

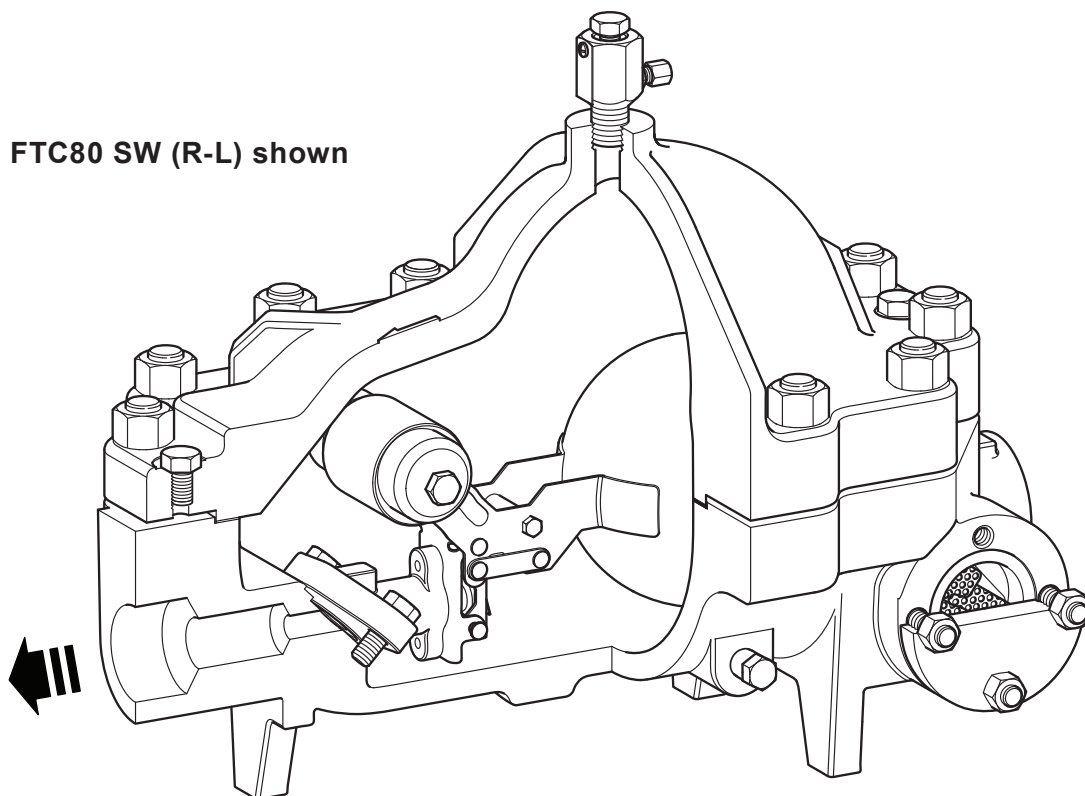


FTC80

Cast Steel

## 1½" and 2" Ball Float Steam Trap with ASTM Body

2" FTC80 SW (R-L) shown



### Description

As standard, the FTC80 ball float steam trap is supplied with a right to left (R-L) flow configuration having horizontal connections and has provision for adding an air venting option; Please note that the unit is supplied with a ¼" socket weld connection in the cover with a plug screwed into the fitting. It has been designed for floor mounting and is suitable for most high-pressure process and drainage applications. Its simple robust ball float mechanism ensures excellent resistance to waterhammer. All internals are easily accessible for in-line maintenance and a drain port allows full body drainage.

It has a large maintainable strainer screen that extends service intervals and is located in an accessible flanged chamber.

### Available options

Factory fitted external BDV2 air vent having a ½" NPT screwed connection (a ½" BSP T Rp (ISO 7-1) screwed connection is used on the PN100 version)

Factory fitted internal fixed bleed for continuous discharge of air and other incondensable gasses

**Note:** As standard the unit is supplied with a ¾" socket weld connection in the cover with a ¾" BSP T Rp (ISO 7-1) screwed plug fitted.

### Standard

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

### Certification

This product is available with certification to EN 10204 3.1 for the body, cover, fasteners, screen flange and BDV2 air vent.

