

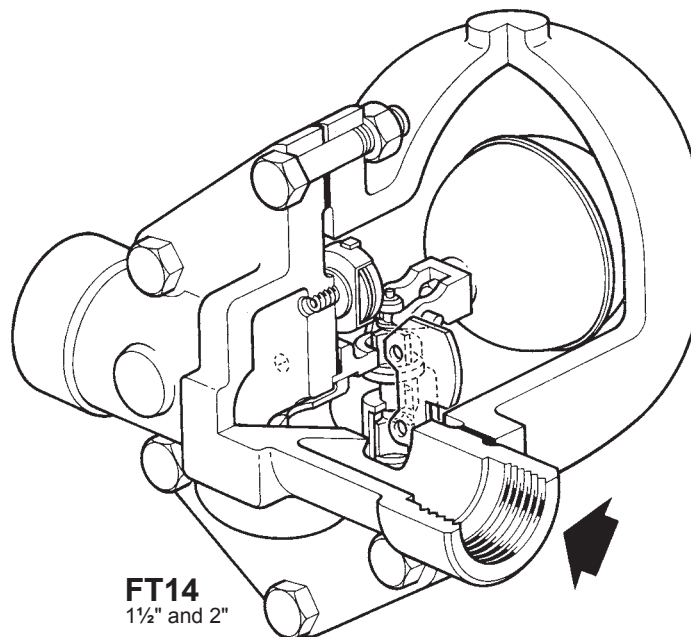
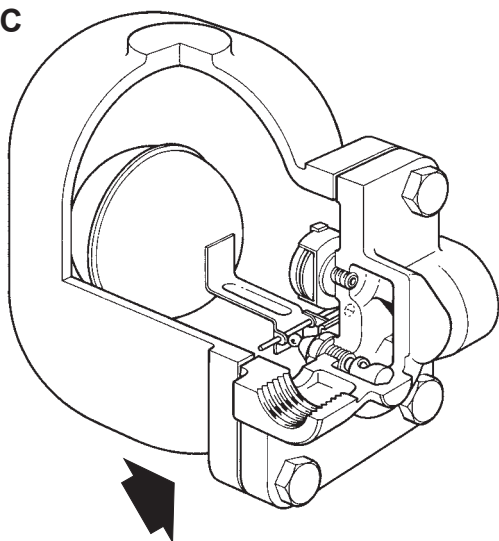
spirax sarco

FT14 and FT14HC SG Iron

Ball Float Steam Traps (1" HC, 1¼", 1½" and 2")

FT14HC
1"

FT14
1¼"



FT14
1½" and 2"

Description

The FT14 and FT14HC are iron bodied ball float steam traps having stainless steel working internals and integral automatic air venting facility. These traps are supplied with horizontal screwed connections only and can be maintained without disturbing the pipework. The flow direction is as indicated on the valve body.

Available types

FT14 Standard 1¼", 1½" and 2"

FT14HC High capacity (1" only) - As standard the FT14HC is available with flow direction in either left-to-right or right-to-left direction.
Please state preference when placing an order.

Note: These ball float steam traps are available with either 4.5, 10 or 14 bar internals (ΔPMX).

Capsule

The BP99/32 capsule which is used in the FT14 and FT14HC ball float steam traps is suitable for use on superheat.

Optional extras will only be supplied if specified at the point of order

The top of the cover can be drilled and tapped up to ⅜" BSP or NPT for the purpose of fitting a balance line.

The bottom of the cover can be drilled and tapped ⅜" BSP or NPT for the purpose of fitting a drain cock

Standards and certification

This product fully complies with the requirements of the Indian Boiler Regulations, 1950.

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

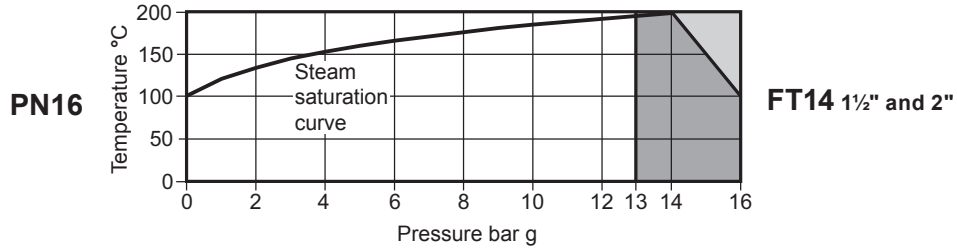
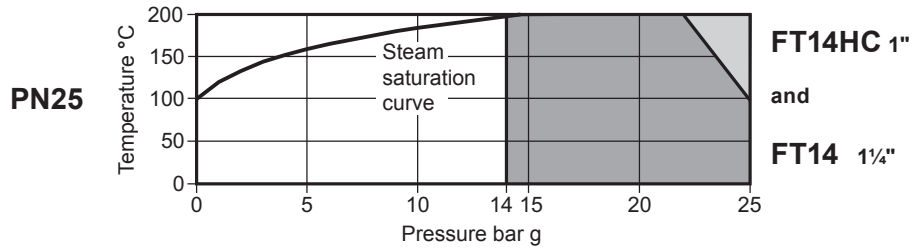
Sizes and pipe connections 1" (FT14HC only), 1¼", 1½" and 2" screwed BSP and NPT.

