



TI-P005-10
CMGT Issue 4

BPC32F and BPC32YF

Carbon Steel Integrally Flanged Balanced Pressure Thermostatic Steam Traps

Description

The BPC32F and BPC32YF are carbon steel maintainable balanced pressure thermostatic steam traps having integrally flanged straight connections.

The BPC32F has an integral flat strainer screen and the BPC32YF has an integral cylindrical Y-type strainer. All pressure bearing components are produced by TÜV approved suppliers in accordance with AD-Merkblatt WO/TRD100. Both traps are unaffected by waterhammer and are available as follows:-

Standard units	BPC32F and BPC32YF	having 'STD' fill capsule
Also available	BPC32CVF and BPC32YCVF	having 'STD' fill capsule and check valve.

Note: When placing an order always state capsule fill.

Capsule fill and operation:

Standard capsule - Is marked with 'STD' for operation at approximately 12 °C below steam saturation temperature.

Optionally - The capsule can be supplied for sub-cooled 'SUB' operation at approximately 24 °C below steam saturation temperature or near-to-steam 'NTS' operation at approximately 6 °C below steam temperature.

Standards

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.

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

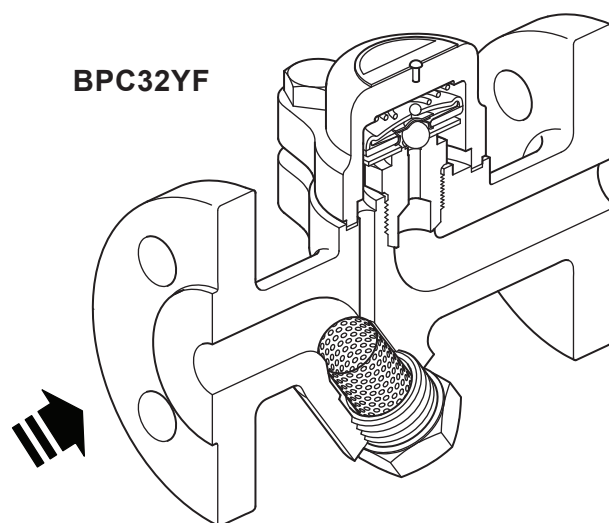
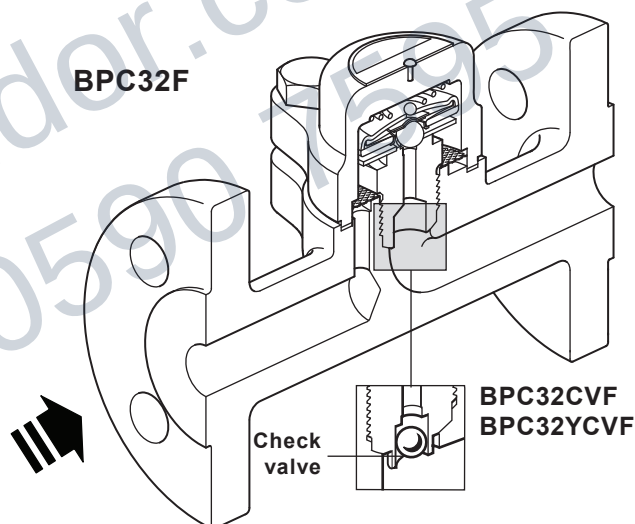
Sizes and pipe connections

DN15, DN20 and DN25

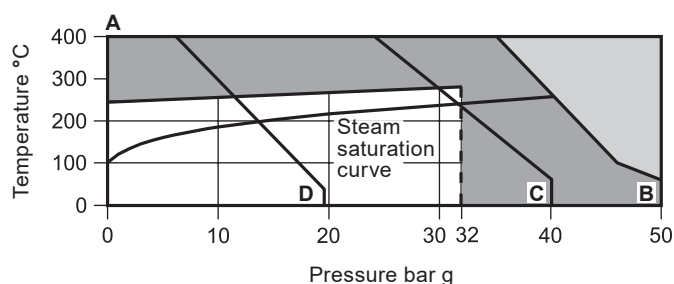
Standard flanges: EN 1092 PN40, ASME (ANSI) B 16.5

Class 150 or ASME (ANSI) B 16.5 Class 300.

For other connections please consult Spirax Sarco.



Pressure/temperature limits (ISO 6552)



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

The product should not be used in this region or beyond its operating range as damage to the internals may occur.

A - B Flanged ASME (ANSI) 300.

