



# FREE FLOAT STEAM TRAP

## MODEL JH5X/JH5

### CAST STEEL FREE FLOAT STEAM TRAP WITH THERMOSTATIC AIR VENTING

#### Benefits

**Extremely durable, inline-repairable free float trap with tight shut-off for drainage of steam mains and small to medium-size process heaters.**

1. Self-modulating free float provides soft and continuous, low velocity discharge as process loads vary, for maximum production performance.
2. Unique rotational seating design eliminates concentrated wear to provide long maintenance-free service life.
3. JH5X: durable thermostatic unit automatically vents air for exceptional start-up and performance.
4. Easy, inline access to internal parts simplifies cleaning and lowers maintenance costs.
5. Rugged float construction with up to 1570 psig hydraulic shock rating ensures excellent resistance to water hammer.
6. Built-in screen with large surface area ensures extended trouble-free service.



#### Specifications

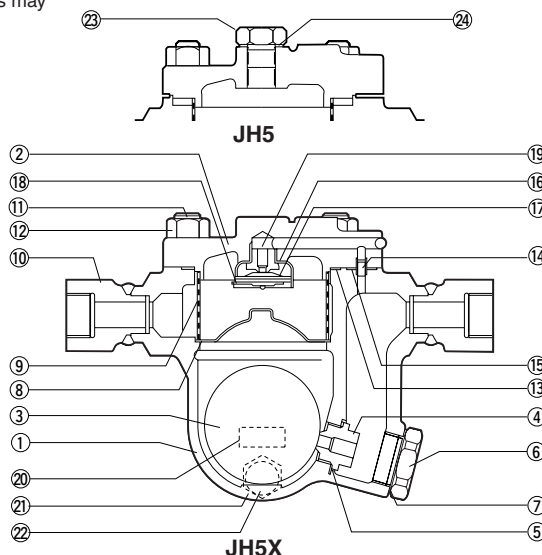
Model	JHS5X	JHW5X	JH5X	JHS5	JHW5	JH5
Connection	<b>Screwed</b>	<b>Socket Weld</b>	Flanged	Screwed	Socket Weld	Flanged
Size (in)	<b>3/4, 1</b>		3/4, 1	<b>3/4, 1</b>		
Orifice No.	2, 5, 10, 22, 32			40		
Maximum Operating Pressure (psig) PMO	30, 75, 150, 315, 450			600		
Maximum Differential Pressure (psi) ΔPMX	30, 75, 150, 315, 450			600		
Minimum Operating Pressure						Vacuum
Maximum Operating Temperature (°F) TMO	464			800		
Maximum Allowable Pressure (psig) PMA	600			650		
Maximum Allowable Temperature (°F) TMA	800			800		



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.

Connections and sizes in bold are standard

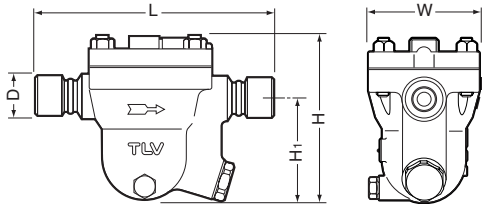
No.	Description	Material	ASTM/AISI*	JIS
①	Body	Cast Steel	A216 Gr. WCB	SCPH2
②	Cover	Carbon Steel	A105	-
③ <sup>F</sup>	Float	Stainless Steel	AISI316L	SUS316L
④ <sup>F</sup>	Orifice	Stainless Steel	AISI420F	SUS420F
⑤ <sup>MR</sup>	Orifice Gasket	Soft Iron	AISI1010	SUYP
⑥	Orifice Plug	Cast Stainless Steel	A217 Gr. CA15	SCS2A
⑦ <sup>MR</sup>	Orifice Plug Gasket	Soft Iron	AISI1010	SUYP
⑧ <sup>F</sup>	Float Cover	Stainless Steel	AISI304	SUS304
⑨ <sup>F</sup>	Screen	Stainless Steel	AISI430	SUS430
	Flange (not shown)	Carbon/Cast Steel**	A105/216 Gr. WCB	-
⑩	Socket (JHW5X)	Cast Steel	A216 Gr. WCB	-
	Socket (JHW5)	Carbon Steel	AISI1025	S25C
⑪	Cover Bolt	Alloy Steel	A193 Gr. B7	SNB7
⑫	Cover Nut	Carbon Steel	AISI1045	S45C
⑬ <sup>MR</sup>	Cover Gasket (JH5X)	Stainl. Steel/Graphite	AISI316L	SUS316L
	Cover Gasket (JH5)	Stainl. Steel/Graphite	AISI304	SUS304
⑭	Connector	Stainless Steel	AISI416	SUS416
⑮ <sup>MR</sup>	Connector Gasket	Stainl. Steel/Graphite	AISI316L	SUS316L
⑯ <sup>F</sup>	X-element Guide	Stainless Steel	AISI304	SUS304
⑰ <sup>F</sup>	X-element	Stainless Steel	-	-
⑱ <sup>F</sup>	Spring Clip	Stainless Steel	AISI304	SUS304
⑲ <sup>F</sup>	Air Vent Valve Seat	Stainless Steel	AISI420F	SUS420F
⑳	Nameplate	Stainless Steel	AISI304	SUS304
㉑	Drain Plug	Carbon Steel	AISI1025	S25C
㉒ <sup>MR</sup>	Drain Plug Gasket	Soft Iron	AISI1010	SUYP
㉓	Plug	Carbon Steel	AISI1025	S25C
㉔ <sup>MR</sup>	Plug Gasket	Soft Iron	AISI1010	SUYP



