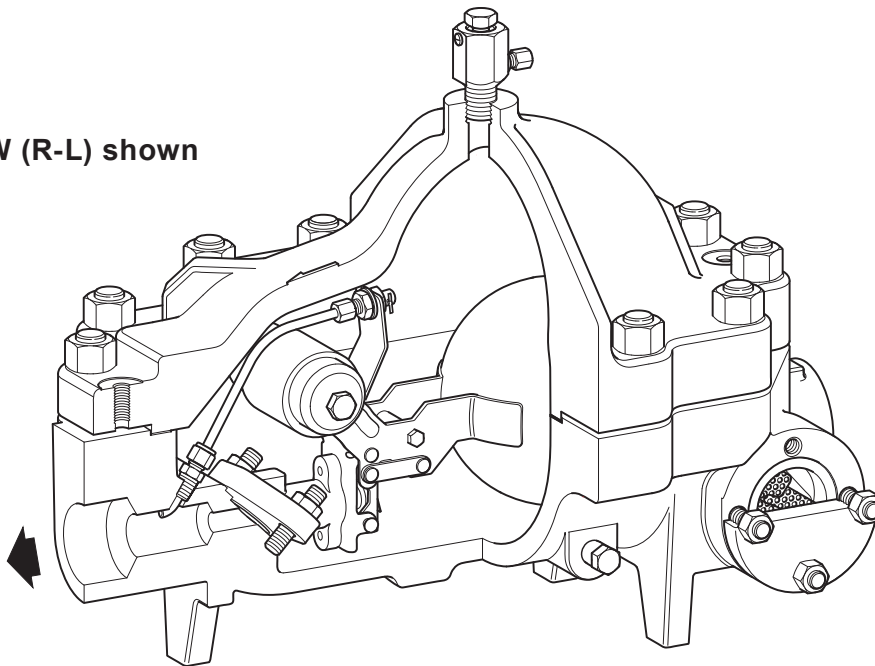


# spirax sarco

## FTC80

## Cast Steel DN40 and DN50 Ball Float Steam Trap with EN 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  $\frac{3}{4}$ " 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  $\frac{1}{2}$ " BSP screwed connection

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

**Note:** As standard the unit is supplied with a  $\frac{3}{4}$ " socket weld connection in the cover with a  $\frac{3}{8}$ " BSP screwed plug fitted.

### Standard

This product fully complies with the requirements of the Pressure Equipment Directive (PED).

### 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

DN40 and DN50 socket weld BS 3799.

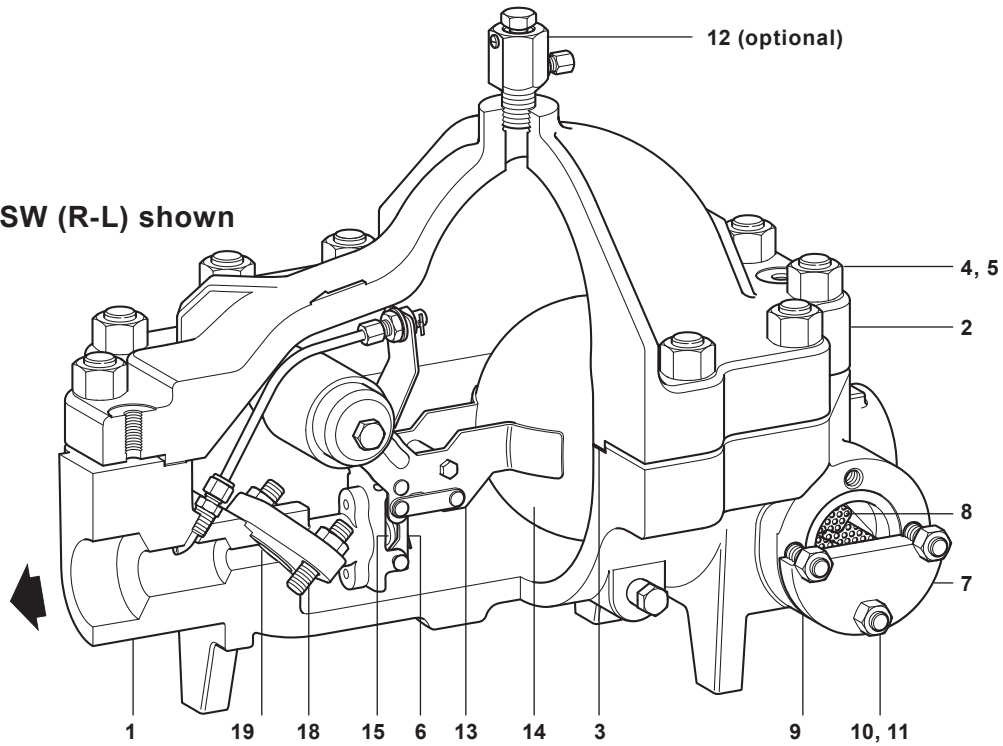
DN40 and DN50 flanged EN 1092 PN100.

