



# FREE FLOAT STEAM TRAP

## MODEL JH7.2X

### FREE FLOAT STEAM TRAP WITH THERMOSTATIC AIR VENTING

#### Features

**A reliable and durable cast steel free float 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. Constant water seal design ensures steam-tight seal, even under low-load conditions.
3. Only one moving part, the free float, eliminates concentrated valve wear and provides long maintenance-free service life.
4. Thermostatic capsule with fail-open feature vents air automatically until close-to-steam temperature, for rapid start-up, increased productivity and even heating.
5. Easy, inline access to internal parts simplifies cleaning and reduces maintenance costs.
6. Built-in screen with large surface area ensures trouble-free operation.



#### Specifications

Model	JHW7.2X	JH7.2X
Connection	Socket Welded	Flanged
Size (mm)	40, 50	
Orifice No.	0.5, 1, 2, 5, 10, 14, 22, 32	
Maximum Operating Pressure (MPaG) PMO	0.05, 0.1, 0.2, 0.5, 1.0, 1.4, 2.2, 3.2	
Maximum Differential Pressure (MPa) ΔPMX	0.05, 0.1, 0.2, 0.5, 1.0, 1.4, 2.2, 3.2	
Minimum Operating Pressure (MPaG)	0.01	
Maximum Operating Temperature (°C) TMO	240	
Subcooling of X-element Fill (°C)	up to 6	
Type of X-element	B	

**PRESSURE SHELL DESIGN CONDITIONS**

(NOT OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 4.0  
Maximum Allowable Temperature (°C) TMA: 425

1 MPa = 10.197 kg/cm<sup>2</sup>

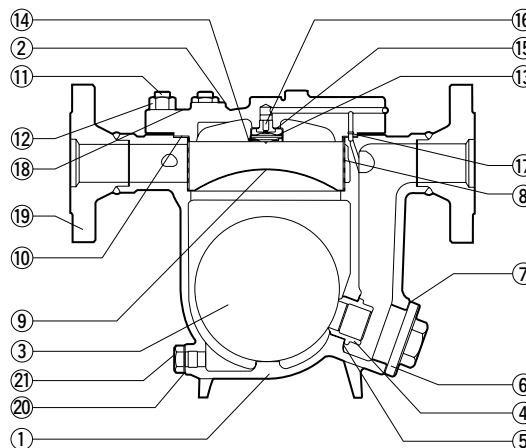


To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

No.	Description	Material	JIS	ASTM/AISI*
①	Body	Cast Steel	SCPH2	A216 Gr. WCB
②	Cover	Carbon Steel	—	A105
③ <sup>F</sup>	Float	Stainless Steel	SUS316L	AISI316L
④ <sup>R</sup>	Orifice	Cast Stainless Steel	SCS2A	A217 Gr. CA15
⑤ <sup>MR</sup>	Orifice Gasket	Soft Iron	SUYF	AISI1010
⑥	Orifice Plug	Cast Stainless Steel	SCS13A	A351 Gr. CF8
⑦ <sup>MR</sup>	Orifice Plug Gasket	Soft Iron	SUYF	AISI1010
⑧ <sup>R</sup>	Screen outside/inside	Stainless Steel	SUS304/430	AISI304/430
⑨	Screen Holder	Stainless Steel	SUS304	AISI304
⑩ <sup>MR</sup>	Cover Gasket	Stainl. St./Graphite	SUS316L	AISI316L
⑪	Cover Bolt	Alloy Steel	SNB16	A193 Gr. B16
⑫	Cover Nut	Carbon Steel	S45C	AISI1045
⑬ <sup>R</sup>	X-element	Stainless Steel	—	—
⑭ <sup>R</sup>	Spring Clip	Stainless Steel	SUS304	AISI304
⑮ <sup>R</sup>	X-element Guide	Stainless Steel	SUS304	AISI304
⑯ <sup>R</sup>	Air Vent Valve Seat	Stainless Steel	SUS420F	AISI420F
⑰	Connector	Stainless Steel	SUS416	AISI416
⑱	Nameplate	Stainless Steel	SUS304	AISI304
⑲	Socket**/Flange	Carbon Steel	—	A105
⑳ <sup>MR</sup>	Drain Plug Gasket	Soft Iron	SUYF	AISI1010
㉑	Drain Plug	Carbon Steel	S25C	AISI1025

