



# FREE FLOAT STEAM TRAP

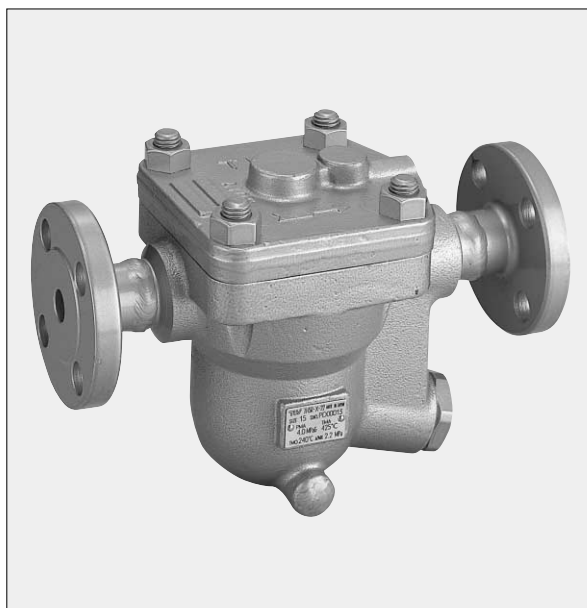
## MODEL JH5RX

### 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 steam mains and small to medium-size process equipment.**

1. Self-modulating free float provides continuous, smooth, low velocity condensate discharge as process loads vary.
2. Precision ground float, constant water seal and three-point seating design ensure a steam-tight seal, even under no-load conditions.
3. Only one moving part, the free float, eliminates concentrated valve wear and provides long maintenance-free service life.
4. Thermostatic capsule (X-element) with "fail open" feature vents air automatically until close-to-steam temperature, for rapid start-up.
5. Built-in screen with large surface area ensures extended trouble-free operation.
6. Easy, inline access to internal parts simplifies cleaning and lowers maintenance costs.



#### Specifications

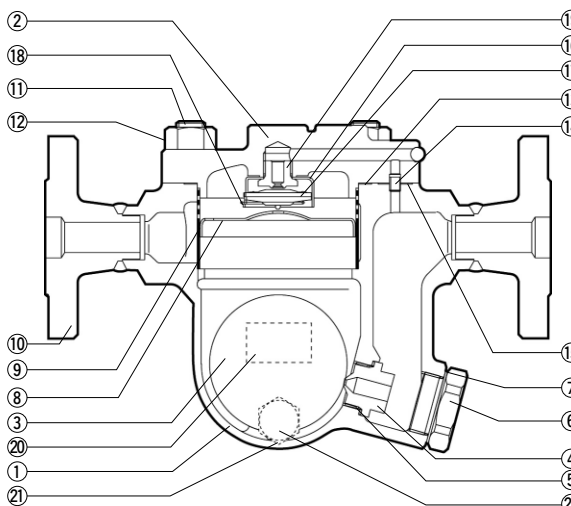
Model	JH5RX		
Connection	Screwed	Socket Welded	Flanged
Size (mm)	15, 20, 25	15, 20, 25, 40, 50	
Orifice No.	2, 5, 10, 14, 22, 32		
Maximum Operating Pressure (MPaG) PMO	0.2, 0.5, 1.0, 1.4, 2.2, 3.2		
Maximum Differential Pressure (MPa) ΔPMX	0.2, 0.5, 1.0, 1.4, 2.2, 3.2		
Minimum Operating Pressure (MPaG)	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 1 MPa = 10.197 kg/cm<sup>2</sup>  
 Maximum Allowable Temperature (°C) TMA: 425



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.

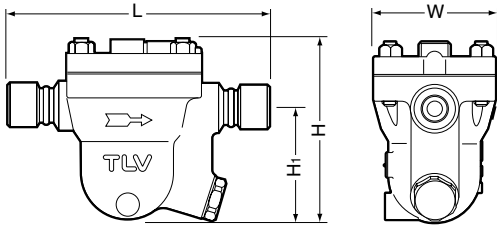
No.	Description	Material	JIS	ASTM/AISI*
①	Body	Cast Steel	—	A216 Gr. WCB
②	Cover	Carbon Steel	—	A105
③ <sup>F</sup>	Float	Stainless Steel	SUS316L	AISI316L
④ <sup>R</sup>	Orifice	—	—	—
⑤ <sup>MR</sup>	Orifice Gasket	Soft Iron	SUYP	AISI1010
⑥	Orifice Plug	Cast Stainless Steel	SCS2A	A217 Gr. CA15
⑦ <sup>MR</sup>	Orifice Plug Gasket	Soft Iron	SUYP	AISI1010
⑧ <sup>R</sup>	Float Cover	Stainless Steel	SUS304	AISI304
⑨ <sup>R</sup>	Screen inside/outside	Stainless Steel	SUS430/304	AISI430/304
⑩	Socket*/Flange	Carbon Steel	—	A105
⑪	Cover Bolt	Alloy Steel	SNB7	A193 Gr. B7
⑫	Cover Nut	Carbon Steel	S45C	AISI1045
⑬ <sup>MR</sup>	Cover Gasket	Stainless Steel/Graphite	SUS316L	AISI316L
⑭	Connector	Stainless Steel	SUS416	AISI416
⑮ <sup>MR</sup>	Connector Gasket	Stainless Steel/Graphite	SUS316L	AISI316L
⑯ <sup>R</sup>	X-element Guide	Stainless Steel	SUS304	AISI304
⑰ <sup>R</sup>	X-element	Stainless Steel	—	—
⑱ <sup>R</sup>	Spring Clip	Stainless Steel	SUS304	AISI304
⑲ <sup>R</sup>	Air Vent Valve Seat	Stainless Steel	SUS420F	AISI420F
⑳	Nameplate	Stainless Steel	SUS304	AISI304
㉑	Drain Plug Gasket***	Soft Iron	SUYP	AISI1010
㉒	Drain Plug***	Carbon Steel	S25C	AISI1025



