

# TLV<sup>®</sup>

# FREE FLOAT STEAM TRAPS

## SJ Series



US. Pat. 5,186,203

# Compact and Light-Weight Steam Traps

## Rapid Initial Air Venting

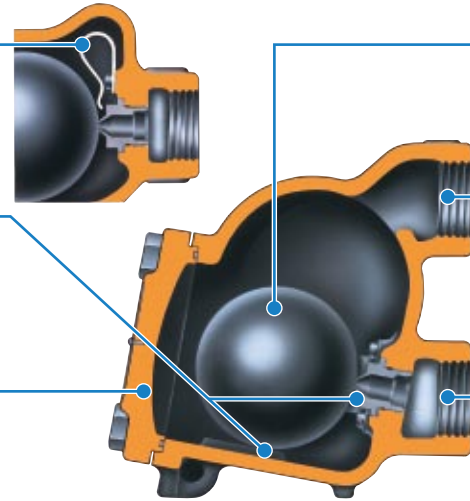
Automatic bimetal air vent provides rapid air venting at start-up.

## Steam-Tight Seal

Three-point seating and constant water seal ensure steam-tight seal even under low-load conditions.

## Easy Maintenance

All internal parts can be accessed by removing the trap cover.



## Continuous Condensate Discharge

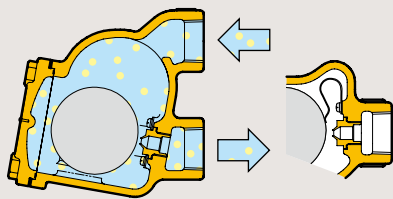
Self-modulating stainless steel free float provides continuous condensate discharge regardless of condensation rate. With virtually limitless sealing surfaces, the precision-ground float is durable with a long service life.

## Easy Installation

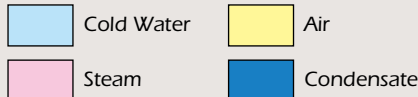
Same side inlet and outlet port connection allows for easy installation.

## Operation

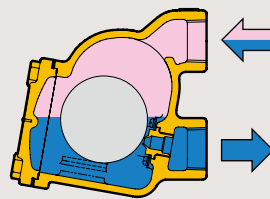
### 1 Rapid Discharge of Initial Air



During startup, the bimetal strip lifts up the float, opening the valve allowing air and cold condensate to be discharged as it flows into the trap.

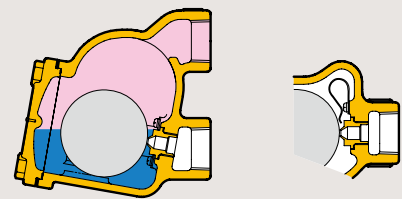


### 2 Continuous Discharge



As temperatures increase, the bimetal retracts, allowing the float to move freely. The float modulates with the condensate load, automatically adjusting the size of the orifice and the rate of condensate discharge.

### 3 Tight Sealing



When the flow of condensate stops, the float seats on the orifice supported by the orifice and two machined guides. The water level remains above the orifice to provide a steam-tight seal. The temperature keeps the bimetal retracted so that it does not affect the float's seating.

Model	SJ3	SJ5	SJ6	SJ7
Size (in.)	3/4, 1	3/4, 1, 1 1/4	1 1/2, 2	1 1/2, 2
Connection	Screwed (NPT)	Screwed (NPT)	Screwed (NPT)	Screwed (NPT)
Orifice No.	1, 2, 5, 10, 14	1, 2, 5, 10, 14	1, 2, 5, 10, 14	1, 2, 5, 10, 14
Maximum Operating Pressure (psig) PMO	15, 30, 75, 150, 200	15, 30, 75, 150, 200	15, 30, 75, 150, 200	15, 30, 75, 150, 200
Maximum Differential Pressure (psi) ΔPMX	15, 30, 75, 150, 200	15, 30, 75, 150, 200	15, 30, 75, 150, 200	15, 30, 75, 150, 200
Minimum Operating Pressure (psig)	1	1	1	1
Maximum Operating Temperature (°F) TMO	428	428	428	428
Maximum Allowable Pressure (psig) PMA	250	250	250	250
Maximum Allowable Temperature (°F) TMA	428	428	428	428
Maximum Discharge Capacity (lb/h)	1,360	2,540	7,320	14,180

Full product details (sizes, pressures, capacities and materials) are included in the individual specification data sheets (SDS).



**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.



**CAUTION** 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.

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Manufacturer

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Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001/ISO 14001

