

AquaMatic® Products

Valves, Stagers and Controllers



GE
Water & Process Technologies

OVERVIEW



GE is a diversified manufacturer

of high technology equipment, controls and components that purify water, concentrate wastes, and enable clean water to be recycled or discharged back into the environment.

GE is an industry leader

offering AquaMatic brand specialty valves and controllers for fluid handling. AquaMatic offers stagers and controllers to automate valve operation for a variety of commercial and industrial applications.

As with all members of the GE family,

AquaMatic brand products have a reputation for value, durability, ease of maintenance, full product support and low life-cycle costs.

Versatility

AquaMatic valves have earned worldwide recognition

for their high quality and value in the water treatment market. Value includes low initial purchase price and lower cost of operation during the life of the product when compared with our competitors. Our valves are simple to maintain, and easily serviced by your maintenance staff.

AquaMatic products have proven to be effective

in a vast array of diverse applications. One of our largest markets is heatless regenerative air dryers where we are one of the preferred suppliers in this specialized industry. The AquaMatic valve controls air flow with one cycle every ten minutes. Other applications where AquaMatic valves can provide reliable service and low life-cycle costs include:

- Center Pivot Irrigation Systems
- Conveying Equipment
- Sand Blasting Equipment
- Desalination Systems
- Car Wash Systems
- Milling Machines and Lathes
- Cooling Tower Float Valves
- Plastic Molding Machinery
- Laundry Equipment
- Sludge Removal Systems
- Bulk Solids Transfer Equipment



AquaMatic valves are available in a wide range of sizes

from three-quarters of an inch to six inches, and are offered in metal or composite materials. These valves share characteristics of excellent flow rates at low pressure drops. Discover the technical benefits of AquaMatic products on your application.



Commitment to Technical Support



Our engineers are committed

to providing technical support whenever needed. We draw on decades of experience to appropriately size AquaMatic valves and related components for both new installations and renovations.

Our deep-rooted commitment to customer satisfaction

has resulted in numerous long-term relationships. We take pride in helping our customers succeed as their operations expand and diversify. We are continuously improving quality systems and procedures to ensure that AquaMatic valves and controllers are manufactured to the highest of quality standards.



Completely Matched Systems

Behind every AquaMatic valve is a variety of complementary products

such as stagers and controllers, which we will match to the precise requirements of your system. Stagers direct the opening and closing of each valve, whereas controllers set the stagers into action. These devices automatically control the valves in a process system. And because they're designed as an integrated system, they take the guesswork out of running your operation efficiently.



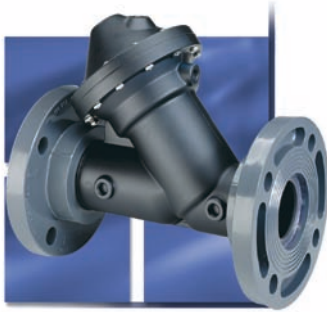
The bottom line is that AquaMatic is a brand you can trust

from system startup right through to ongoing product support. It's all part of the GE heritage of providing strong partnerships with our customers. Because we take the time to understand our customers, we are becoming the preferred single source for water purification, fluid handling, filtration and separation products. It's that simple – no matter how complex your operation is.



Valves

Composite



K52 Series

The AquaMatic K52 Series valve provides the time proven advantages of the "Y" pattern design for pipe sizes from one-half inch to three inches. The body and cap are molded in strong, glass-filled Noryl* and the diaphragm is made of durable Buna N or Viton** materials. Various pipe end connections are available for your system design. Other AquaMatic valve options include spring-assist open, spring-assist close, flow control limit stop, poppet position indicator, Viton** seals, butyl seals, normally closed, and fail-safe spring closed products.

Pipe Size Inches	Pipe Size Millimeter, DN	Valve Model	Cv (1)	Cv (2)
1/2	15	K520	4.0	3.5
1	25	K521	15.0	13.0
1-1/2 - 2	40-50	K524	38.0	32.8
2-1/2 - 3	65-80	K526	100.0	86.5



K53 Series

The AquaMatic K53 Series valve is designed for controlling the flow of most fluids including deionized water, salt solutions, and corrosive fluids such as acids and caustics. The rugged construction employs strong corrosion-resistant glass-filled Noryl* components. The "Y" pattern design permits high flow with low pressure drop. Separate flow and control chambers provide positive closing without springs. Dual "O" ring design on the shaft prevents leakage between the flow and control chambers and the cap is easily removed for maintenance purposes. True union end design with female socket weld connections provide easy installation and servicing.

