



# FREE FLOAT<sup>®</sup> STEAM TRAP

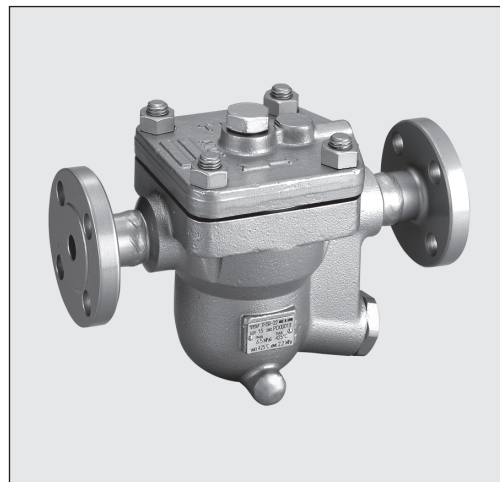
## MODEL JH5RL-P/JH5RH-P

### FREE FLOAT STEAM TRAP WITH THREE-POINT SEATING AND COVER PLUG

#### Features

**A reliable and durable cast steel steam trap for use on 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. Built-in screen with large surface area ensures extended trouble-free operation.
4. Easy, inline access to internal parts simplifies cleaning and reduces maintenance costs.
5. A manual air vent or pressure balancing tube can be installed using the threaded connection on the cover.



#### Specifications

Model	JH5RL-P			JH5RH-P	
	Screwed	Socket Welded	Flanged	Socket Welded	Flanged
Connection	Screwed	Socket Welded	Flanged	Socket Welded	Flanged
Size (mm)	15, 20, 25	15, 20, 25, 40, 50		15, 20, 25, 40, 50	
Orifice No.	2, 5, 10, 14, 22, 32, 40, 46, 65			80	
Maximum Operating Pressure (MPaG) PMO	0.2, 0.5, 1.0, 1.4, 2.2, 3.2, 4.0, 4.6, 6.5			8.0	
Maximum Differential Pressure (MPa) ΔPMX	0.2, 0.5, 1.0, 1.4, 2.2, 3.2, 4.0, 4.6, 6.5			8.0	
Minimum Operating Pressure (MPaG)	0.01			0.01	
Maximum Operating Temperature (°C) TMO	425			425	

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS):

Maximum Allowable Pressure (MPaG) PMA: 6.5 (JH5RL-P), 8.0 (JH5RH-P)

Maximum Allowable Temperature (°C) TMA: 425

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



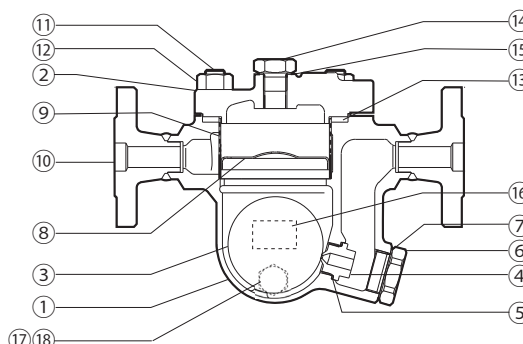
#### CAUTION

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	JH5RL-P	Carbon Steel	A105
		JH5RH-P	Cast Steel	A216 Gr.WCB
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	—	A743 Gr.CA40
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	Stainless Steel	SUS430	AISI430
⑩	Flange/Socket**	Carbon Steel	—	A105
⑪	Cover Bolt	Alloy Steel	SNB16	A193 Gr.B16
⑫	Cover Nut	Carbon Steel	S45C	AISI1045
⑬ <sup>MR</sup>	Cover Gasket	Graphite/Stainless Steel	—/SUS304	—/AISI304
⑭	Cover Plug	Carbon Steel	S25C	AISI1025
⑮ <sup>MR</sup>	Cover Plug Gasket	Soft Iron	SUYP	AISI1010
⑯	Nameplate	Stainless Steel	SUS304	AISI304
⑰	Drain Plug Gasket***	Soft Iron	SUYP	AISI1010
⑱	Drain Plug***	Carbon Steel	S25C	AISI1025

