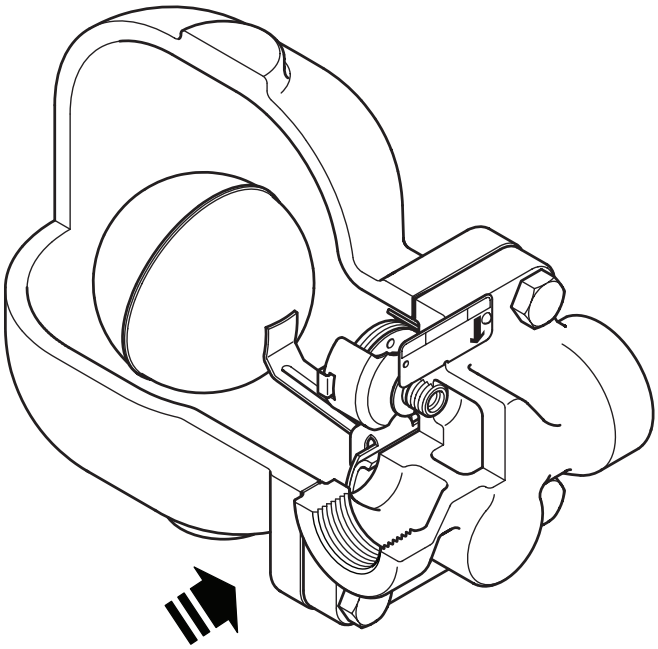
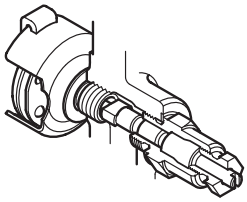
shopvalves.com

FTGS14HC
Ball Float Steam Trap
(1" Screwed)

FTGS14HC (L-R)



FTGS14HC-C



Description

The FTGS14HC 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 screwed connections and can be maintained without disturbing the pipework.

Available options

FTGS14HC (R-L) Horizontal connections with flow from right to left

FTGS14HC (L-R) Horizontal connections with flow from left to right

Note: If the orientation has to be changed on site - consult Spirax Sarco

Capsule

The BP99/32 capsule which is used in the FTGS14HC ball float steam trap 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. **FTGS14HC-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.
The **top of the cover can be drilled and tapped ⅜" BSP T Rp (ISO 7-1) or NPT** for the purpose of fitting a balance line if requested at the point of order.
The **bottom of the cover can be drilled and tapped ⅜" BSP T Rp (ISO 7-1) or NPT** for the purpose of fitting a drain cock if requested at the point of order.

Standards

This product fully complies with the requirements of the European Pressure Equipment Directive 2014/68/EU.

Certification

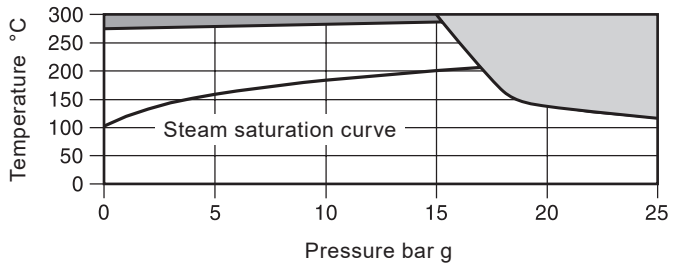
This product is available with a manufacturers Typical Test Report.
Note: All certification/inspection requirements must be stated at the time of order placement.

shopvalves.com

Sizes and pipe connections

1" screwed BSP T Rp (ISO 7-1) and NPT.

Pressure/temperature limits (ISO 6552)



