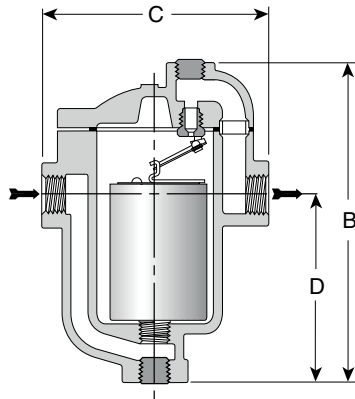


814-816 Series Inverted Bucket Steam Traps

Cast Iron for Horizontal Installation

For Pressures to 17 bar...Capacities to 9 000 kg/h



Description

The most reliable steam trap known – the inverted bucket – provides efficient condensate drainage of virtually all types of steam-using equipment. Put the inverted bucket to work in a tough cast iron package, and you have the best of both worlds. Because they operate efficiently for longer periods of time, Armstrong cast iron inverted buckets add solid energy savings to lower replacement/labor costs. All Armstrong cast iron inverted bucket steam traps are repairable for even bigger maintenance savings.

A unique leverage system multiplies the force provided by the bucket to open the valve against system pressure. The mechanism is free-floating, and has no fixed pivots to create wear or friction.

Because the mechanism is located at the top of the trap, no dirt can collect on the orifice. Small particles of dirt are held in suspension until discharged by the full differential purging action when the bucket sinks, pulling the valve off the seat.

The discharge orifice is surrounded by a water seal, preventing live steam loss. Automatic air venting is provided by a small vent hole in the bucket, which provides continuous automatic air and CO₂ venting at steam temperature.

Inverted bucket traps drain continuously, although discharging intermittently, allowing no condensate backup. They are also resistant to water hammer.

Maximum Operating Conditions

Maximum allowable pressure (vessel design): 17 bar @ 232°C
 Maximum operating pressure: 17 bar
 Maximum back pressure: 99% of inlet pressure

Connections

Screwed BSPT and NPT
 Flanges ASME B16.5 (screw on) available on request

Materials

Body: ASTM A48 Class 30
 Internals: All stainless steel – 304
 Valve and seat: Stainless Steel 17-4PH
 Test plug: Carbon steel

Options

- Stainless steel internal check valve
- Thermic vent bucket
- Stainless steel pop drain
- Thermo drain
- Scrub wire
- Large vent 17 bar maximum

Specification

Inverted bucket steam trap, type ... in cast iron, with continuous air venting at steam temperature, free-floating stainless steel mechanism, and discharge orifice at the top of the trap. Maximum allowable back pressure 99% of inlet pressure.

How to Order

- Specify:
- Model number
 - Size and type of pipe connection
 - Maximum working pressure or orifice size
 - Any options required

Table ST-82-1. 814-816 Series Side Inlet, Side Outlet Trap (dimensions in mm)

Add suffix «CV» to model number for internal check valve, «T» for thermic vent bucket, «LV» for the large vent..

Model No.	814	815	816
Pipe Connections	1" – 1 1/4"	1 1/2" – 2"	2" – 2 1/2"
Test plug	1"	1 1/2"	2"
«B» Height	346	413	541
«C» Face-to-Face (screwed)	229	260	330
«D» Bottom to \varnothing Inlet	198	203	279
Number of Bolts	8		
Weight in kg (screwed)	20,0	32,2	59,4

All models are CE Marked according to the PED (2014/68/UE), but PMA for 816 is 15 bar.
 + May be derated depending on flange rating and type.

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

814-816 Series Inverted Bucket Steam Traps

Cast Iron for Horizontal Installation

For Pressures to 17 bar...Capacities to 9 000 kg/h



Table ST-83-1. Model 814 Capacity

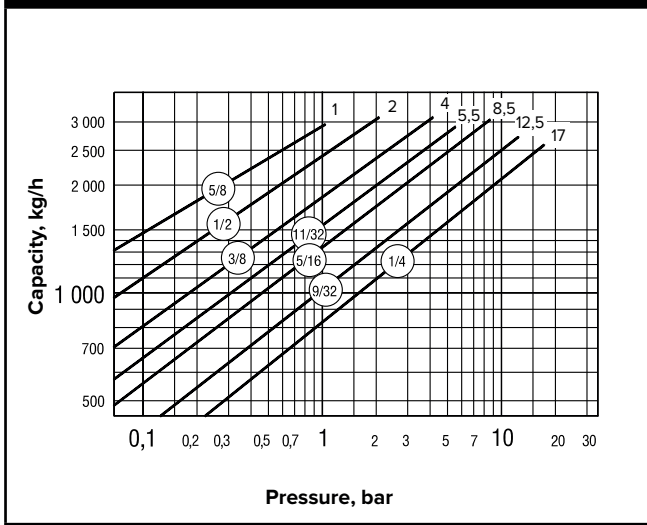


Table ST-83-2. Model 815 Capacity

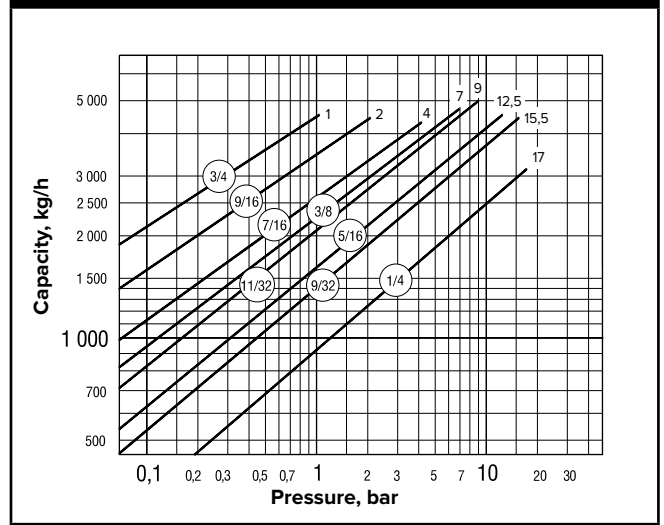
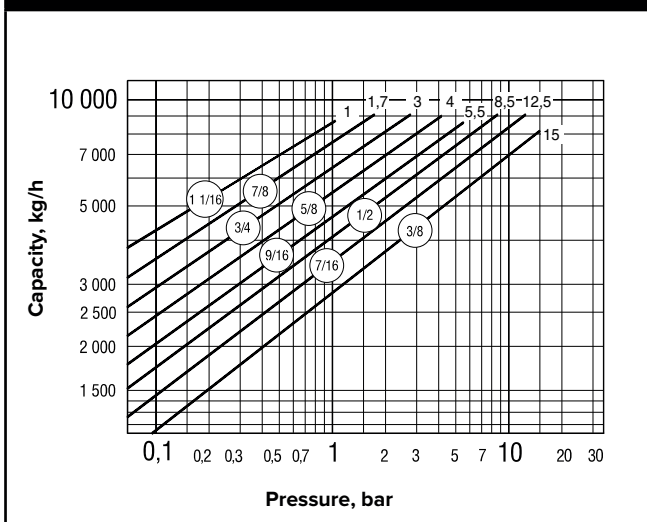


Table ST-83-3. Model 816 Capacity



Steam Trapping and
Steam Tracing Equipment

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