

spirax sarco®

BPC32 and BPC32Y Carbon Steel Balanced Pressure Thermostatic Steam Trap

The standard welded stainless steel element is self-adjusting over the entire operating pressure range and will discharge condensate at approximately 22°F (12°C) below saturated steam temperature. The element is resistant to waterhammer, and up to 572°F (318°C) steam temperature can be tolerated by this trap. **The BPC32Y has an integral "Y" strainer.**

Model ⇄	BPC32	BPC32Y
PMO	465 psig	
Sizes	1/2", 3/4", and 1"	
Connections	NPT, SW, FLG ANSI 150 & 300	
Construction	Forged steel body and cover, stainless steel internals	
Options	Special Capsule fill near to steam and subcool. Blowdown valve for BPC32Y, Check Valve.	

Typical Applications

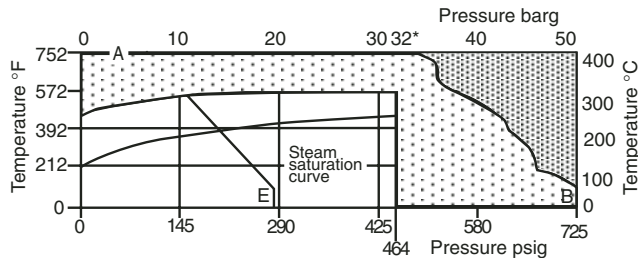
Kitchen and laundry equipment, steam tracers, hospital equipment, steam coils, steam radiators and steam main drip stations.

Limiting Operating Conditions (ISO 6552)

Body design conditions		PN40	
PMA	-Maximum allowable pressure	725 psig	50 barg
TMA	-Maximum allowable temperature	752°F	400°C
PMO	-Maximum operating pressure	465 psig	32 barg
TMO	-Maximum operating temperature	572°F	300°C
Designed for a maximum cold hydraulic test pressure of		1088 psig	75 barg

Note: PMA & TMA are pressure/temperature related - see chart below.

Operating range



- 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.

*PMO Maximum operating pressure 32 barg.
A-B Screwed, socket weld, butt weld and flanged ANSI 300
A-E Flanged ANSI 150

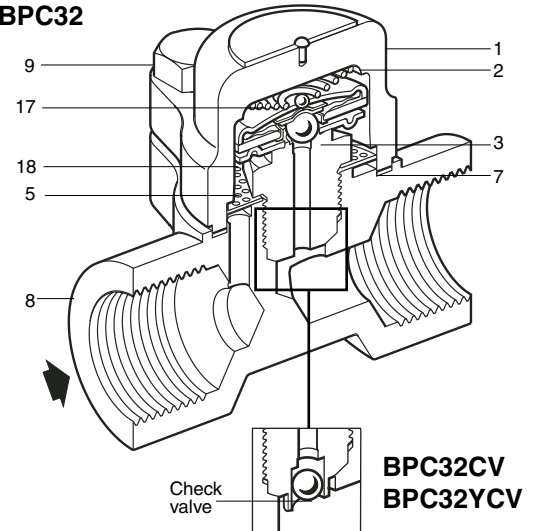
Materials

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	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	

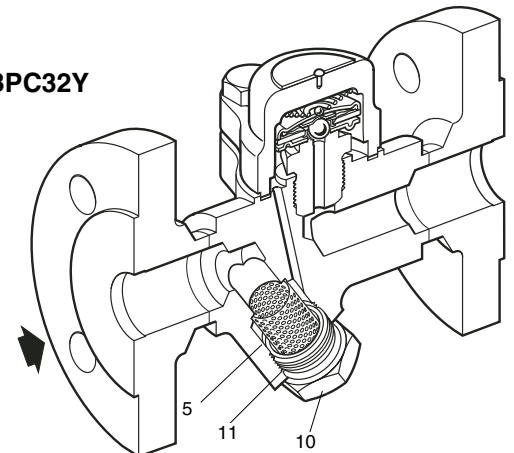
Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.

In the interests of development and improvement of the product, we reserve the right to change the specification.

BPC32



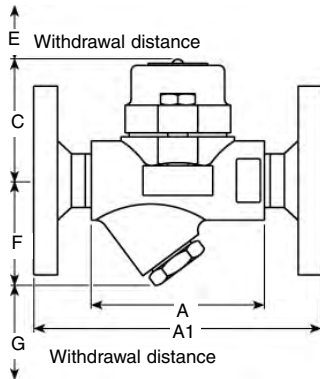
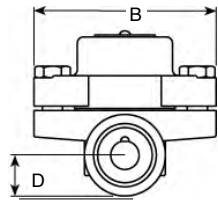
BPC32Y



Capsule fill and operation:

Standard capsule - is marked with "STD" for operation at approximately 22°F below steam saturation temperature.
Optionally - The capsule can be supplied for sub-cooled "SUB": operation at approximately 43°F below steam saturation or "NTS" at 7°F below steam temperature.

