through 180°, therefore **the arrow on the name-plate must point downwards.**

**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 DN25 FTGS14-4.5 (L-R) ball float steam trap with flanged EN 1092 PN16 connections and integral air vent.

**Spare parts**

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

**Available spares**



Maintenance kit	<b>3, 5, 6, 7 (2 off), 8, 10, 11 17, 18, 28 (DN25 only)</b>
Main valve assembly with float	<b>3, 5, 6, 7 (2 off), 8, 10, 11, 28 (DN25 only)</b>
Air vent assembly	<b>3, 17, 18</b>
Manually adjustable needle valve (FTGS14-C only)	<b>19 + 21, 20</b>
Cover gasket (packet of 3)	<b>3</b>
Gasket and plug	<b>20, 29</b>

**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 DN25 FTGS14-10 ball float steam trap.

**Recommended tightening torques**

Item	 or mm		N m
2	17 A/F	M10 x 30	47 - 50
5	17 A/F		50 - 55
7	Pozidrive	M4 x 6	2.5 - 3.0
17	17 A/F		50 - 55
19	19 A/F		57 - 63
21	13 A/F		3 - 5
29	19 A/F	M14 x 1.5	57 - 63

