



TI-P005-01
ST Issue 6

BPC32 and BPC32Y

Carbon Steel

Balanced Pressure Thermostatic Steam Traps

Description

The BPC32 and BPC32Y are carbon steel maintainable balanced pressure thermostatic steam traps with straight connections.

The BPC32 has an integral flat strainer screen and the BPC32Y 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 BPC32 and BPC32Y having 'STD' fill capsule

Also available BPC32CV and BPC32YCV 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 97/23/EC.

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

½", ¾", and 1" screwed BSP or NPT.

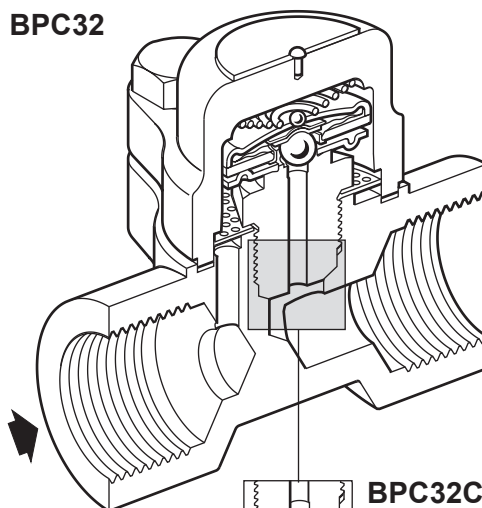
½", ¾", and 1" socket weld ends to BS 3799.

½", ¾", and 1" butt weld ends to EN 12 627.

DN15, DN20 and DN25 standard flange to EN 1092 PN40.

ASME B 16.5 Class 150 and 300, JIS/KS 10K and JIS/KS 20K.

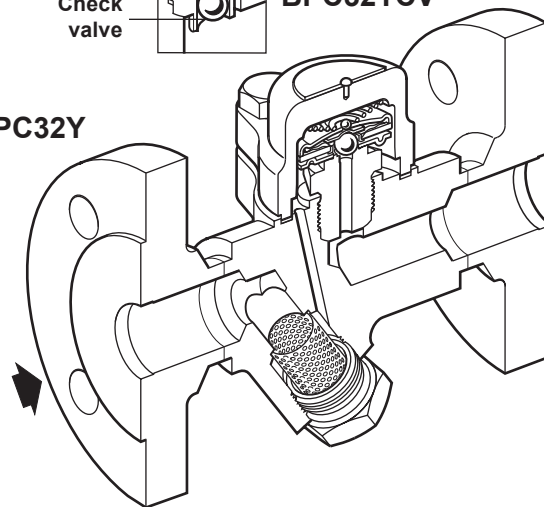
BPC32



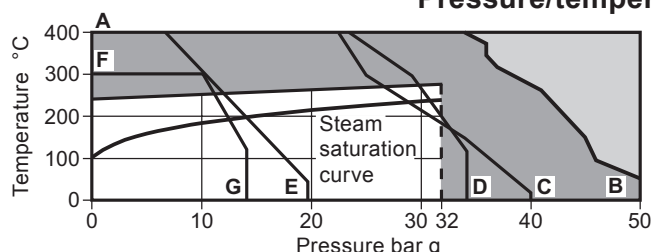
Check valve

BPC32CV
BPC32YCV

BPC32Y



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 Screwed, socket weld, butt weld and flanged ANSI 300.

A - C Flanged EN 1092 PN40.

A - D Flanged JIS/KS 20K.

A - E Flanged ANSI 150.

F - G Flanged JIS/KS 10K.

