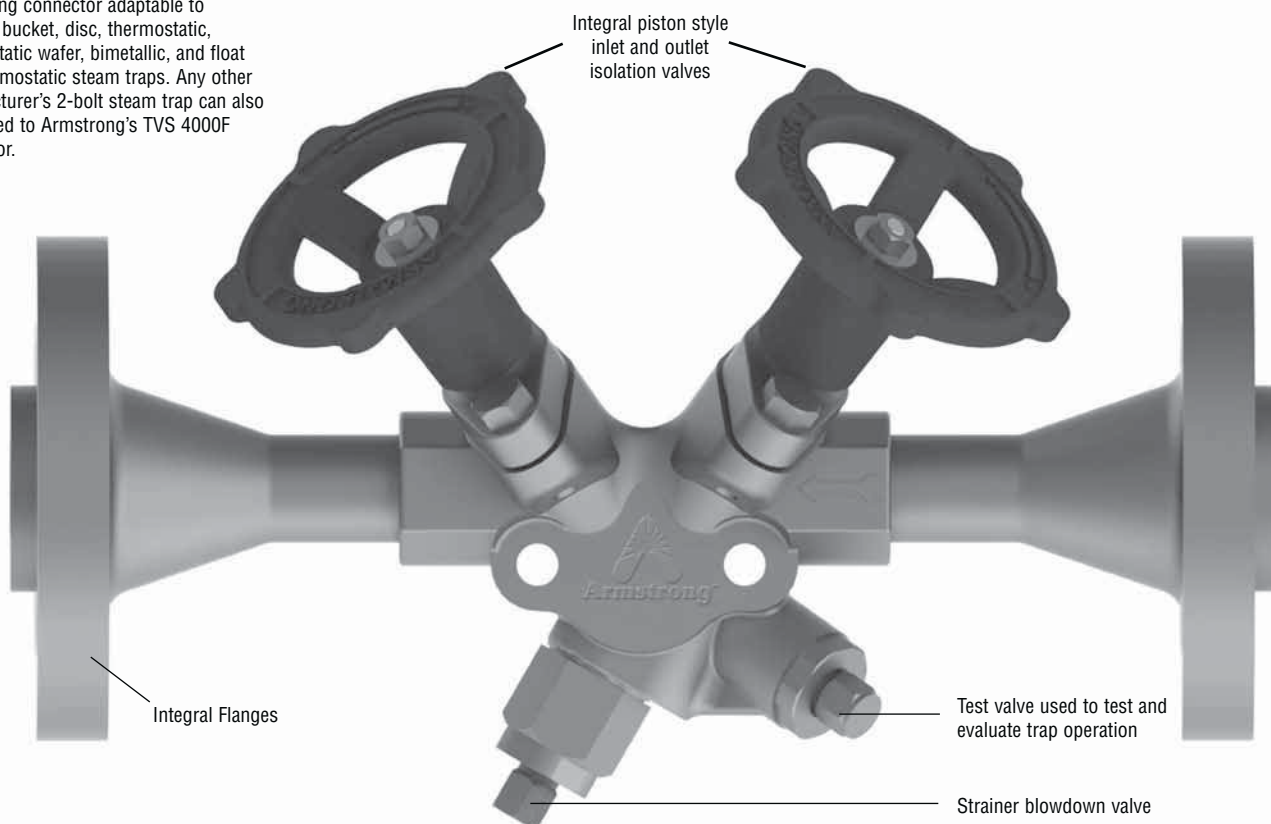


TVS-4000F Series Stainless Steel Trap Valve Station

For Pressures to 45 bar...Capacities to 590 kg/hr (Using 2000 Series Inverted Bucket Steam Traps)

Armstrong connector adaptable to inverted bucket, disc, thermostatic, thermostatic wafer, bimetallic, and float and thermostatic steam traps. Any other manufacturer's 2-bolt steam trap can also be applied to Armstrong's TVS 4000F connector.



Description

A complete package featuring two piston-style isolation valves, test valve and integral stainless steel strainer with blowdown valve. You'll realize all the benefits of a piston valve integrated into the same space-saving package.

Maximum Operating Conditions

Maximum allowable pressure:
45 bar @ 315°C

Materials—TVS-4000F Connector

Connector ASTM A351 Gr. CF8M
Strainer screen..... Stainless steel
Test valve Stainless steel
Blowdown valve Stainless steel

Isolation Valve Components

All wetted parts..... Stainless steel
Valve sealing rings..... Graphite and stainless steel
Handwheel Ductile iron

Weight

6,4 kg

How to Order

Model	Connection	Type of Connection Inlet/Outlet	Flow Direction	Trap Type
TVS-4000F	3/4"	Flanged ASME B16.5 Class 150, 300, 600	R = Right to Left L = Left to Right	Inverted Bucket • Disc • Thermostatic wafer Bimetallic • Float and Thermostatic
	1"	Flanged ASME B16.5 Class 150, 300		

