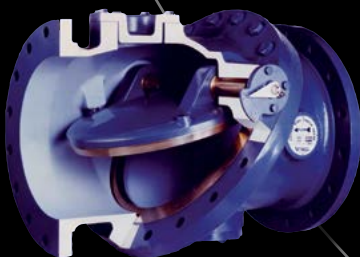
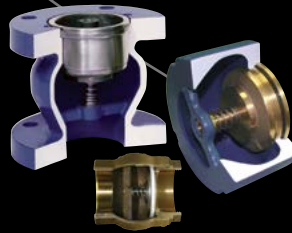


# VAL-MATIC®

QUALITY VALVES  
FOR MUNICIPAL  
AND INDUSTRIAL  
APPLICATIONS



# *Our* MISSION

The mission of Val-Matic is to be recognized as the leader in our industry by profitably providing products and services that always meet or exceed the needs of our customers as they relate to quality, cost, performance, dependability, operational features and delivery considerations.



ELMHURST FACILITY



ADDISON FACILITY

# HISTORY *of Growth*

From humble beginnings in 1966 with a silent check valve product line, Val-Matic Valve & Mfg. Corporation has grown to become a leading manufacturer of fourteen valve product lines for the water and wastewater, industrial, commercial building construction, and plumbing industries. Customers and users include sales representatives, OEM's, distributors, general contractors, municipalities, private water companies, and a variety of industrial users. Val-Matic operates two manufacturing facilities in Illinois, has strong working relationships with several independent factories, and deploys sales and marketing resources across the globe.

# DEDICATION

## *to Product Innovation*

Val-Matic's success has been driven by manufacturing and product innovations to enhance reliability and quality; specific product features to meet the demands of diverse industries; and the development of a broad array of air valves (air vent valves), check valves, and quarter-turn valves. Backed by decades of product and application experience, Val-Matic continues to provide new developments in valve technology to serve industry through research and development. In 2014, Val-Matic completed a new 7000 sq. ft. research and development facility in its manufacturing facility located in Addison, Illinois.

The R&D facility includes a Materials Lab with state of the art equipment for testing elastomers and metals to determine their mechanical properties and exposure to corrosive environments and elevated temperatures.



FLOW LAB



MATERIALS LAB

A Flow Lab equipped with a battery of water pumps is used to perform dynamic valve tests and water flow tests in a wide range of pressures and velocities to determine flow and torque characteristics of various valves. Valve test data is recorded and analyzed using a computer based data acquisition system. In addition, a 5000 gallon air tank allows full scale air flow testing of large air valves.

The facility includes working models of pump control systems for use in technical hands-on training of industry professionals. Val-Matic is committed to developing superior quality products based on these expanded research and development resources.

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## QUARTER-TURN VALVES

Val-Matic cast and forged quarter-turn valves are highly engineered products available in a wide range of sizes and pressure classes. They are designed to provide both on-off and process control functions in municipal and industrial systems. Our Plug, Butterfly, and Ball valves are built using advanced manufacturing technologies and certified to rigorous AWWA, ASME, and API industry standards to assure reliable performance in numerous applications and media including liquids, gases, and slurries. The valve seating systems are built with corrosion and wear resistant materials and tested to provide positive seating. Valve flow path geometries are optimized to provide exceptional flow control characteristics, ultra-low headloss, and energy conservation. All Val-Matic Quarter-Turn Valves are equipped with manual or power actuators to precisely position the plug, disc, or ball under the rated flow and pressure conditions. Automatic controls are also available to position the valve in response to process signals and provide fail-safe positioning on signal or power loss.

### ENER•G® BALL VALVE

The Ener•G® Rubber Seated Ball Valve is the preferred solution for surge control and energy savings in municipal and industrial water and wastewater. The Ener•G® Ball Valve's self-flushing contoured ball design fully complies with AWWA C507. It features the advantages of a standard two-piece design with a fusion bonded epoxy interior and exterior coating and a bidirectional resilient Tri-Loc™ Seating System. The Tri-Loc™ Seat Retention System provides a low friction, wear resistant seat and allows easy adjustment or replacement of the seat without removing the valve from the line. Val-Matic's Ener•G® Ball Valve provides 100% flow area equal to the pipe size and will represent a significant savings in pumping costs compared to other pump control valves. The valve's design and performance have been verified through proof of design and independent

flow testing. The valve is available with cylinder, electric motor or manual actuation.