Body design conditions PN40

PMA Maximum allowable pressure 50 bar g @ 50 °C

TMA Maximum allowable temperature 400 °C @ 35 bar g

Minimum allowable temperature -60 °C

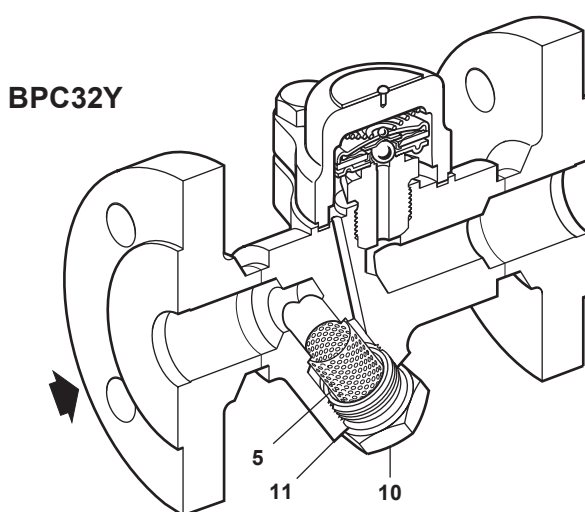
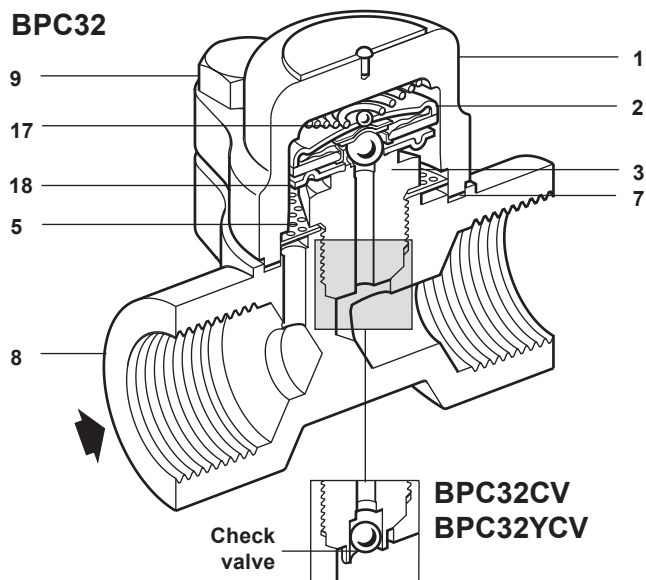
PMO Maximum operating pressure for saturated steam service 32 bar g @ 281 °C

TMO Maximum operating temperature 281 °C @ 32 bar g

Minimum operating temperature 0 °C

Note: For lower operating temperatures consult Spirax Sarco.

Designed for a maximum cold hydraulic test pressure of: 75 bar g



Materials

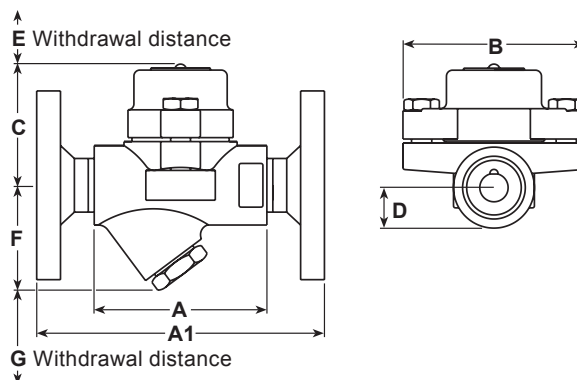
No.	Part	Material
1	Cover	Carbon steel DIN 17243 C22.8 (W/S 1.0460) ASTM A105N
2	Capsule	Stainless steel
3	Valve seat	Stainless steel BS 970 431 S29
5	Strainer screen	Stainless steel AISI 304
7	Cover gasket	Stainless steel reinforced exfoliated graphite
8	Body/flanges	Carbon steel DIN 17243 C22.8 (W/S 1.0460) ASTM A105N
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 BPC32

