

Fluid Automation Solutions for Water Analyzers Proven automation solutions and local expertise to help you overcome your

Proven automation solutions and local expertise to help you overcome your toughest challenges.



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ASCO miniature isolation valves and manifolds

Emerson's ASCO™ solenoid-operated miniature isolation valves and associated manifolds are the preferred fluid automation choice of original equipment manufacturers (OEMs). Our advanced solutions control the flow of aggressive fluids for applications ranging from water analysis to clinical laboratory equipment. With outstanding performance and high reliability, ASCO miniature products and solutions are especially suitable for expensive reagents and biological fluids that are typically used in analytical technologies. Design engineers can specify stock and customized ASCO solutions for equipment, including chromatography (GC, IC, and HPLC), mass spectrometers, chemical analyzers, automated pipettes and water analyzers.

Rapid Engineered Solutions

To meet the varying demands of the broad range of instrumentation developed within the analytical and medical market, the ability to quickly customize valve products and provide optimized solutions is critical. Emerson's Rapid Engineered Solutions program focuses on the unique needs of analytical and medical instrument manufacturers. The program creates miniature valves and fluidic assemblies customized to your exact needs, and delivers them at unprecedented speeds.



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Powerful performance.

Analytical equipment manufacturers rely on ASCO isolation valves and manifolds to provide the high repeatability, small internal volumes and low pumping effects they need. Specify them for proven performance in high-precision analytical equipment.

Repeatable results.

Designed and tested to provide an extended service life, ASCO isolation valves are characterized by their high repeatable functionality and reliability in harsh conditions.

Flawless flushability.

In addition to offering pinch valves with no internal volume, we have designed our isolation valves using computational fluid dynamics (CFD) to avoid sharp corners and pockets – preventing or eliminating build-up and clogging.

Low or no pumping effects.

Many of our designs evenly displace fluid within the valve, so you get minimal pumping. The result is fewer complicated calculations and a lot less wasted expensive reagents and other consumables.

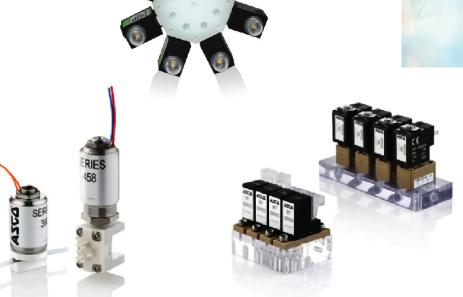
3)

Comprehensive range of fluid automation solutions

Emerson represents a single source for a wide variety of ASCO fluid-handling components, including miniature pinch, liquid isolation, proportional and general service valves, as well as fittings, manifolds, tubing and pressure regulators.

An extensive product portfolio and the ability to create customized assemblies for specific requirements, enables our customers to maximize process efficiencies and optimize their applications.









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Single Valve

Customized multi-station manifolds

Mixing Manifolds Valve





- These 2-way normally closed isolation valves are developed for industrial liquid analyzers, biotechnology and clinical diagnostic applications
- Diaphragm isolation separates media from the the internal part of the valve
- Ideal for controlling aggressive fluids and have easy-to-flush internal cavities



FEATURES

- These multi-station valve manifolds can be customized to meet customer's specific requirements
- Optimized manifold design significantly reduces fluid path complexity
- All valves have a 2-way normally closed function and diaphragm isolation mechanism



FEATURES

- This X282 eight station mixing valve manifold is specifically designed for water analyzers
- Optimized manifold design significantly reduces fluid path complexity
- All valves have a 2-way normally closed function and diaphragm isolation mechanism

Digestion Valve



Pinch Valve



FEATURES

- These 2-way normally closed isolation valves are designed specifically for water analyzer digestion applications
- Diaphragm isolation plus chemical resistant valve materials ensure compatibility with the most corrosive reagents



FEATURES

- These PTFE isolation valves are designed for use with highly aggressive liquids.
- Excellent self-draining capability and easy-to-flush low-volume internal cavity
- Compact architecture makes them ideal for analytical bench-top instrumentation



FEATURES

- Pinch solenoid valve, suitable to shut off media without producing turbulent flows or dead spaces
- Under the same conditions, provides higher flow rate than other solenoid valves with same internal diameter; the system allows a bi-directional through flow
- The tubing is the only material in contact with the fluid







For more information, visit Emerson.com/ASCO

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Responsive engineering partnership

As markets change and requirements come into focus over lengthy development cycles, your products evolve. Emerson understands this and can respond. Unlike some suppliers, we have the local sales and engineering resources available to work closely with your team to define your requirements. We can then select the right product, match the elastomer, develop a custom manifold and expedite delivery of the part to produce the precise performance you need.



Complete customized fluidic solutions

Using our broad range of products and engineering capabilities we are specialists in customized product designs that meet your specific requirements. Our capabilities include developing, designing, building and factory-testing. We provide a complete, prequalified manifold assembly, with valves plus terminations, pins, and housings – saving you time, cost and effort.

Customized Solutions



All valves are designed to accommodate unlimited manifold configurations. Multiple porting options are also standard.

Product breadth



Whether you require a valve to control flows measured in liters or microliters, Emerson has what you need. It represents a single source for a wide range of valves, from 8mm to 50mm in width, with various orifice sizes, elastomers and isolation mechanisms.

Industry leader



Our miniature solenoid valves are manufactured in ISO Class 8-equivalent clean rooms to eliminate contamination risks.

Fit your process line







Our products occupy the smallest possible footprint. They provide the highest reliability and functionality, and to assist with validation we keep meticulous records and adhere to industry standard cGMPs (Current Good Manufacturing Practices).







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Worldwide coverage



ASCO[™]

Emerson delivers time-tested and innovative fluid-handling and control solutions, designed to help you improve your system's overall reliability and efficiency, while reducing your time to the market. Contact us for world-class technologies and services that can maximize your ability to control the flow of aggressive fluids in your analytical instruments. Getting started is easy.

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