



# FREE FLOAT<sup>®</sup> STEAM TRAP

## MODEL SJ7

### 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 automatically vents air for exceptional start-up and performance.
6. Extremely soft near-to-steam temperature discharge for safety and environmental considerations.



#### Specifications

Model	SJ7	
Connection	<b>Screwed</b>	
Size (in)	<b>1½, 2</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	

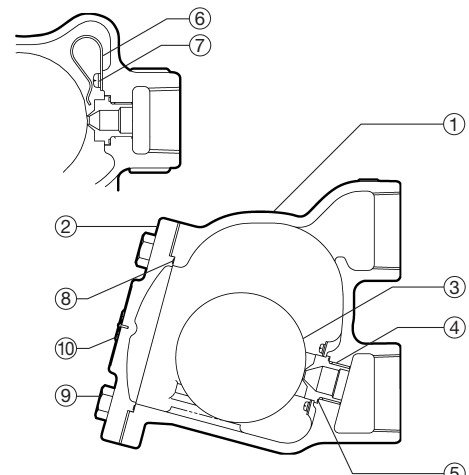
Connections and sizes in bold are standard



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.

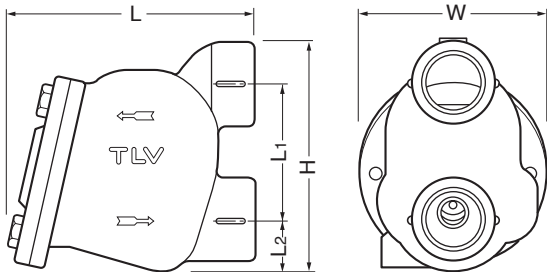
No.	Description	Material	ASTM/AISI*	JIS
①	Body	Cast Iron	A126 Cl.B	FC250
②	Cover	Cast Iron	A126 Cl.B	FC250
③	Float	Stainless Steel	AISI316L	SUS316L
④	Orifice	Stainless Steel	—	—
⑤	Orifice Gasket	Fluorine Resin	PTFE	PTFE
⑥	Air Vent Strip	Bimetal	—	—
⑦	Screw & Spring Washer	Stainless Steel	AISI304	SUS304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

\* Equivalent



**Dimensions**

● **SJ7** Screwed

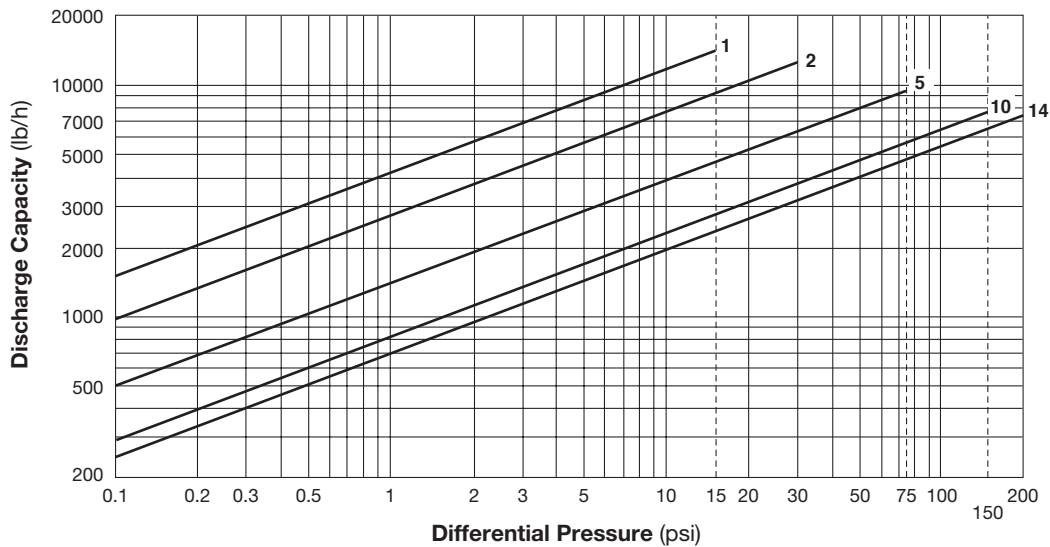


**SJ7** Screwed\* (in)

Size	L	L1	L2	H	W	Weight (lb)
1½	10 5/16	4 15/16	2 1/8	8 5/8	8 1/8	33
2						

\* 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.

**TLV CORPORATION**

13901 South Lakes Drive, Charlotte, NC 28273-6790

Tel: 704-597-9070 Fax: 704-583-1610

E-mail: [tlv@tlvengineering.com](mailto:tlv@tlvengineering.com) <https://www.tlv.com>

For Technical Service 1-800 "TLV TRAP"



Manufacturer

**TLV CO., LTD.**

Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001  
ISO 14001