- Size Range: 4" - 48"
- Pressure Range: Up to 300 PSI
- Tri-Loc™ Seat Retention System
- Self-flushing Contoured Ball Design
- Field Adjustable/Replaceable Seat
- Bidirectional Seating Available
- Fusion Bonded Epoxy (FBE) Standard
- Meets AWWA C507
- NSF/ANSI 372 Certified Lead-Free
- NSF/ANSI 61 Certified for Drinking Water
- 100% Flow Area
- Superior Design Characteristics for Controlling Flow and Pressure
- Proof of Design and Independently Flow Tested
- Energy Efficient with Ultra-Low Headloss

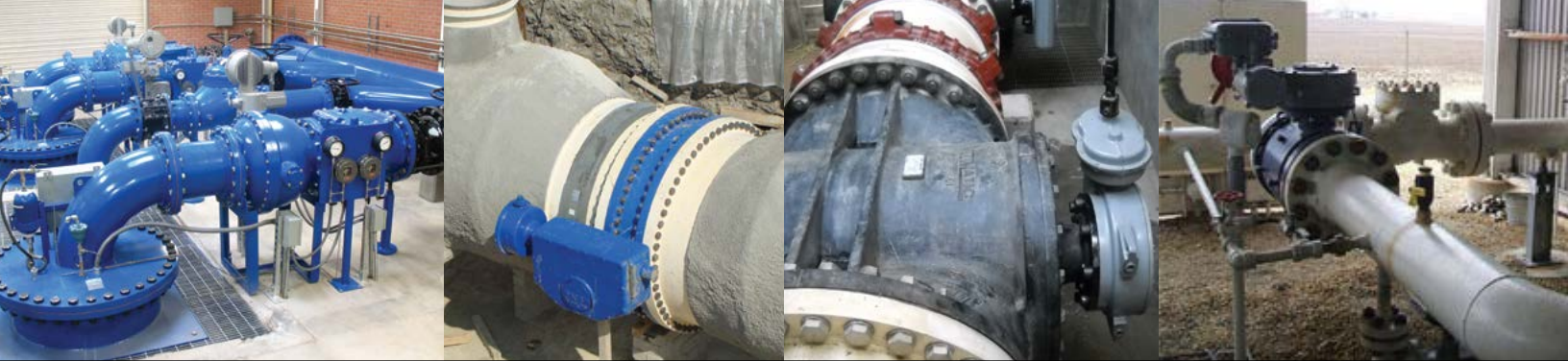


### AMERICAN-BFV® BUTTERFLY VALVE

The American-BFV® is the valve of choice for quarter-turn service in municipal, industrial and power applications. The American-BFV® is designed to provide long life and trouble-free performance. The unique Tri-Loc™ Seat Retention System assures seat integrity by securing the seat through three different mechanical methods to assure long-term dependable service. The Tri-Loc™ provides ease of adjustment or replacement without special tools or removing the valve from the line. The American-BFV® disc is ductile iron in all sizes. The added strength allows the disc design to have a smaller cross section providing improved headloss characteristics. The American-BFV® will withstand flow rates and pressure transients beyond the maximum AWWA pressure rating and are AWWA proof of design tested.

- Size Range: 3" - 144"
- Pressure Range: Up to 250 PSI
- Tri-Loc™ Seat Retention System
- Field Adjustable/Replaceable Seat
- T316 Stainless Steel Uninterrupted Body Seat





- Fusion Bonded Epoxy (FBE) and Rubber Lining Available
- Meets AWWA C504 and C516
- NSF/ANSI 372 Certified Lead-Free
- NSF/ANSI 61 Certified for Drinking Water
- Proof of Design and Independently Flow Tested

## CAM-CENTRIC® PLUG VALVE

The Cam-Centric® Plug Valve is the solution for systems where slurries, grit, or solids are present. The eccentric action of the Cam-Centric® Plug Valve allows the plug to rotate and lift out of its seated position minimizing rubbing or scraping. Features such as a heavy-duty fully rubber encapsulated plug, welded nickel seat, grit-seals and V-Type packing make the Cam-Centric® a valve that will provide reliable operation for years to come. This has been proven in installations throughout the world as well as through independent proof of design and flow tests. Standard Port, 100% Port, 3 and 4 Way Tapered Plug Valve configurations are available.

- Size Range: ½" - 72"
- Pressure Range: Up to 250 PSI
- Welded Nickel Seat
- Grit-Guard™ Shaft Seals
- Fully Rubber Encapsulated Plug
- Full Top Access
- POP™ (Packing Overload Protection) Shims
- Fusion Bonded Epoxy (FBE), Glass and Rubber Lining Available
- AWWA C517 Certified
- NSF/ANSI 372 Certified Lead-Free
- Eccentric Action



## QUADROSPHERE® BALL VALVE

The QuadroSphere® Trunnion Ball Valve features a unique ball design. Surfaces of the ball that are non-essential to sealing have been recessed in all 4 quadrants. The surfaces of the ball that have been recessed create additional flow paths allowing the flow and particulates to move freely above, below and

around the sides of the ball when moving from closed to open position. The contact area between the seat ring and ball has been minimized, reducing wear and operating torques. The recessed surfaces on the ball also provide lipped edges that wipe the seat surfaces clean during opening and closing to avoid particulate buildup. The ball has two sets of seating surfaces to provide shut off in the fully closed position and protect the seats in the fully open position.