Pipe Size Inches	Pipe Size Millimeter, DN	Valve Model	Cv (1)	Cv (2)
1	25	K531	18.0	15.6
1-1/2	40	K534	48.0	41.5
2	50	K535	84.0	73.5
3	80	K537	200.0	173.0



(1) Flowrate in gallons per minute of water at 60°F, 1 psi pressure drop.

(2) Flowrate in cubic meters per hour of water at 15.5°C, 1 bar pressure drop.

*Noryl® is a registered trademark of General Electric Company.

**Viton® is a registered trademark of E.I. du Pont de Nemours and Company.

Note: For technical information, see the AquaMatic technical catalog.

Valves



V42 Series

The AquaMatic V42 Series valves are constructed of cast iron and are designed for air and water applications. A separate control chamber protects the diaphragm from line fluid and extends cycle life. Reinforced diaphragm of Buna N or Viton** materials are pre-formed and stress relieved to maximize responsiveness and product life. The valve is highly serviceable even while in line. A variety of options are available such as spring-assist open, spring-assist closed, flow control limit stop, normally closed, poppet position indicator, and high temperature EP or Viton** seals.



Pipe Size Inches	Pipe Size Millimeter	End Connectors (Female Thread)	Valve Model	Cv (1)	Cv (2)
3/4	20	NPT, BSPT	V42B	11.5	10.0
1	25	NPT, BSPT	V42C	13.0	11.2
1-1/4	32	NPT, BSPT	V42D	26.5	22.9
1-1/2	40	NPT, BSPT	V42E	32.5	28.1
2	50	NPT, BSPT	V42F	56.0	48.4
2	50	NPT, BSPT	V42G	68.0	58.8
2-1/2	65	NPT, BSPT	V42H	84.0	72.7
3	80	NPT, BSPT	V42J	135.0	117.0
3	80	Flanged	V42J	135.0	117.0
4	100	Flanged	V42K	275.0	238.0
6	150	Flanged	V42L	680.0	588.0



V82 Series – High Pressure

The AquaMatic V82 Series valves are constructed of brass and are identical in operation to the V42 Series. Body and cap are brass, and components are designed to withstand up to 250 psi (17 Bar).



Pipe Size Inches	Pipe Size Millimeter	End Connectors (Female Thread)	Valve Model	Cv (1)	Cv (2)
3/4	20	NPT, BSPT	V82B	11.5	10.0
1	25	NPT, BSPT	V82C	13.0	11.2
1-1/4	32	NPT, BSPT	V82D	26.5	22.9
1-1/2	40	NPT, BSPT	V82E	32.5	28.1
2	50	NPT, BSPT	V82G	68.0	58.8
2-1/2	65	NPT, BSPT	V82H	84.0	72.7
3	80	NPT, BSPT	V82J	135.0	117.0

Stager Valves



AquaMatic Stagers

AquaMatic Stagers are rotary pilot valves with multiple ports for directing fluid flows to operate various diaphragm valves installed in a process system. AquaMatic stager internal parts are constructed of durable, non-corroding, self-lubricating material for long, maintenance-free life.



Model Number	Body Material	Number of Ports	Typical Applications
48	Brass	6	Filters and softeners
51	Brass	8	More complex softener systems and sequential filter systems
58	PVC	16	Twin alternating systems and de-ionizers
59	Brass	16	and sequential filter systems
96	Brass	8	High pressure systems, up to 250 psi (17 BAR)

Electronic Stager Controls

AquaMatic 962 Stager Controls

AquaMatic 962 Stager Controls combine an AquaMatic stager with an Autotrol® 962 Series electronic control, mounted and prewired in a NEMA-rated enclosure.

The Series 962 electronic controls provide sophisticated, demand-based water conditioning by combining a microprocessor with a flow meter to electronically monitor the amount of water used. Time-based and/or external signal initiation is also available as a standard feature. This fully programmable series of controls provide the ability to fine-tune the operation to meet the application requirements.



