



FT44


Cast Steel

## Ball Float Steam Traps DN80 and DN100

### Description

The FT44 is a carbon steel ball float steam trap with integral automatic air venting facility. It is available with horizontal flanged connections only. If required the covers can be drilled and tapped,  $\frac{3}{8}$ " when bottom drilled and  $\frac{1}{2}$ " when top drilled - with either BSP T Rp (ISO 7-1) or NPT connections for the purpose of fitting drain cocks.

### Standards

This product fully complies with the requirements of the European Pressure Equipment Directive 2014/68/EU and carries the  mark when so required.

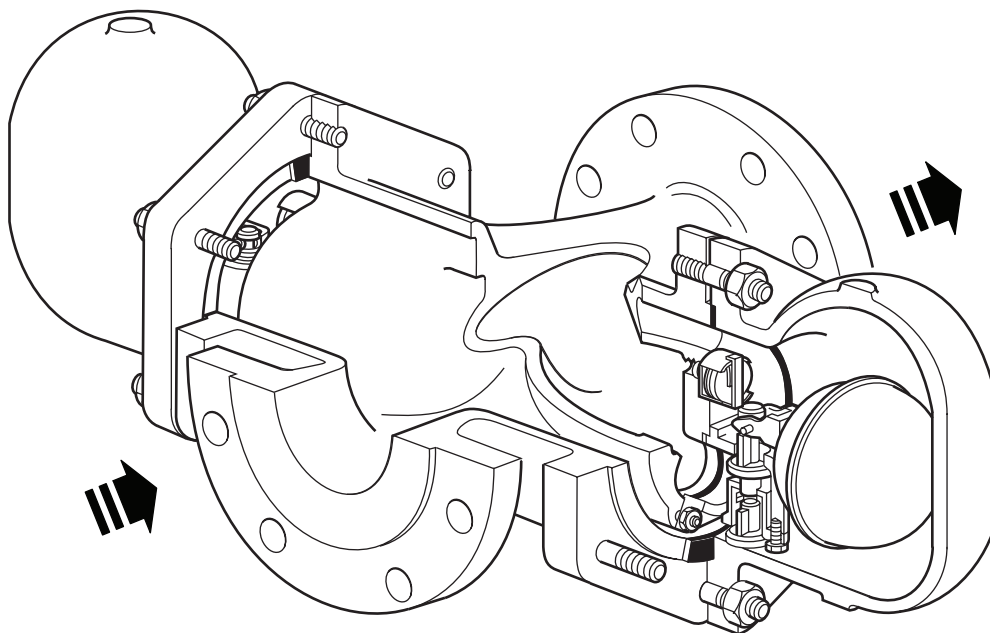
### Certification

This product is available with certification to EN 10204 3.1.

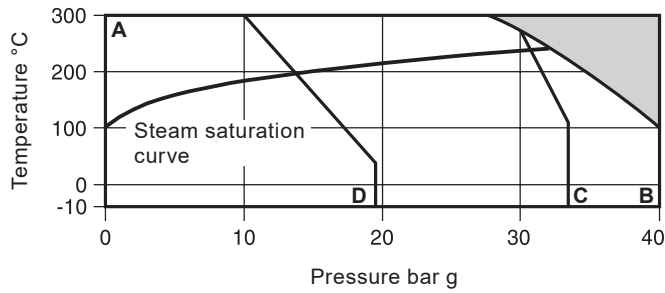
**Note:** All certification/inspection requirements must be specified at the time of order placement.

### Sizes and pipe connections

DN80 and DN100 standard flange is EN 1092 PN40, EN 1759-1 or ASME Class 150 or 300, and JIS/KS 20K.



