

Experience

We offer over 50 years of experience providing a full line of air valves up to 20 inch and vacuum breakers up to 42 inch in size. The Air Release, Air/Vacuum and Combination Air Valves are manufactured in accordance to the rigorous industry requirements given in American Waterworks Association (AWWA) Standard C512. The standard was developed and based on decades of successful applications of air valves in our industry. AWWA Air Valves feature 316 stainless steel trim, full size ports, ANSI threaded or flanged connections and stringent testing. From the float material to the shape of the body, Air Valves are designed for optimum performance. manufactures air valves in a wide range of materials and pressure ratings with many accessories including Regulated-Exhaust Devices, Dual Port Throttling Devices, Isolation Valves, Screened Hoods and Backwash Accessories. also provides web-based software to locate, select and size air valves for pipelines and force mains.

Type 316 Stainless Steel Trim

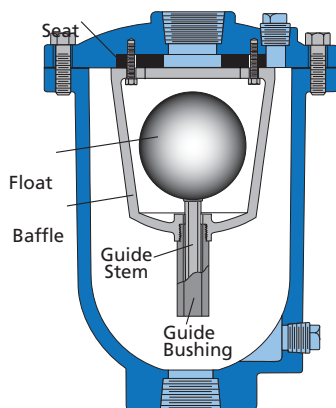
Type 316 stainless steel is the standard for all internal components in Air Valves. Type 316 stainless steel provides the greatest protection from aggressive waters and hydrogen sulfide exposure in wastewater applications.

Unconditionally Guaranteed Floats

Floats are unconditionally guaranteed for the life of the valve from corrosion, collapse or leakage. has such confidence in the design and manufacturing of our floats that we are able to provide this unconditional guarantee.

Guided Floats

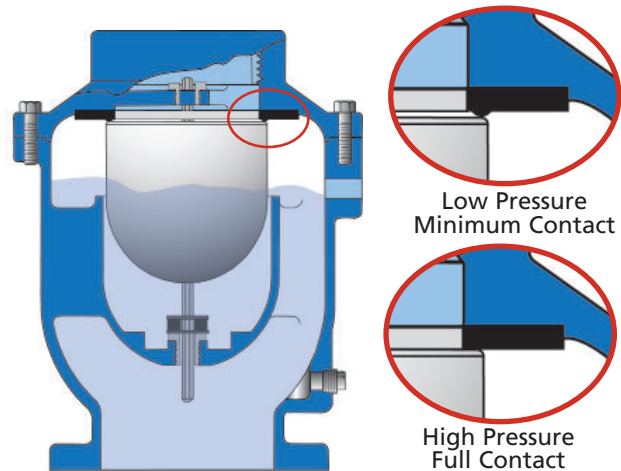
Providing a quality float is not enough to ensure a reliable seal every time. When entering the seat, a damaged or off-center float will prevent a valve from sealing tight. High air velocities in air valves can cause unguided floats to violently strike the sides of the valve body. air/vacuum floats are guided with hexagonal stems in round bushings to prevent the build-up of debris or scale. Guiding assures



that the float approaches the center of the seat every time to provide a positive drop tight seal.

Resilient Seats

All valves incorporate a resilient seat or orifice button which mates with a 316 stainless steel float or seat for positive drip tight seating. The elastomers are specially formulated for water and wastewater service and have been NSF 61 certified. Air Release Valves have a synthetic sealing button mounted to the float linkage mechanism. On Air/Vacuum and Combination Air Valves, the stainless steel float closes against the resilient seat mechanically retained in a cover register. The seats contain raised sealing beads that provide positive shutoff from the lowest system pressure to the valve's rated working pressure.



Pressure Sensitive Seating with Raised Sealing Beads

Full Size Flow Area

Air/Vacuum and Combination Air Valves are equipped with full and equal size inlets and outlets in accordance with AWWA C512. Some air valve manufacturers use common covers for different size air valves resulting in undersized outlets and reduced flow. Standard industry calculations assume a full port size so the air valve should provide the same. You can be assured that the inlets and outlets of Val-Matic's Air Valves are equal to or larger than the area of the nominal valve size. Finally, all Combination Air Valves with float guides in the outlet have expanded flow areas around the guide spokes to provide full flow area through the valve.

Certifications

Air Valves for water service are NSF 61 and 372 certified and marked for use in drinking water applications. All Air Valves meet AWWA C512 requirements.

