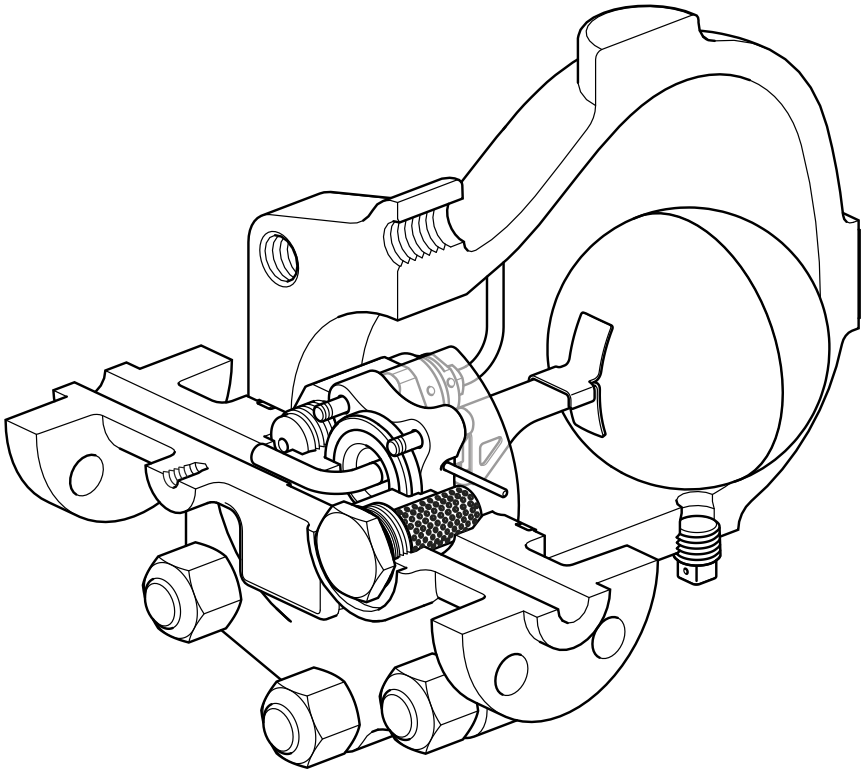
FTC62
Carbon Steel
Ball Float Steam Traps (DN15 to DN25)

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**

Standards
This product fully complies with the requirements of the EU Pressure Equipment Directive 2014/68/EU and carries the CE mark.

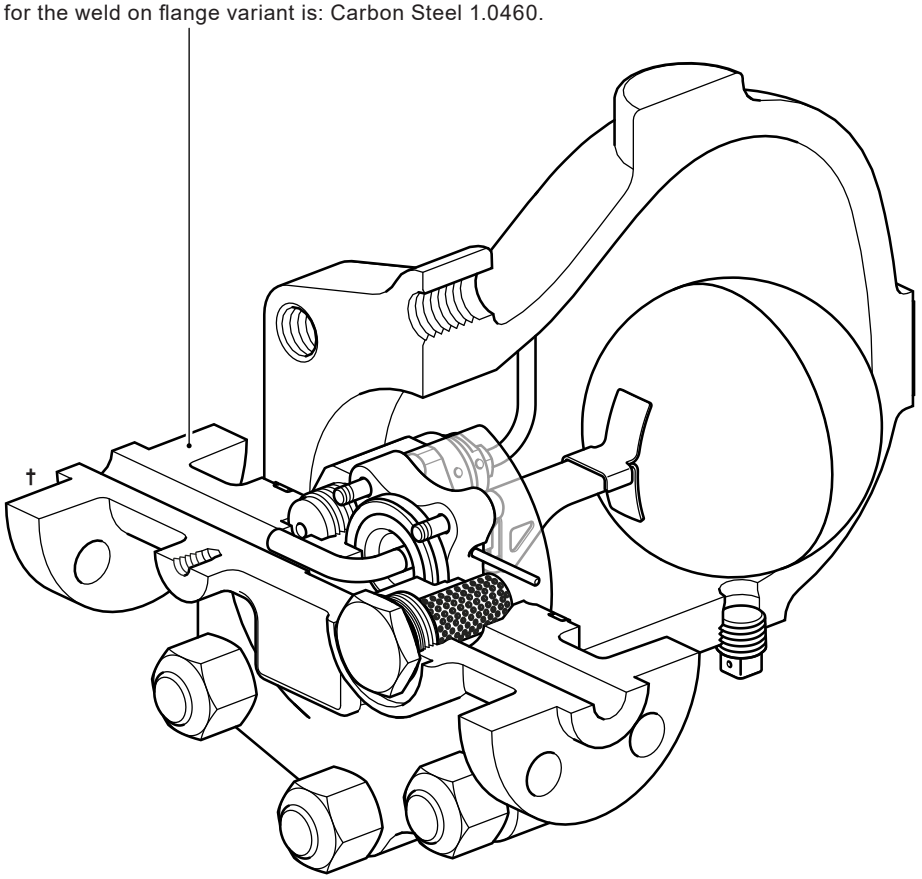
Certification
This unit is available with certification to EN 10204 3.1.
Note: All certification/inspection requirements must be stated at the time of order placement.