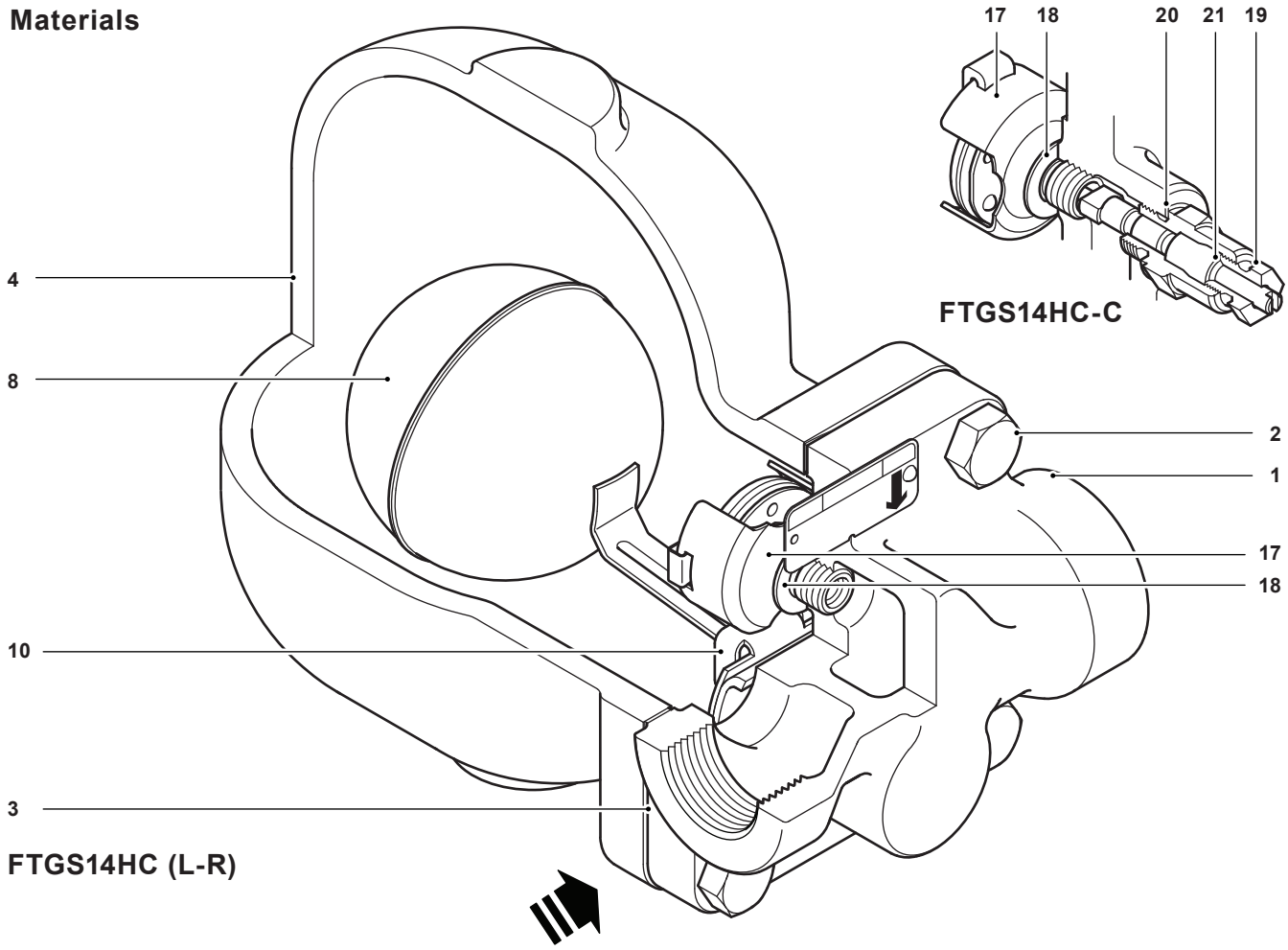
The product **must not** be used in this region.

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

Body design conditions			PN25
PMA	Maximum allowable pressure		25 bar g @ 120 °C
TMA	Maximum allowable temperature		300 °C
Minimum allowable temperature			-10 °C
PMO	Maximum operating pressure for saturated steam service		17 bar g
TMO	Maximum operating temperature		288 °C @ 15 bar g
Minimum operating temperature			0 °C
ΔPMX	Maximum differential pressure	FTGS14HC-4.5	4.5 bar
		FTGS14HC-10	10 bar
		FTGS14HC-14	14 bar
Product is safe for use under full vacuum conditions			
Designed for a maximum cold hydraulic test pressure of			37.5 bar g