Wastewater Air Valve Features & Benefits

Stainless Steel Body

Seamless stainless steel bodies are lightweight and available for extreme service such as hydrogen sulfide, industrial chemicals or corrosive environments. ASTM A351, Grade CF8M stainless steel bodies provide superior corrosion resistance in full compliance with AWWA C512.

Non-Stick Coatings

Special interior coatings are available to minimize the buildup of sewage on the inside of the valve. Fusion Bonded Epoxy is a baked-on, glass-like coating that reduces maintenance and prevents corrosion of the valve. Non-stick coatings are important when force mains contain grease that tends to collect in valves and pipes.

Non-Clog Design for Reduced Maintenance

Wastewater Air Valves are specially designed for grit and sewage service without the need for backwashing when combined with non-stick coatings. The bodies are extended in length to prevent solid material from reaching the operating mechanism. The bottom of the body is sloped toward the outlet to prevent clogging. Val-Matic provides a minimum 2 inch inlet size and a 2 inch cleanout connection on all wastewater valves to facilitate the passage of solids.

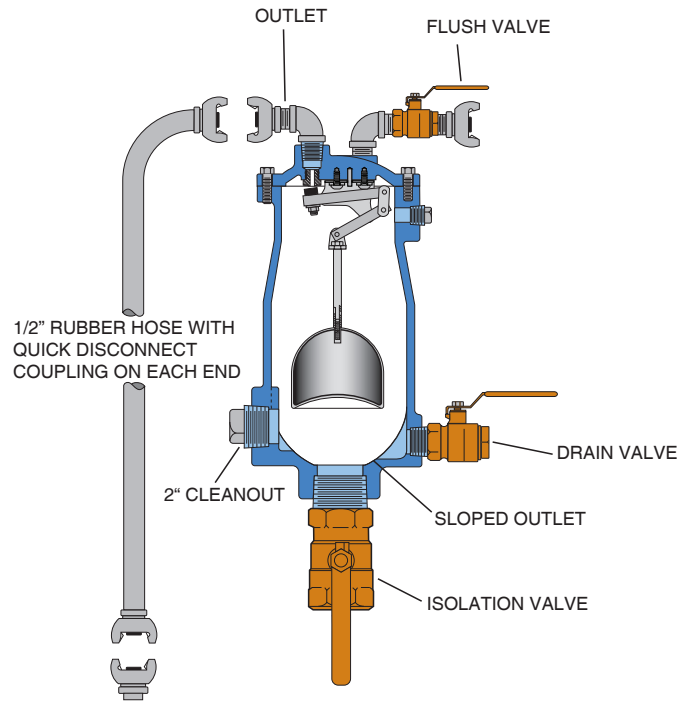
Wastewater Floats

As with all Val-Matic Air Valves, the float and operating mechanism are 316 stainless steel for long life in the harshest wastewater applications. Additionally, the floats are equipped with a concave or skirted shaped bottom to accelerate the closure of the float to reduce leakage and clogging of the valve.

Severe Service Backwashing

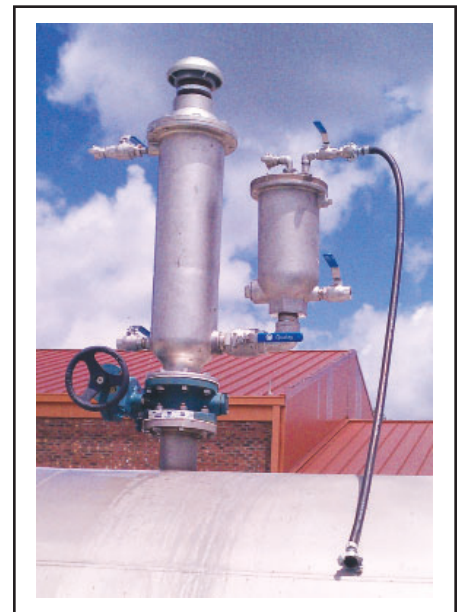
When systems are heavy in grease and solids, backwashing of Wastewater Air Valves may become a necessary maintenance process. The key is to reduce the frequency of backwashing by designing the valve to handle conditions such as wastewater containing solids and grease. As indicated in the above features, Val-Matic has done that with the extended and bell shaped body, the sensitivity float and the availability of non-stick Fusion Bonded Epoxy. Periodic maintenance may still be required on severe applications, therefore, all Wastewater Air Valves can be furnished with an accessory kit which includes a shutoff valve to isolate the air valves from the line, flush and drain valves, and a hose for connecting to a clean water supply.

