



## HP45 Bimetallic Steam Trap

### Description

The Spirax Sarco HP45 bimetallic steam trap is made of forged steel, and designed for draining high pressure, high temperature steam lines and processes.

This steam trap is specially designed for HP steam and has a reinforced stainless steel insert within the body and can be repaired inline. It operates with no loss of steam, and quickly drains air, non-condensable gases and large quantities of cold water on start-up.

Normally open in the event of failure, it has a built-in strainer screen and an external device for adjusting the discharge temperature of the condensate.

### Standards

This product fully complies with the requirements of the European Pressure Equipment Directive 2014/68/EU.

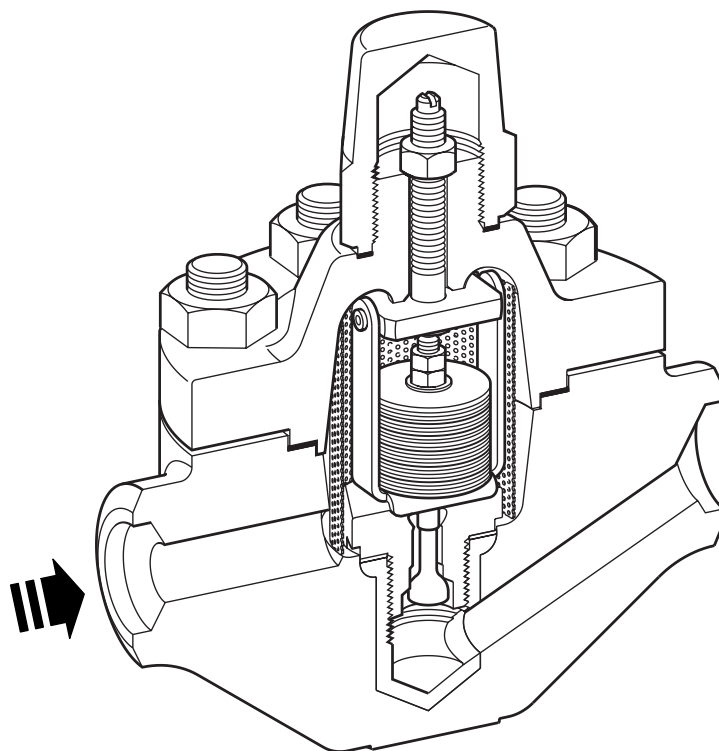
### Certification

This product is available with certification to EN 10204 3.1.

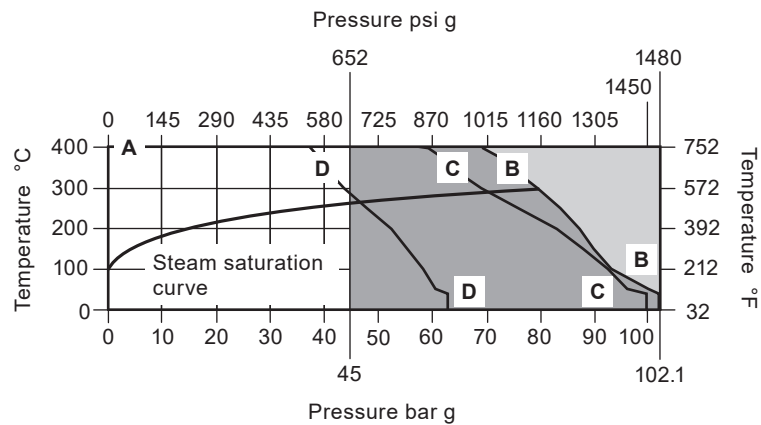
**Note:** All certification/inspection requirements must be stated at the time of order placement.

### Sizes and pipe connections

½", ¾" and 1" screwed BSP T Rp (ISO 7-1)/NPT, socket weld ends to ANSI B 16.11 and butt weld ends to ANSI B 16.25.  
DN15, DN20 and DN25 Flanged PN63, PN100 and ANSI 600.