## Pressure/temperature limits



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

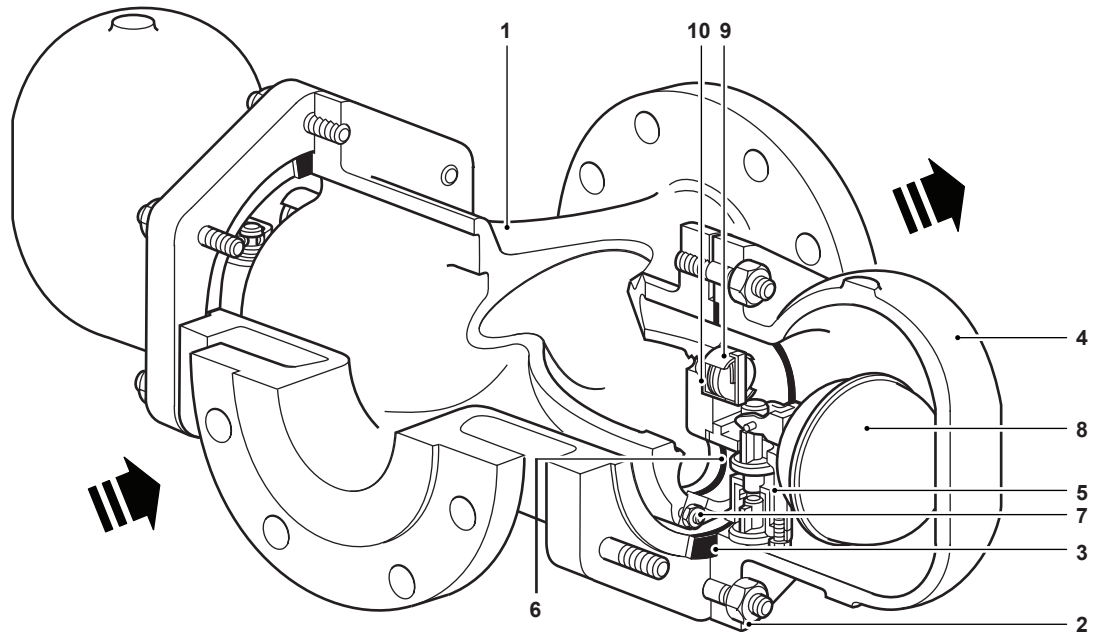
**A - B** Flanged EN 1092 PN40, ASME 300.

**A - C** Flanged JIS/KS 20K.

**A - D** Flanged ASME 150.

Body design conditions	PN40
PMA Maximum allowable pressure	40 bar g @ 100 °C
TMA Maximum allowable temperature	300 °C
Minimum allowable temperature	-10 °C
PMO Maximum operating pressure for saturated steam service	32 bar g @ 239 °C
TMO Maximum operating temperature	300 °C @ 27.5 bar g
Minimum operating temperature	-10 °C
<b>Note:</b> for lower operating temperatures consult Spirax Sarco	
	<b>FT44-4.5</b> 4.5 bar
	<b>FT44-10</b> 10 bar
$\Delta$ PMX Maximum differential pressure	<b>FT44-21</b> 21 bar
	<b>FT44-32</b> 32 bar
Product is safe for use under full vacuum conditions	
Designed for a maximum cold hydraulic test pressure of :	60 bar g
<b>Note:</b> With internals fitted, test pressure must not exceed :	48 bar g

