



FREE FLOAT STEAM TRAP

MODEL JH5RX/JH5R/JH5RH

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 medium sized process heaters (JH5RX), or superheated or high-pressure steam mains and turbines (JH5R, JH5RH).

1. Self-modulating free float provides soft and continuous, low velocity discharge as process loads vary, for maximum production performance.
2. Precision ground float, constant water seal and three-point seating design ensure a steam-tight seal, even under no-load conditions.
3. JH5RX: 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 1740 or 2300 psig* hydraulic shock rating ensures excellent resistance to water hammer.
6. Built-in screen with large surface area ensures extended trouble-free service.

* Depending on orifice No.



Specifications

Model	JH5RX			JH5R			JH5RH	
	Screwed	Socket Weld	Flanged	Screwed	Socket Weld	Flanged	Socket Weld	Flanged
Connection	Screwed	Socket Weld	Flanged	Screwed	Socket Weld	Flanged	Socket Weld	Flanged
Size (in)	1/2, 3/4, 1	1/2, 3/4, 1	1/2, 3/4, 1	1/2, 3/4, 1	1/2, 3/4, 1	1/2, 3/4, 1	3/4, 1	3/4, 1
Orifice No.	2, 5, 10, 14, 22, 32				40, 46		70, 80	
Max. Operating Pressure (psig) PMO	30, 75, 150, 200, 315, 450				600, 650		1000, 1150	
Max. Differential Pressure (psi) Δ PMX	30, 75, 150, 200, 315, 450				600, 650		1000, 1150	
Minimum Operating Pressure (psig)					Vacuum			
Max. Operating Temperature (°F) TMO		464			800		800	
Max. Allowable Pressure (psig) PMA		600			925		1150	
Max. Allowable Temperature (°F) TMA					800			

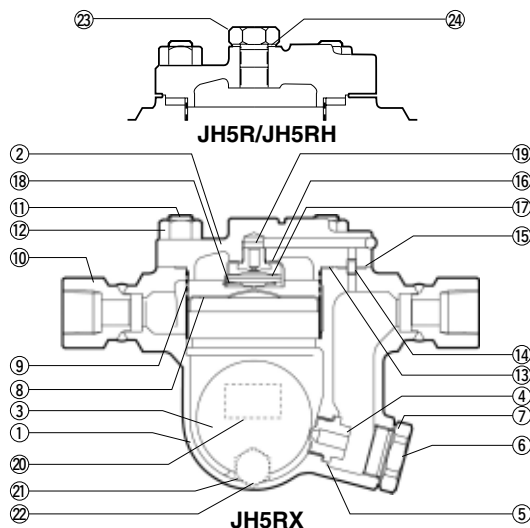


To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

Connections and sizes in bold are standard

No.	Description	Material	ASTM/AISI*	JIS
①	Body	Cast Steel	A216 Gr. WCB	-
②	Cover	Carbon Steel	A105	-
③ ^F	Float	Stainless Steel	AISI316L	SUS316L
④ ^R	Orifice	-	-	-
⑤ ^{MR}	Orifice Gasket	Soft Iron	AISI1010	SUYF
⑥	Orifice Plug	Cast Stainless Steel	A217 Gr. CA15	SCS2A
⑦ ^{MR}	Orifice Plug Gasket	Soft Iron	AISI1010	SUYF
⑧ ^R	Float Cover	Stainless Steel	AISI304	SUS304
⑨ ^R	Screen	Stainless Steel	AISI430	SUS430
⑩	Socket/Flange**	Carbon Steel	A105	-
⑪	Cover Bolt (JH5RX)	Alloy Steel	A193 Gr. B7	SNB7
	Cover Bolt (JH5R, RH)	Alloy Steel	A193 Gr. B16	SNB16
⑫	Cover Nut	Carbon Steel	AISI1045	S45C
⑬ ^{MR}	Cover Gasket (JH5RX)	Stainl. Steel/Graphite	AISI316L	SUS316L
	Cover Gasket (JH5R, RH)	Stainl. Steel/Graphite	AISI304	SUS304
⑭	Connector	Stainless Steel	AISI416	SUS416
⑮ ^{MR}	Connector Gasket	Stainl. Steel/Graphite	AISI316L	SUS316L
⑯ ^R	X-element Guide	Stainless Steel	AISI304	SUS304
⑰ ^R	X-element	Stainless Steel	-	-
⑱ ^R	Spring Clip	Stainless Steel	AISI304	SUS304
⑲ ^R	Air Vent Valve Seat	Stainless Steel	AISI420F	SUS420F
⑳	Nameplate	Stainless Steel	AISI304	SUS304
㉑	Drain Plug***	Carbon Steel	AISI1025	S25C
㉒	Drain Plug Gasket***	Soft Iron	AISI1010	SUYF
㉓	Plug	Carbon Steel	AISI1025	S25C
㉔ ^{MR}	Plug Gasket	Soft Iron	AISI1010	SUYF

