



FREE FLOAT STEAM TRAP

MODEL SS3

Features

Maintenance-free stainless steel steam trap for steam mains and tracer lines.

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. Designed to maintain the condensate level above the valve orifice to provide a water seal.
5. Three-point seating guarantees a perfect seal even under no-load conditions.
6. Only one moving part, the free float, eliminates valve wear and provides long service life.
7. Built-in screen with large surface area holds back impurities.
8. Optional ceramic fiber insulating cover, clad in stainless steel, minimizes energy losses due to radiation.



Specifications

Model	SS3N	SS3V
Connection	Screwed, Socket Welded, Flanged	
Installation	Horizontal	Vertical
Size (mm)	15, 20, 25	
Orifice No.	5, 10, 16, 21	
Maximum Operating Pressure (MPaG) PMO	0.5, 1, 1.6, 2.1	
Maximum Differential Pressure (MPa) ΔPMX	0.5, 1, 1.6, 2.1	
Minimum Operating Pressure (MPaG)	0.01	
Maximum Operating Temperature (°C) TMO	350	

PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 2.1

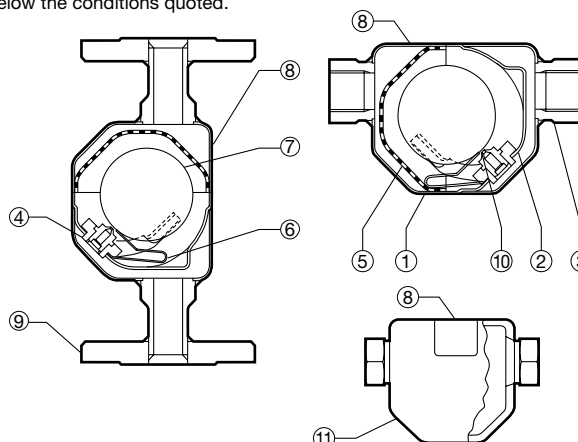
Maximum Allowable Temperature (°C) TMA: 350



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.

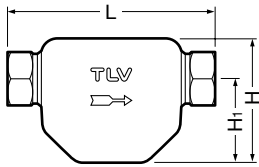
No.	Description	Material	JIS	ASTM/AISI*
①	Body	Stainless Steel	SUS316L	AISI 316L
②	Inner Cover	Stainless Steel	SUS316L	AISI 316L
③	Socket	Stainless Steel	SUS304	AISI 304
④	Guide	Stainless Steel	SCS16	A743 CF-3M
⑤	Screen	Stainless Steel	SUS304	AISI 304
⑥	Air Vent Strip	Bimetal	—	—
⑦	Float	Stainless Steel	SUS316L	AISI 316L
⑧	Nameplate	Stainless Steel	SUS30H	AISI30H
⑨	Flange	Stainless Steel	SUS304/SCS13***	AISI 304/A351 Gr. CF-8***
⑩	Orifice	Stainless Steel	SUS420F	AISI 420F
⑪	Insulating Cover**	Ceramic Fiber/ Stainl. Stl.	SUS304	AISI 304

* Equivalent ** Option *** Either material may be used

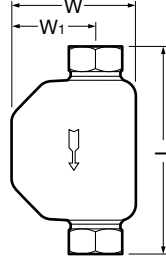


Dimensions

SS3N Screwed



SS3V

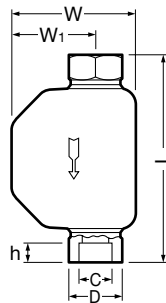
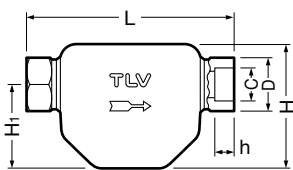


SS3N/SS3V Screwed* (mm)

Size	L	φH/W	H ₁ /W ₁	Weight (kg)
15	127	76	52	0.6
20	154			0.8
25	165			1.0

* PT, other standards available

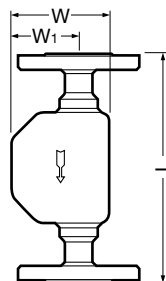
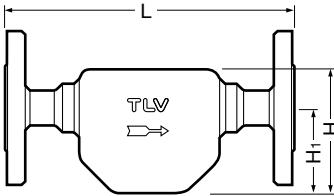
Socket Welded



SS3N/SS3V Socket Welded (mm)

Size	φD	φC	h	L	φH/W	H ₁ /W ₁	Weight (kg)
15	31	22.2	12	127	76	52	0.6
20	37	27.7	14	154			0.8
25	45	34.5		165			1.0

Flanged

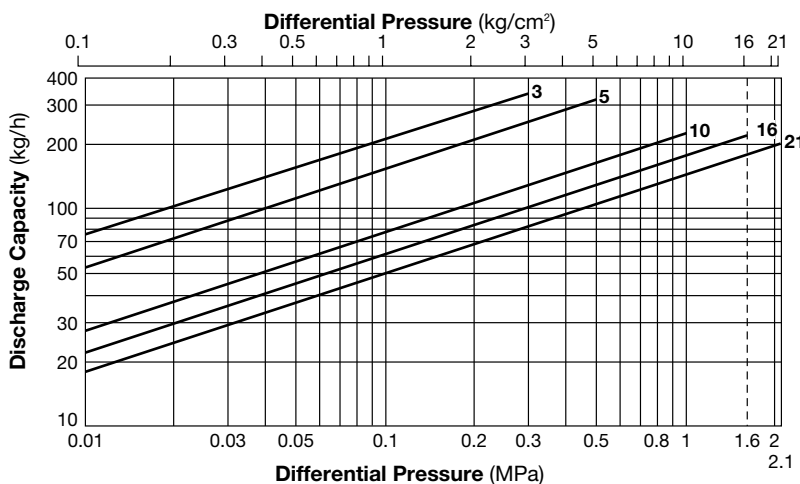


SS3N/SS3V Flanged* (mm)

Size	L (ASME Class)		φH/W	H ₁ /W ₁	Weight (approx.kg)
	150RF	300RF			
15	175	175	76	52	2.4
20	195	195			3.5
25	215	215			4.2

* Other standards available, but length and weight may vary

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 °C below saturated steam temperature.
4. Recommended safety factor: at least 1.5.



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

Manufacturer

ISO 9001/ISO 14001

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

