

# spirax sarco

## FTC62

TI-P179-13  
CMGT Issue 8

## Carbon Steel Ball Float Steam Traps (DN15 to DN25)

### Description

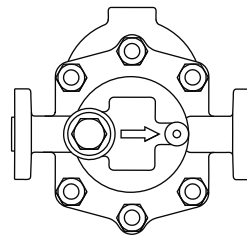
The FTC62 is a carbon steel bodied ball float steam trap having stainless steel working internals and automatic air venting facility.

### FTC62 available options when facing the body:

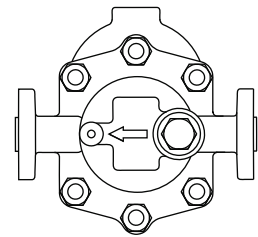
L-R Select L-R for a flow direction of **Left-to-Right**

or

R-L Select R-L for a flow direction of **Right-to-Left**




Left-to-right



Right-to-left

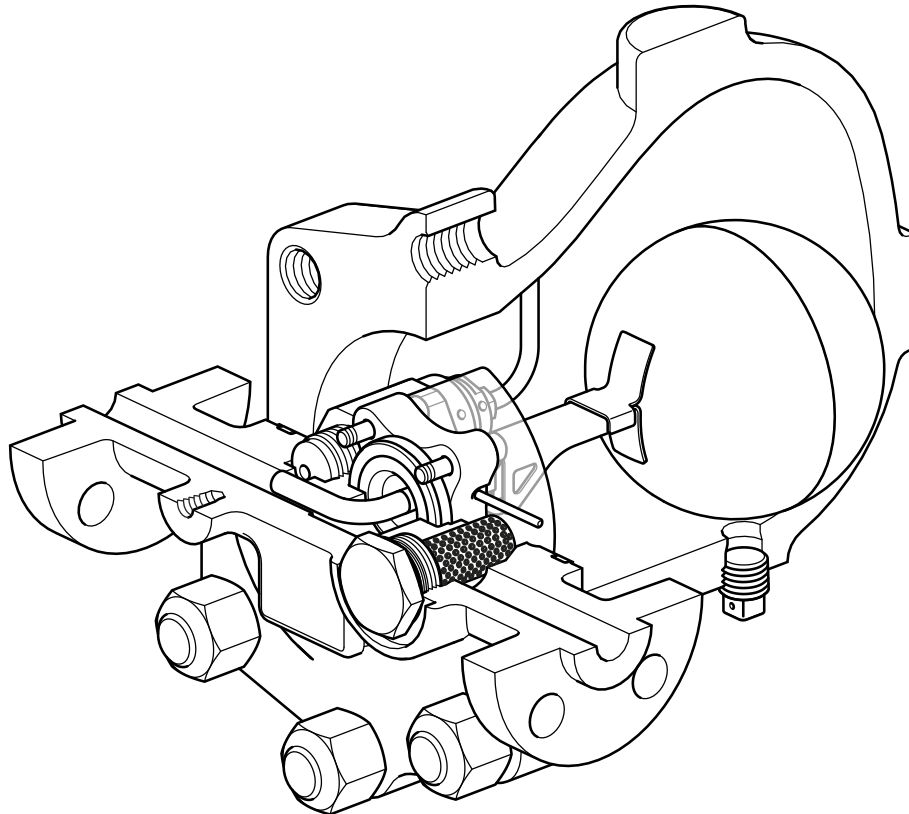
### Standards

This product fully complies with the requirements of the EU Pressure Equipment Directive 2014/68/EU 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.

