



# 614F-616F Series Inverted Bucket Steam Traps

Ductile Iron for Horizontal Installation

For Pressures to 17 bar...Capacities to 9 072 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 ductile iron package, and you have the best of both worlds. Because they operate efficiently for longer periods of time, Armstrong ductile iron inverted buckets add solid energy savings to lower replacement/labor costs. All Armstrong ductile 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

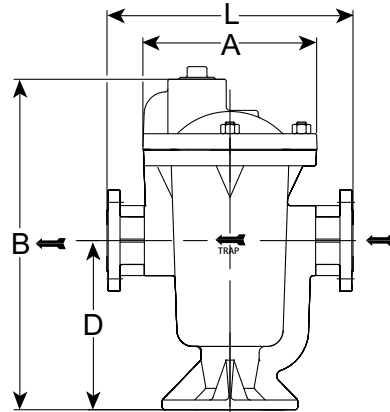
Maximum allowable pressure (vessel design): 17 bar @ 232°C  
 Maximum operating pressure: 17 bar  
 Maximum back pressure: 99% of inlet pressure

## Connections

Integral Flanged EN1092-2 PN25

## Materials

Body: ASTM A395 Gr. 60-40-18  
 Internals: All stainless steel – 304  
 Valve and seat: Stainless Steel 17-4PH H900



## Options

- Stainless steel internal check valve (add suffix CV)
- Thermic vent bucket (add suffix T)
- Large vent 17 bar maximum (add suffix LV)
- Scrub wire (add suffix BVSW)

## Specification

Inverted bucket steam trap, type ... in ductile 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 84-1. 614F-616F Series Side Inlet, Side Outlet Trap (dimensions in mm)**

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

Model No.	614F	615F	616F
Pipe Connections	25 – 32	40 – 50	50 – 65
Test plug	1"	1 1/2"	2"
«A» Face-to-Face	203	229	292
«B» Height	346	413	541
«D» Bottom to Ç Inlet	198	205	279
«L» Face-to-Face (Integral Flanged EN1092-2 PN25)	315 – 320	345 – 355	415 – 420
Number of Bolts	8	8	8
Weight in kg	24 – 26	39 – 41	68 – 70

All models are CE Marked according to the PED (2014/68/UE).

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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Table 85-1. Model 614F Capacity

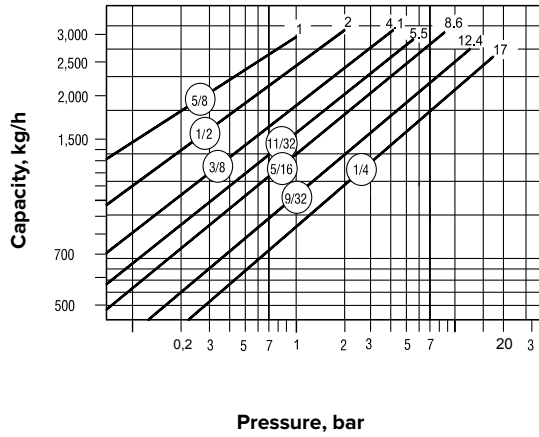


Table 85-2. Model 615F Capacity

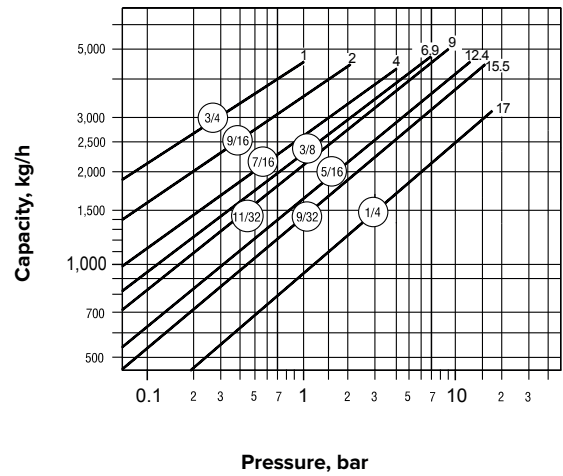
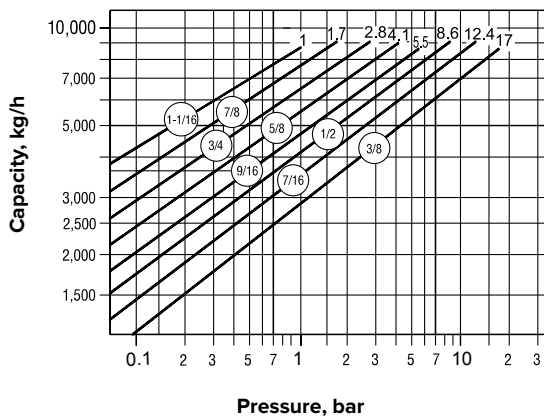


Table 85-3. Model 616F Capacity



Steam Trapping and  
Steam Tracing Equipment

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