TI-P179-14 CMGT Issue 3

Spirax FTS62 Stainless Steel Ball Float Steam Traps (DN15 to DN25)

Description

The FTS62 is a stainless steel bodied ball float steam trap having stainless steel working internals and automatic air venting facility.

	L-R	Select L-R for a flow direction of Left-to-Right
FTS62 available options when facing the body:		or
	R-L	Select R-L for a flow direction of Right-to-Left

Optional extra:

On request the cover (2) can be drilled and tapped for the purpose of fitting a balance line. If this option is requested at the time of order placement there will be an extra charge incured and the unit will be treated as a special product.

Standards

This product fully complies with the requirements of the Pressure

Equipment Directive (PED) and carries the **(e** mark.

Certification

This unit 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

2

1⁄2", 3⁄4" and 1"	Screwed BSP or NPT
1⁄2", 3⁄4" and 1"	Socket weld ends to BS 3799 and Class 3000 lbs
Standard flanges:	
DN15, DN20 and DN25	Flanged EN 1092-1 PN100 †
1⁄2", 3⁄4" and 1"	Flanged ASME B 16.5 Class 600



Materials

No.	Part	Material			
1	Body	Stainless steel	ASTM A351 CF8 EN10213 1.4308		
2	Cover	Stamless steel	ASTM ASST CF6 EN10215 1.4500		
3	3/8" NPT taper plug	Stainless steel	CF8/1.4308 or 1.4301/304		
4	¾" UNF nut (6)	Carbon steel	ASTM A194 Gr. 7		
5	¾" UNF studs x 85mm long (x 6)	Carbon steel	ASTM A193 B7		
6	Strainer cap	Stainless steel	CF8/1.4308 or 1.4301/304		
7	Strainer screen	Stainless steel	AISI 316L		
8	'S' type gasket	Stainless steel	AISI 304		
9	Air vent assembly	Stainless steel	AISI 431 S29 + 303		
10	Air vent tube	ASTM A269 304L			
11*	Seat clamp	Stainless steel			
12*	M6x30 long cap screw (x4)	Stainless steel	EN 150 3506-1		
13	Pivot pin	Stainless steel	ASTM A276 304		
14	Float assembly	Stainless steel	AISI 304L		
15*	½"Ø ball	Stainless steel	AISI 316		
16*	Conical spring	cal spring Stainless steel			
17	Valve seat and discharge pipe assembly	Stainless steel	AISI 431 S29 + 304L		
18	Spirally wound gaskets Body to Cover and Seat to Body	Graphite filler + 304 stainless str	in		
19	Spirally would gaskets Body to Cover and Seat to Body		μ		
20	Name-plate	Stainless steel	204		
21	Hammer drive screws (x 2)	Stainless steel	18-8		
22	Baffle plate	Stainless steel	304L		



FTS62 Stainless Steel Ball Float Steam Traps (DN15 to DN25)

Pressure/temperature limits (ISO 6552)



The product must not be used in this region or beyond the parameter of the PMA or TMA of the relative end connection.

Body design condition		ASME Class 600		
PMA Maximum allowable pressure		99.3 bar g @ 38 °C		
TMA Maximum allowable temperature	425 °C @ 56 bar g			
Minimum allowable temperature		-29 °C		
PMO Maximum operating pressure for sat	urated steam service	63.1 bar g @ 280 °C		
TMO Maximum operating temperature		425 °C @ 56 bar g		
Minimum operating temperature Note: For I	ower operating temperatures consult Spirax Sarco	0 °C		
Minimum operating differential pressure		0.1 bar g		
	FTS62-46	46 bar		
△PMX Maximum differential pressure	FTS62-62	62 bar		
Designed for a maximum cold hydraulic test	pressure of:	149 bar g		



The product must not be used in this region or beyond the parameter of the PMA or TMA of the relative end connection.

