



# FREE FLOAT<sup>®</sup> STEAM TRAP

## MODEL SJ5

### CAST IRON FREE FLOAT AND THERMOSTATIC STEAM TRAP WITH THREE-POINT SEATING

#### Benefits

**A multi-purpose steam trap for use with coils, heat exchangers, tank heaters, dryers and other heating equipment.**

1. Constant water seal and unique rotational seating design eliminate concentrated wear to ensure long life.
2. Precision-ground float, three-point seating and constant water seal ensure steam-tight seal, even under low-load conditions.
3. Float with up to 1740 psig hydraulic shock rating ensures excellent resistance to water hammer.
4. Easy, inline access to internal parts to simplify cleaning and lower maintenance costs.
5. Durable thermostatic air vent for exceptionally fast start-up.
6. Extremely soft near-to-steam temperature discharge for safety and environmental considerations.



#### Specifications

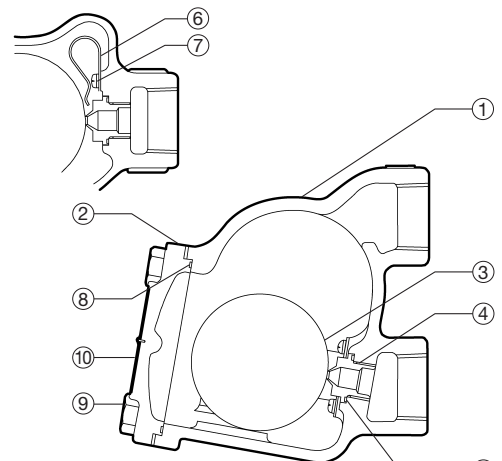
|  |                      |  |
|--|----------------------|--|
| Model                                    | SJ5                  |  |
| Connection                               | <b>Screwed</b>       |  |
| Size (in)                                | <b>3/4, 1, 1 1/4</b> |  |
| Orifice No.                              | 1, 2, 5, 10, 14      |  |
| Maximum Operating Pressure (psig) PMO    | 15, 30, 75, 150, 200 |  |
| Maximum Differential Pressure (psi) ΔPMX | 15, 30, 75, 150, 200 |  |
| Minimum Operating Pressure (psig)        | 1                    |  |
| Maximum Operating Temperature (°F) TMO   | 428                  |  |
| Maximum Allowable Pressure (psig) PMA    | 250                  |  |
| Maximum Allowable Temperature (°F) TMA   | 428                  |  |

Connections and sizes in bold are standard

**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.

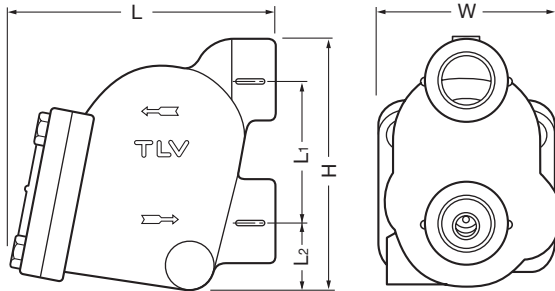
| No. | Description           | Material        | ASTM/AISI* | JIS     |
|-----|-----------------------|-----------------|------------|---------|
| ①   | Body                  | Cast Iron       | A126 Cl.B  | FC250   |
| ②   | Cover                 | Cast Iron       | A126 Cl.B  | FC250   |
| ③   | Float                 | Stainless Steel | AISI316L   | SUS316L |
| ④   | Orifice               | Stainless Steel | —          | —       |
| ⑤   | Orifice Gasket        | Fluorine Resin  | PTFE       | PTFE    |
| ⑥   | Air Vent Strip        | Bimetal         | —          | —       |
| ⑦   | Screw & Spring Washer | Stainless Steel | AISI304    | SUS304  |
| ⑧   | Cover Gasket          | Fluorine Resin  | PTFE       | PTFE    |
| ⑨   | Cover Bolt            | Carbon Steel    | AISI1045   | S45C    |
| ⑩   | Nameplate             | Stainless Steel | AISI304    | SUS304  |

\*Equivalent



**Dimensions**

● **SJ5** Screwed

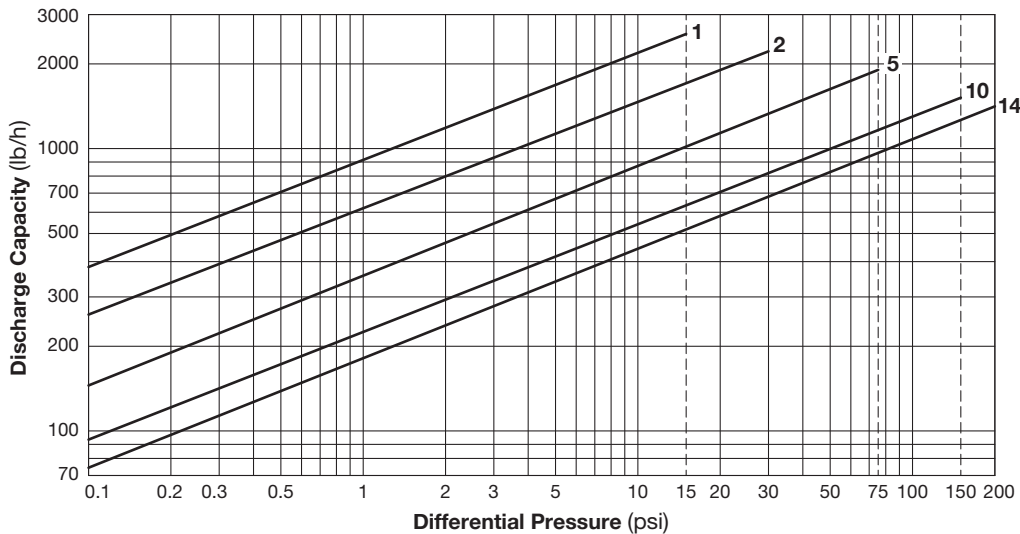


**SJ5** Screwed\*

| Size  | L     | L <sub>1</sub> | L <sub>2</sub> | H     | W      | Weight (lb) |
|-------|-------|----------------|----------------|-------|--------|-------------|
| 3/4   | 6     | 3 5/16         | 1 1/2          | 5 3/4 | 4 3/16 | 9.2         |
| 1     |       |                |                |       |        | 10          |
| 1 1/4 | 6 1/4 | 3              |                |       |        |             |

\* NPT, other standards available

**Discharge Capacity**



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 11 °F below saturated steam temperature.
4. Recommended safety factor: at least 1.5.

**CAUTION** DO NOT use this product under conditions that exceed maximum differential pressure, as condensate backup will occur!

**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