Sizes and pipe connections

½", ¾" and 1"	Screwed BSP T Rp (ISO 7-1) 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

Note for the PN100 variant:
† The material used for the weld on flange variant is: Carbon Steel 1.0460.

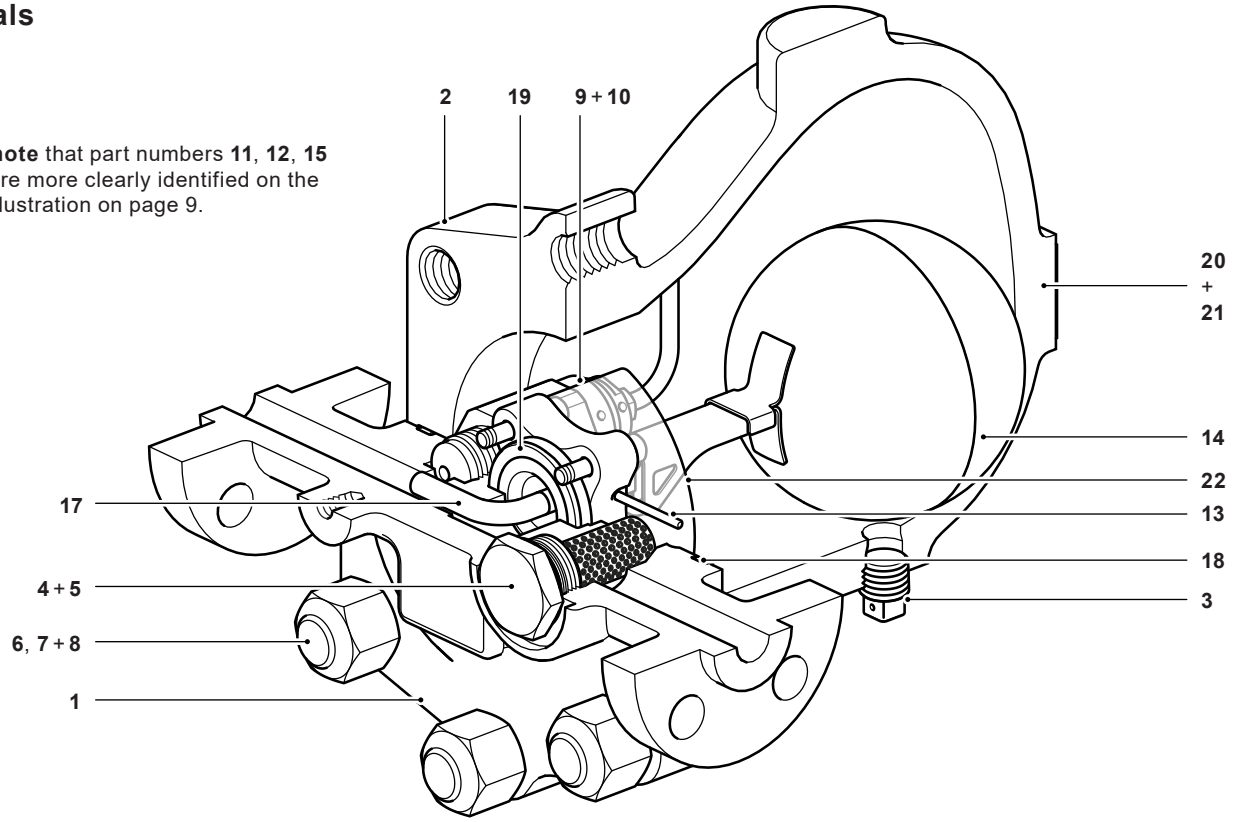


The material used for the studs and nuts upon all versions is:

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

Materials

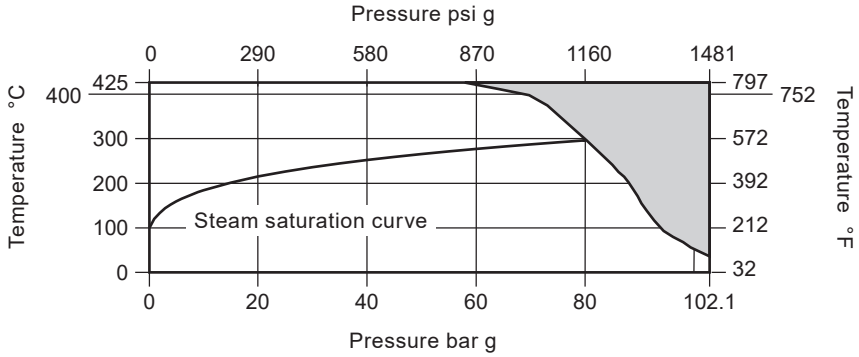
*Please note that part numbers **11**, **12**, **15** and **16** are more clearly identified on the spares illustration on page 9.



No.	Part	Material	
1	Body	Carbon steel	EN 10213 1.0619+N/ASTM A216 WCB
2	Cover		
3	⅜" NPT taper plug	Stainless steel	CF8 / 1.4308 or 1.4301 / 304
