WT Series Thermostatic Wafer Steam Trap

Stainless Steel or Carbon Steel

For Pressures to 600 psig (41 bar)...Cold Water Start-Up Capacities to 1,600 lb/hr (726 kg/hr)

Description

Armstrong offers three thermostatic wafer steam traps. The WT-1 is ideal for low-capacity steam tracers and features an exclusive non-welded wafer design and internal strainer screen two to three times larger than that of other thermostatic traps in a sealed stainless steel body. Choice of NPT or BSPT screwed connections.

The WT-2000 does not have an internal strainer, but is equipped with a special 360° connector to expand piping options and simplify installation. Choice of NPT or BSPT screwed connections, or socketweld connections. Also available with optional IS-2 stainless steel connector with integral strainer.

Armstrong's WT-3 is a carbon steel thermostatic wafer trap for superheated drip service. It features an exclusive non-welded wafer design, which eliminates problems associated with weld stress. The WT-3 has no thin-walled enclosures such as bellows or welded diaphragms. It is also resistant to water hammer. Choice of NPT or BSPT screwed connections, or socketweld connections.

NOTE: Since the normal operation of all suppressed temperature-discharge (subcooling) steam traps is to back up condensate, they should not be used on drip legs for saturated steam service, heating or process equipment. Exercise care in the maintenance of any thermostatic wafer trap with a small discharge area susceptible to clogging.

Specification

Thermostatic wafer steam trap, type ... in stainless steel or carbon steel.

How to Order

Specify:

- Model number
- Size and type of pipe connection, or connector style
- Any options required

For a fully detailed certified drawing, refer to CD #1017.

Model WT Series Wafer Trap Capacity

Differential Pressure*		Cold Water Start-Up 70°F (21°C)		Hot Water Start-Up 212°F (100°C)		Operating Condensate 50°F (28°C) Below Saturation	
psi	bar	lb/hr	kg/hr	lb/hr	kg/hr	**lb/hr	**kg/hr
5	0.35	120	54	100	45	10	4.5
10	0.70	150	68	170	77	13	5.9
20	1.4	320	145	250	113	18	8.2
30	2	390	177	300	136	20	9.1
40	3	420	191	350	159	24	10.9
50	3.5	490	222	400	181	26	11.8
75	5	570	259	480	218	30	13.6
100	7	650	295	580	263	35	15.9
150	10.5	700	318	700	318	40	18.1
200	14	900	408	800	363	46	20.9
250	17	1,000	454	950	431	50	22.7
300	21	1,050	476	1,025	465	56	25.4
350	24	1,150	522	1,200	544	63	28.6
400	28	1,300	590	1,250	567	70	31.8

*Capacities based on differential pressure with no back pressure.

**Capacities will vary with the degree of subcooling. When greater capacities are required, the trap will automatically adjust to the load, up to the maximum (cold water) capacity shown, by increasing the amount of subcooling.

Model	WT-1 All Stainless Steel	WT-2000 Stainless Steel w/360° Connector	WT-3 Carbon Steel
Design		Welded	
Connections	Screwed (NPT and BSPT) Socketweld	Screwed (NPT and BSPT), Socketweld and Flanged	Screwed (NPT and BSPT) Socketweld
Material			
Body	ASTM A240—304L		Carbon steel C-1018
Cap			
Capsule wafer	Hastelloy		
Capsule body	Stainless steel—303		
Capsule cap			
Flange	—	ASTM A105 Zinc plated	—
Connector			
Standard	—	Stainless steel—304	—
IS-2 w/integral strainer	—	Stainless steel—304 w/20x20 mesh 304 SS screen	—
TVS 4000	—	ASTM A351 Gr. CF8M with screen, test valve and blowdown valve—stainless steel	—
Maximum Operating Conditions			
Maximum allowable pressure (vessel design)	400 psig @ 650°F (28 bar @ 343°C)		600 psig @ 750°F (41 bar @ 399°C)
Maximum operating pressure	400 psig (28 bar)		600 psig (41 bar)
Option WT-2000			
Blowdown Valve IS-2 Connector and TVS-4000 Only			

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Stainless Steel or Carbon Steel