Backwashing is as simple as: 1) closing the isolation valve, 2) opening the drain valve, and 3) sending clean water through the flush valve and outlet for five minutes.



Air Valve with Severe Service Backwash Accessories

For those installations where backwashing on site is not practical or desirable, a valve rotation program can be established. The valve to be serviced is exchanged with a spare valve and taken back to the shop for cleaning. It is then ready to replace the next valve scheduled for maintenance. The valve rotation program also provides the benefit of a backup valve in the unlikely event one should ever fail.



Stainless Steel Dual Body Wastewater Combination Air Valve



Operational Highlights:

- Maintains system flow efficiency
- Releases unwanted air pockets during system operation
- Protects system against air related surges
- Fully complies with AWWA C512

Product Features:

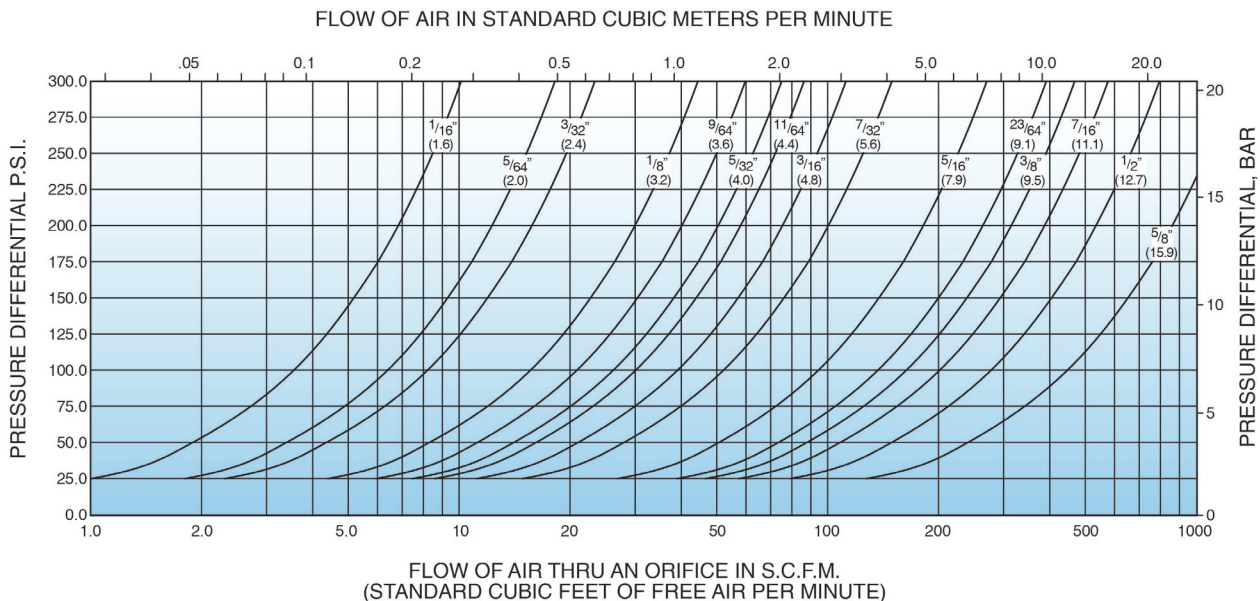
- Unconditionally guaranteed stainless steel floats
- Stainless steel 316 internal trim
- Resilient seating for positive shutoff
- Performance proven for over 50 years
- Non-clog design minimizes need for backwashing

Optional Accessories:

- Vacuum check (prevents inflow of air)
- Outlet hood with screen (prevents debris from entering valves)
- Ball and plug isolation valves (allows valve maintenance)
- Inflow Preventer on outlet (stops flood water and resulting contamination from entering pipeline)
- Backwash kit (for severe wastewater applications)