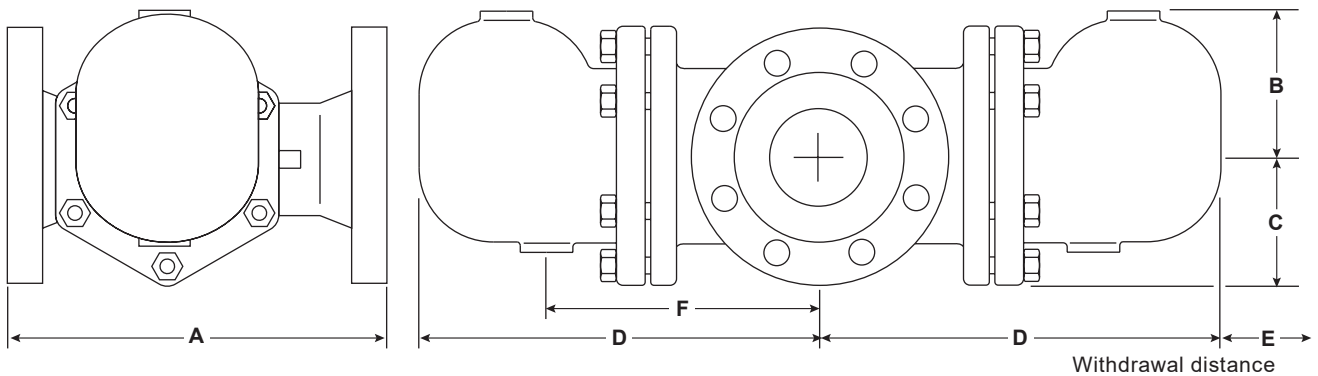
## Materials



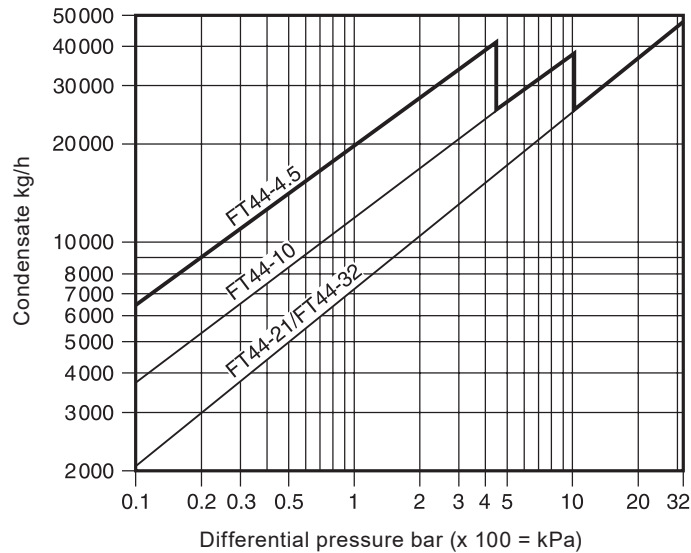
No.	Part	Material	
1	Body	Cast steel	1.0619 + N/WCB
2	Cover studs and nuts	Steel	BS 4882 B7M EN 10269 25 Cr Mo 4
3	Cover gasket	Reinforced exfoliated graphite	
4	Cover	Cast steel	1.0619 + N/WCB
5	Main valve assembly	Stainless steel	BS 3146 Pt. 2 ANC 2
6	Main valve assembly gasket	Reinforced exfoliated graphite	
7	Main valve assembly studs and nuts	Stainless steel	BS 6105 A4-80
8	Ball float and lever	Stainless steel	BS 1449 304 S16
9	Air vent assembly	Stainless steel	
10	Air vent seat gasket	Stainless steel	BS 1449 409 S19

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

Size	ASME 150 A	ASME 300 A	PN40 A	JIS/KS 20K A	B	C	D	E	F	Weight
DN80	343	362	353	350	140	123	390	200	310	95
DN100	350	366	350	350	140	123	390	200	310	97



## Capacities - DN80 and DN100



### 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.

#### Minimum additional cold water capacity (kg/h)

$\Delta p$ (bar)	0.5	1	2	3	4.5	7	10	14	21	32
<b>Size</b>	<b>Minimum additional cold water capacity (kg/h)</b>									
<b>DN80, DN100 (up to 21 bar)</b>	920	1 360	1 800	2 160	2 600	3 200	3 960	4 100	5 200	-
<b>DN80, DN100 (32 bar only)</b>	160	240	700	920	1 200	1 700	1 800	2 040	2 400	2 600

### Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-S02-30) supplied with the product.