**Note:** All certification / inspection requirements must be stated at the time of order placement.

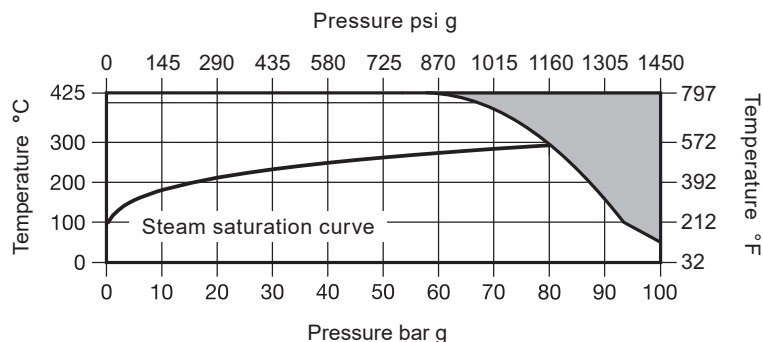
## Sizes and pipe connections

1½" and 2" (DN40 and DN50) ASME B 16.11 Class 6000 socket weld.

1½" and 2" (DN40 and DN50) ASME B 16.5 Class 600 flanges.

**Note:** Other connections are available upon request but may limit the operating range – Please consult Spirax Sarco for further information.  
Drain plug connection is ¾" screwed NPT as standard (a ¾" screwed BSP T Rp (ISO 7-1) connection is used on the PN100 version).

## Pressure/temperature limits



The product **must not** be used in this region.

Body design conditions		ASME 600	
PMA	Maximum allowable pressure	100 bar g @ 52 °C	1450 psi g @ 126 °F
TMA	Maximum allowable temperature	425 °C @ 57 bar g	797 °F @ 827 psi
Minimum allowable temperature		-29 °C	-20.2 °F
PMO	Maximum operating pressure for saturated steam service	80 bar g	1160 psi g
TMO	Maximum operating temperature	425 °C @ 57 bar g	797 °F @ 827 psi g
Minimum operating temperature		0 °C	32 °F
ΔPMX	Maximum differential pressure	FTC80-45	45 bar
		FTC80-62	62 bar
		FTC80-80	80 bar
Product is safe for use under full vacuum conditions			
Designed for a maximum cold hydraulic test pressure of:		150 bar g	2176 psi g

## Parts 1 to 18

1 to 18

TC80 SW (R-L) shown

12 (optional)

