



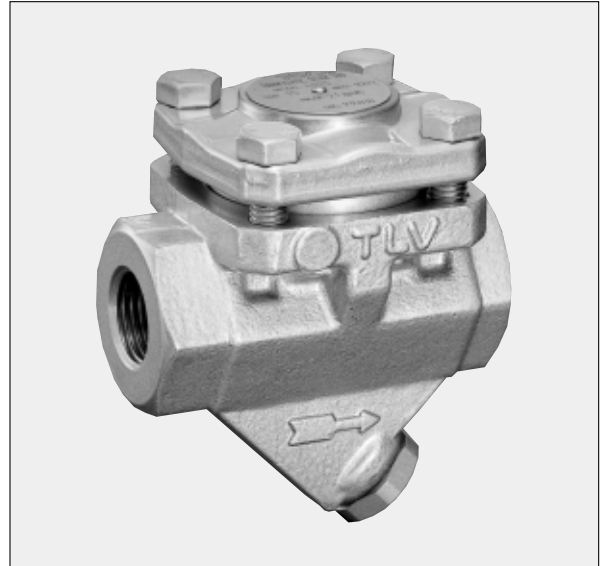
BALANCED PRESSURE THERMOSTATIC STEAM TRAP

MODEL L21S/L32S FORGED STEEL
STAINLESS STEEL

Features

Thermostatic steam 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

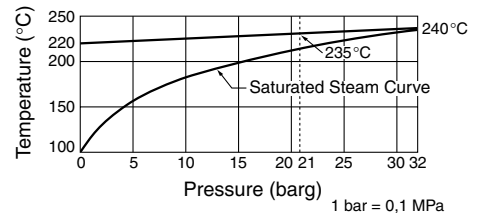
Model	L21S				L32S				
	Forged Steel		Stainless Steel		Forged Steel		Stainless Steel		
Material	Forged Steel		Stainless Steel		Forged Steel		Stainless Steel		
Connection	Screwed	Socket Welded	Flanged	Screwed	Flanged	Screwed	Flanged	Screwed	Flanged
Size	1/2", 3/4", 1"		DN 15, 20, 25	1/2", 3/4", 1"		DN 15, 20, 25	1/2", 3/4", 1"		DN 15, 20, 25
Max. Operating Pressure (barg) PMO	21				32				
Min. Operating Pressure (barg)	0.1				0.1				
Max. Operating Temperature °C TMO	see graph below				see graph below				
Maximum Back Pressure	90% of inlet pressure				90% of inlet pressure				
Max. Subcooling of X-element Fill (°C)	up to 6				up to 6				
Type of X-element	B				B				

PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS):
 Maximum Allowable Pressure PMA: 32 barg
 Maximum Allowable Temperature TMA: 300 °C

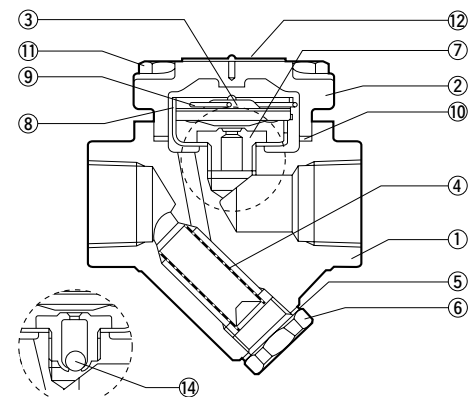
1 bar = 0.1 MPa



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	DIN*	ASTM/AISI*
①	Body (Steel)	Carbon Steel C22.8	1.0460	A105
	Body (Stainless Steel)	Cast Stainless Steel A351 Gr. CF8	1.4408	—
②	Cover (Steel)	Carbon Steel C22.8	1.0460	A105
	Cover (Stainless Steel)	Cast Stainless Steel A351 Gr. CF8	1.4408	—
③ ^R	X-element	Stainless Steel	—	—
④ ^R	Screen inside/outside	Stainless Steel SUS304/430	1/4301/1.4016	AISI304/430
⑤ ^{MR}	Screen Holder Gasket (Steel)	Soft Iron SUYP	1.0110	AISI1010
	Screen Holder Gasket (Stainl. Steel)	Stainless Steel SUS303	1.4305	AISI303
⑥	Screen Holder (Steel)	Carbon Steel C22.8	1.0460	A105
	Screen Holder (Stainless Steel)	Stainless Steel SUS303	1.4305	AISI303
⑦ ^R	Valve Seat	Stainless Steel SUS420F	1.4021	AISI420F
⑧ ^R	X-element Guide	Stainless Steel SUS304	1.4301	AISI304
⑨ ^R	Spring Clip	Stainless Steel SUS304	1.4301	AISI304
⑩ ^{MR}	Cover Gasket	Stainl. Steel SUS316L/Graphite	1.4404	AISI316L
⑪	Cover Bolt (Steel)	Carbon Steel S45C	1.1181	AISI1045
	Cover Bolt (Stainless Steel)	Stainless Steel SUS304	1.4301	AISI304
⑫	Nameplate	Stainless Steel SUS304	1.4301	AISI304
	Flange (Steel)**	Carbon Steel C22.8/A105	1.0460	A105
	Flange (Stainless Steel)**	Stainless Steel/Cast Stainless Steel SUS304/A351 Gr. CF8	1.4301/1.4308	AISI304/—
⑬	Flange Pipe (Stainless Steel)***	Stainless Steel SUS304	1.4301	AISI304
⑭ ^R	Steel Ball (Check Valve)	Stainless Steel SUS440C	1.4301	AISI304

