

L21S/L32S Thermostatic Steam Trap

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.

Pressure Equipment Directive (PED)

Classification according to PED 2014/68/EU, fluid group 2

Size	Category	CE marking
DN 15 to DN 25	*	Art. 4, Sec. 3 (sound engineering practice), CE marking not allowed

^{*} Manufactured in accordance with sound engineering practice



Specifications

Model	L21S					L32S			
Material	Carbon Steel			Stainless Steel		Carbon 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	1/2",3/4",1"	DN 15, 20, 25
Max. Operating Pressure (barg) PMO		21				32			
Min. Operating Pressure (barg)					0.1				
Max. Operating Temperature (°C)TMO				see graph below					
Maximum Back Pressure				90% of inlet pressure					
Max. Subcooling of X-element Fill (°C)	up to 6								
Type of X-element	C6								

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure PMA: 32 barg Maximum Allowable Temperature TMA: 300 °C 1 bar = 0.1 MPa



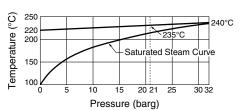
To avoid abnormal operation, accidents or serious injury, do not use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

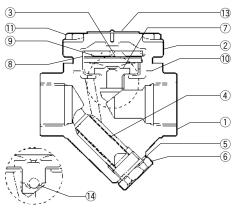
No.	Description		Material	DIN ¹⁾	ASTM/AISI1)
<u>(1)</u>	Body	Carbon Steel	Carbon Steel C22.8	1.0460	A105
(1)	① Body	Stainless Steel	Cast Stainless Steel A351 Gr.CF8	1.4312	_
	@ ^	Carbon Steel	Carbon Steel C22.8	1.0460	A105
2	Cover	Stainless Steel	Cast Stainless Steel A351 Gr.CF8	1.4312	_
3 ^R	X-element		Stainless Steel	_	_
(4)R	Screen inside/o	utside	Stainless Steel SUS304/430	1.4301/1.4016	AISI304/430
(5)MR	Screen Holder	Carbon Steel	Soft Iron SUYP	1.1121	AISI1010
(5)	Gasket	Stainless Steel	Stainless Steel SUS316	1.4404	AISI316L
<u>(6)</u>	@ 0 !!!!	Screen Holder Carbon Steel Carbon Steel C22.8		1.0460	A105
(6)	Screen Holder	Stainless Steel	Stainless Steel SUS303	1.4305	AISI303
7)R	Valve Seat		Stainless Steel SUS420F	1.4028	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		Graphite/Stainl. Steel SUS316L	— /1.4404	—/AISI316L
(1)	Cover Bolt	Carbon Steel	Carbon Steel S45C	1.0503	AISI1045
U)	Cover Boil	Stainless Steel	Stainless Steel SUS304	1.4301	AISI304
12	Nameplate		Stainless Steel SUS304	1.4301	AISI304
		Carbon Steel	Carbon Steel C22.8/A105 ³ /	1.0460/1.0460/	A105/ — /
	Flange ²⁾	Carbon Steel	Cast Steel A216 Gr.WCB ³⁾	1.0619	
13	i lange	Stainless Steel	Stainless Steel SUS304/	1.4301/	AISI304/
			Cast Stainless Steel A351 Gr.CF8	1.4312	
	Flange Pipe (Stainless Steel)4)		Stainless Steel SUS304	1.4301	AISI304
(14)P	Steel Ball (Check Valve)		Stainless Steel SUS440C	1.4125	AISI440C

¹⁾ Equivalent materials 2) Shown overleaf, shape and material depend on flange specifications

3) For models with ASME flange standards 4) Not shown

Replacement kits available for carbon steel version: (M) maintenance parts, (R) repair parts



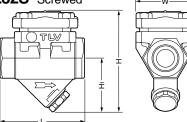


With optional Check Valve, L21SC available screwed and flanged. L32SC available flanged only.

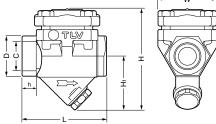


Dimensions

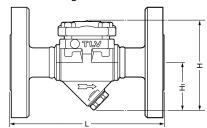
• L21S/L32S Screwed







• L21S/L32S Flanged



L21S/L32S Screwed*

LZ13/L323 Sciewed (IIIII)									
Size	L	Н	H ₁	W	Weight (kg)				
¹ /2" ³ /4"	80	97	52	56	1.3				
1″	88	104	55	[62]	1.8				

^{*} BSP DIN 2999, other standards available

L21S Socket Welded*

(mm)

DN	L	Н	H₁	w	φD	ФС	h	Weight (kg)
15	0,0	97	52		30	21.8	12	1.0
20	80	97	52	56 [62]	36	27.2	1.1	1.3
25	88	104	55	[02]	44	33.9	14	1.8

^{*} ASME B16.11-2005, other standards available

L21S/L32S Flanged

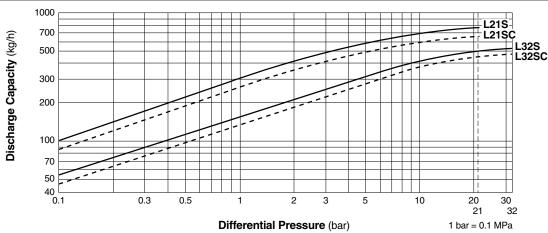
(mm)

DN	DINLOFOA	L		١	Weight*		
DN	DIN 2501	AS	SME Cla	iss	Н	Ηı	(kg)
	PN25/40	150RF	300RF	600RF			
15	150	140	140	140		52	3.2
		[160]	[160]	[160]	97		
20		165	165	165			3.8
25	160	210	210	210	104	55	4.6

Other standards available, but length and weight may vary

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.

^[] is for Stainless Steel

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^{*} Weight is for DIN PN 25/40

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