

spirax sarco

TI-IBR16-06
 Issue 8

FT14 Ball Float Steam Trap (Flanged)

Description

The FT14 is an SG iron bodied ball float steam trap having stainless steel working internals and integral automatic air venting facility. The FT14 can be maintained without disturbing the pipework.

Available types

FT14 (R-L) Horizontal connections with flow from right to left

FT14 (L-R) Horizontal connections with flow from left to right

Please note: On the cover of both of these traps, the orientation of the connections can be adjusted on site in preparation of downward vertical flow applications.

Capsule

The BP99/32 capsule which is used in the FT14 is suitable for use on superheat.

Standards and certification

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

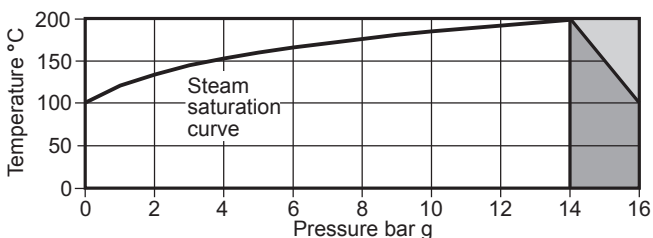
This product is available with a manufacturers' Typical Test Report and IBR certification.

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

Sizes and pipe connections

DN15, DN20 and DN25
 Flanged ASME 150.

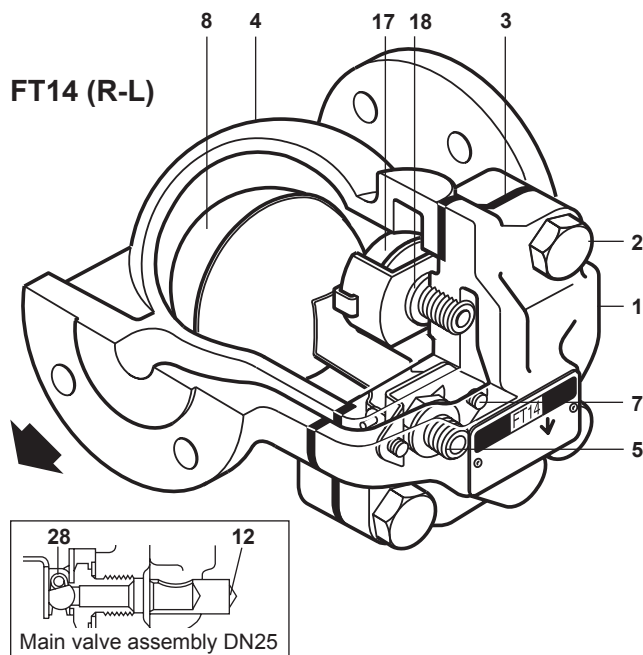
Pressure/temperature limits (ISO 6552)



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

For optimum performance the PMO should not exceed 14 bar g.

Body design conditions	PN16
TMA Maximum allowable temperature	200°C
Minimum allowable temperature	-10°C
PMO Maximum operating pressure for saturated steam service	14 bar g
TMO Maximum operating temperature	200°C
Minimum operating temperature	0 °C
Maximum Δ PMX differential pressure	FT14-4.5 4.5 bar FT14-10 10 bar FT14-14 14 bar
Designed for a maximum cold hydraulic test pressure of	21 bar g

