



APPLICATION SOLUTIONS **HYGIENIC AND ASEPTIC**



APPLICATION OVERVIEW

Whether the challenge is perfect hygiene in a food plant or sterility in a pharmaceutical lab; SAMSON aseptic and hygienic valves are manufactured to the highest requirements of these industries. Our valves are fully compliant with FDA, 3A, EHEDG, ASME BPE and USP regulations for the ultimate in safety and reliability. Available in a wide variety of design options and end connections means we have the right valve for your application. In conjunction with electro-polished finishes, the valve designs allow for easy Clean-In-Place (CIP) and Sterilization-In-Place (SIP) procedures.

Dairy

Using various methods of advanced processing and by eliminating the risk of contamination, the shelf life of dairy products can be increased from days to weeks, or even months.



Distillation

Distillation is a process of separating the individual component substances from a liquid mixture by selective evaporation and condensation.

Breweries

The number of breweries in the US and Canada has recently increased at a rate of almost 20% per year, leading to a renaissance of beer cult in North America.

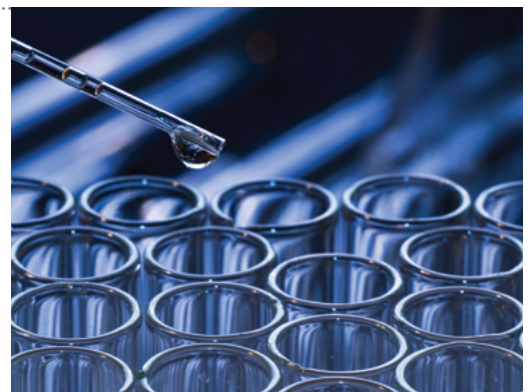


Fermenters

Fermentation is a metabolic process that converts sugar to acids, gases, or alcohol. It occurs in yeast and bacteria, often with the goal of producing a specific chemical product.

Medicine

Drug manufacturing is the process of industrial-scale synthesis of pharmaceutical drugs. The process can be broken down into a series of operations, each requiring careful procedural adherence to maintain quality and safety.



Bioreactors

Bioreactor design is a relatively complex engineering task. The environmental conditions inside the bioreactor, such as temperature or nutrient concentrations must be tightly controlled.

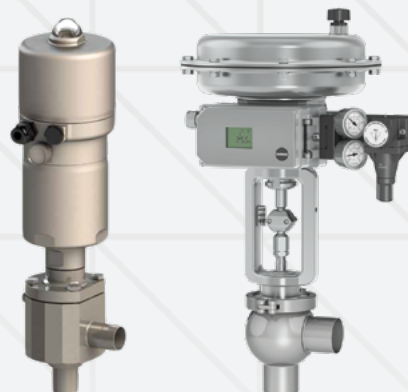
HYGIENIC & ASEPTIC CONTROL VALVES

Globe/Angle Control Valves

Angle seated globe control valves for precise process control in both hygienic and aseptic systems. Compliant with FDA, 3A, EHEDG, and USP CL VI specifications for a wide variety of applications.

FEATURES & BENEFITS

- Suitable for CIP/SIP requirements
- No dead spaces for process media to stagnate
- Soft-seal plug available for Class VI shut-off
- Leakage monitoring of diaphragm/wiper seal

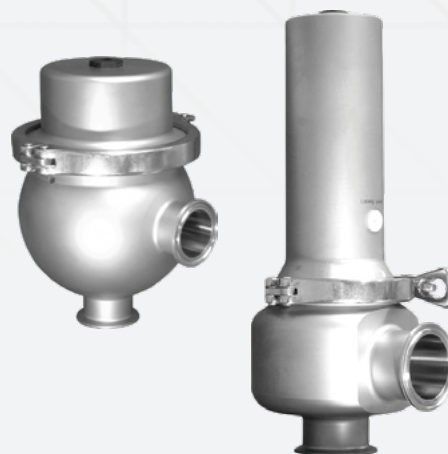


Self-Operated Regulators

Our self-operated regulators can control either the upstream or downstream process pressure; the desired pressure can be set either locally or via a pneumatic signal.

FEATURES & BENEFITS

- Pneumatic or manual stem locking options for CIP/SIP
- No dead spaces for process media to stagnate
- Leakage monitoring of diaphragm available
- Simple and compact design minimizes space requirements



Actuators & Positioners

Pneumatic control valve actuator with integrated positioner. The external smooth-polished stainless steel finish is suitable for Clean-In-Place (CIP) applications.

FEATURES & BENEFITS

- Easy to operate positioner with LCD display and automatic calibration
- Non-contact position sensing design for maximum reliability
- Internal air routing eliminates the need for external tubing between components
- Actuator can utilize up to 120 psi (8 bar) pneumatic supply to maximize output force



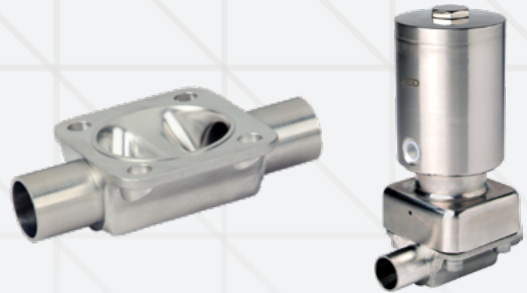
DIAPHRAGM VALVES

Aseptic Diaphragm Valves

Our diaphragm valves are manufactured to current industry standards and meet the demanding process requirements of the food and beverage, pharmaceutical, bio-processing, and cosmetics industries where contamination risks pose a serious problem to the final product.