**Note:** Other connections are available upon request but may limit the operating range – Please consult Spirax Sarco for further information.

Drain plug connection is  $\frac{3}{8}$ " screwed BSP as standard.

## Materials

2" FTC80 SW (R-L) shown



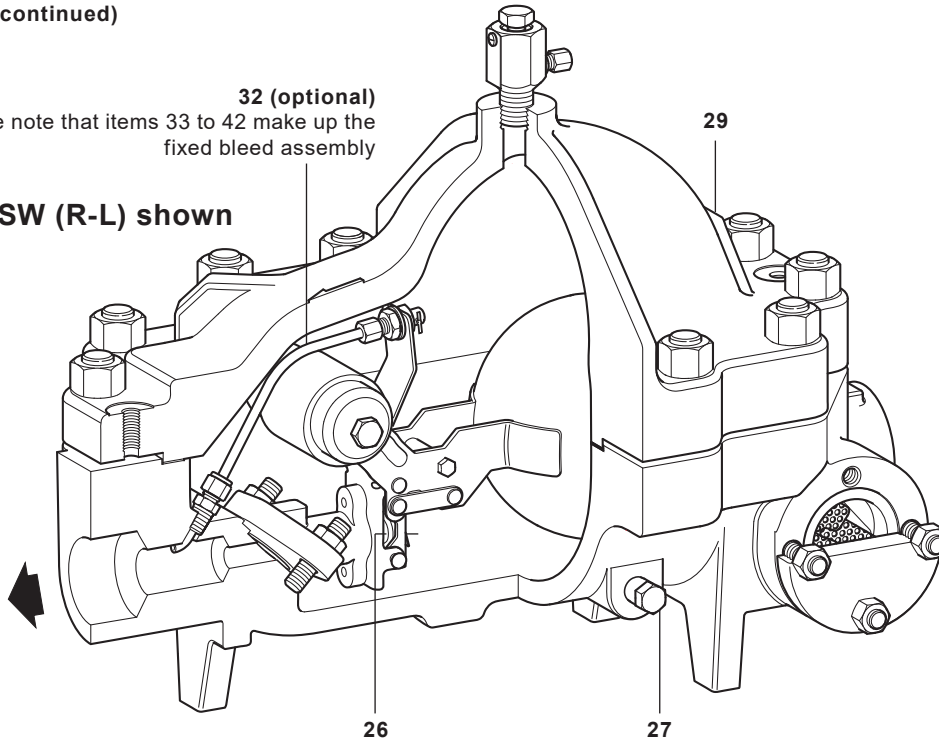
No.	Part	Material	
1	Body	Cast steel	GP240GH 1.0619
2	Cover	Cast steel	GP240GH 1.0619
3	Cover gasket	Tanged graphite	SST100
4	Cover stud	Steel	ASTM A193 B16
5	Cover nuts	Steel	ASTM A194 Gr. 4
6	Valve head and retainer	Stainless steel	
7	Strainer flange	Steel	ASTM A182 F11 CL2
8	Strainer screen	Stainless steel	
9	Strainer gasket	Tanged graphite	SST100
10	Strainer studs	Steel	ASTM A193 B16
11	Strainer nuts	Steel	ASTM A194 Gr. 4
12	Air vent (optional)	Stainless steel	(See BDV2 in TI-P600-01)
13	Mechanism assembly	Stainless steel	
14	Float	Stainless steel	
15	Valve seat	Titanium	
18a 18b	Assembly bolts and nuts	Stainless steel	A4-80
19	Assembly gasket	Reinforced exfoliated graphite	

Materials continued on next page

**Materials (continued)**

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

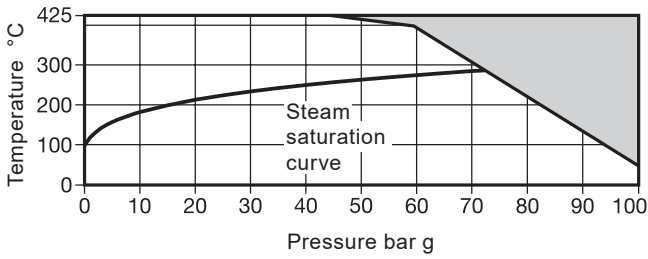
**2" FTC80 SW (R-L) shown**



No.	Part	Material			
26	Gasket	Stainless steel			
27	Drain plug	Steel	ASTM A182 F11 CL2		
28	Air vent plug (not shown)	Steel	ASTM A182 F11 CL2		
29	Name-plate	Stainless steel			
30 *	Flange pipe	Steel	ASTM A335 P11		
31 *	Flange	Steel	ASTM A182 F11 CL2		
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.

