

# FREE FLOAT STEAM T

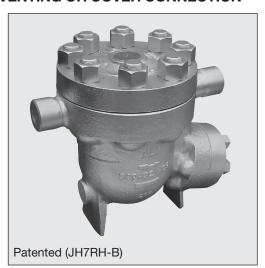
## MODEL JH7RH-B JH7RH-P/JH7RH-W

#### FREE FLOAT STEAM TRAP WITH THERMOSTATIC AIR VENTING OR COVER CONNECTION

#### **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, lowvelocity 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. JH7RH-B: Thermostatic bimetal air vent valve vents air automatically for rapid startup.
- 4. JH7RH-P/JH7RH-W\*: Instead of the bimetal air vent, for higher pressure and temperature applications, the JH7RH-P/JH7RH-W are manufactured with a cover threaded plug, or socket connection.
- 5. Built-in screen with large surface area ensures extended trouble-free operation.
- 6. Easy, inline access to internal parts simplifies cleaning and reduces maintenance costs.



## **Specifications**

Model	JH7RH-B		JH7RH-P		JH7RH-W (option)	
Connection	Socket Welded	Socket Welded Flanged		Flanged	Socket Welded	Flanged
Size (mm)	15, 20, 25		15, 20, 25		15, 20, 25	
Orifice No.	80, 100		100, 120		100, 120	
Maximum Operating Pressure (MPaG) PMO	8.0, 10		10, 12		10, 12	
Maximum Differential Pressure (MPa) ΔPMX	8.0, 10		10, 12		10, 1	2
Minimum Operating Pressure (MPaG)	0.01		0.01		0.0	1
Maximum Operating Temperature (°C) TMO	425		530*		530	)
Type of Air Vent	Bimetal (vents air up to approx. 100 °C)		_		_	

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

.IH7RH-W

(11)(21)

22)

8 (7)(13) 12

(6)

\*JH7RHT-P available for temperatures up to 620 °C. See reverse.
PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 12

Maximum Allowable Temperature (°C) TMA: 425 (JH7RH-B), 530 (JH7RH-P, JH7RH-W)

JH7RH-P



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.

(2)

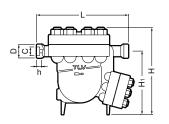
No.	Description	Material	JIS	ASTM/AISI *
1	Body	Low Alloy Cast Steel	_	A217 Gr.WC9
2	Cover	Low Alloy Cast Steel	_	A217 Gr.WC9
3)F	Float	Stainless Steel	SUS316L	AISI316L
<b>4</b> )R	Orifice	_	_	_
5)MR	Orifice Gasket	Graphite/Stainless Steel	-/SUS316	-/AISI316
<b>6</b> )R	Orifice Locknut	Stainless Steel	SUS303	AISI303
7)MR	Outlet Cover Gasket	Graphite/Stainless Steel	-/SUS309S+cb	-/AISI309S+cb
8	Outlet Cover	Stainless Steel	SUS420J2	AISI420
9	Cover Bolt	Alloy Steel	SNB16	A193 Gr.B16
10	Cover Nut	Alloy Steel	SNB7	A193 Gr.B7
(11)MR	Cover Gasket	Graphite/Stainless Steel	-/SUS309S+cb	-/AISI309S+cb
12	Outlet Cover Bolt	Alloy Steel	SNB16	A193 Gr.B16
13)	Outlet Cover Nut	Alloy Steel	SNB7	A193 Gr.B7
(14)R	Screen	Stainless Steel	SUS430	AISI430
(15)	Screen Holder	Stainless Steel	SUS304	AISI304
16)	Snap Ring	Stainless Steel	SUS304	AISI304
17)	Screen Holder Retainer	Stainless Steel	SUS304	AISI304
18)	Nameplate	Stainless Steel	SUS304	AISI304
19)R	Bimetal Air Vent Unit	_	_	_
20	Air Vent Guide	Stainless Steel	SUS303	AISI303
21)MR	Air Vent Unit Gasket	Stainless Steel	SUS316L	AISI316L
22	Flange	Alloy Steel	_	A182 F22 Cl.3
23 <sup>MR</sup>	Cover Plug Gasket	Stainless Steel	SUS316L	AISI316L
24)	Cover Plug	Stainless Steel	SUS303	AISI303
25)	Cover Socket	Alloy Steel	_	A182 F22 Cl.3

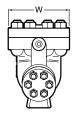
<sup>(15)</sup> (3) (4) JH7RH-B 1 \* Equivalent Replacement kits available: (M) maintenance parts, (R) repair parts, (F) float

## Consulting · Engineering · Services

#### **Dimensions**

• JH7RH-B/JH7RH-P/JH7RH-WB Socket Welded



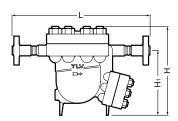


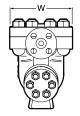
JH7RH-B	/JH7RH-P/	JH7RH-W	Socket Welded	(mm)
---------	-----------	---------	---------------	------

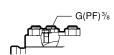
Si	ze	L	Н	H₁	φW	φD	φС	h	Weight (kg)
1	5		074				22.2		
2	0	390	[371 [382]	270	258	53.5	27.7	13	76
2	5		[002]				34.5		

[] JH7RH-W

• JH7RH-B/JH7RH-P/JH7RH-W Flanged







JH7RH-P



#### JH7RH-B/JH7RH-P/JH7RH-W Flanged

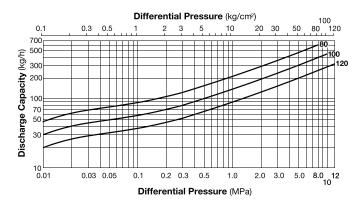
Size	ASME	Class	Н	H₁	φW	Weight* (kg)
	900RF	1500RF				(Ng)
15			074			94
20	572	572	371 [382]	270	258	95
25			[002]			98

Other standards available, but length and weight may vary

JH7	RH-W	Cover	Socket

JIII HII-W Cover Socket				
$\phi$ D <sub>1</sub>	φC <sub>1</sub>	H <sub>1</sub>		
36	22.2	13		

### **Discharge Capacity**



- 1. Line numbers within the graph are orifice numbers.
- Differential pressure is the difference between the inlet and outlet pressure of the trap.
   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!

## **Optional High Temperature Model**

Model		JH7RHT-P
Body Material		Low Alloy Cast Steel (ASTM A217 Gr.C12A)
Connection / Size (mm)		Socket Welded / 15, 20, 25
Orifice No.		60, 90
Max. Operating Press. (MPaG)	PMO	6.0, 9.0
Max. Differential Press. (MPa)	ΔΡΜΧ	6.0, 9.0
Max. Operating / Allowable Temp. (°C)	TMO/TMA	620, 595
Max. Discharge Capacity (kg/h)		760, 495

Contact TLV for further details.

Manufacturer

Kakogawa, Japan proved by LRQA Ltd. to ISO 9001/14001 ISO 9001 ISO 14001 LRQA