TI-P179-14 CMGT Issue 3



# 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.

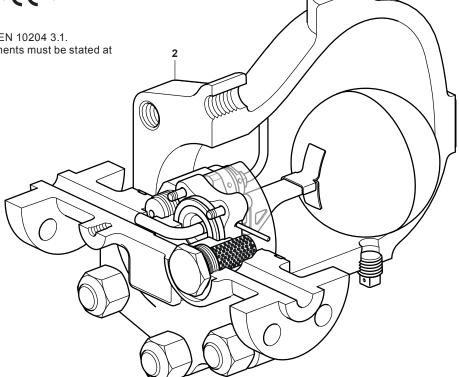
If this option is requested at the time of order placement there will be an extra charge incured and the unit will be treated as a special product.

#### Standards

This product fully complies with the requirements of the Pressure Equipment Directive (PED) and carries the **( (** mark.

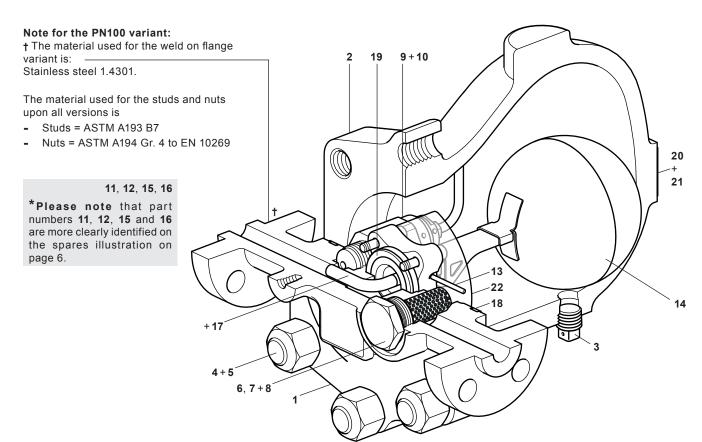
#### Certification

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

½", ¾" and 1"	Screwed BSP or NPT		
½", ¾" and 1" Socket weld ends to BS 3799 and Class 3000 lbs			
Standard flanges:			
DN15, DN20 and DN25	Flanged EN 1092-1 PN100 †		
½", ¾" and 1"	Flanged ASME B 16.5 Class 600		



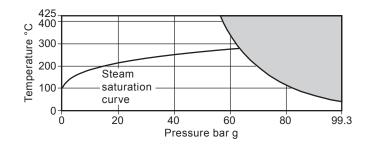
### **Materials**

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No.	Part	Material	
1	Body	Stainless steel	ASTM A351 CF8 EN10213 1.4308
2	Cover	Stainless steel	451M A351 CF8 EN10213 1.4308
3	3/8" NPT taper plug	Stainless steel	CF8/1.4308 or 1.4301/304
4	3/4" UNF nut (6)	Carbon steel	ASTM A194 Gr. 7
5	3/4" 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	vent tube Stainless steel		ASTM A269 304L
11*	Seat clamp	at clamp Stainless steel CF8	
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*	1/2"Ø ball	Stainless steel	AISI 316
16*	Conical spring	Stainless steel	Gr. 302 S26 Gr. 1
17	Valve seat and discharge pipe assembly	Stainless steel	AISI 431 S29 + 304L
18	Chirally wound goalete Dedute Cover and Seet to Dedu	Craphita filler   204 stainless at	rin.
19	Spirally wound gaskets Body to Cover and Seat to Body	Graphite filler + 304 stainless st	пр
20	Name-plate	Stainless steel	204
21	Hammer drive screws (x 2)	Stainless steel	18-8
22	Baffle plate	Stainless steel	304L

# Pressure/temperature limits (ISO 6552)

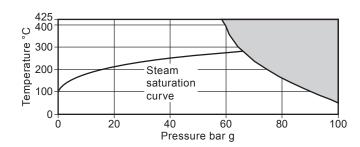
# Screwed Socket weld



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	MA Maximum allowable temperature		
Minimum allowable temperature		-29 °C	
PMO Maximum operating pressure for saturated steam service		63.1 bar g @ 280 °C	
TMO Maximum operating temperature	TMO Maximum operating temperature		
Minimum operating temperature <b>Note:</b> For	lower operating temperatures consult Spirax Sarco	0 °C	
Minimum operating differential pressure		0.1 bar g	
	FTS62-46	46 bar	
ΔPMX Maximum differential pressure	FTS62-62	62 bar	
Designed for a maximum cold hydraulic tes	t pressure of:	149 bar g	

# Flanged PN100

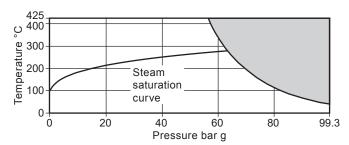


The product must not be used in this region or beyond the parameter of the PMA or TMA of the relative end connection.