Applications

Controls	Model Number	Description
Single Unit Controls		
Typical Softeners and Filters	E948*	962 Control w/model 48, 6-port stager
More Complex Softeners and Filters	E951*	962 Control w/model 51, 8-port stager
Multiple Unit Controls		
Twin-Alternating Softeners and Filters (w/Timed Brine Switch Output)	E958-TB	962 Control w/model 58-TB, 16-port stager
Twin-Alternating Softeners	E958-TA	962 Control w/model 58-TA, 16-port stager
Sequential Filters (Backwash Only)	E948	962 Control w/model 48, 6-port stager
2 Unit Sequential Filters (Backwash & Rinse)	E951	962 Control w/model 51, 8-port stager
3 or 4 Unit Sequential Filters	E958	962 Control w/model 58, 16-port stager

* Two-tank and three-tank parallel systems can be controlled by individual controls provided with lockout feature. Lockout feature is void when using the added relay output option.

Stager Controls



These controls combine an AquaMatic stager with a reliable Autotrol® timer, mounted and prewired in a NEMA-rated enclosure. Stagers are initiated by timeclock or impulse controls. The cycle times are programmable to accommodate a wide range of applications.

Base Model	Initiation	Filters/Softener Systems	Multi-Tank Systems	High Pressure Systems
A100	Time	A148, A151	A158	A196
A200	Impulse	A248, A251	A258	A296

Fluid Handling

Ejectors

540 Series

540 Series PVC ejectors are available in one-half-inch through two-inch sizes with female NPT threads or female socket ends for US pipe. Specific applications are brine draw, acid draw, or caustic draw. This economical ejector is engineered to draw two parts of regenerant fluid for each three parts of water.



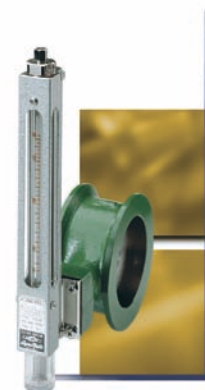
Pipe Size Inches	Model Number
1/2	540
3/4	541
1	542
1-1/2	544
2	546



Flow Cell Flowmeters

AquaMatic Flow Cell Flowmeters

AquaMatic Flow Cell Flowmeters are direct-reading devices which take advantage of the dominant features of the orifice and area type flowmeters. These flow meters are accurate to $\pm 2\%$ of full scale in a compact design requiring less than six inches of piping. The AquaMatic Flow Cell Flowmeter is available for 3/8-inch to 20-inch diameter pipes and can be installed to accommodate flow in any direction. Connections are available for NPT, BSP and flanged end connectors. The Flow Cell Flowmeter is constructed in ductile cast iron with nickel plated brass, 316 stainless steel, or PVC.





V46 Series

Stainless Steel Valves

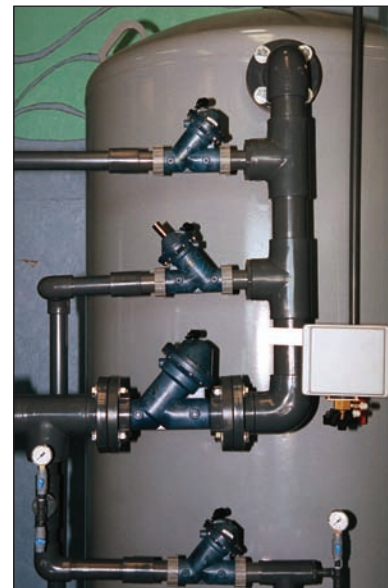
The AquaMatic V46 valves have the same operational characteristics, and are constructed of 316 Stainless Steel material. These valves are available in 1-inch, 1-1/2-inch and 2-inch sizes, in either threaded or flanged ends. Flanged valves are rated for 150 PSI (10 bar) and threaded valves are rated for 250 PSI (17 bar). With all stainless steel internals and no internal threads, this series is ideal for corrosion resistance applications.

Pipe Size Inches	Pipe Size Millimeter, DN	Valve Model	Cv (1)	Cv (2)
1	25	V46C	13	11.3
1-1/2	40	V42E	32	27.8
2	50	V46F	54	47

Commitment to Partnerships with Customers

No two customers are alike. That means "standard" or "off the shelf" does not apply to the needs of everyone. In these situations, our engineers work closely with our customers to develop customized solutions to their specific application. The result is a unique combination of valves and related components that will provide years of reliable, trouble-free service.

One example of our commitment to partnerships with our customers can be found in the irrigation market. Based on the cost-reduction needs of a long-time GE customer, we created a valve especially for irrigation applications.



For More Information:

Contact the **Residential and Commercial Group** at **(815) 964-9421** or **(800) 245-9421** or visit **www.gewater.com**

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