



# FREE FLOAT<sup>®</sup> STEAM TRAP

## MODEL SJH5X CAST STEEL SJH5VX STAINLESS STEEL

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

#### Features

Reliable and durable steam trap with tight shut-off for use on small to medium high pressure process equipment. Models for horizontal or vertical piping installation.

1. Self-modulating free float provides continuous, smooth, low velocity condensate discharge as process loads vary.
2. Precision-ground float, constant water seal and three-point seating design ensure a steam-tight seal, even under no-load conditions.
3. Thermostatic capsule (X-element) with "fail open" feature vents air automatically until close-to-steam temperature.
4. Built-in screen with large surface area ensures extended trouble-free operation.
5. Easy, inline access to internal parts simplifies cleaning and reduces maintenance costs.

#### Pressure Equipment Directive (PED)

Classification according to PED 2014/68/EU, fluid group 2

Size	Category	CE marking
DN 20, DN 25	I	with CE marking and Declaration of Conformity



#### Specifications

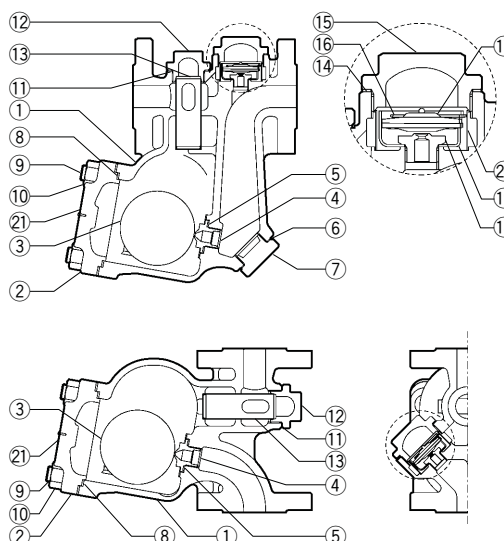
Model	SJH5NX	SJH5VX
Installation	Horizontal	Vertical
Connection	Flanged	
Size	DN 20, 25	
Orifice No.	5, 10, 14, 22, 32	
Maximum Operating Pressure (barg)	PMO	5, 10, 14, 22, 32
Maximum Differential Pressure (bar)	ΔPMX	5, 10, 14, 22, 32
Maximum Operating Temperature (°C)	TMO	240
Subcooling of X-element Fill (°C)	up to 6	
Type of X-element	C6	

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (barg) PMA: 40  
Maximum Allowable Temperature (°C) TMA: 400  
1 bar = 0.1 MPa



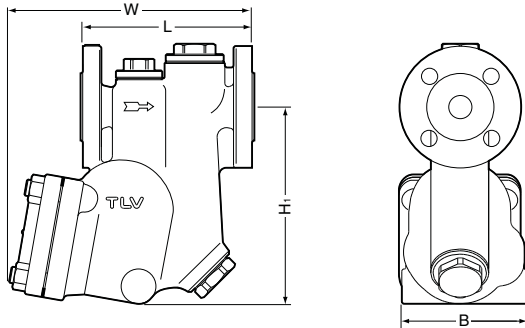
To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