Body design co	ondition		PN100
PMA Maximi	MA Maximum allowable pressure		100 bar g @ 50 °C
TMA Maximu	um allowable temperature	425 °C @ 58.9 bar g	
Minimum allow	rable temperature		-29 °C
PMO Maximi	PMO Maximum operating pressure for saturated steam service		65.8 bar g @ 283 °C
TMO Maximi	um operating temperature	425 °C @ 58.9 bar g	
Minimum opera	ating temperature <b>Note</b> : For lo	wer operating temperatures consult Spirax Sarco	0°C
Minimum opera	ating differential pressure		0.1 bar g
ΔPMX Maximum differential pressure		FTS62-46	46 bar
		FTS62-62	62 bar
Designed for a	Designed for a maximum cold hydraulic test pressure of:		

# Pressure/temperature limits (ISO 6552) - Flanged ASME

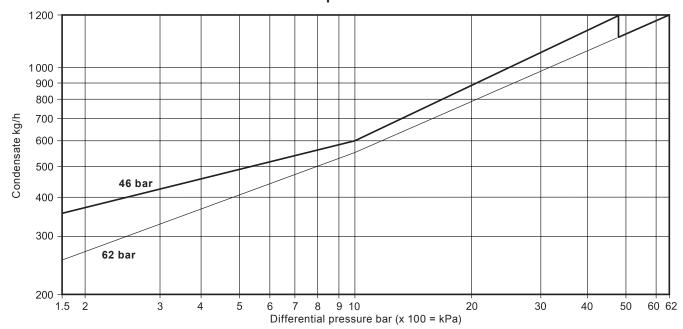
# Flanged ASME Class 600



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	MA Maximum allowable pressure		99.3 bar g @ 38 °C	
TMA	Maximum allowable temperature	425 °C @ 56 bar g		
Minim	um allowable temperature		-29 °C	
РМО	PMO Maximum operating pressure for saturated steam service		63.1 bar g @ 280 °C	
ТМО	Maximum operating temperature		425 °C @ 56 bar g	
Minim	um operating temperature <b>Note:</b> For low	wer operating temperatures consult Spirax Sarco	0 °C	
Minim	um operating differential pressure		0.1 bar g	
		FTS62-46	46 bar	
ΔΡΜΧ	Maximum differential pressure	FTS62-62	62 bar	
Designed for a maximum cold hydraulic test pressure of:			149 bar g	

### **Capacities**



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.

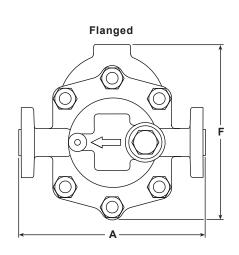
ΔP (bar)	1.5	10	30	46	62
FTS62	Minimum	addition	al cold wa	ter capac	ity (kg/h)
46 bar version	20	426	536	800	
62 bar version	20	350	440	930	800

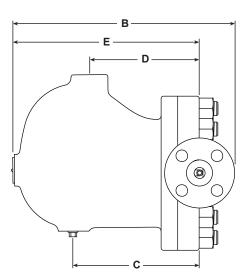
### Dimensions/weights (approximate) in mm and kg

Size		Flanged					
		PN100			ASME 60	0	
	Α	A B Weight			В	Weight	
DN15	300	304.0	25.0	261	299	24.0	
DN20	300	316.5	26.0	271	309	25.5	
DN25	300	321.5	28.0	291	314	27.0	

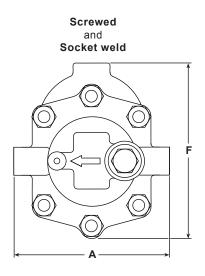
Screwed and Socket weld						
A B Weight						
190	287.5	22.0				
190	287.5	22.0				
190	190 287.5 22.0					

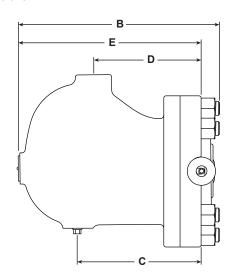
Common sizes					
С	D	E	F		
172.5	148	251.5	239		
172.5	148	251.5	239		
172.5	148	251.5	239		





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

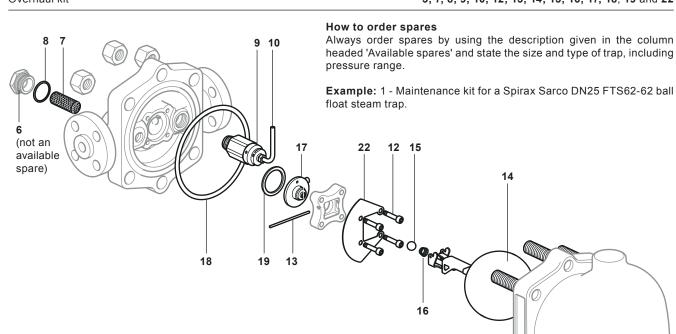
**Example:** 1 off Spirax Sarco DN25 FTS62-62 L-R ball float steam trap, flanged to EN 1092 PN100 with stainless steel body and cover and thermostatic air vent.

### **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	<b>9</b> and <b>10</b>
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



# Recommended tightening torques

Item	Part		nch or mm	N m	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	¾" 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