Pressure / temperature limits See page 2 for the pressure/temperature limitations.

Materials See page 3 for the materials list.

Capacities See page 4 for full capacity details.

Pressure / temperature limits



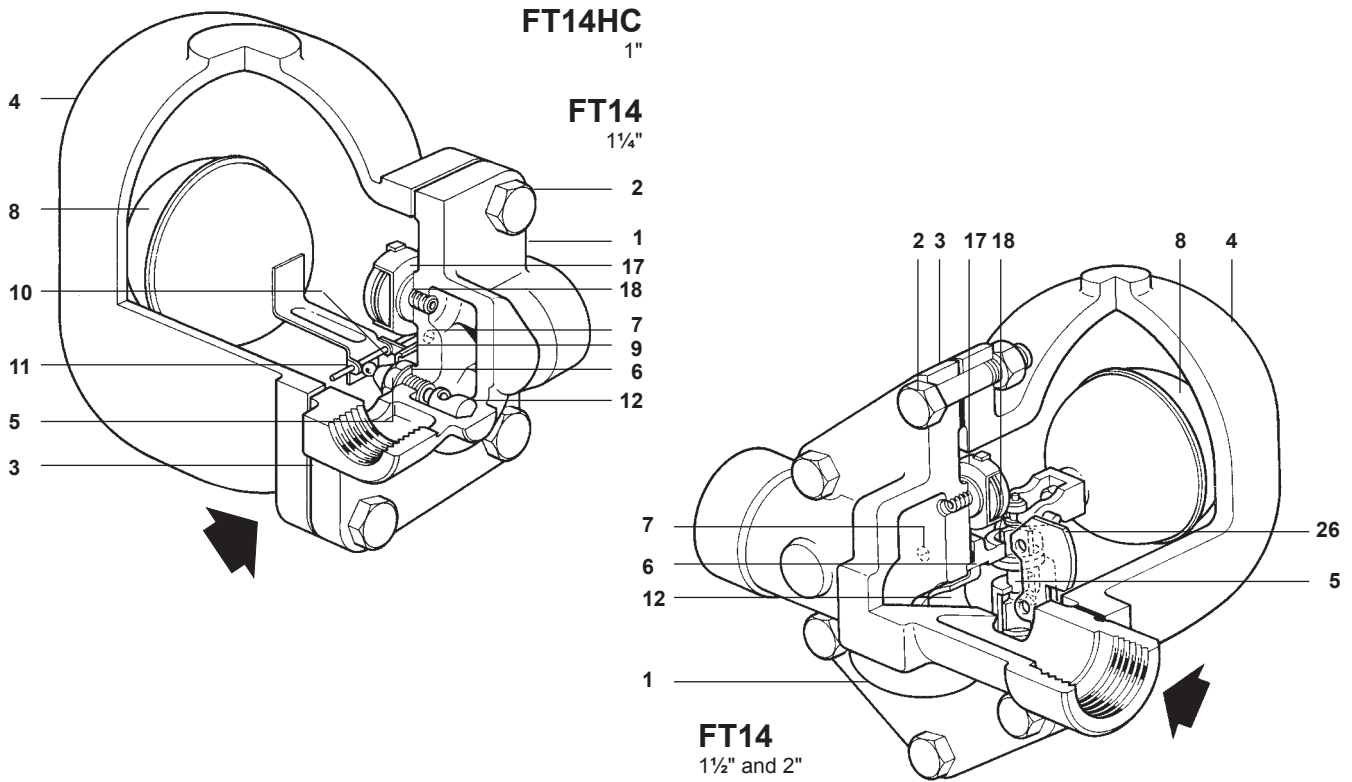
The product **must not** be used in this region.

