



# BALANCED PRESSURE THERMOSTATIC STEAM TRAP

## MODELS L21S/L32S

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

#### Features

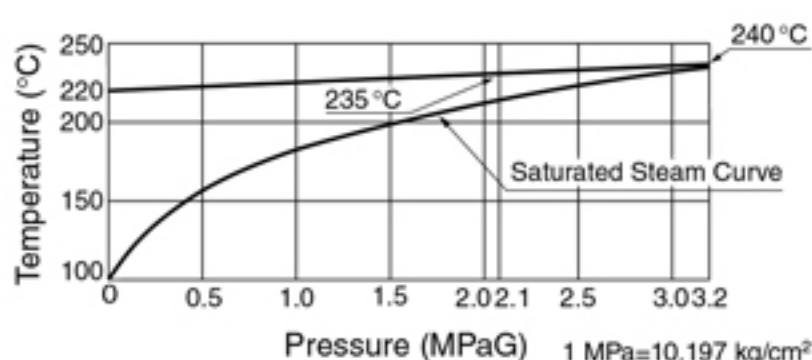
Forged steel thermostatic trap suitable for a wide range of applications, including steam mains, tracing, dryers and heaters.

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 Capsule Fill (°C)	up to 6	
Type of X-element	B	

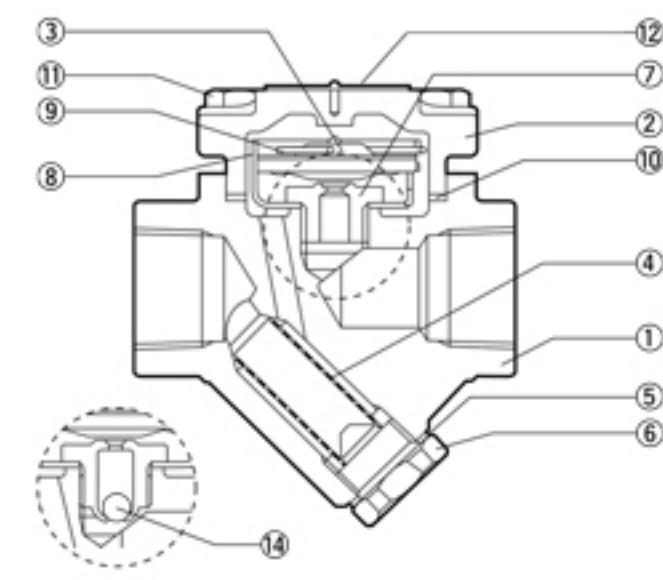


PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS):  
 Maximum Allowable Pressure (MPaG) PMA: 3.2  
 Maximum Allowable Temperature (°C) TMA: 300

**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	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	Stainl. Steel/Graphite	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 overleaf, shape and material depend on flange specifications  
 Replacement kits available: (M) maintenance parts, (R) repair parts



With optional Check Valve

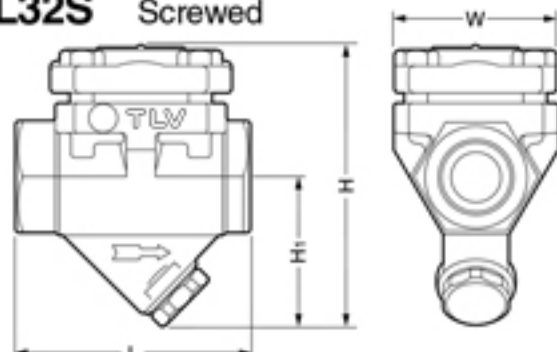
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### Consulting & Engineering Service

