

# TLV<sup>®</sup>

# FREE FLOAT<sup>®</sup> STEAM TRAP

## MODEL SS5

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

### Benefits

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

1. All-welded, maintenance-free construction.
2. Free float's unique rotational seating design prevents concentrated wear to ensure long life.
3. Precision-ground float, three-point seating and constant water seal ensure steam-tight seal, even under no-load conditions.
4. Rugged float construction with up to 1740 or 2300 psig\* hydraulic shock rating ensures excellent resistance to water hammer.
5. Durable thermostatic air vent automatically vents air for exceptional start-up and performance.
6. Extremely soft near-to-steam temperature discharge for safety and environmental considerations.
7. Built-in screen for extended trouble-free service.

\* Depending on orifice number



### Specifications

Model	SS5N		SS5V		SS5NH		SS5VH	
	Horizontal		Vertical		Horizontal		Vertical	
Installation	Horizontal		Vertical		Horizontal		Vertical	
Connection	<b>Screwed</b>		Socket Weld		<b>Screwed</b>   <b>Socket Weld</b>		<b>Screwed</b>   <b>Socket Weld</b>	
Size (in)	<b>1/2, 3/4, 1</b>		1/2, 3/4, 1		1/2, 3/4, 1		1/2, 3/4, 1	
Orifice No.			10, 32				46	
Maximum Operating Pressure (psig) PMO			150, 450				650	
Maximum Differential Pressure (psi) ΔPMX			150, 450				650	
Minimum Operating Pressure (psig)			1.5				1.5	
Maximum Operating Temperature (°F) TMO			800				800	
Maximum Allowable Pressure (psig) PMA			650				650	
Maximum Allowable Temperature (°F) TMA			800				800	

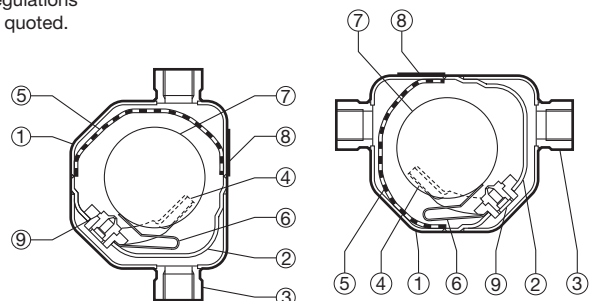
Connections and sizes in bold are standard



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	ASTM/AISI	JIS
①	Body	Stainless Steel	A240 Type 316L	—
②	Inner Cover	Stainless Steel	A240 Type 316L	—
③	Socket	Cast Stainl. Stl.	A351 Gr.CF8	—
④	Float Guide	Cast Stainl. Stl.	A351 Gr.CF3M	—
⑤	Screen	Stainless Steel	AISI304*	SUS304
⑥	Air Vent Strip	Bimetal	—	—
⑦	Float	Stainless Steel	AISI316L*	SUS316L
⑧	Nameplate	Stainless Steel	AISI304*	SUS304
⑨	Orifice	—	—	—

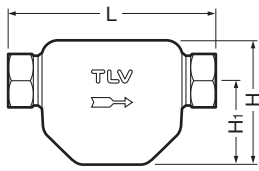
\* Equivalent



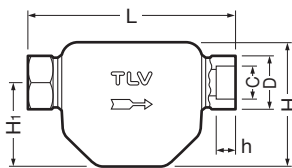
**Dimensions**

● **SS5N/SS5NH**

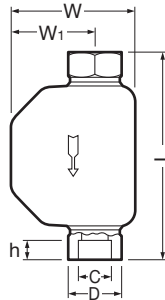
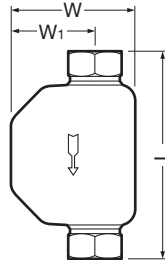
Screwed



Socket Weld



● **SS5V/SS5VH**



**SS5N/SS5NH/SS5V/SS5VH Screwed\*** (in)

Model	Size	L	φH/W	H <sub>1</sub> /W <sub>1</sub>	Weight (lb)
SS5N SS5V	1/2	6 1/8	4 1/8	2 13/16	3.1
	3/4	7 3/16			3.5
	1	7 5/8			4.0
SS5NH SS5VH	1/2	6 5/16	4 1/4	2 7/8	3.3
	3/4	7 3/8			3.7
	1	7 13/16			4.2

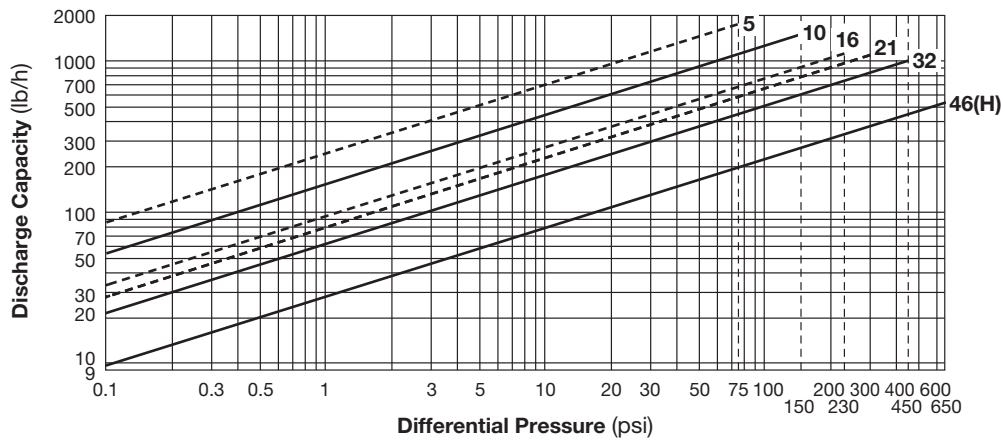
\* NPT, other standards available

**SS5N/SS5NH/SS5V/SS5VH Socket Weld\*** (in)

Model	Size	L	φH/W	H <sub>1</sub> /W <sub>1</sub>	φD	φC	h	Weight (lb)
SS5NH SS5VH	1/2	6 5/16	4 1/4	2 7/8	1 3/16	0.855	1/2	3.3
	3/4	7 3/8			1 7/16	1.065	9/16	3.7
	1	7 13/16			1 3/4	1.330		4.2

\* ASME B16.11-2005, other standards available

**Discharge Capacity**



— Standard    - - - - Available on special request

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 11 °F below saturated steam temperature.
4. Recommended safety factor: at least 1.5.

**CAUTION** DO NOT use this product under conditions that exceed maximum differential pressure, as condensate backup will occur!

**CAUTION** DO NOT DISASSEMBLE OR REMOVE THIS PRODUCT WHILE IT IS UNDER PRESSURE. Allow internal pressure of this product to equal atmospheric pressure and its surface to cool to room temperature before disassembling or removing. Failure to do so could cause burns or other injury. READ INSTRUCTION MANUAL CAREFULLY.

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For Technical Service 1-800 "TLV TRAP"



Manufacturer

**TLV CO., LTD.**

Kagokawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001  
ISO 14001

