



# BALANCED PRESSURE THERMOSTATIC STEAM TRAP

## MODEL LV6 Clean Steam Trap

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

#### Benefits

**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 minimizes interruption of critical operation.
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  $\mu\text{m}$  (32 micro-inch) Ra inside and 1.2  $\mu\text{m}$  (48 micro-inch) Ra outside, with an electro-polish option to further resist bacterial growth.



#### Specifications

| Model  | LV6-CE                        | LV6-CF        | LV6-SF   | LV6-P*   |
|--|-------------------------------|---------------|--|--|
| Connection                                     | Clamp End                     |               |  |  |
| Size (in)                                      | ½, ¾, 1                       |               |  |  |
| Max. Operating Pressure (psig)    PMO          | 85                            |               |  |  |
| Min. Operating Pressure (psig)                 | Vacuum                        |               |  |  |
| Max. Back Pressure                             | 90% of Inlet Pressure         |               |  |  |
| Max. Operating Temperature (°F)   TMO          | 329                           |               |  |  |
| Max. Allowable Pressure (psig)    PMA          | 150                           |               |  |  |
| Max. Allowable Temperature (°F)   TMA          | 365                           |               |  |  |
| Subcooling of X-element Fill (°F)              | Up to 3.6 (option: up to 11)  |               |  |  |
| 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 µm Ra / 1.2 µm Ra<br>(32 micro-inch/48 micro-inch)<br>Fine Machining | 0.8 µm Ra / 1.2 µm Ra<br>(32 micro-inch/48 micro-inch)<br>Polish |

\* LV6-EP with 0.4  $\mu\text{m}$  (16 micro-inch) Ra electro-polishing available on request

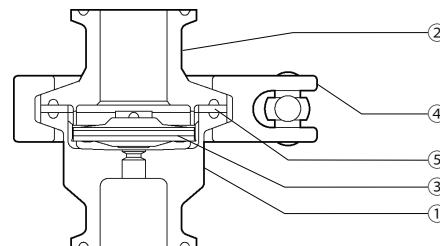
**Connections and sizes in bold are standard.**



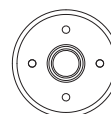
To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

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

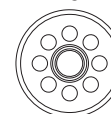
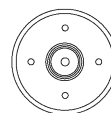
\* Equivalent \*\* Body gasket is GYLON BIO-PRO; complies with FDA 21 CFR 177.1550, USP Class VI and EC 1935/2004. GYLON BIO-PRO is a registered trademark of Garlock GmbH. Material certificates to ISO 10474 2.2 or 3.1B available for major components, contact TLV for details.



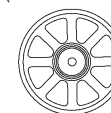
Standard X-element    Free-draining X-element



Standard X-element  
(6 °C subcooling)



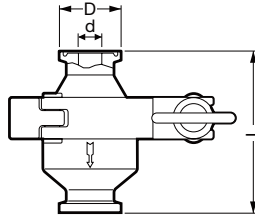
Free-draining X-element  
(6 °C subcooling)



## Dimensions

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

ASME-BPE (Tri-Clamp Compatible)



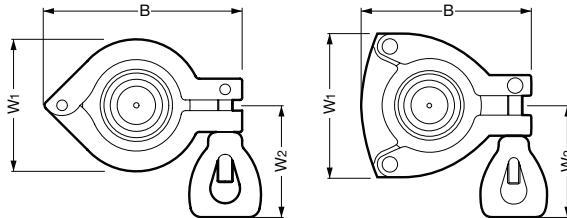
### LV6-CE/LV6-CF/LV6-SF/LV6-P Clamp End\* (in)

| Size | L**                            | φ D | φ d | Weight (lb) |
|------|--------------------------------|-----|-----|-------------|
| 1/2  | 2 <sup>9</sup> / <sub>16</sub> | 1   | 3/8 | 1.1         |
| 3/4  |                                |     | 5/8 | 1.2         |
| 1    |                                | 2   | 7/8 | 1.3         |

\* ASME-BPE (Tri-Clamp compatible), other standards available

\*\* Approximate dimension

### ● Body Clamp



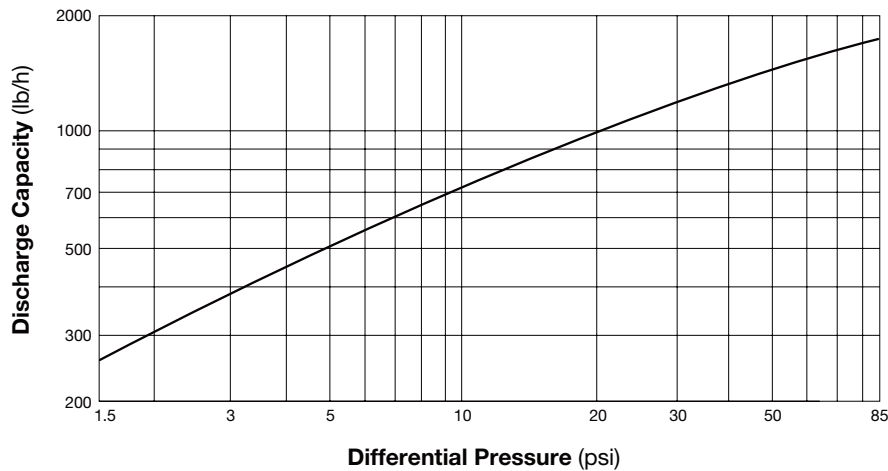
### Body Clamp (in)

| Size | 2-Piece: LV6-CE/LV6-CF/LV6-SF |                                |                                | 3-Piece: LV6-P |       |                                |
|------|-------------------------------|--------------------------------|--------------------------------|----------------|-------|--------------------------------|
|      | B*                            | W1*                            | W2*                            | B*             | W1*   | W2*                            |
| 1/2  | 4 3/4                         | 2 <sup>9</sup> / <sub>16</sub> | 2 <sup>3</sup> / <sub>16</sub> | 3 3/8          | 2 3/4 | 2 <sup>3</sup> / <sub>16</sub> |
| 3/4  |                               |                                |                                |                |       |                                |
| 1    |                               |                                |                                |                |       |                                |

\* 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.



DO NOT DISASSEMBLE OR REMOVE THIS PRODUCT WHILE IT IS UNDER PRESSURE.

Allow internal pressure of this product to equal atmospheric pressure and its surface to cool to room temperature before disassembling or removing. Failure to do so could cause burns or other injury. READ INSTRUCTION MANUAL CAREFULLY.

## TLV CORPORATION

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For Technical Service 1-800 "TLV TRAP"



Manufacturer

**TLV** CO., LTD.

Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001

ISO 14001