Pressure/temperature limits




**A-B-B** Flanged Class 600, Screwed BSP/NPT, Socket weld and butt weld ends

**A-C-C** Flanged PN100

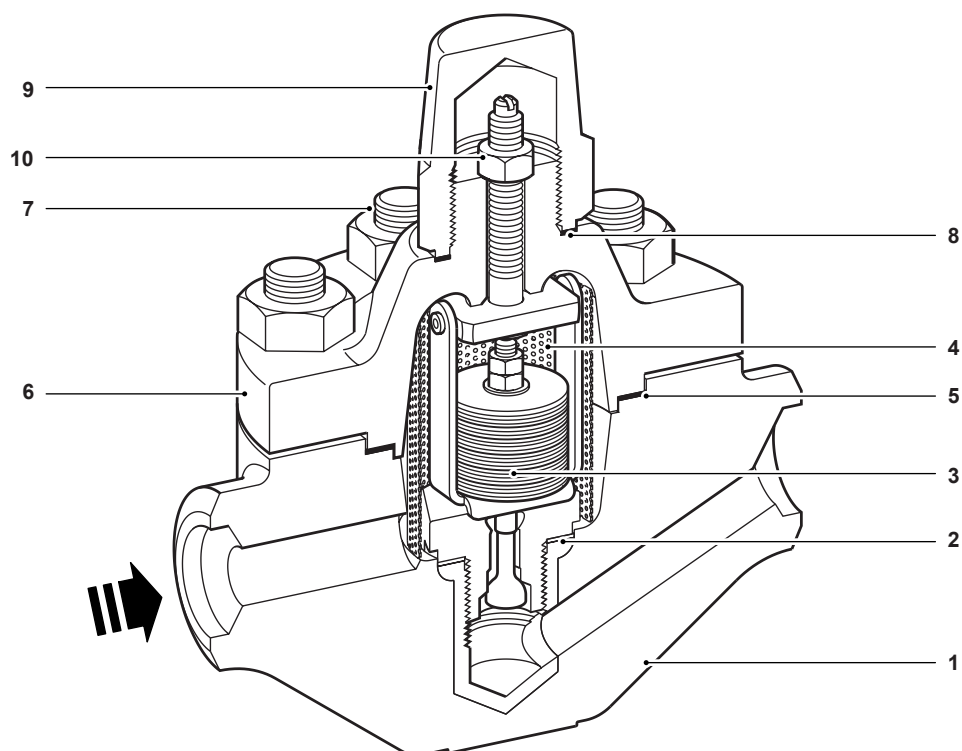
**A-D-D** Flanged PN63

 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.

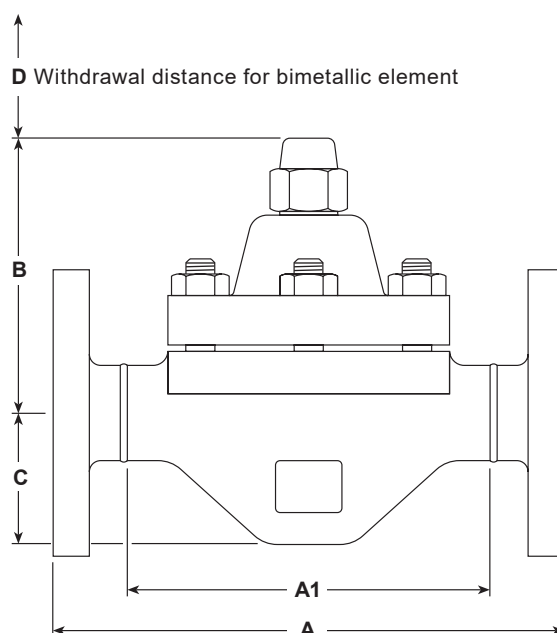
Body design conditions		Class 600 to ANSI B 16.34	
PMA	Maximum allowable pressure	102 bar g @ 38 °C	1479 psi g @ 100 °F
TMA	Maximum allowable temperature	425 °C @ 57.5 bar g	797 °F @ 833 psi g
Minimum allowable temperature		0 °C	32 °F
PMO	Maximum operating pressure	45 bar g @ 425 °C	653 psi g @ 797 °F
TMO	Maximum operating temperature	425 °C @ 45 bar g	797 °F @ 653 psi g
Minimum operating temperature		0 °C	32 °F
<b>Note:</b> For lower temperatures consult Spirax Sarco.			
Minimum inlet pressure for satisfactory operation		15 bar g	218 psi g
ΔPMX The backpressure for correct operation must not exceed 90% of the upstream pressure.			
Product is safe for use under full vacuum conditions			
Designed for a maximum cold hydraulic test pressure of:		166 bar g	2407 psi g

## Materials



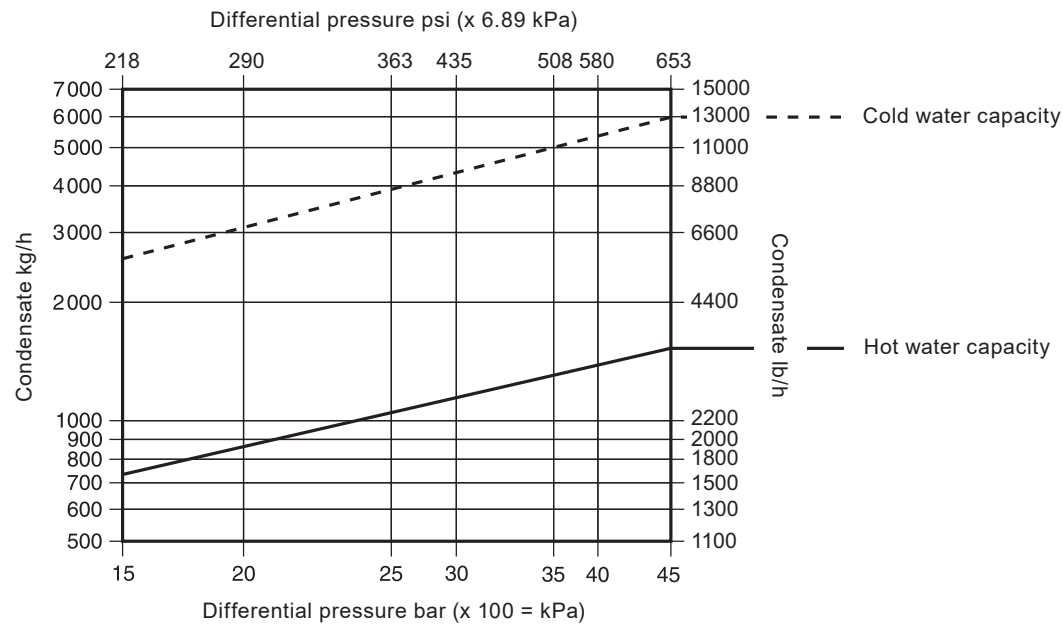
No.	Part	Material	
1	Body	Steel	ASTM A105N
2	Valve seat gasket	Stainless steel	AISI 304
3	Bimetallic element	Stainless steel	
4	Strainer screen	Stainless steel	AISI 304L
5	Cover gasket	Spiral wound stainless steel and graphite (asbestos free)	
6	Cover	Steel	ASTM A105N
7	Cover stud	Steel	ASTM A193 Gr. B7
	Cover nut	Steel	ASTM A194 Gr. 2H
8	Blind nut gasket	Stainless steel tanged reinforced graphite	
9	Blind nut	Steel	ASTM A105
10	Lock-nut	Steel	