For optimum performance the PMO should not be exceeded

Size	1" HC and 1/4"	1/2" and 2"
Body design conditions	PN25	PN16
TMA Maximum allowable temperature	200°C	200°C
Minimum allowable temperature	-10°C	-10°C
PMO Maximum operating pressure for saturated steam service	14 bar g	13 bar g
TMO Maximum operating temperature	200°C	200°C
Minimum operating temperature	0°C	0°C

Note: For lower temperatures consult Spirax Sarco

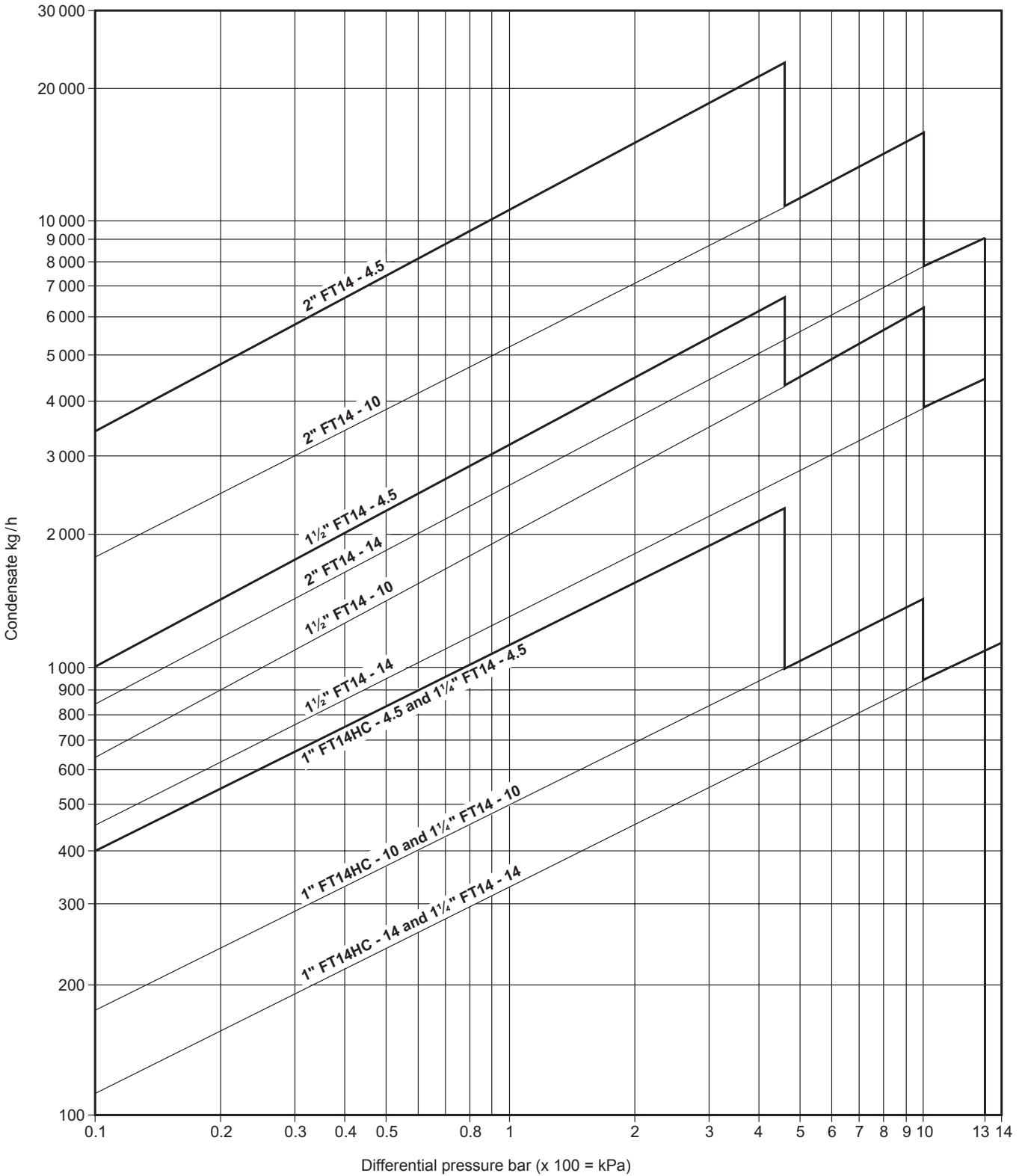
	Size	1" HC	1/4"	1/2" and 2"
ΔPMX Maximum differential pressure	4.5 bar	FT14HC-4.5	FT14-4.5	FT14-4.5
	10 bar	FT14HC-10	FT14-10	FT14-10
	14 bar	FT14HC-14	FT14-14	FT14-14
Designed for a maximum cold hydraulic test pressure of:		21 bar g		19.5 bar g



