FREE FLOAT® STEAM TRAP

MODEL JH5SL-X JH5SL-B/JH5SH-B

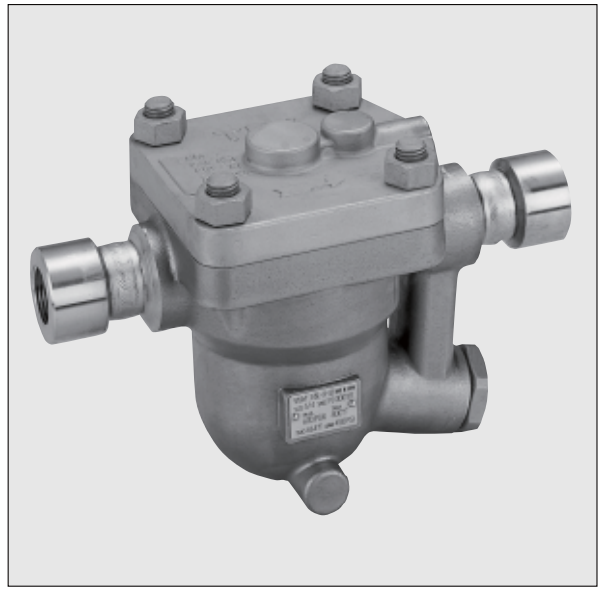
FREE FLOAT STEAM TRAP WITH THERMOSTATIC AIR VENTING

Benefits

A reliable and durable cast steel steam trap for use on small to medium-size process equipment. JH5SL-B/JH5SH-B are also suitable for both superheated and high-pressure process equipment.

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. Only one moving part, the free float, eliminates concentrated valve wear and provides long maintenance-free service life.
4. Rugged float construction with up to 1740 or 2300 psig* hydraulic shock rating ensures excellent resistance to water hammer.
5. **JH5SL-X:** Thermostatic capsule (X-element) with "fail open" feature vents air automatically at close-to-steam temperature.
6. **JH5SL-B/JH5SH-B:** Thermostatic bimetal air vent valve vents air automatically for rapid startup.
7. Built-in screen with large surface area ensures extended trouble-free operation.

* Depending on orifice No.



Specifications

Model		JH5SL-X		JH5SL-B		JH5SH-B
Connection		Screwed	Socket Weld	Screwed	Socket Weld	Socket Weld
Size (in)		3/4	3/4	3/4	3/4	3/4
Orifice No.		5, 10, 22, 32		2, 5, 10, 22, 32, 40, 46		65
Maximum Operating Pressure (psig)	PMO	75, 150, 315, 450		30, 75, 150, 315, 450, 600, 650		925
Maximum Differential Pressure (psi)	ΔPMX	75, 150, 315, 450		30, 75, 150, 315, 450, 600, 650		925
Minimum Operating Pressure (psig)		Vacuum		1.5		1.5
Maximum Operating Temperature (°F)	TMO	464		800		800
Maximum Allowable Pressure (psig)	PMA	600		650		925
Maximum Allowable Temperature (°F)	TMA	800		800		800
Type of Air Vent		X-element (11 °F subcooling)		Bimetal (vents air up to approx. 212 °F)		

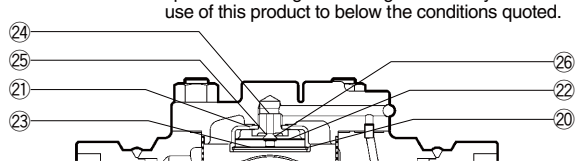
These are non-standard products, consult TLV for delivery time required.

No.	Description	Material	ASTM/AISI*	JIS
①	Body	Cast Stainless Steel	A351 Gr.CF8	—
②	Cover	Cast Stainless Steel	A351 Gr.CF8	—
③F	Float	Stainless Steel	AISI316L	SUS316L
④R	Orifice	—	—	—
⑤MR	Orifice Gasket	Stainless Steel	AISI316L	SUS316L
⑥	Orifice Plug	Cast Stainless Steel	A351 Gr.CF8	—
⑦MR	Orifice Plug Gasket	Stainless Steel	AISI316L	SUS316L
⑧R	Float Cover	Stainless Steel	AISI304	SUS304
⑨R	Screen	Stainless Steel	AISI430	SUS430
⑩	Socket	Stainless Steel	AISI304	SUS304
⑪	Cover Bolt	Stainless Steel	A193 Gr.B8 Cl.2	—
⑫	Cover Nut	Stainless Steel	A194 Gr.8	—
⑬MR	Cover Gasket	Graphite/Stainless Steel	– /AISI316L	– / SUS316L
⑭	Connector	Stainless Steel	AISI416	SUS416
⑮MR	Connector Gasket	Graphite/Stainless Steel	– /AISI316L	– / SUS316L
⑯R	X-element Guide	Stainless Steel	AISI304	SUS304
⑰R	X-element	Stainless Steel	—	—
⑱R	Spring Clip	Stainless Steel	AISI304	SUS304
⑲R	Air Vent Valve Seat	Stainless Steel	AISI420F	SUS420F
⑳R	Snap Ring	Stainless Steel	AISI304	SUS304
㉑R	Air Vent Case	Cast Stainless Steel	A351 Gr.CF8	—
㉒R	Bimetal Plate	Bimetal	—	—
㉓R	Air Vent Screen	Stainless Steel	AISI304	SUS304
㉔R	Air Vent Valve Seat	—	—	—
㉕R	Air Vent Valve Plug	—	—	—
㉖R	Snap Ring	Stainless Steel	AISI304	SUS304
㉗	Nameplate	Stainless Steel	AISI304	SUS304
㉘	Drain Plug Gasket**	Stainless Steel	AISI316L	SUS316L
㉙	Drain Plug**	Stainless Steel	AISI303	SUS303