- Size Range: 2 NPS - 24 NPS
- ASME Pressure Classes: 150-2500
- Forged Body and Ball Construction
- Self-Cleaning Seats
- Self-Flushing Contoured Ball Design
- Single Piston Effect seating (DBB) Standard, Double
- Piston Effect seating (DIB) Available
- Standard Design API 6D /ASME B16.34
- Certified to API 607, Fire Test Standard
- Meets: API, ASME/ANSI, BS, ISO, MSS and NACE
- API 6D Monogram Available



## CHECK VALVES

In the past the specifier had only to pull out a standard swing check specification and add it to the system plans regardless of location and application. Today, however, engineers weigh the importance of slamming characteristics, flow efficiency, headloss, cost of purchase, and cost of maintenance when making a check valve selection. Val-Matic has utilized the same criteria in the design of our eight check valve lines. Val-Matic is prepared to meet your check valve needs from potable water to abrasive slurries and corrosive chemicals with a wide range of metallurgies, seating materials and accessories. A number of technical papers and brochures are available on check valves.

## SWING-FLEX® CHECK VALVE

The Swing-Flex® Check Valve is the valve of choice based on its simple maintenance-free design, low



headloss and non-slam characteristics. The valve meets AWWA C508 and provides superior performance when compared to traditional swing-checks. The Memory-Flex™ Disc is warranted\* for 25 years and has been independently cycle tested 1,000,000 cycles. Its unrestricted full flow design makes the Swing-Flex® an excellent choice for water and wastewater as well as slurries and sludge, and vertical flow up applications.

Non-slam performance is assured by placing the valve seat on a 45° angle to minimize disc travel and utilizing the Memory-Flex™ Disc return feature. Fusion Bonded Epoxy is provided standard on the interior and exterior of the valve and when provided with optional rubber or glass lining, the Swing-Flex® is ideal for highly abrasive, corrosive and municipal and industrial water and wastewater applications. To add to its versatility, backflow actuators and disc position indicators are available and field installable. Independent flow, cycle and proof of performance test reports are available upon request.

- Size Range: 2" - 60"
- Pressure Range: Up to 300 PSI
- Fusion Bonded Epoxy (FBE) Standard
- Mechanical Indicator Available
- Welded Nickel Seat Available
- Bottom Mounted Oil Dashpot Available
- Glass and Rubber Lining Available
- Available in all Stainless Steel Construction
- AWWA C508 Certified
- NSF/ANSI 372 Certified Lead-Free
- NSF/ANSI 61 Certified for Drinking Water
- 25-Year Warranty on Memory-Flex™ Disc\*
- Non-Slam Closing Action
- 100% Flow Area



## SURGEBUSTER® CHECK VALVE

The SURGEBUSTER® has all the design features of the Swing-Flex® with the added feature of the Disc Accelerator™ to prevent slamming in the most severe

applications. It is guaranteed\* to outperform a conventional weight and lever air cushion swing check valve. The Disc Accelerator™ is a precision formed stainless steel mechanism that closes the valve disc rapidly thus avoiding slamming by flow reversal even in highly dynamic applications such as multiple pumps, surge tanks and vertical discharge pipe runs. Fusion Bonded Epoxy is provided standard on the interior and exterior of the valve with optional rubber or glass lining available.

- Size Range: 2" - 60"
- Pressure Range: Up to 300 PSI
- Fusion Bonded Epoxy (FBE) Standard
- Mechanical Indicator Available
- Welded Nickel Seat Available
- Glass and Rubber Lining Available
- Available in all Stainless Steel Construction
- 25-Year Warranty on Memory-Flex™ Disc\*
- AWWA C508 Certified
- NSF/ANSI 372 Certified Lead-Free
- NSF/ANSI 61 Certified for Drinking Water
- Non-Slam Closing Action
- 100% Flow Area



## SILENT CHECK VALVE

The Silent Check Valve is the preferred choice in applications where silent operation and cost are of major concern. Its short linear stroke and spring return action combine to close the valve upon flow reversal. This effectively eliminates surges and water hammer normally associated with the sudden stoppage of a reverse flow.

- Size Range: ½" - 42"
- ASME Pressure Classes: 150-600
- Precision Metal-to-Metal Seating
- Resilient Seating Available
- Heavy Duty Spring Tested 100,000 Cycles
- Available in all Stainless Steel Construction
- NSF/ANSI 372 Certified Lead-Free
- NSF/ANSI 61 Certified for Drinking Water



\*Warranty and guarantee details available upon request.



