

# BALANCED PRESSURE THERMOSTATIC STEAM TRAP

# MODEL LV6 Clean Steam Trap 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.

- Free-draining, virtually crevice-free design minimizes the possibility of bacteria buildup.
- 2. "Fail open" feature will not hold back condensate in steam space.
- 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. LV6P polished to 0.8  $\mu m$  Ra inside and 1.2  $\mu m$  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 15 to DN 25	*	Art. 4, Sec. 3 (sound engineering practice), CE marking not allowed

<sup>\*</sup> Manufactured in accordance with sound engineering practice



#### **Specifications**

Model	LV6-CE	LV6-CE LV6-SF LV6			
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 6				
X-element type (for Clean Steam Traps)	Standard	Free-draining	Free-draining (electro-polished)		
Clamp Type	2-Piece Clamp (Buff Polished)		3-Piece Clamp (Buff Polished)		
Finishing (Internal / External)*	Natural Machining	0.8μm Ra / 1.2μm Ra Fine Machining	0.8µm Ra / 1.2µm Ra Polish		

\* LV6-EP with 0.4µm Ra electro-polishing available on request

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

**CAUTION** 

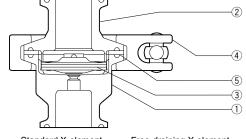
To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range.Local regulations may restrict the use of this product to below the conditions quoted.

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	_	_

<sup>\*</sup> Equivalent materials

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





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1 bar = 0.1 MPa

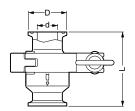
<sup>\*\*</sup> Body gasket is GYLON BIO-PRO; complies with FDA 21 CFR 177. 1550, USP Class VI and EN 1935.

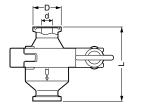
### Consulting · Engineering · Services

#### **Dimensions**

#### ● LV6-CE / LV6-SF / LV6-P Clamp End

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



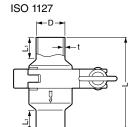


#### LV6-CE / LV6-SF / LV6-P Clamp End\* (mm)

DN (Size)	L	φD	φd	Weight (kg)	
15 ( <sup>1</sup> / <sub>2</sub> ")		34 [25]	15.2 [9.4]	0.5	
20 (3/4")	65	04 [23]	19.3 [15.75]	0.55	
25 (1")		50.5	22.6 [22.1]	0.6	

<sup>\*</sup> ISO 2852 Clamp / ISO 2037 Tube or ASME-BPE (Tri-Clamp compatible)
[ ] ASME-BPE (Tri-Clamp compatible)

#### ● LV6-CE / LV6-SF / LV6-P Tube End

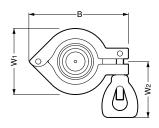


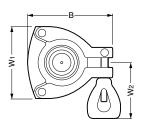
#### LV6-CE/LV6-SF/LV6-P Tube End\* (mm)

DN	L	L <sub>1</sub>	φD	t	Weight (kg)
8	90	20	13.5	1.6	0.5
10			17.2		0.55
15			21.3		
20			26.9		
25			33.7	2.0	0.6

<sup>\*</sup> ISO 1127, other standards available

#### Body Clamp





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

#### **Body Clamp**

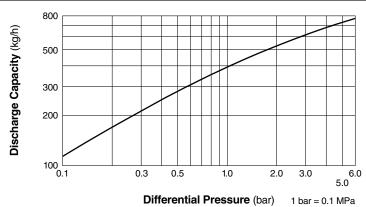
(mm)

DN	2-Piece: LV6-CE / LV6-SF			3-Piece: LV6-P		
	B*	W <sub>1</sub> *	W <sub>2</sub> *	B*	W <sub>1</sub> *	W2*
8						
10						
15	92	62	55	82	70	55
20						
25						

<sup>\*</sup> Approximate dimension

https://www.tlv.com

## **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 Kakogawa, Japan



ISO 9001