



# BALANCED PRESSURE THERMOSTATIC STEAM TRAP

## MODEL LV6 Clean Steam Trap STAINLESS STEEL

### STAINLESS STEEL THERMOSTATIC STEAM TRAP FOR PURE AND CLEAN STEAM SYSTEMS

#### Features

Balanced pressure thermostatic steam trap recommended for use in reactors, sterilizers and distribution lines in clean and pure steam systems.

1. Free-draining, virtually crevice-free design minimizes the possibility of bacteria buildup.
2. "Fail open" feature will not hold back condensate in steam space.
3. Large orifice provides high air venting capacity for rapid start-up and resists plugging to ensure continuous operation.
4. Compact for easy installation.
5. Maintainable design lowers cleaning costs.
6. LV6-P polished to 0.8  $\mu\text{m}$  Ra inside and 1.2  $\mu\text{m}$  Ra outside, with an electro-polish option to further resist bacterial growth.

#### Pressure Equipment Directive (PED)

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

Size	Category	CE marking
DN 8 to DN 25	—*	Art. 4, Sec. 3 (sound engineering practice), CE marking not allowed

\* Manufactured in accordance with sound engineering practice



#### Specifications

Model	LV6-CE	LV6-CF	LV6-SF	LV6-P*
Connection	Clamp End / Tube End			
Size	DN 15, 20, 25 / DN 8, 10, 15, 20, 25			
Maximum Operating Pressure (barg) PMO	6			
Minimum Operating Pressure (barg)	0.1			
Maximum Back Pressure	90% of Inlet Pressure			
Maximum Operating Temperature (°C) TMO	165			
Subcooling of X-element Fill (°C)	Up to 2 (option: up to 6)			
X-element type (for <b>Clean Steam Traps</b> )	Standard	Free-draining		Free-draining (electro-polished)
Clamp Type	2-Piece Clamp (Buff Polished)			3-Piece Clamp (Buff Polished)
Finishing (Internal / External)*	Natural Machining		0.8 $\mu\text{m}$ Ra / 1.2 $\mu\text{m}$ Ra Fine Machining	0.8 $\mu\text{m}$ Ra / 1.2 $\mu\text{m}$ Ra Polish

\* LV6-EP with 0.4  $\mu\text{m}$  Ra electro-polishing available on request

1 bar = 0.1 MPa

PRESSURE SHELL DESIGN CONDITIONS (**NOT OPERATING CONDITIONS**): Maximum Allowable Pressure (barg) PMA: 10  
Maximum Allowable Temperature (°C) TMA: 185  
Minimum Allowable Temperature (°C): -40



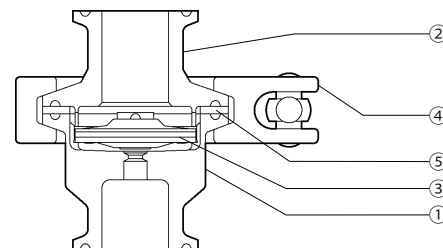
#### CAUTION

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.

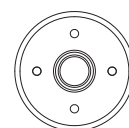
No.	Description	Material	DIN	ASTM/AISI*
①	Lower Body	Stainless Steel AISI316L	1.4404	—
②	Upper Body	Stainless Steel AISI316L	1.4404	—
③	X-element	Stainless Steel SUS316L	1.4404	AISI316L*
④	Body Clamp	Cast Stainless Steel A351 Gr.CF8	1.4312	—
⑤	Body Gasket **	High-performance Fluorine Resin	—	—

\* Equivalent materials \*\* Body gasket is GYLON BIO-PRO; complies with FDA 21 CFR 177.1550, USP Class VI and EN 1935.

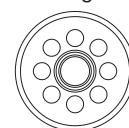
GYLON BIO-PRO is a registered trademark of Garlock GmbH. Material certificates to ISO 10474 2.2 or 3.1B available for major components, contact TLV for details.