4, 5

2

8

7

9

10, 11

3

14

13

6

15

18

1

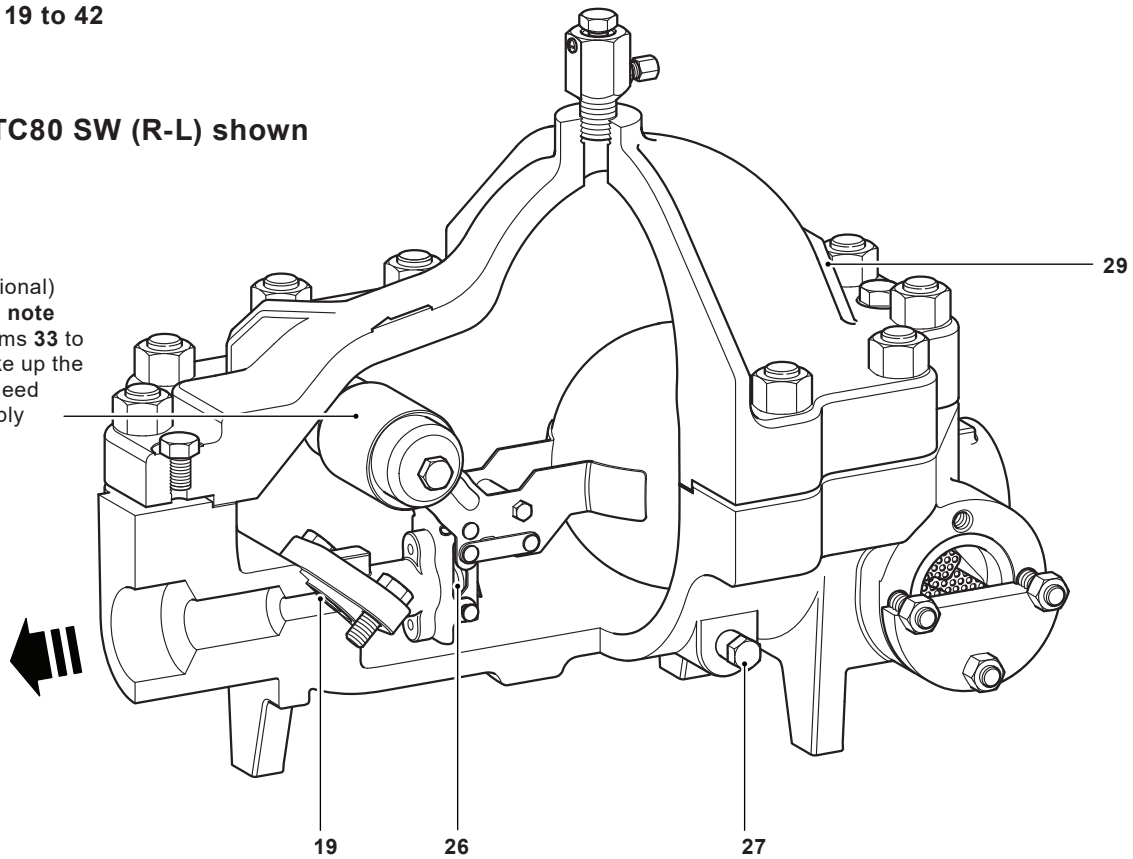
**Materials continued on next page**

## Materials

### Parts 19 to 42

#### 2" FTC80 SW (R-L) shown

32 (optional)  
Please note  
that items 33 to  
42 make up the  
fixed bleed  
assembly

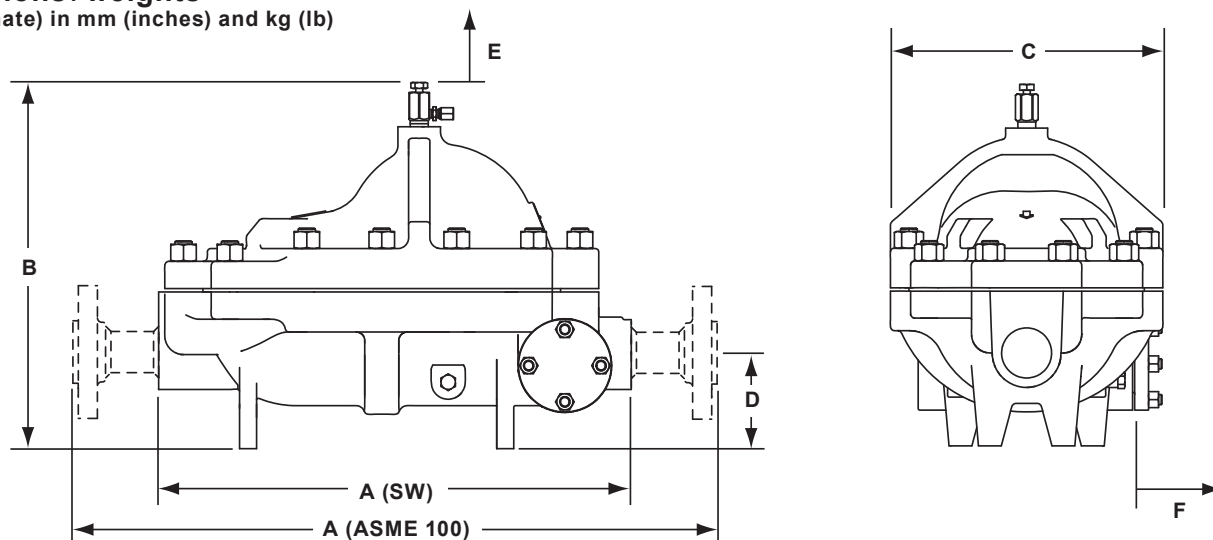


No.	Part	Material			
19	Assembly gasket	Reinforced exfoliated graphite			
26	Gasket	Stainless steel			
27	Drain plug	Steel	ASTM A105N		
28	Air vent plug (not shown)	Steel	ASTM A105N		
29	Name-plate	Stainless steel	ASTM A105N		
30 *	Flange pipe	Steel	ASTM A106B		
31 *	Flange	Steel	ASTM A105N		
32	Fixed bleed assembly	33	Bleed orifice	Stainless steel	ASTM A276 431
		34	Pipe support	Stainless steel	304 or 316
		35	Washer	Stainless steel	
		36	Lock-nut	Stainless steel	A2-70
		37	Nut	Stainless steel	316
		38	Ferrule	Stainless steel	316L
		39	Bleed pipe	Stainless steel	ASTM A269 304
		40	Stud	Stainless steel	316 S11 or S13
		41	Twin ferrule	Stainless steel	316 S11 or S13
		42	Nut	Stainless steel	316 S11 or S13

\* **Note:** Items 30 and 31 the flange and flange pipe are not shown.

