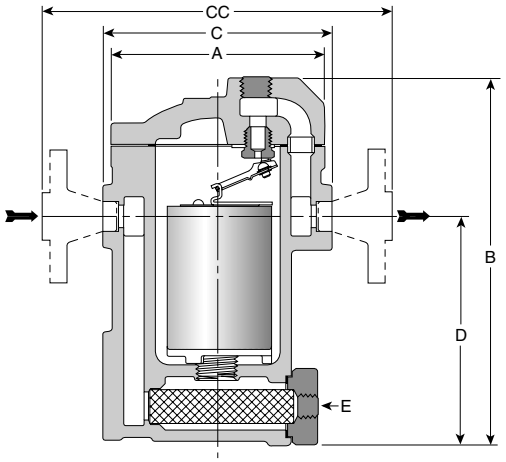
980 Series Inverted Bucket Steam Traps

Cast Steel for Horizontal Installation With Integral Strainer

For Pressures to 600 psig (41 bar)...Capacities to 4,400 lb/hr (2,000 kg/hr)



Description

Armstrong offers two sizes of cast steel traps with in-line horizontal pipe connections and integral strainers with a choice of screwed, socketweld or flanged connections.

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_2 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):	600 psig @ 650°F (41 bar @ 343°C)
Maximum operating pressure:	600 psig (41 bar)

Connections

Screwed NPT and BSPT
Socketweld
Flanged

See page 185 for dimensional information for flanged and socketweld connections.

Materials

Body:	ASTM A216 WCB
Internals:	All stainless steel—304
Valve and seat:	Hardened chrome steel—17-4PH
Strainer:	Stainless steel—304
Test plug:	Carbon steel

Options

- Stainless steel internal check valve
- Thermic vent bucket (983 only) maximum operating pressure 250 psig (17 bar)
- Scrub wire

Specification

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

How to Order

Specify:
- Model number
- Size and type of pipe connection. When flanges are required, specify type of flange in detail
- Maximum working pressure that will be encountered or orifice size
- Any options required

For a fully detailed certified drawing, refer to CD #1007.

980 Series Traps

Model No.	981		983	
	in	mm	in	mm
Pipe Connections	1/2, 3/4	15, 20	3/4, 1	20, 25
Test Plug	1/2	15	3/4	20
"A" (Flange Diameter)	4-1/2	114	7-1/4	184
"B" (Height)	8-5/8	219	12-5/16	313
"C" (Face-to-Face, Scr or SW)	5-3/8	137	7-3/4	197
"CC" (Face-to-Face, Class 600 ANSI Flanges*)				
1/2" (15 mm) connection	9-3/8	238	—	—
3/4" (20 mm) connection	9-1/2	241	11-3/4	298
1" (25 mm) connection	—	—	12-1/8	308
"D" (Bottom to ℄ Inlet)	4-13/16	122	7-9/16	192
"E" (Blowdown Connection)	3/8	9	3/4	20
Weight, Scr or SW lb (kg)	11-1/2 (5.2)		43 (19.5)	
Weight, 600 Class Flanges lb (kg) 1/2" connection	18 (8.2)		50 (22.7)	

*Face-to-face, other flanges on request. Also available with ANSI raised face, flat face or ring joint flanges.

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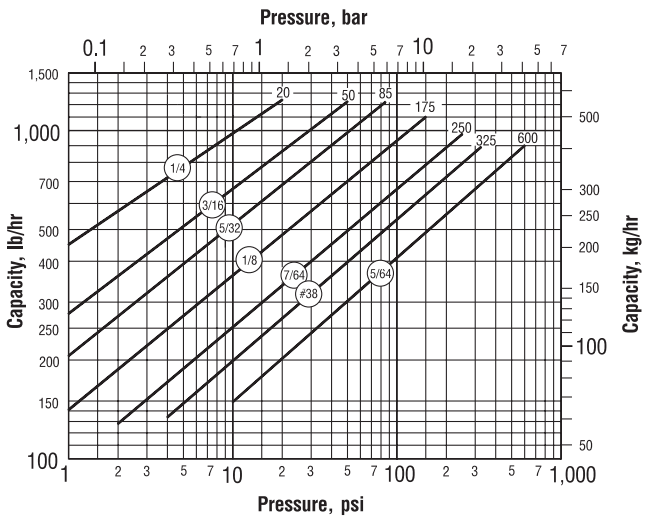
Model 981 Capacity



Model 983 Capacity