1800 Series Inverted Bucket Steam Traps
All Stainless Steel for Horizontal Installation
For Pressures to 45 bar...Capacities to 1 090 kg/h

Description
A quick and easy “in-line” replacement for other types of side inlet/side outlet traps, the Armstrong 1800 Series brings together all the benefits of energy-efficient inverted bucket operation. Side inlet/outlet all-welded construction means an inverted bucket trap that will operate efficiently on applications such as tracer lines, drips, heating, processing and similar applications.

With the 1800 Series you get freeze-resistant, all-stainless steel construction, with a three-year guarantee, plus all the benefits of inverted bucket operation:

- Long, trouble-free service life
- Excellent purging action
- Continuous air venting
- Ease and flexibility of in-line installation

Maximum Operating Conditions
Maximum allowable pressure (vessel design)†:
Model 1810, 1811: 28 bar @ 427°C
Model 1822: 45 bar @ 315°C

Maximum operating pressure:
Model 1810: 14 bar
Model 1811: 28 bar
Model 1822: 45 bar @ 316°C
43 bar @ 371°C
41.6 bar @ 427°C

Maximum back pressure: 99% of inlet pressure

Connections
Screwed BSPT and NPT
Socketweld
Flanged DIN or ANSI (welded)

Materials
Body: ASTM A240 Grade 304L
Internals: All stainless steel – 304
Valve and seat: Stainless Steel 17-4PH (<35 bar)
Titanium (>35 bar)

Options
- Insu-Pak™ insulation for Models 1810/1811
- Stainless steel pop drain for Models 1811/1822
- Probe connection
- With the in-line 1800N Series inverted bucket, copper oxide plugging problems can be eliminated.

Specification
Inverted bucket steam trap, type ... in all stainless steel, freeze resistant, without gaskets, with continuous air venting at steam temperature, free-floating stainless steel mechanism, and 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-108-1. 1800 Series Side Inlet, Side Outlet Trap (dimensions in mm)

<table>
<thead>
<tr>
<th>Model No.</th>
<th>1810</th>
<th>1811</th>
<th>1822</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;A&quot; Body Outside Diameter</td>
<td>70</td>
<td>70</td>
<td>99</td>
</tr>
<tr>
<td>&quot;B&quot; Height</td>
<td>130</td>
<td>167</td>
<td>218</td>
</tr>
<tr>
<td>&quot;CC&quot; Face-to-Face (screwed &amp; SW)</td>
<td>110</td>
<td>110</td>
<td>127</td>
</tr>
<tr>
<td>&quot;CC&quot; Face-to-Face (flanged PN40*)</td>
<td>N/A – 150 – 150 – 160</td>
<td>150 – 150 – 160</td>
<td>190 – 190 – 200</td>
</tr>
<tr>
<td>&quot;D&quot; Bottom to Ø Inlet</td>
<td>113</td>
<td>138 – 141</td>
<td>186 – 181</td>
</tr>
<tr>
<td>Weight in kg (screwed &amp; SW)</td>
<td>0.8</td>
<td>0.9 – 1.0</td>
<td>3</td>
</tr>
<tr>
<td>Weight in kg (flanged PN40*)</td>
<td>2.3 – 2.3 – 2.8</td>
<td>2.5 – 3.2</td>
<td>4.5 – 5.2 – 5.6</td>
</tr>
</tbody>
</table>

* Standard flanges are in carbon steel, stainless steel flanges are optional. Other flange sizes, ratings and face-to-face dimensions are available on request.
** pipe connections only available if flanged.
All models comply with the article 3.3 of the PED (97/23/EC). † 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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Options
Pop Drain for Freeze Protection
In general, a properly selected and installed Armstrong trap will not freeze as long as steam is coming to the trap. If the steam supply is shut off, a pop drain should be used to automatically drain the trap. Stainless steel pop drain available for Models 1811 and 1822.

Maximum Operating Conditions
Pressure: 41 bar
Temperature: 177°C

Insu-Pak™
Now you can insulate the in-line traps in your plant without complicating regular trap maintenance. Insu-Pak, a simple reusable insulation package, cuts the time and cost of in-field installation because it goes on in a snap. And it comes off just as easily. Insu-Pak can prevent trap freeze-up when used with a properly designed condensate manifold. Designed for use with Model 1810 and Model 1811 traps.

Probe connections are available for trap monitoring on Models 1811 and 1822.

* Orifices available only with 3/4” connections.