4	¾" UNF nut (x 6)	Carbon steel	ASTM A194 Gr. 7
5	¾" UNF studs x 85 mm 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	Stainless steel	ASTM A269 304L
11 *	Seat clamp	Stainless steel	CF8 / 1.4308 or AISI 303
12 *	M6 x 30 long cap screw (x 4)	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	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

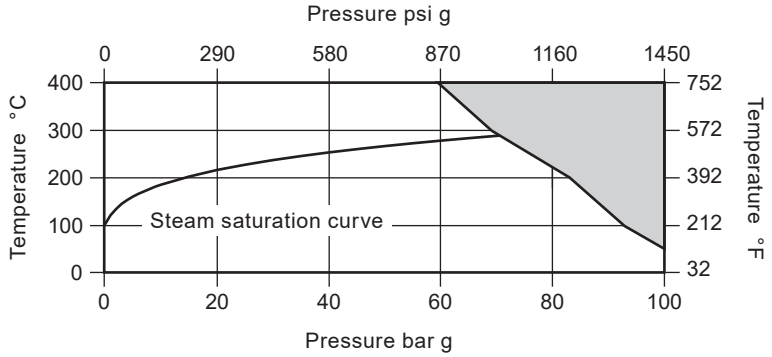


The product **must not** be used in this region or beyond the parameter of the PMA or TMA of the relative end connection.

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 **Note:** For lower operating temperatures consult Spirax Sarco			0 °C	32 °F
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

Pressure/temperature limits (ISO 6552)