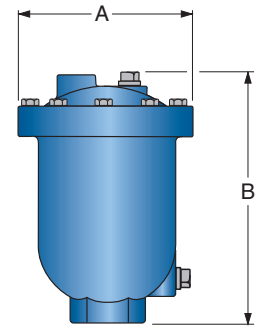
MATERIALS OF CONSTRUCTION		
COMPONENT	STANDARD	OPTIONAL
Body and Cover	Cast Iron ASTM A126 Class B Ductile Iron ASTM A536 Grade 65-45-12	Carbon Steel ASTM A216 Grade WCB Stainless Steel ASTM A351 Grade CF8M
Float and Trim	Type 316 Stainless Steel	—————
Seal	Buna-N	EPDM or Viton
Coating	Universal Acrylic Primer (external)	Non-Stick Fusion Bonded Epoxy (internal & external)

VENTING CAPACITY OF AIR RELEASE VALVE ORIFICES

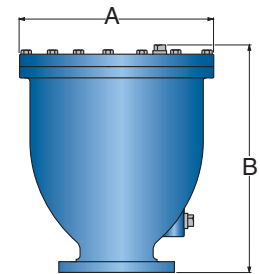


WATER AIR RELEASE VALVES						
Inlet Size	Outlet Size	Model Number*	CWP PSI	Orifice Size	Dimensions (Inches)	
					A	B
1/2" NPT	1/2" NPT	15A†	175	1/16"	4.75	5.25
3/4" NPT	1/2" NPT	15A.2†	175	1/16"	4.75	5.25
1" NPT	1/2" NPT	15A.3†	175	1/16"	4.75	5.25
1" NPT	1/2" NPT	22.3†	175	3/32"	5.13	6.31
1/2" - 3/4" NPT	1/2" NPT	22.4†	175	3/32"	5.13	6.31
1/2" NPT	1/2" NPT	22.7†	300	1/16"	5.13	6.31
3/4" - 1" NPT	1/2" NPT	22.9	300	1/16"	5.13	6.31
3/4" - 1" NPT	1/2" NPT	25.5	150	1/8"	6.13	7.00
3/4" - 1" NPT	1/2" NPT	25.6	300	3/32"	6.13	7.00
1" NPT	1/2" NPT	38	150	3/16"	7.00	10.00
2" NPT	1/2" NPT	38.2	150	3/16"	7.00	10.00
1" NPT	1/2" NPT	38HP	500	1/8"	7.00	10.00
2" NPT	1/2" NPT	38HP.2	500	1/8"	7.00	10.00
1" NPT	1/2" NPT	38.5	300	5/32"	7.00	10.00
2" NPT	1/2" NPT	38.6	300	5/32"	7.00	10.00
2" NPT	1" NPT	45	150	23/64"	9.50	12.25
3" NPT	1" NPT	45.2	150	23/64"	9.50	12.25
2" NPT	1" NPT	45HP	400	3/16"	9.50	12.25
3" NPT	1" NPT	45HP.2	400	23/64"	9.50	12.25
2" NPT	1" NPT	45.5	300	7/32"	9.50	12.25
3" NPT	1" NPT	45.6	300	7/32"	9.50	12.25
2" NPT	1" NPT	50	500	7/32"	10.88	13.06
2" NPT	1" NPT	50HP	1000	1/8"	10.88	13.06
6" 125lb Flg	1" NPT	61	150	1"	19.63	22.06

*NSF 61 & 372 Certified †UL Listed/FM Approved

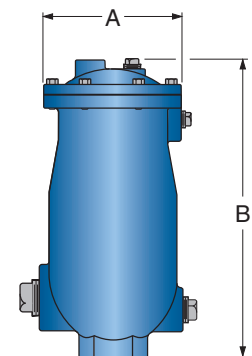


15A - 50HP
Air Release Valve



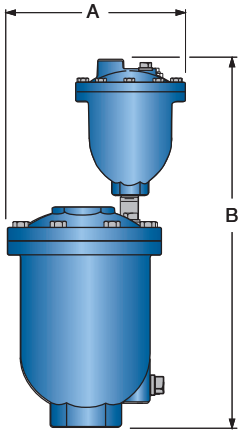
61
Air Release Valve

WASTEWATER AIR RELEASE VALVES						
Inlet Size	Outlet Size	Model Number	CWP PSI	Orifice Size	Dimensions (Inches)	
					A	B
2" NPT	1/2" NPT	48A	150	3/16"	7.00	15.31
3" NPT	1/2" NPT	48A.2	150	3/16"	7.00	15.31
2" NPT	1/2" NPT	48A.4	75	5/16"	7.00	15.31
3" NPT	1/2" NPT	48A.5	75	5/16"	7.00	15.31
4" NPT	1/2" NPT	48A.6	75	5/16"	7.00	15.31
2" NPT	1" NPT	49A	150	7/16"	9.50	17.56
3" NPT	1" NPT	49A.2	150	7/16"	9.50	17.56
2" NPT	1" NPT	49A.4	75	1/2"	9.50	17.56
3" NPT	1" NPT	49A.5	75	1/2"	9.50	17.56
4" NPT	1" NPT	49A.6	75	1/2"	9.50	17.56



