



FREE FLOAT STEAM TRAP

MODEL J3X

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 process loads.

1. Self-modulating free float provides soft and continuous, low velocity discharge as process loads vary for maximum performance.
2. Unique rotational seating design eliminates concentrated wear to provide long life.
3. 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 psig hydraulic shock rating ensures excellent resistance to water hammer.
6. Built-in screen with large surface area ensures extended trouble-free service.



U.S. Pat. 5,197,669

Specifications

Model		J3X		JF3X
Body material		Ductile Cast Iron	Stainless Steel	Cast Iron
Connection		Screwed		Flanged
Size (in)		1/2, 3/4, 1		1
Orifice No.		1*, 2, 5, 10, 21		1, 2, 5, 10, 18
Maximum Operating Pressure (psig)	PMO	15, 30, 75, 150, 300		15, 30, 75, 150, 250
Maximum Differential Pressure (psi)	ΔPMX	15, 30, 75, 150, 300		15, 30, 75, 150, 250
Minimum Operating Pressure (psig)				Vacuum
Maximum Operating Temperature (°F)	TMO			428
Maximum Allowable Pressure (psig)	PMA	300		250
Maximum Allowable Temperature (°F)	TMA	428		428

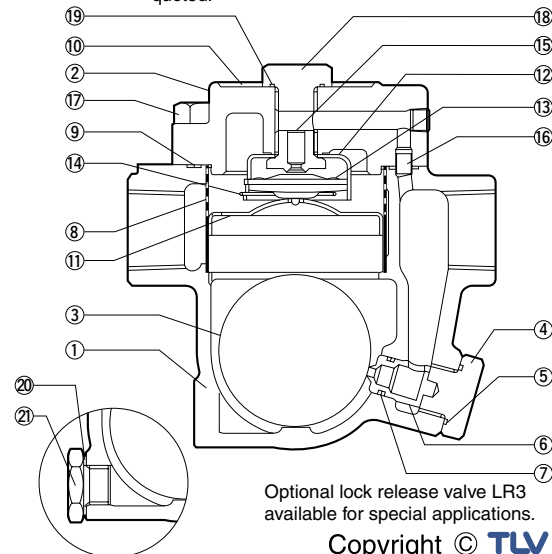
* #1 orifice is standard only on 3/4" size

Connections and sizes in bold are standard

No.	Description	Materials	ASTM/AISI*	JIS
①	Body (J3X)	Ductile Cast Iron	A536 Gr. 35-45-12	FCD450
	Body (JF3X)	Cast Stainless Steel**	A351 Gr. CF8	—
②	Cover	Ductile Cast Iron	A536 Gr. 65-45-12	FCD450
		Cast Stainless Steel**	A351 Gr. CF8	—
③F	Float	Stainless Steel	AISI316L	SUS316L
④	Orifice Holder Plug	Carbon Steel	AISI1025	S25C
		Stainless Steel**	AISI303	SUS303
⑤MR	Orifice Plug Gasket	Fluorine Resin	PTFE	PTFE
⑥R	Orifice	Stainless Steel	AISI420F	SUS420F
⑦MR	Orifice O-Ring	Synthetic Rubber	D2000CA	EPR
⑧R	Screen	Stainless Steel	AISI430	SUS430
⑨MR	Cover Gasket	Fluorine Resin	PTFE	PTFE
⑩	Nameplate	Stainless Steel	AISI304	SUS304
⑪R	Float Cover	Stainless Steel	AISI304	SUS304
⑫R	X-element Guide	Stainless Steel	SUS304	SUS304
⑬R	X-element	Stainless Steel	—	—
⑭R	Spring Clip	Stainless Steel	AISI304	SUS304
⑮R	Air Vent Valve Seat	Stainless Steel	AISI420F	SUS420F
⑯	Connector	Stainless Steel	SUS416	SUS416
		Carbon Steel	AISI1045	S45C
⑰	Cover Bolt	Stainless Steel**	AISI304	SUS304
		Carbon Steel	AISI1025	S25C
⑱	Plug	Stainless Steel**	AISI303	SUS303
		Carbon Steel	AISI1025	S25C
⑲MR	Plug Gasket	Fluorine Resin	PTFE	PTFE
⑳	Drain Plug Gasket***	Soft Iron	AISI1010	SUYP
		Stainless Steel**	AISI303	SUS303
		Carbon Steel	AISI1025	S25C
㉑	Drain Plug***	Stainless Steel**	AISI316L	SUS316L



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.