## Dimensions / weights

(approximate) in mm (inches) and kg (lb)

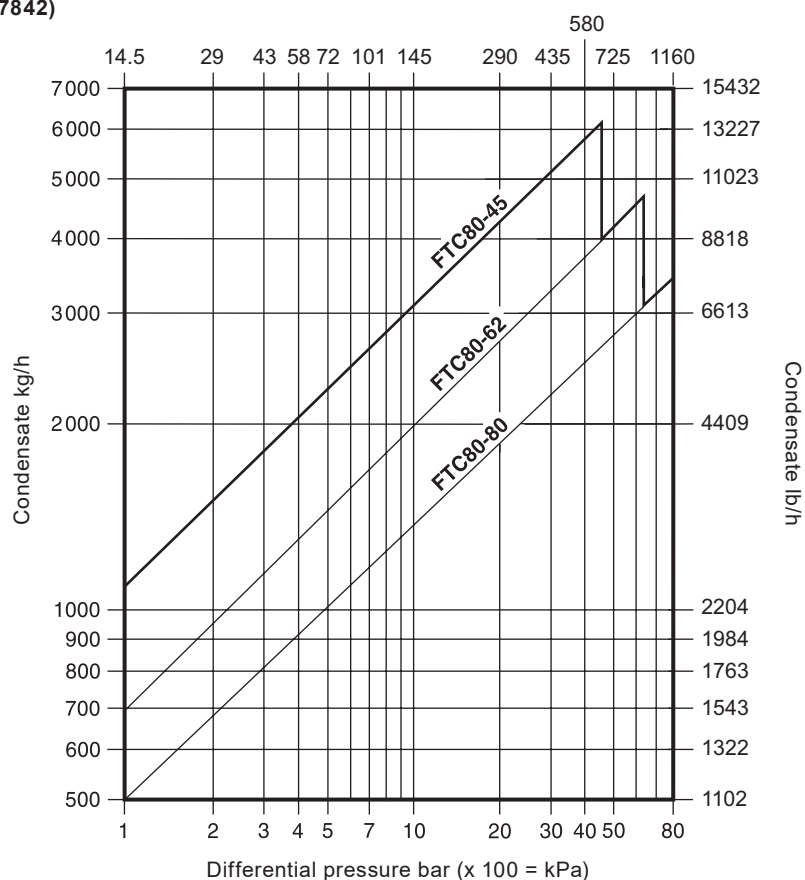


Size	A		B		C	D	Withdrawal distance		Weight	
	Socket weld	Flanged ASME 600	BDV2	Plug			E Cover	F Screen	Socket weld	Flanged ASME 600
DN40 (1½")	555 (21.9 in)	755 (29.7 in)	430 (16.9 in)	390 (15.4 in)	324 (12.8 in)	110.5 (4.35 in)	55 (2.2 in)	260 (10.2 in)	112 (4.41 in)	118 (4.65 in)
DN50 (2")		785 (30.9 in)								

## Capacities

(in accordance with ISO 7842)

Differential pressure psi (x 6.9 = kPa)



## Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P179-06) supplied with the product.

### Installation note

The FTC80 must be installed with the direction of flow as indicated on the body, and with the float arm in a horizontal plain so that it rises and falls vertically. Integral legs assist stable floor mounting. Please note that appropriate high temperature jointing compound must be used on the drain plug and air vent plug threads.

### Disposal

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

Please visit the Spirax Sarco product compliance web pages

<https://www.spiraxsarco.com/product-compliance>

for up to date information on any substances of concern that may be contained within this product. Where no additional information is provided on the Spirax Sarco product compliance web page, this product may be safely recycled and/or disposed providing due care is taken.

Always check your local recycling and disposal regulations.

### How to order

**Example:** 1 off Spirax Sarco 1½" FTC80-45 (R-L) ball float steam trap with ASME Class 6000 weld connections and screwed BDV2 manual air vent complete with 3.1 certification for the FTC80 and BDV2.

## Spare parts

The spare parts available are shown in heavy outline. Parts drawn in a grey line are not supplied as spares.

### Available spares

Mechanism maintenance kit, including float	<b>3, 13, 18a, 18b, 19</b>
Seat and ball head	<b>3, 15, 16, 17, 19, 26</b>
Cover gasket (3 off)	<b>3</b>
Strainer screen	<b>8, 9</b>
Strainer gasket (3 off)	<b>9</b>
Mechanism and fixed bleed maintenance kit including float	<b>3, 13, 18a, 18b, 19, 32</b>

### 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 off Seat and ball head set for a Spirax Sarco 1½" FTC80-45 ball float steam trap.

**Item 12** The BDV2 air vent is an optional extra. For ordering this unit see TI-P600-01.