- FM Approved Wafer Style 2"-10"
- FM Approved Globe Style 2 1/2"-12"
- Meets MSS-SP 125
- Non-Slam Closure
- Full Flow Area

## DUAL DISC® CHECK VALVE

The Dual Disc® Check Valve, with its compact wafer design and low cost, have made it a popular choice when space and price are major factors in valve selection. The compact design, features non-slam spring-assisted closing. Utilization of a synthetic seat assures bubble tight shut off. Dual Disc® Check Valves for low-pressure blower service are specially designed with lightweight springs and discs.

- Size Range: 2" - 66"
- ASME Pressure Classes: 150-300
- Wafer, Lug and Grooved End Designs
- ASME 125, ISO PN10 and PN16 Flanges
- Meets AWWA C518
- NSF/ANSI 372 Certified Lead-Free
- NSF/ANSI 61 Certified for Drinking Water, Wafer
- Style 2"-60", Grooved Style 2"-12"
- UL Approved 2 1/2"-12" for Fire Protection
- FM Approved 2 1/2"-16" for Fire Protection
- Available for Air Service
- Cycle Tested 50,000 Cycles



## TILTED DISC® CHECK VALVE

The Tilted Disc® Check Valve provides exceptionally low headloss and non-slam performance. Its streamlined body contouring, flow area 40% greater than nominal pipe size and hydrodynamic disc combine to provide the lowest headloss of any check valve produced today. Non-slam closure is assured by both an angled seat design which minimizes disc travel and an offset pivot mounted disc. Top or bottom mounted oil dashpots can be added for systems with extreme conditions such as high shut-off heads, surge tanks or multiple pump applications.

*\*Warranty and guarantee details available upon request.*

The valve's tapered seat and disc, designed with wear-resistant materials, assure tight seating and long life even in the most severe applications. The Tilted Disc® Check Valve is an excellent choice for a wide range of media such as raw water, cooling water, and treated water and wastewater effluent. Independent cycle and flow tests are available on request.

- Size Range: 4" - 60"
- ASME Pressure Classes: 125-300
- 2 Part Interior Epoxy Standard
- Top and Bottom Mounted Oil Dashpots Available
- Fusion Bonded Epoxy (FBE) Available
- Available in Carbon Steel Construction
- NSF/ANSI 372 Certified Lead-Free
- NSF/ANSI 61 Certified for Drinking Water
- Energy Efficient with Ultra-Low Headloss
- Independently Certified Flow and Cycle Tested



## SWING CHECK VALVE

The Val-Matic Swing Check Valve with its rugged construction and full flow area is the most specified check valve for municipal/industrial water and wastewater applications. Its smooth, unrestricted flow design can provide significant savings in pumping costs over other check valves with reduced ports. The ductile iron 250 psi rating and fusion bonded epoxy coating place the Val-Matic Swing Check Valve in a class above other swing check valves. The available closure options of Lever & Weight, Air Cushion, and Lever & Spring allow the valve to be used effectively in a wide range of pumping system applications.

- Size Range: 2" - 48"
- Pressure Range: Up to 250 PSI
- Fusion Bonded Epoxy (FBE) Standard
- Full Domed Access Cover with Vent Port
- Resilient and Metal to Metal Seating Available
- Closure Options: Lever & Weight, Air Cushion, Lever & Spring
- Meets AWWA C508





- NSF/ANSI 372 Certified Lead-Free
- NSF/ANSI 61 Certified for Drinking Water

## OIL CUSHION SWING CHECK VALVE

The Val-Matic Oil Cushion Swing Check Valve has all of the design features of the standard Swing Check Valve with the added features of heavy duty shafts and provisions for side or bottom oil dashpots. Oil cushions prevent slamming in highly dynamic applications such as high head and surge tank installations.

- Size Range: 8" - 48"
- Pressure Range: Up to 250 PSI
- Fusion Bonded Epoxy (FBE) Standard
- Metal to Metal Seating Standard
- Full Domed Access Cover with Vent Port
- Resilient Seat Available
- Side or Bottom Mounted Oil Cushions
- Meets AWWA C508
- NSF/ANSI 372 Certified Lead-Free
- NSF/ANSI 61 Certified for Drinking Water



## SURE SEAL FOOT VALVE

Design of the Sure Seal Foot Valve evolved through the need for a reliable valve that could provide positive seating action at both low and high pressures without slamming. The Val-Matic® Sure Seal Foot Valve satisfies these requirements plus offers low headloss through the full-ported area and heavy-duty stainless steel basket screening.