No.	Description	Material	DIN*	ASTM/AISI*
①	Body	Cast Steel A216 Gr.WCB	1.0619	—
		Cast Stainless Steel** A351 Gr.CF8	1.4312	—
		Carbon Steel A105	1.0460	—
②	Cover	Cast Stainless Steel** A351 Gr.CF8	1.4312	—
		Stainless Steel SUS316L	1.4404	AISI316L
③	Float	—	—	—
④	Orifice	—	—	—
⑤	Orifice Gasket	Graphite/Stainless Steel SUS316L	-/1.4404	-/AISI316L
⑥	Orifice Plug Gasket (SJH5NX)	Soft Iron SUYP	1.1121	AISI1010
		Stainless Steel** SUS316L	1.4404	AISI316L
⑦	Orifice Plug (SJH5NX)	Cast Stainless Steel A743 Gr.CA40	1.4027	—
		Stainless Steel SUS303**	1.4305	AISI303
⑧	Cover Gasket	Graphite/Stainless Steel SUS316L	-/1.4404	-/AISI316L
⑨	Cover Bolt	Alloy Steel SNB7	1.7225	A193 Gr.B7
		Stainless Steel** SUS304	1.4301	AISI304
		Carbon Steel S45C	1.0503	AISI1045
⑩	Cover Nut	Stainless Steel** SUS304	1.4301	AISI304
		Soft Iron SUYP	1.1121	AISI1010
⑪	Screen Holder Gasket	Stainless Steel** SUS316L	1.4404	AISI316L
		Cast Stainless Steel A351 Gr.CF8	1.4312	—
⑫	Screen Holder	Stainless Steel SUS430	1.4016	AISI430
⑬	Screen	Soft Iron SUYP	1.1121	AISI1010
⑭	X-element Cover Gasket	Stainless Steel** SUS316L	1.4404	AISI316L
		Cast Stainless Steel A351 Gr.CF8	1.4312	—
⑮	X-element Cover	Stainless Steel SUS304	1.4301	AISI304
⑯	Spring Clip	Stainless Steel	—	—
⑰	X-element	Stainless Steel SUS420F	1.4028	AISI420F
⑱	Air Vent Valve Seat	Stainless Steel SUS304	1.4301	AISI304
⑲	X-element Guide	Stainless Steel SUS304	1.4301	AISI304
⑳	Air Vent Screen	Stainless Steel SUS304	1.4301	AISI304
㉑	Nameplate	Stainless Steel SUS304	1.4301	AISI304



**Dimensions**

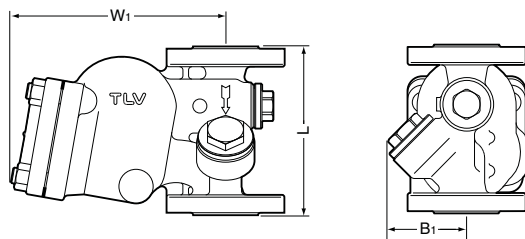
● **SJH5NX** Flanged



**SJH5NX** Flanged (mm)

DN	L	H <sub>1</sub>	W	B	Weight (kg)
	DIN 2501 PN25/40				
20	150	170	215	110	8.7
25	160		220		10

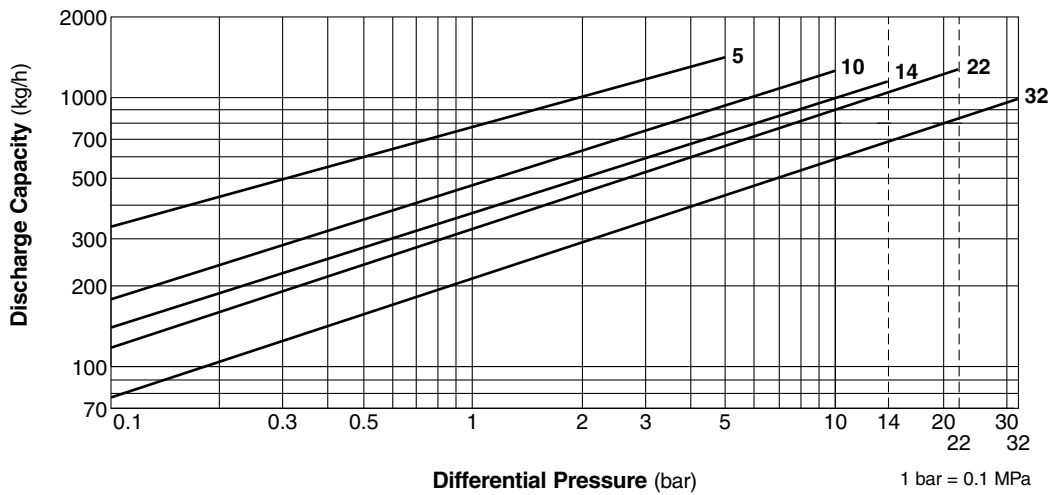
● **SJH5VX** Flanged



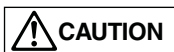
**SJH5VX** Flanged (mm)

DN	L	W <sub>1</sub>	B <sub>1</sub>	Weight (kg)
	DIN 2501 PN25/40			
20	150	195	70	7.5
25	160			9.2

**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

ISO 9001  
ISO 14001