#### Dimensions

##### ● L21S/L32S Screwed

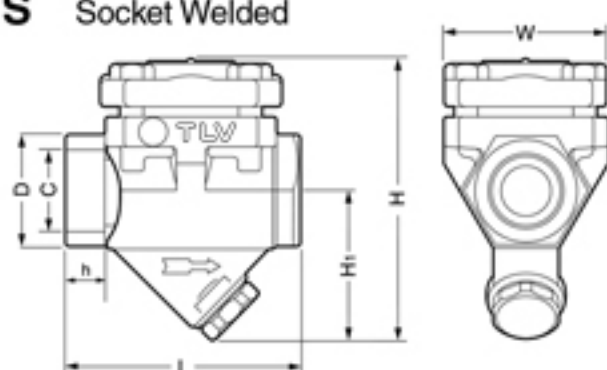


##### L21S/L32S Screwed\* (mm)

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

\* Rc(PT), other standards available

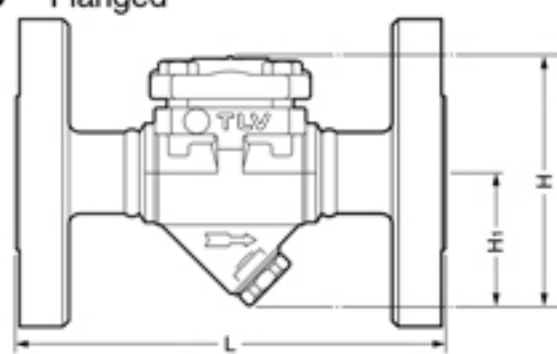
##### ● L21S Socket Welded



##### L21S Socket Welded (mm)

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

##### ● L21S/L32S Flanged

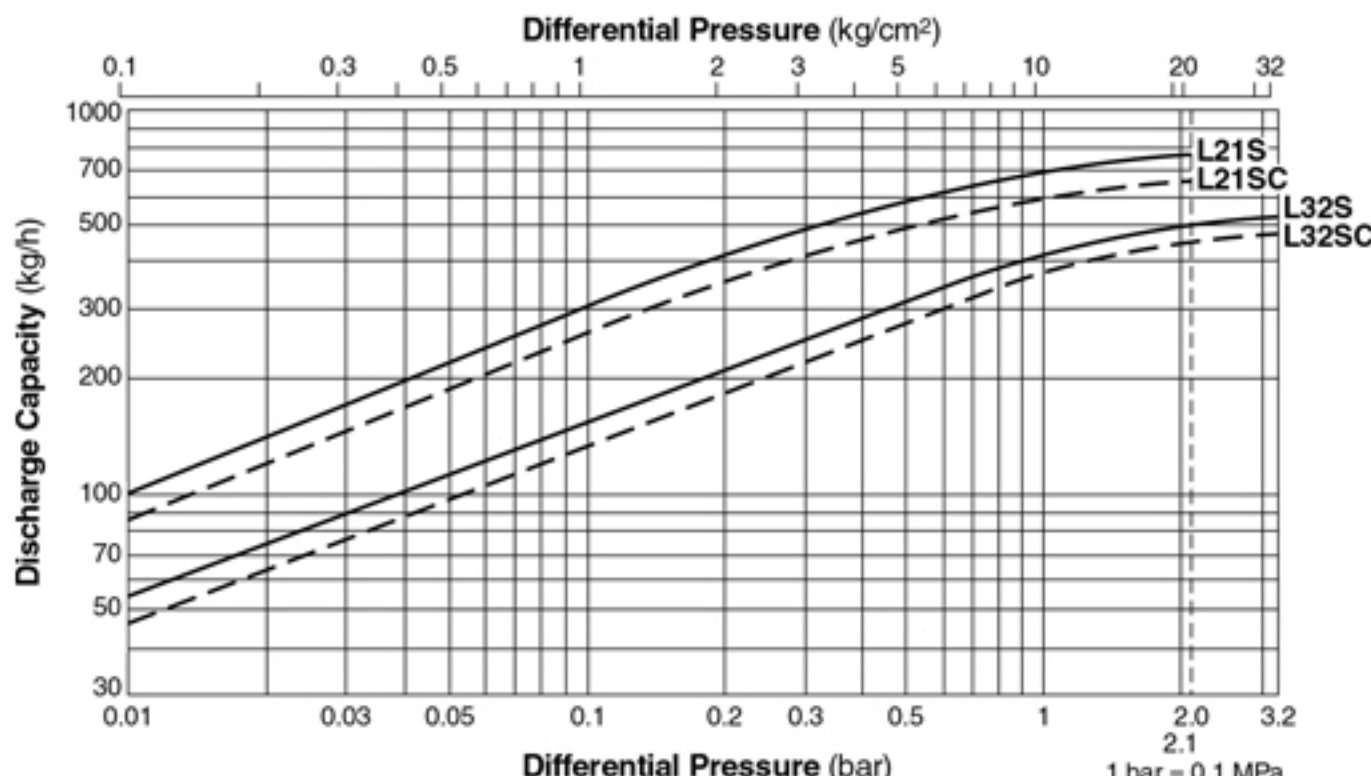


##### L21S/L32S Flanged\* (mm)

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			4.7

Other standards available, but length and weight may vary  
 \* Weight is for class 300 RF

#### Discharge Capacity



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

