



## BTS7 and BTS7.1 Stainless Steel Clean Steam Traps

### Description

The Spirax Sarco BTS7 and BTS7.1 are sealed thermostatic steam traps designed to remove condensate from clean steam systems with minimal back up. Applications include sterile steam barriers, process vessels and CIP / SIP systems. Manufactured in 316L stainless steel with minimal crevices, it is self-draining and operates close to steam temperature. When supplied, they are individually packaged with protective end caps and sealed in a polythene bag.

### Options

Fixed bleed to ensure fail open operation.

### Standards

The BTS7 and BTS7.1 fully comply with the ASME BPE, where applicable. They also comply with the requirements of the European Pressure Equipment Directive 97/23/EC. All wetted parts of these traps are manufactured from FDA/3-A approved materials.

### Certification BTS7: Certification to EN 10204 2.2

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.

### Surface Finish

BTS7.1	Internal 20µin (0.5µm) Ra. SF1 External 32 µin (.075µm) Ra.
BTS7	Machined finish

### Sizes and pipe connections

**BTS7.1:** ½" and ¾" with sanitary clamp connections.

### BTS7:

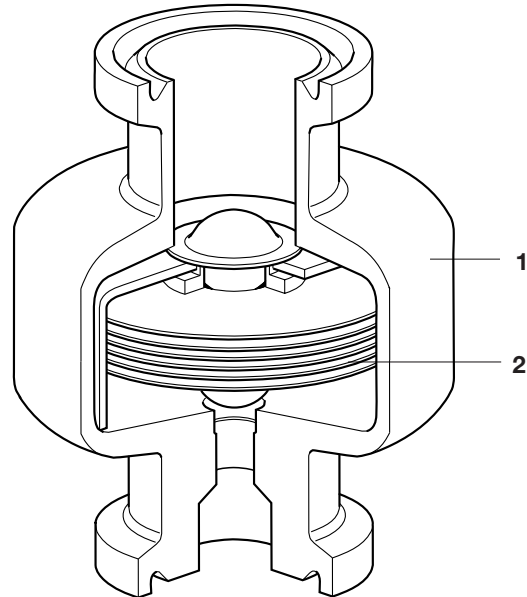
¼", ½", ¾", 1" screwed BSP or NPT.  
½", ¾", 1" imperial O/D x 16 swg (0.065") wall thickness tube end.

### Pressure and Temperature Limits

Body design conditions	PN7
PMA Maximum allowable pressure	102 psig @ 338°F (7 barg @ 170°C)
TMA Maximum allowable temperature	338°F @ 102psig (170°C @ 7 barg)
Minimum allowable temperature	14°F (-10°C)
PMO Maximum operating pressure for saturated steam service	102 psig (7 bar g)
TMO Maximum operating temperature	338° F (170°C)
Minimum operating temperature	32°F (0°C)
Designed for a maximum cold hydraulic test pressure of 152 psig (10.5 barg)	

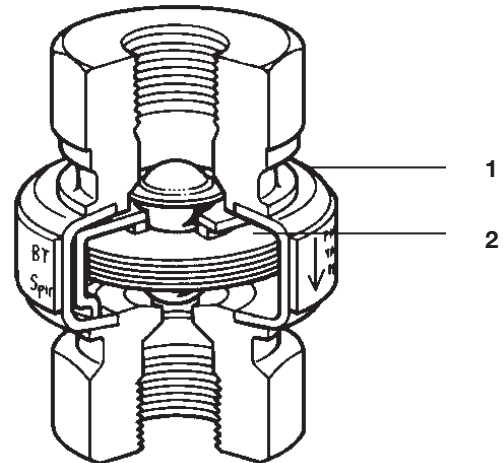
### Materials

No.	Part	Material
1	Body	Stainless steel AISI 316L (1.4404)
2	Element	Stainless steel AISI 316L (1.4404)



**BTS7.1**

with sanitary clamp connections



**BTS7**

with screwed connection

Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.  
In the interests of development and improvement of the product, we reserve the right to change the specification.

TI-P180-40-US 1.17

## Capacities

Pressure (psig)	cold water #/hr	½" and larger hot condensate #/hr.	¼" only hot condensate #/hr.
1	565	50	50
5	1125	124	124
10	1513	217	217
20	2036	404	404
30	2422	590	590
40	2740	777	737
50	3014	963	779
75	3586	1429	855
100	4056	1896	910

## 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 ¾" BTS7.1 clean steam trap suitable for pressures up to 101 psig (7 bar g) with a body that is self-draining.

## Spare parts

There are no spare parts.

## Sample Specification

Steam trap shall be self-adjusting balanced pressure type capable of operating close to saturated steam temperature. All wetted parts shall be manufactured from 316L stainless steel. Trap shall be sealed construction and shall be completely self-draining when installed in vertical pipeline. Connections shall be 0.065" extended O.D. tube, Tri-Clamp® compatible, or screwed NPT. All wetted parts of this trap are manufactured from FDA/3-A approved materials.

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

Size	A	B		C	D	Weight		
		Tube	Clamp			Tube	Screwed	Clamp
¼"	1.5 (40)	-	-	-	2.3 (58)	-	0.53	-
½"	1.5 (40)	4.1 (106)	1.9 (49)	1.5 (40)	2.9 (74)	0.44	0.49	0.3 (.15)
¾"	1.5 (40)	4.1 (106)	1.9 (49)	1.5 (40)	3.2 (81)	0.51	0.60	0.3 (.15)
1"	1.5 (40)	4.1 (106)	-	1.5 (40)	3.7 (95)	0.60	0.73	-

BTS7.1