- Size Range: 2" - 42"
- Pressure Range: Up to 400 PSI
- Unique Synthetic/Metal Seating System
- Fusion Bonded Epoxy (FBE) Available
- NSF/ANSI 372 Certified Lead-Free
- NSF/ANSI 61 Certified for Drinking Water
- Full Flow Area
- Silent Operation



## AIR VALVES (AIR VENT VALVES)

Air Valves perform two important functions in a piping system: they maintain system design efficiency and provide system protection. System efficiency is maintained by venting air from the system that can restrict flow and increase pumping costs. Protection is provided by exhausting and admitting air during system operations including start-up, shut-down, and critical conditions such as power failures or line breaks.

The exhausting and admitting of air during these conditions will reduce the potential for destructive surges and water hammer normally associated with uncontrolled air or a vacuum condition within the piping system. Val-Matic has developed the most comprehensive line of water and wastewater air valves available today. Specialty air valves available include: Surge Suppression, Vacuum Breaker, Well Service and Vacuum Priming

- T316 Stainless Steel Trim and Float
- Unconditionally Guaranteed T316 Stainless Steel Floats
- Fusion Bonded Epoxy (FBE) Available
- Available in all Stainless Steel and Carbon Steel Construction
- AWWA C512 Certified
- NSF/ANSI 372 Certified Lead-Free
- NSF/ANSI 61 Certified for Drinking Water
- UL/FM Approved for Fire Protection

## AIR RELEASE

Air Release Valves, sometimes referred to as "small orifice valves," are often fitted at the highest point on a pipeline to continually release unwanted air during system operation to protect against unwanted surges and maintain system efficiency.

- Size Range: ½" - 6"
- Pressure Range: Up to 1000 PSI





## AIR/VACUUM

Air/Vacuum Valves, often referred to as “large orifice valves”, are used to allow large volumes of air to be exhausted from or admitted into a water pipeline as it is being filled or drained. When draining the pipeline, the float drops, allowing air to enter, preventing negative pressure, possible pipeline collapse and damaging water column separation.

- Size Range: ½” - 20”
- Pressure Range: Up to 740 PSI



## COMBINATION

Combination Air Valves perform the functions of both Air/Vacuum Valves (exhaust large quantities of air on start-up, admits air on shut-down) and Air Release Valves (release air continuously during operation) to maintain system efficiency and prevent pipeline surges.

- Size Range: 1” - 20”
- Pressure Range: Up to 740 PSI



## VAULTSAFE® PRODUCTS

The VaultSafe® Family of Products are designed to protect potable water systems from contaminated flood waters, freezing temperatures and intentional malicious contamination.

### FLOODSAFE®

The FloodSafe® Inflow Preventer is a revolutionary system that works with air valves and provides unrivaled protection of potable water systems from contamination. By preventing water from passing through the FloodSafe®, contaminated floodwater or water that has been compromised by intentional tampering is prevented from entering the air valve outlet and is subsequently unable to enter the potable water system. While preventing the system

from becoming compromised, the FloodSafe® still allows the air valve or vent to exhaust and admit air to the system. The FloodSafe® is a durable, reliable, and critical solution for maintaining the integrity of every water system in service today and those being developed for the future.

- Size Range: 1” - 16”
- Cross Contamination Control
- Field Testing Capability
- Adaptable to Existing Air Valve Applications
- ASSE 1063 Certified (1”-2”)
- NSF/ANSI 372 Certified Lead-Free



### FROSTSAFE®

Cold air enters air valve vaults through vent pipes. When vaults reach freezing temperatures, the operation of air valves and other equipment can be jeopardized. When the FrostSafe®, a wafer style bi-directional hinge-less damper is installed in a vent pipe, it minimizes the thermal exchange of cold and warm air in and out of a vault to help prevent freezing. FrostSafe® will allow air valves to vent and admit air at full rated capacity.

- Size Range: 4” - 12”
- Provides 100% Flow Area
- 100% Corrosion Resistant Construction
- Wafer Design Minimizes Space Requirements
- NSF/ANSI 372 Certified Lead-Free



### VENTSAFE®

Open vent pipes provide a haven for nesting animals and are a target for intentional harmful activities. The VentSafe® is installed in air valve vent pipes and enclosed reservoirs to prevent the entrance of animals or foreign objects and to provide a barrier against the malicious introduction of liquids and other matter into the vent pipe.

- Size Range: 4” - 12”
- Provides 100% Flow Area
- 100% Corrosion Resistant Construction





- NSF/ANSI 372 Certified Lead-Free
- Wafer Design Minimizes Space Requirements

## VALVE ACTUATION

Val-Matic manufactures manual and power actuators that include traveling nut, worm gear and cylinder actuators. In addition, Val-Matic® can supply manual and power actuators as specified by users and engineers. All actuators can be provided with a wide variety of accessories such as: chain wheels, floor stands, extension stems, stem guides, torque tube bonnets and floorstands.

