

TLV[®]

Clean Steam Traps

**LV6 Series
SS3-P / SS5-P**



Designed for Bio and Clean Steam Applications

Clean Steam Trap

LV6 Series

SS3-P/SS5-P

CLE

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 uses SUS316L, and the SS3-P/SS5-P body and cover are made of A351 Gr.CF3M with an SUS316L float.

Prevents Condensate Accumulation

- Smooth, virtually crevice-free interior allows for complete condensate drainage.
- The SS3-P/SS5-P has a small drain hole to prevent condensate pooling.

LV6 Series

SS3-P

Drain Hole

3-piece clamp

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 ISO and Tri-Clamp* standards) is used for connection to piping. Tube end connections are also available.

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



- Uniquely designed free-draining X-element* case with large openings allows for complete fluid drainage and easy cleaning. It is electro-polished for the LV6-P and the optional LV6-EP.

*LV6-CE is equipped with a standard X-element.



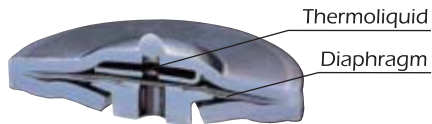
- The SS3-P and SS5-P free floats have an internal 0.8 μ m Ra buff polish. (The optional SS3-EP and SS5-EP have a 0.4 μ m Ra buff and electro-polish [internal and external])

AN 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 6 °C 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.



Free Float Clean Steam Trap Continuous Discharge **SS3-P/SS5-P**

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 SS3-P and SS5-P are therefore suitable for condensate recovery in closed systems.



LV6 Series



● Specifications

Model	LV6-CE	LV6-SF	LV6-P	LV6-EP*
Material	Stainless Steel SUS316L (DIN 1.4404)			
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			
Maximum Discharge Capacity (kg/h)	770			
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		3-piece Clamp	
Finishing (Internal/External)	Natural Machining	0.8 μm Ra / 1.2 μm Ra Fine Machining	0.8 μm Ra / 1.2 μm Ra Buff-polished	0.4 μm Ra Electro-polished

* Option

** Fits to ISO 2852, Tri-Clamp compatible, other standards available. Tri-Clamp is a registered trademark of Tri-Clover Inc.

*** Fits to ISO 1127, other standards available

1 bar = 0.1 MPa

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

SS3-P/ SS5-P



● Specifications

Model	SS3-E ¹⁾	SS3-P	SS3-EP ¹⁾	SS5-P	SS5-EP ¹⁾	
Material	Body: Cast Stainless Steel A351 Gr. CF3M (DIN 1.4435) Float: Stainless Steel SUS316L (DIN 1.4404)					
Connection ²⁾	Clamp End ³⁾					
Size	DN 15, 20			DN 25, 38		
Maximum Operating Pressure (barg) PMO	6					
Maximum Differential Pressure (bar) ΔPMX	6					
Maximum Operating Temperature (°C) TMO	165					
Maximum Discharge Capacity (kg/h)	155			530		
Finishing ⁴⁾	Internal	25 μm Ra Electro-polished	0.8 μm Ra Buff-polished 25 μm Ra Electro-polished	Buff-polished then 0.4 μm Ra Electro-polished	0.8 μm Ra Buff-polished Bead blasted and Electro-polished	Buff-polished then 0.4 μm Ra Electro-polished
	External					

¹⁾ Option ²⁾ Tube end connections for SS5-P/SS5-EP available on request ³⁾ Fits To ISO 2852, Tri-Clamp compatible,

other standards available. Tri-Clamp is a registered trademark of Tri-Clover Inc. ⁴⁾ Treated base surfaces are lost-wax casted

1 bar = 0.1 MPa

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.

Full product details (sizes, pressures, capacities and materials) are included in the individual specification data sheets (SDS).

TLV® Stainless Steel Product Series

Steam Traps		PowerTrap	Pressure Reducing Valves		Separator Filter	Separators
Valves	Flowmeters	Air Vents	Clean Air Vent	Air & Drain Traps	Check Valves	Strainers

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

TLV® INTERNATIONAL, INC.

881 Nagasuna, Noguchi, Kakogawa Hyogo 675-8511, JAPAN
Phone: [81]-(0)79-427-1818
Fax: [81]-(0)79-425-1167
E-mail: tlv-japan@tlv.co.jp

Manufacturer
TLV® CO., LTD.
Kakogawa, Japan
is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001/ISO 14001



(O)

Internet World Wide Web URL <http://www.tlv.com>

Pamphlet U2088 Rev. 9/2012
Specifications subject to change without notice.