



# Stainless Steel Balanced Pressure Thermostatic Steam Trap BTM7/BTS7

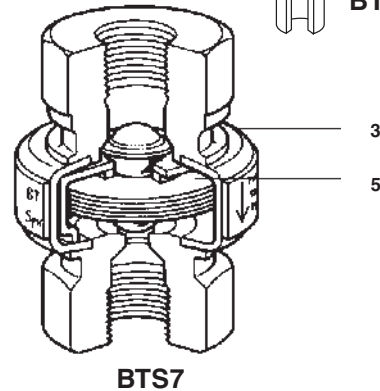
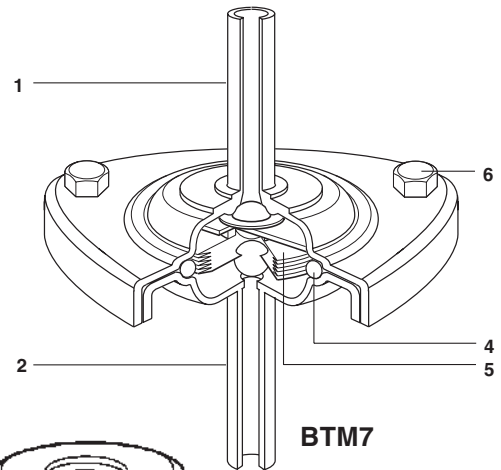
The BTM7 (maintainable) and BTS7 (sealed) are vertical body thermostatic steam traps, with all AISI 316L construction designed for use in clean steam systems. Normal operation is close to saturated steam temperature, with minimal back-up of condensate.

Model	BTM7 / BTS7
PMO	102 psig
Sizes	(1/4" BTS7 only) 1/2", 3/4", 1"
Connections	0.065" O.D. Tube, NPT or Tri-Clamp <sup>®</sup> compatible
Construction	All 316L Stainless Steel
Options	BSP connections are available Fixed bleed 3.1B available (BTM7 only)

\* A registered trademark of Tri-Clover Inc.

## Typical Applications

Fermenter sterilization, steam barriers (block & bleed systems), sterilizer drainage and air venting, CIP/SIP system condensate drainage, and sterilization of process vessels and pipes.



## Limiting Operating Conditions

Max. Operating Pressure (PMO) 102 psig (7 barg)

Max. Operating Temperature Saturated Steam Temperature

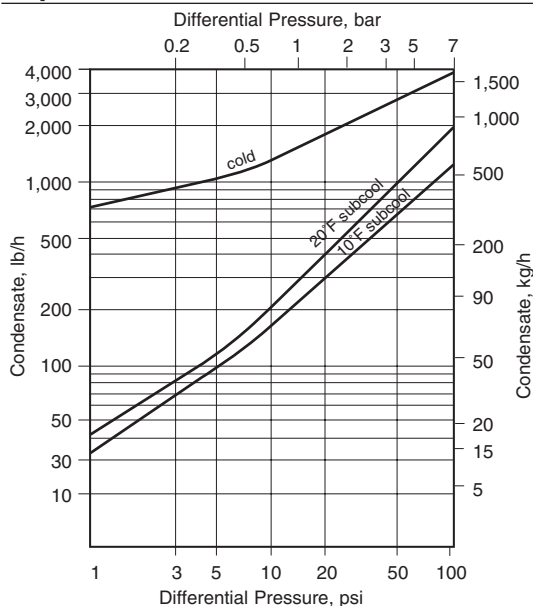
## Pressure Shell Design Conditions

PMA 145 psig/0-302°F 10 barg/0-150°C  
Max. allowable pressure

132 psig/338°F 9 barg/170°C

TMA 338°F/0-132 psig 170°C/0-9 barg  
Max. allowable temperature

## Capacities



## Standards

The BTS7 fully complies with the ASME BPE, where applicable. It also complies with the requirements of the European Pressure Equipment Directive 97/23/EC. All wetted parts of this trap are manufactured from FDA/3-A approved materials.

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.

## Construction Materials

No.	Part	Material
1 (BTM7)	Body (Inlet)	Stainless Steel AISI 316L
2 (BTM7)	Body w/ Seat (Outlet)	Stainless Steel AISI 316L
3 (BTS7)	Body	Stainless Steel AISI 316L
4 (BTM7)	O-Ring gasket	FKM compound (V1274-80) complies with FDA 21CFR 177.2600 and is USP Class VI approved. For use on all clean systems or where lactic acid may be present.
5	Element	Stainless Steel AISI 316L
6 (BTM7)	Nuts & Bolts	Stainless Steel BS6105 Gr A4 80

## Certification

This product is available with certification to EN 10204 2.2.

