FREE FLOAT® STEAM TRAP

MODEL SS5 STAINLESS STEEL

FREE FLOAT STEAM TRAP WITH THERMOSTATIC AIR VENTING

Features

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

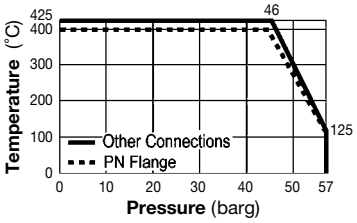
1. All-welded, maintenance-free construction.
2. Automatic bimetal air vent for rapid start-up.
3. Self-modulating free float provides continuous, smooth, low velocity condensate discharge as process loads vary.
4. Constant water seal and unique three-point seating ensure perfect steam-tight seal, even under no-load conditions.
5. Only one moving part, the free float, prevents concentrated 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	½″, ¾″, 1″ / DN 15, 20, 25		½″, ¾″, 1″ / DN 15, 20, 25	
Orifice No.	5, 10, 16, 21, 32		46	
Max. Operating Pressure (barg) PMO	5, 10, 16, 21, 32		46	
Max. Differential Pressure (bar) ΔPMX	5, 10, 16, 21, 32		46	
Max. Operating Temperature (°C) TMO	400* / 425		400* / 425	

* With PN flange

Max. Allowable Press. / Temp. (PMA/TMA)
Pressure Shell Design Conditions
(**NOT** Operating Conditions)

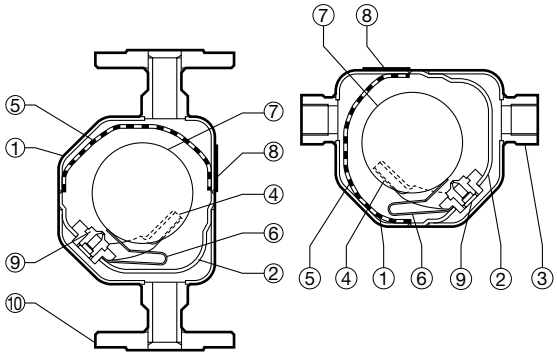


1 bar = 0.1 MPa

CAUTION 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.

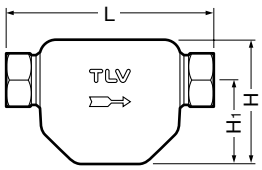
No.	Description	Material	DIN*	ASTM/AISI*
①	Body	Stainless Steel A240 Type 316L	1.4404	—
②	Inner Cover	Stainless Steel A240 Type 316L	1.4404	—
③	Socket	Stainless Steel A351 Gr.CF8	1.4312	—
④	Float Guide	Cast Stainl. Steel A351 Gr.CF3M	1.4435	—
⑤	Screen	Stainless Steel SUS304	1.4301	AISI304
⑥	Air Vent Strip	Bimetal	—	—
⑦	Float	Stainless Steel SUS316L	1.4404	AISI316L
⑧	Nameplate	Stainless Steel SUS304	1.4301	AISI304
⑨	Orifice	—	—	—
⑩	Flange**	Stainless Steel SUS304/ Cast Stainl. Steel A351 Gr.CF8	1.4301/ 1.4312	AISI304/ —

* Equivalent materials
** Shown on reverse, shape and material depend on flange specifications

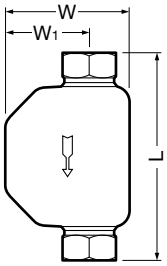


Dimensions

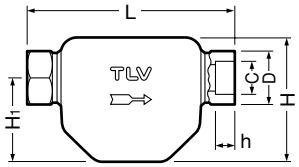
● **SS5N/SS5NH** Screwed

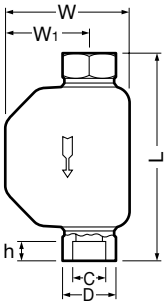


● **SS5V/SS5VH**

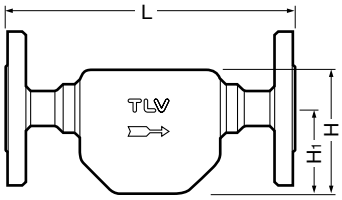


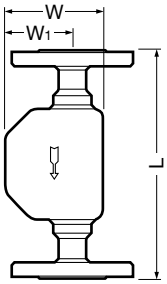
Socket Welded





Flanged





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

Model	Size	L	ϕ H/W	H1/W1	Weight (kg)
SS5N SS5V	1/2″	155	105	71	1.4
	3/4″	182			1.6
	1″	193			1.8
SS5NH SS5VH	1/2″	160	108	73	1.5
	3/4″	187			1.7
	1″	198			1.9

* BSP DIN 2999, other standards available

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

Model	DN	L	ϕ H/W	H1/W1	ϕ D	ϕ C	h	Weight (kg)
SS5N SS5V	15	155	105	71	30	21.8	12	1.4
	20	182			36	27.2	14	1.6
	25	193			44	33.9		1.8
SS5NH SS5VH	15	160	108	73	30	21.8	12	1.5
	20	187			36	27.2	14	1.7
	25	198			44	33.9		1.9

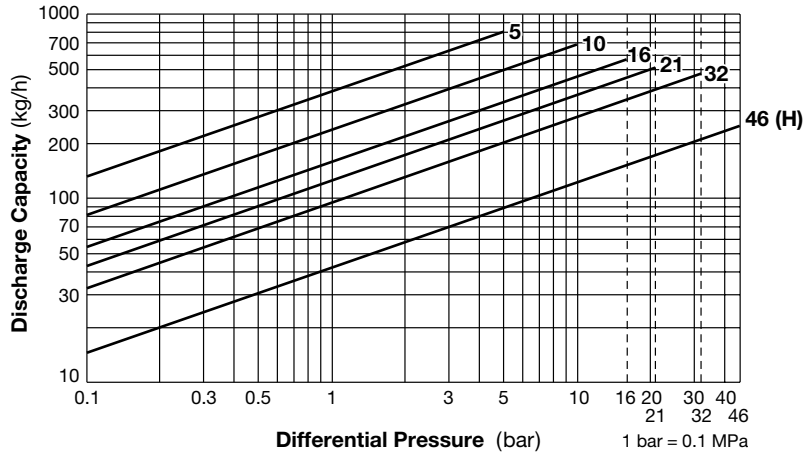
* ASME B16.11-2005, other standards available

SS5N/SS5NH/SS5V/SS5VH Flanged (mm)

Model	DN	L				ϕH/W	H1/W1	Weight* (kg)
		DIN 2501		ASME Class				
		PN 25/40	PN 63	150RF 300RF	600RF			
SS5N SS5V	15	210	–	202	202	105	71	3.2
	20		–	222	222			3.6
	25	230	–	242	242			4.7
SS5NH SS5VH	15	210	210	–	208	108	73	3.3
	20		–	–	228			3.7
	25	230	230	–	248			4.8

Other standards available, but length and weight may vary
* Weight is for DIN PN 25/40

Discharge Capacity



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

CAUTION

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

Manufacturer
TLV CO.,LTD.
Kakogawa, Japan
is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001/ISO 14001