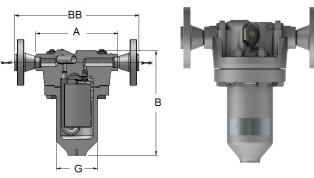


# **521 Series Inverted Bucket Steam Traps**

Forged Carbon Steel for Horizontal Installation

For Pressures to 1 000 psig (69 barg)...Capacities to 1 300 lb/hr (590 kg/hr)



Model 521 Trap

#### Description

Armstrong Model 521 horizontal installation offers smaller capacities at higher pressures.

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. Inverted bucket traps drain continuously to prevent condensate backup. They are also resistant to water hammer. Model 521 adds the convenience and savings of in-line repairability and is designed to meet today's energy-management requirements efficiently and economically over a long, trouble-free service life. Model 521 also has an integral strainer to protect from dirt and scale

## Connections

Screwed NPT and BSPT Socketweld Flanged

# **Materials**

Body: Cap: Internals: Valve and seat: Strainer Screen Bolt/Nut ASTM A105N ASTM A105N All stainless steel—304 Titanium Stainless Steel ASTM A193 Gr B7 / ASTM A194 Gr 2H

## **Specifications**

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

# How to Order

Specify:

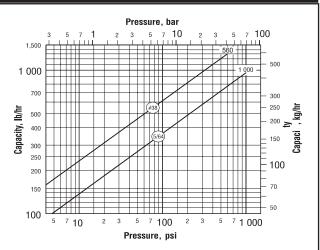
- Model number
- Size and type of pipe connection. When flanges are required, specify type of flange in detail
- Maximum working pressure that will be encountered or orifice size
  Any options required

521 Side Inlet, Side Outlet Traps
Add suffix "CV" to trap number for internal check valve.

Model No. Screwed or SW Model No. Flanged	521 521-FW				
	in	mm			
Pipe Connections	1/2, 3/4	15, 20			
"A"	8	203			
"B" (Height, Screwed or SW)	10-5/16	263			
"G" (Body OD)	4	102			
Number of Bolts	8				
Weight Scr. or SW Ib (kg)	30 (13.4)				

Consult factory for "BB" dimensions.

#### Model 521 Capacity



NOTE: #38 orifice in Model 521 is limited to 560 psig (39 barg).

Pressure-Temperature Rating for Forged Steel Traps											
Max. Oper.			Maximum Allowable Pressure (Vessel Design) of Pressure-Containing Parts at Indicated Temperature								
Model	0			°C	°F	°C	°F	°C	°F	°C	
INU.	No. Steam		-20/+650	-28/+343	700	371	750	399	800	427	
	psig	barg	psig	barg	psig	barg	psig	barg	psig	barg	
521	1 000	69	1 000	69	1 000	69	950	65.5	840	58	

NOTE: Maximum operating pressure to be marked on nameplate will be determined by actual orifice used. Traps with flanges may have different pressure-temperature ratings.