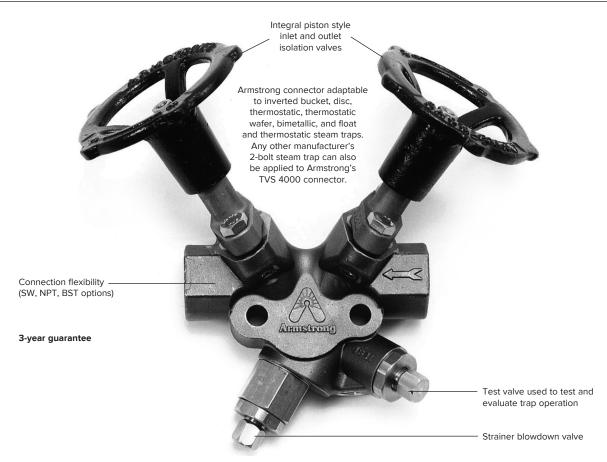
TVS 4000 Series Stainless Steel Trap Valve Station





Description

Same principle. Different package with two piston-style isolation valves, test valve and integral stainless steel strainer with blowdown valve. What you'll find new are all the benefits of a piston valve integrated into the same space-saving package.

Maximum Operating Conditions

Maximum allowable pressure: 830 psig (57.2 barg) @ 800°F (427°C)

Materials—TVS 4000 Connector

ASTM A351 Gr. CF8M Connector: 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 or CF8M

Weight

6-1/2 lb (2.9 kg)

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. When installed with Armstrong Model 2011 and 2022 steam traps, it will also accommodate the Armstrong pop drain as well as AIM® and SteamEye® remote steam trap monitoring and testing devices.
- Reduced design time. Permits combining products with exact face-to-face dimensions
- Three-year guarantee. The TVS 4000 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.

How to Order

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Model	Connection	Type of Connection Inlet/Outlet	Flow Direction	Trap Type	
TVS 4000	1/2"	NPT	R = Right to Left	Inverted Bucket	
	3/4"	SW	L = Left to Right	Disc	
		BSPT		Thermostatic wafer	
		Flanged*		Bimetallic	
				Float and Thermostation	
		1		I I	

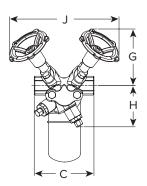
U.S. Patent 6,467,503 *Consult factory.

Designs, materials, weights and performance ratings are approximate and subject to change without notice. Visit armstronginternational.com for up-to-date information.

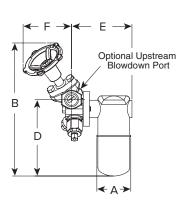


TVS 4000 Series Stainless Steel Trap Valve Station

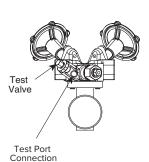
For Pressures to 830 psig (57.2 barg)...Capacities to 1300 lb/hr (590 kg/hr) (Using 2000 Series Inverted Bucket Steam Traps)



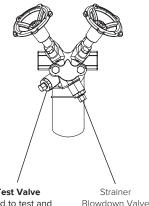




Model TVS 4000 With 2000 Series SS Trap Side View



Model TVS 4000 With 2000 Series SS Trap Bottom View



Test Valve
Used to test and
evaluate trap
operation

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 4000 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 or CF8M
Nut: Stainless steel
Stem, washers: Stainless steel
Bonnet: ASTM A351 Gr. CF8M

Bonnet, bolts: DIN 933, Gr. A2 Class 70 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: Stainless steel—17-4PH

Model No.	20	2010		2011		2022	
Dina Compostions	in	mm	in	mm	in	mm	
Pipe Connections	3/8, 1/2, 3/4	10, 15, 20	1/2, 3/4	15, 20	1/2, 3/4	15, 20	
"A" Trap Diameter	2-11/16	68	2-11/16	68	3-7/8	98	
"B" Height (Valve Open)	8	203	10-1/2	268	12-1/2	318	
"C" Face to Face	4-3/4	120	4-3/4	120	4-3/4	120	
"D" Connection & to Bottom	4-3/4	120	6	154	8	203	
"E" Connection Q to Outside of Trap	4-1/2	114	4-13/16	122	5-7/8	149	
"F" Connection & to Front of Handwheel (Valve Open)	3-1/2	89	3-7/8	98	3-7/8	98	
"G" Connection & to Top of Handwheel (Valve Open)	3-1/4	83	4-1/2	114	4-1/2	114	
"H" Connection & to Bottom of Connector	1-7/8	47	3-1/4	83	3-1/4	83	
"J" Width Across Handwheels (Valve Open)	9-1/4	235	8-3/4	222	8-3/4	222	
Test Port Connection	1/4 NPT	6	1/4 NPT	6	1/4 NPT	6	
Weight lb (kg)	9	4	9-1/2	4.3	12	5.4	
Maximum Operating Pressure (Trap)	200 psig	200 psig (14 barg)		400 psig (28 barg)		650 psig (45 barg)	
Maximum Operating Conditions (Connector)		830 psig (57.2 barg) @ 800°F (427°C) 1400 psig (96.5 barg) @ 100°F (38°C)					
Maximum Allowable Pressure (Trap)	le Pressure (Trap) 400 psig (28 barg) @ 750°F (399°C)			650 psig @ 600°F (45 barg @ 315°C)			

U.S. Patent 6,467,503