



# BALANCED PRESSURE THERMOSTATIC STEAM TRAP

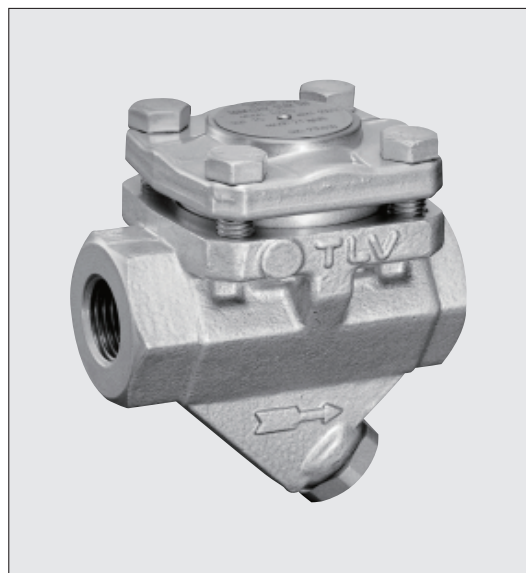
## MODEL L21S/L32S

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

#### Features

**Forged steel thermostatic trap suitable for a wide range of applications, including steam mains, tracing, dryers and heaters.**

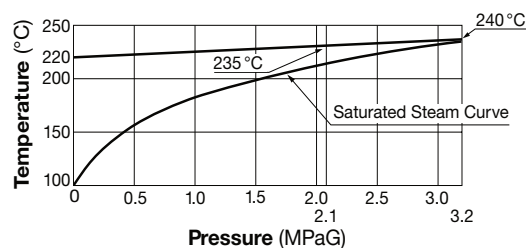
1. "Fail open" feature will not hold back condensate in the steam space.
2. Rugged, yet light construction, withstands superheat and water hammer.
3. Cyclic operation with fixed subcooling throughout the whole pressure range.
4. Outstanding air venting capability.
5. Compact, yet with high capacity.
6. Easy to clean and maintain.
7. Hardened stainless steel valve seat.
8. Built-in screen with large surface area.
9. Models L21SC/L32SC with built-in check valve are available upon request.



#### Specifications

Model	L21S	L32S
Connection	Screwed, Socket Welded, Flanged	
Size (mm)	15, 20, 25	
Max. Operating Press. (MPaG) PMO	2.1	3.2
Min. Operating Press. (MPaG)	0.01	
Maximum Back Pressure	90% of Inlet Pressure	
Max. Operating Temp. (°C) TMO	see graph at right	
Subcooling of X-element Fill (°C)	up to 6	
Type of X-element	C6	

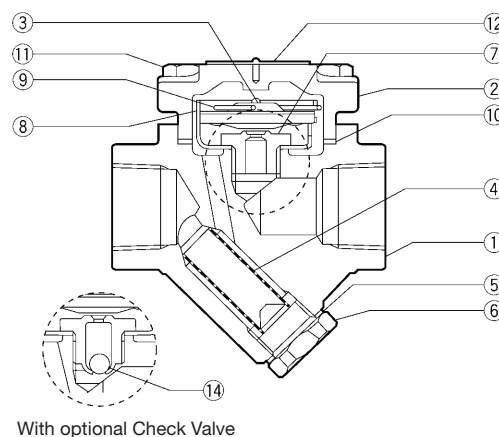
PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS):  
 Maximum Allowable Pressure (MPaG) PMA: 3.2  
 Maximum Allowable Temperature (°C) TMA: 300



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.

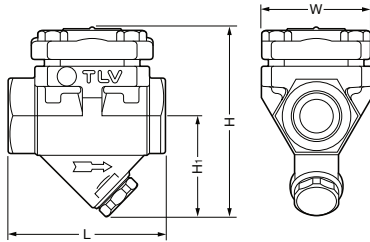
No.	Description	Material	JIS	ASTM/AISI*
①	Body	Carbon Steel	—	A105
②	Cover	Carbon Steel	—	A105
③ <sup>R</sup>	X-element	Stainless Steel	—	—
④ <sup>R</sup>	Screen inner/outer	Stainless Steel	SUS304/430	AISI304/430
⑤ <sup>MR</sup>	Screen Holder Gasket	Soft Iron	SUYP	AISI1010
⑥	Screen Holder	Carbon Steel	—	A105
⑦ <sup>R</sup>	Valve Seat	Stainless Steel	SUS420F	AISI420F
⑧ <sup>R</sup>	X-element Guide	Stainless Steel	SUS304	AISI304
⑨ <sup>R</sup>	Spring Clip	Stainless Steel	SUS304	AISI304
⑩ <sup>MR</sup>	Cover Gasket	Graphite/Stainl. Steel	-/SUS316L	-/AISI316L
⑪	Cover Bolt	Carbon Steel	S45C	AISI1045
⑫	Nameplate	Stainless Steel	SUS304	AISI304
⑬	Flange**	Carbon/Cast Steel	—	A105/A216 Gr. WCB
⑭ <sup>R</sup>	Check Valve Ball	Stainless Steel	SUS440C	AISI440C

