

## FREE FLOAT® STEAM TRAP

MODEL JH7RH-B/JH7RH-W

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

#### **Benefits**

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 threepoint seating design ensure a steam-tight seal, even under no-load conditions.
- 3. Rugged float construction with up to 2850 psig hydraulic shock rating ensures excellent resistance of the float to water hammer.
- 4. JH7RH-B:Thermostatic bimetal air vent valve vents air automatically for rapid startup.
- 5. JH7RH-W\*: Instead of the bimetal air vent, for higher pressure and temperature applications, the JH7RH-W manufactured with a cover socket connection.
- 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.



#### **Specifications**

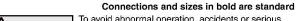
| Model                                    | JH7RH-B                                  | JH7RH-W (option) |
|--|--|------------------|
| Connection                               | Socket Weld                              | Socket Weld      |
| Size (in)                                | ₹  | 1                |
| Orifice No.                              | 80, 100                                  | 100, 120         |
| Maximum Operating Pressure (psig) PMO    | 1150, 1500                               | 1500, 1740       |
| Maximum Differential Pressure (psi) ΔPMX | 1150, 1500                               | 1500, 1740       |
| Minimum Operating Pressure (psig)        | 1.5                                      | Vacuum           |
| Maximum Operating Temperature (°F) TMO   | 800                                      | 986              |
| Maximum Allowable Pressure (psig) PMA    | 1740                                     | 1740             |
| Maximum Allowable Temperature (°F) TMA   | 800                                      | 986              |
| Type of Air Vent                         | Bimetal (vents air up to approx. 212 °F) | _                |

## CAUTION

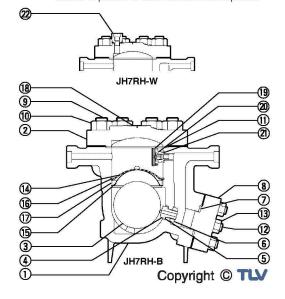
| No.               | Description            | Material  | ASTM/AISI*                | JIS          |  |
|-------------------|------------------------|---|---------------------------|--------------|--|
| 1                 | Body                   | Low Alloy Cast Steel                                    | oy Cast Steel A217 Gr.WC9 |              |  |
| 2                 | Cover                  | Low Alloy Cast Steel                                    | A217 Gr.WC9               | _            |  |
| 3)F               | Float                  | Stainless Steel   | AISI316L                  | SUS316L      |  |
| <b>4</b> )P       | Orifice                | _   | _                         | _            |  |
| (5)MR             | Orifice Gasket         | Graphite/Stainless Steel                                | - /AISI316                | -/SUS316     |  |
| <u>6</u> В        | Orifice Locknut        | Stainless Steel   | eel AISI303               |              |  |
| ØMR.              | Outlet Cover Gasket    | Outlet Cover Gasket Graphite/Stainless Steel - /AISI309 |                           | -/SUS309S+cb |  |
| (8)               | Outlet Cover           | Stainless Steel   | AISI420                   | SUS420J2     |  |
| 9                 | Cover Bolt             | Alloy Steel   | A193 Gr.B16               | SNB16        |  |
| 10                | Cover Nut              | Alloy Steel   | A193 Gr.B7                | SNB7         |  |
| 1DMB              | Cover Gasket           | Graphite/Stainless Steel                                | - /AISI309S+cb            | -/SUS309S+cb |  |
| (12)              | Outlet Cover Bolt      | Alloy Steel   | A193 Gr.B16               | SNB16        |  |
| 13                | Outlet Cover Nut       | Alloy Steel   | A193 Gr.B7                | SNB7         |  |
| 14 <sup>A</sup>   | Screen                 | Stainless Steel   | AISI430                   | SUS430       |  |
| (15)              | Screen Holder          | Stainless Steel   | AISI304                   | SUS304       |  |
| 16                | Snap Ring              | Stainless Steel   | AISI304                   | SUS304       |  |
| 17                | Screen Holder Retainer | Stainless Steel   | AISI304                   | SUS304       |  |
| (18)              | Nameplate              | Stainless Steel   | AISI304                   | SUS304       |  |
| (19 <sup>)R</sup> | Bimetal Air Vent Unit  | _   | _                         | _            |  |
| 20                | Air Vent Guide         | Stainless Steel   | AISI303                   | SUS303       |  |
| 2)MR              | Air Vent Unit Gasket   | Stainless Steel   | AISI316L                  | SUS316L      |  |
| 22                | Cover Socket           | Alloy Steel   | A182 F22 Cl.3             |              |  |

<sup>\*</sup> Equivalent

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



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.

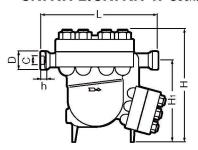


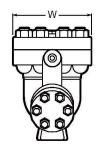


### **Consulting & Engineering Service**

#### **Dimensions**

#### • JH7RH-B/JH7RH-W Socket Weld

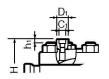




| JH7RH-B/JH7RH-W Socket Weld* |        |                |      |        |      |       |     | (in)        |
|------------------------------|--------|----------------|------|--------|------|-------|-----|-------------|
| Size                         | L      | Н              | Hı   | φW     | ΦD   | ΦС    | h   | Weight (lb) |
| 1                            | 15 3/8 | 14 5/8<br>(15) | 10 % | 10 1/8 | 21/8 | 1.330 | 1/2 | 189         |

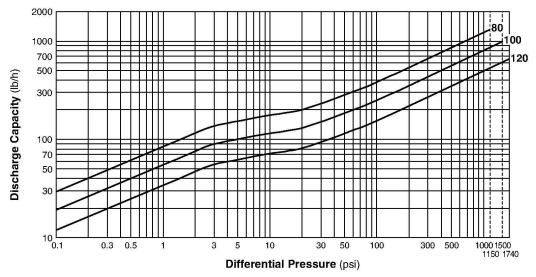
\* ASME B16.11-2005, other standards available ( ) JH7RH-W

#### JH7RH-W



# JH7RH-W Cover Socket\* (in) ΦD₁ ΦC₁ h₁ 1 7/16 0.855 ½

## **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 11 °F below saturated 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!



DO NOT DISASSEMBLE OR REMOVE THIS PRODUCT WHILE IT IS UNDER PRESSURE.

Allow internal pressure of this product to equal atmospheric pressure and its surface to cool to room temperature before disassembling or removing. Failure to do so could cause burns or other injury. READ INSTRUCTION MANUAL CAREFULLY.

## TLM: CORPORATION

13901 South Lakes Drive, Charlotte, NC 28273-6790 Phone: 704-597-9070 Fax: 704-583-1610

E-mail: tlv@tlvengineering.com

For Technical Service 1-800 "TLV TRAP"

Relia Control
Technical Service 1-800 "TLV TRAP"

Technical Service 1-800 "TLV TRAP"



Manufacturer





ISO 9001/ISO 14001



is approved by LROA Ltd. to ISO 9001/14001

<sup>\*</sup> ASME B16.11-2005, other standards available