



FREE FLOAT® STEAM TRAP

MODEL SJH7B CAST 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 medium-size 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 bimetal air vent valve vents air automatically for rapid startup.
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 40, DN 50	I	With CE marking and Declaration of Conformity



Specifications

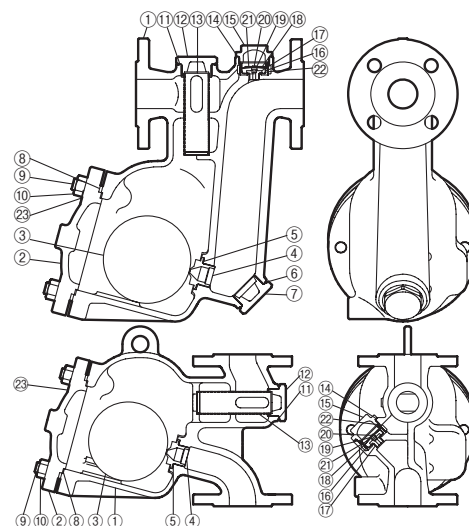
Model	SJH7NB	SJH7VB
Installation	Horizontal	Vertical
Connection	Flanged	
Size	DN 40, 50	
Orifice No.	5, 10, 14, 22, 32	
Maximum Operating Pressure (barg) PMO	5, 10, 14, 22, 32	
Maximum Differential Pressure (bar) ΔPMX	5, 10, 14, 22, 32	
Maximum Operating Temperature (°C) TMO	400	

PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS): Maximum Allowable Pressure (barg) PMA: 40 1 bar = 0.1 MPa
Maximum Allowable Temperature (°C) TMA: 400
Minimum Allowable Temperature (°C): 0

No.	Description	Material	DIN*	ASTM/AISI*
①	Body	Cast Steel A216 Gr.WCB	1.0619	—
②	Cover	Carbon Steel A105	1.0460	—
③	Float	Stainless Steel SUS316L	1.4404	AISI316L
④	Orifice	—	—	—
⑤	Orifice Gasket	Graphite/Stainl. Steel SUS316L	—/1.4404	—/AISI316L
⑥	Orifice Plug Gasket	Soft Iron SUYP	1.1121	AISI1010
⑦	Orifice Plug	Cast Stainless Steel A351 Gr.CF8	1.4312	—
⑧	Cover Gasket	Graphite/Stainl. Steel SUS316L	—/1.4404	—/AISI316L
⑨	Cover Bolt	Carbon Steel SNB7	1.7225	A193 Gr.B7
⑩	Cover Nut	Carbon Steel S45C	1.0503	AISI1045
⑪	Screen Holder Gasket	Soft Iron SUYP	1.1121	AISI1010
⑫	Screen Holder	Cast Stainless Steel A351 Gr.CF8	1.4312	—
⑬	Strainer	Stainless Steel SUS430	1.4016	AISI430
⑭	Element Cover Gasket	Soft Iron SUYP	1.1121	AISI1010
⑮	Element Cover	Cast Stainless Steel A351 Gr.CF8	1.4312	—
⑯	Element Guide	Stainless Steel SUS304	1.4301	AISI304
⑰	Air Vent Valve Seat	—	—	—
⑱	Bimetal	—	—	—
⑲	Snap Ring	Stainless Steel SUS304	1.4301	AISI304
⑳	Air Vent Valve	—	—	—
㉑	Snap Ring	Stainless Steel SUS304	1.4301	AISI304
㉒	Screen	Stainless Steel SUS304	1.4301	AISI304
㉓	Nameplate	Stainless Steel SUS304	1.4301	AISI304

* Equivalent materials
Contact TLV for available replacement parts.

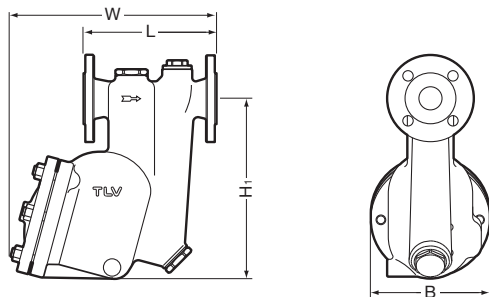
CAUTION To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.



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Dimensions

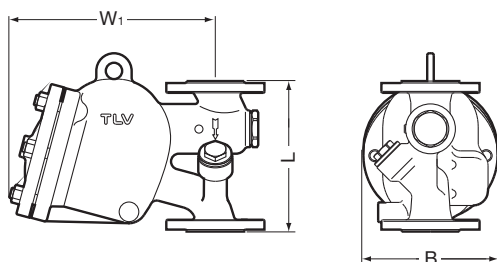
● SJH7NB Flanged



SJH7NB Flanged (mm)

DN	L	H ₁	W	B	Weight (kg)
	DIN 2501				
	PN25/40				
40	230	315	360	205	32
50					33

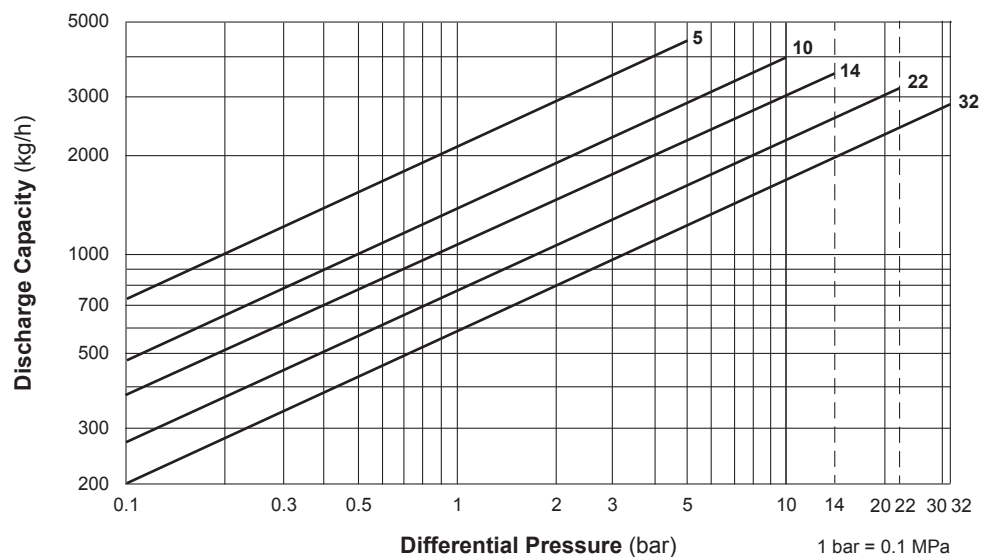
● SJH7VB Flanged



SJH7VB Flanged (mm)

DN	L	W ₁	B ₁	Weight (kg)
	DIN 2501			
	PN25/40			
40	230	315	205	27
50				29

Discharge Capacity



1. Line numbers within the graph are 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