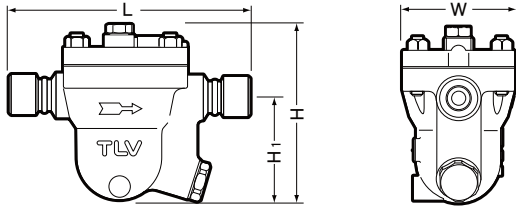
\* Equivalent \*\* Shown on reverse \*\*\* Option

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



**Dimensions**

● **JH5RL-P** Screwed

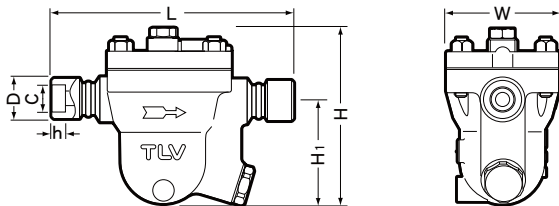


**JH5RL-P** Screwed\* (mm)

Size	L	H	H <sub>1</sub>	W	Weight (kg)
15	234	175	105	115	6.5
20	246				6.6
25	258				6.7

\* Rc(PT), other standards available

● **JH5RL-P/JH5RH-P** Socket Welded

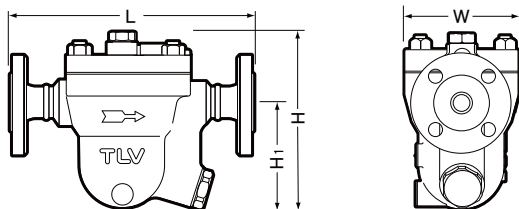


**JH5RL-P/JH5RH-P** Socket Welded (mm)

Size	L	H	H <sub>1</sub>	W	φ D	φ C	h	Weight (kg)
15	234	175	105	115	33	22.2	12	6.5 [10]
20	246				39.5	27.7	14	6.6 [10]
25	258				[177]	[107]		[125]
40	246	175	105	115	64	49.1	17	9.1 [13]
50					77.5	61.1		10 [14]

[ ] JH5RH-P

● **JH5RL-P/JH5RH-P** Flanged



**JH5RL-P/JH5RH-P** Flanged (mm)

Size	L				H	H <sub>1</sub>	W	Weight** (kg)
	ASME Class							
	150RF	300RF	600RF	900RF*				
15	239	239	239	269	175	105	115	8.4 [12]
20	264	264	264	294				9.8 [14]
25	309	309	309	319				[177]
40	290	290	290	300	175	105	115	15 [19]
50	300	300	300	310				19 [23]

Other standards available, but length and weight may vary

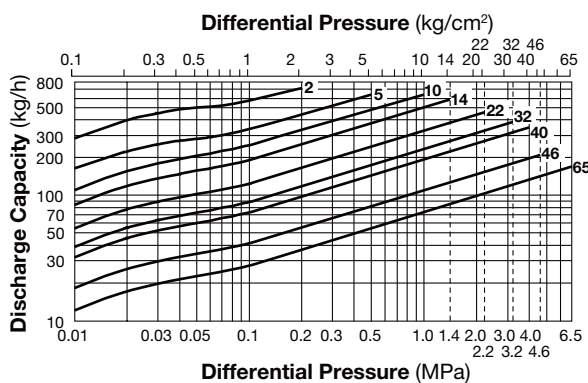
\* Option

\*\* Weight is for Class 600 RF

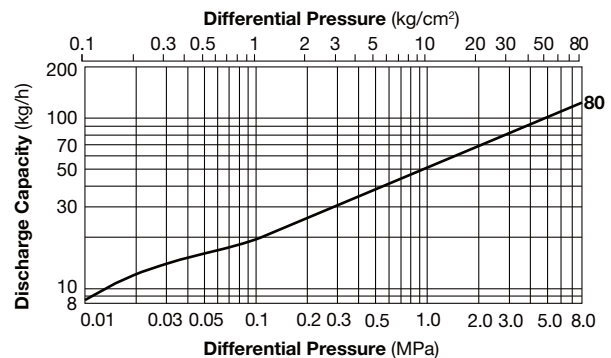
[ ] JH5RH-P

**Discharge Capacity**

● **JH5RL-P**



● **JH5RH-P**



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