48A - 49A.6
Wastewater Air Release Valves

Combination Air Valves



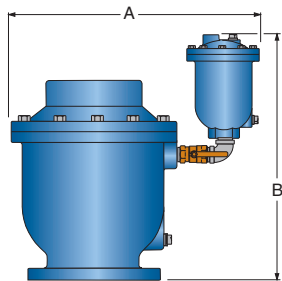
WATER COMBINATION AIR VALVES (DUAL BODY)						
Inlet Size	Outlet Size	Model Number*	CWP PSI	Orifice Size	Dimensions (Inches)	
					A	B
1" NPT	1" NPT	101S/22.9	300	1/16"	7.81	15.75
2" NPT	2" NPT	102S/22.9	300	1/16"	10.25	18.00
3" NPT	3" NPT	103S/22.9	300	1/16"	10.25	18.00

*NSF 61 & 372 Certified

101S/22.9 - 103S/22.9
Dual Body Combination
Air Valves

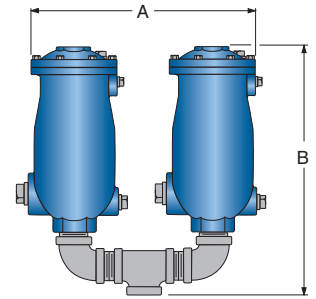
WATER COMBINATION AIR VALVES (DUAL BODY)						
Inlet Size	Outlet Size Air/Vacuum	Model Number*	CWP PSI	Orifice Size Air Release	Dimensions (Inches)	
					A	B
4" Flg	4" NPT	104S/38 154S/38.5	125lb - 150 250lb - 300	3/16" 5/32"	19.50	21.50
6" Flg	6" NPT	106S/38 156S/38.5	125lb - 150 250lb - 300	3/16" 5/32"	22.00	23.25
8" Flg	8" NPT	108S/38 158S/38.5	125lb - 150 250lb - 300	3/16" 5/32"	25.25	25.25
8" Flg	8" NPT	108S/45 158S/45.5	125lb - 150 250lb - 300	23/64" 7/32"	29.19	28.69
10" Flg	10" Flg	110F/38 160F/38.5	125lb - 150 250lb - 300	3/16" 5/32"	28.19	27.19
10" Flg	10" Flg	110F/45 160F/45.5	125lb - 150 250lb - 300	23/64" 7/32"	32.19	30.44
12" Flg	12" Flg	112F/38 162F/38.5	125lb - 150 250lb - 300	3/16" 5/32"	31.91	30.44
12" Flg	12" Flg	112F/45 162F/45.5	125lb - 150 250lb - 300	23/64" 7/32"	35.94	33.69
14" Flg	14" Flg	114F/38 164F/38.5	125lb - 150 250lb - 300	3/16" 5/32"	34.91	30.37
14" Flg	14" Flg	114F/45 164F/45.5	125lb - 150 250lb - 300	23/64" 7/32"	38.94	33.63
16" Flg	16" Flg	116F/38 166F/38.5	125lb - 150 250lb - 300	3/16" 5/32"	38.41	32.69
16" Flg	16" Flg	116F/45 166F/45.5	125lb - 150 250lb - 300	23/64" 7/32"	42.44	35.94

*NSF 61 & 372 Certified



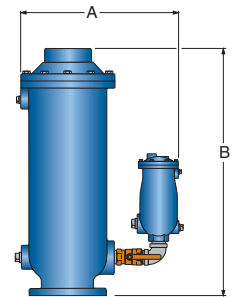
104S/38 - 166F/45.5
Dual Body Combination
Air Valves

