



BTS7.1

Sanitary Balanced Pressure Thermostatic Steam Trap

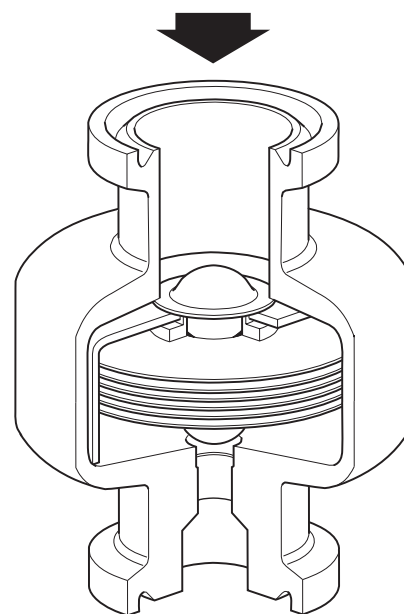
Description

The Spirax Sarco BTS7.1 is a sealed sanitary balanced pressure thermostatic steam trap designed to remove condensate from clean (Chemical Free) and pure steam applications with minimal condensate retention. Applications include sterile steam barriers, block and bleed installations, mains drainage and CIP/SIP of vessels and reactors and process lines. Manufactured in 316L stainless steel with minimal crevices, it is self-draining and operates close to steam temperature. The BTS7.1 has an internal finish of $0.5 \mu\text{m Ra}$ whilst the external finish is $0.75 \mu\text{m Ra}$. Each trap is individually packaged within an "ISO CLASS 7" clean environment with protective end caps and sealed in a protective plastic bag.

Designed, manufactured and approved for Steam and Condensate applications. This product complies with EC1935:2004 Food Contact Materials. It also complies with regulation EC2023:2006 on good manufacturing practice for materials and articles intended to come into contact with food.

Options

Fixed bleed to ensure 'Fail Open' operation.



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Sanitary clamp ended variant

Standards

- The BTS7.1 has been designed and manufactured in general accordance with ASME BPE standards.
- The unit also complies with the requirements of the EU Pressure Equipment Directive/UK Pressure Equipment (Safety) Regulations.

Certification

This product is available with the following certification:

- EN 10204 3.1 Material Certification Pressure Retaining Parts - Chargeable.
- EN 10204 3.1 Material Certification for Wetted Parts including the WFI element fill - Chargeable.
- Specific Internal Surface Finish - Chargeable.
- Typical Internal Surface Finish - F.O.C.
- Certificate of Compliance for FDA and ADI Free Statement - F.O.C.
- TSE-BSE Statement - F.O.C.
- EC1935:2004 Declaration of Compliance - F.O.C.
- Declaration of Conformity BS EN ISO 14644-1:2015 Class 7 Clean Room - F.O.C.
- Typical Test Report - F.O.C.

Note: All certification/inspection requirements must be stated at the time of order placement, and may be subject to additional cost as detailed above.

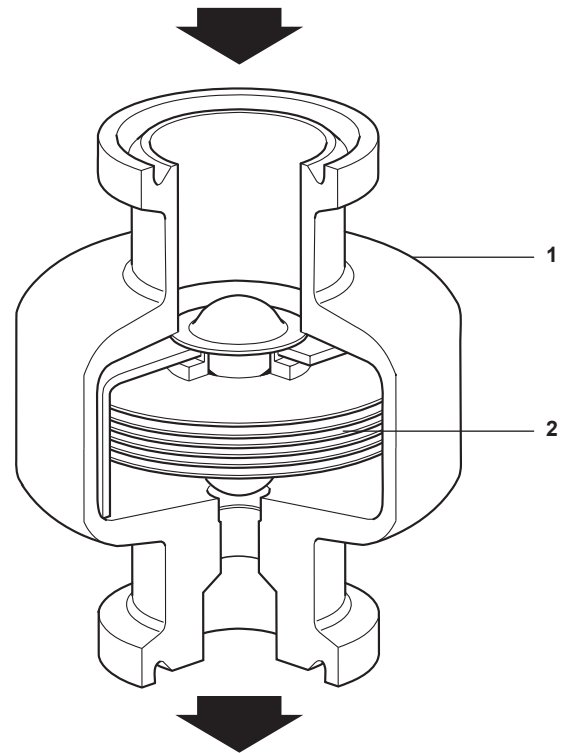
Sizes and pipe connections

3/4" inlet and 1/2" outlet to ASME BPE Type A sanitary clamp connections.