Parts 14-19 for JH5X only, parts 23-24 for optional air vent kit on JH5 only  
Replacement kits available: (M) maintenance parts, (R) repair parts, (F) float

**Dimensions**

● **JHS5X/JHS5** Screwed



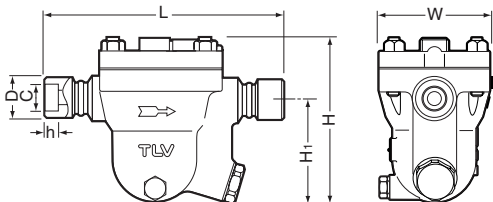
**JHS5X/JHS5** Screwed\* (in)

Size	L	H	H <sub>1</sub>	W	Weight (lb)
3/4	9 13/16	6 1/2	4 3/16	4 1/2	20
1		(9 15/16)			

\* NPT, other standards available

( ): JHS5

● **JHW5X/JHW5** Socket Weld

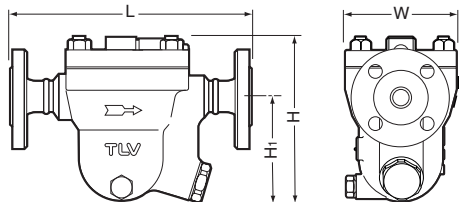


**JHW5X/JHW5** Socket Weld (in)

Size	L	H	H <sub>1</sub>	W	φ D	φ C	h	Weight (lb)
3/4	9 13/16	6 1/2	4 3/16	4 1/2	1 5/16	7/8	1/2	20
1		(6 15/16)			1 9/16	1 1/16	9/16	

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● **JH5X/JH5** Flanged



**JHS5X/JHS5** Flanged (in)

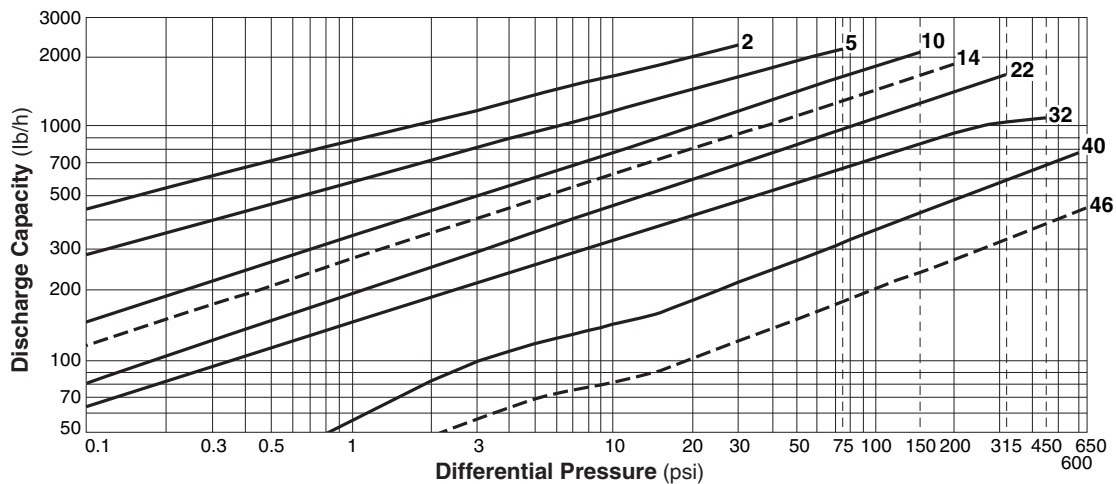
Size	L			H	H <sub>1</sub>	W	Weight* (lb)
	ASME Class						
	150RF	300RF	600RF				
3/4	9 13/16	9 13/16	9 13/16	6 1/2	4 3/16	4 1/2	21
1				(6 15/16)			24

Other standards available, but length and weight may vary

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\* Weight is for class 600 RF

**Discharge Capacity**



— Standard - - - - Available on special request

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 11°F below saturated steam temperature.
4. Recommended safety factor: at least 1.5.

Capacities for orifice #2-32 apply only to JH5X; capacities #40-46 apply only to JH5.

**CAUTION** DO NOT use traps under conditions that exceed maximum differential pressure, as condensate backup will occur!

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For Technical Service 1-800 "TLV TRAP"



Manufacturer

**TLV CO., LTD.**

Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001/ISO 14001

