



FREE FLOAT® STEAM TRAP

MODEL SS5

FREE FLOAT STEAM TRAP WITH THERMOSTATIC AIR VENTING

Features

Maintenance-free stainless steel steam trap for steam mains, tracer lines and small-to-medium process applications.

1. All-welded, maintenance-free construction.
2. Automatic bimetal air vent for rapid start-up.
3. Self-modulating free float provides continuous, smooth, low velocity condensate discharge as process loads vary.
4. Constant water seal and unique three-point seating ensure perfect steam-tight seal, even under no-load conditions.
5. Only one moving part, the free float, eliminates valve wear and provides long service life.
6. Built-in screen with large surface area holds back impurities.



Specifications

Model		SS5N	SS5V	SS5NH	SS5VH
Installation		Horizontal	Vertical	Horizontal	Vertical
Connection		Screwed, Socket Welded, Flanged		Screwed, Socket Welded, Flanged	
Size (mm)		15, 20, 25		15, 20, 25	
Orifice No.		5, 10, 16, 21, 32		46	
Maximum Operating Pressure (MPaG)	PMO	0.5, 1.0, 1.6, 2.1, 3.2		4.6	
Maximum Differential Pressure (MPa)	ΔPMX	0.5, 1.0, 1.6, 2.1, 3.2		4.6	
Minimum Operating Pressure (MPaG)		0.01		0.01	
Maximum Operating Temperature (°C)	TMO	425		425	

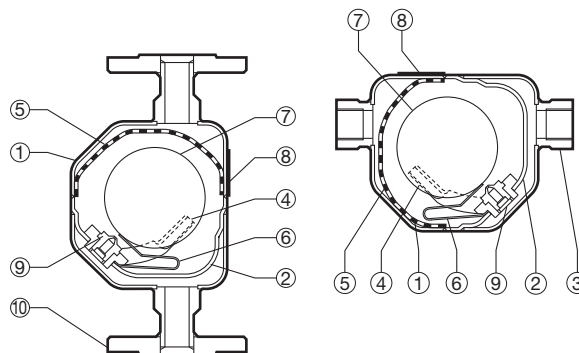
PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 4.6 1 MPa = 10.197 kg/cm²
Maximum Allowable Temperature (°C) TMA: 425



To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

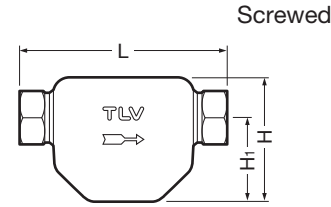
No.	Description	Material	JIS	ASTM/AISI
①	Body	Stainless Steel	—	A240 Type 316L
②	Inner Cover	Stainless Steel	—	A240 Type 316L
③	Socket	Cast Stainless Steel	—	A351 Gr.CF8
④	Float Guide	Cast Stainless Steel	—	A351 Gr.CF3M
⑤	Screen	Stainless Steel	SUS304	AISI304*
⑥	Air Vent Strip	Bimetal	—	—
⑦	Float	Stainless Steel	SUS316L	AISI316L*
⑧	Nameplate	Stainless Steel	SUS304	AISI304*
⑨	Orifice	—	—	—
⑩	Flange	Stainless Steel/ Cast Stainless Steel**	SUS304/ —	AISI304*/ A351 Gr.CF8

* Equivalent ** Material depends on flange specifications

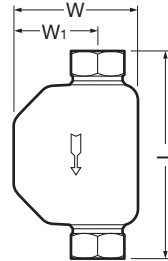


Dimensions

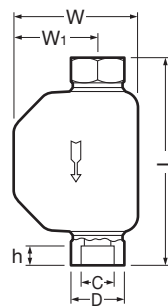
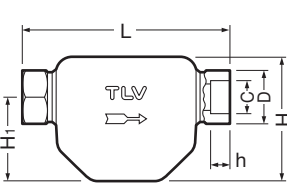
• SS5N/SS5NH



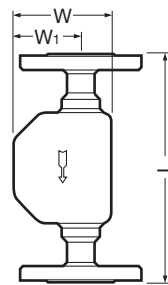
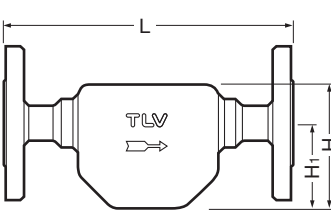
• SS5V/SS5VH



Socket Welded



Flanged



SS5N/SS5NH/SS5V/SS5VH Screwed* (mm)

Model	Size	L	φ H/W	H ₁ /W ₁	Weight (kg)
SS5N	15	155	105	71	1.4
	20	182			1.6
	25	193			1.8
SS5NH	15	160	108	73	1.5
	20	187			1.7
	25	198			1.9

* Rc(PT), other standards available

SS5N/SS5NH/SS5V/SS5VH Socket Welded (mm)

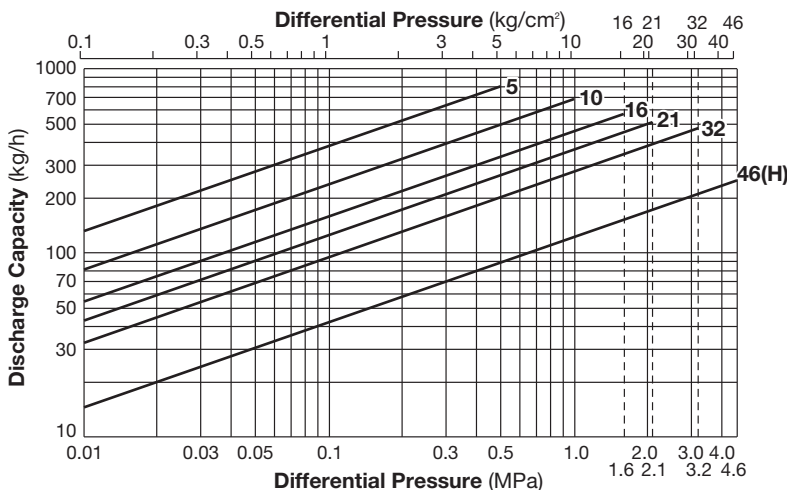
Model	Size	L	φ H/W	H ₁ /W ₁	φ D	φ C	h	Weight (kg)
SS5N	15	155	105	71	30	22.2	12	1.4
	20	182			36	27.7	14	1.6
	25	193			44	34.5	14	1.8
SS5NH	15	160	108	73	30	22.2	12	1.5
	20	187			36	27.7	14	1.7
	25	198			44	34.5	14	1.9

SS5N/SS5NH/SS5V/SS5VH Flanged (mm)

Model	Size	L			φ H/W	H ₁ /W ₁	Weight* (kg)
		ASME Class					
		150RF	300RF	600RF			
SS5N	15	202	202	202	105	71	3.6
	20	222	222	222			5.0
	25	242	242	242			5.8
SS5NH	15	-	-	208	108	73	3.7
	20	-	-	228			5.1
	25	-	-	248			5.9

Other standards available, but length and weight may vary
* Weight is for Class 600 RF

Discharge Capacity



- Line numbers within the graph refer to orifice numbers.
- Differential pressure is the difference between the inlet and outlet pressure of the trap.
- Capacities are based on continuous discharge of condensate 6°C below saturated steam temperature.
- Recommended safety factor: at least 1.5.



DO NOT use traps under conditions that exceed maximum differential pressure as condensate backup will occur.