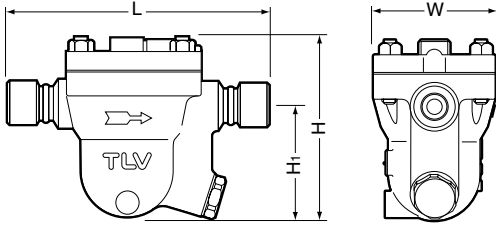
* Equivalent ** Shown on reverse *** Option



Parts 14-19 for JH5RX only, parts 23-24 for optional air vent kit on JH5R and JH5RH
Replacement kits available: (M) maintenance parts, (R) repair parts, (F) float

Dimensions

● JH5RX/JH5R Screwed

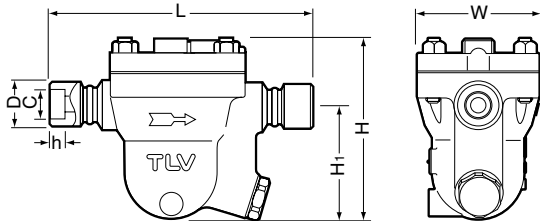


JH5RX/JH5R Screwed* (in)

Model	Size	L	H	H ₁	W	Weight (lb)
JH5RX	1/2	9 3/16	6 3/8 (6 7/8)	4 1/8	4 1/2	14
JH5R	3/4	9 11/16				15
	1	10 1/8				

() JH5R
* NPT, other standards available

● JH5RX/JH5R/JH5RH Socket Welded

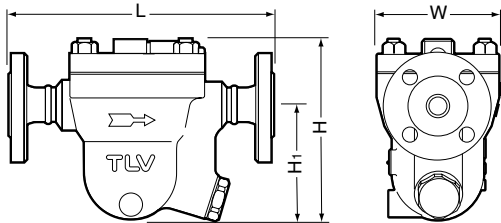


JH5RX/JH5R/JH5RH Socket Weld (in)

Model	Size	L	H	H ₁	W	φD	φC	h	Weight (lb)
JH5RX	1/2	9 3/16	6 3/8 (6 7/8)	4 1/8	4 1/2	1 5/16	7/8	1/2	14
JH5R	3/4	9 11/16				1 3/8	1 1/16	9/16	15
JH5RH	3/4	9 11/16	7	4 3/16	4 15/16	1 9/16	1 1/16	9/16	22
	1	10 1/8				1 7/8	1 3/8	9/16	22

() JH5R

● JH5RX/JH5R/JH5RH Flanged



JH5RX/JH5R/JH5RH Flanged (in)

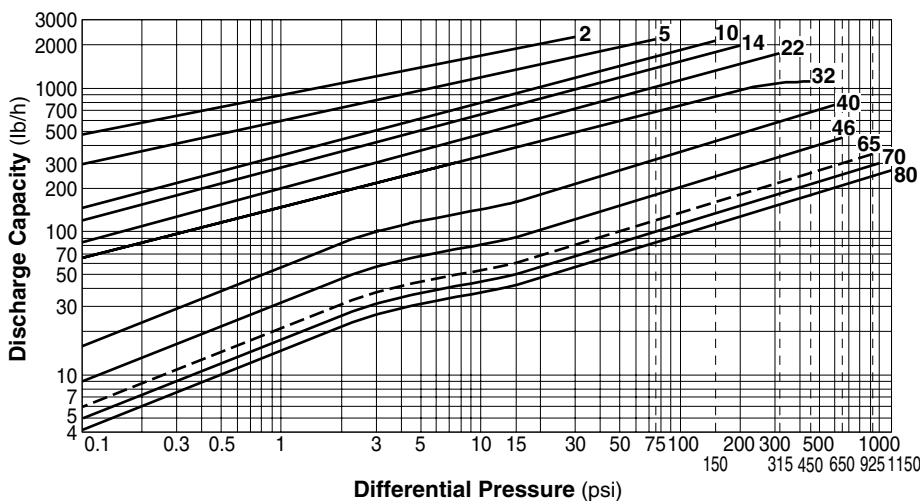
Model	Size	L			H	H ₁	W	Weight* (lb)
		ASME Class						
		150RF	300RF	600RF				
JH5RX	1/2	9 3/8	9 3/8	9 3/8	6 3/8 (6 7/8)	4 1/8	4 1/2	19
JH5R	3/4	10 3/8	10 3/8	10 3/8				22
	1	12 3/16	12 3/16	12 3/16				24
JH5RH	3/4	10 3/8	10 3/8	10 3/8	7	4 3/16	4 15/16	31
	1	12 3/16	12 3/16	12 3/16				35

() JH5R
Other standards available, but length and weight may vary
* Weight is for Class 600 RF

JH5RX shown. Configuration of JH5R/JH5RH differs slightly.

Flange classes in bold are standard

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 JH5RX; #40-65 only to JH5R; #70-80 only to JH5RH.



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

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

ISO 9001/ISO 14001

