



FREE FLOAT STEAM TRAP

MODEL JH7RH-B/JH7RH-V LOW ALLOY CAST STEEL

FREE FLOAT STEAM TRAP WITH THERMOSTATIC OR MANUAL AIR VENTING

Features

A reliable and durable low alloy cast steel* steam trap for use on medium-size process equipment, also suitable for both superheated and extremely high-pressure applications.

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 a long maintenance-free service life.
4. **JH7RH-B**: Thermostatic bimetal air vent valve vents air automatically for rapid startup.
5. **JH7RH-V****: Easy-to-use air vent for rapid startup
6. Built-in screen with large surface area ensures extended trouble-free operation.
7. Easy, inline access to internal parts simplifies cleaning and reduces maintenance costs.

* Stainless Steel body available on request ** Option



Specifications

Model	JH7RH-B		JH7RH-V (option)	
	Socket Welded	Flanged	Socket Welded	Flanged
Size	DN 15, 20, 25		DN 15, 20, 25	
Orifice No.	80, 100		100, 120	
Maximum Operating Pressure (barg) PMO	80, 100		100, 120	
Maximum Differential Pressure (bar) ΔPMX	80, 100		100, 120	
Maximum Operating Temperature (°C) TMO	425		530	
Type of Air Vent	Bimetal (vents air up to approx. 100 °C)		Manual Air Vent Valve	

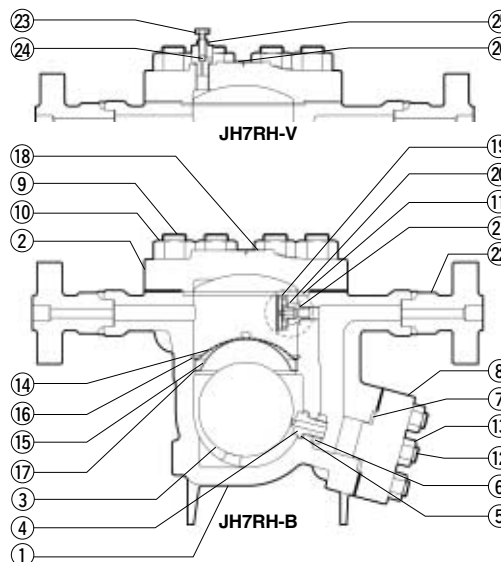
PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS):

1 bar = 0.1 MPa

Maximum Allowable Pressure (barg) PMA: 120 Maximum Allowable Temperature (°C) TMA: 425 (JH7RH-B), 530 (JH7RH-V)

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	DIN*	ASTM/AISI*
①	Body	Low Alloy Cast Steel A217 Gr.WC9	1.7379	—
②	Cover	Low Alloy Cast Steel A217 Gr.WC9	1.7379	—
③ ^F	Float	Stainless Steel SUS316L	1.4404	AISI316L
④ ^R	Orifice	—	—	—
⑤ ^{MR}	Orifice Gasket	Graphite/Stainless Steel SUS316	- /1.4401	- /AISI316
⑥ ^R	Lock Nut	Stainless Steel SUS303	1.4305	AISI303
⑦ ^{MR}	Outlet Cover Gasket	Graphite/Stainless Steel SUS309S+cb	- /1.4833	- /AISI309S+cb
⑧	Outlet Cover	Stainless Steel SUS420J2	1.4031	AISI420
⑨	Cover Bolt	Alloy Steel SNB16	1.7711	A193 Gr.B16
⑩	Cover Nut	Alloy Steel SNB7	1.7225	A193 Gr.B7
⑪ ^{MR}	Cover Gasket	Graphite/Stainless Steel SUS309S+cb	- /1.4833	- /AISI309S+cb
⑫	Outlet Cover Bolt	Alloy Steel SNB16	1.7711	A193 Gr.B16
⑬	Outlet Cover Nut	Alloy Steel SNB7	1.7225	A193 Gr.B7
⑭ ^R	Screen	Stainless Steel SUS430	1.4016	AISI430
⑮	Screen Holder	Stainless Steel SUS304	1.4301	AISI304
⑯	Snap Ring	Stainless Steel SUS304	1.4301	AISI304
⑰	Screen Holder Retainer	Stainless Steel SUS304	1.4301	AISI304
⑱	Nameplate	Stainless Steel SUS304	1.4301	AISI304
⑲ ^R	Bimetal Air Vent Unit	—	—	—
⑳	Air Vent Guide	Stainless Steel SUS303	1.4305	AISI303
㉑ ^{MR}	Air Vent Unit Gasket	Stainless Steel SUS316L	1.4404	AISI316L
㉒	Flange	Alloy Steel A182 F22 Cl.3	1.7380	—
㉓ ^V	Air Vent Valve Stem	Stainless Steel SUS304	1.4301	AISI304
㉔ ^V	Steel Ball	Stainless Steel SUS440C	1.4125	AISI440C
㉕ ^V	Air Vent Valve Body	Stainless Steel SUS303	1.4305	AISI303
㉖ ^{MRV}	Air Vent Valve Gasket	Stainless Steel SUS316L	1.4404	AISI316L