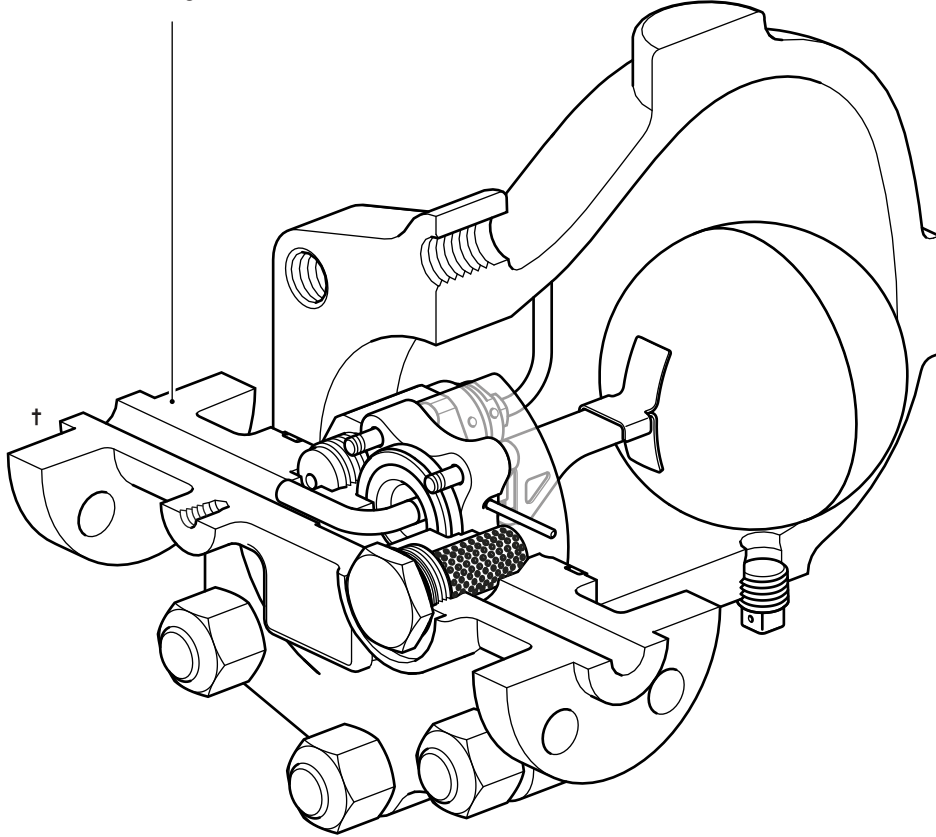


## Sizes and pipe connections

1/2", 3/4" and 1"	Screwed BSP T Rp (ISO 7-1) 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

### Note for the PN100 variant:

† The material used for the weld on flange variant is: Carbon Steel 1.0460.