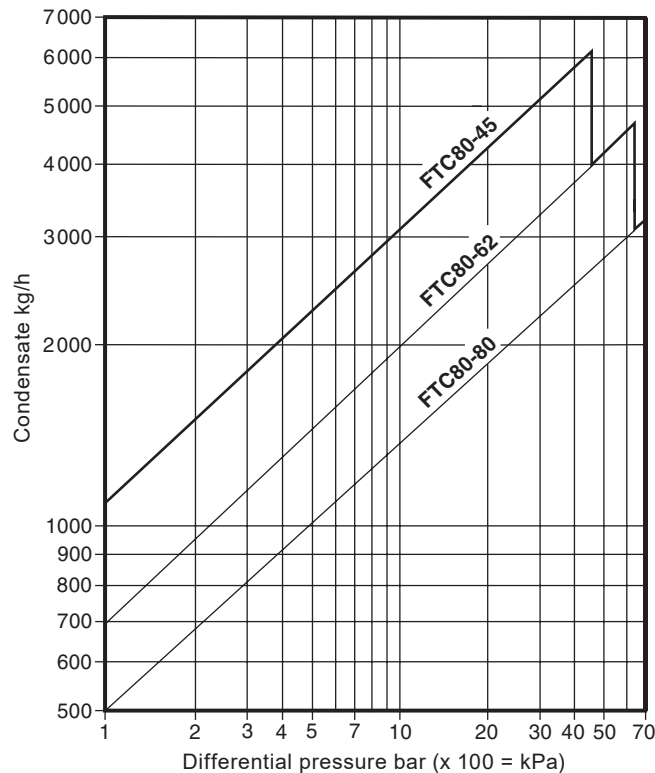
## Pressure/temperature limits



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

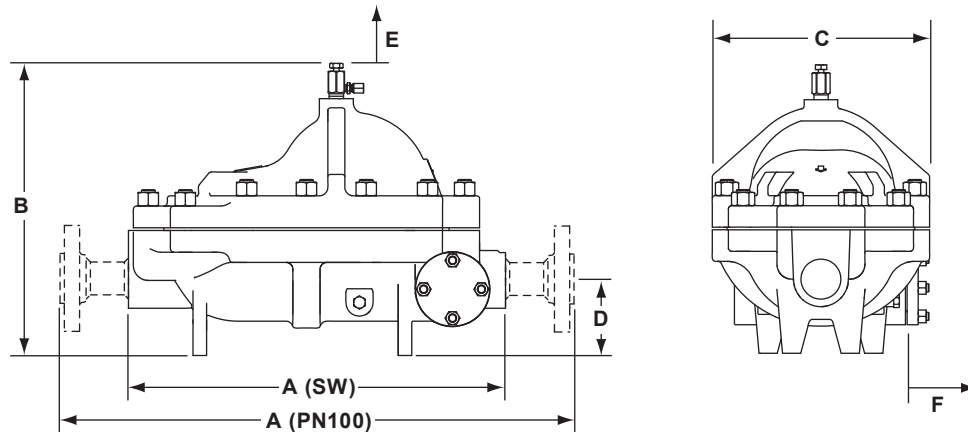
Body design conditions	PN100	
PMA Maximum allowable pressure	100 bar g @ 50 °C	
TMA Maximum allowable temperature	425 °C @ 46 bar g	
Minimum allowable temperature	-29 °C	
PMO Maximum operating pressure for saturated steam service	70 bar g	
TMO Maximum operating temperature	425 °C @ 46 bar g	
Minimum operating temperature	0 °C	
	FTC80-45	45 bar
ΔPMX Maximum differential pressure	FTC80-62	62 bar
	FTC80-80	70 bar
Designed for a maximum cold hydraulic test pressure of	150 bar g	

## Capacities (in accordance with ISO 7842)



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

Size	A		B		C	D	Withdrawal distance		Weight	
	Socket weld	Flanged PN100	BDV2	Plug			E Cover	F Screen	Socket weld	Flanged PN100
DN40 (1½")	555	755	430	390	324	110.5	55	260	112	118
DN50 (2")	555	785	430	390	324	110.5	55	260	112	118



## 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.

## How to order

**Example:** 1 off Spirax Sarco DN40 FTC80-45 (R-L) ball float steam trap with flanged EN 1092 PN100 connections and screwed BDV2 manual air vent complete with 3.1 certification for the FTC80 and BDV2.

