TI-P122-01 ST Issue 6

# Spirax Sarco BPT13 Brass

# **Balanced Pressure Thermostatic Steam Trap**

#### **Description**

The BPT13 is a readily maintainable brass bodied, balanced pressure thermostatic steam trap.

The standard trap is designated BPT13A and has angled connections.

#### Available types

BPT13A	Angled connections (standard trap)			
BPT13AX	Angled connections with strainer screen			
BPT13S	Straight connections			
BPT13SX	Straight connections with strainer screen			
BPT13UA	Angled connections, union inlet			
BPT13UAX	Angled connections, union inlet with strainer screen			
BPT13US	Straight connections, union inlet			
BPT13USX	Straight connections, union inlet with strainer screen			

Capsule fill and operation - When placing an order always state the capsule fill:

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. For critical applications the 'NTS' fill capsule should be selected which operates at approximately 4 °C below steam saturation temperature.

#### **Standards**

This product fully complies with the requirements of the European Pressure Equipment Directive 97/23/EC.

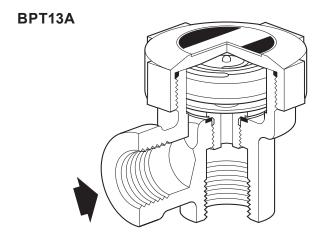
#### Certification

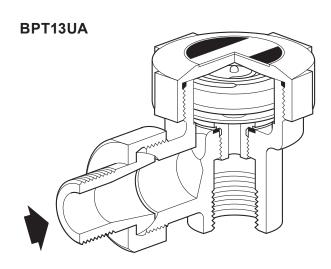
This product is available with a manufacturers' Typical Test Report.

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

## Sizes and pipe connections

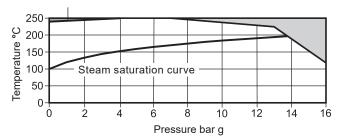
3/8", 1/2" and 3/4" screwed BSP (BS 21 parallel) or NPT.





# Pressure/temperature limits (ISO 6552)

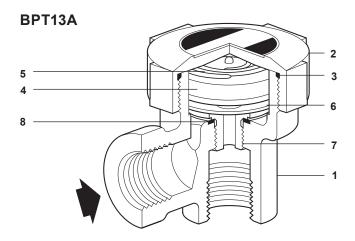
# The product should not be used in this region or beyond its operating range as damage to the internals may occur.

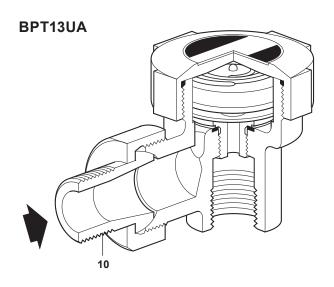


## The product **must not** be used in this region.

Body design conditions PN				
РМА	Maximum allowable pressure 16 bar g @ 12			
TMA	Maximum allowable temperature	250 °C @ 7 bar g		
Minim	-20 °C			
РМО	Maximum operating pressure	13 bar g @ 220 °C		
ТМО	Maximum operating temperature	250 °C @ 7 bar g		
Minimum operating temperature 0 °C				
Designed for a maximum cold hydraulic test pressure of 24 bar g				

# **Materials**

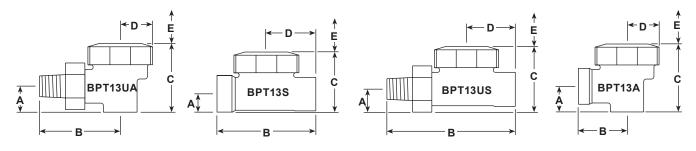




No.	Part	Material	
1	Body	Brass	BS EN 12165 CW 617N
2	Сар	Brass	BS EN 12165 CW 617N
3	'O' ring	Synthetic rubbe fluorocarbon	r high fluorine
4	Capsule	Stainless steel	
5	Spring	Stainless steel	BS 2056 302 S26
6	Spacer plate	Stainless steel	BS 1449 304 S16
7	Valve seat	Stainless steel	BS 970 431 S29
8	Valve seat gasket	Stainless steel	BS 1449 304 S11
9 *	Strainer screen	Stainless steel	ASTM A240 316L
10	Union nut and tailpiece	Brass	BS EN 12165 CW 617N

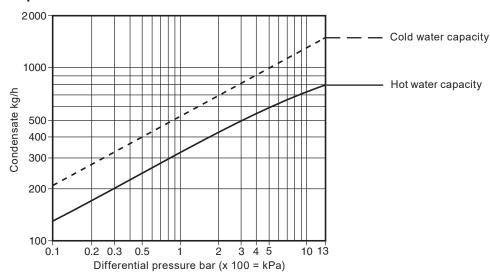
<sup>\*</sup> Note: Item 9 is shown clearly on the next page

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



Туре	Size	Α	В	С	D	E	Weight
DDT42A	1/2"	20	38	53	25	55	0.40
BPT13A	3/4"	27	40	62	25	55	0.45
DDT420	1/2"	14	76	47	38	55	0.45
BPT13S	3/4"	20	80	53	40	55	0.50
BPT13UA	1/2"	20	67	53	25	55	0.50
	3/4"	27	75	62	25	55	0.55
DDT40UC	1/2"	19	105	52	38	55	0.55
BPT13US	3/4"	22	115	57	40	55	0.60

# **Capacities**



## Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P122-02) which is supplied with the product.

#### Installation note:

The trap is designed for installation with the capsule in a horizontal plane with the cap at the top, preferably with a drop leg immediately proceding the trap.

## Disposal

This product is recyclable. No ecological hazard is anticipated with the disposal of this product provided due care is taken. However, if the recycling process involves a temperature approaching 315 °C, caution is advised regarding decomposition of the fluorocarbon rubber component.

#### How to order

Example: 1 off Spirax Sarco ½" BPT13AX balanced pressure thermostatic steam trap with screwed BSP connections. Brass body with internal strainer screen and 'STD' fill capsule for operation 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.

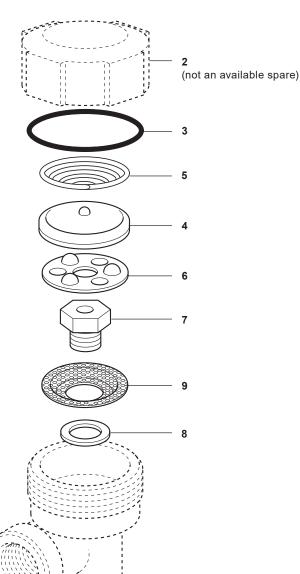
#### Available spares

Maintenance kit			3, 4, 5, 6, 7, 8, 9
Cap gasket	Earlier models	(packet of 3)	3
<b>Note:</b> Earlier models were fitted with conventional gaskets.  Current models are fitted with an 'O' ring to seal the cap.	Current models	(packet of 3 'O' rings)	3
Screen		(packet of 3)	3, 9

## 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 for a Spirax Sarco ½" BPT13S balanced pressure thermostatic steam trap with screwed BSP connections. Brass body with internal strainer screen and 'STD' fill capsule for operation approximately 12 °C below steam saturation temperature.



#### Recommended tightening torques

Item	Part		or mm	N m
2	Сар	'O' ring	50 A/F	50 -60
		Gasket	50 A/F	90 - 110
7	Seat		17 A/F	35 - 40