\* Equivalent \*\* Shown on reverse \*\*\* Option  
 Replacement kits available: (M) maintenance parts, (R) repair parts, (F) float

**Dimensions**

● **JH5RX** Screwed

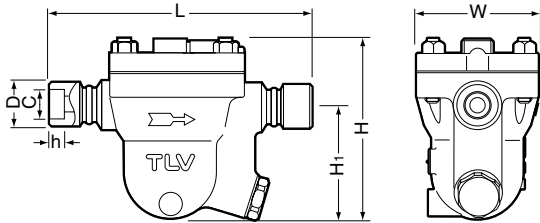


**JH5RX** Screwed\* (mm)

Size	L	H	H <sub>1</sub>	W	Weight (kg)
15	234	162	105	115	6.5
20	246				6.6
25	258				6.7

\* Rc(PT), other standards available

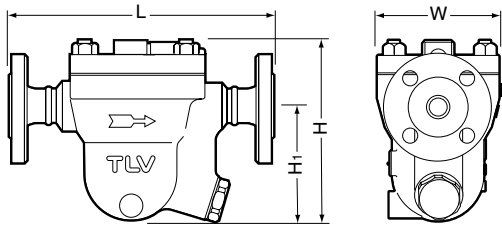
● **JH5RX** Socket Welded



**JH5RX** Socket Welded (mm)

Size	L	H	H <sub>1</sub>	W	φD	φC	h	Weight (kg)
15	234	162	105	115	33	22.2	12	6.5
20	246				39.5	27.7	6.6	
25	258				48	34.5	14	6.7
40	246				64	49.1	9.1	
50					77.5	61.1	17	10

● **JH5RX** Flanged

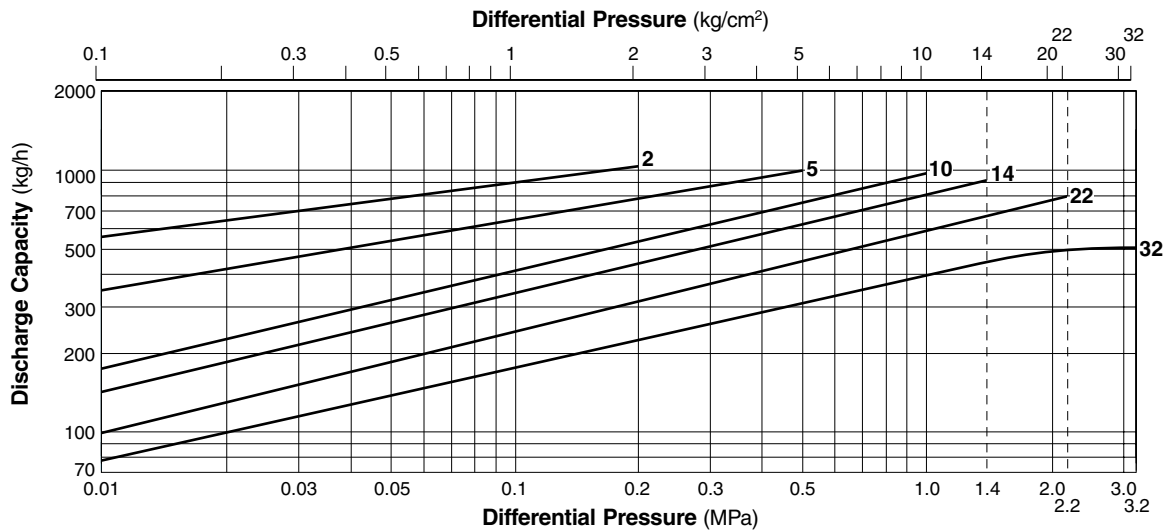


**JH5RX** Flanged (mm)

Size	L			H	H <sub>1</sub>	W	Weight* (kg)
	ASME Class						
	150RF	300RF	600RF				
15	239	239	239	162	105	115	8.4
20	264	264	264				9.8
25	309	309	309				11
40	290	290	290				15
50	300	300	300				19

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.



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

