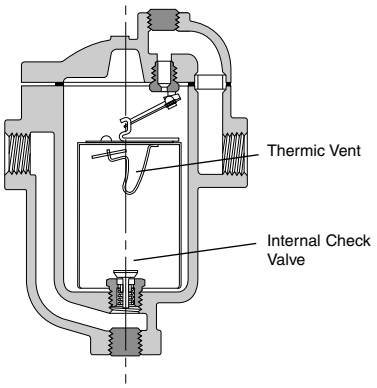
Steam Trap Options and Connectors

Thermic Vent Buckets

Whenever steam is turned on and off, air will accumulate in the piping and steam equipment. A trap equipped with a thermic bucket will discharge this air 50 to 100 times faster than a standard bucket, reducing warm-up time. Thermic vent buckets are suitable for pressures up to 9 bar. A large vent hole in the bucket can also solve air venting problems upon start-up.

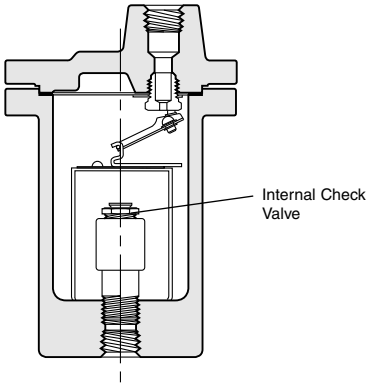


Internal Check Valves – 1/2" Thru 2" NPT

Almost all Armstrong inverted bucket steam traps can be equipped with internal check valves. A check valve is needed between the trap and the equipment being drained in the following cases:

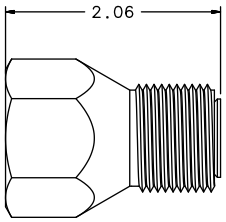
- When the trap is installed above the unit drained
- When sudden pressure drops may occur in the steam supply to the unit
- Whenever a back pressure exists in the condensate return line

Armstrong spring-loaded, stainless-steel internal check valves can be screwed directly into the trap inlet or into an extended inlet tube having a pipe coupling at the top.



"In-Line" Check Valve – 1/2" and 3/4" NPT

On 1800 and 2000 Series stainless-steel traps, an internal check valve cannot be installed. Armstrong's CVI "in-line" check valve will solve the problem.

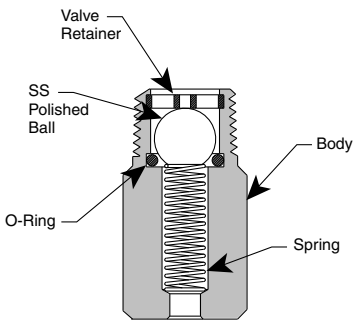


Pop Drain for Freeze Protection

In general, a properly selected and installed Armstrong trap will not freeze as long as steam is coming to the trap. If the steam supply is shut off, a pop drain should be used to automatically drain the trap.

Maximum Operating Conditions

Pressure:	41 bar
Temperature:	177°C



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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Steam Trap Options and Connectors

Vacuum Breaker – 3/8" and 1/2" NPT

Many times, condensate will be retained ahead of steam traps because of the presence of a vacuum. To break a vacuum, air must be introduced into the system by means of a vacuum breaker.

For maximum protection against freezing and water hammer in heating coils under modulated control, for example, vacuum breakers are recommended in conjunction with freeze protection devices.

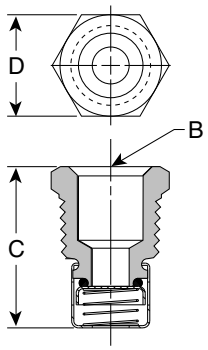


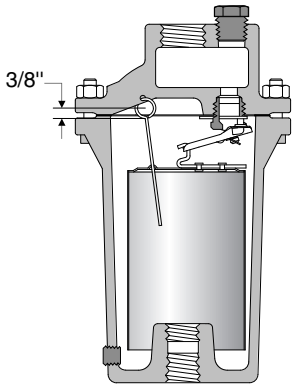
Table ST-161-1. Vacuum Breaker

Size	1/2" NPT	3/8" NPT
"B" Pipe Connections	3/8"	1/4"
"C" Height	30	28
"D" Width	22 Hex	17 Hex

Bucket Vent Scrubbing Wire (BVSW) solves dirt problems

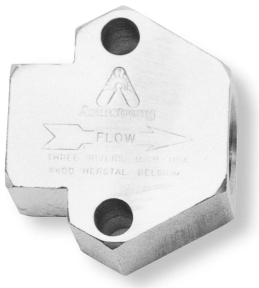
Whenever dirt plugs the bucket vent, Armstrong recommends the use of a scrubbing wire which, on each cycle, keeps the bucket vent hole open. **Note**: On small size stainless-steel (only) bucket traps, a wiggle wire is installed as standard.

In normal conditions, the inverted bucket trap is not sensitive to dirt problems (because of its orifice at the top of the trap), unlike most other traps, which should be installed normally with a strainer (see Armstrong "Y" Type Strainers Selection Table on page S-389).



Connectors

Besides 2000 Series stainless steel inverted bucket traps, the standard connector or IS-2 connector with integral strainer can also be used on F&T-2000 float and thermostatic, AB-2000 bimetallic, TT-2000 bellows, WT-2000 wafer and CD-3300 controlled disc traps.



Standard Connector
Material: 316 Stainless Steel

Integral Strainer
(shown with optional blowdown valve)
Material: 316 Stainless Steel

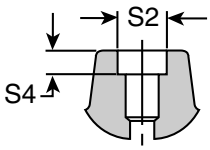
Probe Connections

Probe Connections are available for trap monitoring on most inverted bucket traps. Consult your Armstrong Factory Representative.

IS-2 Connector with

Table ST-161-2. Socketweld Dimensions

Pipe Size	S-2	S-4 Min.
in	mm	mm
1/2"	22	10
3/4"	27	13
1"	34	13
1 1/4"	43	13
1 1/2"	49	13
2"	61	16
2 1/2"	74	16
3"	90	16



Socketweld Connection

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