#### Installation note

The FT44 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 DN100 FT44-4.5 ball float steam trap flanged to EN 1092 PN40, with cast steel body and cover with thermostatic 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

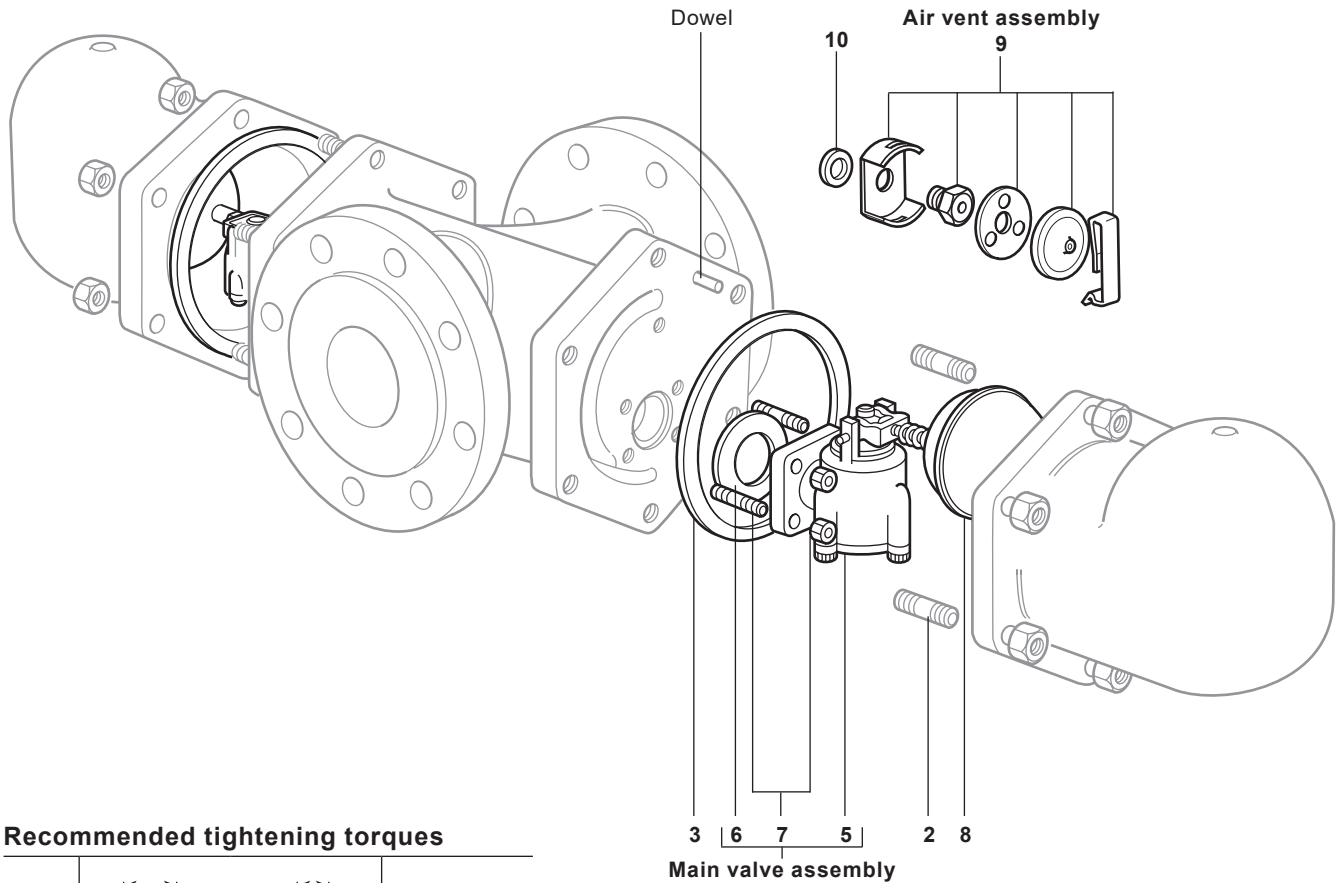
Main valve assembly	5, 6, 7
Ball float and lever	8
Air vent assembly	9, 10
Set of gaskets	3, 6, 10

**Note:** For a complete overhaul 2 x each spare is required, with the exception of the gaskets.



### 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 DN100 FT44-4.5 ball float steam trap.



### Recommended tightening torques

Item	 or mm		N m
2	24 A/F	M16 x 50	80 - 88
7	13 A/F	M8 x 20	20 - 24
9	17 A/F		50 - 55