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

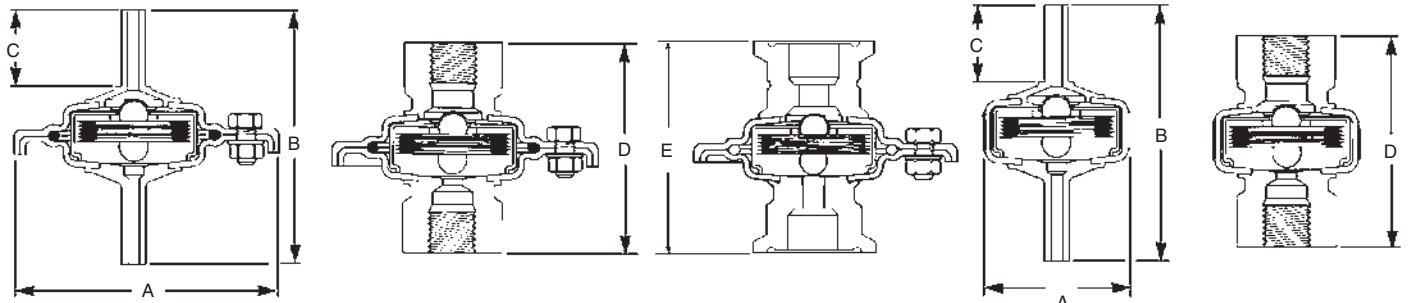
TI-2-0002-US 04.11

# Stainless Steel Balanced Pressure Thermostatic Steam Trap BTM7/BTS7

## Dimensions

(nominal) in inches and millimeters

BTM7							BTS7						
Size	A	B Tube	C Tube	D Screwed	E Tri-Clamp*	Weight Tube Screwed Tri-Clamp*	Size	A	B Tube	C Tube	D Screwed	D* Tri-Clamp	Weight Tube Screwed
1/2"	2.8 70	4.2 106	1.5 40	2.9 74	1.85 47	.62 lb .28 kg .66 lb .30 kg .48 lb .22 kg	1/2"	1.6 40	4.2 106	1.5 4.0	2.9 74	1.9 49	.44 lb .20 kg .49 lb .22 kg
3/4"	2.8 70	5.1 130	1.5 40	3.2 81	1.85 47	.68 lb .31 kg .77 lb .35 kg .48 lb .22 kg	3/4"	1.6 40	5.1 130	1.5 40	3.2 81	1.9 49	.51 lb .23 kg .60 lb .27 kg
1"	2.8 70	5.0 126	1.5 40	3.7 95	1.85 47	.77 lb .35 kg .90 lb .41 kg .78 lb .37 kg	1"	1.6 40	5.0 126	1.5 40	3.7 95	2.1 53	.60 lb .27 kg .73 lb .33 kg



\*Tri-Clamp connection not shown

### 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 maintainable (BTM7), or sealed construction (BTS7), 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.

### Installation

The traps are designed for installation in vertical lines with the flow downward to ensure self-draining. The element may be damaged if it is exposed to superheated steam. Full-flow isolating valves, such as Spirax Sarco Model 70i or 80i Clean Ball Valve, should be installed so as to permit servicing.

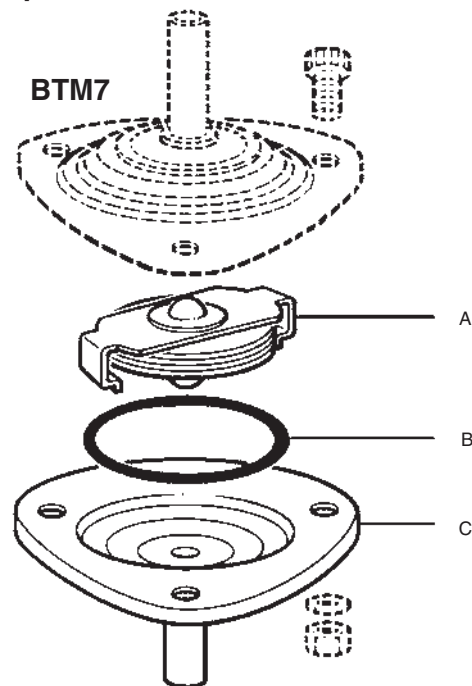
### Maintenance

The BTM7 is a maintainable trap. The BTS7 is non-maintainable. Maintenance on the BTM7 can be performed once the steam trap is isolated from system and return line pressure. Complete Installation & Maintenance instructions are given in IM-2-0002-US, which is included with the product.

### Spare Parts

Element Assembly	A
Gasket (PKT of 3)	B
Body with Seat (outlet)	C

Available spare parts are shown in heavy outline. Parts shown in broken lines are not available as spares.



**There are no spare parts for the BTS7**

TI-2-0002-US 04.11