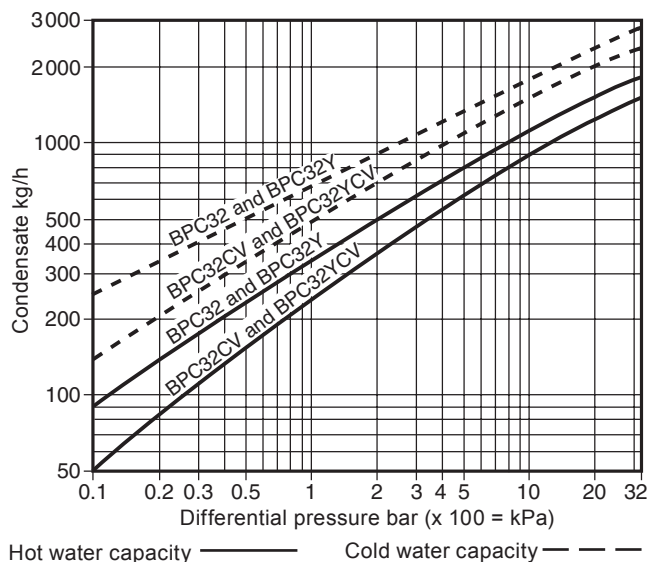
Size									Weight	
	A	A1	B	C	D	E	F	G	Scrd/SW/BW	Flgd
½" DN15	95	150	94	64	17	37	-	-	1.4	2.9
¾" DN20	95	150	94	64	19	37	-	-	1.4	3.5
1" DN25	95	160	94	64	23	37	-	-	1.5	4.1

BPC32Y

Size									Weight	
	A	A1	B	C	D	E	F	G	Scrd/SW/BW	Flgd
½" DN15	95	150	94	64	-	37	54	28	1.6	3.1
¾" DN20	95	150	94	64	-	37	54	28	1.6	3.7
1" DN25	95	160	94	64	-	37	54	28	1.8	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 BPC32 and BPC32Y 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 ½" BPC32 carbon steel bodied maintainable balanced pressure thermostatic steam trap. Screwed BSP with '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.

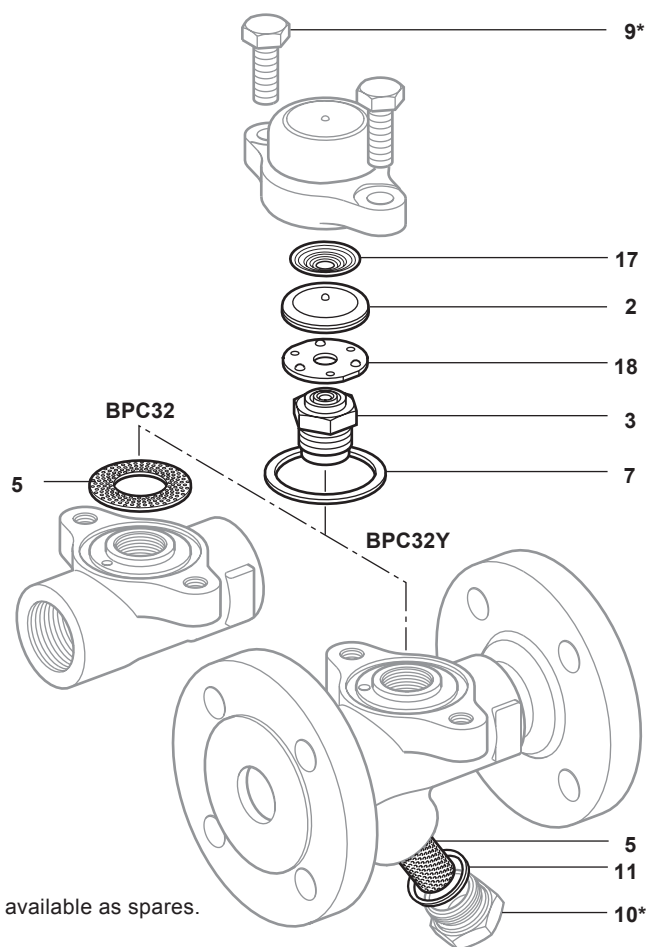
Available spares

Capsule and seat assembly set			2, 3, 17, 18
Strainer screen	BPC32	(3 off)	5
Strainer screen and gasket	BPC32Y	(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 BPC32 - 'STD' fill capsule for operation at 12 °C below steam saturation temperature.



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

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