WASTEWATER COMBINATION AIR VALVES (DUAL BODY)						
Inlet Size	Outlet Size	Model Number	CWP PSI	Orifice Size	Dimensions (Inches)	
					A	B
2" NPT	1" NPT	48A/301A	150	3/16"	25.80	20.20
2" NPT	1" NPT	49A/301A	150	7/16"	27.00	22.50
2" NPT	2" NPT	48A/302A	150	3/16"	27.00	20.20
2" NPT	2" NPT	49A/302A	150	7/16"	28.30	22.50
3" NPT	3" NPT	48A/303A	150	3/16"	34.00	21.00
3" NPT	3" NPT	49A/303A	150	7/16"	35.20	22.50



**48A/301A - 49A/303A
Dual Body Wastewater
Combination Air Valves**

WASTEWATER COMBINATION AIR VALVES (DUAL BODY)						
Inlet Size	Outlet Size	Model Number	CWP PSI	Orifice Size	Dimensions (Inches)	
					A	B
4" Flg	4" NPT	48A/304	150	3/16"	24.90	36.63
4" Flg	4" NPT	49A/304	150	7/16"	24.30	36.60
6" Flg	6" NPT	48A/306	150	3/16"	25.60	36.38
6" Flg	6" NPT	49A/306	150	7/16"	26.80	36.40
8" Flg	8" NPT	48A/308	150	3/16"	28.60	40.13
8" Flg	8" NPT	49A/308	150	7/16"	29.90	40.10



**48A/304 - 49A/308
Dual Body Wastewater
Combination Air Valves**



**Single Body Wastewater Combination
Air Valve**

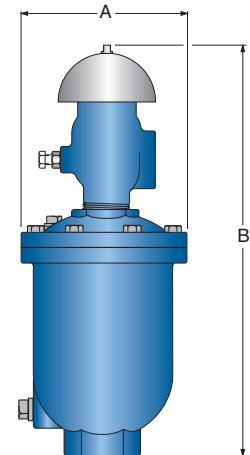


Dual Body Combination Air Valve

Air/Vacuum Valves for Vertical Pumps

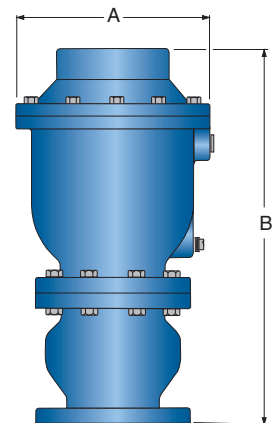
AIR/VACUUM VALVE FOR VERTICAL PUMPS WITH DUAL PORT THROTTLING DEVICE					
Inlet Size	Outlet Size	Model Number	CWP PSI	Dimensions (Inches)	
				A	B
1/2" NPT	1/2" NPT	100ST	300	6.13	11.75
1" NPT	1" NPT	101ST*	300	7.00	14.75
2" NPT	2" NPT	102ST*	300	9.50	20.13
3" NPT	3" NPT	103ST*	300	9.50	22.13

*UL Listed for fire pump service



100ST - 103ST
Air Valves with
Dual Port Throttling Device

AIR/VACUUM VALVE FOR VERTICAL PUMPS WITH REGULATED-EXHAUST DEVICE					
Inlet Size	Outlet Size	Model Number	CWP PSI	Dimensions (Inches)	
				A	B
4" 125lb Flg	4" NPT	104SSA.1	150	11.50	23.63
4" 250lb Flg	4" NPT	154SSA.1	300	11.50	23.63
6" 125lb Flg	6" NPT	106SSA.1	150	14.00	28.50
6" 250lb Flg	6" NPT	156SSA.1	300	14.00	28.50
8" 125lb Flg	8" NPT	108SSA.1	150	17.25	34.63
8" 250lb Flg	8" NPT	158SSA.1	300	17.25	34.63
10" 125lb Flg	10" 125lb Flg	110FSSA.1	150	20.30	40.10
10" 250lb Flg	10" 125lb Flg	160FSSA.1	300	20.30	40.10
12" 125lb Flg	12" 125lb Flg	112FSSA.1	150	24.00	45.10
12" 250lb Flg	12" 125lb Flg	162FSSA.1	300	24.00	45.10



