

2000 Series Inverted Bucket Steam Traps

All Stainless Steel with 360° Connector

For Pressures to 45 bar...Capacities to 590 kg/h

Description

With the 2000 Series' 360° universal connector, you can install inverted bucket efficiency and long service life in any piping configuration with little or no repiping. You get the reliability of the inverted bucket operating principle, plus all the benefits of all-stainless steel construction:

- A sealed, tamperproof package
- A compact, lightweight trap
- The ability to withstand freeze-ups without damage
- Exceptional corrosion resistance
- A **three-year guarantee** against defective materials, defective workmanship.

2000 Series steam traps combine savings in three important areas: energy, installation and replacement. The 360° universal connector provides quick, easy in-line replacement along with all the proven advantages of inverted bucket operation. Also available with optional IS-2 integral strainer connector.

Maximum Operating Conditions

Maximum allowable pressure (vessel design):
Model 2010, 2011: 28 bar @ 427°C
Model 2022: 45 bar @ 315°C

Maximum operating pressure:

Model 2010: 14 bar
Model 2011: 28 bar
Model 2022: 45 bar @ 316°C
43 bar @ 371°C
41,6 bar @ 427°C

Maximum back pressure: 99% of inlet pressure

Connections

Screw BSPT and NPT
Socketweld
Flanged DIN or ANSI (welded)

Materials

Body: ASTM-A 240 Grade 304L
Loose Flange: Zinc Plated Steel
Internals: All stainless steel – 304
Valve and seat: Stainless Steel 17-4PH (<35 bar)
Titanium (>35 bar)
Stainless steel – 304

Standard connector: ASTM A351 Gr.CF8
IS-2 connector with integral strainer: 20 x 20 mesh 304 SS Screen

Specification

Inverted bucket steam trap, type ... in all stainless steel, freeze resistant, with 360° universal connector, having 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:

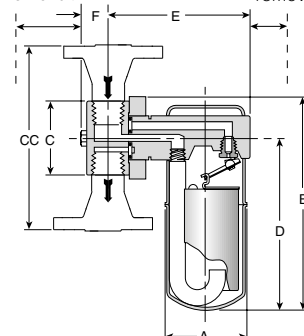
- Model number
- Size and type of pipe connection
- Type of 360° connector (with or without strainer)
- Maximum working pressure that will be encountered or orifice size
- Any options required

Options

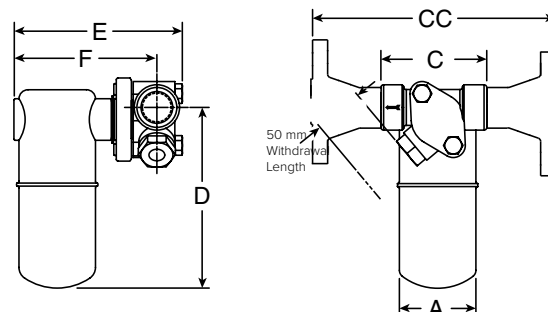
- Stainless steel pop drain for Models 2011/2022
- Stainless steel loose flange
- Probe connection for Models 2011/2022
- Standard connector
- IS-2 connector with integral strainer
- With the 2000N Series 360° universal connector, copper oxide plugging problems can be eliminated.

Allow 635 mm clearance for bolt installation and removal.

Allow 635 mm clearance for trap installation and removal.



Model 2011 Trap with Standard Connector



Model 2010-2022 with IS-2 Connector

Table ST-114-1. 2000 Series Traps with Standard Connector			
Model No.	2010	2011	2022
Pipe Connections	15 – 20 – 25*		
"A" Body Outside Diameter	68	68	98
"B" Height ⁽²⁾	152	176	221
"C" Face-to-Face (screwed & SW)	60	60	60
"CC" Face-to-Face (flanged PN40 ⁽¹⁾)	150 – 150 – 160		
"D" Bottom to $\varnothing$ Inlet	117	142	187
"E" $\varnothing$ to Outside (Standard) ⁽³⁾	116	116	146
"F" $\varnothing$ to Bolt	25	25	25
Weight in kg (screwed & SW)	1,9	2,0	3,0
Weight in kg (flanged PN40 ⁽¹⁾)	3,6 – 4,2 – 4,7	3,7 – 4,3 – 4,8	4,7 – 5,3 – 5,7

⁽¹⁾Standard flanges are in carbon steel, stainless steel flanges are optional. Other flange sizes, ratings and face-to-face dimensions are available on request.

⁽²⁾ For IS-2 connector, add 15 mm to "B" and "D" dimensions when optional probe connections is required. ⁽³⁾ When trap is installed in vertical position on flanged connector, the "Export - Long Neck" version should be used.

* Pipe connection only available in 25 mm for flanged models. All models comply with the Article 4.3 of the PED (2014/68/UE).

† May be derated depending on flange rating and type.

Table ST-114-1. 2000 Series Traps with IS-2 Integral Strainer Connector						
Model No.	2010		2011		2022	
Pipe Connections	15 – 20	25	15 – 20	25	15 – 20	25
"C" Face-to-Face (screwed & SW)	89	102	89	102	89	102
"CC" Face-to-Face (flanged PN40 ⁽¹⁾)	150	160	150	160	150	160
"D" Bottom to $\varnothing$ Inlet ⁽²⁾	127	127	152	152	197	197
"E" Outside to Bolt	140	144	140	144	170	175
"F" $\varnothing$ to Outside	117	122	117	122	148	152
Weight in kg (screwed & SW)	2,2	2,4	2,3	2,5	3	3
Weight in kg (flanged PN40 ⁽¹⁾)	3,9 – 4,5	5,1	4,0 – 4,6	5,2	4,7 – 5,3	5,7

All dimensions and weights are approximate. Use certified print for exact dimensions. Design and materials are subject to change without notice.