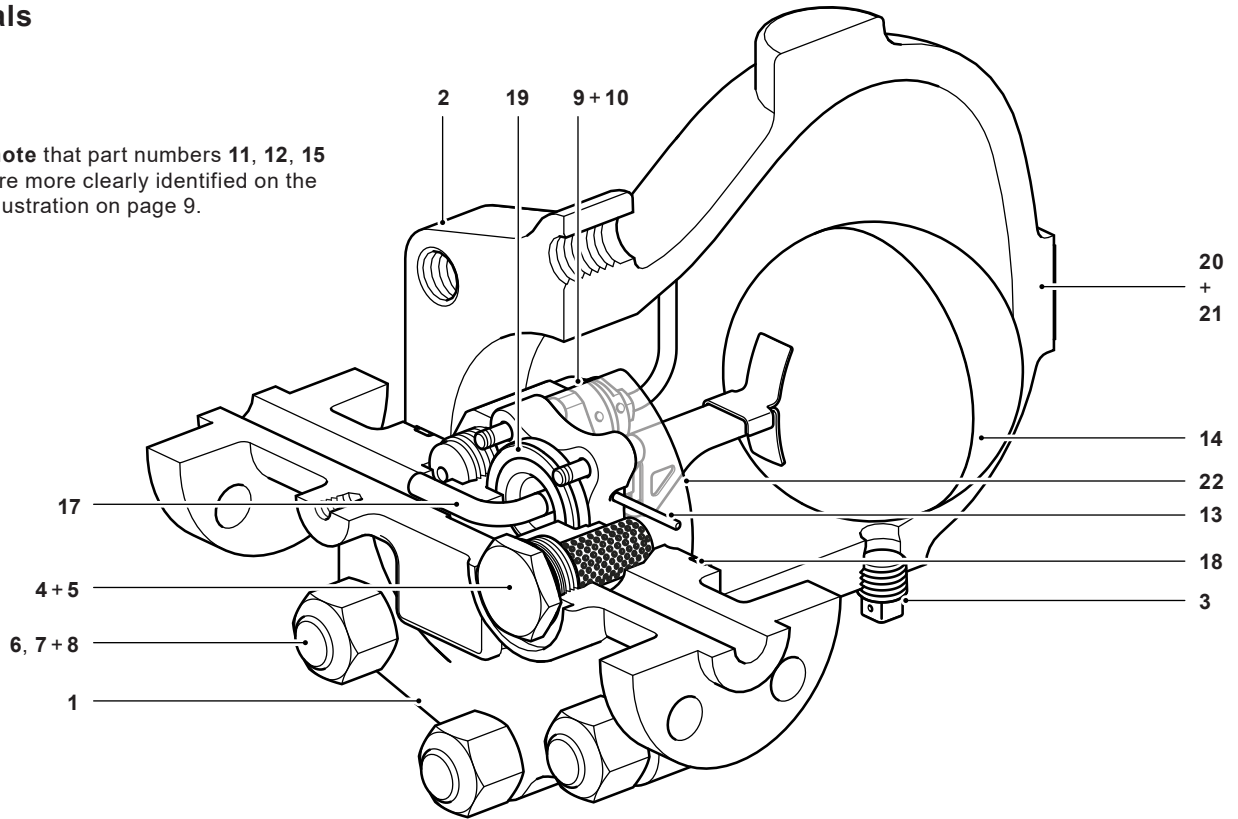


The material used for the studs and nuts upon all versions is:

- Studs = ASTM A193 B7
- Nuts = ASTM A194 Gr. 4 to EN 10269

## Materials

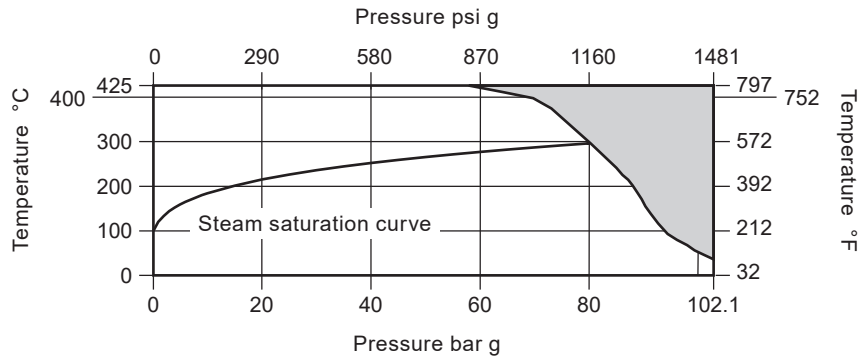
\*Please note that part numbers 11, 12, 15 and 16 are more clearly identified on the spares illustration on page 9.



No.	Part	Material	
1	Body	Carbon steel	EN 10213 1.0619+N/ASTM A216 WCB
2	Cover		
3	3/8" NPT taper plug	Stainless steel	CF8 / 1.4308 or 1.4301/304
4	3/4" UNF nut (x6)	Carbon steel	ASTM A194 Gr. 7
5	3/4" UNF studs x 85 mm long (x6)	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	Stainless steel	ASTM A269 304L
11 *	Seat clamp	Stainless steel	CF8 / 1.4308 or AISI 303
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	Spirally wound gaskets	Body to Cover and Seat to Body	Graphite filler + 304 stainless strip
19			
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

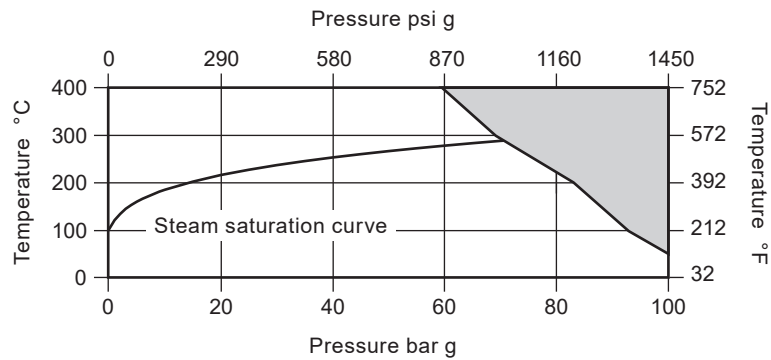


The product **must not** be used in this region or beyond the parameter of the PMA or TMA of the relative end connection.