FEATURES & BENEFITS

- No dead spaces for process media to stagnate
- Valve design and installation optimizes drainability
- Positive closure eliminates cross contamination
- Circumferential raised rib sealing for enhanced sterility
- Top entry design for ease of maintenance
- Compliant with FDA, 3A, ASME BPE and USP standards

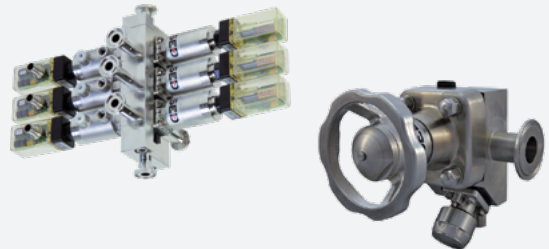


Multi-Port And Manifold Valves

The weir design allows multiple valves to be configured as a single block, providing a completely customizable solution for special process applications. These innovative and proven designs reduce or eliminate dead legs and hold-up volume. The multi-port setup offers a much smaller package for distribution, sampling, diverting, mixing, bypass, drain, and sterilization applications.

FEATURES & BENEFITS

- Designed and engineered for custom process applications
- Different nominal sizes can be combined
- Variety of manual and pneumatic operators
- Point of use valves with sample and purge ports
- Modular design allows for easy changes and flexibility



Angle Seat Valves

Angle seat valves are suitable for shut off, dosing, control, and regulating liquid or gaseous media. Available in standard 2/2-way or multiport configurations for the control or shut-off of steam, cooling water, gases, compressed air, oils, and various chemicals.

FEATURES & BENEFITS

- High flow rate
- Equal percentage or linear flow control
- Pneumatic and manual operation
- 360° adjustable actuator orientation
- Variety of valve body materials and end connections
- Comprehensive modular accessories are available



GENERAL SERVICE & UTILITIES

Linear Globe Control Valves

SAMSON offers a wide variety of linear control valve solutions for various applications, including models that are particularly well suited for more demanding services such as steam.

FEATURES & BENEFITS

- Modular valve design allows for maximum flexibility
- Hardened trim available for prolonged service life in high-wear applications
- Standard spring loaded low-emission packing minimizes valve stem leakage and maintenance requirements



Three-Way Globe Control Valves

Three-way valves are used for both mixing and diverting applications. Available options make them suitable for a wide range of process media, including glycol, thermal oils, steam, water, air, etc.

FEATURES & BENEFITS

- Standard spring loaded low-emission packing minimizes valve stem leakage and maintenance requirements
- Optional bellows seal available for media that may leak through traditional valve packing (e.g. thermal oils)
- Linear globe design provides excellent control for maximum performance and system efficiency

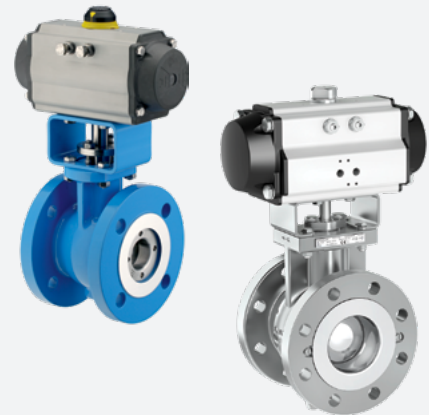


Rotary Control Valves

Our double eccentric rotary plug valves and segmented ball valves are used for a variety of general flow control applications. They are typically used for their large flow capacity and small overall profile.

FEATURES & BENEFITS

- Straight through flow path maximizes flow capacity
- Double eccentric rotary plug valve eliminates contact between seat and plug during control, minimizing friction and wear on internal valve components
- Various actuator designs available to fit application requirements



HYGIENIC & ASEPTIC PRODUCTS

SAMSON

PFEIFFER · RINGO · SED · STARLINE · VETEC
AIR TORQUE · CERA SYSTEM · LEUSCH

VALVES

- Control and on/off valves used where sterility and purity is of the utmost importance
- Designs include globe, rotary plug, ball, diaphragm, and angle seat valves
- Compliant with FDA, 3A, EHEDG, ASME BPE and USP standards

ACTUATORS

- Solutions for pneumatic, electric, and manual applications
- Designs include linear, rack-and-pinion, lever, and manual override
- Available in a wide variety of materials and finishes suitable for use in Clean-In-Place (CIP) applications

SMART DEVICES

- Digital positioners for linear and rotary valves that work in demanding conditions
- Available in HART, PROFIBUS, and FOUNDATION fieldbus communication
- Easy operation with state-of-the-art valve diagnostics

SAMSON

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