



# FREE FLOAT<sup>®</sup> STEAM TRAP

## MODEL J8X

### FREE FLOAT STEAM TRAP WITH THERMOSTATIC AIR VENTING

#### Features

A reliable and durable cast iron steam trap with tight shut-off for use on large-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

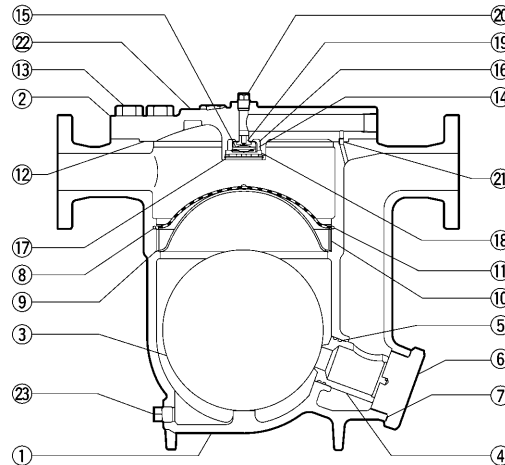
Model		J8X
Connection		Flanged
Size (mm)		50, 80, 100
Orifice No.		0.5, 1, 2, 5, 10, 14, 16
Maximum Operating Pressure (MPaG)	PMO	0.05, 0.1, 0.2, 0.5, 1.0, 1.4, 1.6
Maximum Differential Pressure (MPa)	ΔPMX	0.05, 0.1, 0.2, 0.5, 1.0, 1.4, 1.6
Minimum Operating Pressure (MPaG)		0.01
Maximum Operating Temperature (°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	FC250	A126 Cl. B
②	Cover	Cast Iron	FC250	A126 Cl. B
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	Ductile Cast Iron	FCD450	A536
⑦ <sup>MR</sup>	Orifice Plug Gasket	Fluorine Resin	PTFE	PTFE
⑧ <sup>R</sup>	Screen	Stainless Steel	SUS430	AISI430
⑨	Screen Holder	Stainless Steel	SUS304	AISI304
⑩	Screen Holder Retainer	Stainless Steel	SUS304	AISI304
⑪	Snap Ring	Stainless Steel	SUS304	AISI304
⑫ <sup>MR</sup>	Cover Gasket	Graphite/Stainless Steel	—/SUS316L	—/AISI316L
⑬	Cover Bolt	Carbon Steel	S45C	AISI1045
⑭ <sup>R</sup>	X-element	Stainless Steel	—	—
⑮ <sup>R</sup>	Spring Clip	Stainless Steel	SUS304	AISI304
⑯ <sup>R</sup>	X-element Guide	Stainless Steel	SUS304	AISI304
⑰ <sup>R</sup>	X-element Cover	Stainless Steel	SUS304	AISI304
⑱ <sup>R</sup>	Snap Ring	Stainless Steel	SUS304	AISI304
⑲ <sup>R</sup>	Air Vent Valve Seat	Stainless Steel	SUS420F	AISI420F
⑳	Plug	Carbon Steel	SS400	A6
㉑	Connector	Stainless Steel	SUS416	AISI416
㉒	Nameplate	Stainless Steel	SUS304	AISI304
㉓	Drain Plug	Carbon Steel	SS400	A6

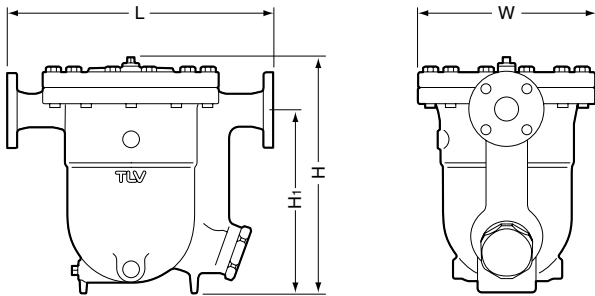


\* Equivalent

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

**Dimensions**

● **J8X** Flanged

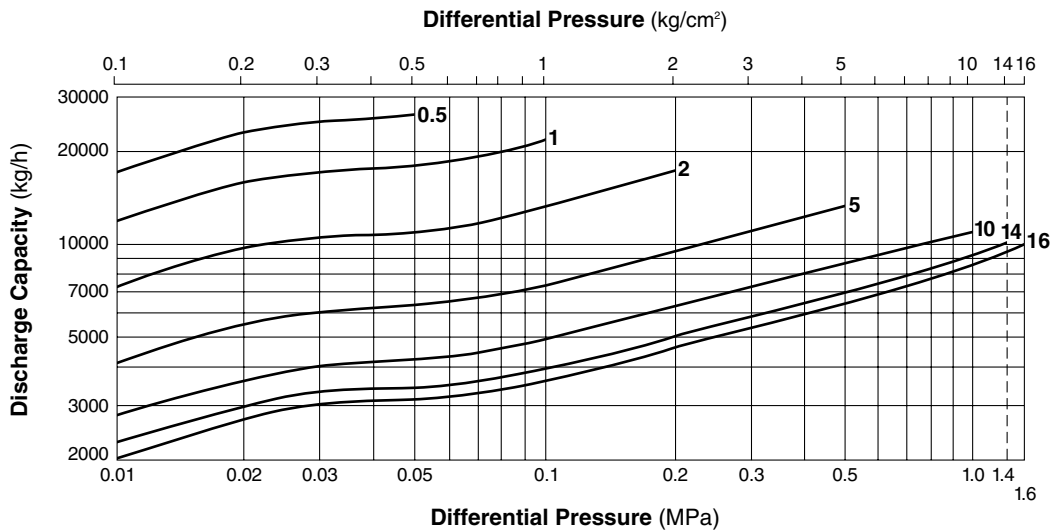


**J8X** Flanged (mm)

Size	L				H	H <sub>1</sub>	φ W	Weight* (kg)
	ASME Class							
	125FF	(150RF)	250RF	(300RF)				
50	542	550	555	556	493	381	365	98
80	546	554	563	564	508	380		105
100	550	550	566	566	518			109

( ) 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  
 \* Weight is for Class 250 RF / 300 RF  
 Other standards available, but length and weight may vary

**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 product under conditions that exceed maximum differential pressure, as condensate backup will occur!

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

ISO 9001  
 ISO 14001