Flanged EN 1092
PN100

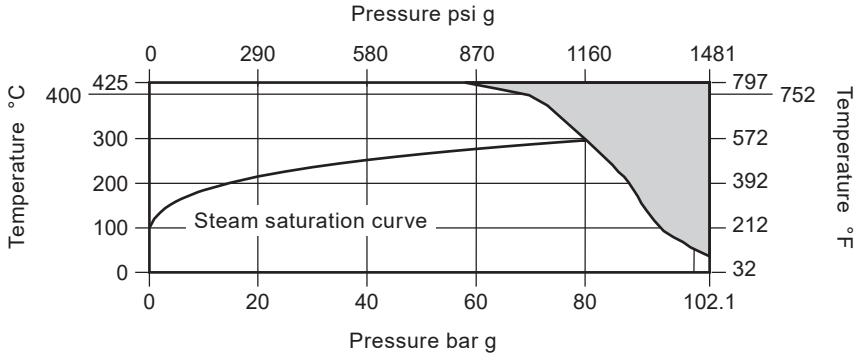


The product **must not** be used in this region or beyond the parameter of the PMA or TMA of the relative end connection.

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 **Note:** For lower operating temperatures consult Spirax Sarco			0 °C	32 °F
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)

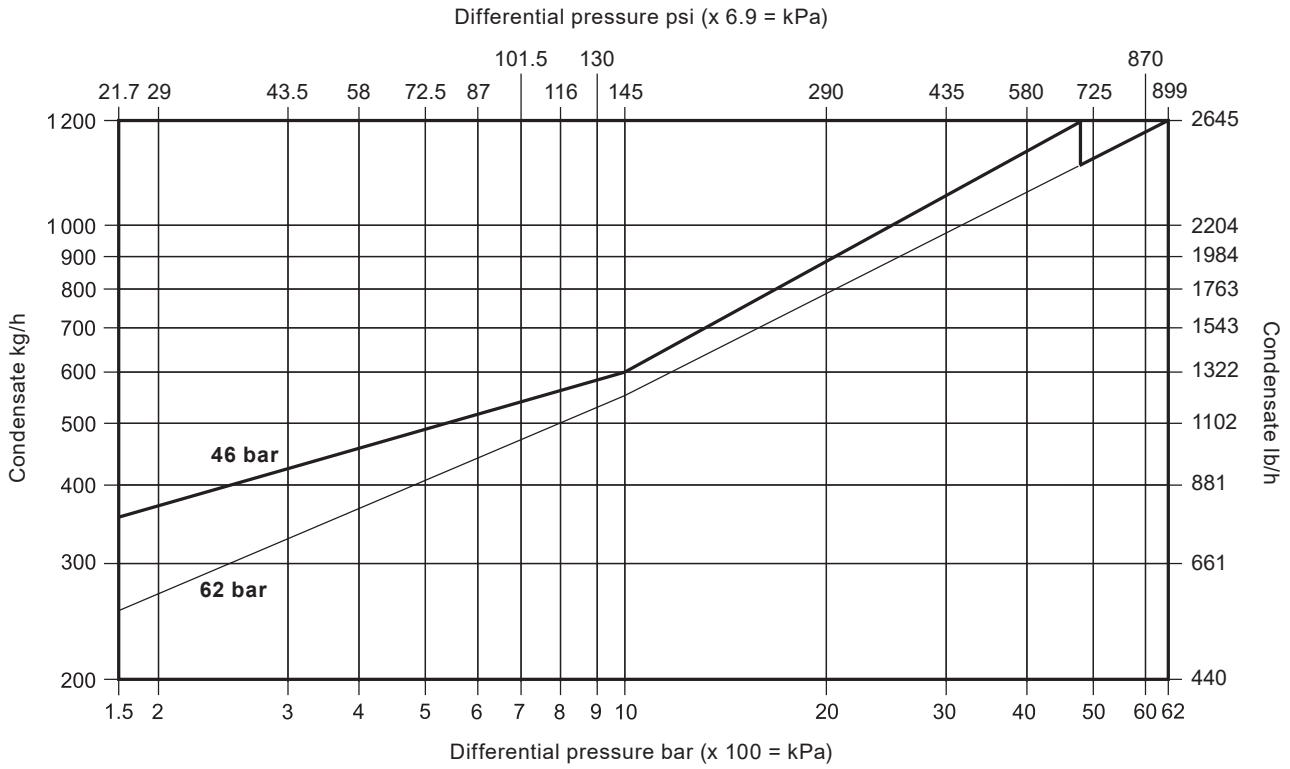
Flanged
ASME Class 600



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 **Note:** For lower operating temperatures consult Spirax Sarco			0 °C	32 °F
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 capcaity to the main valve.

