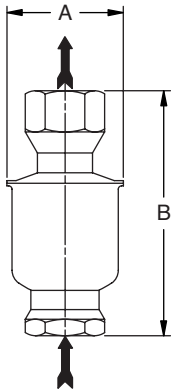


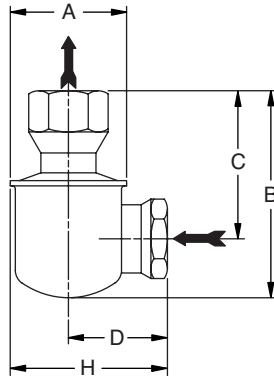


Armstrong Stainless Steel Thermostatic Air Vents

For Pressures to 300 psig (20 bar)...Capacities to 104 scfm



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 - 300 psig
- 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.

For a fully detailed certified drawing, refer to CD #1018.

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.

Physical Data

| Model No. | Straight-Thru Connections TTF-1 | | | | Right-Angle Connections TTF-1R | | | |
|--|-----------------------------------|-----------|------------|-----------|--------------------------------|-----------|------------|-----------|
| | in | mm | in | mm | in | mm | in | mm |
| Pipe Connections | 1/2 | 15 | 3/4 | 20 | 1/2 | 15 | 3/4 | 20 |
| "A" Diameter | 2-1/4 | 57 | 2-1/4 | 57 | 2-1/4 | 57 | 2-1/4 | 57 |
| "B" Height | 4-1/2 | 114 | 4-11/16 | 119 | 3-3/4 | 95 | 3-15/16 | 100 |
| "C" \varnothing inlet to face of outlet | — | — | — | — | 2-5/8 | 67 | 2-13/16 | 71 |
| "D" \varnothing outlet to face of inlet | — | — | — | — | 1-15/16 | 49 | 1-7/8 | 48 |
| "H" | — | — | — | — | 3-1/16 | 78 | 3 | 76 |
| Weight, lb (kg) | 3/4 (0.4) | | 1 (0.5) | | 3/4 (0.4) | | 1 (0.5) | |
| Maximum Allowable Pressure (Vessel Design) | 300 psig @ 450°F (20 bar @ 232°C) | | | | | | | |
| Maximum Operating Pressure, psi (bar) | 300 (20) | | | | | | | |
| Discharge Orifice Size | 3/16" | | | | | | | |