

Automatic Air Valves

For water, sewage, and wastewater







Air Valves

The safe and efficient operation of a liquid piping system is contingent on the continuous removal of air and wastewater gases from that system. That's exactly what GA Industries Air Valves are designed to do: automatically release air and/or wastewater gases during the filling and normal operation of water and wastewater piping systems, and admit air into the system during draining to minimize vacuum formation.

All GA Industries Air Valves meet the requirements of American Water Works Association (AWWA) Standard C512 for use in both water and wastewater systems.

See our website for technical data sheets about each product and ordering instructions.

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A 6" GA Industries Figure 931-D Slow Closing Air and Vacuum Valve is shown here installed on the discharge of a vertical turbine pump.

Air Release Valves

Sometimes called "pressure air" or "small orifice" air valves, GA Industries air release valves are installed at high points in the system to automatically release air and sewer gases that collect in the valve while the system is in operation, increasing efficiency and reducing pumping costs.

For Water



Figure 905 Minimatic™ Simple Lever

- Compact and lightweight
- 1/2", 3/4" or 1" NPT
- Iron body, 316SS float and trim, Buna-N seat
- Standard 3/32" orifice 150 PSI max working pressure
- High pressure 1/16" orifice 200 PSI max working pressure



Figure 912 High Capacity Simple Lever

- Releases air up to 2X faster than Figure 905
- 1/2", 3/4" or 1" NPT
- Iron body, 316SS float and trim, Buna-N seat
- Standard 1/8" orifice 150 PSI max working pressure
- High pressure 3/32" orifice 300 PSI max working pressure



Figure 920 Compound

- Releases air up to 2X faster than Figure 912
- 1" or 2" NPT
- Iron body, 316SS float and trim, Buna-N seat
- Standard 3/16" orifice 150
 PSI max working pressure
- High pressure 1/8" orifice 300 PSI max working pressure



Figure 922 High Capacity Compound Lever

- Releases air up to 4X faster than Figure 920
- 2" or 3" NPT
- Iron body, 316SS float and trim, Buna-N seat
- Standard 3/8" orifice 150 PSI max working pressure
- High pressure 7/32" orifice 300 PSI max working pressure

For Sewage and Wastewater



Figure 925 Standard Body

- 2" or 3" NPT elongated body, minimizes fouling
- Iron body, 316SS float and trim, Buna-N seat
- Optional backflush attachments
- Standard 3/16" orifice 150 PSI max working pressure
- Low pressure 5/16" orifice 75 PSI max working pressure



Figure 929 Short Body

- 2" or 3" NPT short body, ideal for shallow cover installations
- Iron body, 316SS float and trim, Buna-N seat
- Optional backflush attachments (shown)
- Standard 3/16" orifice 150 PSI max working pressure
- Low pressure 5/16" orifice 75 PSI max working pressure



Figure 927 High Capacity

- Releases air up to 7X faster than Figure 925
- 2" or 3" NPT or 4" FlangedIron body, 316SS float and
- Iron body, 316SS float and trim, Buna-N seat
- Optional backflush attachmentsStandard 7/16" orifice 150
- PSI max working pressure
- Low pressure 1/2" orifice 75 PSI max working pressure



Durovent[™] Stainless Steel Air Release Valves

- Ideal when installed in corrosive environments
- 2" or 3" NPT standard or short body
- 316SS body, cover, float and trim, Buna-N seat
- Optional backflush attachments

Air and Vacuum Valves

Also known as "large orifice air valves," air and vacuum valves are typically installed at high points in the pipeline to allow air to be exhausted as liquid enters to ensure the system fills completely. They are held closed by system pressure but automatically re-open to admit air when the pipeline is drained to minimize vacuum formation and prevent pipeline damage.



