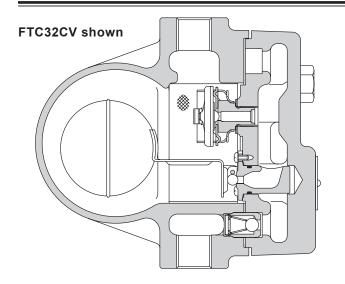
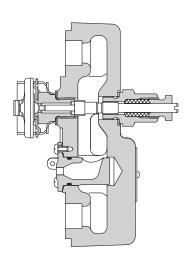
TI-P602-01 CMGT Issue 5

spirax Sarco FTC32

Carbon Steel Ball Float Steam Trap (DN15 and DN20)



FTC32-C



Description

The FTC32 is a carbon steel ball float steam trap with integral automatic thermostatic air vent. It is ideal for all process drainage applications as condensate is always removed efficiently and quickly over a wide range of fluctuating pressure and load conditions. Standard connections are horizontal from right to left (R-L) when viewed from the base.

Capsule

The BP99/32 capsule which is used in the FTC32 ball float steam trap is suitable for use on 150 °C superheat @ 0 bar g and 50 °C superheat @ 32 bar g.

Standards

This product fully complies with the requirements of the Pressure Equipment Directive (PED) 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 stated at the time of order placement.

Sizes and pipe connections

½" and ¾" screwed BSP and NPT.
½" and ¾" socket weld to BS 3799 Class 3000 and ASME (ANSI) B16.11 Class 3000.
DN15 and DN20 flanged to EN 1092 PN40,
ASME (ANSI) B16.5 Class 150 and 300, JIS/KS 20K and 30K.

Optional extras

The FTC32 is also available with horizontal connections having flow from left to right - FTC32 (L-R), and vertical - FTC32V.

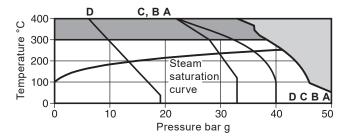
The trap is available with either ASTM or DIN body material.

An optional manually adjustable needle valve can be fitted to all versions which provides a steam lock release feature in addition to the air vent - FTC32-C.

An optional internal strainer screen is available - FTC32X.

An internal non-return valve is available - FTC32CV.

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.

A - A Flanged ASME 300, JIS/KS 30K, screwed and socket weld.

A - B Flanged PN40.

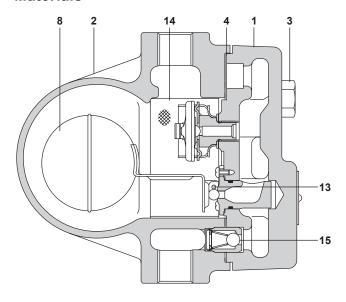
A - C Flanged JIS/KS 20K.

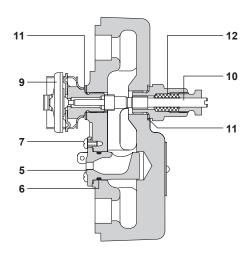
A - D Flanged ASME 150.

Body d	esign conditions	PN40/ASME (AI	NSI) 300
DMAA	Marinana	PN	40 bar g
PMA	Maximum allowable pressure	ASME	50 bar g
ТМА	Maximum allowable temperature		400 °C
Minimu	m allowable temperature		0 °C
РМО	Maximum operating pressure (recommended)		32 bar g
ТМО	Maximum operating temperature		300 °C
	m operating temperature for lower operating temperatures consult Spirax Sarco		0 °C
		FTC32-4.5	4.5 bar
		FTC32-10	10 bar
ΔΡΜΧ	Maximum differential pressure	FTC32-14	14 bar
		FTC32-21	21 bar
		FTC32-32	32 bar
D		PN	60 bar g
Designed for a maximum cold hydraulic test pressure of:		ASME	75 bar g

The trap in its complete operational form must not be subjected to pressures greater than 48 bar as damage to the internals may occur.

Materials





FT32CV shown

FTC32-C

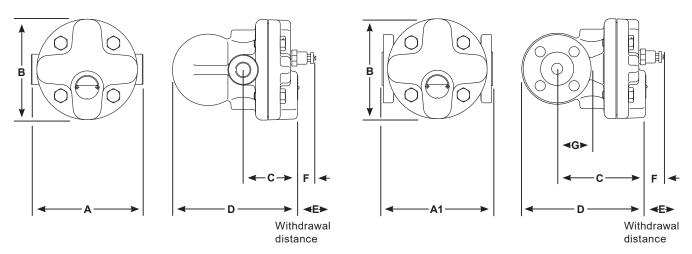
No	Part	Material	
_	Dodu	Cast steel	
1	Body	Cast steel	DIN 17245 GS C25N
2	Cover	Cast steel	ASTM A216 WCB/
2	Cover	Cast steel	DIN 17245 GS C25N
3	Cover bolts M12 x 35	Steel	ASTM A193 B7/A 2.70
4	Cover gasket	Reinforced exfoliated graphite	
5	Main valve seat	Stainless steel	BS 3146 ANC 2
6	'O' ring	EPDM	
7	Main valve assembly screws M3 x 6	Stainless steel	BS 6105 CI A2 70
8	Ball float and lever	Stainless steel	BS 1449 304 S11
9	Air vent assembly	Stainless steel	
10	SLR assembly	Stainless steel	BS 970 303 S21
11	Air vent/SLR gasket	Stainless steel	BS 1449 304 S16
12	SLR seal	Graphite	
13	Pivot	Stainless steel	BS 970 431 S29
14	Strainer screen (FTC32X only)	Stainless steel	ASTM A240 316L
15	Check valve assembly (FTC32CV only)	Stainless steel	