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Dimensions (NOMINAL) IN INCHES AND MILLIMETERS									WEIGHT SCR/BW	WEIGHT FLGD
Size	A	A1	B	C	D	E	F	G		
BPC32										
1/2" DN15	3.7 95	5.9 150	3.7 94	2.5 64	0.7 17	1.5 37	-	-	3.1 lb 1.4 kg	6.4 lb 2.9 kg
3/4" DN20	3.7 95	5.9 150	3.7 94	2.5 64	0.7 17	1.5 37	-	-	3.1 lb 1.4 kg	7.7 lb 3.5 kg
1" DN25	3.7 95	5.9 160	3.7 94	2.5 64	0.7 23	1.5 37	-	-	3.3 lb 1.5 kg	9.0 lb 4.1 kg
BPC32Y										
1/2" DN15	3.7 95	5.9 150	3.7 94	2.5 64	-	1.5 37	2.1 53	1.1 28	3.5 lb 1.6 kg	6.8 lb 3.1 kg
3/4" DN20	3.7 95	5.9 150	3.7 94	2.5 64	-	1.5 37	2.1 54	1.1 28	3.5 lb 1.6 kg	8.2 lb 3.7 kg
1" DN25	3.7 95	6.3 160	3.7 94	2.5 64	-	1.5 37	2.3 58	1.1 28	4 lb 1.8 kg	9.7 lb 4.4 kg

Sample Specification

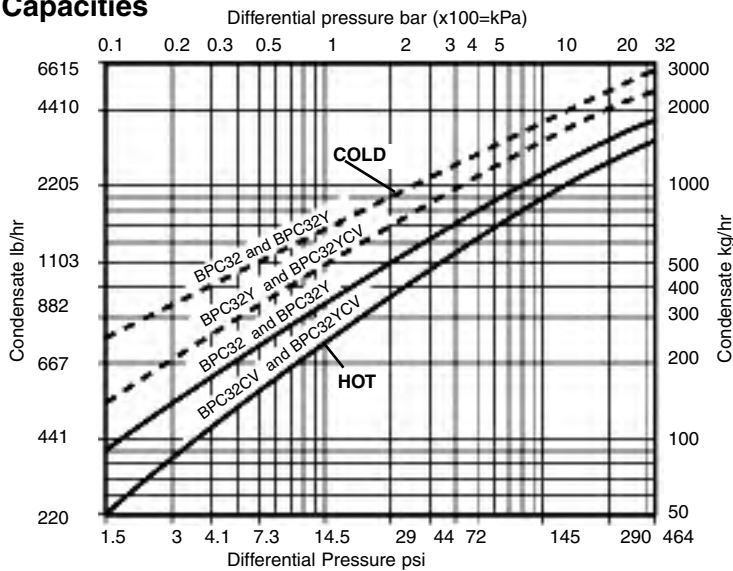
Steam trap shall be Spirax Sarco BPC32/BPC32Y balanced pressure thermostatic-type which self-adjusts to all pressures to 464 psig. Body construction of forged steel with side inlet and outlet threaded (or socket weld) ends containing an integral stainless steel strainer. Shall be provided with blowdown when required, and be maintainable in the field without disturbing the piping. Operating element capsule of design capable of resisting waterhammer and freezing conditions, and can withstand up to 572°F temperatures.

Spare parts

Capsule and seat assembly seat			
2, 3, 17, 18			
Strainer screen	BPC32	(3 of each)	5
Strainer screen & gasket	BPC32Y	(1 of each)	5, 11

Set of cover gaskets	(packet of 3)	7
Strainer cap gasket	(packet of 3)	11

Capacities



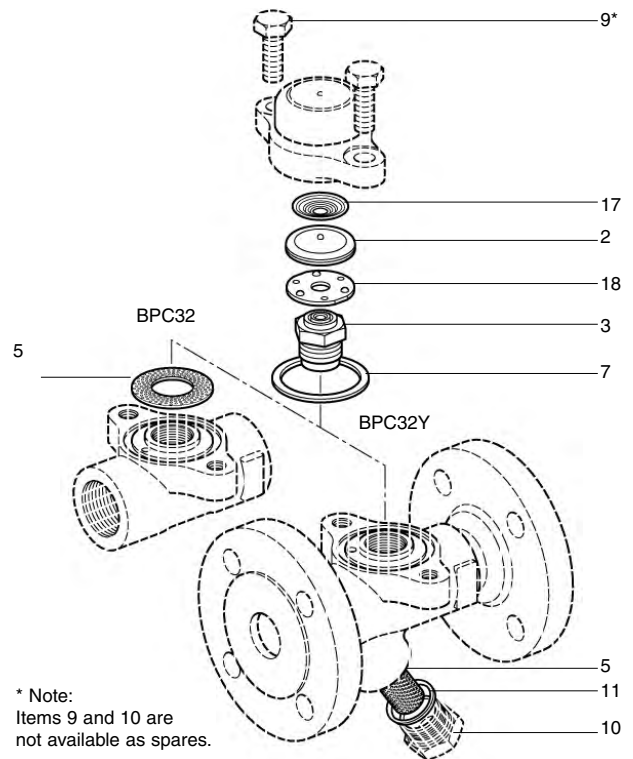
Installation

The trap is designed for installation with the capsule in a horizontal plane and the cover at the top, preferably with a drop leg immediately preceding the trap. When welding the trap into the pipeline, there is no need to remove the element, providing the welding is done by the electric arc method. Full port isolating valves should be installed upstream and downstream of the trap.

Maintenance

This product can be maintained without disturbing the piping connections. Complete isolation of the connector from both supply and return line is required before any servicing is performed. The trap should be disassembled periodically for cleaning of the strainer screen and inspection and cleaning of the valve head and seat. Worn or damaged parts should be replaced using a complete Capsule and Seat Assembly Set.

Complete installation and maintenance instructions are given in the IM-P005-02 sheet, which accompanies the product.



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

Recommended tightening torques

Item	Part	mm	FT/LB
3	Valve seat	24 A/F	85 - 92
9	Cover bolts	17 A/F M10 x 30	17 - 20
10	Strainer cap	27 A/F	89 - 100