Materials

No.	Part		Material		
1	Body	1" and 1 1/4"	SG iron	EN1563 JS 1030 (DIN 1693 GGG 40)	
		1 1/2" and 2"	Cast iron	BS EN 1561 JL 1040	
2	Cover bolts	1" and 1 1/4"	Steel	Gr. 8.8	
	Cover bolts & nuts	1 1/2" and 2"	Steel	Gr. 8.8	
3	Cover gasket		Reinforced exfoliated graphite		
4	Cover	1" and 1 1/4"	SG iron	EN1563 JS 1030 (DIN 1693 GGG 40)	
		1 1/2" and 2"	Cast iron	BS EN 1561 JL 1040	
5	Valve seat	1" and 1 1/4"	Stainless steel	AISI 431	
	Main valve assembly with erosion deflector	1 1/2" and 2"	Stainless steel	Gr. ANC 2	
6	Valve seat gasket	1" and 1 1/4"	Stainless steel	AISI 304	
	Main valve assembly gasket	1 1/2" and 2"	Reinforced exfoliated graphite		
	Pivot frame assembly set screws	1" and 1 1/4"	Stainless steel	Gr. A2-70	
7	Main valve assembly bolts	Bolts	1 1/2"	Stainless steel	Gr. A2-70
		Studs and nuts	2"	Stainless steel	Gr. A4-80
8	Ball float and lever		Stainless steel	AISI 304	
9	Support frame	1" and 1 1/4"	Stainless steel	AISI 304	
10	Pivot frame	1" and 1 1/4"	Stainless steel	AISI 304	
11	Pivot pin	1" and 1 1/4"	Stainless steel	AISI 431	
12	Erosion deflector		Stainless steel	AISI 431	
17	Air vent assembly		Stainless steel	AISI 304	
18	Air vent seat gasket		Stainless steel	AISI 409	
26	Inlet plate	1 1/2" and 2" only	Stainless steel	AISI 304	

Capacities



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

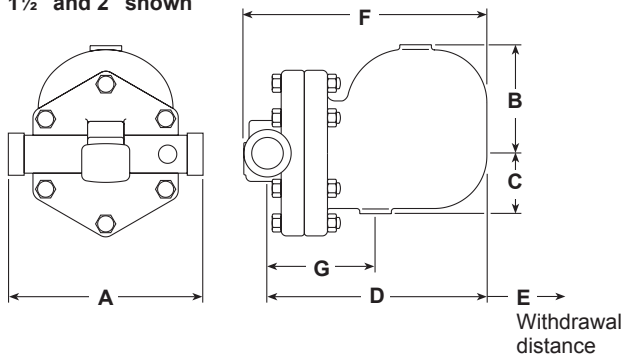
Capacities shown above are based on condensate at saturation temperature. Under start-up conditions when the condensate is cold the internal thermostatic air vent will be open and provides additional capacity to the main valve. The following table gives the minimum additional cold water capacities from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

ΔP (bar)	0.5	1	2	3	4.5	7	10	13	14
	Minimum additional cold water capacity (kg/h)								
1" HC and 1 1/4"	580	600	650	670	700	1000	1300	1525	1600
1 1/2" and 2"	580	600	650	670	700	1000	1300	1525	-

Dimensions / weights (approximate) in mm and kg

Size	A	B	C	D	E	F	G	Weight
1" HC	120	110	80	195	160	220	115	6.8
1¼"	120	110	80	195	160	220	115	6.9
1½"	270	130	108	248	200	270	115	17.5
2"	300	138	125	250	200	288	140	22.0

1½" and 2" shown



Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-IBR16-04) supplied with the product.

Installation note:

The FT14 must be installed with the direction of flow as indicated on the body, and with the float arm in a horizontal plane so that it rises and falls vertically.

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" screwed BSP FT14HC-14 ball float steam trap having an SG iron body and cover, with thermostatic air vent - flow direction left-to-right. The cover is to be suitable for tapping ⅜" for drain/balance pipe connection.

Spare parts

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

Available spares

Main valve assembly	with float (1" and 1¼")	5, 6, 7, 8, 9, 10, 11
	with erosion deflector (1½" and 2")	5, 6, 7, 26
Ball float (1½" and 2")		8
Air vent assembly		17, 18
Complete set of gaskets (packet of 3 sets)		3, 6, 18



Note: The erosion deflector on the 1" and 1¼" is pressed into the body during manufacture and is not available as a spare.

How to order spares

Always order spares by using the description given in the column headed 'Available spares' and state the size and type of trap.

Example: 1 - Air vent assembly for a Spirax Sarco 2" FT14-4.5 ball float steam trap.

Recommended tightening torques

Item	Size	 or mm		N m
2	1"	17	M10 x 30	29-33
	1¼"	14*	M10 x 30	29-33
	1½"	19	M12 x 60	60-66
	2"	24	M16 x 70	80-88
5	1" and 1¼"	17	-	40-45
7	1" and 1¼"	-	M5 x 20	10-12
	1½"	10	M6 x 20	10-12
	2"	13	M8 x 20	20-24
17	-	17	-	50-55

*Note: Reduced A/F bolt head required