### TRAVELING NUT

Traveling Nut Manual Actuators are designed to specifically match the torque characteristics of Val-Matic® Ener•G® Ball Valves and American-BFV® Butterfly Valves and are built in accordance with AWWA Standards. The traveling nut actuator provides characterized closure which allows the valve to slowly close during the last half of travel to reduce pipeline surges. These actuators also have the exclusive feature of externally adjustable stops rated to 450 Ft-Lbs of input torque.

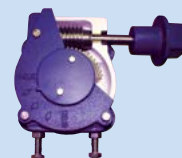
- Available in 8 Sizes to Handle Valve Torques Up to 180,000 Ft-Lbs
- Externally Adjustable Stops Rated to 450 Ft-Lbs
- External Indication of Valve Position
- Stainless Steel External Stop Bolts
- Centralizing ACME Thread for High Efficiency
- FA10 Motor Mounting Flange for Ease of Automation
- Lab Tested - 10,000 Cycles per AWWA Standards
- Quarter-Turn Manual Actuators per AWWA C504 and C507 Requirements for Plant, Buried and Submerged Service



### WORM GEAR

Worm Gear Actuators provide precise quarter-turn actuation in accordance with industry standards. They are standard on QuadroSphere® Ball Valves, Cam-Centric® Plug Valves and available on Ener•G® Ball Valves and American-BFV® Butterfly Valves. Worm gears include externally adjustable mechanical stops to control end of valve travel. Optional spur gear assemblies are provided to increase mechanical advantage thereby reducing the hand wheel and nut input torques.

- Available in Valve Output Torques Up to 180,000 Ft-Lbs
- Externally Adjustable Mechanical Stops Rated to 300 Ft-Lbs
- Available for Above Ground, Buried Service and Submerged Applications
- Quarter Turn Manual Actuators per AWWA Standards C504, C507 and C517 Requirements



### CYLINDER

Traveling Nut Cylinder Actuators are designed and built in accordance with industry standards for Hydraulic Actuators. They provide reliable characterized closure and feature externally adjustable closed stops to control end of valve travel and for ease of adjustment. The one piece piston is fitted with a wear strip for long and reliable seal life. Piston seals are self-adjusting and wear compensating for extended life. Cylinder actuators can also be supplied with complete control systems.

- Available in Valve Output Torques Up to 180,000 Ft-Lbs
- Bore Sizes Up to 24"
- Suitable for Air, Oil and Water Supply Media Up to 150 psig
- Available with Declutchable Hand Wheel Overrides
- Available in All Stainless Steel and Non-Metallic Construction
- Built per AWWA Standard C541 Requirements





## ELECTRIC MOTOR

Traveling Nut and Worm Gear Actuators are specifically designed to work with a variety of motor actuators as specified by users and engineers. Motors are built in accordance with industry standards and available to suit multiple speeds and voltages and are equipped with thermal overloads, torque switches and limit switches to protect the actuator and valve. A hand wheel gear set with declutch is included to allow users to manually position the valve without electrical power.

- Available in Valve Output Torques Up to 180,000 Ft-Lbs
- Various Operating Times
- Electric Power - 3PH, 1PH and DC Motors
- Open/Close, Modulating and Throttling
- Compliance with AWWA C542 Requirements



## HYDRAULIC CONTROL PANEL

Hydraulic Control Panels operate pump control valves using air, oil, or water and include solenoid and flow control valves for slow open, slow close, and emergency shutdown. The panels feature rugged corrosion resistant piping in a NEMA 4X enclosure with window, shut-off valve, and supply pressure gauge.

- NEMA 4X Waterproof and Corrosion Resistant Enclosures
- Corrosion Resistant Piping
- Supply Line with Isolation Valve and Pressure Gauge
- Reliable Brass Solenoid Valves and Multi-Turn Flow Control Valves



## CONTROL SYSTEMS

Val-Matic® Control Systems provide low maintenance and reliable control of butterfly, plug, and ball valves equipped with cylinder actuators. Hydraulic and electric panels control the valves with air, oil, or water power. In addition to control panels, Val-Matic® Valves can be equipped with limit switches, pressure switches, and positioners for remote control and operation.

## OIL ACCUMULATOR SYSTEM

Oil Accumulator Systems consist of dual oil pumps and air compressors piped to an ASME certified air-over-oil accumulator tank. The system provides a clean and reliable oil supply to operate all of the pump control valves even after power outages.