Figure 930 Standard

- Kinetic designed not to blow shut
- 1/2" 3" NPT, 3" 12" flanged
- Iron body, 316SS float, Buna-N seat
- Working pressure to 300 PSI



Figure 931 Slow Closing

- Air & vacuum valve plus surge check
- Minimizes system shock, surge and valve damage due to sudden air valve closure
- 1/2" 3" NPT, 3" 12" flanged
- Iron body, 316SS float and trim, Buna-N seat
- Working pressure to 300 PSI



Figure 933 Deep Well with Trottle Device

- Installed at discharge of deep well turbine pump
- Regulates air outflow from well column at pump start
- Admits air into well column at shutdown
- 1/2" 3" NPT, 3" 4" flanged
- Iron body, 316SS float and trim, Buna-N seat
- Working pressure to 300 PSI

Air and Vacuum Valves

For Sewage and Wastewater



Figure 935 Standard Body

- Standard elongated body minimizes fouling
- 1" 4" NPT, 4" 6" flanged
- 1" size has 2" NPT inlet
- Iron body, 316SS float and trim, Buna-N seat
- Working pressure to 200 PSI
- Optional backflush attachments



Figure 939 Short Body

- Ideal for shallow cover installations
- 1" 2" NPT
- 1" size has 2" NPT inlet to minimize plugging
- Iron body, 316SS float and trim, Buna-N seat
- Working pressure to 200 PSI
- Optional backflush attachments



Durovent™ Stainless Steel

- Ideal for corrosive environments
- 1" or 2" NPT standard or short body
- 316SS body, cover, float and trim, Buna-N seat
- Optional backflush attachments

Combination Air Valves

Combination air valves perform the functions of both an air & vacuum valve and an air release valve. The valve's large orifice exhausts of air while the system is being filled and then closes. It's small orifice automatically releases air and sewage gases that collect in the valve while the system is pressurized. The large orifice re-opens to admit air into the system during draining to prevent excessive vacuum formation and pipeline damage.

For Water



Figure 945 Single Body

- Compact and lightweight
- 1/2" 4" NPT, 3" 4" flanged
- Iron body, 316SS float and trim, Buna-N seat
- Working pressures to 300 PSI
- Available with 316SS body and cover or fusion bond epoxy coating



Figure 960 Dual Chamber, Flanged

- 6" 12" flanged
- Iron body, 316SS float and trim, Buna-N seat
- Working pressures to 300 PSI



Figure 980 Slow Closing Dual Chamber

- Dual chamber air & vacuum valve plus surge check
- Minimizes system shock, surge and valve damage due to sudden air valve closure
- 6" 12" flanged
- Iron body, 316SS float and trim, Buna-N seat
- Working pressure to 300 PSI



Figure 950 Dual Body

- Separate air & vacuum and air release valves, factory assembled
- 3" 12" flanged
- Iron body, 316SS float and trim, Buna-N seat
- Working pressure to 300 PSI



Figure 983 Slow Closing Dual Body

- Separate air & vacuum and air release valves plus surge check, factory assembled
- Minimizes system shock, surge and valve damage due to sudden air valve closure
- 3" 12" flanged
- Iron body, 316SS float and trim, Buna-N seat

for service, pricing, and delivery. If you have a question, need specification assistance, or want other information, please let us know. Info-ga@vag-group.com • 724-776-1020 gaindustries.com

For Sewage and Wastewater



Figure 942 Single Body

- Air & vacuum and air release functions in a single elongated body
- 1" 4" NPT, 4" 6" flanged
- 1" size has 2" NPT inlet
- Iron body, 316SS float and trim, Buna-N seat
- Working pressure to 150 PSI
- Optional backflush attachments



Figure 955 Dual Body

- Separate air & vacuum and air release valves, factory assembled
- 1" 4" NPT, 4" 6" flanged
- 1" size has 2" NPT inlet
- Iron body, 316SS float and trim, Buna-N seat
- Optional backflush attachments



Figure 957 Dual Body, High Capacity

- Separate air & vacuum and high capacity air release valves, factory assembled
- 1" 4" NPT, 4" 6" flanged
- 1" size has 2" NPT inlet
- Iron body, 316SS float and trim, Buna-N seat
- Optional backflush attachments

Combination Air Valves

For Sewage and Wastewater



Figure 959 Short Dual Body

- Separate short body air & vacuum and air release valves, factory assembled
- 1" and 2", 1" size has 2" NPT inlet
- Iron body, 316SS float and trim, Buna-N seat
- Optional backflush attachments



Durovent™ Stainless Steel Dual Body Combination Air Valves

- Ideal for corrosive environments
- Standard elongated or short body (shown)
- 1" or 2" NPT (1" size has 2" NPT connection)
- 316SS body, cover, float and trim, Buna-N seat
- Optional backflush attachments (shown)

Vacuum Breaking Valves

GA Industries vacuum breaking valves automatically open to admit air at the rate needed to prevent critical vacuum during negative water pipeline or sewage forcemain pressure conditions caused by draining or column separation. All valves have screened air inlet to minimize entry of foreign material.

