



# AUTOMATIC AIR VENT

## MODEL VS3-P Clean Air Vent

### SANITARY AUTOMATIC AIR VENT FOR LIQUID SYSTEMS

#### Features

**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  $\mu\text{m}$  Ra for improved resistance to bacterial growth.
4. Maintainable design lowers cleaning costs.
5. Dual function as air vent and vacuum breaker.



#### Specifications

Model	VS3-E*	VS3-P	VS3-EP*
Connection	Clamp End		
Size	15, 20 mm (ISO) 3/4" (ASME-BPE)		
Maximum Operating Pressure (MPaG) P <sub>MO</sub>	0.6		
Maximum Differential Pressure (MPa) $\Delta$ P <sub>MX</sub>	0.6		
Maximum Operating Temperature (°C) T <sub>MO</sub>	150		
Clamp type	3-piece (buff-polished)		
Finishing**	Internal	25 $\mu\text{m}$ Ra electro-polished	0.8 $\mu\text{m}$ Ra buff-polished
	External		25 $\mu\text{m}$ Ra electro-polished
Applicable Fluids***	Water, Other Liquids (Specific gravity must be at least 0.8)		

\* Option \*\* Treated base surfaces are lost-wax cast \*\*\* Do not use for toxic, flammable or otherwise hazardous fluids. 1 MPa = 10.197 kg/cm<sup>2</sup>  
 PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 1.0  
 Maximum Allowable Temperature (°C) TMA: 185

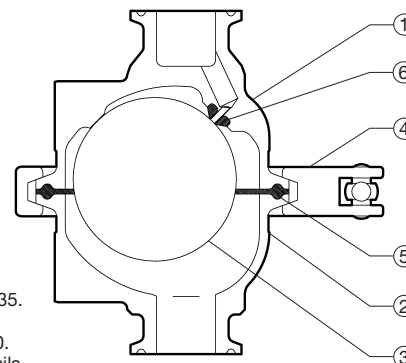
**CAUTION** To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

No.	Description	Material	JIS	ASTM/AISI
①	Body	Cast Stainless Steel	–	A351 Gr.CF3M
②	Cover	Cast Stainless Steel	–	A351 Gr.CF3M
③	Float	Stainless Steel	SUS316L	AISI316L*
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.

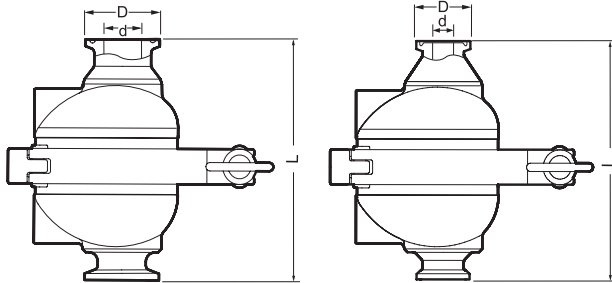
\*\*\* The valve seat affixed to the body using RTV silicone rubber complies with FDA 21 CFR 177. 2600. Material certificates to ISO 10474 2.2 or 3.1B available for major components, contact TLV for details.



**Dimensions**

● **VS3-P** Clamp End

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



**VS3-P** Clamp End\*

(mm)

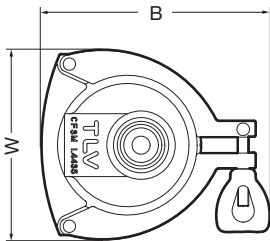
Size	L	W**	B**	φD	φd	Weight (kg)
15	105	105	125	34	15.2	1.4
20 (3/4")				34 (25)	19.3 (15.75)	1.4 (1.3)

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

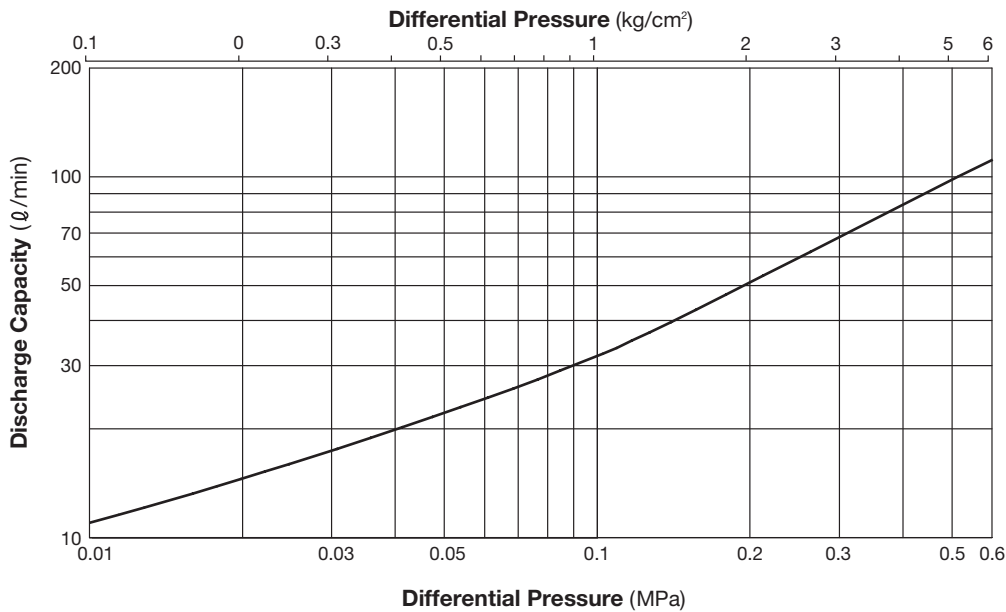
\*\* Approximate dimensions

() ASME-BPE (Tri-Clamp compatible)

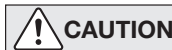
● **Body Clamp**



**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 20 °C under atmospheric pressure.



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

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

