

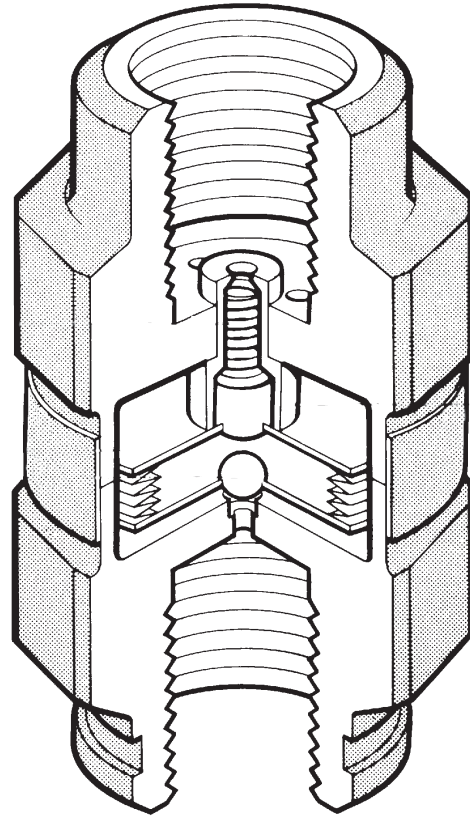


# Sealed Balanced Pressure Thermostatic Steam Trap TSS300

## Description

The welded stainless steel element is self-adjusting over the entire operating pressure range and will discharge condensate at approximately 20 °F (11 °C) below saturated steam temperature. Trap may be installed in horizontal or vertical pipelines.

Model	TSS300
PMO	300 psi g
Sizes	3/8" and 1/2"
Connections	NPT
Construction	All Stainless steel Tamper-proof body
Options	Strainer Screen (For 1/2" size only)



## Typical applications

Critical and non-critical steam tracing systems and steam main drips.

## Operation

The TSS300 should be used for critical applications (such as draining steam mains or high temperature tracing lines) where it is important to keep the steam space free of condensate. This installation must also be used when the trap discharges into a pressurized condensate return system.

The normal failure mode will be in the open position unless the bellows is distorted by severe operating conditions.

The TSS300 may also be used as a thermostatic air vent. For this use, it should be installed to discharge vertically upward. The discharge should be piped to a drain.

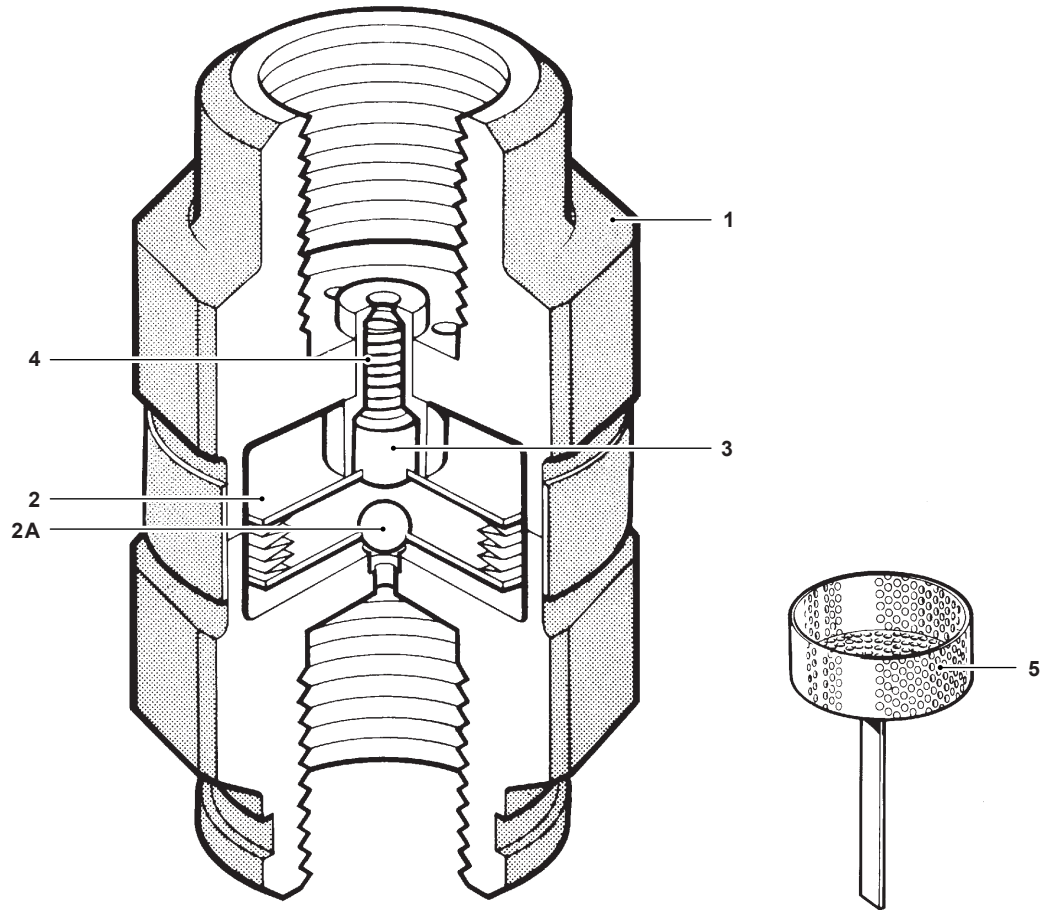
## Limiting operating conditions

PMO Maximum operating pressure	300 psi g (21 bar g)
Maximum operating temperature	Saturated Steam Temperature

