

# FREE FLOAT® STEAM TRAP

MODEL SS3-P Clean Steam Trap

### STAINLESS STEEL FREE FLOAT STEAM TRAP FOR PURE AND CLEAN STEAM SYSTEMS

### **Benefits**

Free float steam trap recommended for use in reactors, fermenters and sterilizers in the chemical, pharmaceutical, food and beverage services.

- Virtually crevice-free design with drain hole allows for condensate drainage without pooling, minimizing the possibility of bacteria build-up.
- 2. Internal buff-polishing with an additional interior and exterior electro-polish option to 0.4  $\mu$ m (16 micro-inch) Ra for improved resistance to bacterial growth.
- Self-modulating free float provides continuous, smooth, low-velocity discharge as process loads vary.
- 4. Maintainable design lowers cleaning costs.
- Only one moving part, the free float, prevents concentrated wear and provides long service life.
- Up to 1740 psig hydraulic shock rating ensures excellent durability of the float.



# **Specifications**

Model		SS3-E*	SS3-P	SS3-EP*	
Connection		Clamp End			
Size (in)		1/2 , 3/4			
Maximum Operating Pressure (psig)	PMO	85			
Maximum Differential Pressure (psi) PMX		85			
Minimum Operating Pressure		Vacuum			
Maximum Operating Temperature (°F) TMO		329			
Maximum Allowable Pressure (psig) PMA		150			
Maximum Allowable Temperature (°F) TMA		365			
Clamp type		3-piece (buff-polished)			
Finishing**	Internal	25 μm Ra (1000 micro-inch)	0.8 µm Ra (32 micro-inch) buff-polished	Buff-polished then	
	External	electro-polished	25 μm Ra (1000 micro-inch) electro-polished	electro-polished	

<sup>\*</sup> Option \*\* Treated base surfaces are lost-wax cast

SS3-P is a non-standard product, consult TLV for delivery time required.



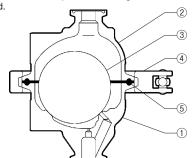
To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

No.	Description	Material	ASTM/AISI	JIS
1	Body	Cast Stainless Steel	A351 Gr.CF3M	_
2	Cover	Cast Stainless Steel	A351 Gr.CF3M	_
3	Float	Stainless Steel	AISI316L*	SUS316L
4	Body Clamp	Cast Stainless Steel	A351 Gr.CF8	_
(5)	Cover Gasket**	High-performance Fluorine Resin	_	_

<sup>\*</sup> Equivalent

<sup>\*\*</sup> Cover gasket is GYLON BIO-PRO; complies with FDA 21 CFR 177. 1550, USP Class VI and EN 1935. GYLON BIO-PRO is a registered trademark of Garlock GmbH.





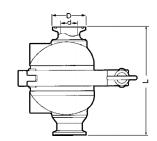


# **Consulting & Engineering Service**

### **Dimensions**

### • SS3-P Clamp End

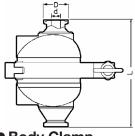
ASME-BPE (Tri-Clamp Compatible)



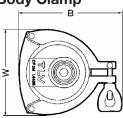
SO 2852 Clam	/ ISO 20	37 Tube
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333-P	Clamp	Ena"				(in)
Size	L	W**	B**	φD	φd	Weight (lb)
1/2	4 1/8	4 1/8	4 <sup>15</sup> / <sub>16</sub>	1(111/32)	3/8(19/32)	2.9 (3.1)
3/4					5/8(3/4)	

\* ASME-BPE (Tri-Clamp compatible) or ISO 2852 Clamp / ISO 2037 Tube

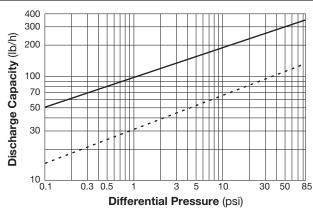






Tri-Clamp is a registered trademark of Alfa Laval Corporate AB.

# **Discharge Capacity**



- : Maximum capacity of SS3-P
- - : Minimum amount of condensate required to prevent steam discharge
- Differential pressure is the difference between the inlet and outlet pressure
  of the trap.
- Capacities are based on continuous discharge of condensate 11 °F below saturated steam temperature.
- Recommended safety factor: at least 1.5.



DO NOT use this product under conditions that exceed maximum differential pressure, as condensate backup will occur!

The SS3-P Clean Steam Trap has a small built-in drain hole to ensure no condensate remains in the trap after operation. Therefore, a minimum condensate load is required during operation to prevent any steam discharge. The chart below shows the maximum steam discharge through the drain hole under no condensate load conditions.

### Max. Steam Discharge Through Drain Hole



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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<sup>\*\*</sup> Approximate dimension

<sup>()</sup> ISO 2852 Clamp / ISO 2037 Tube