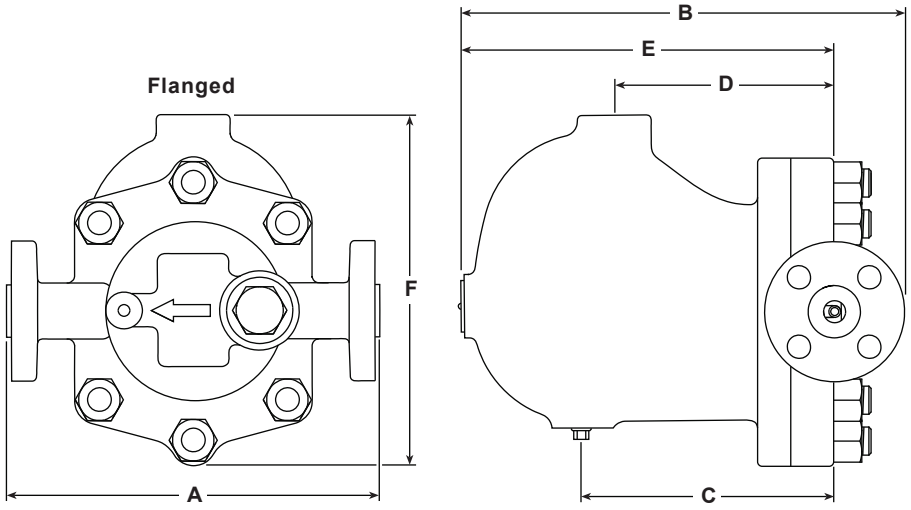
The table below gives the minimum additional cold water capacities from the air vent on all sizes.

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

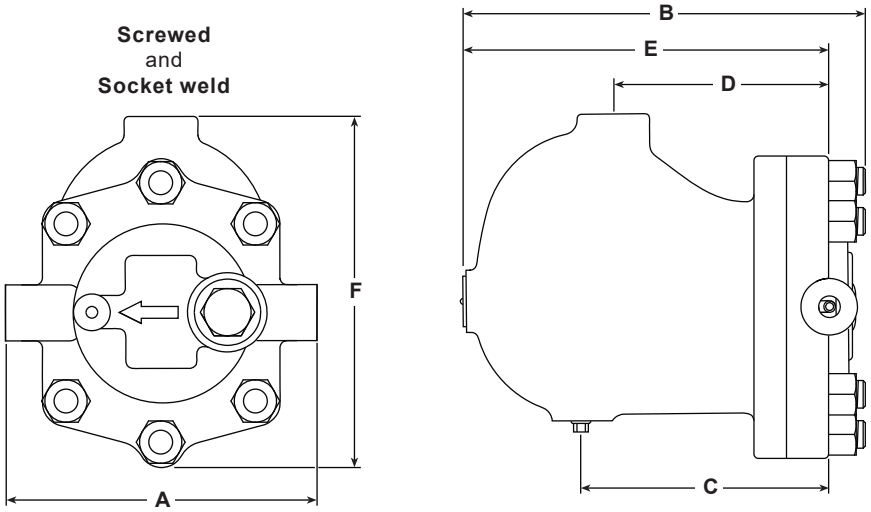
For differential pressures less than 1.5 bar g (22 psi g), the additional cold water capacity is minimal.

ΔP in bar (psi)	1.5 (22)	10 (145)	30 (435)	46 (667)	62 (899)
FTS62	**Minimum additional cold water capacity in kg/h (lb/h)**				
46 bar version	20 (44)	426 (939)	536 (1182)	800 (1764)	
62 bar version	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	A	B	Weight	A	B	Weight	C	D	E	F
DN15	300 (11.8)	304.0 (12)	25.0 (55.1)	261 (10.3)	299 (11.77)	24.0 (52.9)	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)
DN20		316.5 (12.5)	26.0 (57.3)	271 (10.7)	309 (12.2)	25.5 (56.2)							
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.

