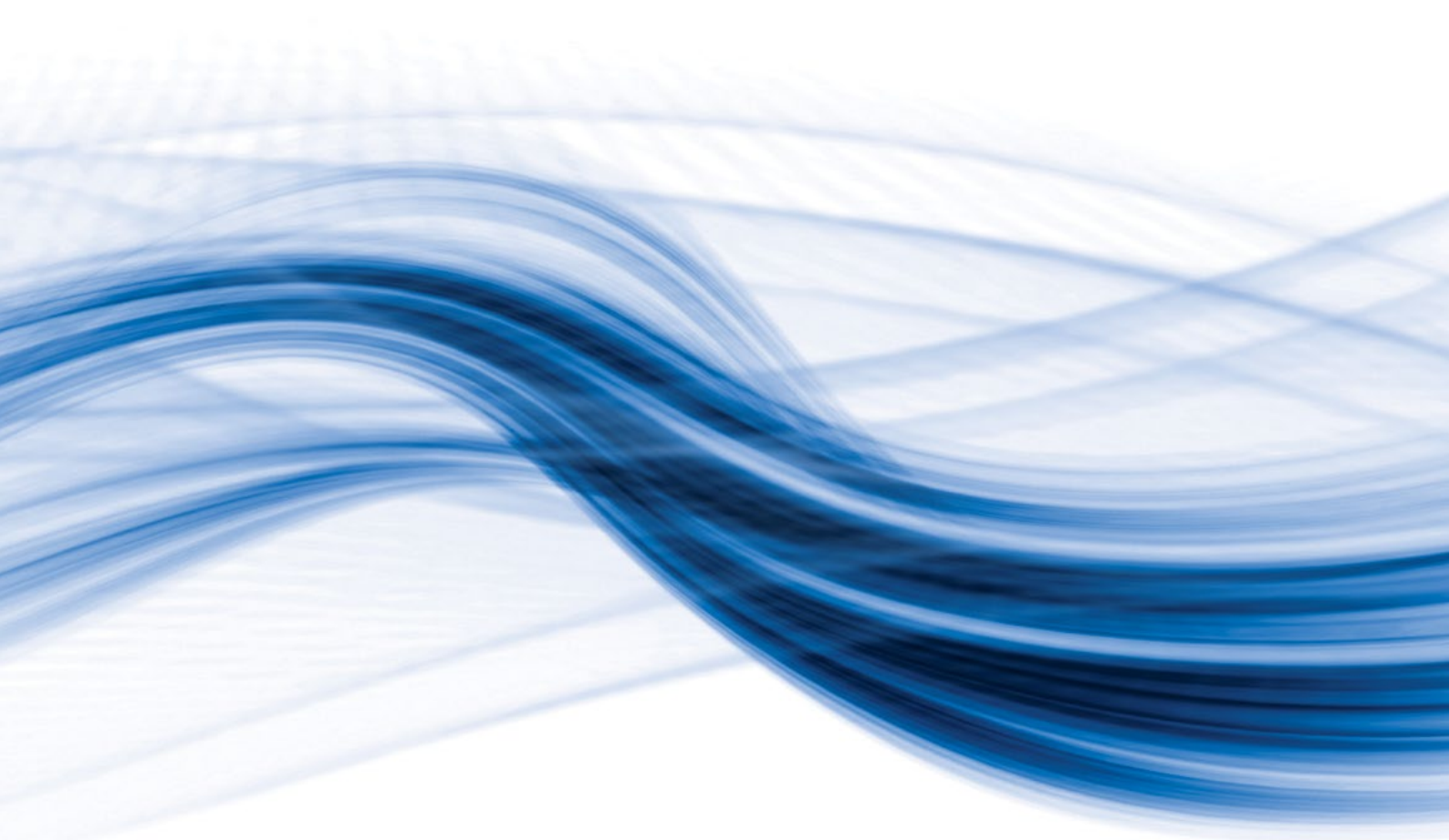


Valve Actuator Controls



Leading expertise from Emerson

- the dependable choice
of engineers the world over.

Your choice of valve actuation controls can have a considerable impact on the way you engineer a project and further down the line on plant performance, reliability and safety.

Regardless of your industry, Emerson can provide unparalleled expertise and product quality with our ASCO range of solenoid valves and associated products. We're here to solve even your most challenging engineering problems.

As developers of the first industrial solenoid valve in 1910 we have over a century of experience, we are the experts to turn to when it comes to solenoid valves for the process industry.

We work across all areas where liquids or gas processing takes place, including:

- Oil and Gas
- Petrochemical
- Pharmaceutical
- Power Generation
- Food and Beverage
- Water Treatment
- Chemistry



Our expertise... Your safety

We are dedicated to helping our customers easily meet the requirements of international functional safety standards. Our proven reliability is the reason we are the number one choice for engineers developing critical and safety related solutions.

Solenoid valves can easily perform millions of cycles in a lifetime – often outlasting the process valves and actuators they are installed on, with no need for maintenance. When fitted to safety shut-off valves, they may only need to operate a handful of times during their entire lifetime.