Body design condition		PN100	
PMA Maximum allowable pressure	100 bar g @ 50 °C		
TMA Maximum allowable temperature	425 °C @ 58.9 bar g		
Minimum allowable temperature		-29 °C	
PMO Maximum operating pressure for sate	urated steam service	65.8 bar g @ 283 °C	
TMO Maximum operating temperature		425 °C @ 58.9 bar g	
Minimum operating temperature Note: For lo	ower operating temperatures consult Spirax Sarco	0 °C	
Minimum operating differential pressure		0.1 bar g	
	FTS62-46	46 bar	
△PMX Maximum differential pressure	FTS62-62	62 bar	
Designed for a maximum cold hydraulic test	150 bar g		

Pressure/temperature limits (ISO 6552) - Flanged ASME



The product must not be used in this region or beyond the parameter of the PMA or TMA of the relative end connection.

Body design condition		ASME Class 600	
PMA Maximum allowable pressure	99.3 bar g @ 38 °C		
TMA Maximum allowable temperature		425 °C @ 56 bar g	
Minimum allowable temperature		-29 °C	
PMO Maximum operating pressure for satu	irated steam service	63.1 bar g @ 280 °C	
TMO Maximum operating temperature		425 °C @ 56 bar g	
Minimum operating temperature Note: For lo	wer operating temperatures consult Spirax Sarco	0 °C	
Minimum operating differential pressure		0.1 bar g	
	FTS62-46	46 bar	
APMX Maximum differential pressure	FTS62-62	62 bar	
Designed for a maximum cold hydraulic test	149 bar g		



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

Note: The air vent closing temperature range = 120 °C to 135 °C.

For differential pressures less than 1.5 bar g, the additional cold water capacity is minimal.

∆P (bar)	1.5	10	30	46	62
FTS62	Minimum	addition	al cold wa	ter capac	ity (kg/h)
46 bar version	20	426	536	800	
62 bar version	20	350	440	930	800

Capacities

Dimensions/weights (approximate) in mm and kg

Size	Flanged PN100 ASME 600				Screwed and Socket weld			Common sizes					
	A	в	Weight	А	в	Weight	A	в	Weight	с	D	Е	F
DN15	300	304.0	25.0	261	299	24.0	190	287.5	22.0	172.5	148	251.5	239
DN20	300	316.5	26.0	271	309	25.5	190	287.5	22.0	172.5	148	251.5	239
DN25	300	321.5	28.0	291	314	27.0	190	287.5	22.0	172.5	148	251.5	239





Notes: 1. PN100 EN 1092-1 and ASME 600 B 16.5 face-to-face dimensions



Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P179-15) supplied with the product.

Installation note:

The FTS62 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 DN25 FTS62-62 L-R ball float steam trap, flanged to EN 1092 PN100 with stainless steel body and cover and 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		
Body/cover gasket kit		18
Air vent assembly + Air ver	nt tube	9 and 10
Strainer screen + 'S' type	gasket	7 and 8
	%" NPT taper plug	3
	M6 x 30 long cap screw (x 4)	12
	Pivot pin	13
	Float assembly	14
Maintenance kit	½"Ø ball	15
	Conical spring	16
	Valve seat and discharge pipe assembly	17
	'S' type gasket + Spirally wound gaskets	8, 18 and 19
	Baffle plate	22
Overhaul kit	3,	7, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19 and 22

Overhaul kit



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, including pressure range.

Example: 1 - Maintenance kit for a Spirax Sarco DN25 FTS62-62 ball float steam trap.



Recommended tightening torques

Item	Part	\bigcup^{\leftarrow}	inch or mm		Nm	lbf ft
3	%" NPT Square head plug	11 mm A/F		3⁄8" NPT	As re	quired
4	¾" UNF Hex. Nut	1.125" A/F		3⁄4" UNF	252-260	186 - 192
6	Strainer cap	32 mm A/F		M28 x 1.5	170-190	125-140
9	Air vent assembly	32 mm A/F		M22 x 1.5	80-88	59-65
10	Air vent tube assembly	11 mm A/F		M10 x 1.5	10-12	7-9
12	M6 x 30 Socket head cap screw	5 A/F (Hex Key)		M6	14-16	10-12

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