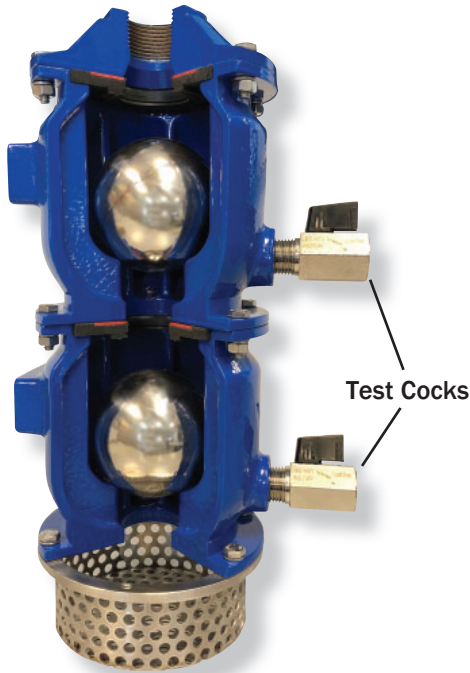
104SSA.1 - 162FSSA.1
Air Valves with
Regulated-Exhaust Device



Air/Vacuum Valve with Dual Port Throttling Device



Air/Vacuum Valve with Dual Port Throttling Device for Vertical Turbine Pumps



Operational Highlights:

- Piped to an outlet for an air valve
- Protects potable water systems from flooding and malicious contamination
- Field testing capability
- Low pressure shut off
- Dual float checks for added protection
- Fully complies with AWWA C514 and the Ten State Standards for Water Works

Product Features:

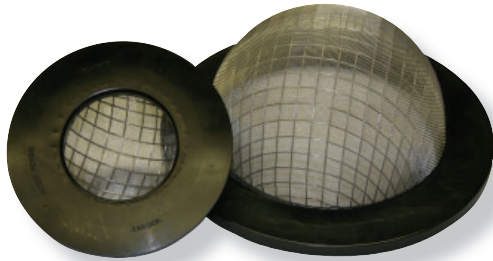
- Cross contamination control
- Adaptable to existing air valve installations
- Dual chamber design with upper chamber as a back up
- Dual float checks designed to assure rapid closure upon the entry of fluid into the chamber.
- Patented resilient seats are specially designed and formulated to assure drop tight closure at low pressures.
- Test ports allow for independent testing of both chambers
- Basket screen prevents debris from entering
- Port sized cover to allow for full venting capacity of air valve or vent

Optional Accessories:

- Field test kit
- Wall bracket

MATERIALS OF CONSTRUCTION	
COMPONENT	STANDARD
Upper & Lower Chambers, Cover	Ductile Iron, ASTM A536 Grade 65-45-12
Upper & Lower Check Floats	Stainless Steel, Type 316
Check Seat	Resilient
Basket Screen	Stainless Steel, Type 304
Coatings	Fusion Bonded Epoxy (internal/External)





Operational Highlights:

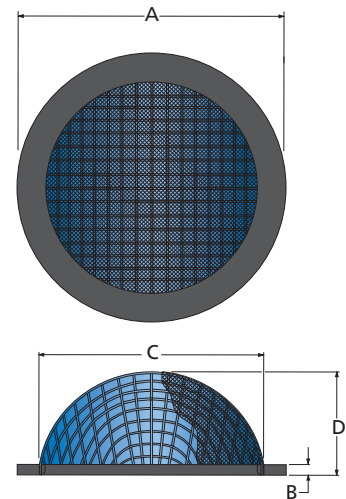
- Installed in vault or reservoir vent pipes
- Helps prevent bugs, birds and small animals from nesting in vent pipes
- Helps prevent malicious introduction of liquids and other matter
- Provides 100% flow area
- 100% corrosion resistant construction

Product Features:

- Flow area equal to 100% of pipe area
- Adapts to existing vent pipes
- Wafer design minimizes space requirements
- 24 mesh screen complies with USEPA and Ten State Standard requirements for tank vent lines

MATERIALS OF CONSTRUCTION	
COMPONENT	STANDARD
Body	45 Shore D PVC
Screen, 24 Mesh	Stainless Steel, Type 304
Cage, 2 Mesh	Stainless Steel, Type 304

Size	Model Number	Dimensions (Inches)			
		A	B	C	D
4	1604	6.75	0.375	3.76	2.37
6	1606	8.63	0.375	5.75	3.37
8	1608	10.88	0.375	7.77	4.37
12	1612	16.00	0.375	11.75	6.00





KASKO DEMİRÇELİK MAKİNE VE İNŞAAT SANAYİ TİCARET LİMİTED ŞİRKETİ

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