

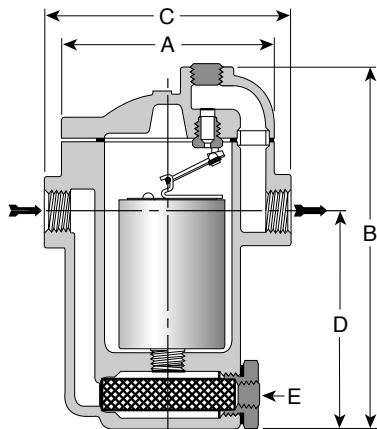


# 880 Series Inverted Bucket Steam Traps

Cast Iron for Horizontal Installation With Integral Strainer

For Pressures to 250 psig (17 bar)...Capacities to 4,400 lb/hr (2,000 kg/hr)

Steam Trapping and Steam Tracing Equipment



## 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 with an integral strainer, 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 CO<sub>2</sub> 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): 250 psig @ 450°F (17 bar @ 232°C)  
 Model 880: 150 psig (10 bar)  
 Maximum operating pressure: Model 881-883: 250 psig (17 bar)

## Connections

Screwed NPT and BSPT

## Materials

Body: ASTM A48 Class 30  
 Internals: All stainless steel—304  
 Valve and seat: Hardened chrome steel—17-4PH  
 Test plug: Carbon steel  
 Strainer: Stainless steel—304

## Options

- Stainless steel internal check valve
- Thermic vent bucket
- Scrub wire

## Specification

Inverted bucket steam trap, type ... in cast iron with integral strainer, with continuous air venting at steam temperature, with free-floating stainless steel mechanism, and discharge orifice at the top of the trap.

## How to Order

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

For a fully detailed certified drawing, refer to CD #1000.

**880 Series Side Inlet, Side Outlet Traps With Integral Strainers.** Add suffix "CV" to model number for internal check valve, "T" for thermic vent bucket.

Model No.	880*		881		882		883	
	in	mm	in	mm	in	mm	in	mm
Pipe Connections	1/2, 3/4	15, 20	1/2, 3/4, 1	15, 20, 25	1/2, 3/4	15, 20	3/4, 1, 1-1/4	20, 25, 32
Test Plug	1/4	6	1/4	6	1/2	15	3/4	20
"A" (Flange Diameter)	3-3/4	95.2	3-3/4	95.2	5-5/8	142.9	7	177.8
"B" (Height)	6-1/16	154	7-1/16	179	9-3/8	244	12-3/8	314
"C" (Face-to-Face)	5	127	5	127	6-1/2	165	7-7/8	200
"D" (Bottom to $\varnothing$ Inlet)	3-7/16	87.3	4-7/16	113	5-3/4	146	7-3/8	187
"E" (Blowdown Connection)	3/8	9	3/8	9	3/8	9	1/2	15
Number of Bolts	6							
Weight lb (kg)	5-1/2 (2.5)		6 (2.7)		15-1/2 (7.0)		31 (14.1)	

\*Cannot be furnished with both thermic vent bucket and check valve.

*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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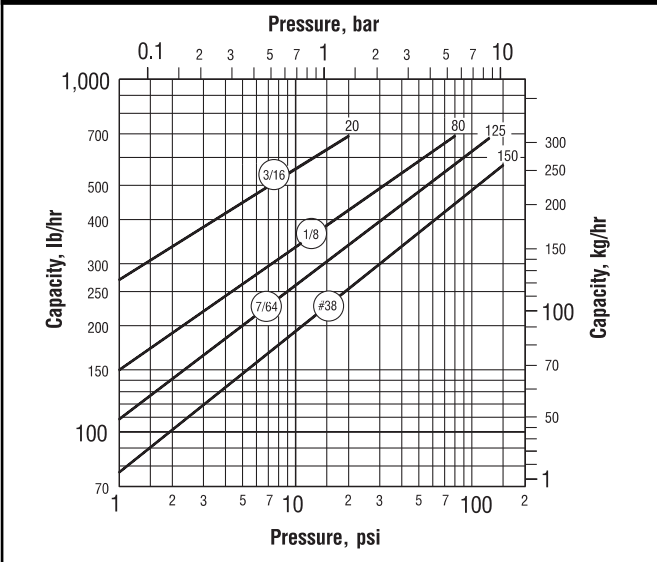
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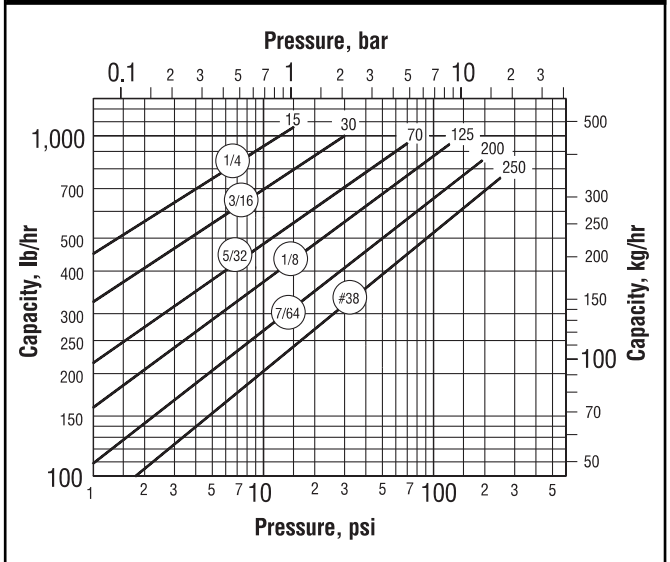


Steam Trapping and  
Steam Tracing Equipment

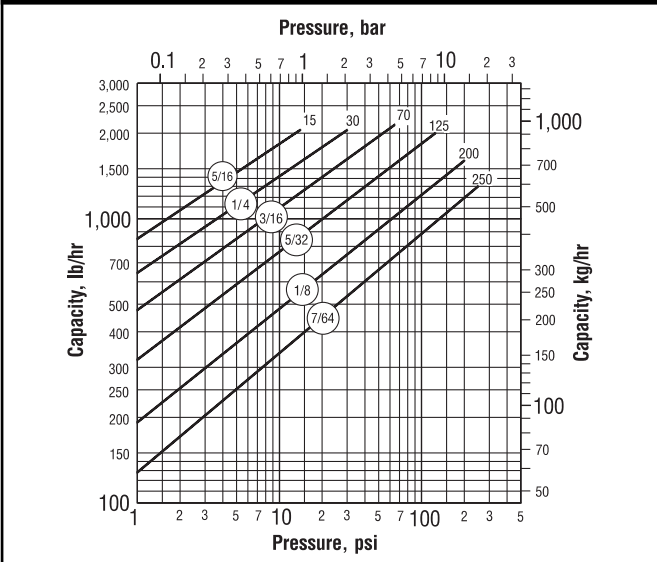
**Model 880 Capacity**



**Model 881 Capacity**



**Model 882 Capacity**



**Model 883 Capacity**