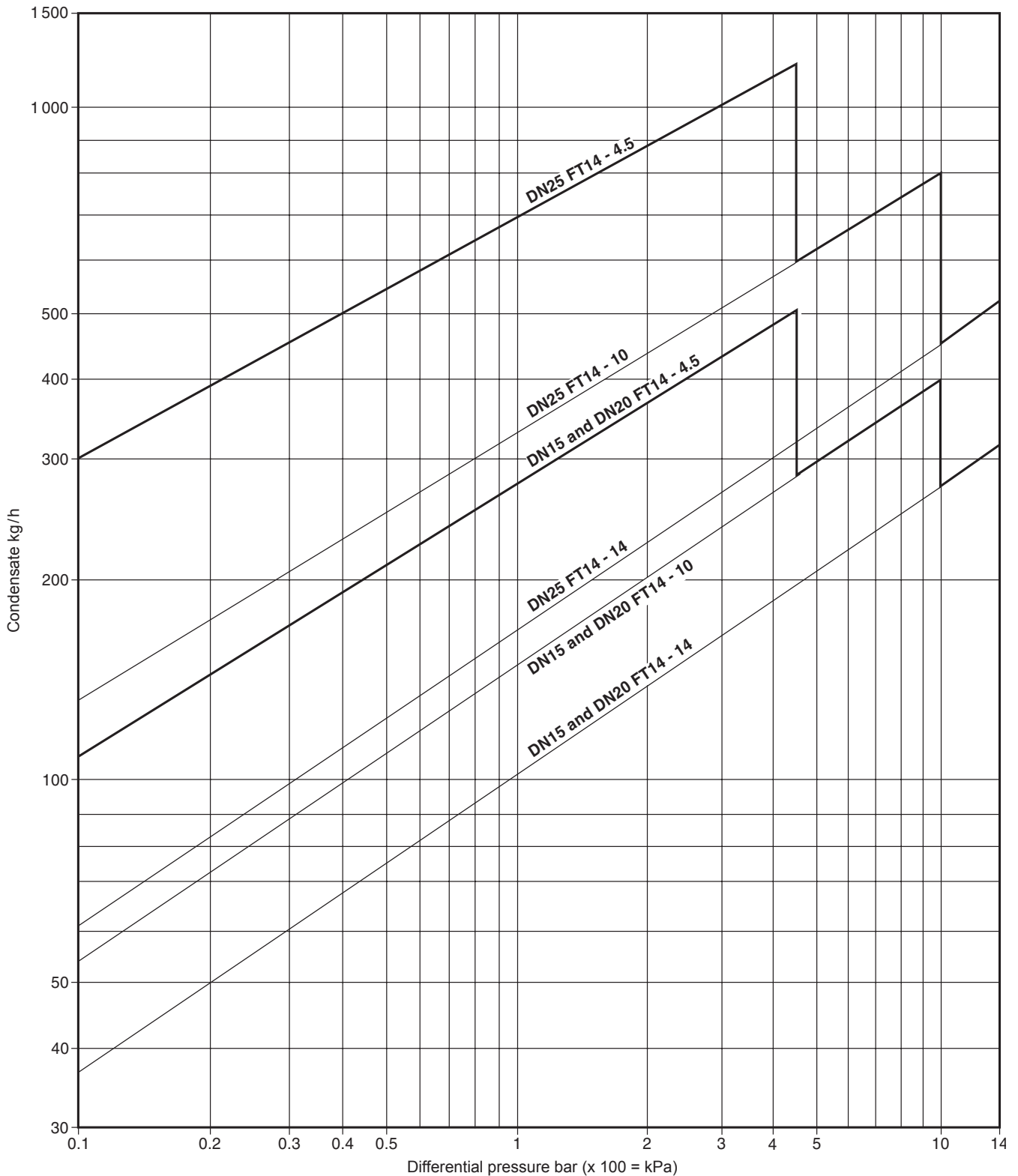


Materials

No. Part	Material
* 1 Body	SG iron EN1563 JS 1030 (DIN 1693 GGG 40)
2 Cover bolts	Steel Gr. 8.8
3 Cover gasket	Reinforced exfoliated graphite
4 Cover	SG iron EN1563 JS 1030 (DIN 1693 GGG 40)
5 Valve seat	Stainless steel AISI 431
6 Valve seat gasket	Stainless steel AISI 409
7 Pivot frame assembly screws	Stainless steel Gr. A2-70
8 Ball float and lever	Stainless steel AISI 304
10 Pivot frame	Stainless steel AISI 304
11 Pivot pin	Stainless steel AISI 431
* 12 Erosion deflector (DN25 only)	Stainless steel AISI 431
17 Air vent assembly	Stainless steel AISI 304
18 Air vent seat gasket	Stainless steel AISI 409
28 Valve spring (DN25 only)	Stainless steel AISI 302

* **Note:** Item 12 is pressed into item 1 (DN25 only).