Body design condition		ASME Class 600	
PMA	Maximum allowable pressure	102.1 bar g @ 38 °C	1481 psi g @ 100 °F
TMA	Maximum allowable temperature	425 °C @ 57.5 bar g	797 °F @ 834 psi g
Minimum allowable temperature		-29 °C	-20 °F
PMO	Maximum operating pressure for saturated steam service	80 bar g @ 296 °C	1160 psi g @ 565 °F
TMO	Maximum operating temperature	425 °C @ 57.5 bar g	797 °F @ 834 psi g
Minimum operating temperature		0 °C	32 °F
<b>Note:</b> For lower operating temperatures consult Spirax Sarco			
Product is safe for use under full vacuum conditions			
Minimum operating differential pressure		0.1 bar g	1.5 psi g
ΔPMX	Maximum differential pressure	FTC62-46	46 bar
		FTC62-62	62 bar
Designed for a maximum cold hydraulic test pressure of:		153.2 bar g	2222 psi g

## Pressure/temperature limits (ISO 6552)

### Flanged EN 1092 PN100

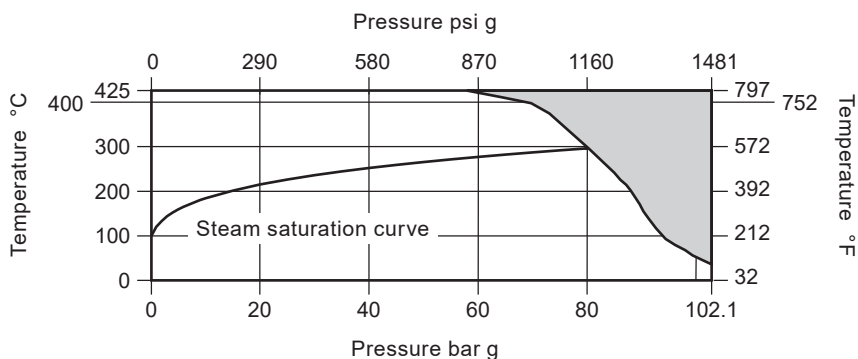



The product **must not** be used in this region or beyond the parameter of the PMA or TMA of the relative end connection.

Body design condition		PN100	
PMA	Maximum allowable pressure	100 bar g @ 50 °C	1450 psi g @ 122 °F
TMA	Maximum allowable temperature	400 °C @ 59.5 bar g	752 °F @ 863 psi g
Minimum allowable temperature		-10 °C	14 °F
PMO	Maximum operating pressure for saturated steam service	70.8 bar g @ 287 °C	1027 psi g @ 549 °F
TMO	Maximum operating temperature	400 °C @ 59.5 bar g	752 °F @ 863 psi g
Minimum operating temperature		0 °C	32 °F
<b>Note:</b> For lower operating temperatures consult Spirax Sarco			
Product is safe for use under full vacuum conditions			
Minimum operating differential pressure		0.1 bar g	1.5 psi g
ΔPMX	Maximum differential pressure	FTC62-46	46 bar / 667 psi
		FTC62-62	62 bar / 899 psi
Designed for a maximum cold hydraulic test pressure of:		150 bar g	2176 psi g