Features

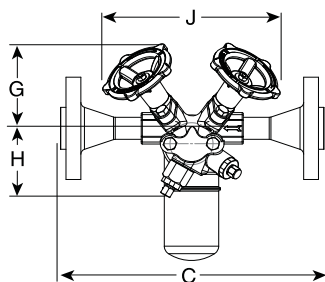
- **Reduced costs.** TVS saves on these fronts: reduced leak points, installation and maintenance time.
- **A full range of features.** TVS has test and strainer blowdown valves.
- **Reduced design time.** Permits combining products with exact face-to-face dimensions.
- **Three-year guarantee.** The TVS-4000F is guaranteed for three years.
- **Easy, in-line repairability with maximum safety.** TVS allows isolation at point of service with upstream/downstream depressurization.
- **Installation versatility.** The connector design makes the TVS adaptable to any manufacturer's 2-bolt steam trap and piping configuration.
- **Simplified trap testing.** TVS enhances your capability to check trap operation and offers a built-in method to block and bleed traps.
- **Integral Flanges.** The body and connections are of one piece construction, free of welds and other potential leak paths.



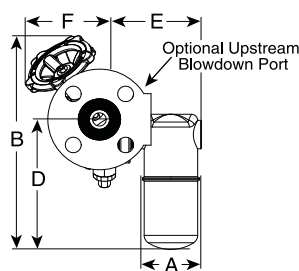
TVS-4000F Series Stainless Steel Trap Valve Station

For Pressures to 45 bar...Capacities to 590 kg/hr (Using 2000 Series Inverted Bucket Steam Traps)

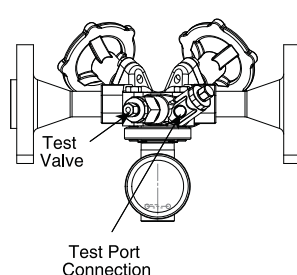
Steam Trapping and
Steam Tracing Equipment



Model TVS-4000F
with
2000 Series SS Trap
Front View



Model TVS-4000F
with
2000 Series SS Trap
Side View



Model TVS-4000F
with
2000 Series SS Trap
Bottom View

Same principle. Different package with two piston-style isolation valves, test valve and integral stainless steel strainer with blowdown valve. Now the energy-saving performance and reliability of the inverted bucket steam trap are available in a versatile new package. You'll still enjoy all the familiar benefits. And the same efficient condensate drainage from virtually every kind of steam-using equipment. What you'll find new are all the benefits of a piston valve integrated into the same space-saving package.

Materials—TVS-4000F Connector

Connector	ASTM A351 Gr. CF8M
Strainer screen.....	Stainless steel
Screen retainer.....	Stainless steel
Gasket.....	Stainless steel
Retainer unit	Stainless steel
Test valve	Stainless steel
Blowdown valve	Stainless steel

Isolation Valve Components

Handwheel	Ductile iron
Nut	Stainless steel
Stem, washers	Stainless steel
Bonnet	ASTM A351 Gr. CF8M
Bonnet, bolts.....	DIN 933, Gr. 8.8 per DIN 267
Valve plug	Stainless steel
Disc springs.....	Stainless steel
Valve sealing rings.....	Graphite and stainless steel
Lantern bushing.....	Stainless steel
Valve washers	Stainless steel

Materials—Series 2000 Traps

Body.....	ASTM A240 Gr. 304L
Internals.....	All stainless steel—304
Valve and seat.....	Hardened chrome steel—17-4PH

Table ST-154-1. TVS-4000F Series With 2000 Series Inverted Bucket Steam Trap

Model No.	2010	2011	2022
Pipe Connections	mm	mm	mm
	20, 25	20, 25	20, 25
"A" Trap Diameter	68	68	98
"B" Height (Valve Open)	203	268	318
"C" Face to Face (ANSI)	305	305	305
"D" Connection \varnothing to Bottom	120	154	203
"E" Connection \varnothing to Outside of Trap	114	122	149
"F" Connection \varnothing to Front of Handwheel (Valve Open)	89	98	98
"G" Connection \varnothing to Top of Handwheel (Valve Open)	83	114	114
"H" Connection \varnothing to Bottom of Connector	47	83	83
"J" Width Across Handwheels (Valve Open)	235	222	222
Test Port Connection	6	6	6
Weight kg	7,3	7,5	8.6
Maximum Operating Pressure (Trap)	14 bar	28 bar	45 bar
Maximum Allowable Pressure (Trap)	28 bar @ 427°C		45 bar @ 315°C

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 (2^e Avenue) • 4040 Herstal • Belgium

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

www.armstronginternational.eu • info@armstronginternational.eu

TVS-4000F Series Stainless Steel Trap Valve Station

For Pressures to 45 bar...Capacities to 590 kg/hr (Using 2000 Series Inverted Bucket Steam Traps)