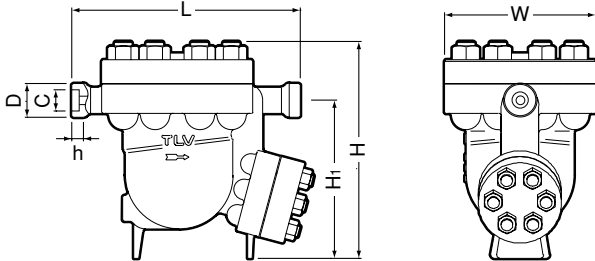
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* Equivalent materials

Replacement kits available: (M) maintenance parts, (R) repair parts, (F) float, (V) air vent valve unit

Dimensions

● **JH7RH-B/JH7RH-V** Socket Welded

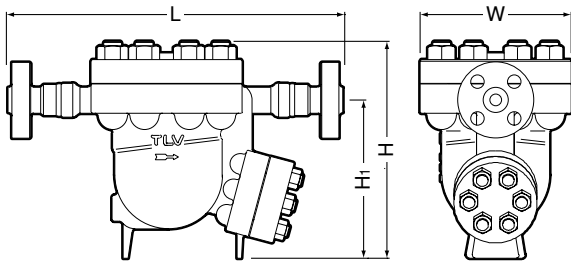


JH7RH-B/JH7RH-V Socket Welded* (mm)

DN	L	H	H ₁	φW	φD	φC	h	Weight (kg)
15	390	395 (419)	270	258	53.5	21.70	13	86
20						27.05		
25						33.80		

* ASME B16.11, other standards available
() JH7RH-V

● **JH7RH-B/JH7RH-V** Flanged



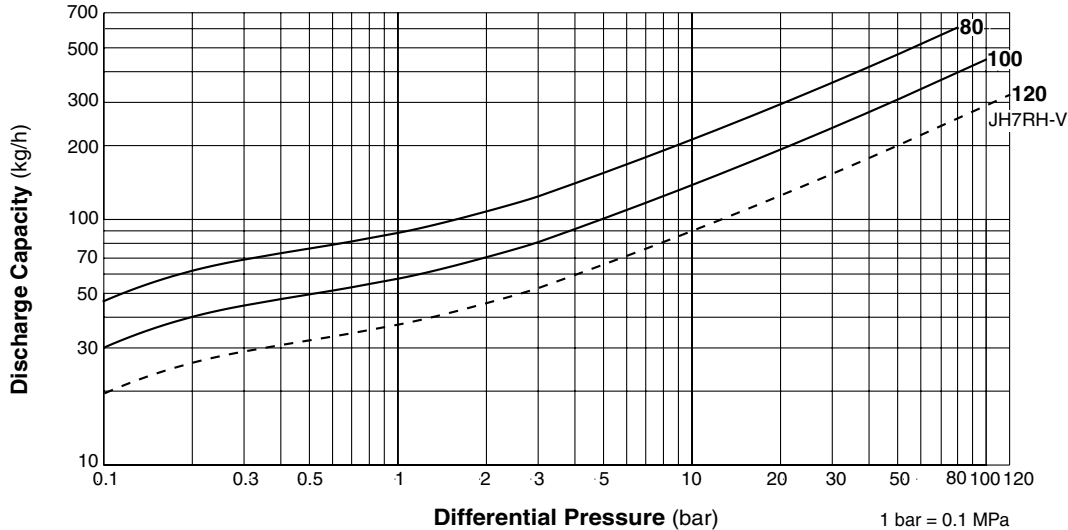
JH7RH-B/JH7RH-V Flanged (mm)

DN	L		H	H ₁	φW	Weight (kg)
	ASME Class					
	900RF	1500RF				
15	572	572	395 (419)	270	258	94
20						95
25						98

Other standards available, but length and weight may vary
() JH7RH-V

JH7RH-B shown. JH7RH-V equipped with Air Vent Valve.

Discharge Capacity



1. Line numbers within the graph are 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