- Size Range: 80-400 Gallon Capacity
- Pressure Range: Up to 125 PSI
- Equipped with Electrical Control Panels
- Compact Skid Design



## ELECTRIC CONTROL PANEL

Electric Control Panels provide the interface between the hydraulic control panel and the pump motor controls. The NEMA 4X panel displays valve position and alarm conditions with heavy-duty pilot lights and controls critical system functions with socket-type relays and timers.

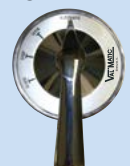
- NEMA 4X Waterproof and Corrosion Resistant Enclosures
- Plug-In Relays
- Heavy-Duty Switches and Transformer Pilot Lights
- Emergency Stop Circuit



## HAND CONTROL VALVE

The Hand Control Valve is a 6-ported manual directional valve used to provide manual override functions in conjunction with a 4-Way Solenoid Valve. The Hand Control Valve provides AUTO-CLOSE-STOP-OPEN position control without electrical power.

- Brass Construction for 150 PSI Supply Pressure
- Suitable for Air, Oil or Water Service

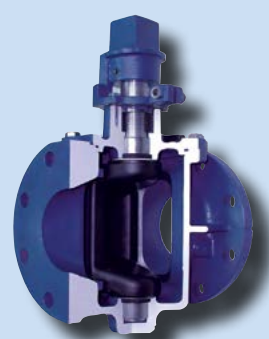
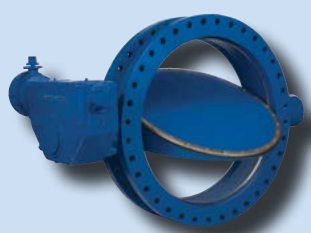


# QUARTER-TURN VALVES

## APPLICATIONS

Ener•G® Ball Valve  
 American-BFV® Butterfly Valve  
 Cam-Centric® Plug Valve  
 QuadroSphere® Ball Valve

MUNICIPAL and INDUSTRIAL APPLICATIONS				
Abrasive Slurries, Mining, Bottom Ash			X	X
Air Service	X	X	X	X
Buried/Vault Service	X	X	X	X
Chemical				X
Compressor Stations				X
Cooling Water	X	X	X	X
Corrosive Service	X	X	X	X
Cryogenic				X
Geothermal				X
Glycol			X	X
High Pressure (Above ASME Class 250)				X
High Temperature (Above 250°F)		X		X
Industrial Process - Water, Wastewater	X	X	X	X
Irrigation	X	X	X	
Low Pressure Gas Service	X	X	X	X
Oil & Gas, Fracking, Off Shore Platforms				X
Ozone Treatment	X	X	X	X
Pig Launching and Receiving	X			X
Potable Water	X	X	X	X
Primary Effluent	X	X	X	X
Pulp/Paper			X	X
Pulp/Paper - White Green and Black Liquors				X
Pump Control	X		X	
Raw Sewage	X		X	X
Raw Water	X	X	X	X
Refining				X
Salt Water, Sea Water, Brine	X	X	X	X
Screened Sewage	X		X	X
Secondary Wastewater Effluent	X	X	X	X
Sludge	X		X	X
Throttling Service	X	X	X	X

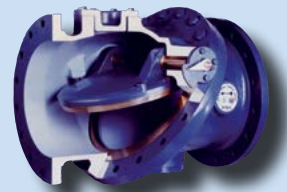
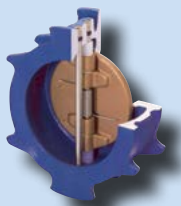


# CHECK VALVES

## APPLICATIONS

Swing-Flex® Check Valve  
 Surgebuster® Check Valve  
 Silent Check Valve  
 Dual Disc® Check Valve  
 Tilted Disc® Check Valve  
 Swing Check Valve  
 Oil Cushion Valve  
 Sure Seal Swing Check Valve

MUNICIPAL and INDUSTRIAL APPLICATIONS								
Abrasive Slurries, Mining, Bottom Ash	x	x				x	x	
Air Service				x				
Cooling Water	x	x	x	x	x	x	x	x
Corrosive Service	x	x	x	x	x	x	x	x
Fire Pumps (FM Approved, UL Listed)			x	x				
Fracking, Dewatering	x	x	x	x		x		
High Pressure (Above ASME Class 125)	x	x	x	x	x	x	x	x
High Temperature (Above 250° F)			x	x	x	x	x	
Industrial Process - Water, Wastewater	x	x	x	x	x	x	x	x
Irrigation	x	x	x	x	x	x	x	x
Low Pressure Gas Service	x			x				
Mining	x	x			x	x	x	
Oil & Gas			x	x				
Ozone Treatment	x	x	x			x	x	
Potable Water	x	x	x	x	x	x	x	x
Primary Effluent	x	x				x	x	
Pulp/Paper	x	x			x	x	x	
Raw and Screened Sewage	x	x				x	x	
Raw Water	x	x		x	x	x	x	x
Salt Water, Sea Water, Brine	x	x	x	x	x	x	x	x
Secondary Wastewater Effluent	x	x	x	x	x	x	x	x
Sludge	x	x				x	x	
Surge Mitigation		x	x		x	x	x	
Vertical Flow Down			x					
Vertical Flow Up	x	x	x	x	x	x	x	x