shopvalves.com

Materials

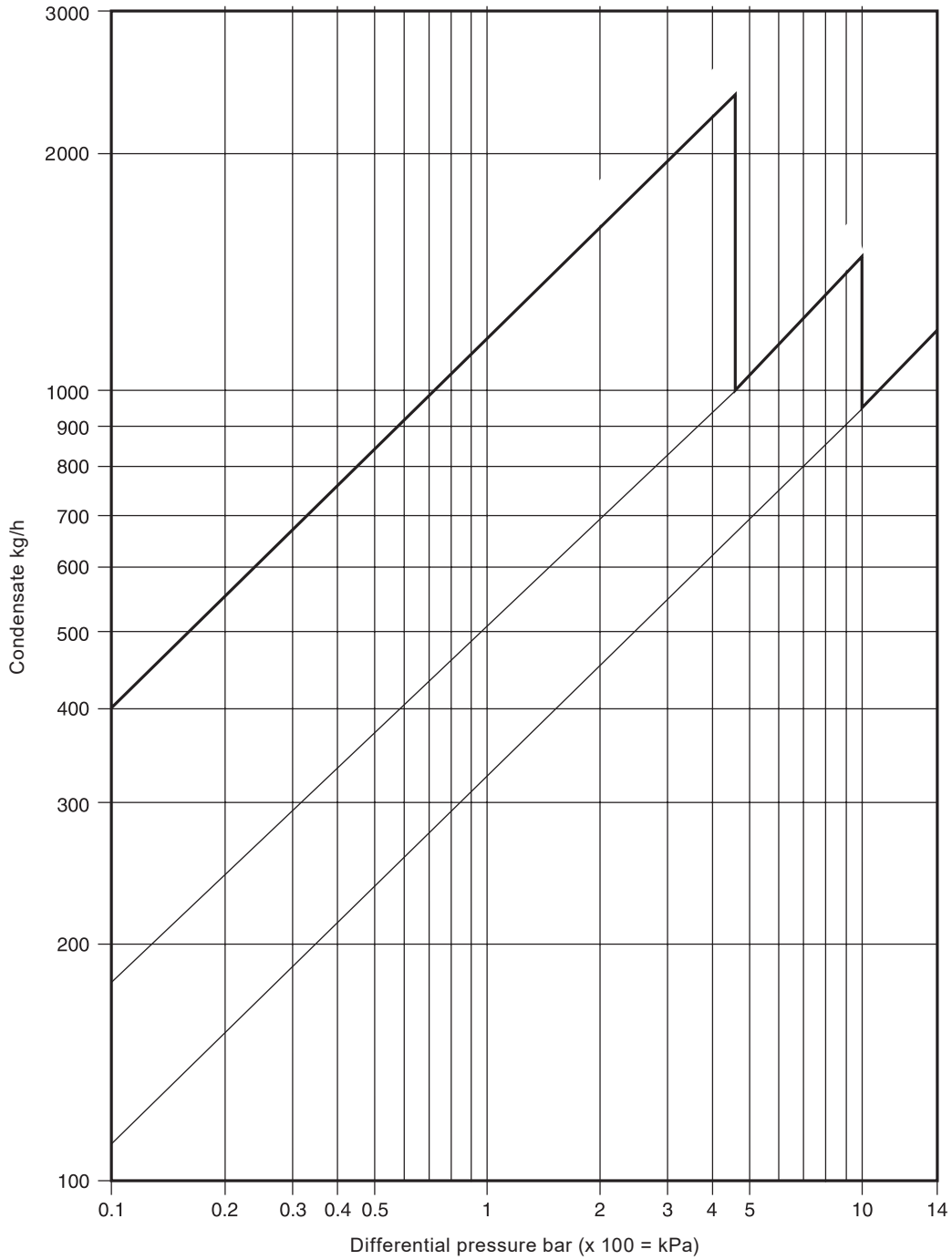


No.	Part	Material	
1	Body	Austenitic stainless steel	EN 10213-4 (1.4308) ASTM A351 CF8
2	Cover bolts	Steel	BS 3692 Gr. 8.8
3	Cover gasket	Reinforced exfoliated graphite	
4	Cover	Electroless nickel plated SG iron	DIN 1693 GGG 40
5 *	Valve seat	Stainless steel	BS 970 431 S29
6 *	Valve seat gasket	Stainless steel	BS 1449 304 S11
7 *	Pivot frame assembly screws	Stainless steel	BS 4183 18/8
8	Ball float and lever	Stainless steel	BS 1449 304 S16
9 *	Support frame	Stainless steel	BS 1449 304 S16
10	Pivot frame	Stainless steel	BS 1449 304 S16
11 *	Pivot pin	Stainless steel	
17	Air vent assembly	Stainless steel	
18	Air vent seat gasket	Stainless steel	BS 1449 304 S11
19	SLR assembly	Stainless steel	BS 970 303 S21
20	SLR gasket	Stainless steel	BS 1449 304 S16
21	SLR seal	Graphite	

