



FREE FLOAT STEAM TRAP

MODEL JH7X

FREE FLOAT STEAM TRAP WITH THERMOSTATIC AIR VENTING

Features

A reliable and durable cast steel free float steam trap with tight shut-off for use on medium-size process equipment.

1. Self-modulating free float provides continuous, smooth, low velocity condensate discharge as process loads vary.
2. Constant water-seal design ensures steam-tight seal, even under low-load conditions.
3. Only one moving part, the free float, eliminates concentrated valve wear and provides long maintenance-free service life.
4. Thermostatic capsule with "fail open" feature vents air automatically until close-to-steam temperature, for rapid start-up.
5. Easy, inline access to internal parts simplifies cleaning and reduces maintenance costs.
6. Built-in screen with large surface area ensures trouble-free operation.



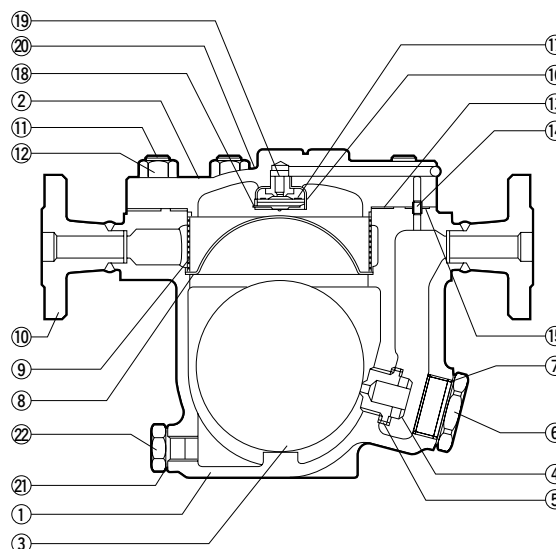
Specifications

Model	JHS7X	JHW7X	JH7X
Connection	Screwed	Socket Welded	Flanged
Size (mm)		20, 25, 40	
Orifice No.		1, 2, 5, 10, 14, 22, 32	
Maximum Operating Pressure (MPaG) PMO		0.1, 0.2, 0.5, 1, 1.4, 2.2, 3.2	
Maximum Differential Pressure (MPa) ΔPMX		0.1, 0.2, 0.5, 1, 1.4, 2.2, 3.2	
Minimum Operating Pressure (MPaG)		0.01	
Maximum Operating Temperature (°C) TMO		240	
Subcooling of X-element Fill (°C)		up to 6	
Type of X-element		B	

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 4
Maximum Allowable Temperature (°C) TMA: 425
1 MPa = 10.197 kg/cm²

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.

No.	Description	Material	JIS	ASTM/AISI*
①	Body	Cast Steel	SCPH2	A216 Gr. WCB
②	Cover	Forged Steel	—	A105
③	Float	Stainless Steel	SUS316L	AISI316L
④	Orifice	Stainless Steel	SUS420F	AISI420F
⑤	Orifice Gasket	Soft Iron	SUYP	AISI1010
⑥	Plug	Stainless Steel	SCS13A	A351 Gr. CF8
⑦	Plug Gasket	Soft Iron	SUYP	AISI1010
⑧	Screen Holder	Stainless Steel	SUS304	AISI304
⑨	Screen outside/inside	Stainless Steel	SUS304/430	AISI304/430
⑩	Flange (JH7X)	Forged Steel**	—	A105/216 Gr. WCB
⑪	Socket (20, 25)***	Carbon Steel	S25C	AISI1025
⑫	Socket (40)***	Carbon Steel	—	A105
⑬	Cover Bolt	Carbon Steel	SNB7	A193 Gr. B7
⑭	Cover Nut	Carbon Steel	S45C	AISI1045
⑮	Cover Gasket	Stainl. Stl./Graphite	SUS316L	AISI316L
⑯	Connector	Stainless Steel	SUS416	AISI416
⑰	Connector Gasket	Stainl. Stl./Graphite	SUS316L	AISI316L
⑱	X-element Guide	Stainless Steel	SUS304	AISI304
⑲	X-element	Stainless Steel	—	—
⑳	Spring Clip	Stainless Steel	SUS304	AISI304
㉑	Air Vent Valve Seat	Stainless Steel	SUS420F	AISI420F
㉒	Drain Plug	Carbon Steel	S25C	AISI1025
㉓	Drain Plug Gasket	Soft Iron	SUYP	AISI1010