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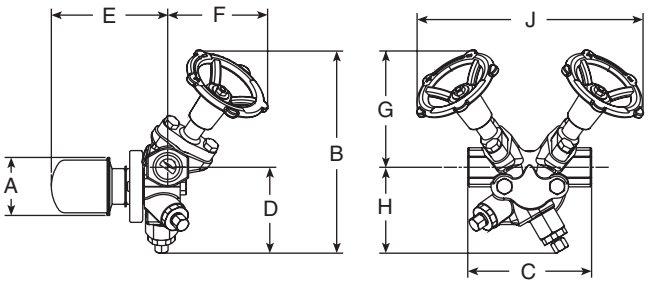
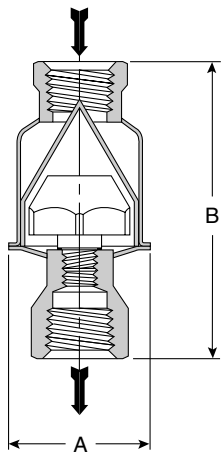
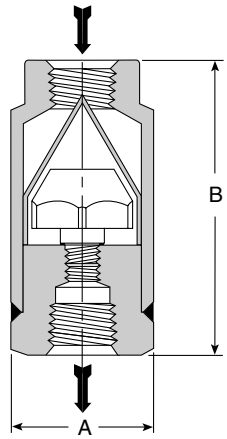


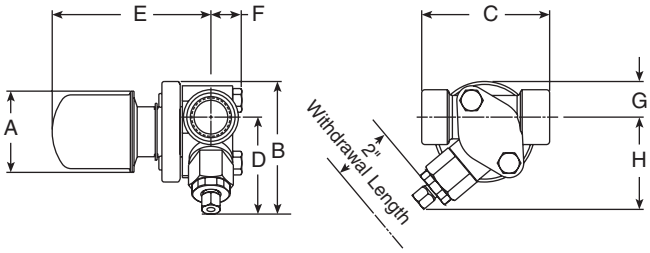
Series WT-2000 With TVS 4000 Trap Valve Station



Model WT-1 Trap



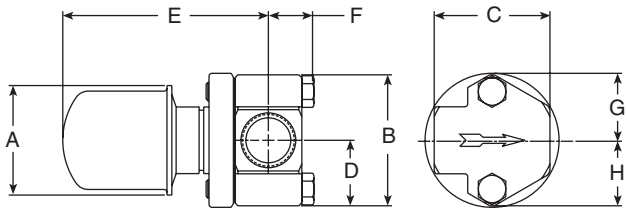
Model WT-3 Trap



Series WT-2000 With Integral Strainer and Blowdown Valve

Connectors

The WT-2000 can be connected to the standard connector, the IS-2 with integral strainer, or TVS 4000. WT-2000 can be used on thermostatic, thermostatic wafer and disc traps.



Series WT-2000 With Standard Connector

WT-1 Series Traps

Model No.	WT-1			
Pipe Connections	in	mm	in	mm
	1/2	15	3/4	20
"A" (Diameter)	2-1/4	57	2-1/4	57
"B" (Height)	4-1/2	114	4-11/16	119
Weight, lb (kg)	1 (0.5)		1-1/4 (0.6)	

WT-3 Series Traps

Model No.	WT-3	
Pipe Connections	in	mm
	1/2, 3/4	15, 20
"A" (Diameter)	2-1/4	57
"B" (Height)	4-5/8	118
Weight, lb (kg)	3 (1.4)	

WT-2000 Series Traps

Model No.	WT-2000							
	Standard Connector		IS-2 Connector With Integral Strainer				TVS 4000 Connector	
Pipe Connections	in	mm	in	mm	in	mm	in	mm
	1/2, 3/4	15, 20	1/2, 3/4	15, 20	1	25	1/2, 3/4	15, 20
"A" Trap Diameter	2-1/4	57	2-1/4	57	2-1/4	57	2-1/4	57
"B" Total Height	2-11/16	68	3-5/8	92	3-5/8	92	7-13/16	198
"C" Face-to-Face	2-3/8	60	3-1/2	89	4	101	4-3/4	120
"D" Connection ℄ to Bottom	1-3/8	46	2-5/8	67	2-5/8	67	3-1/4	83
"E" Connection ℄ to Outside of Trap	4-1/4	107	4-3/4	120	4-15/16	125	4-1/2	115
"F" Connection ℄ to Front of Connector	13/16	20	7/8	22	7/8	22	3-7/8	98
"G" Connection ℄ to Top	1-3/8	46	1	25	1	25	4-1/2	114
"H" Connection ℄ to Bottom of Connector	1-3/8	46	2-1/2	64	2-1/2	64	3-1/4	83
"J" Width Across Handwheels (valve open)	—	—	—	—	—	—	8-11/16	221
Test Port Connection	—	—	—	—	—	—	1/4 NPT	6
Trap Only Weight, lb (kg)	1-1/2 (0.70)							
Trap and Connector Weight, lb (kg)	3.2 (7)		3.4 (7.5)				8 (3.6)	

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