

TLV[®]

Clean Steam Traps

LV6CE • LV6SF • LV6P
SS5P
P10



Designed for Bio and Clean Steam Applications

Clean Steam Trap

LV6 Series

SS5P

P10

CL

All Stainless Steel Construction

- Low-quality stainless steel may corrode when exposed to water with even low ionic content. To solve this problem, the LV6 series and P10 use SUS316L, and the SS5P body/cover is made of A351 Gr. CF3M with an SUS316L float.

Prevents Condensate Accumulation

- Smooth, virtually crevice-free interior allows for complete condensate drainage.
- The SS5P has a small drain hole to prevent condensate pooling.



LV6 Series

SS5P

Easy Disassembly and Cleaning

- Consists of only 5 simple components held together by easily removable clamps.
- Clamp pipe connections enable the trap to be easily removed from the pipeline.

Prevents Bacterial Contamination

- Simply constructed clamp joining body and cover has few projections.
- Sanitary rubber gasket with a PTFE coat provides high durability and resistance to chemicals, heat and impurities.

- Ferrule clamp joint for clean steam (in accordance with Tri-Clamp* standard) is used for connection to piping. Tube end connections are also available.

* Tri-Clamp is a registered trademark of Tri-Clover Inc.

- The LV6SF and LV6P have a uniquely designed free-draining X-element case that allows complete fluid drainage and easy cleaning.

(LV6CE is equipped with a standard X-element for Clean Steam Traps.)

- The free float SS5P* has a 0.8 μm Ra buff polish.

* The optional SS5EP has a 0.4 μm Ra buff and electro-polish



EAN STEAM TRAP

Thermostatic Clean Steam Trap Compact LV6 Series

What is the X-element?

- A multi-diaphragm valve mechanism filled with a thermoliquid which opens and closes the valve at approximately 11°F less than saturated steam temperature.



Fail-open Safety Mechanism

- In the event of a damaged diaphragm, the LV6 is not blocked, but remains open, ensuring the operation of the steam using equipment.

Automatic Air Venting

- The LV6 rapidly vents low temperature air and condensate at system start up, therefore reducing overall start-up time and improving productivity.
- In addition to rapid air venting at start up, air at near-to-steam temperature can be almost completely vented during operation, making the LV6 suitable for batch processes.

Thermodyne Clean Steam Trap Cost Performance P10

Air-jacketed Construction

- An insulating air pocket held above the pressure chamber slows radiant heat loss to reduce no-load cycling, minimizing steam loss and wear.



Tight Sealing

- Precision-ground seating surfaces provide good sealing, lengthening the operation cycle, extending service life.

Excellent Cost Performance

- The P10 achieves high reliability and performance for essential functions while maintaining the simplest, most cost-effective design

Free Float Clean Steam Trap Continuous Discharge

SS5P

Smaller size SS3P also available.
See SS3P data sheet for details.

Continuous Discharge of Condensate

- The self-modulating free float automatically adjusts to the level of condensate allowing continuous discharge. There is no condensate backup or accumulation in the equipment.



High Durability and Long Life

- The free float with simple construction and only one moving part, without levers or hinges, has less failure. Valve wear is distributed across the entire float surface, greatly improving valve service life.

Suitable for Condensate Recovery

- Even with a back pressure of 99% of operating steam pressure, the free float operates without fail. The SS5P is therefore suitable for condensate recovery in closed systems.



LV6 Series



SS5P



P10

LV6 Series



LV6CE/LV6SF



LV6P

Specifications

Model	LV6CE	LV6SF	LV6P
Material	Stainless Steel SUS316L		
Connection	Clamp End / Tube End		
Size (in)	1/2, 3/4, 1		
Maximum Operating Pressure (psig) PMO	85		
Minimum Operating Pressure (psig)	Vacuum		
Maximum Back Pressure	90% of Inlet Pressure		
Maximum Operating Temperature (°F) TMO	329		
Maximum Allowable Pressure (psig) PMA	150		
Maximum Allowable Temperature (°F) TMA	365		
Maximum Discharge Capacity (lb/h)	1700		
Subcooling of Capsule Fill (°F)	Up to 11		
X-element Type (for Clean Steam Traps)	Standard	Free-draining	Polished Free-draining
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

* LV6EP with 0.4 μm Ra electro-polishing is available on request

SS5P



Specifications

Smaller size SS3P also available. See SS3P data sheet for details.

Model	SS5P
Material	Body: Cast Stainless Steel A351 Gr. CF3M Float: Stainless Steel SUS316L
Connection*	Clamp End
Size (in)	1, 1 1/2
Maximum Operating Pressure (psig) PMO	85
Maximum Differential Pressure (psi) ΔPMX	85
Maximum Operating Temperature (°F) TMO	329
Maximum Allowable Pressure (psig) PMA	150
Maximum Allowable Temperature (°F) TMA	365
Maximum Discharge Capacity (lb/h)	1150
Clamp Type	3-Piece Clamp (buff-polished)
Finishing (Internal/External)**	0.8 μm Ra Buff-polished / Bead-blasted and Electro-polished

* Tube end connections available on request ** SS5EP with 0.4 μm Ra electro-polishing is available on request

P10



Specifications

Model	P10
Material	Stainless Steel SUS316L
Connection	Screwed Clamp End
Size (in)	1/2
Maximum Operating Pressure (psig) PMO	150
Minimum Operating Pressure (psig)	Horizontally installed : 3.5 Vertically installed : 6
Maximum Back Pressure	80% of Inlet Pressure
Maximum Operating Temperature (°F) TMO	850
Maximum Allowable Pressure (psig) PMA	300
Maximum Allowable Temperature (°F) TMA	850
Maximum Discharge Capacity (lb/h)	530
Finishing (Internal/External)	Natural Machining / Natural Forged Surface

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.

TLV Stainless Steel Product Series

Steam Traps



SS1NL



SS3N



SS1VA



COS



DR20



VS1C



CKF3M



SF1

Air & Drain Traps

Pressure Reducing Valves

Air Vents

Check Valves

Filters

Contact **TLV** for more information on these and other stainless steel products.



CAUTION 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.

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Manufacturer

ISO 9001/ISO 14001

TLV CO., LTD.

Kakogawa, Japan

is approved by L.RQA Ltd. to ISO 9001/14001