Capacities

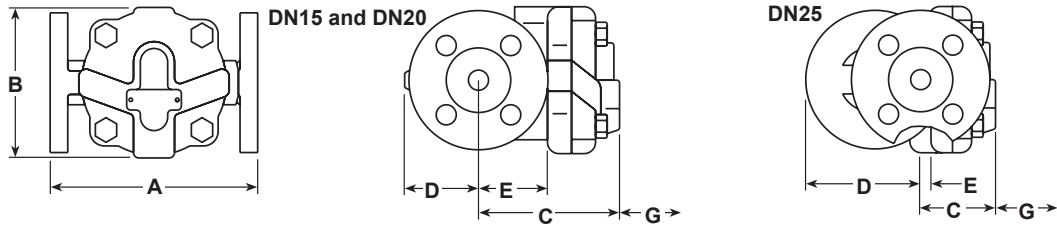


Capacities shown above are based on condensate at saturation temperature. When discharging sub-cooled condensate the air vent provides extra capacity. Under start-up conditions when the condensate is cold the internal thermostatic air vent will be open and provides additional capacity to the main valve. 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. 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)								
DN15 and DN20	70	140	250	380	560	870	1 130	1 500
DN25	120	240	360	500	640	920	1 220	1 500

Dimensions/weights (approximate) in mm and kg

Size	A	B	C	D	E	G Withdrawal distance	Weight
DN15	150	107	101	51	47	115	4.5
DN20	150	107	101	51	47	115	5.0
DN25	160	117	70	100	10	120	6.5



Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-IBR16-03) 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 plain 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 DN25 FT14-4.5 (R-L) ball float steam trap with flanged ASME 150 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.

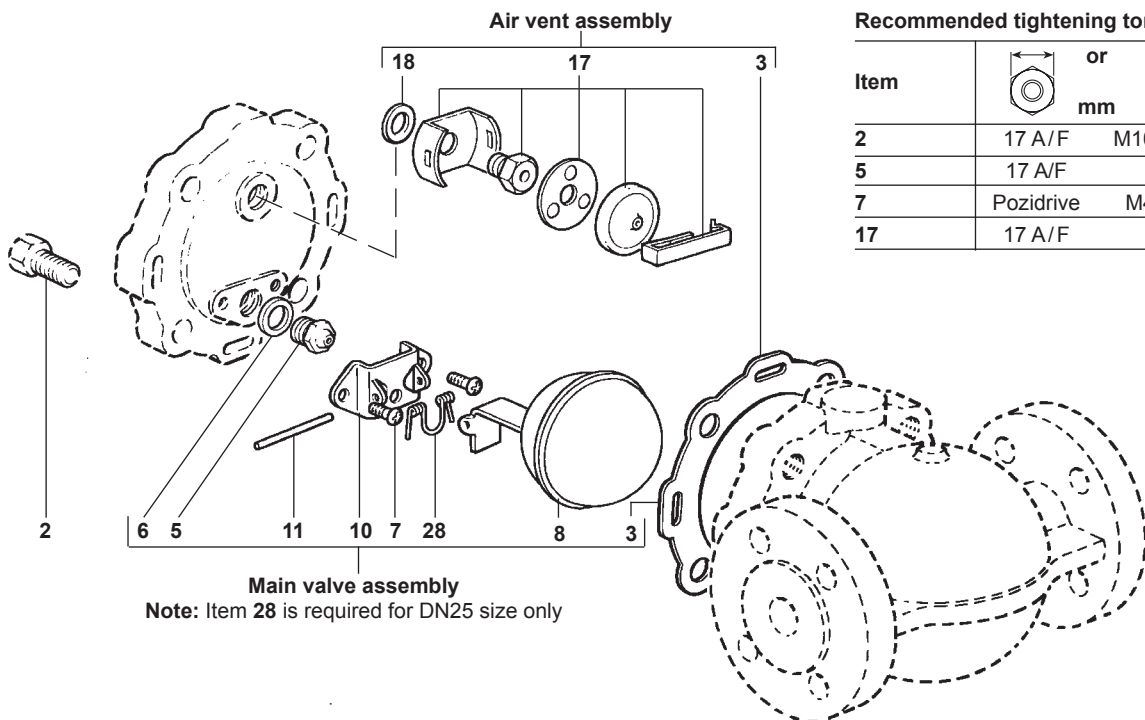
Available spares

Main valve assembly with float	3, 5, 6, 7 (2 off), 8, 10, 11, 28 (DN25 only)
Air vent assembly	3, 17, 18
Cover gasket (packet of 3)	3
Maintenance kit	3, 5, 6, 7 (2 off), 8, 10, 11, 17, 18, 28 (DN25 only)



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 FT14-10 ball float steam trap.



Recommended tightening torques

Item	 or 	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

Main valve assembly
Note: Item 28 is required for DN25 size only