



# FREE FLOAT<sup>®</sup> STEAM TRAP

## MODEL J7.2X

### FREE FLOAT STEAM TRAP WITH THERMOSTATIC AIR VENTING

#### Features

A reliable and durable cast iron 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. Only one moving part, the free float, prevents concentrated wear and provides long maintenance-free service life.
3. Thermostatic capsule (X-element) with "fail open" feature vents air automatically until close-to-steam temperature.
4. Built-in screen with large surface area ensures extended trouble-free operation.
5. Easy, inline access to internal parts simplifies cleaning and reduces maintenance costs.



#### Specifications

Model	J7.2X	
Connection	Flanged	
Size (mm)	40, 50, 80	
Orifice No.	0.5, 1, 2, 5, 10, 14, 16	
Maximum Operating Pressure (MPaG) PMO	0.05, 0.1, 0.2, 0.5, 1, 1.4, 1.6	
Maximum Differential Pressure (MPa) ΔPMX	0.05, 0.1, 0.2, 0.5, 1, 1.4, 1.6	
Minimum Operating Pressure (MPaG)	0.01	
Maximum Operating Temperature (°C) TMO	220	
Subcooling of X-element Fill (°C)	up to 6	
Type of X-element	C6	

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 1.6 1 MPa = 10.197 kg/cm<sup>2</sup>  
Maximum Allowable Temperature (°C) TMA: 220

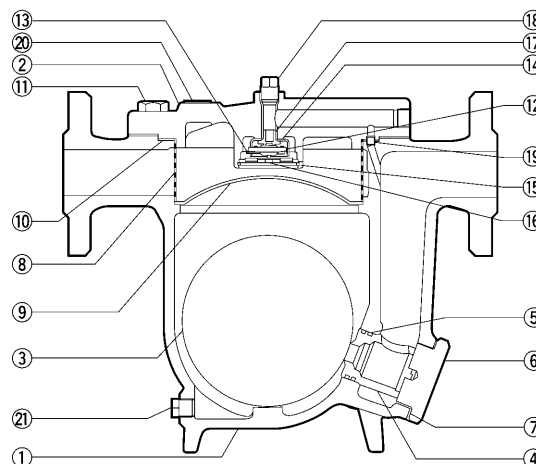


To avoid abnormal operation, accidents or serious injury, **DO NOT** use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

No.	Description	Material	JIS	ASTM/AISI*
①	Body	Cast Iron	FCV410	A842 Gr.400
②	Cover	Cast Iron	FCV410	A842 Gr.400
③ <sup>F</sup>	Float	Stainless Steel	SUS316L	AISI316L
④ <sup>R</sup>	Orifice	—	—	—
⑤ <sup>MR</sup>	Orifice O-Ring	Ethylene Propylene Rubber	EPR	D2000CA
⑥	Orifice Holder Plug	Cast Iron	FCV410	A842 Gr.400
⑦ <sup>MR</sup>	Holder Plug Gasket	Fluorine Resin	PTFE	PTFE
⑧ <sup>R</sup>	Screen	Stainless Steel	SUS430	AISI430
⑨	Screen Holder	Stainless Steel	SUS304	AISI304
⑩ <sup>MR</sup>	Cover Gasket	Graphite/Stainl. Stl.	—/SUS316L	—/AISI316L
⑪	Cover Bolt	Carbon Steel	S45C	AISI1045
⑫ <sup>R</sup>	X-element	Stainless Steel	—	—
⑬ <sup>R</sup>	Snap Ring	Stainless Steel	SUS304	AISI304
⑭ <sup>R</sup>	X-element Guide	Stainless Steel	SUS304	AISI304
⑮ <sup>R</sup>	X-element Cover	Stainless Steel	SUS304	AISI304
⑯ <sup>R</sup>	Snap Ring	Stainless Steel	SUS304	AISI304
⑰ <sup>R</sup>	Air Vent Valve Seat	Stainless Steel	SUS420F	AISI420F
⑱	Plug	Carbon Steel	SS400	A6
⑲	Connector	Stainless Steel	SUS416	AISI416
⑳	Nameplate	Stainless Steel	SUS304	AISI304
㉑	Drain Plug	Carbon Steel	SS400	A6

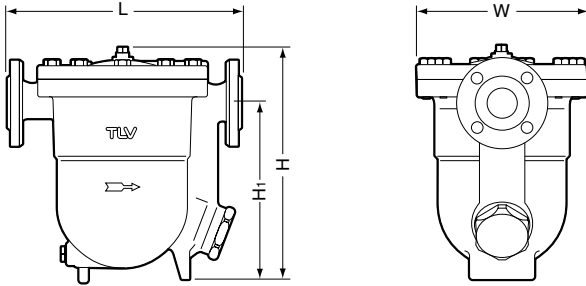
\* Equivalent

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



**Dimensions**

● **J7.2X** Flanged

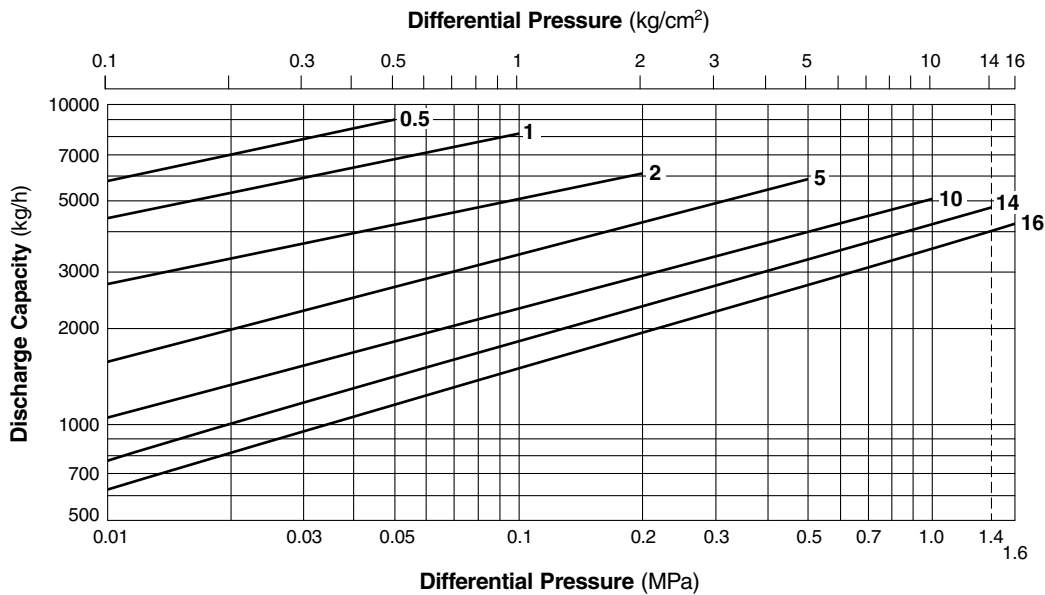


**J7.2X** Flanged (mm)

Size	L				H	H <sub>1</sub>	φ W	Weight* (kg)
	ASME Class							
	125FF (150RF)	250RF (300RF)	250RF (300RF)	300RF				
40	359	370	372	374	330	244	243	33
50	362		375	376	340	249		36
80	379	388	398	398	373	265		41

( ) No ASME standard exists for cast iron; machined to fit steel flanges  
 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 / 300 RF

**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 this products under conditions which exceed maximum differential pressure, as condensate backup will occur!

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