As such, it's essential that they work perfectly each and every time. Our product certification and testing means that the hard work has been done for you. The data you need for your safety calculations is readily available and you do not need to demonstrate they are proven in use.

Our SIL expertise

Emerson is proud to hold places on the IEC 61508 and IEC 61511 committees. This means that we lead the way in SIL and risk management. Key salespeople and distributor personnel are fully trained in SIL, and what it means for your business. This way, you can have complete confidence in our services and products.



Safe from start to finish

When you choose to work with Emerson, we'll provide you with a complete solution from start to finish. Our specialist understanding of safety loops means that we can help you design your Safety Instrumented System, whilst also supplying MTBF information and PFD values. For your convenience, you can work with a single point of contact on your entire project.

SIL products and solutions

- Direct acting Solenoid Valves (327 Series)
- Solenoid operated Spool Valves (551 Series)
- Valve Islands and associated electronics
- Redundant Control Systems
- Actuator Control Systems
- Bypass Panels

We also have certified products from Exida and Tüv which are suitable for use in safety applications up to SIL 3 with PFD < 4.10⁻⁷. These products have the highest achievable rating in accordance with IEC61508:

- 327 Series
- 551 Series

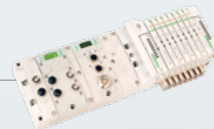
327 Series



551 Series



Valve Islands



Bypass panels



Redundancy and diagnostics

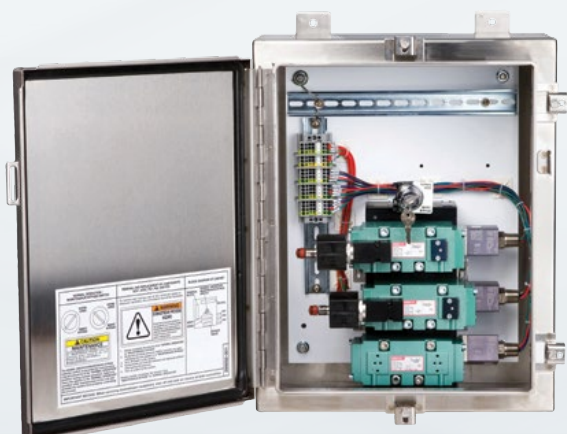
The ASCO Redundant Control System (RCS) provides inbuilt redundancy and diagnostics to optimise the safety and reliability of your plant while maximising uptime. It consolidates many components into one easy to configure, purchase and install package that meets all your safety requirements.

RCS provides higher levels of safety by incorporating a redundant, fault-tolerant architecture, high diagnostic coverage – as well as automated testing. The system's self-diagnostic capabilities test both the safety system and the emergency shutdown or process valve to ensure correct operating performance.

For those applications where automated valve testing may not be required we have the option to supply a bypass panel which enables the solenoid valve to be bypassed while its function is tested.

When it is not necessary to test the valve but it is necessary to have a redundant configuration to meet the SIL requirements we can offer Actuator Control System (ACS) containing two or more solenoid valves, solenoid valves with dual coils and separate valves which can be installed on the actuator in a redundant configuration.

RCS



ACS



Our expertise... Your productivity

We understand the importance to you and your business of keeping processes running smoothly – and we know the challenges you face.

When you choose ASCO products, you're also choosing the power of Emerson. We can offer complete actuator control, including predictive diagnostics via AMS software, to valve partial stroke testing and solenoid valve testing using Emerson digital valve controllers, providing safety measures that don't interrupt your process.

ACS

The ASCO Actuator Control System units are supplied completely assembled and tested using standard ATEX and Functional Safety certified products.

- Reduces the risk of malfunction and leakage
- Provides a flexible full 316L stainless steel modular system with:
 - Filter Regulators
 - Solenoids
 - Check valves
 - Speed controllers
 - Manual valves



Learn about our ACS capabilities with our product video



Bypass panels for solenoid testing

We offer the capability to test your solenoid valve in a safe, effective and non-disruptive way with our bypass panels.

- Won't affect or interrupt your process
- Ensures the longevity of components and functional safety
- Reduces downtime



327 Series solenoid valve

A safe and reliable product that offers the optimum balance between high flow rates and low power consumption, with proven high-cycling capabilities. With over one million 327 valves being installed in the field, this a product that has time and again proven its excellence in valve actuator applications with high flow requirements.

- Unique sealing system and non-stick design
- One of the most reliable valves of its type in aggressive atmospheres
- Reduces engineering time
- Lowers installation and commissioning costs



Find out more about 327 series at www.asco.com/en-gb/Pages/327-home.aspx

Solenoid operated spool valves

A low power and non-breathing construction offers high resistance and efficient solenoid pilot valves for harsh environments. Combined with extreme temperature capabilities (both high and low), the 551-553 valves are perfect for severe environments.