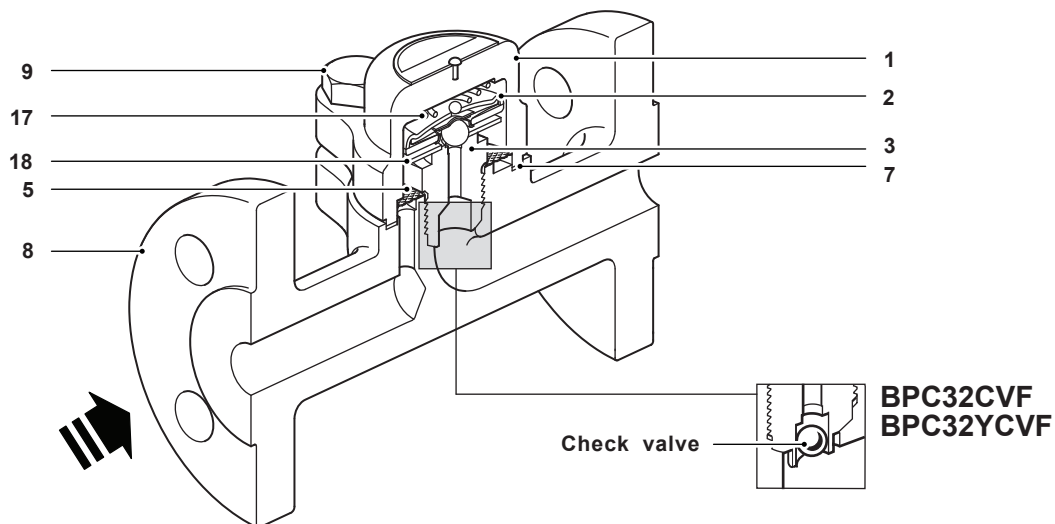
A - C Flanged EN 1092 PN40.

A - D Flanged ASME (ANSI) 150.

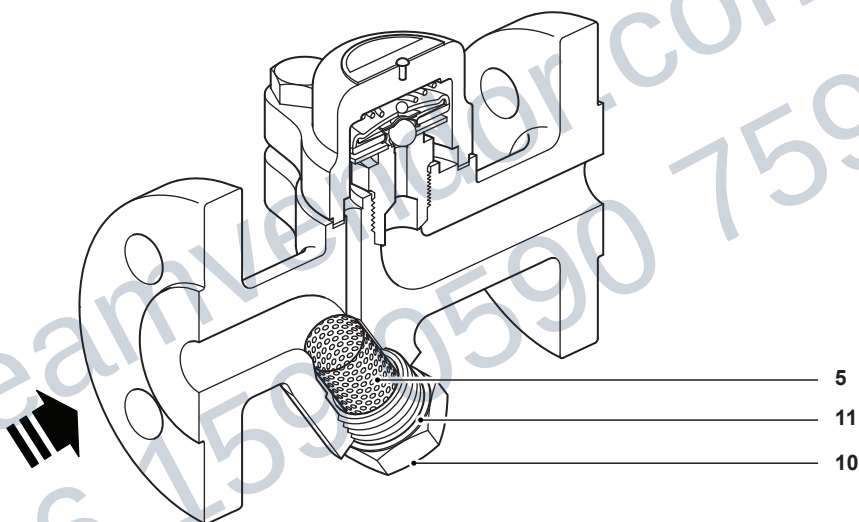
Body design conditions		ASME (ANSI) 300
PMA	Maximum allowable pressure	50 bar g @ 50 °C
TMA	Maximum allowable temperature	400 °C @ 35 bar g
Minimum allowable temperature		-60 °C
PMO	Maximum operating pressure for saturated steam service	32 bar g @ 281 °C
TMO	Maximum operating temperature	281 °C @ 32 bar g
Minimum operating temperature		0 °C
BPC32 and BPC32Y product ranges are verified safe for use under full vacuum conditions for integral and welded flanged connections.		
Note: Please consult Spirax Sarco to confirm full vacuum suitability, for other pipe connections.		
Designed for a maximum cold hydraulic test pressure of		75 bar g

Materials

BPC32F



BPC32YF



No.	Part	Material
1	Cover	Carbon steel DIN 17243 C22.8 (W/S 1.0460) ASTM A105N
2	Capsule	Stainless steel
3	Valve seat	Stainless steel BS 970 431 S29
5	Strainer screen	Stainless steel AISI 304
7	Cover gasket	Stainless steel reinforced exfoliated graphite
8	Body	Carbon steel 1.0619+N ASTM A216 WCB
9	Cover bolts	Stainless steel (M10 x 30) A2-70
10	Strainer cap	Carbon steel DIN 17243 C22.8 (W/S 1.0460) ASTM A105N
11	Strainer cap gasket	Stainless steel BS 1449 304 S16
17	Spring	Stainless steel
18	Spacer plate	Stainless steel

