TLV 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.

- 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.
- 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.
- LV6-P polished to 0.8 μm Ra inside and 1.2 μm 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 / Tube End | | | | |
| Size | 15, 20, 25 mm (ISO) ½", ¾", 1" (ASME-BPE) / 8, 10, 15, 20, 25 mm (ISO) | | | | |
| Max. Operating Pressure (MPaG) PMO | 0.6 | | | | |
| Min. Operating Pressure (MPaG) | 0.01 | | | | |
| Max. Back Pressure | 90 % of Inlet Pressure | | | | |
| Max. Operating Temperature (°C) TMO | 165 | | | | |
| Subcooling of X-element Fill (°C) | Up to 2 (option: 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 | | 0.8 µm Ra / 1.2 µm Ra Fine Machining | 0.8 μm Ra / 1.2 μm Ra Polish | |
| LV6-EP with 0.4 µm Ra electro-polishing available on request | | | 1 MPa = 10.197 kg/cm | | |

* LV6-EP with 0.4 µm Ra electro-polishing available on request PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 1.0 Maximum Allowable Temperature (°C) TMA: 185

Minimum Allowable Temperature (°C): -40



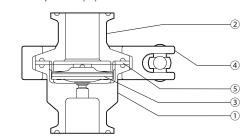
To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

| N | o. Description | Material | JIS | ASTM/AISI* | |
|----|----------------|----------------------|---------|-------------|--|
| (1 | Lower Body | Stainless Steel | — | AISI316L | |
| (2 | Upper Body | Stainless Steel | — | AISI316L | |
| (3 | X-element | Stainless Steel | SUS316L | AISI316L* | |
| (4 | Body Clamp | Cast Stainless Steel | - | A351 Gr.CF8 | |
| (5 | Body Gasket ** | High-performance | _ | _ | |

* 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





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

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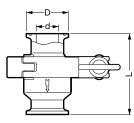
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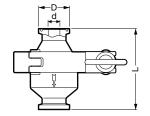
Dimensions

TLV

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 Tube End ISO 1127

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

| Size | L** | φD | φd | Weight (kg) |
|---------|-----|---------|--------------|-------------|
| 15 [½"] | | 24 [05] | 15.2 [9.4] | 0.5 |
| 20 [¾"] | 65 | 34 [25] | 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)

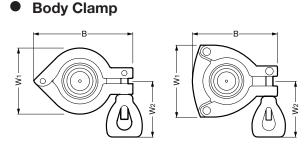
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LV6-CE/LV6-CF/LV6-SF/LV6-P Tube End* (mm)

| Size | L** | L1** | φD | t | Weight (kg) |
|------|-----|------|------|-----|-------------|
| 8 | - | 20 | 13.5 | | 0.5 |
| 10 | | | 17.2 | 1.6 | |
| 15 | 90 | | 21.3 | | 0.55 |
| 20 | | | 26.9 | | |
| 25 | | | 33.7 | 2.0 | 0.6 |

* ISO 1127, other standards available

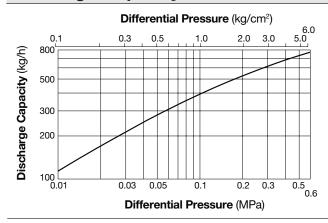
Approximate dimension



| Body Clamp (mm) | | | | | | |
|-----------------|-----------------------------------|-----|-----|----------------|-----|-----|
| Size | 2-Piece: LV6-CE/LV6-CF/ LV6-SF | | | 3-Piece: LV6-P | | |
| | B* | W1* | W2* | B* | W1* | W2* |
| 8 | | | | | | |
| 10 | | | | | | |
| 15 | 95 | 65 | 55 | 85 | 70 | 55 |
| 20 |] | | | | | |
| 25 | | | | | | |

* Approximate dimension

Discharge Capacity



1. Differential pressure is the difference between the inlet and outlet pressure of the trap.

2. Recommended safety factor: at least 2.







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