



FREE FLOAT STEAM TRAP

MODEL SS5

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. Designed to maintain the condensate level above the valve orifice to provide a water seal.
5. Three-point seating provides a perfect seal even under no-load condition.
6. Only one moving part, the free float, eliminates valve wear and provides long service life.
7. Built-in screen with large area holds back impurities.



Specifications

Model		SS5N	SS5V	SS5NH	SS5VH
Connection		Screwed, Socket Welded, Flanged		Screwed, Socket Welded, Flanged	
Installation		Horizontal	Vertical	Horizontal	Vertical
Size (mm)		15, 20, 25		15, 20, 25	
Orifice No.		5, 10, 16, 21, 32		4.6	
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	350		350	

PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS):
 Maximum Allowable Pressure (MPaG) PMA: 3.2 (SS5N/V), 4.6 (SS5NH/VH)
 Maximum Allowable Temperature (°C)TMA: 350

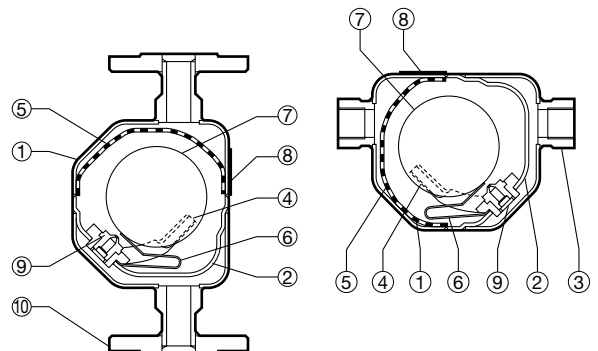
1 MPa = 10.197 kg/cm²



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	AISI316L
②	Inner Cover	Stainless Steel	SUS316L	AISI316L
③	Socket	Stainless Steel	SUS304	AISI304
④	Float Guide	Stainless Steel	SCS16A	A743 CF-3M
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	Stainless Steel	SUS420F	AISI420F
⑩	Flange	Stainless Steel	SUS304	AISI304

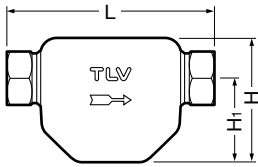
* Equivalent



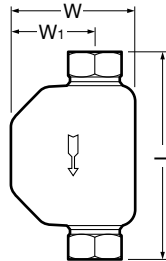
Dimensions

● **SS5N • SS5NH**

Screwed



● **SS5V • SS5VH**



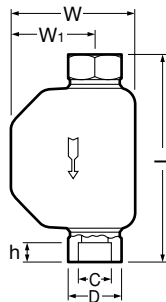
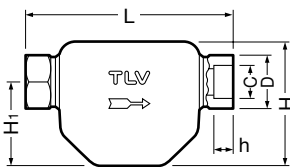
SS5N • SS5NH

SS5V • SS5VH Screwed* (mm)

Size	L	H/W	H ₁ /W ₁	Weight (kg)
15	155 (160)	104 (108)	71 (73)	1.4 (1.5)
20	182 (187)			1.6 (1.7)
25	193 (198)			1.8 (1.9)

* Rc(PT), other standards available () Model SS5NH/VH

Socket Welded



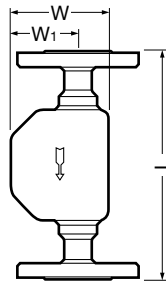
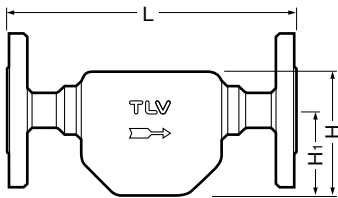
SS5N • SS5NH

SS5V • SS5VH Socket Welded (mm)

Size	φD	φC	h	L	H/W	H ₁ /W ₁	Weight (kg)
15	31	22.2	12	155(160)	104 (108)	71 (73)	1.4 (1.5)
20	37	27.7	14	182 (187)			1.6 (1.7)
25	45	34.5		193 (198)			1.8 (1.9)

() Model SS5NH/VH

Flanged



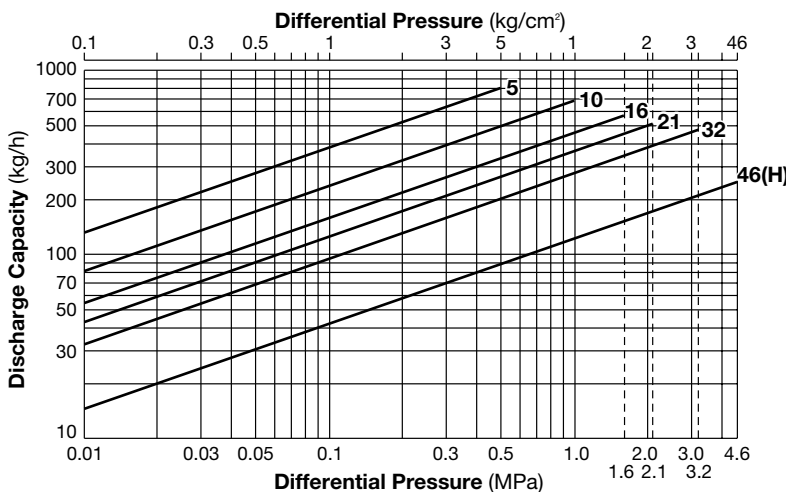
SS5N • SS5NH

SS5V • SS5VH Flanged* (mm)

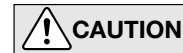
Size	L	H/W	H ₁ /W ₁	Weight (kg)
15	202 (208)	104 (108)	71 (73)	3 (3.1)
20	222 (228)			3.4 (3.5)
25	242 (248)			4.5 (4.6)

* JIS 20K RF (40K RF), other standards available () Model SS5NH/VH

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