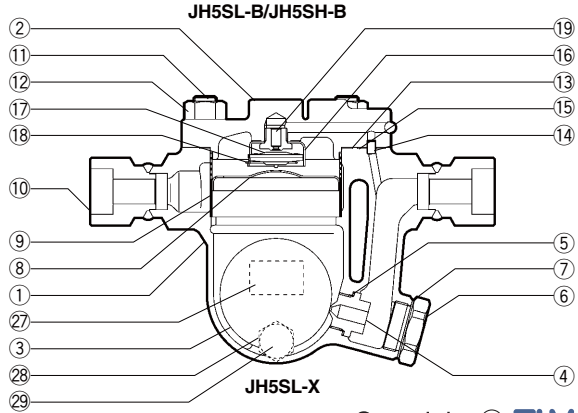
* Equivalent ** Option

Replacement kits available: (M) maintenance parts, (R) repair parts, (F) float

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.



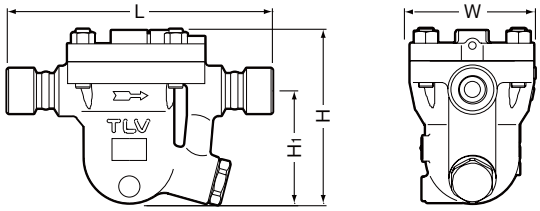
JH5SL-B/JH5SH-B



JH5SL-X

Dimensions

● **JH5SL-X/JH5SL-B** Screwed

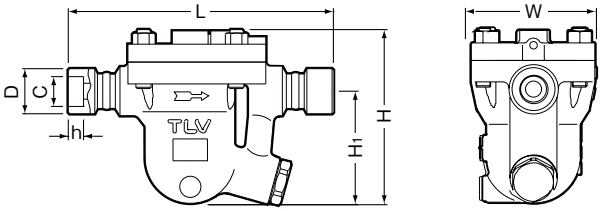


JH5SL-X/JH5SL-B Screwed* (in)

Model	Size	L	H	H_1	W	Weight(lb)
JH5SL-X JH5SL-B	¾	9 11/16	6 9/16	4 1/8	4 1/2	15

* NPT, other standards available

● **JH5SL-X/JH5SL-B/JH5SH-B** Socket Weld



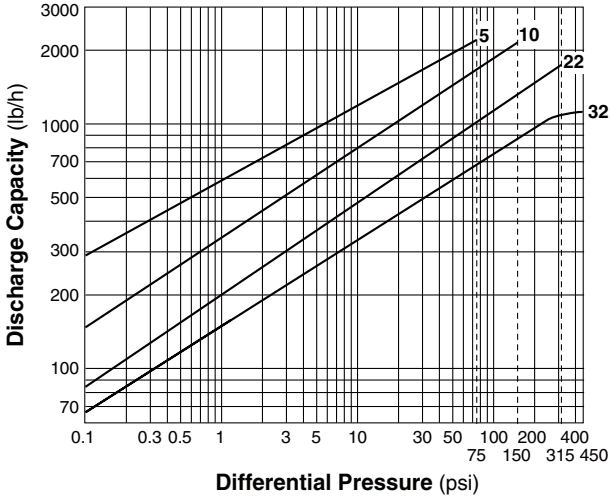
JH5SL-X/JH5SL-B/JH5SH-B Socket Weld* (in)

Model	Size	L	H	H_1	W	ϕD	ϕC	h	Weight(lb)
JH5SL-X JH5SL-B	¾	9 11/16	6 9/16	4 1/8	4 1/2	1 1/2	1.065	9/16	15
JH5SH-B	¾	9 11/16	7	4 1/4	4 5/16	1 1/2	1.065	9/16	15

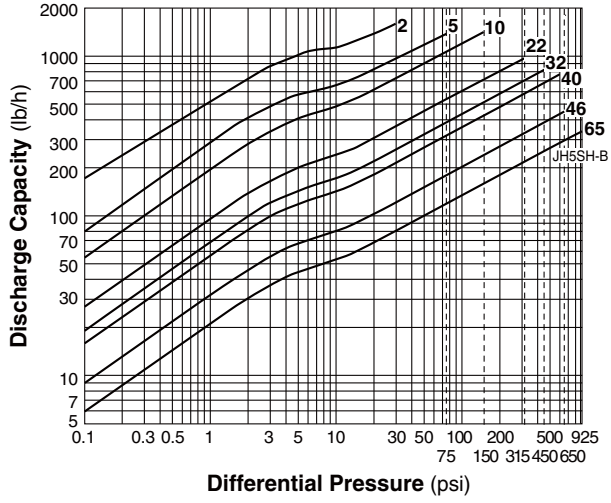
* ASME B16.11-2005, other standards available

Discharge Capacity

● **JH5SL-X**



● **JH5SL-B/JH5SH-B**



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 11 °F below saturated 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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Member of FCI Fluid Controls Institute, Inc. Technical Resources for Instrumentation and Fluid Control

Manufacturer
TLV CO., LTD.
Kakogawa, Japan
is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001
ISO 14001
CERTIFIED ISO 9001 · ISO 14001

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