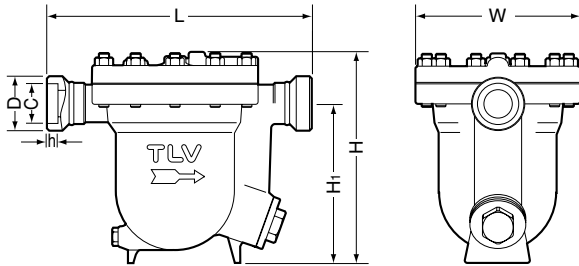
\* Equivalent \*\* Shown on reverse

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



**Dimensions**

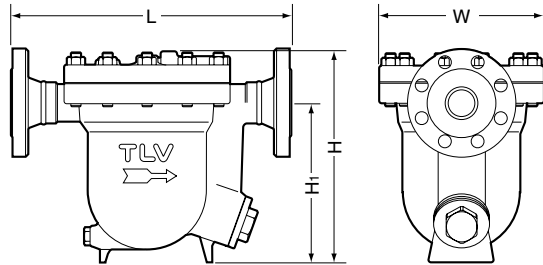
● **JHW7.2X** Socket Welded



**JHW7.2X** Socket Welded (mm)

Size	L	H	H <sub>1</sub>	φ W	φ D	φ C	h	Weight(kg)
40	401	320	244	250	64	49.1	13	35
50					77.5	61.1	16	38

● **JH7.2X** Flanged

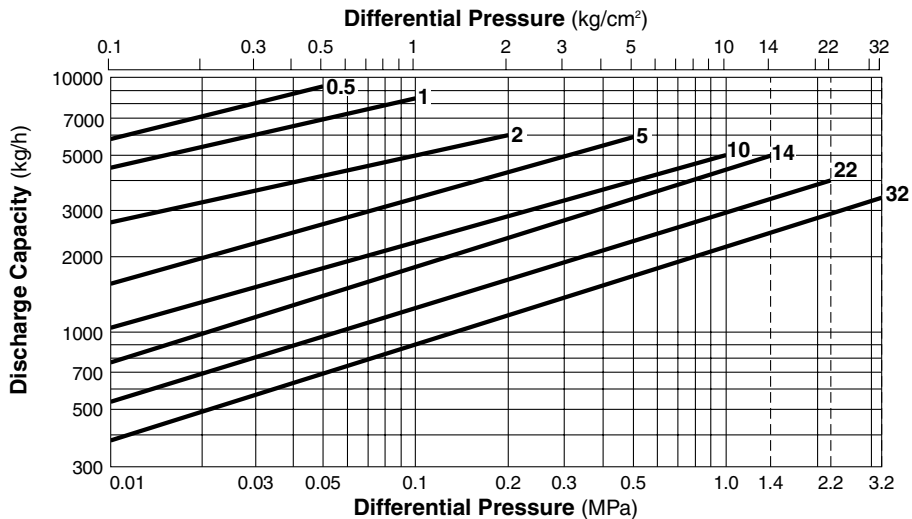


**JH7.2X** Flanged (mm)

Size	L			H	H <sub>1</sub>	φ W	Weight* (kg)
	ASME Class						
	150RF	300RF	600RF				
40	406	413	429	320	244	250	37
50	410	416	435				39

Other standards available, but length and weight may vary  
\* Weight is for Class 600 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.

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

Manufacturer

ISO 9001/ISO 14001

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