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



Size		A	A1	B	C	D	Weight
1/2" 3/4" 1"			160 (6.3)				6.5 (14)
DN15	PN63/PN100	235 (9.3)		124 (4.9)	58 (2.3)	150 (5.9)	11.0 (24)
	ANSI 600						9.5 (21)
DN20	PN63/PN100						11.5 (25)
	ANSI 600						10.0 (22)
DN25	PN63/PN100						12.0 (26)
	ANSI 600						10.5 (23)

Capacities



Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P623-03) supplied with the product.

Disposal

The 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 ½" HP45 bimetallic steam trap with socket weld end connections.

## Spare parts

The spare parts available are detailed below. No other parts are supplied as spares.

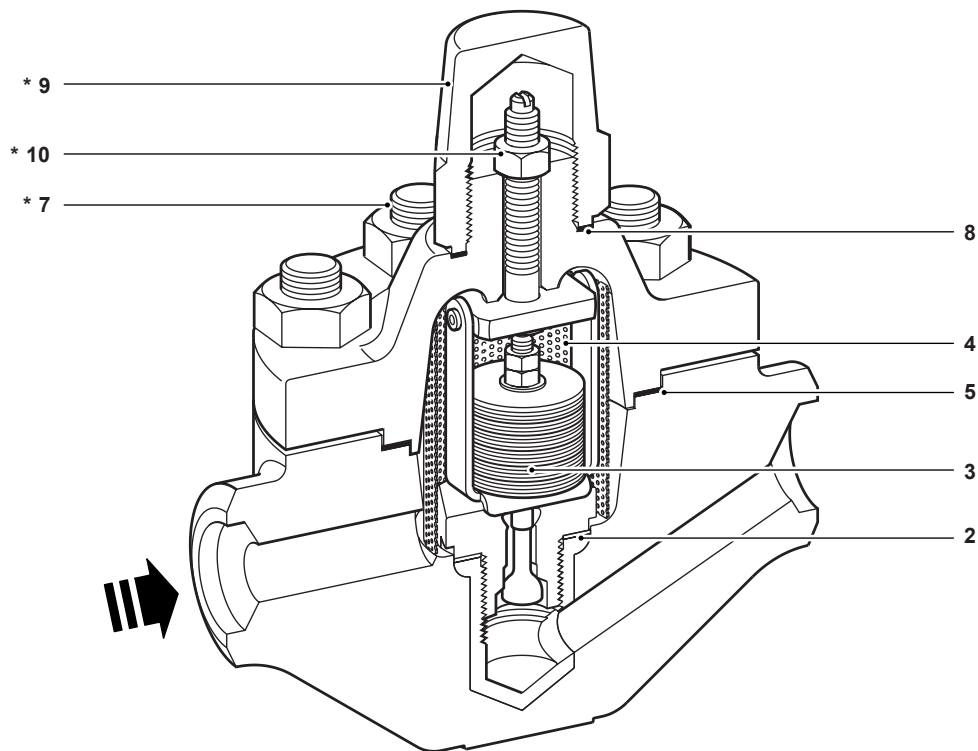
### Available spare

Bimetallic assembly kit	2, 3, 4, 5, 8
Cover gasket (pack of 3)	5
Gasket set	2, 5, 8
Strainer screen	4

### How to order spares



Always order spares by using the description given in the column headed 'Available spare' and state the size and model of the bimetallic steam trap.

**Example:** 1 - Bimetallic assembly kit for a Spirax Sarco 1" HP45 bimetallic steam trap.



\* Items 7, 9 and 10 are not available spares.

### Recommended tightening torques

Item	 or mm 	N m	ft lbf
3	36 A/F	120 - 132	89 - 96
7	22 A/F	70 - 77	52 - 57
9	29 A/F	80 - 88	59 - 65
10	13 A/F	5	4