



AUTOMATIC AIR VENT

MODEL VS3-P Clean Air Vent

SANITARY AUTOMATIC AIR VENT FOR LIQUID SYSTEMS

Benefits

Float-type mechanical valve recommended for venting air in purified water and other liquid systems such as in the pharmaceutical, biotechnology, and cosmetics industries.

1. Precision-ground float, three-point seating and valve seat with rubber contact ensure superior sealing.
2. Only one moving part, the free float, prevents concentrated wear and provides long service life.
3. Internal buff-polishing with an additional interior and exterior electro-polish option to $0.4\mu\text{m}$ (16 micro-inch) Ra for improved resistance to bacterial growth.
4. Maintainable design lowers cleaning costs.
5. Dual function as air vent and vacuum breaker.
6. Up to 1740 psig hydraulic shock rating ensures excellent durability of the float.



Specifications

Model	VS3-E*	VS3-P	VS3-EP*
Connection	Clamp End		
Size (in)	$\frac{3}{4}$ (ASME-BPE) $\frac{1}{2}$, $\frac{3}{4}$ (ISO)		
Maximum Operating Pressure (psig) PMO	85		
Maximum Differential Pressure (psi) ΔPMX	85		
Maximum Operating Temperature (°F) TMO	212		
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) electro-polished	0.8 μm Ra (32 micro-inch) buff-polished
	External		25 μm Ra (1000 micro-inch) electro-polished
Applicable Fluids***	Water, Other Liquids (Specific gravity must be at least 0.8)		

* Option ** Treated base surfaces are lost-wax cast

VS3-P is a non-standard product, consult TLV for delivery time required.

*** Do not use for toxic, flammable or otherwise hazardous fluids.



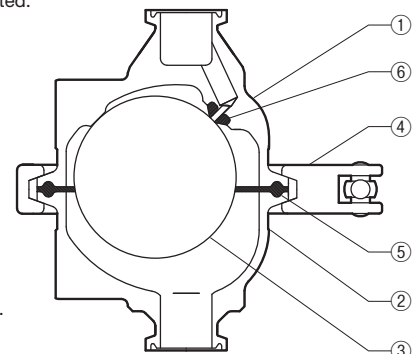
To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

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	—	—
⑥	Valve Seat***	Silicone Rubber	—	—

* Equivalent

** 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.

*** The valve seat affixed to the body using RTV silicone rubber complies with FDA 21 CFR 177. 2600. Material certificates to ISO 10474 2.2 or 3.1B available for major components, contact TLV for details.

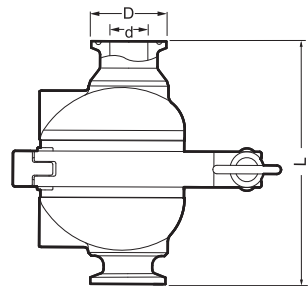
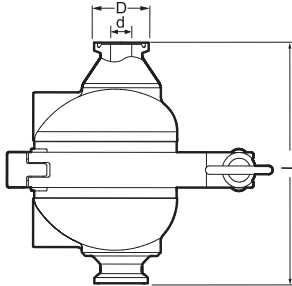


Dimensions

● **VS3-P** Clamp End

ASME-BPE (Tri-Clamp Compatible)

ISO 2852 Clamp / ISO 2037 Tube



VS3-P Clamp End*

(in)

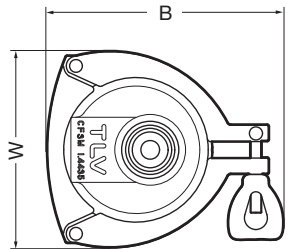
Size	L	B**	W**	φ D	φ d	Weight** (lb)
(1/2)	4 1/8	4 15/16	4 1/8	(1 1/32)	(1 19/32)	2.9 (3.1)
3/4 (3/4)				1(1 1/32)	5/8 (3/4)	

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

** Approximate dimensions

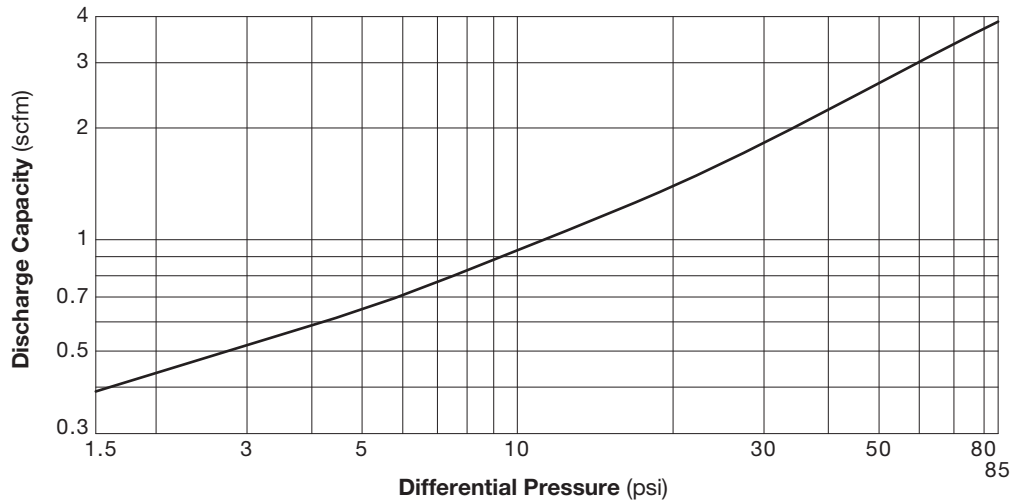
() ISO 2852 Clamp / ISO 2037 Tube

● **Body Clamp**



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

Discharge Capacity



1. Differential pressure is the difference between the inlet and outlet pressure of the air vent.
2. Capacities are equivalent capacities of air at 68 °F under atmospheric pressure.

CAUTION Air vents used under conditions which exceed maximum differential pressure will fail closed.

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.

TLV CORPORATION

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Manufacturer

TLV CO., LTD.

Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001/ISO 14001