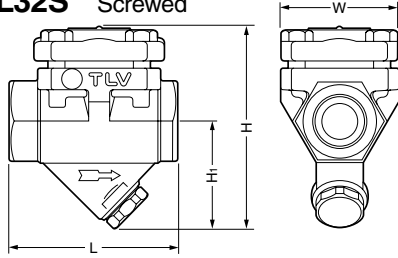


With optional Check Valve, L21SC available screwed and flanged. L32SC available flanged only.

* Equivalent materials ** Shown overleaf, shape and material depend on flange specifications *** Not shown Replacement kits available for steel version: (M) maintenance parts, (R) repair parts

Dimensions

● **L21S/L32S** Screwed

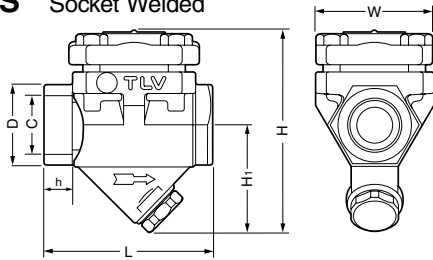


L21S/L32S Screwed* (mm)

Size	L	H	H ₁	W	Weight (kg)
1/2"	80	97	52	56	1.3
3/4"					
1"	88	104	55		1.8

* BSP DIN 2999, other standards available

● **L21S** Socket Welded

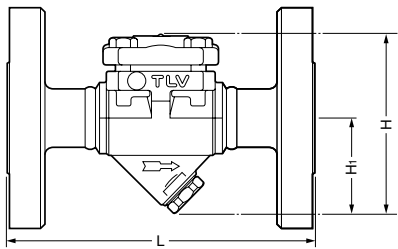


L21S Socket Welded* (mm)

DN	L	H	H ₁	W	φD	φC	h	Weight (kg)
15	80	97	52	56	30	21.70	12	1.3
20					36	27.05		
25	88	104	55		44	33.80	14	1.8

* ASME B16.11, other standards available

● **L21S/L32S** Flanged



L21S/L32S Flanged (mm)

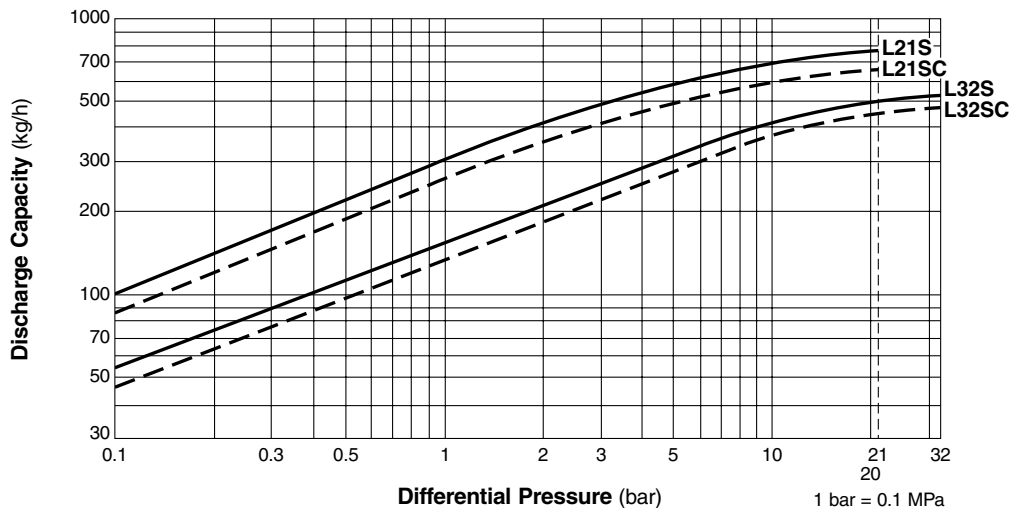
DN	L				H	H ₁	Weight* (kg)
	DIN 2501 PN25/40	ASME Class 150RF	300RF	600RF			
15	150	140	140	140	97	52	3.2
20		165	165	165			3.8
25	160	210	210	210	104	55	4.6

Other standards available, but length and weight may vary

* Weight is for DIN PN 25/40

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

Discharge Capacity



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

Manufacturer

ISO 9001/ISO 14001

TLV® CO., LTD.
Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