\* Equivalent \*\* Shown on reverse, shape and material depend on flange specifications  
 Replacement kits available: (M) maintenance parts, (R) repair parts



**Dimensions**

● **L21S/L32S** Screwed

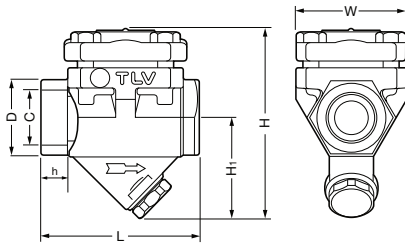


**L21S/L32S** Screwed\* (mm)

Size	L	H	H <sub>1</sub>	W	Weight (kg)
15	80	97	52	56	1.3
20					1.8
25	88	104	55		

\* Rc(PT), other standards available

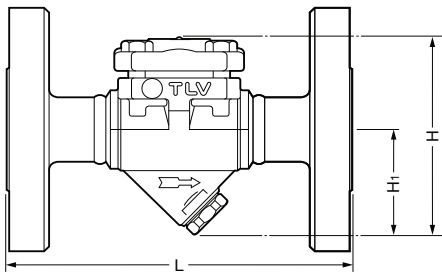
● **L21S/L32S** Socket Welded



**L21S/L32S** Socket Welded (mm)

Size	L	H	H <sub>1</sub>	W	φ D	φ C	h	Weight (kg)
15	80	97	52	56	30	22.2	12	1.3
20					36	27.7		
25	88	104	55		44	34.5	14	1.8

● **L21S/L32S** Flanged



**L21S/L32S** Flanged (mm)

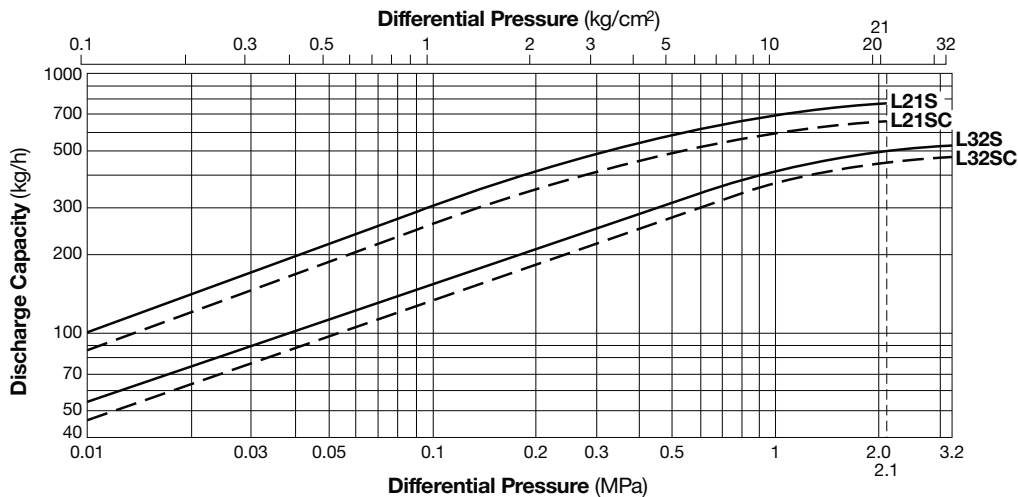
Size	L			H	H <sub>1</sub>	Weight* (kg)
	ASME Class					
	150RF	300RF	600RF			
15	140	140	140	97	52	2.9
20	165	165	165			3.9
25	210	210	210	104	55	4.7

Other standards available, but length and weight may vary

\* Weight is for Class 300 RF

The models L21SC and L32SC with internal check valves have the same dimensions and weights as models L21S and L32S

**Discharge Capacity**



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

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