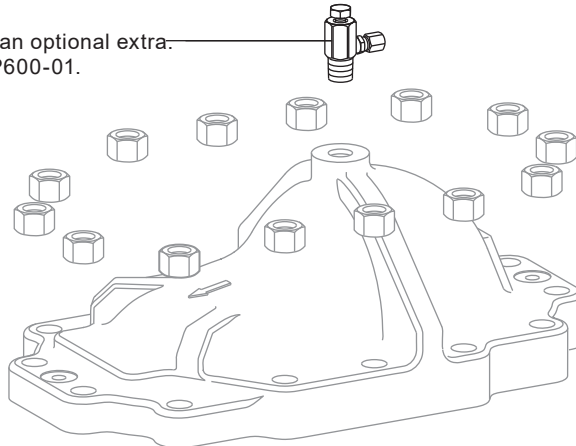
## Spare parts

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

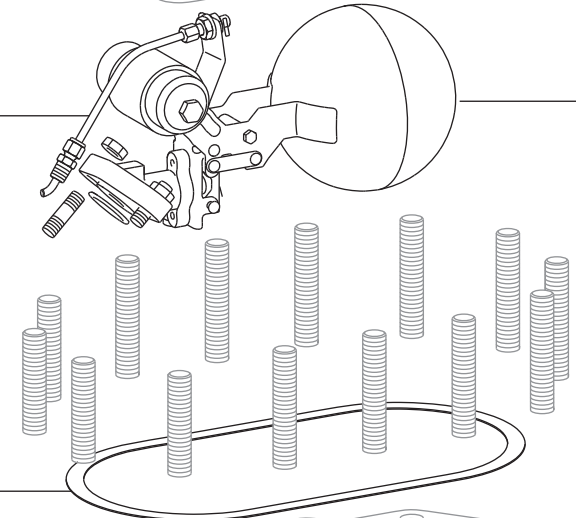
### Available spares

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>

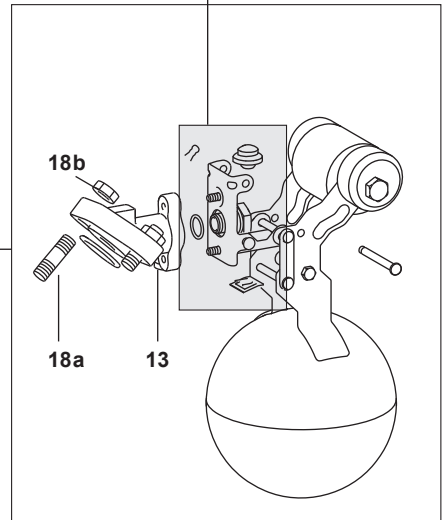
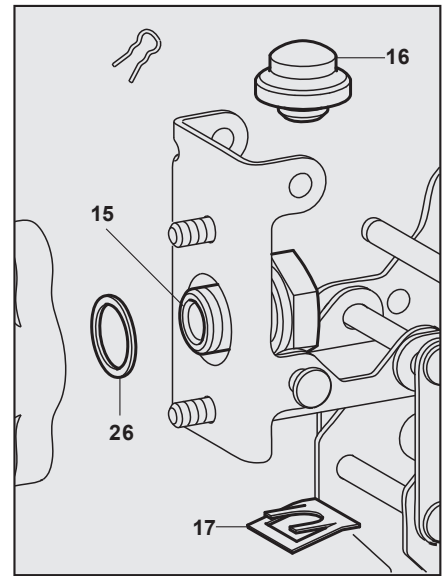
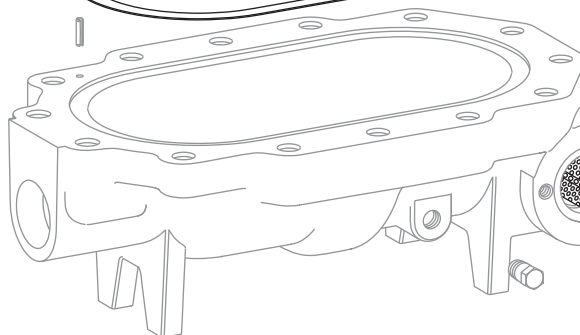
**Item 12** The BDV2 air vent is an optional extra. For ordering this unit see TI-P600-01.



**32**  
(Optional - fixed bleed assembly)



**3**



**18b**

**18a**

**13**

**8**

**9**

### 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 DN40 FTC80-45 ball float steam trap.