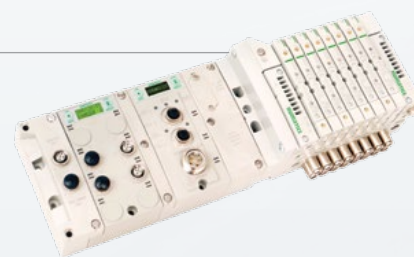
- This range is available in aluminium, brass or stainless steel
- Available with all existing protection modes and enclosures
- Suitable for explosive atmospheres
- For complex process valve actuation this solenoid valve exists in Namur or tapped connections.



Valve islands

Valve islands provide a fully integrated and complete actuator control solution. They are ideal for high density applications where the control valves are grouped together.

- Enable digital communication with plain-language diagnostics
- Can be used in a distributed mode which puts the control close to the actuator
- Supplied ready installed in cabinets for use in aggressive environments or mounted into cabinets on site
- Can communicate via common fieldbus protocols.



Find out more about valve islands at www.asco.com/en-gb/Pages/pneumatic-valves-directional-control.aspx

Our high performance products

With our strong research and development heritage we are always pushing at the boundaries of what is possible. If you are looking for high flow rates, low power consumption or extremes of temperature the chances are that if we do not already have a product to suit we can develop one.

- Our 327 series of direct operated solenoid valves offers the lowest power level of their type
- Our Actuator Control Systems were designed with a unique coupling system that does not restrict flow
- We offer solenoid coils with a power consumption as low as 7mW enabling you to choose the right balance between power consumption and flow rate
- Our stainless steel filter regulator 342 Series offers an excellent flow rate in both high and low temperatures in a compact size

Our expertise... Your efficiency

Your design and engineering time is valuable. Let us help you make the most of it by enabling you to select from one supplier all the products you may need, backed up with the expertise you would expect from a global supplier like Emerson. Our globally certified products, broad product range and solution capabilities mean that you can work with just one supplier. From the most complex requirements of your existing systems, to meeting the requirements of strict safety directives, we can meet your unique application needs.

Global approvals

We support a wide range of key global approvals, including:



Plus many more for local areas.

Production solutions for harsh environments

For harsh environment applications such as in the North Sea or in wash-down areas of food and beverage plants, we have products that will suit.

- NACE valves for upstream oil and gas, including offshore operations
- Solenoid valves in a wide variety of materials and coatings
- Stainless Steel Filter-Regulators
- Cabinet solutions including single or multiple products

Mounting flexibility

How you mount and install our products is a choice that you make. Whether you want to use standard NAMUR interfaces, have a specially designed interface or manifold, mount the valve to the actuator with a bracket, mount the valve in the pneumatic line or mount it in a cabinet, we have products to suit.



Stainless Steel and Aluminium Filter Regulator

Bespoke solutions from a single supplier

For customers who may be tight on time or short on resources, we offer fully pre-assembled, certified, ready to install systems built to your specification. Ranging from a simple close coupled assembly of a solenoid valve and a regulator, right through to full cabinet-mounted solutions consisting of Filter regulators, valves, switching units, power supplies etc. We provide solutions for different levels of integration, from simple actuators to multifunctional cabinets.

For ease of installation and integration with your existing systems, some of our products offer standard communication protocols such as Profibus-DP, Ethernet/IP and ProfiNet. Need something else? Just ask.

Finding a complete solution for your business requires the careful consideration of a number of key areas, including:

- Function and environment
- Mounting interface
- Power consumption and connecting methods
- Functional safety
- Direct acting or pilot operated
- Standards and Directives
- Individual component requirements



Cabinet mount

Get it quicker with ASCO Express

ASCO Express guarantees short-term deliveries on several of the products featured in this brochure. Despatched same day from our European manufacturing plant, it's never been easier to get the products you need to match with your project schedule.

A service built around your business

ASCO Express is part of our dedication to providing you with the kind of service, quality and performance our customers deserve.

We currently offer two Express service levels:

- Same day: We aim to provide shipment from the production location on the day your order is received. If this is logistically impossible, we guarantee shipment in three days.
- Fast ship: guaranteed shipment within ten days of your order.

To find out more about our Express service, or to request a quote, visit us online at www.asco.com/en-gb/Pages/asco-express-services.aspx.



Please note - actual shipment time is dependent on product and quantity ordered. Orders for the same day service must be received before 14:00 European time and are subject to a limit of 25 pieces of any product. Reasonable time must be added for transportation. For expected delivery dates of your required products, please contact your local sales office or distributor.

Why Emerson

Emerson has an established worldwide reputation for technology innovation and industry leadership. Our technologies have served to transform entire industries, from the creative solutions provided by the smallest detail, to their greater collective impact on the environments we live and work in. Helping our customers achieve that distinct competitive advantage is our priority.

Problem solving is our passion. We are committed to driving technological progress and setting the standards of the future by maintaining a strong focus on research and development, and investment in training and future talent. Our approach includes extensive research on both emerging technology and key global market trends, and our own customer challenges enable us to prioritise our R&D efforts.

Emerson. Consider it solved.

Discover more

To find out more about how our valve actuator controls can benefit your business, please visit www.asco.com/en-gb/Pages/applications-valve-actuator-controls.aspx, or contact your local Sales Department.



Scan to see ASCO in action
Or go to www.asco.com

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Fluid Automation. Right. Now.™

