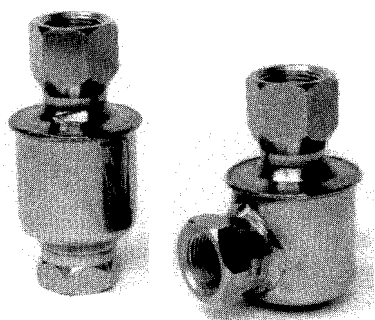


Armstrong Stainless Steel Thermostatic Air Vents



Armstrong
Stainless Steel
Thermostatic Air Vents



Armstrong

For venting air from steam in chamber type heat exchangers with pressures to 300 psig

Armstrong offers Thermostatic Air Vents for positive venting of air and other noncondensable gases from steam in chamber type heat transfer equipment. Typical applications include jacketed kettles, retorts, vulcanizers, jacketed sterilizers or other contained equipment where air could accumulate in remote areas of the steam chamber and reduce heat transfer capacity. These vents are balanced pressure air vents that respond to the pressure-temperature curve of steam at any pressure. Air is automatically vented at slightly below steam temperature throughout the entire operating pressure range.

Features

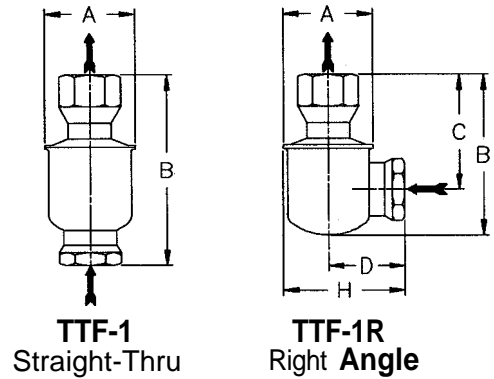
- Suitable for pressures from 0 to 300 psig.
- All 304L stainless steel bodies — sealed, tamper-proof.
- Balanced pressure thermostatic element vents air at slightly below steam temperature over the entire pressure range - no adjustments required.
- Dependable, proven phosphor-bronze bellows caged in stainless steel with bronze valve and stainless steel seat.
- Available in straight-thru or right angle connections.

List of Materials

Name of Part	Material
Body	304-L Stainless Steel
Connections	304 Stainless Steel
Balanced Pressure Thermostatic Air Vent	Stainless Steel and bronze with phosphor-bronze bellows, entire unit caged in stainless steel
Gasket	Copper clad non-asbestos

Series TTF Stainless Steel Thermostatic Air Vents

Physical Data				
Model No.	Straight-Thru Connections		Right-Angle Connections	
	TTF-1		TTF-1R	
Pipe Connections	1/2"	3/4"	1/2"	3/4"
"A" (Diameter) (in)	2 1/4	2 1/4	2 1/4	2 1/4
"B" (Height) (in)	4 1/2	4 11/16	3 3/4	3 15/16
"C" (∅ inlet to face of outlet) (in)	—	—	2 5/8	2 13/16
"D" (∅ outlet to face of inlet) (in)	—	—	1 15/16	1 7/8
"H" (in)	—	—	3 1/16	3
Weight (lb)	1	1 1/4	1	1 1/4
Maximum Allowable Pressure (Vessel Design)	300 psig @450°F			
Maximum Operating Pressure (psi)	300			
Discharge Orifice Size	3/16"			



Typical Applications for Series TTF Armstrong Thermostatic Air Vents

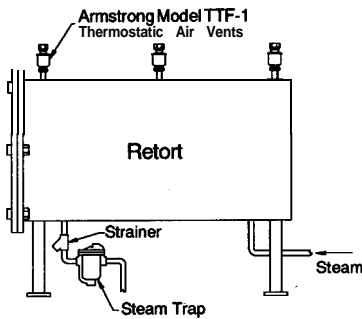


Fig. 2-1. Installation on a Retort.

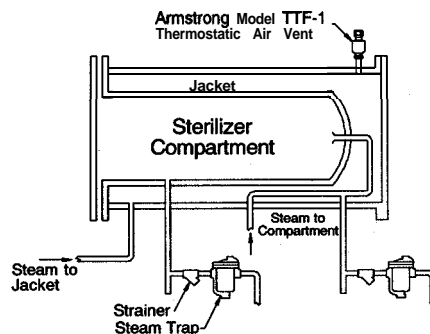


Fig. 2-2. Installation on a Sterilizer.

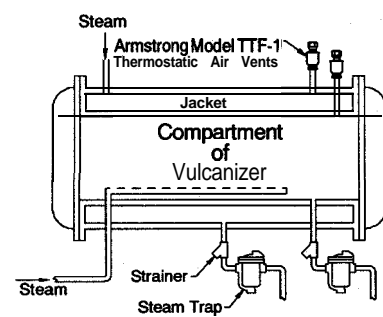


Fig. 2-3. Installation on a Vulcanizer.

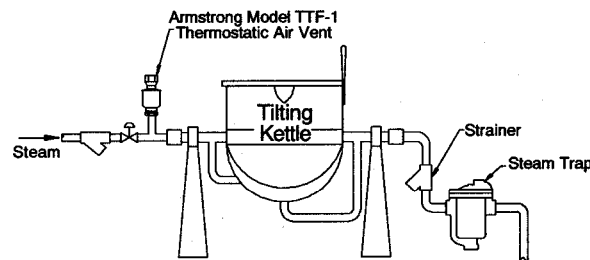
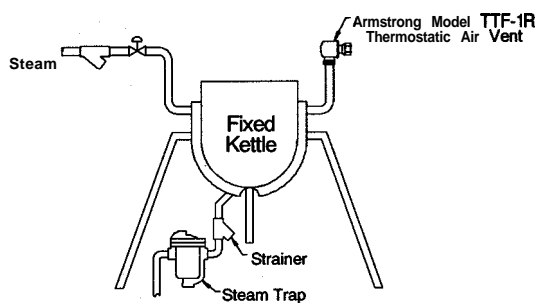


Fig. 2-4. Installation on Jacketed Kettles.

Armstrong thermostatic air vents should be installed at the highest point on a steam chamber, with the air vent located above the chamber. This will minimize the possibility of any liquid carryover, and air can be vented at atmosphere without a drain line. Figs. 2-1 through 2-4 show typical installations.



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Steam Traps \ Humidifiers \ Steam Coils \ Valves \ Water Heaters