The BTS7.1 trap is designed to be self draining for vertical installation (discharge down) 1/2" - 3/4" trap should be fitted with a 3/4" gasket at the inlet.

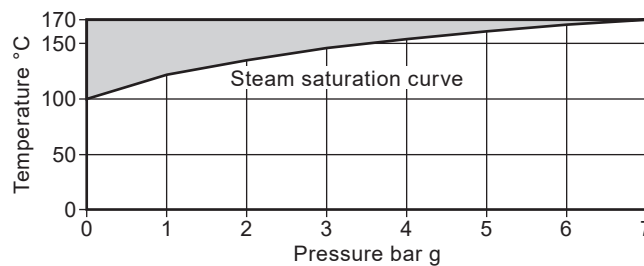
Materials

No.	Part	Material	
1	Body	Stainless steel	316L (1.4404)
2	Capsule element	Stainless steel	316L (1.4404)



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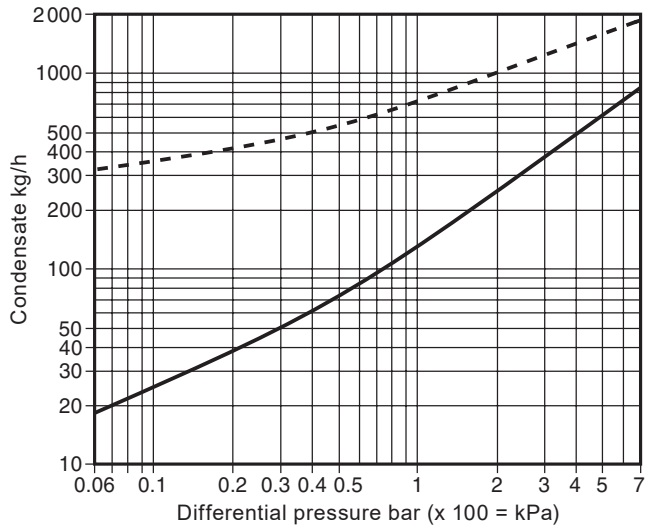
Pressure/temperature limits



The product should not be used in this region as damage to the internals may occur.

Body design conditions	PN7
PMA Maximum allowable pressure	7 bar g @ 170 °C
TMA Maximum allowable temperature	170 °C @ 7 bar g
Minimum allowable temperature	-254 °C
PMO Maximum operating pressure for saturated steam service	7 bar g @ 170 °C
TMO Maximum operating temperature	170 °C @ 7 bar g
Minimum operating temperature	0 °C
Designed for a maximum cold hydraulic test pressure of:	10.7 bar g

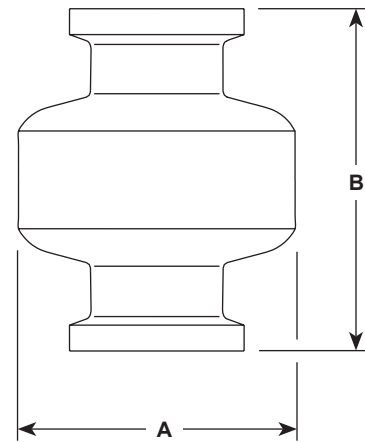
Capacities



Cold water capacity - - - - Hot water capacity ————

Dimensions/weights (approximate) in mm and kg

Size	A	B	Weight
3/4" x 1/2"	40	49	0.15 kg



Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P180-05) supplied with the product.

Installation note

The trap is designed for installation in vertical lines with the flow downward to ensure self-draining operation. Do not expose the element to superheat conditions since over-expansion may result. Suitable isolation valves must be installed to allow for safe maintenance/replacement.

How to order example

1 off Spirax Sarco non-maintainable 1/2" - 3/4" BTS7.1 clean steam trap suitable for pressures up to 7 bar g with a body that is self-draining.

Spare parts

There are no spare parts for the BTS7.1.