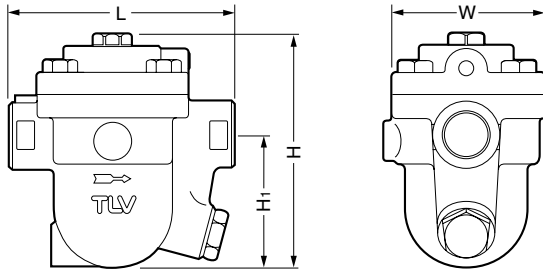
Optional lock release valve LR3 available for special applications.

* Equivalent ** Material used for stainless steel model *** Option Replacement kits available: (M) maintenance parts, (R) repair parts, (F) float

Dimensions

● **J3X**

Screwed



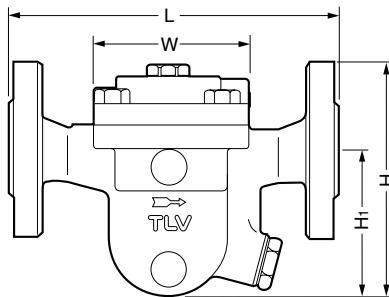
J3X Screwed* (in)

Size	L	H	H ₁	W	Weight (lb)
1/2	4 3/4	5 1/8 (5)	2 15/16 (2 7/8)	3 1/8	6.0 (5.5)
3/4			2 7/8		6.2 (5.7)
1		5 3/8 (5 5/16)	2 15/16		6.6 (6.2)

* NPT, other standards available
() stainless steel body

● **JF3X**

Flanged



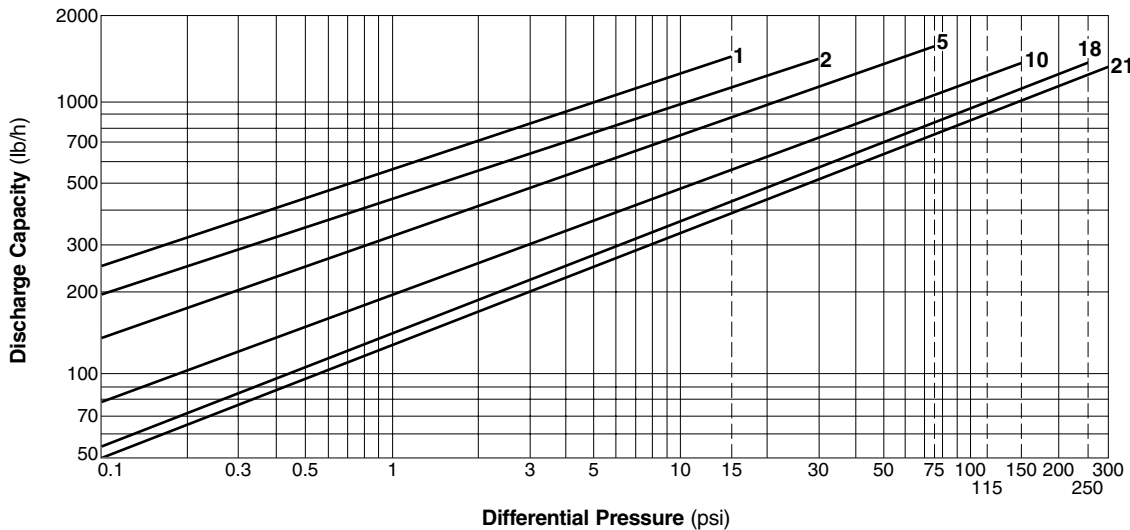
JF3X Flanged (in)

Size	L		H	H ₁	W	Weight* (lb)
	ASME Class					
	125FF	250RF				
1	8	8 7/16	5 1/2	3 9/16	3 1/8	13

Class 125 FF can connect to 150 RF, 250 RF can connect to 300 RF
Other standards available, but length and weight may vary
* Weight is for Class 250 RF

Flange classes in bold are standard

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 11 °F below saturated steam temperature.
4. Recommended safety factor: at least 1.5.
5. #1 orifice is standard only on 3/4" size.

CAUTION DO NOT use traps under conditions which 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