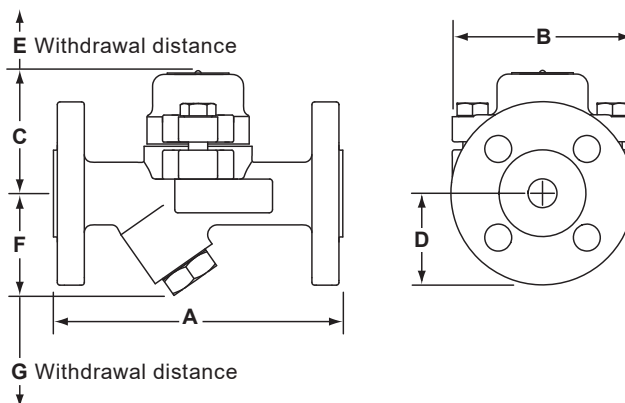
Dimensions/weights (approximate) in mm and kg

BPC32F

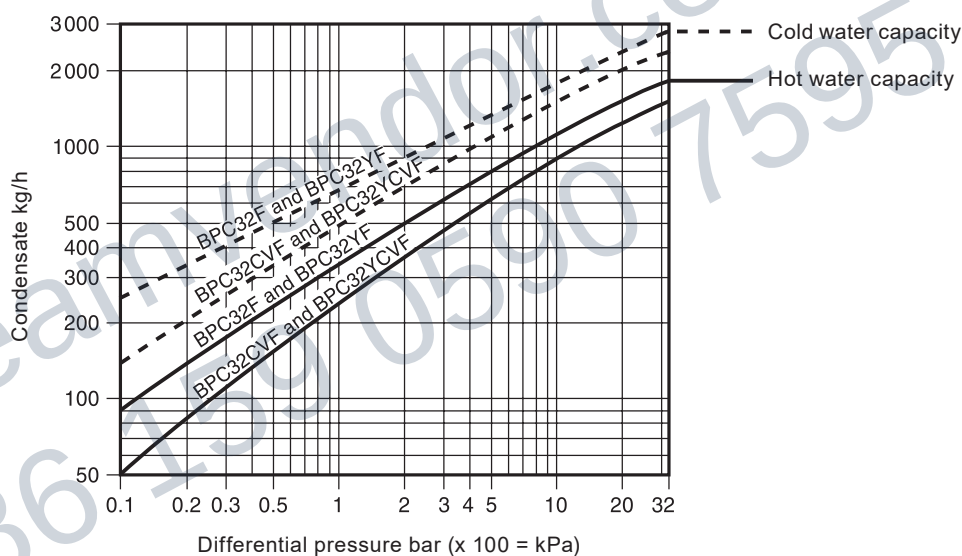
Size	A	B	C	D	E	F	G	Weight
DN15	150	94	64	17	37	-	-	2.9
DN20	150	94	64	19	37	-	-	3.5
DN25	160	94	64	23	37	-	-	4.1

BPC32YF

Size	A	B	C	D	E	F	G	Weight
DN15	150	94	64	-	37	55	28	3.1
DN20	150	94	64	-	37	56	28	3.7
DN25	160	94	64	-	37	58	28	4.4



Capacities



Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P005-02) supplied with the product.

Installation note:

The BPC32F and BPC32YF are designed for installation in any position, horizontal or vertical.

It is recommended that a non-return valve is fitted when discharging condensate into return lines where backpressure is experienced.

It is also recommended that a diffuser is fitted when discharging to atmosphere.

For ease and maintenance, consideration should be given to fitting isolation valves upstream and downstream of the steam trap.

Disposal

These products are recyclable. No ecological hazard is anticipated with the disposal of these products, providing due care is taken.

How to order

Example: 1 off Spirax Sarco DN15 BPC32F carbon steel bodied maintainable balanced pressure thermostatic steam trap having flanged EN 1092 PN40 connections and an integral strainer screen. The trap is to be fitted with an 'STD' fill capsule for operation at approximately 12 °C below steam saturation temperature.

Spare parts

The spare parts available are shown in solid outline. Parts drawn in broken line are not supplied as spares.

