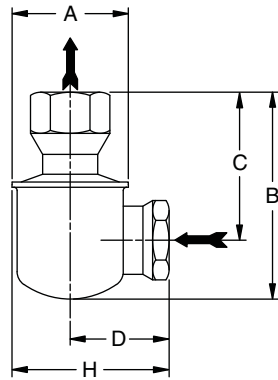


TTF-1
Straight-Thru



TTF-1R
Right Angle



Armstrong offers Thermostatic Air Vents for positive venting of air and other non-condensable 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. Air is automatically vented at slightly below steam temperature throughout the entire operating pressure range.

Features

- Suitable for pressures from 0 to 20 bar
- All 304-L 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

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.

Table AV-348-1. TTF-1 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

Optional: All stainless steel thermostatic air vent.

Table AV-348-2. TTF-1 Physical Data

Model No.	Straight-thru Connections TTF-1		Right-Angle Connections TTF-1R	
	mm	mm	mm	mm
Pipe Connections	15	20	15	20
"A" Diameter	57	57	57	57
"B" Height	114	119	95	100
"C" \varnothing inlet to face of outlet	—	—	67	71
"D" \varnothing outlet to face of inlet	—	—	49	48
"H"	—	—	78	76
Weight in kg (screwed)	0,4	0,5	0,4	0,5
Maximum Allowable Pressure (Vessel Design)	20 bar @ 232°C			
Maximum Operating Pressure	20 bar			
Discharge Orifice Size	3/16"			

All models comply with the article 3.3 of the PED (97/23/EC).

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