**Pressure/temperature limits (ISO 6552)**

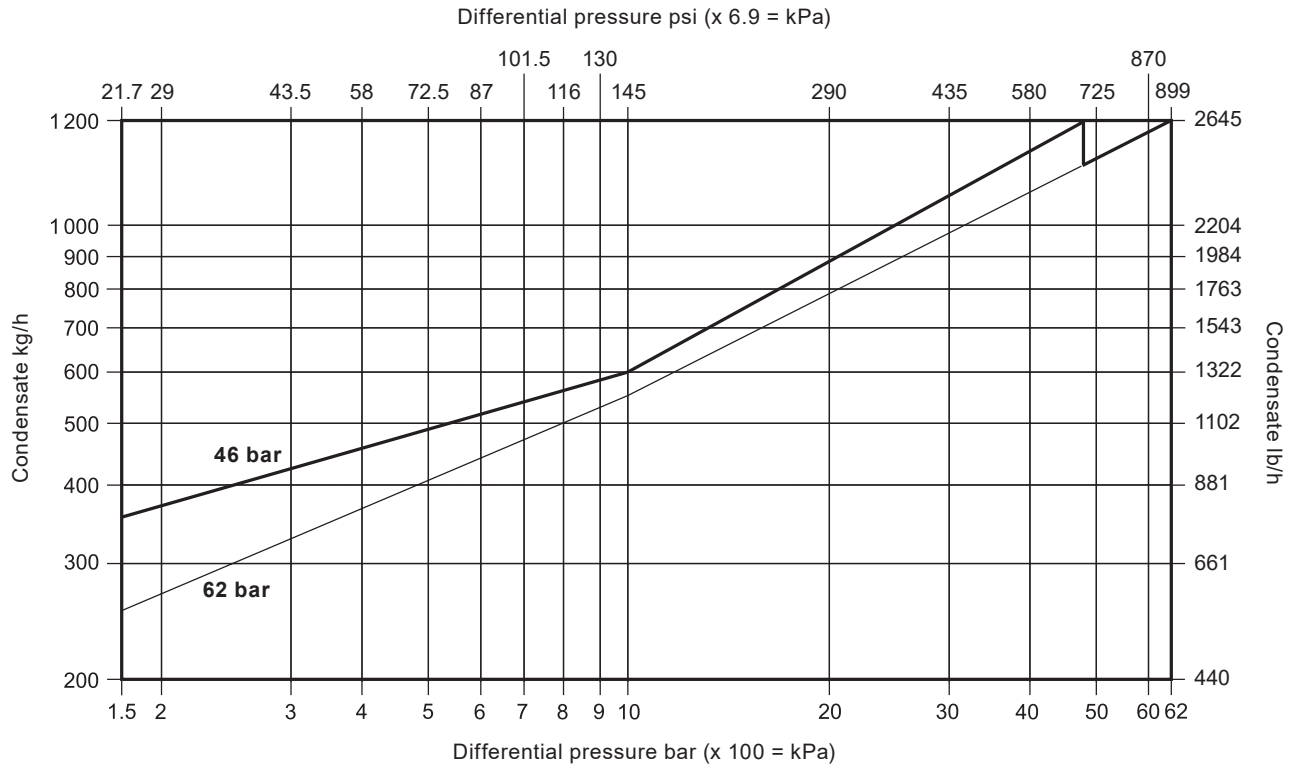
**Flanged  
ASME Class 600**



 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	Maximum allowable pressure	102.1 bar g @ 38 °C	1481 psi g @ 100 °F
TMA	Maximum allowable temperature	425 °C @ 57.5 bar g	797 °F @ 834 psi g
Minimum allowable temperature		-29 °C	-20 °F
PMO	Maximum operating pressure for saturated steam service	80 bar g @ 296 °C	1160 psi g @ 565 °F
TMO	Maximum operating temperature	425 °C @ 57.5 bar g	797 °F @ 834 psi g
Minimum operating temperature		0 °C	32 °F
<b>Note:</b> For lower operating temperatures consult Spirax Sarco			
Product is safe for use under full vacuum conditions			
Minimum operating differential pressure		0.1 bar g	1.5 psi g
ΔPMX	Maximum differential pressure	FTC62-46	46 bar / 667 psi
		FTC62-62	62 bar / 899 psi
Designed for a maximum cold hydraulic test pressure of:		153.2 bar g	2222 psi 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 capacity to the main valve.

