

TC Series Clean Steam Thermostatic Traps

Stainless Steel 316L

For Pressures to 8,3 bar...Capacities to 1 700 kg/h

Armstrong offers a complete range of T-316L stainless steel clean steam thermostatic traps to handle the special requirements of clean steam systems. Different body configurations allow for choice of piping and ease of cleaning.

The thermostatic design is free-draining and can operate close to steam temperature at any given pressure.

Features:

- Constructed of 316L stainless steel for corrosion resistance
- Highly polished for cleanability
- Self-draining to minimize contamination
- Compact and lightweight
- Easy to install
- Provide easy disassembly for cleaning

Typical Applications:

- Fermentors
- Sterilizers/autoclaves
- Process piping
- Block and bleed
- Bioreactors
- CIP/SIP systems
- Equipment sterilization
- Sterile barriers

How to Order:

Specify:

- Model number
- Pipe connection size
- End connection type

Example:

TC-C, 1/2" sanitary end connections.



Table ST-196-1. TC Series Clean Steam Traps Materials			
Model	TC-C Clamp	TC-R Repairable	TC-S Sealed
Cap and body	316L stainless steel		
Bellows	316L stainless steel		
Body gasket	Viton		—
Retainer	316L Stainless steel		
Clamp	304 Stainless steel	—	—
Screws	—	304 Stainless steel	—
Polish	Grit Electro		Mechanical
Interior Finish	≤ 0,5 µm Ra		≤ 1,6 µm Ra
Exterior Finish	≤ 0,8 µm Ra outside		

All models comply with the Article 4.3 of the PED (2014/68/UE).

Table ST-196-2. TC Series Clean Steam Traps Physical Data			
Model	TC-C Clamp	TC-R Repairable	TC-S Sealed
Maximum Allowable Pressure (Vessel Design)	8,3 bar		10 bar
Maximum Allowable Temperature	177°C		186°C
Maximum Operating Pressure	7 bar		8,3 bar
Weight in kg	0,57	0,68	0,34

Maximum back pressure: 99% of inlet pressure

Table ST-196-3. TC Series Capacity		
Differential Pressure*	5°C Subcool	11°C Subcool
bar	kg/h	kg/h**
0,35	82	145
0,7	163	293
1,4	307	503
2,1	458	709
2,8	561	830
3,5	699	915
4,1	837	1 136
4,8	924	1 210
5,5	1 071	1 356
6,2	1 116	1 468
6,9	1 155	1 565
7,6	1 184	1 651
8,3	1 206	1 712

* Capacities based on differential pressure with no back pressure.

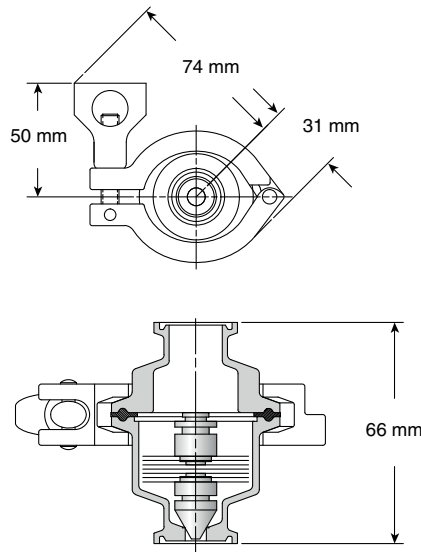
** Capacities will vary with the degree of subcooling. When greater capacities are required, the trap will automatically adjust to the load, up to the maximum (cold water) capacity shown, by increasing the amount of subcooling.

All dimensions and weights are approximate. Use certified print for exact dimensions. Design and materials are subject to change without notice.

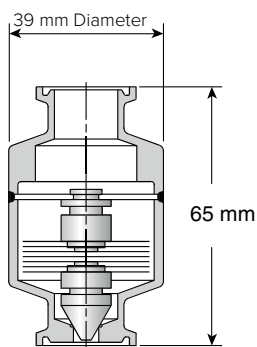
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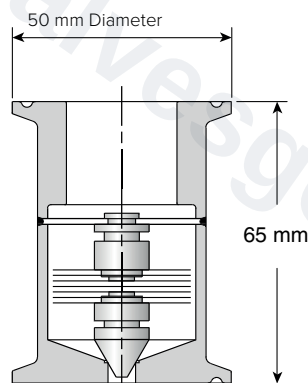
For Pressures to 8,3 bar...Capacities to 1 700 kg/h



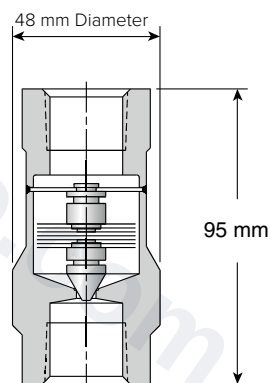
Model TC-C Clamp
With Sanitary Body Clamp
1/2", 3/4 and 1" Sanitary End Connections



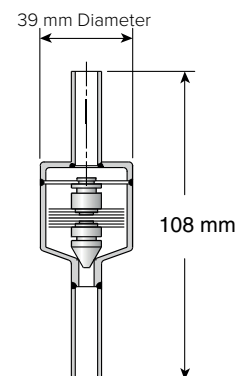
Model TC-S Sealed
1/2" and 3/4"
Sanitary End Connections



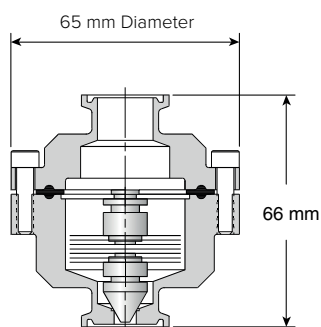
Model TC-S Sealed
1"
Sanitary End Connections



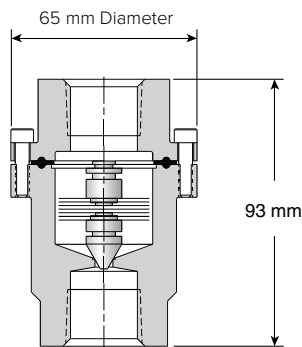
Model TC-S Sealed
1/2" and 3/4"
Threaded End Connections



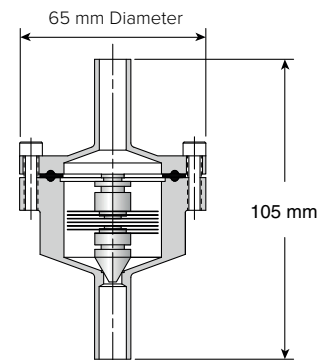
Model TC-S Sealed
1/2" and 3/4"
Tube End Connections



Model TC-R Repairable
With Bolted Body and Cap
1/2", 3/4 and 1"
Sanitary End Connections



Model TC-R Repairable
With Bolted Body and Cap
1/2" and 3/4"
Threaded End Connections



Model TC-R Repairable
With Bolted Body and Cap
1/2" and 3/4"
Tube End Connections

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