

## AIR VALVE



### SERIES - ARV 01

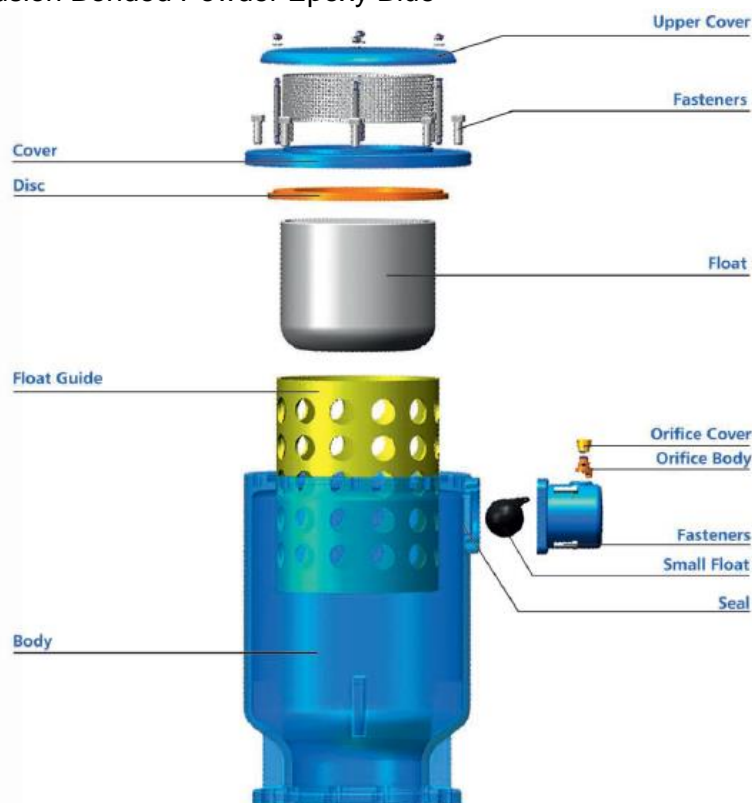


## Air Valves Double Chamber / single, double and triple function

**Size:** DN 40 up to DN 500

**Pressure rating:** PN 10 u to PN 40

**Coating:** Electrostatic Fusion Bonded Powder Epoxy Blue



Parts	Main Material	Optional Material
Body Cover Upper Cover	Ductile Iron	Steel Stainless Steel Carbon Nickel Aluminum Bronze
Floats	Foamed Polypropylene (DN40-150) Polyethylene (DN200-500) (Full Material, Not Hollow Inside)	SS 304 SS 316 NAB
Float Guide	PVC	Nylon (Polyamide), SS 304, SS 316
Disc	Bronze	Brass, SS 304, SS 316, NAB
Orifce	SS 304	Bronze, SS 316
Seals	EPDM	NBR
Screws	8:8 (Galv.)	SS 304, SS 316
NOTES	Different Flange Drillings are available such as ISO, EN, and ANSI etc. Standard Operating Temperature is -100C to +800C. All RAL Colors are available. Potable Water Certified Coating is available	



## Air Valves single double Chamber and triple function

### APPLICATION

Double Chamber Air Release and Vacuum Valves are designed to perform three functions:

1. The venting of large volumes of air on the start-up of the system, while pipelines are being drained.
2. The intake of large volumes of air on shut-off of the system, while pipelines are being drained.
3. The discharge of pressurized air pockets during the operation.

### OPERATION

1. System is turned-on by a valve opening or a pump start:

- a) Water moves along the pipeline, pushing air.
- b) Air is vented through the large chamber.
- c) Water flows inside the air valve, causing the float to rise and seal the outlet.

2. During the operation, pressurized air pockets accumulate in the system:

- a) Air pockets enter the valve and cause the float in the small chamber to drop.
- b) Air is vented through the small orifice.
- c) Water flows inside the small chamber, causing the float to rise and seal the outlet

3. System is turned-off by a valve closing, pump shut-off or by an electricity failure:

- a) Water drains and the level of water in the pipeline drops, causing vacuum inside the system.
- b) The float drops and opens the large chamber.
- c) Air is let in the system.

### NOTE

Due to superior float design, constructed from a special material, it has advanced sealing performance in low pressures. It can provide drip tight sealing even in 0.2 bar pressure. Therefore, you can always rely on air valves even in low operating pressure lines.

