

## Stainless Steel Balanced Pressure Thermostatic Steam Trap BTM7/BTS7

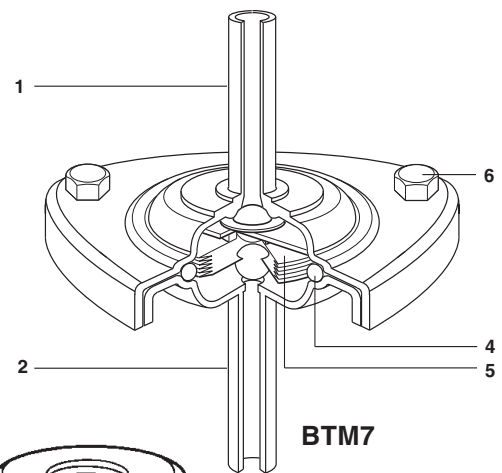
The BTM7 (maintainable) and BTS7 (sealed) are vertical body thermostatic steam traps, with all AISI 316L construction designed for use in clean steam systems. Normal operation is close to saturated steam temperature, with minimal back-up of condensate.

Model ⇄	BTM7 / BTS7
<b>PMO</b>	102 psig
<b>Sizes</b>	1/2", 3/4", 1"
<b>Connections</b>	0.065" O.D. Tube, NPT or Tri-Clamp <sup>®</sup> compatible (BTM7 only)
<b>Construction</b>	All 316L Stainless Steel
<b>Options</b>	Other connections are available Fixed bleed (BTM7 only) 3.1B available (BTM7 only) FEP encapsulated silicone 'O' ring is recommended and available. For use on systems where there is, or maybe lactic acid present BTM7 only.

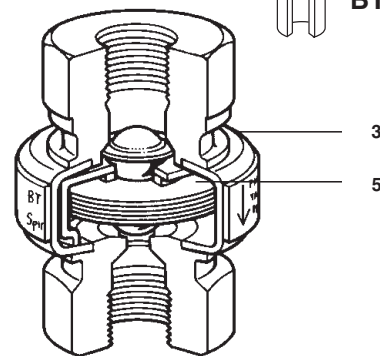
\* A registered trademark of Tri-Clover Inc.

### 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.



**BTM7**



**BTS7**

### Limiting Operating Conditions

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

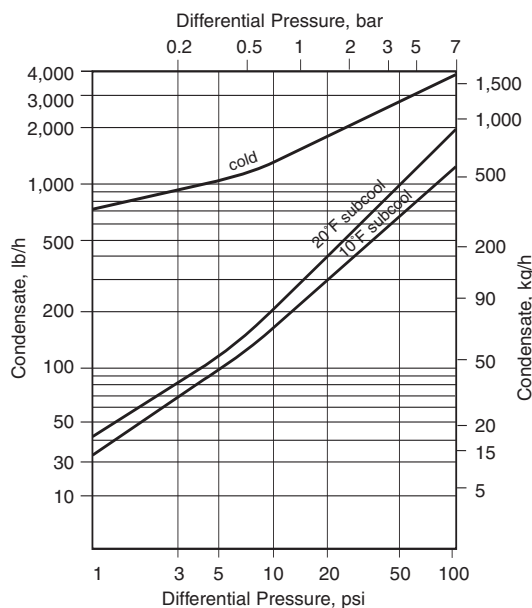
Max. Operating Temperature Saturated Steam Temperature

### 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



### 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 (standard)	Grey Viton 'O' ring complies with FDA CFR title 21, paragraph 177 section 2600 and 3A's sanitary standards 20-22.
	O-Ring gasket (optional)	Clear Teflon FEP encapsulated silicone compliant to: - FDA regulation 21 CFR 177.1550 - 3A's sanitary standard 20-22 - USP class VI
5	Element	Stainless Steel AISI 316L
6 (BTM7)	Nuts & Bolts	Stainless Steel BS6105 Gr A4 80

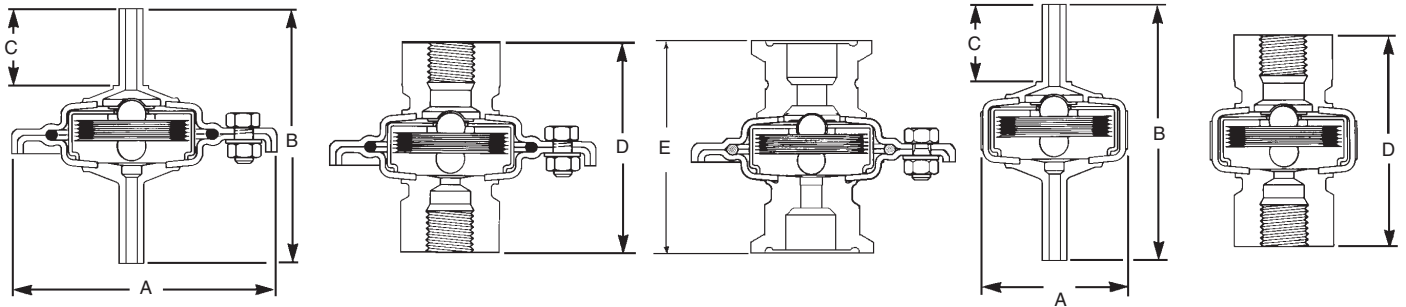
Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.

In the interests of development and improvement of the product, we reserve the right to change the specification.

TI-2-0002-US 11.07

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



## 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 (BTM7 only), 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.

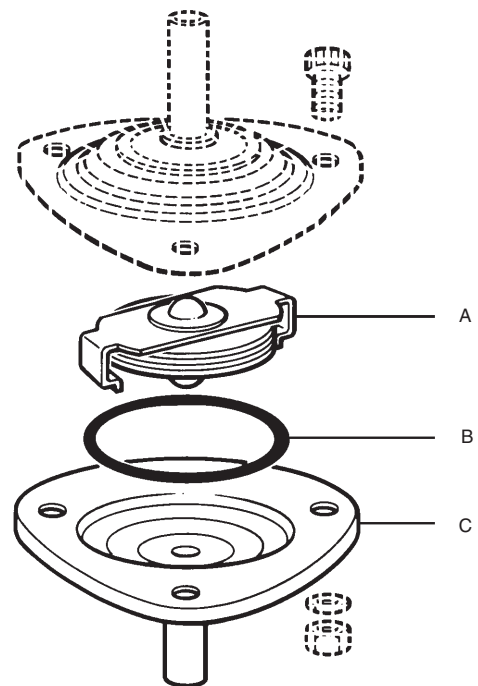
## Maintenance

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	C

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



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