* **Note:** For clarity items **5**, **6**, **7**, **9** and **11** are shown more clearly in the spare parts section.

shopvalves.com

Capacities



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

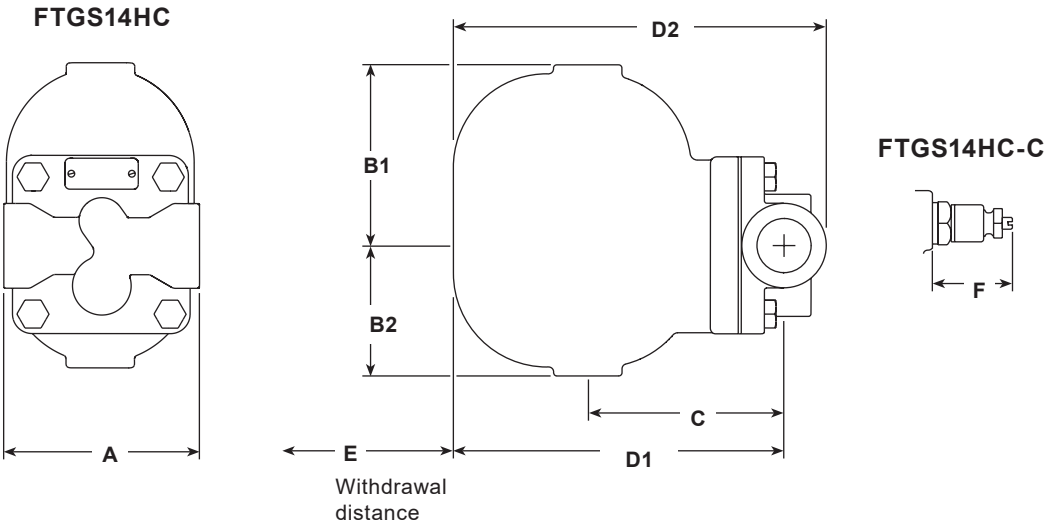
Capacities shown above are based on condensate at saturation temperature. Under start-up conditions when the condensate is cold the internal thermostatic air vent will be open and provides additional capacity to the main valve. The following table gives the minimum additional cold water capacities from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

ΔP (bar)	0.5	1	2	3	4.5	7	10	14
	Minimum additional cold water capacity (kg/h)							
1"	580	600	650	670	700	1000	1300	1600

shopvalves.com

Dimensions/weight (approximate) in mm and kg

Size	A	B1	B2	C	D1	D2	E Withdrawal distance	F	Weight
1"	120	111	80	115	203	230	160	35	7.0



Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P145-20) supplied with the product.

Installation note

The FTGS14HC 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, 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: 1 off Spirax Sarco 1" FTGS14HC-4.5 (L-R) ball float steam trap with screwed BSP T Rp (ISO 7-1) connections and integral air vent. Cover to be supplied with ⅜" tappings ready for both drain and balance pipe connections.

Note: If the optional manually adjustable needle valve is required you would need to write your order as follows:

Example 2: 1 off Spirax Sarco 1" FTGS14HC-4.5C (L-R) ball float steam trap with screwed BSP T Rp (ISO 7-1) connections and integral air vent complete with manually adjustable needle valve supplied fitted.