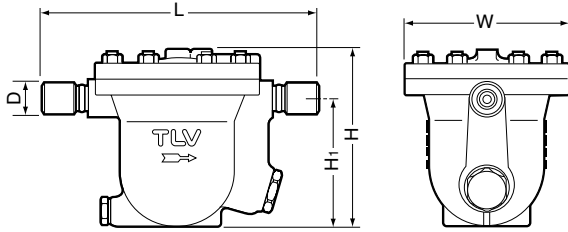
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* Equivalent ** Either A105 or A216 Gr. WCB, depending upon flange specifications

*** Shown on reverse

Dimensions

● **JHS7X** Screwed

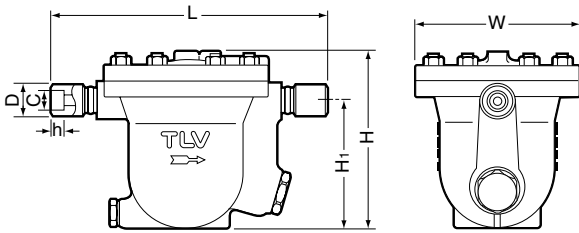


JHS7X Screwed* (mm)

Size	L	H	H ₁	φW	φD	Weight (kg)
20	350	227	161	206	40	21
25					49	
40	336				66	23

* PT, other standards available

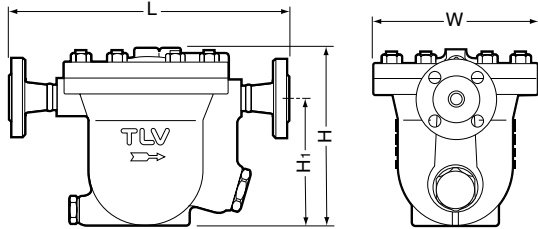
● **JHW7X** Socket Welded



JHW7X Socket Welded (mm)

Size	φD	φC	h	L	H	H ₁	φW	Weight (kg)
20	40	27.7	14	350	227	161	206	21
25	49	34.5						
40	66	49.1		336				23

● **JH7X** Flanged

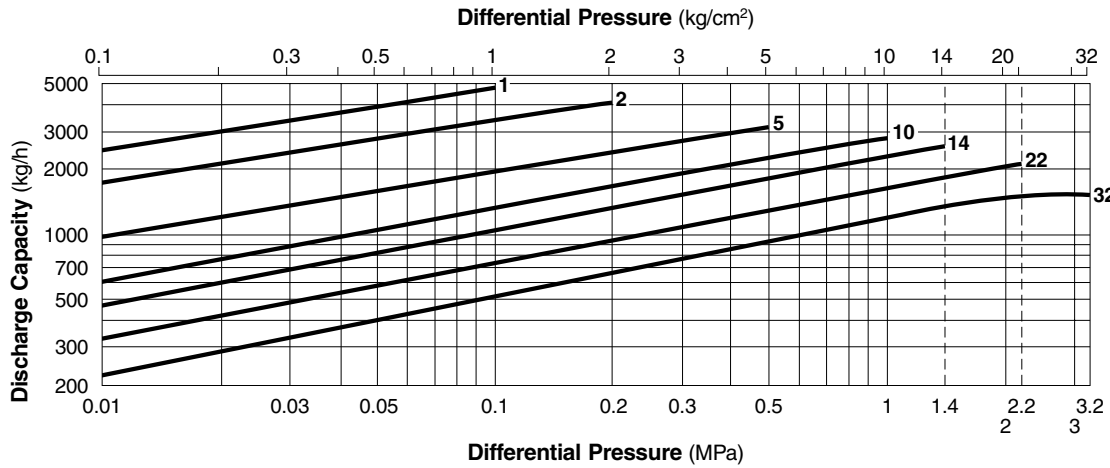


JH7X Flanged* (mm)

Size	L	H	H ₁	φW	Weight (kg)
20	350	227	161	206	23
25					24
40	380				27

* JIS 40K RF, other standards available

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