## Pressure shell design conditions - ANSI 600

PMA Maximum allowable pressure	800 psi g/up to 725 °F (55 bar g/up to 385 °C)
TMA Maximum allowable temperature	725 °F/0-800 psi g (385 °C/0-55 bar g)

## Materials

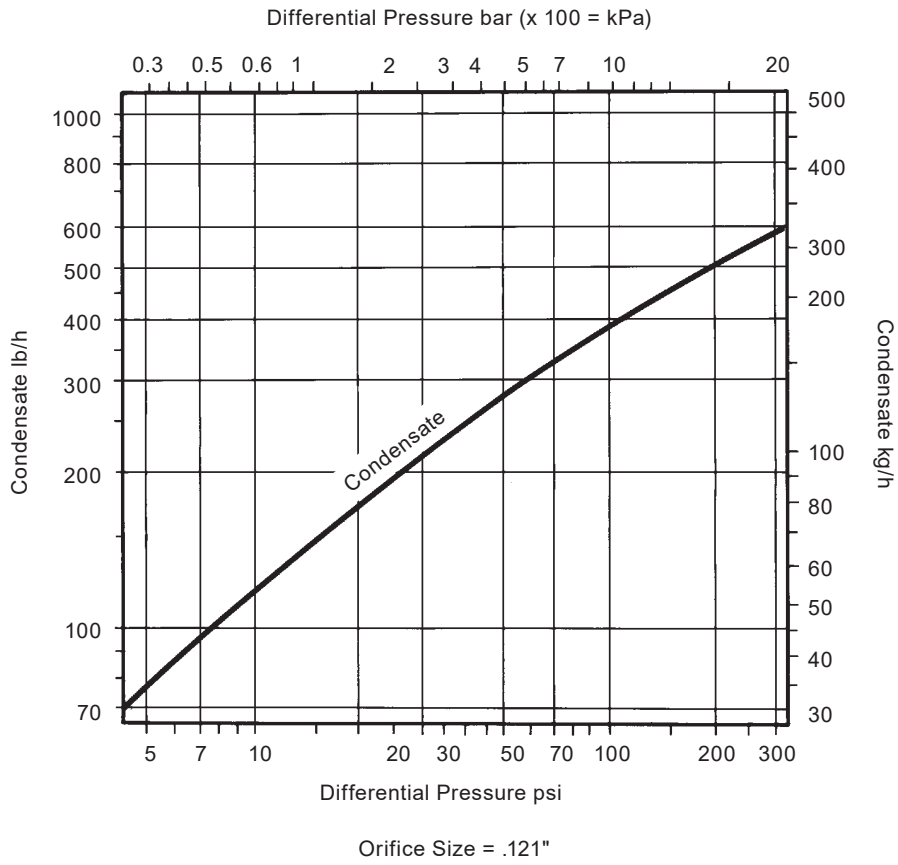


No.	Part	Material
1	Body*	Stainless steel <span style="float: right;">AISI 304</span>
2	Element Plates	Stainless steel
2A	Element Valve	Stainless steel
3	Element Holder	Stainless steel
4	Spring	Stainless steel
5	Strainer Screen (optional)**	Stainless steel
	Screen Tab	Stainless steel

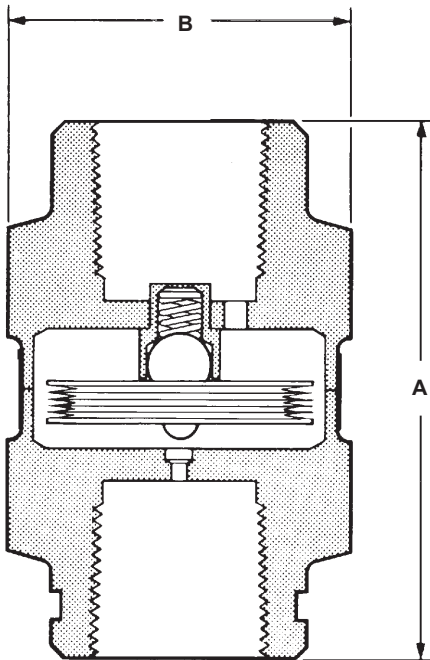
\* The body weld joint complies with ASME section IX and BS4870 (1981).

\*\* Optional strainer screen can be inserted into the inlet connection.

# Capacities



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



Size	A	B	Weight
3/8", 1/2"	2.5	1.5	0.7 lb
	(64)	(38)	(0.3 kg)

## Sample specification

Steam trap shall be encapsulated Spirax Sarco TSS300 balanced pressure thermostatic type, which will operate installed in either horizontal or vertical piping. Construction of all stainless steel with tamper-proof body sealed against leakage. Operating element to be stainless steel welded thermostatic bellows for operation without adjustment at any pressure to 300 psi g (21 bar g). Trap to operate close to steam temperature and shall be provided with internal strainer when required.

## Installation

The trap nameplate indicates the flow direction. A strainer should be installed upstream of the trap (an optional internal strainer is available). Full port isolating valves should be installed upstream and downstream. To avoid damaging the thermostatic element, the pipe connections should never be welded to the trap. For freeze protection, all drain lines must be pitched toward the trap for gravity flow. The trap must discharge vertically downward and the discharge piping must be self-draining.

## Maintenance

This product is factory sealed for tamper-proof operation, and no repair parts are available. Complete isolation of the trap from both supply and return line is required before the trap is removed.

Complete installation and maintenance instructions are given in IMI 2.0001, which accompanies the product.