Double Chamber Air Release and Vacuum Valves are used to prevent pipeline bursts, as a result of air intake/discharge failure in the startup and shut-off of the system AND during the operation.

These valves consist of a body which holds two floats in different chambers, that are positioned at a predetermined height.

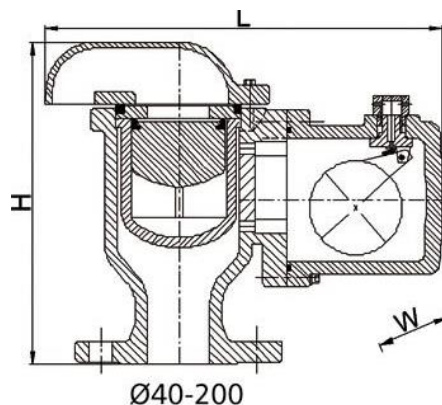
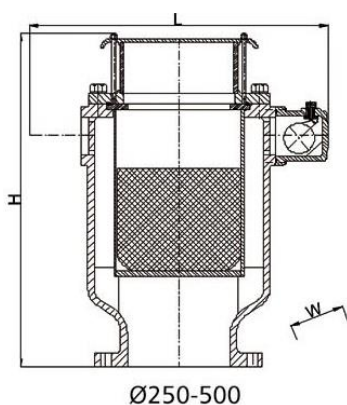
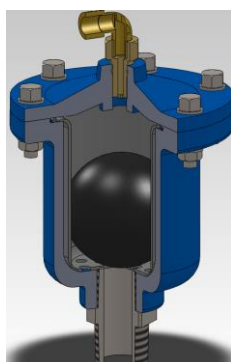
The main float is guided by a ribbed cage when there is a change in the elevation of water.

As a result of the aerokinetic design of the valve, the float remains completely stable under air intake/discharge, preventing premature closing of the valve.

Only when there is a rise in the water level, float rises and closes the valve, and when the water level drops, the float drops, enabling the intake of large volumes of air to the system.

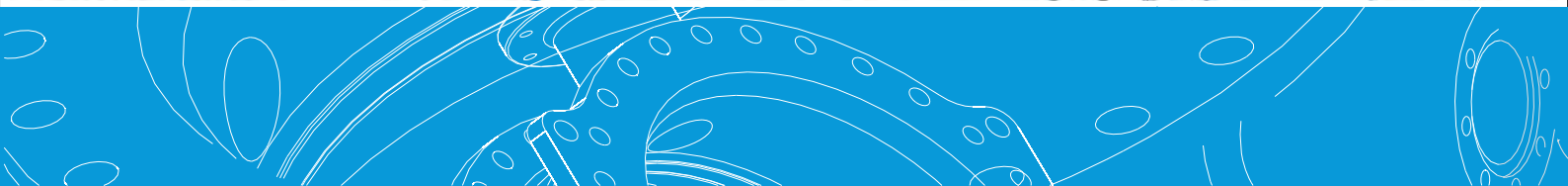
The second float is attached by a pin for acting quickly to sudden water level changes. Therefore, it lets In / out air, while the system is operating. Because of its unique design, Air Valves have intake/discharge capacities greater than its allies, suppressing competition.

## Air Valves Double Chamber /triple function



### Dimensions:

		DIMENSIONS (mm)													
DN		40	50	60	65	80	100	125	150	200	250	300	350	400	500
H		255	260	260	260	260	320	320	320	450	810	975	1065	1220	1525
W	<b>PN 10</b>	150	165	175	185	200	220	250	285	340	395	525	615	700	880
	<b>PN 16</b>	150	165	175	185	200	220	250	285	340	405	525	615	700	880
	<b>PN 25</b>	150	165	175	185	200	235	270	300	360	425	525	615	700	880
	<b>PN 40</b>	150	165	175	185	200	235	270	300	375	450	525	615	700	880
L		325	325	325	325	325	370	370	370	370	580	700	880	910	1135
	<b>PN 10</b>	17	17	19	20,1	20,4	31,2	32	34	64	181	195	420	835	1035
Weight (Kg)	<b>PN 16</b>	17	17	19	20,1	20,4	31,2	32	34	64	181	200	425	845	1050
	<b>PN 25</b>	17	17	19,5	21	22	34	34,5	36,5	67	185	205	432	-----	-----
	<b>PN 40</b>	17	17	19,5	21	22	34	34,5	36,5	71	190	210	440	-----	-----



**Dembla**

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