Note: For clarity some items are not identified on the drawing.

Dimensions/weights (approximate) in mm and kg

Screwed/socket weld

Size	Α	В	С	D	E	F	Weight
½" and ¾"	150	135	74	169	120	26	5.8



Flanged

Size	A1 PN40	A1 ASME 150	A1 ASME 300	A1 JIS 20K	A1 JIS 30K	В	С	D	E	F	G	Weight
DN15 and DN20	150	144	150	150	150	135	121	180	120	26	47	7.4

How to order

Example: 1 off Spirax Sarco DN15 FTC32-10-C-X-CV (R-L) carbon steel ball float steam trap having flanged EN 1092 PN40 connections and material certification to EN 10204 3.1.

Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P602-12) supplied with the product.

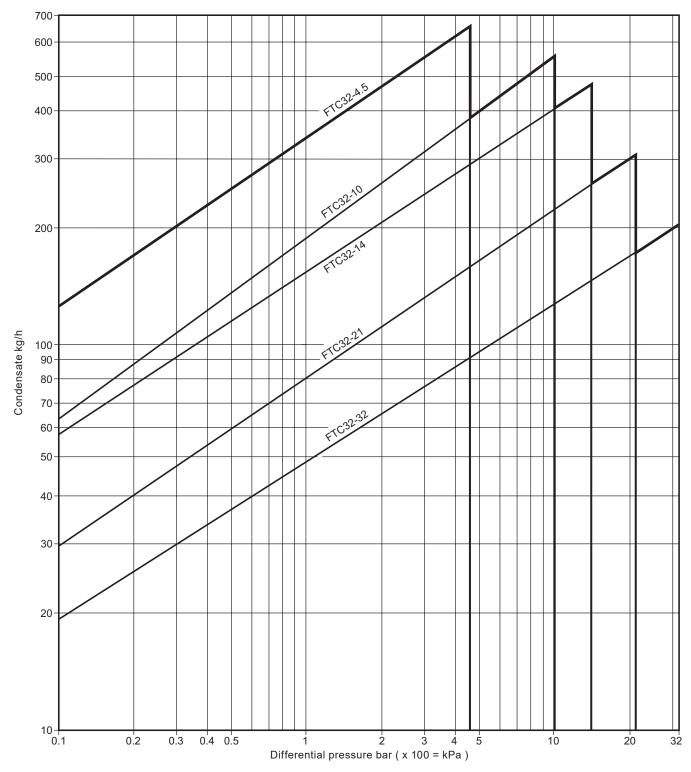
Installation note

The FTC32 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.

Capacities



Additional cold water capacities from thermostatic air vent (TV) 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 (TV) 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	21	32
Minimum additional cold water capacity (kg/h)										
DN15 and DN20	70	140	250	380	560	870	1 130	1 500	2 300	3 200

Spare parts

Spare parts are available as indicated. No other parts are supplied as spares.

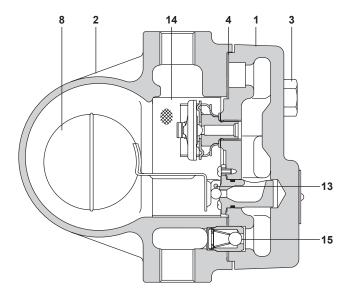
Available spares

Main valve assembly with float	5, 6, 7 (3 off), 8, 13
Air vent assembly	9, 11
Manually adjustable needle valve and air vent assembly	9, 10, 11
Cover gasket (packet of 3)	4
Check valve assembly	15
Strainer screen	14

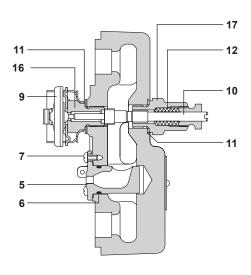
How to order spares

Always order spare parts by using the description given in the column headed 'Available spares' and state the size, model number and pressure rating of the trap.

Example: 1 off Main valve assembly with float for a Spirax Sarco DN15 FTC32-10-C-X-CV (R-L) ball float steam trap.







FTC32-C

Recommended tightening torques

		, ,	
Item		or am	N m
3	19	M12 x 35	65 - 70
7	Posidrive	M3 x 6	1 - 1.5
16	17		50 - 55
17	19		40 - 45