shopvalves.com

Spare parts

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

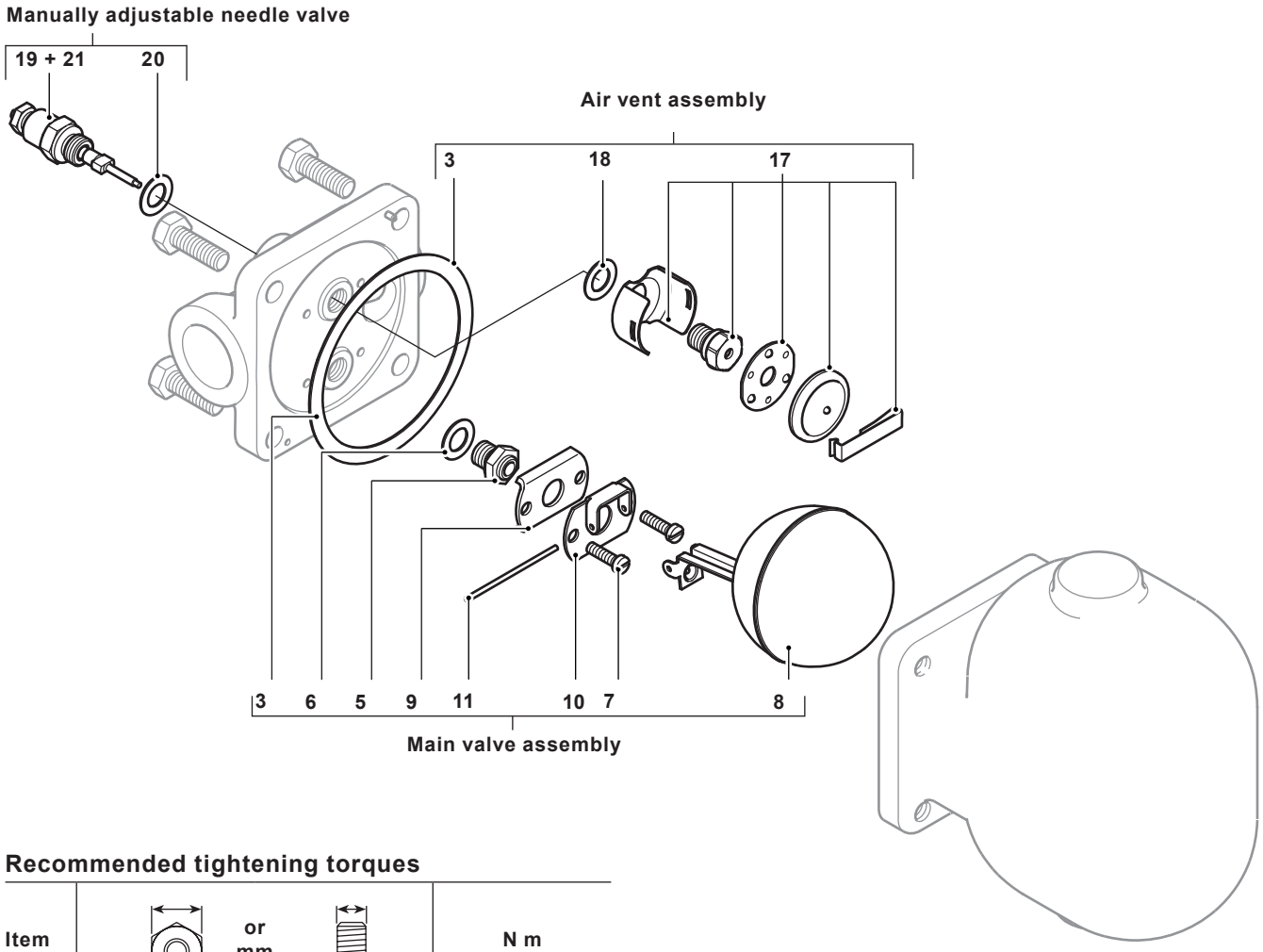
Available spares

Maintenance kit	**3, 5, 6, 7** (2 off)**, 8, 9, 10, 11, 17, 18**
Main valve assembly with float	**3, 5, 6, 7** (2 off)**, 8, 9, 10, 11**
Air vent assembly	**3, 17, 18**
Manually adjustable needle valve (FTGS14HC-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 with float for a Spirax Sarco 1" FTGS14HC-10 ball float steam trap.



Recommended tightening torques

Item	or mm		N m
2	17 A/F	M10 x 30	29 - 33
5	17 A/F		40 - 45
7	Pozidrive	M5 x 20	10 - 12
17	17 A/F		50 - 55
19	21 A/F		40 - 45