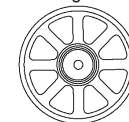
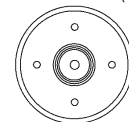
Standard X-element      Free-draining X-element



Standard X-element (Option)



Free-draining X-element (Option)

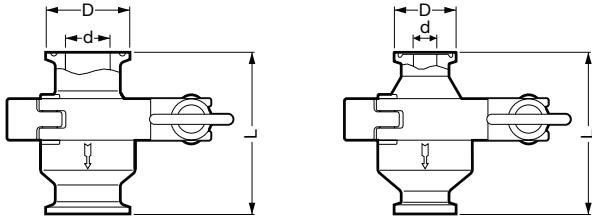


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**Dimensions**

● **LV6-CE/LV6-CF/LV6-SF/LV6-P** Clamp End

ISO 2852 Clamp / ISO 2037 Tube ASME-BPE (Tri-Clamp Compatible)



**LV6-CE/LV6-CF/LV6-SF/LV6-P** Clamp End\* (mm)

DN (Size)	L**	φ D	φ d	Weight (kg)
15 [½"]	65	34 [25]	15.2 [9.4]	0.5
20 [¾"]			19.3 [15.75]	0.55
25 [1"]		50.5	22.6 [22.1]	0.6

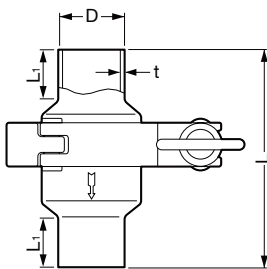
\* ISO 2852 Clamp / ISO 2037 Tube or ASME-BPE (Tri-Clamp compatible)

\*\* Approximate dimension

[ ] ASME-BPE (Tri-Clamp compatible)

● **LV6-CE/LV6-CF/LV6-SF/LV6-P** Tube End

ISO 1127



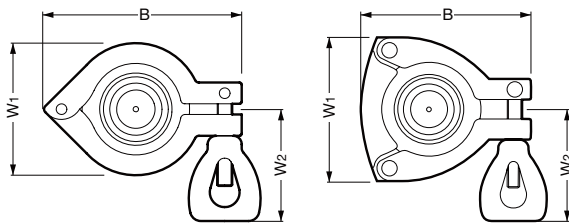
**LV6-CE/LV6-CF/LV6-SF/LV6-P** Tube End\* (mm)

DN	L**	L1**	φ D	t	Weight (kg)
8	90	20	13.5	1.6	0.5
10			17.2		
15			21.3		0.55
20			26.9		
25			33.7	2.0	0.6

\* ISO 1127, other standards available

\*\* Approximate dimension

● **Body Clamp**



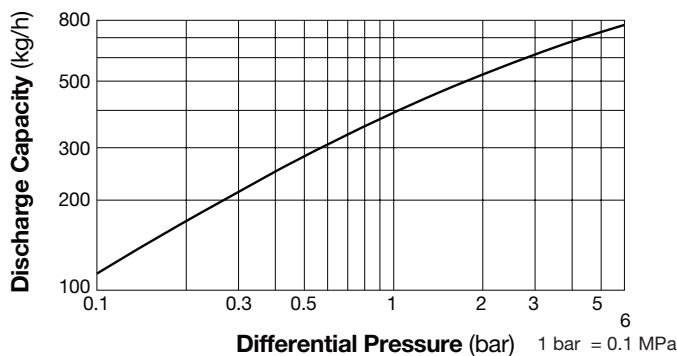
**Body Clamp** (mm)

DN	2-Piece: LV6-CE / LV6-CF / LV6-SF			3-Piece: LV6-P		
	B*	W1*	W2*	B*	W1*	W2*
8	95	65	55	85	70	55
10						
15						
20						
25						

\* Approximate dimension

Tri-Clamp is a registered trademark of Alfa Laval Corporate AB.

**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

ISO 9001  
ISO 14001

