880 Series Inverted Bucket Steam Traps
Cast Iron for Horizontal Installation, with Integral Strainer
For Pressures to 17 bar... Capacities to 2 000 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 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 CO2 venting at steam temperature.

Inverted bucket traps drain continuously, although discharging intermittently, allowing no condensate backup. They are also resistant to water hammer.

Connections
Screwed BSPT and NPT
Flanged ANSI (screw on)**

Maximum Operating Conditions
Maximum allowable pressure (vessel design) †: 17 bar @ 232°C
Maximum operating pressure: Model 880: 10 bar
Model 881 - 883: 17 bar
Maximum back pressure: 99% of inlet pressure

Materials
Body: ASTM A48 Class 30
Internals: All stainless steel – 304
Valve and seat: Stainless 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. Maximum allowable back pressure 99% of inlet pressure.

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

Table ST-86-1. 880 Series Side Inlet, Side Outlet Trap with Integral Strainer (dimensions in mm)
Add suffix «CV» to model number for internal check valve, «T» for thermic vent bucket.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>860</th>
<th>881</th>
<th>882</th>
<th>883</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test plug</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>1/2&quot;</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>A= Diameter</td>
<td>95</td>
<td>95</td>
<td>143</td>
<td>179</td>
</tr>
<tr>
<td>B= Height</td>
<td>154</td>
<td>179</td>
<td>244</td>
<td>314</td>
</tr>
<tr>
<td>C= Face-to-Face</td>
<td>127</td>
<td>127</td>
<td>165</td>
<td>200</td>
</tr>
<tr>
<td>D= Bottom to C Inlet</td>
<td>87</td>
<td>113</td>
<td>146</td>
<td>187</td>
</tr>
<tr>
<td>Number of Bolts</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight in kg</td>
<td>2.5</td>
<td>2.7</td>
<td>7</td>
<td>14.1</td>
</tr>
</tbody>
</table>

* Cannot be furnished with both thermic vent bucket and check valve.
** Dimensions on request.
All models comply with the Article 4.3 of the PED (2014/68/UE).
† May be derated depending on flange rating and type.

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 ST-87-1. Model 880 Capacity

Table ST-87-2. Model 881 Capacity

Table ST-87-3. Model 882 Capacity

Table ST-87-4. Model 883 Capacity

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