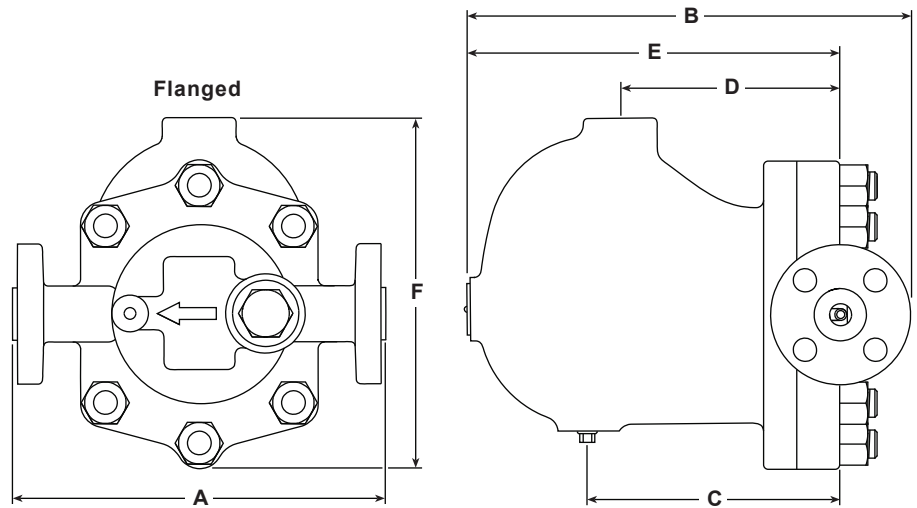
The table below gives the minimum additional cold water capacities from the air vent on all sizes.

**Note:** The air vent closing temperature range = 120 °C to 135 °C (248 °F to 275 °F).

For differential pressures less than 1.5 bar g (22 psi g), the additional cold water capacity is minimal.

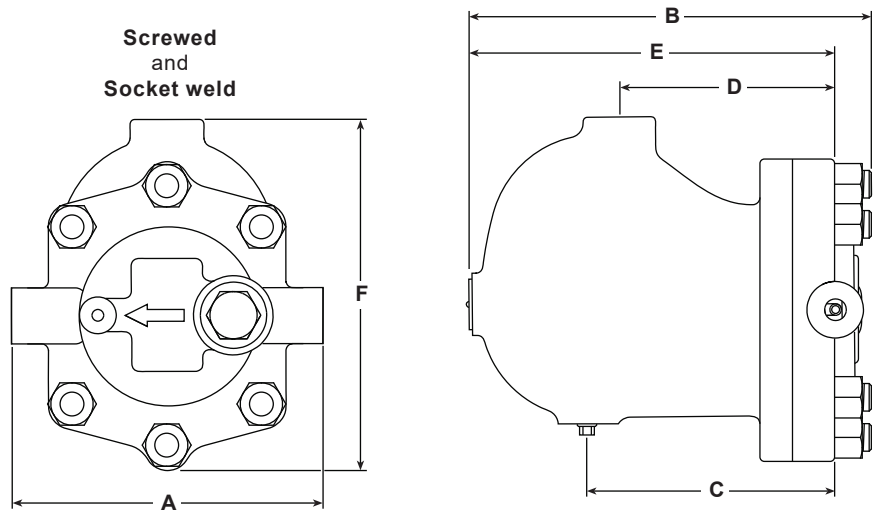
ΔP in bar (psi)	1.5 (22)	10 (145)	30 (435)	46 (667)	62 (899)
<b>FTS62</b>	<b>Minimum additional cold water capacity in kg/h (lb/h)</b>				
<b>46 bar version</b>	20 (44)	426 (939)	536 (1182)	800 (1764)	
<b>62 bar version</b>	20 (44)	350 (772)	440 (970)	930 (2050)	800 (1764)

**Dimensions/weights (approximate) in mm (inches) and kg (lbs)**



**Notes:**

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



Size	Flanged						Screwed and Socket weld			Common sizes			
	PN100			ASME 600			A	B	Weight	C	D	E	F
	A	B	Weight	A	B	Weight							
DN15		304.0 (12)	25.0 (55.1)	261 (10.3)	299 (11.77)	24.0 (52.9)							
DN20	300 (11.8)	316.5 (12.5)	26.0 (57.3)	271 (10.7)	309 (12.2)	25.5 (56.2)	190 (7.48)	287.5 (11.3)	22.0 (48.5)	172.5 (6.79)	148 (5.83)	251.5 (9.90)	239 (9.41)
DN25		321.5 (12.7)	28.0 (61.7)	291 (11.5)	314 (12.4)	27.0 (59.5)							