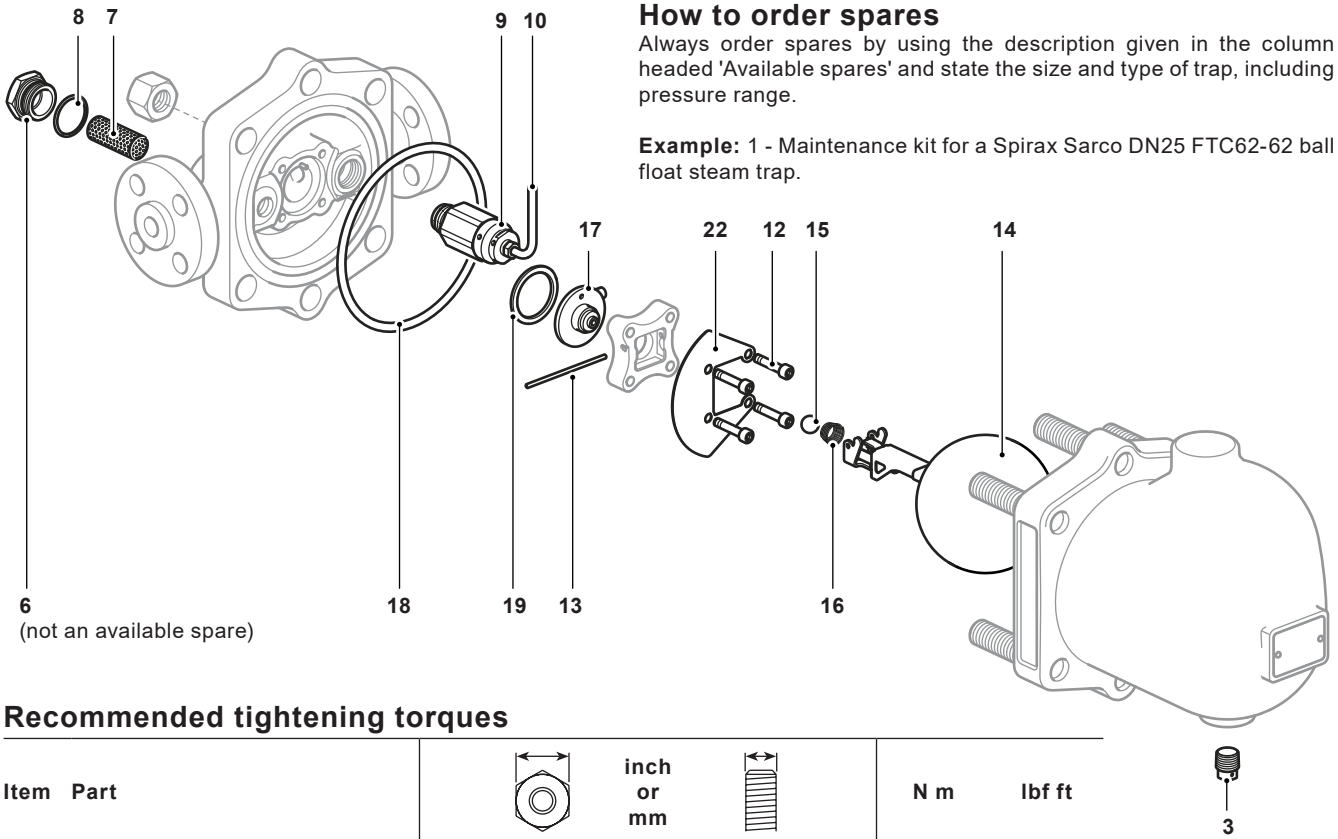
How to order
Example: 1 off Spirax Sarco DN25 FTC62-62 L-R ball float steam trap, flanged to EN 1092 PN100 with carbon steel body and cover and thermostatic air vent.

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**
Maintenance kit	⅜" NPT taper plug	**3**
	M6 x 30 long cap screw (x 4)	**12**
	Pivot pin	**13**
	Float assembly	**14**
	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	⅜" NPT Square head plug	11 mm A/F	⅜" 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