Biotechnology & Pharmaceutical
Our expertise, your efficiency

As a company with considerable expertise in providing fluid automation solutions to the process industries, we know that making the right choices can enable efficiency to be improved or maintained.

We offer a broad range of high quality and industry proven fluid control and fluid power solutions and products, including many that are certified to, and meet the needs of the Pharmaceutical and Biotechnology industries.

The right fit for your process

With a reputation for quality and reliability our fluid automation solutions are ideal for all critical Pharmaceutical and Biotechnology plant areas. These include the processing of raw materials and finished products as well as the control of utilities.

Processing  Raw material delivery to reactors and fermenters, sampling, injection and dosing, filling, coating & packaging - both in dry and liquid forms.

Utilities  Pure water generation, CIP-SIP circuit, steam & water sampling, filtration and purification, fluid networks (water, air, nitrogen steam and oxygen), wastewater treatment.

The right solutions for your applications

Our products and solutions are suitable for most Pharmaceutical and Biotechnology applications and we have the expertise to apply them, enabling the efficiency of your plant and processes.

Hygienic  Perfectly designed to suit CIP and SIP processes, our aseptic valves are self draining and contain no dead legs or retention areas to reduce bacteriologic risks.

Certification  Our Biotechnology and Pharmaceutical products meet mandatory certification requirements for critical, safe and hygienic processes.

Corrosion Resistance  Where required, our products are resistant to corrosive and chemical attacks caused by the process and cleaning fluids used in many Biotechnology and Pharmaceutical plants. The materials used will not leach out and adulterate the flowing media.

Diagnostics  For easier start-up, commissioning and trouble-shooting, our valves, valve islands and actuator control solutions are equipped with sensors, controls and clear diagnostics.

Solutions  For ease of installation we offer complete solutions that meet your application needs. We will mount our products in cabinets, on panels, on manifolds or manufacture complete sub systems.
Filter Regulators
Filter regulators, treat air quality and pressure in a plant’s pneumatic system. Available in multiple configurations, they can be applied to control pressure or meet the filtration requirements of pneumatic equipment.

Actuator Controls
NAMUR interface or piped configurations can be coupled with spring-return and double-acting actuators for use throughout the process. Low power Ex is suitable for use with all current limited barriers.

Solenoid Valves
We offer the widest range of solenoid valves of any manufacturer, they are ideal for any air and liquid flow control requirements.

Valves for utilities
We offer a broad range of valves for utilities applications such as the control of steam, water and air.

Linear indicators
Linear indicators are used on aseptic diaphragm valves to signify whether they are open or closed. One enclosure is offered for all valve sizes, with or without a built-in solenoid. They are available with AS-interface® protocol.

Aseptic Diaphragm valves
Elimination of microscopic areas where fluid can be retained enables SIP and CIP cycle times to be reduced. The welded assembly design minimises the time taken to assemble, reduces dead legs and enhances hygiene.

Pressure Operated Valve Assembly
A 2-way piston operated valve assembly with position indicator, and integrated pilot valve is a cost effective alternative to an actuated ball valve assembly. The linear on/off valve is a stand-alone solution that can be used in a variety of applications.

Valve Manifolds
Our innovative I/O valve manifolds feature a high-flow rate and a broad range of fieldbus options. An integral LED display enables easy configuration and diagnostics and an Auto Recovery Module (ARM) saves and reloads all configuration data to ensure fast change-out. For continuous processes a single valve can be shut off and maintained while the manifold is pressurised. The manifold is offered with the industries widest variety of protocols, including Foundation Fieldbus, Profinet®, DeviceNet™, AS-Interface and industrial Ethernet/IP™.

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Our aseptic valves are offered with a range of diaphragm materials and have contoured, polished and self draining bodies. To ease installation issues, the valves can be provided as a custom solution with fully assembled and welded inlet and outlet piping. The high quality valves are resistant to steam, acids and other fluids used in typical cleaning or sterilisation systems. In order to meet most common requirements they can be manually operated or operated by air supplied by a solenoid valve or valve island. Our valve islands are available with most industry standard fieldbus protocols.

**CIP & SIP systems**

**Pure water generation**

This process requires high quality valves, filter elements and flow meters. We have the range, the expertise and the technology to fulfil these functions.

**Utilities**

Fluids such as steam, dry air, water and gases such as nitrogen, oxygen and carbon dioxide, can be supplied to the process via ASCO solenoid or air-operated valves.

**Actuator controls**

Process valves can be controlled by a single solenoid valve or by a valve installed on a manifold. Valve manifolds can be assembled directly on the machine or integrated into a specially designed cabinet that includes all electrical and pneumatic connections. Our actuator control solutions can be installed in safe areas or in explosive atmospheres.
Certification expertise

Sanitary certification

ASCO Sanitary diaphragm valves are certified to the European Hygienic Equipment Design Group (EHEDG) document n° 8. They are also certified to 3A sanitary standards and approved by the USA Food and Drug Administration Agency, FDA and by the United States Pharmacopeia, USP Class VI. All body and contact surfaces are designed to meet the requirements of cGMP.

Communications protocols

ASCO Numatics valve islands with G3 electronics support many of the standard communications protocols, including FOUNDATION Fieldbus, DeviceNet™, EtherNet/IP™, PROFINET® and MODBUS TCP. There are also many options for AS-interface communications, including solenoid valves, proportional valves and travel feedback.

Functional Safety

551-553 solenoid valves are certified according to IEC 61508. Functional safety data is available on request. The solenoid valves are approved for use up to SIL 3 loop.

ATEX-IECEx certification

Compliance with ATEX directive 2014/34/EU for use in potentially explosive atmospheres. Many operators available with different categories and protection mode (Ex d, Ex ia, Ex m, Ex e mb ...).