**Safety information, installation and maintenance**

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

**Installation note**

The FTC62 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**

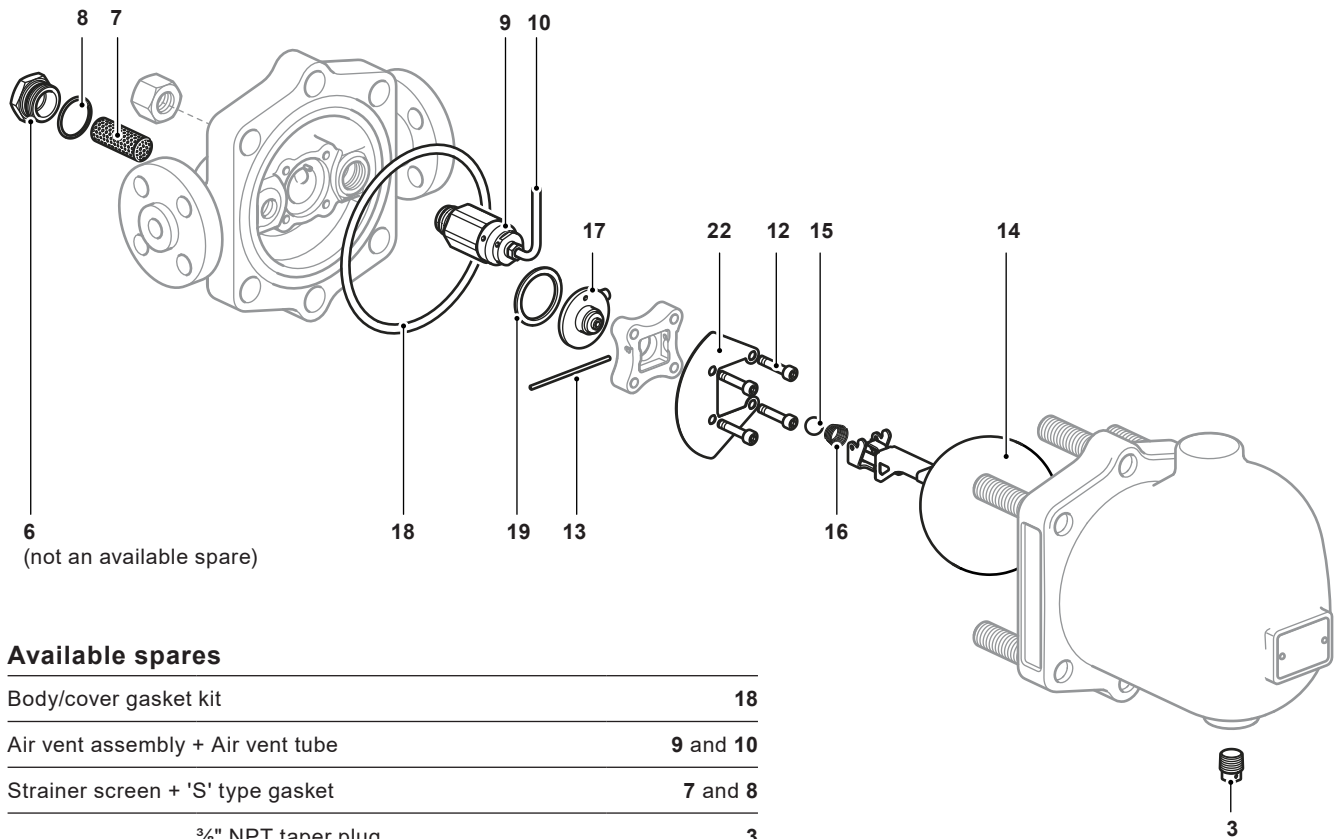
This product is recyclable. No ecological hazard is anticipated with the disposal of this product, providing due care is taken.

**How to order**

**Example:** 1 off Spirax Sarco DN25 FTC62-62 L-R ball float steam trap, flanged to EN 1092 PN100 with carbon 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 vent tube	9 and 10
Strainer screen + 'S' type gasket	7 and 8
¾" 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

### 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 FTC62-62 ball float steam trap.

### Recommended tightening torques

Item	Part		inch or mm		N m	lbf ft
3	¾" NPT Square head plug		11 mm A/F	¾" NPT	As required	
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 mm A/F (Hex Key)	M6	14-16	10-12