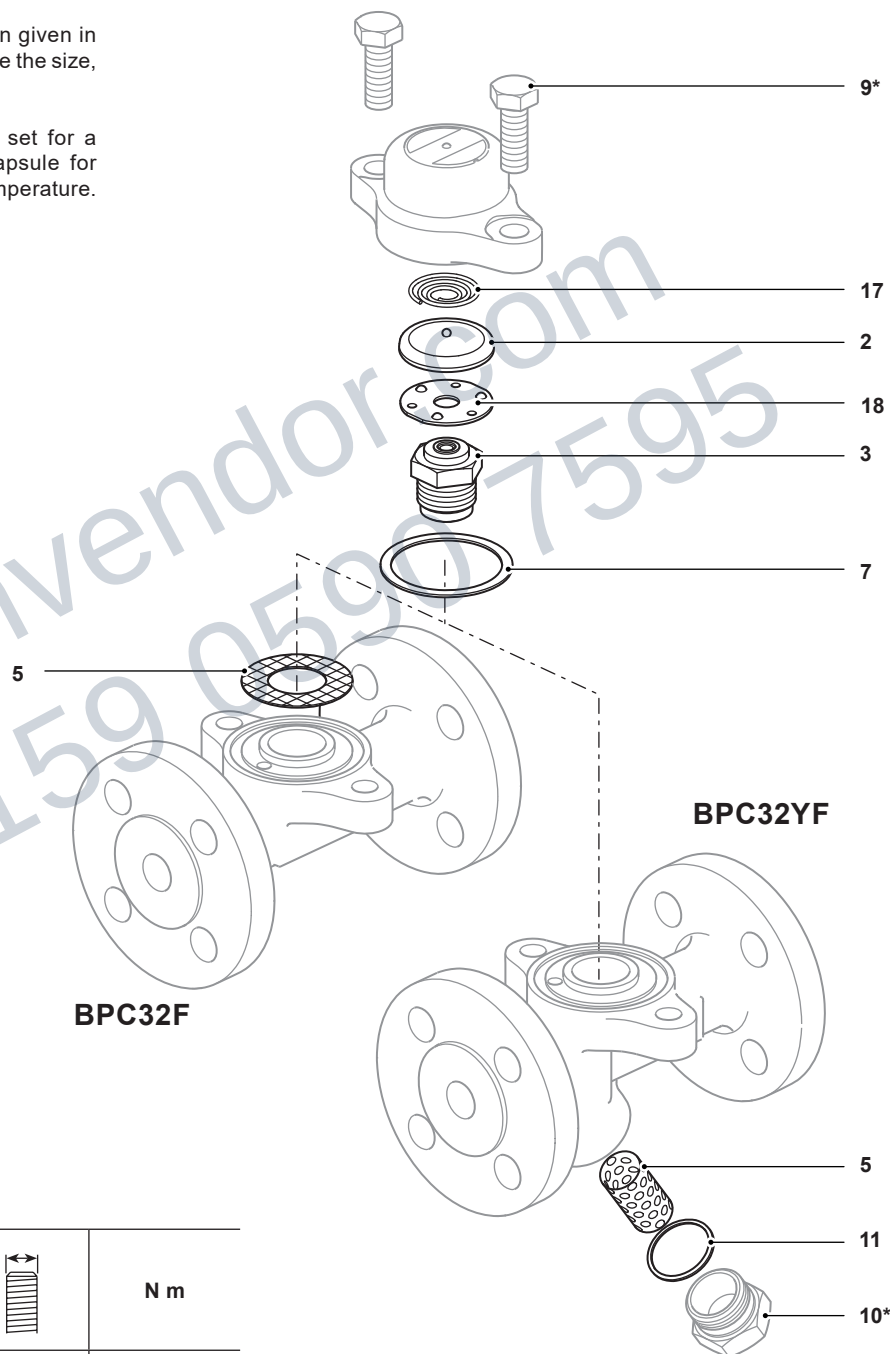
Available spares

Capsule and seat assembly set			2, 3, 17, 18
Strainer screen	BPC32F	(3 off)	5
Strainer screen and gasket	BPC32YF	(1 off each)	5, 11
Set of cover gaskets		(packet of 3)	7
Strainer cap gasket		(packet of 3)	11

How to order spares

Always order spares by using the description given in the column headed 'Available spares' and state the size, model number and capsule reference.

Example: 1 - Capsule and seat assembly set for a Spirax Sarco DN25 BPC32F - 'STD' fill capsule for operation at 12 °C below steam saturation temperature.



Recommended tightening torques

Item	Part	 or mm		N m
3	Valve seat	24 A/F		115 - 125
9	Cover bolts	16 A/F	M10 x 30	23 - 27
10	Strainer cap	27 A/F		120 - 135

* **Note:** Items 9 and 10 are not available as spares.