



# BALANCED PRESSURE THERMOSTATIC STEAM TRAP

## MODEL LV21

### BALANCED PRESSURE THERMOSTATIC TRAP WITH "FAIL OPEN" DESIGN

#### Benefits

**Maintainable stainless steel trap with high air venting capability and light condensate capacity for steam mains, tracing, and process equipment.**

1. Patented "fail open" design for critical service.
2. Hardened stainless steel valve head and seat for maximum longevity.
3. Positive open-close operation reduces valve wear.
4. "Pressure-to-close" valve design improves life.
5. Valve, four diaphragms and casing have matching contours for high superheat capability and water hammer resistance.
6. Large screen promotes trouble-free service.
7. Self-draining for freeze protection in vertical use.
8. Flat mirror-finish valve head provides tightest sealing for energy efficiency and life.
9. Compact for easy installation.
10. Maintainable design lowers cleaning costs.



#### Specifications

Model	LV21
Connection	<b>Screwed</b>
Size (in)	<b>1/4, 3/8, 1/2, 3/4</b>
Max. Operating Pressure (psig) PMA	300
Min. Operating Pressure (psig)	Vacuum
Maximum Back Pressure	90% of Inlet Pressure
Max. Operating Temp. (°F) TMO	see graph at right
Max. Allowable Pressure (psig) PMA	900
Max. Allowable Temperature (°F) TMA	800
Subcooling of Capsule Fill (°F)	up to 11 (option: up to 40)
Type of X-element	C6 (option: C22)

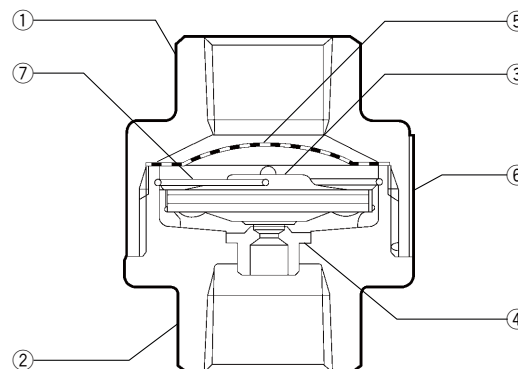
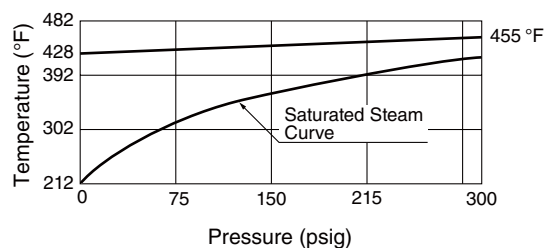
Connections and sizes in bold are standard



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.

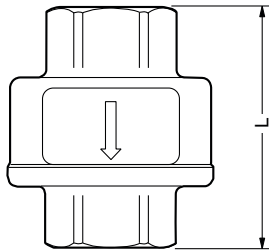
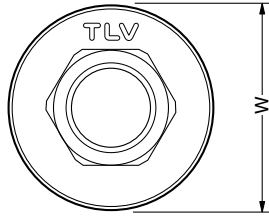
No.	Description	Material	ASTM/AISI*	JIS
①	Body Upper Part	Cast Stainless Steel	A351 Gr.CF8	—
②	Body Lower Part	Cast Stainless Steel	A351 Gr.CF8	—
③	X-element	Stainless Steel	—	—
④	Valve Seat	Stainless Steel	AISI630	SUS630
⑤	Screen	Stainless Steel	AISI304	SUS304
⑥	Nameplate	Stainless Steel	AISI304	SUS304
⑦	Spring Clip	Stainless Steel	AISI304	SUS304

\* Equivalent



**Dimensions**

● **LV21** Screwed

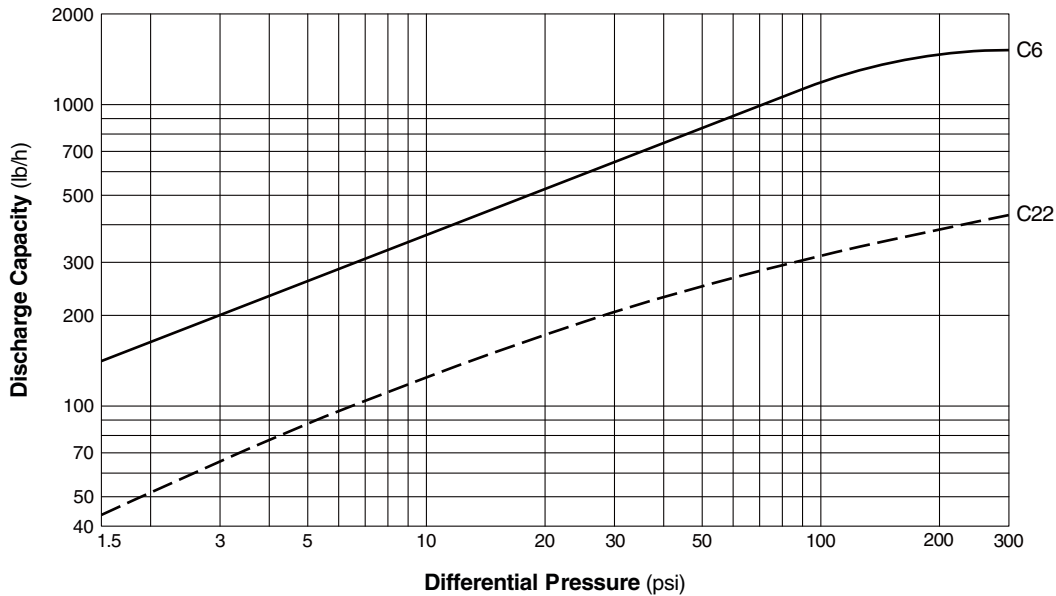


**LV21** Screwed\* (in)

Size	L	φW	Weight (lb)
1/4	2 3/16	1 7/8	0.9
3/8			
1/2			
3/4	2 3/8	2	1

\* NPT, other standards available

**Discharge Capacity**



— : C6-type X-element - - - : C22-type X-element (option)

1. Differential pressure is the difference between the inlet and outlet pressure of the trap.
2. Recommended safety factor: at least 2.



**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  
**TLV CO., LTD.**  
 Kakogawa, Japan  
 is approved by LRQA Ltd. to ISO 9001/14001