# AIR VALVES (AIR VENT VALVES)

## APPLICATIONS & FUNCTIONS

	Air Release Valve	Air/Vacuum Valve	Combination Air Valve	Surge-Suppression Air Valve	Vacuum Air Valve	Vacuum Breaker Priming Valve	Wastewater Air Release Valve	Wastewater Air/Vacuum Valve	Well Service Combination Air Valve
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APPLICATIONS									
Booster Pump Station	x		x	x					
Centrifugal Pump Volute	x					x	x		x
Filter Backwash Piping	x		x	x	x		x		
Fire Pumps (FM Approved, UL Listed)	x								x
Force Main				x	x		x	x	x
High Points	x	x	x	x	x		x	x	x
Hydropneumatic Tanks	x								
Industrial Process Water	x	x	x	x	x		x	x	x
Lift Station						x	x	x	x
Municipal Wastewater Collection							x	x	x
Penstock					x				
Pressure Filters	x		x	x	x				
Pulp/Paper	x	x	x	x	x		x	x	x
Pump Station High Points	x	x	x	x	x				
Slurries, Mining, Bottom Ash	x	x	x	x	x		x	x	x
Storage Tank Valves			x	x	x				
Turbine Well Pump Discharge									x
Venturi Meters	x		x				x		x
Water Distribution and Transmission	x	x	x	x	x				

FUNCTIONS										
Admitting Large Volumes of Air During Shut Down and Draining Operations (Power Failure)		x	x	x	x			x	x	x
Air Bound Pump Protection	x					x				
Air Related Head Loss Protection (Efficiency)	x		x	x			x		x	
Air Related Surge Protection		x	x	x	x		x	x	x	x
Column Separation		x	x	x	x			x	x	x
Control Air Valve Exhaust				x						x
Maintain Pipeline Efficiency	x		x	x			x		x	x
Maintain Pump Prime						x				
Regulated-Exhaust of Large Volumes of Air During Start-Up and Filling Operations				x						x
Vacuum Protection (Pipe Joints, Gaskets, Packing, Etc.)		x	x	x	x			x	x	x
Venting of Accumulated Air During System Operation	x		x	x		x	x		x	



# TECHNOLOGY

## *Moving Forward*

Respected worldwide for quality products, Val-Matic utilizes the latest technology coupled with close attention to industry requirements. The application of the latest product innovations while maintaining the highest quality products requires the seamless incorporation of advanced technologies in every step of design and manufacturing.

From conceptual design through delivery, Val-Matic uses the latest technologies to optimize product performance and ensure the highest quality products are delivered to our customers. Computational Fluid Dynamics (CFD) is used to model product performance which is then validated through flow testing to confirm the hydraulic design and torque characteristics. Solid Modeling and Finite Element Analysis (FEA) are performed to analyze key structural components and then validated with proof-of-design testing. Raw materials are analyzed using an X-Ray Fluorescence (XRF) scanner to provide Positive Material Identification (PMI). Cast and machined parts are qualified with a Coordinate Measuring Machine (CMM) capable of precise measurement of complex parts. The results of CMM measurements can then be presented in a 3-D model for use in further CFD or FEA analysis.

Val-Matic is constantly introducing new technologies and product designs that provide long life and ease of maintenance in response to the changing needs of our customers and the industry.



COORDINATE MEASURING MACHINE



ROBOTIC WELDING STATION



X-RAY FLUORESCENCE SCANNER

## *Commitment to*

# QUALITY



DUAL HYDRAULIC TEST STAND



CNC MACHINING CENTER

Val-Matic is an employee-owned ISO 9001 certified company with products certified to applicable regulations and standards including NSF/ANSI 61 for drinking water and 372 Lead-Free; UL and FM for fire protection applications; and ASME, NACE, MSS, and API for other industries.

An experienced engineering staff takes a leading role in standard development organizations to keep published product standards current with industry innovations and user needs. Val-Matic engineers are leaders in the development of valve application software to assist users in selecting the right equipment for their fluid system.

Val-Matic's quality of design and meticulous workmanship have set the standard by which all others are measured. Val-Matic is totally committed to providing the highest quality products and services to its customers.



# VAL-MATIC®

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