For Water



Figure 990 Vacuum Breaking

- 2-1/2" 12" flanged
- Iron body, 316SS trim, Buna-N seat
- Up to 400 PSI working pressure



Figure 992 Vacuum Breaking & Slow Air Release

- Rapid air admission, slow air release
- 2½" 12" flanged
- Iron body, 316SS trim, Buna-N seat
- Up to 300 PSI working pressure



Figure 991 Vacuum Breaking

- Suitable for use on raw sewage
- 3" 12" flanged
- Iron body, 316SS trim, Buna-N seat
- Up to 400 PSI working pressure



Durovent[™] Stainless Steel Single Body Combination Air Valves

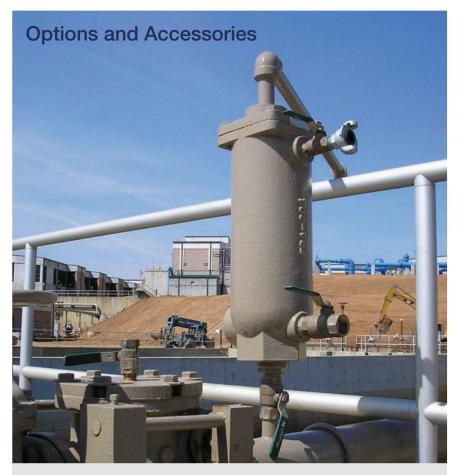
- Ideal for corrosive environments
- 1" or 2" NPT standard elongated body
- 1" size has 2" NPT inlet
- 316SS body, cover, float and trim, Buna-N seat
- Optional backflush attachments

For Sewage and Wastewater



Figure 993 Vacuum Breaking & Slow Air Release

- Suitable for use on raw sewage
- Rapid air admission, slow air release
- 3" 12" flanged
- Iron body, 316SS trim, Buna-N seat
- Up to 150 PSI working pressure



A variety of accessories are available that facilitate air valve function in most water and wastewater applications. If you have any questions about what you need to keep your water or wastewater system operating optimally, please let us know.

Flushing Attachment

- Recommended for all wastewater air valves, especially for use with raw sewage
- Allows backflushing of air valve
- Includes isolating valves, quick-connect couplings and five feet of rubber hose

Vacuum Check

 Used on the outlet of an air valve to allow air to be vented from the system, but to prevent re-entry of air during negative internal system pressure conditions

Isolating Valve

- Used with an air release valve to isolate the valve from the system for inspection or repair (included with backflush attachments)
- Installed between the valve and pipeline
- For 3" and smaller, a ball valve is recommended
- For 4" and larger, a butterfly valve is recommended

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- Butterfly Valves
 - Series 800 AWWA C504 Butterfly Valve
- Eccentric Plug Valves
 - 1/2" to 24" ECO-Centric® Round Port 24" to 48" Rectangular Port
- Engineered Check Valves
 Cushioned Swing Check
 - Oil Controlled Closing Swing Check Tilting Disc Check
- Check Valves
 - Lever & Weight or Spring Swing Check Heavy-Duty Swing Check Rubber Flapper Check
- Pilot Operated Control Valves
 - Pressure Reducing
 - Pressure Sustaining
 - **Emergency Cut-in**
 - Altitude
 - Slow-Closing Check
 - Solenoid Control
 - Float

- Pump Control Valves
 - AWWA C507 Ball Valves
 - CHECKtronic® Motor Actuated
 - Electric Check Piston Actuated
 - Rotovalve® Cone Valve
- Surge Relief Valves
 - Diaphragm Actuated for Water
 - Differential Piston Actuated for Water Spring Loaded for Wastewater or Sewage
- Air Valves
- Air Release for Water & Sewage
 - Air and Vacuum for Water & Sewage
 - Combination for Water & Sewage
 - Vacuum Breaking Valves for Water & Sewage
 - Durovent™ All Stainless Steel Air Valves

GA Industries is a brand of the VAG Group, a renowned manufacturer of water control valves with headquarters in Mannheim, Germany, and an international organization of specialists that includes:

- Engineering & technical design
- Production
- Fabrication

- Sales & distribution
- Installation & start-up
- Aftermarket service



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