

Description

This is a Balanced Pressure Thermostatic Steam Trap with strainer. The operating principle is based on the expansion and contraction of a temperature sensitive capsule. The elements are filled with a liquid whose saturation temperature is lower than that of water, at the same pressure. With sub-cooled condensate the elements contract. When steam is formed the pressure inside the element causes expansion to close the valve.

Note: The Integral Blow-down valve is an assembly designed to be fitted to BP112 Thermostatic steam trap as an extra option.



Limiting Conditions

Maximum Body Design Conditions	PN 50
PMO - Maximum Operating Pressure	10 kgf/cm ²
TMO - Maximum Operating Temperature	240 °C
PMA - Maximum Allowable Pressure	50 kgf/cm ²
TMA - Maximum Allowable Temperature	400 °C
Cold Hydraulic Test Pressure	75 kgf/cm ²

Capsule Options

Standard capsule is Sub-cooling 5 for operation at approximately 5°C below steam saturation temperature.

Optionally the capsule can be supplied for sub-cooled 10 for operation at approximately 10°C below steam saturation temperature.

Operating Range

ΔPMX – Maximum differential pressure 10 kgf/cm²

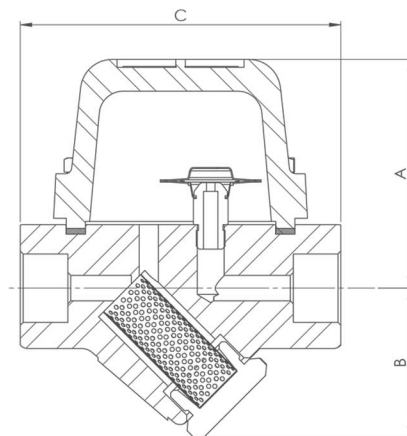
Sizes and Pipe Connections

1/2", 3/4" and 1" Screwed (ANSI B1.20.1) - Socket Weld (ANSI B16.11) - Flanged (ANSI B16.5)

Dimensions / Weights (Approximate) mm and kg

Size	A	B	C	Weight
1/2"	80	60	110	3
3/4"	80	60	110	3
1"	80	60	110	3

Constructions are a bit different according the sizes

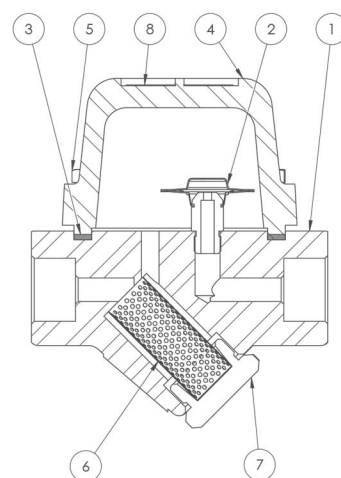


Balanced Pressure Thermostatic Steam Traps - 112

Materials

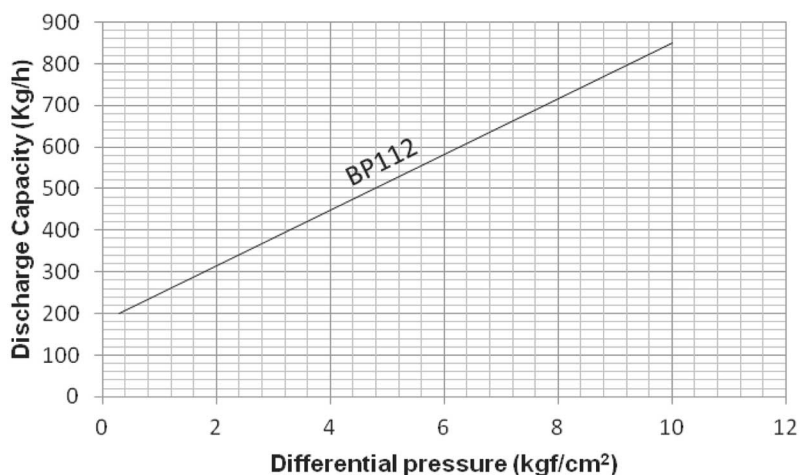
No.	Part	Material
1	Body	ASTM A105
2	Capsule Assembly *	AISI 316
3	Cover Gasket *	Reinforced Exfoliated Graphite
4	Cover	ASTM A105
5	Bolt	ASTM A193 B7
6	Strainer Screen *	AISI 304/316
7	Strainer Cap	AISI 420
8	Blow-Down Cap **	AISI 420
9	Blow-Down Screw **	AISI 420

Note: (*) Spare Part
(**) Optional extra



Capacities

Maximum continual discharge amount (kg/h)



Installation

The steam trap can be installed on horizontal or vertical lines. However avoid installation with the body leaning on one side as it is likely that the cover will contain condensate at two different temperatures causing malfunction and possible distortion of the element. Do not fit the trap upside down since this position will not allow the cleaning of the strainer screen.

How to Order

Example: BP 112 – ½", Balanced Pressure Thermostatic Steam Trap Screwed with Blow-down Valve.