

RAPID INITIAL AIR VENT

MODEL VA

RAPID INITIAL AIR VENT FOR WATER SYSTEMS

Features

Float-type mechanical valve for rapidly venting air from water piping systems at start-up for moderate to hot water.

- 1. Large orifice can vent large volumes of initial air for quick system start-up.
- 2. Combination of precision-ground float and valve seat with rubber contact assures seal tightness when vent is closed.
- 3. Only one moving part, the free float, eliminates concentrated wear and provides long maintenance-free service life.
- 4. Facilitates drainage of the system by introducing air when the system has to be drained.
- 5. Dual function as a rapid initial air vent and a vacuum breaker.



Specifications

Model			VA1	VA3	VA4	VA5	
Connection	Inlet		Flanged				
	Outlet		Screwed		Flanged		
Size (mm)	Inlet		50	80	100	150	
	Outlet		20	32	65	100	
Maximum Operating Pressure (MPaG) PMO			1.0				
Minimum Operating Pressure (MPaG)			0.01				
Maximum Operating Temperature (°C) TMO			100				
Applicable Fluid*			Water				

* Do not use for toxic, flammable or otherwise hazardous fluids.
PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS):Maximum Allowable Pressure (MPaG) PMA: 1.0

1 MPa = 10.197 kg/cm²

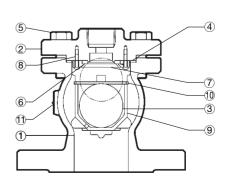
Maximum Allowable Pressure (MPAC) PMA: 1.0

Maximum Allowable Temperature (°C) TMA: 150



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 Iron	FC250	A126 CI.B	
2	Cover		Cast Iron	FC250	A126 CI.B	
3	Float		Stainless Steel	ss Steel SUS316L		
4	Cover Gasket		Fiber-Rubber Compound	Rubber Compound —		
<u>(5)</u>	Cover Bolt		Carbon Steel	SS400	A307 Gr.B	
6	Valve Seat		Nitrile Rubber	NBR	D2000BF	
(7)	Valve Seat Retainer	VA1	Brass	C3604	B16 C36000	
		VA3-5	Bronze	CAC407	B584 C92200	
8	Set Screw		Brass	C3604	B16 C36000	
9	Float Guide		Bronze	CAC407	B584 C92200	
10	Snap Ring		Stainless Steel	SUS304	AISI304	
11)	Nameplate		Stainless Steel	SUS304	AISI304	



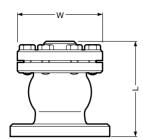


Consulting & Engineering Service

Dimensions

● VA1 ● VA3

Flanged / Screwed



VA4 VA5

Flanged / Flanged



VA Flanged / Screwed, Flanged / Flanged

(mm)

Model	Size		ASME	L E Class	φW	Weight*
	Inlet	Outlet	125FF	(150RF)	,	(kg)
VA1	50	20	126	130	110	5.1
VA3	80	32	170	174	145	9.5
VA4	100	65	297	301	235	34
VA5	150	100	447	447	335	72

⁽⁾ No ASME standard exists for cast iron; machined to fit steel flanges Class 125 FF can connect to 150 RF

Discharge Capacity

Differential Pressure (kg/cm²) 0.1 50000 40000 30000 Discharge Capacity ((/min) 20000 VA4 VA3 10000 6000 VA1 4000 2000 1000 800 600 500 0.01 0.04 0.08 0.1 0.8 1.0 Differential Pressure (MPa)

- 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.



Once the valve closes after discharging initial air, it will not open again, even if air accumulates inside the product, until internal pressure drops to near atmospheric pressure.

Manufacturer

Kakogawa, Japan roved by LRQA Ltd. to ISO 9001/14001





Screwed outlet connections are Rc(PT)

Other standards available, but length and weight may vary

^{*} Weight is for Class 125 FF