



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, continuous, and smooth, low velocity discharge as process loads vary for maximum performance.
2. Unique rotational seating design eliminates concentrated wear to provide long maintenance-free service 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 1720 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		J3X	JF3X
Connection		Screwed	Flanged
Size (in)		½, ¾, 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 ¾" size

Connections and sizes in bold are standard

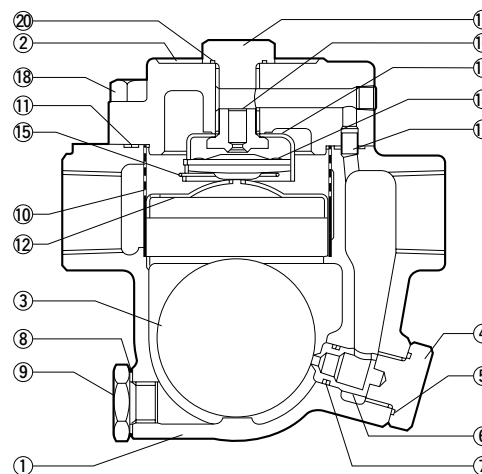


To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

No.	Description	Material	ASTM/AISI*	JIS
①	Body (Screwed)	Ductile Cast Iron	A536 Gr. 65-45-12	FCD450
	Body (Flanged)	Cast Iron	A842 Gr. 400	FCV410
②	Cover	Ductile Cast Iron	A536 Gr. 65-45-12	FCD450
③ ^F	Float	Stainless Steel	AISI316L	SUS316L
④	Orifice Holder Plug	Carbon Steel	AISI1025	S25C
⑤ ^{MR}	Holder Plug Gasket	Fluorine Resin	PTFE	PTFE
⑥ ^R	Orifice	Stainless Steel	AISI420F	SUS420F
⑦ ^{MR}	Orifice O-Ring	Synthetic Rubber	D2000CA	EPR
⑧ ^{MR}	Drain Plug Gasket	Soft Iron	AISI1010	SUYP
⑨	Drain Plug	Carbon Steel	AISI1025	S25C
⑩ ^R	Screen	Stainless Steel	AISI430	SUS430
⑪ ^{MR}	Cover Gasket	Fluorine Resin	PTFE	PTFE
⑫ ^R	Float Cover	Stainless Steel	AISI304	SUS304
⑬ ^R	X-element Guide	Stainless Steel	AISI304	SUS304
⑭ ^R	X-element	Stainless Steel	—	—
⑮ ^R	Spring Clip	Stainless Steel	AISI304	SUS304
⑯ ^R	Air Vent Valve Seat	Stainless Steel	AISI420F	SUS420F
⑰	Connector	Stainless Steel	AISI416	SUS416
⑱	Cover Bolt	Carbon Steel	AISI1045	S45C
⑲	Plug	Carbon Steel	AISI1025	S25C
⑳ ^{MR}	Plug Gasket	Fluorine Resin	PTFE	PTFE

* Equivalent

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

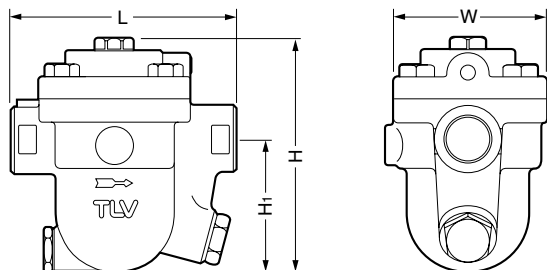


Optional lock release valve available for special applications

Dimensions

● **J3X**

Screwed



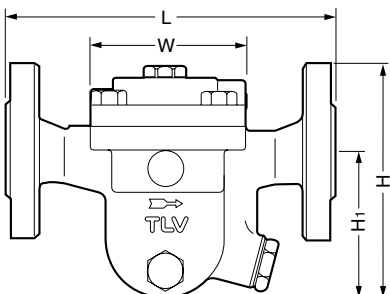
J3X Screwed* (in)

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

* NPT, other standards available

● **JF3X**

Flanged



JF3X Flanged (in)

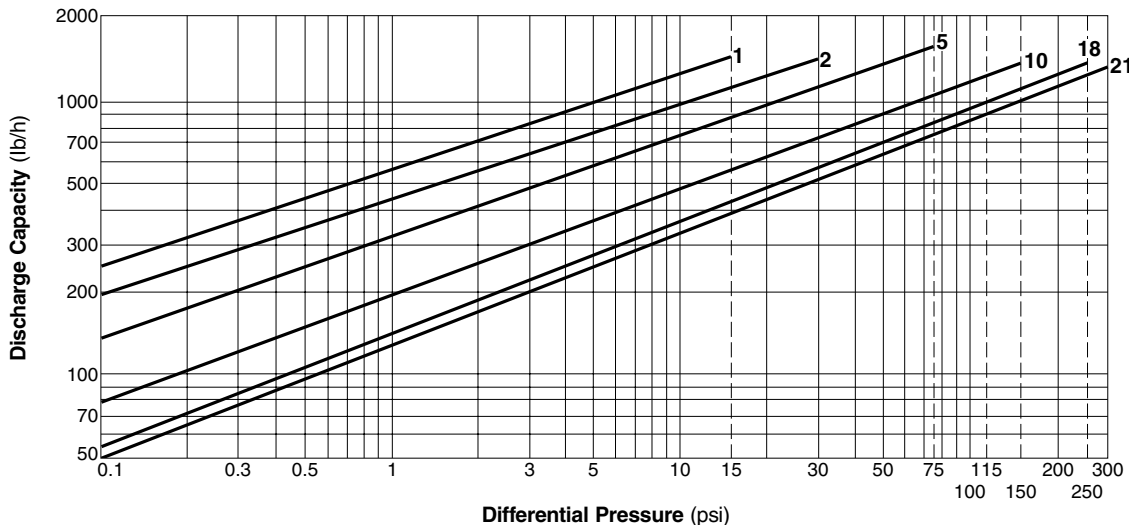
Size	L		H	H ₁	W	Weight* (lb)
	ASME Class					
1	125FF	250RF	5 1/2	3 9/16	3 1/8	13
	8	8 7/16				

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!

TLV CORPORATION

13901 South Lakes Drive, Charlotte, NC 28273-6790
Phone: 704-597-9070 Fax: 704-583-1610
E-mail: tlv@tlvengineering.com
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

