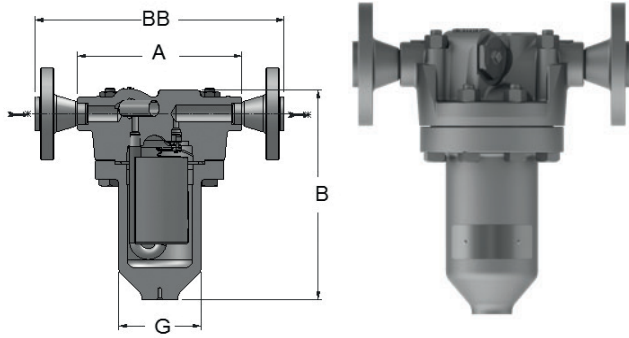




521 Series Inverted Bucket Steam Traps

Forged Carbon Steel for Horizontal Installation

For Pressures to 69 barg...Capacities to 590 kg/hr



Model 521 Trap

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 reparability 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 EN 1092-1 or ASME B16.5

Materials

Body: ASTM A105N
Cap: ASTM A105N
Internals: All stainless steel—304
Valve and seat: Titanium
Strainer Screen: Stainless Steel
Bolt/Nut: ASTM A193 Gr B7/ASTM A194 Gr2H

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.

Table ST-98-1. Model 521 Side Inlet, Side Outlet Traps
Add suffix "CV" to trap number for internal check valve.

| | |
|-----------------------------|------------|
| Model No. Screwed or SW | 521 |
| Model No. Flanged | 521-FW |
| Pipe Connections | 1/2", 3/4" |
| "A" | 203 |
| "B" (Height, screwed & SW) | 263 |
| "G" Body Outside Diameter | 102 |
| Number of Bolts | 8 |
| Weight in kg (screwed & SW) | 13.4 |

Other flange sizes available on request, consult factory.

How to Order

Specify:

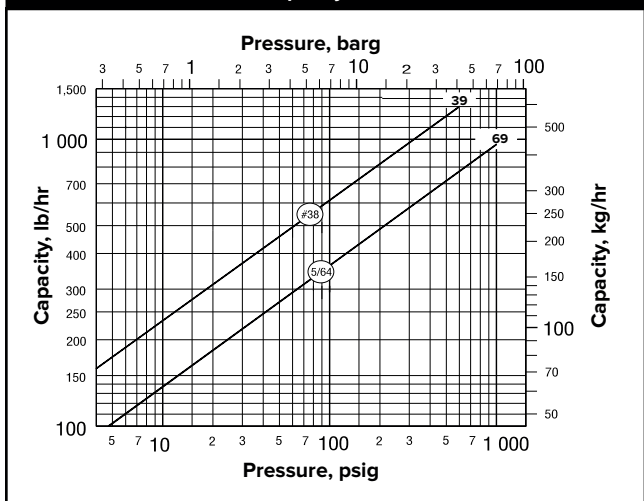
- Model number
- Size and type of pipe connection. When flanges are required, specify type of flange in detail
- Maximum working pressure that will be encountered or orifice size
- Any options required

Table ST-98-2. Pressure-Temperature Rating for Forged Steel Traps

| Model No. | Max. Oper. Pressure, Sat. Steam | Maximum Allowable Pressure (Vessel Design) of Pressure-Containing Parts at Indicated Temperature | | | |
|-----------|---------------------------------|--|------|------|------|
| | | °C | °C | °C | °C |
| | | -28/+343 | 371 | 399 | 427 |
| 521 | barg | barg | barg | barg | barg |
| 521 | 69 | 69 | 69 | 65.5 | 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.

Table ST-98-3. Model 521 Capacity



NOTE: #38 orifice in Model 521 is limited to 39 barg.