



# FREE FLOAT<sup>®</sup> STEAM TRAP

## MODEL SS3

### FREE FLOAT STEAM TRAP WITH THREE-POINT SEATING AND THERMOSTATIC AIR VENTING

#### 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. 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	SS3N	SS3V
Installation	Horizontal	Vertical
Connection	Screwed, Socket Welded, Flanged	
Size (mm)	15, 20, 25	
Orifice No.	5, 10, 16, 21	
Maximum Operating Pressure (MPaG) PMO	0.5, 1.0, 1.6, 2.1	
Maximum Differential Pressure (MPa) ΔPMX	0.5, 1.0, 1.6, 2.1	
Minimum Operating Pressure (MPaG)	0.01	
Maximum Operating Temperature (°C) TMO	400	

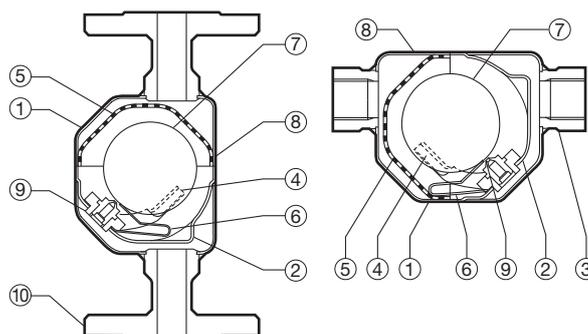
PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 2.4      1 MPa = 10.197 kg/cm<sup>2</sup>  
Maximum Allowable Temperature (°C) TMA: 400



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.

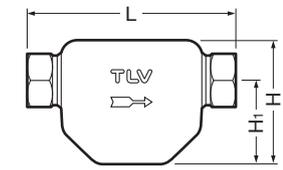
No.	Description	Material	JIS	ASTM/AISI
①	Body	Stainless Steel	—	A240 Type 316L
②	Inner Cover	Stainless Steel	—	A240 Type 316L
③	Socket	Cast Stainless Steel	—	A351 Gr.CF8
④	Guide	Cast Stainless Steel	—	A351 Gr.CF3M
⑤	Screen	Stainless Steel	SUS304	AISI304*
⑥	Air Vent Strip	Bimetal	—	—
⑦	Float	Stainless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

\* Equivalent

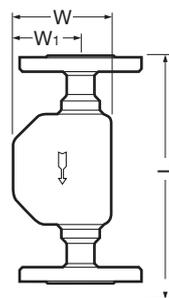
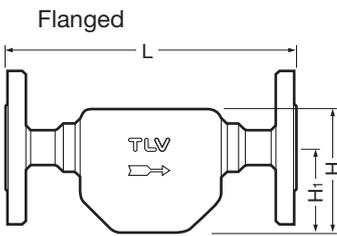
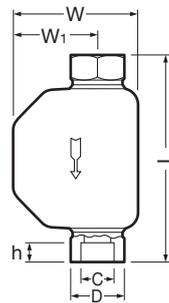
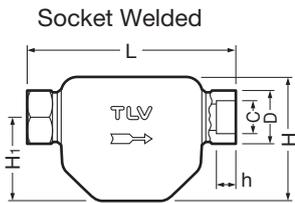
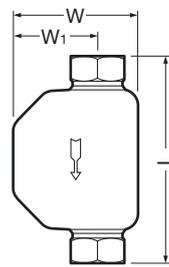


**Dimensions**

● **SS3N**  
Screwed



● **SS3V**



**SS3N/SS3V Screwed\*** (mm)

Size	L	φH/W	H <sub>1</sub> /W <sub>1</sub>	Weight (kg)
15	127	77	53	0.8
20	154			1.0
25	165			1.2

\* Rc(PT), other standards available

**SS3N/SS3V Socket Welded** (mm)

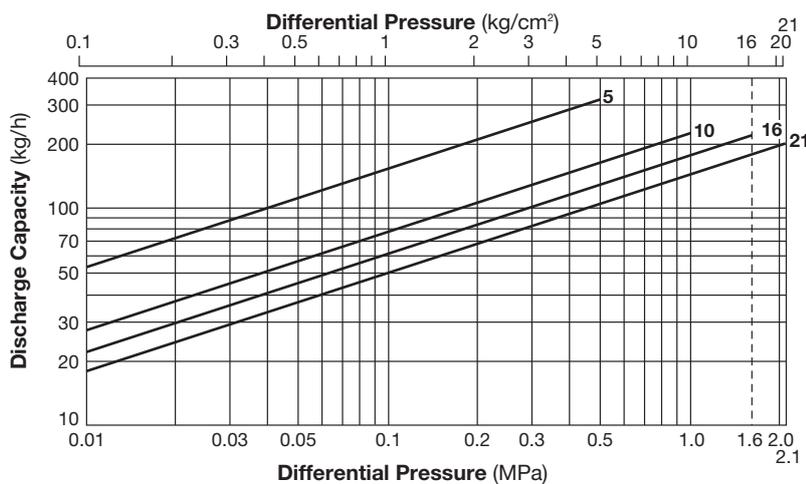
Size	L	φH/W	H <sub>1</sub> /W <sub>1</sub>	φD	φC	h	Weight (kg)
15	127	77	53	30	22.2	12	0.8
20	154			36	27.7	14	1.0
25	165			44	34.5	1.2	

**SS3N/SS3V Flanged** (mm)

Size	L		φH/W	H <sub>1</sub> /W <sub>1</sub>	Weight* (kg)
	ASME Class 150RF	300RF			
15	175	175	77	53	2.4
20	195	195			3.5
25	215	215			4.2

Other standards available, but length and weight may vary  
\* Weight is for Class 300 RF

**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 this product 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