Table ST-155-1. Model 2010 Capacity

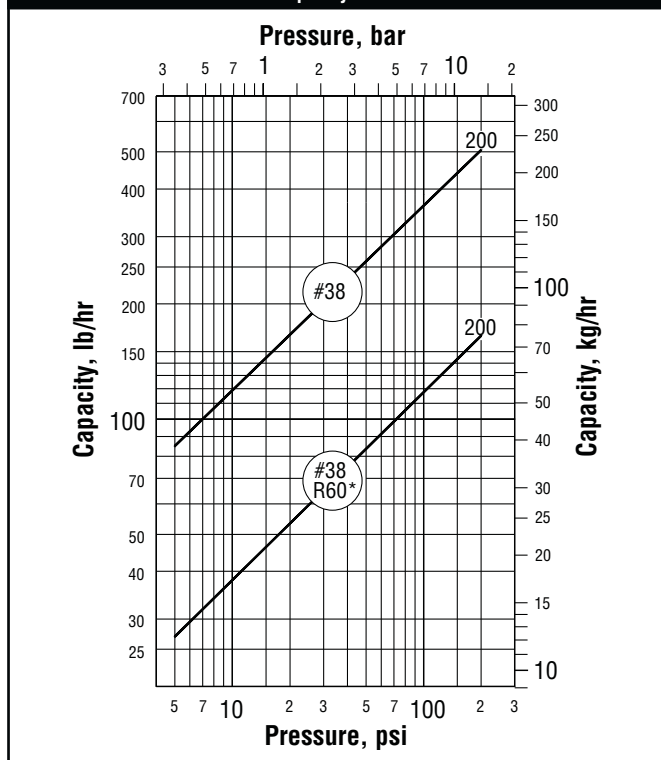


Table ST-155-2. Model 2011 Capacity

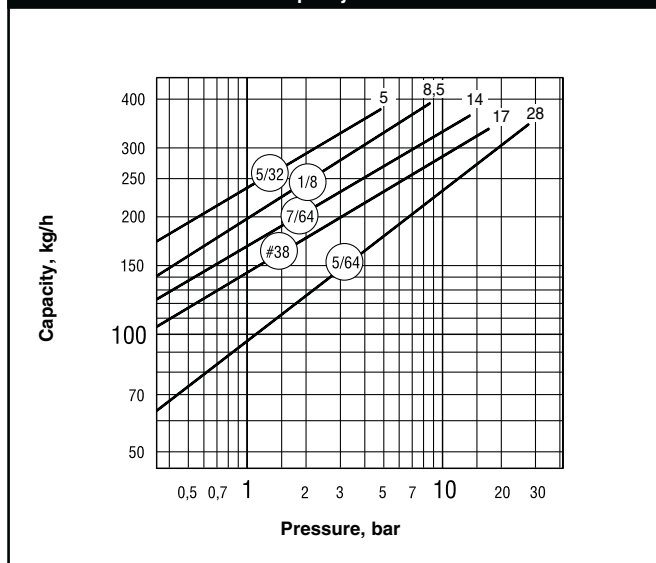
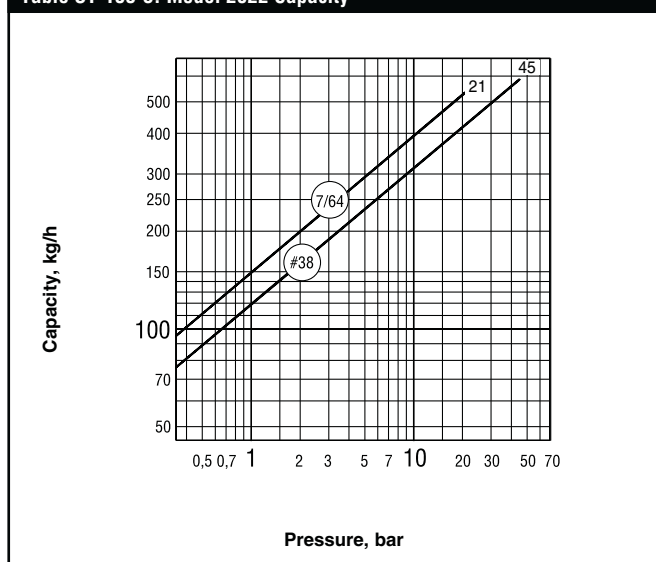


Table ST-155-3. Model 2022 Capacity



Options

Insu-Pak™

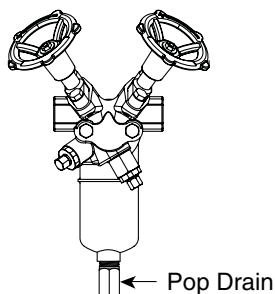
Now you can insulate the in-line traps in your plant without complicating regular trap maintenance. Insu-Pak, a simple reusable insulation package, cuts the time and cost of in-field installation because it goes on in a snap. And it comes off just as easily. The Insu-Pak can prevent trap freeze-up when used with a properly designed condensate manifold. Designed for use with Model 2010 and Model 2011 traps.



Pop Drain

Simple but effective against freeze-up. Properly installed and maintained at low points in your system, the simple, pressure-actuated pop drain opens for condensate drainage at 5 psig (0.35 bar) for Models 2011 and 2022.

Probe Connections are available for trap monitoring on 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.