Armstrong International SA • Parc Industriel des Hauts-Sarts (2e Avenue) • 4040 Herstal • Belgium

Tel.: +32 (0)4 240 90 90 • Fax: +32 (0)4 240 40 33

www.armstronginternational.eu • info@armstronginternational.eu

2000 Series Inverted Bucket Steam Traps

All Stainless Steel with 360° Connector

For Pressures to 45 bar...Capacities to 590 kg/h



Table ST-115-1. Model 2010 Capacity

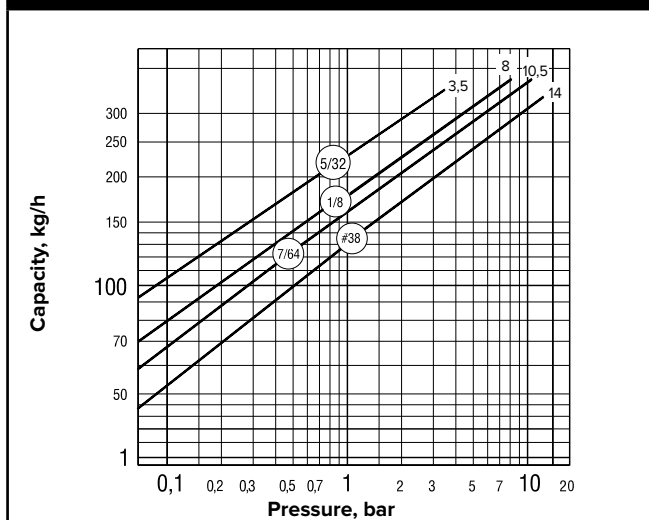
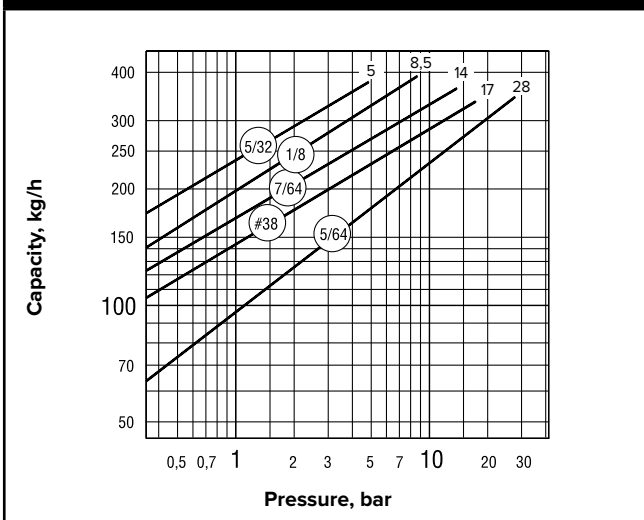


Table ST-115-2. Model 2011 Capacity

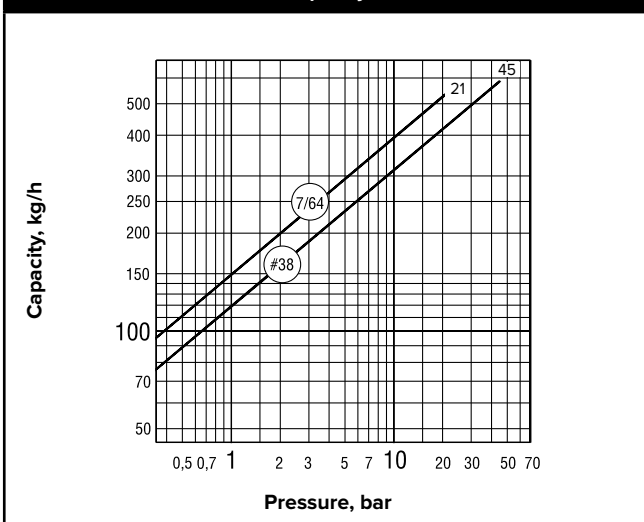


Connectors

Besides the inverted bucket traps, the standard connector, IS-2 connector with integral strainer and TVS-4000 can also be used on thermostatic, thermostatic wafer and disc traps.



Table ST-115-3. Model 2022 Capacity



Options

Pop Drain for Freeze Protection

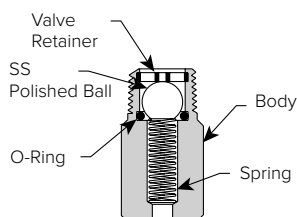
In general, a properly selected and installed Armstrong trap will not freeze as long as steam is coming to the trap. If the steam supply is shut off, a pop drain should be used to automatically drain the trap. Stainless steel pop drain available for Models 2011 and 2022.

Maximum Operating Conditions

Pressure: 41 bar

Temperature: 177°C

Probe connections are available for trap monitoring for Models 2011 and 2022.



All dimensions and weights are approximate. Use certified print for exact dimensions. Design and materials are subject to change without notice.

Armstrong International SA • Parc Industriel des Hauts-Sarts (2e Avenue) • 4040 Herstal • Belgium

Tel.: +32 (0)4 240 90 90 • Fax: +32 (0)4 240 40 33

www.armstronginternational.eu • info@armstronginternational.eu