



# Fluid Power & Fluid Control Solutions

Leadership and Innovation in  
Valve Products and Valve Systems



# ASCO's fluid control products and Numatics' fluid power products

**ASCO**  
**numatics**

have come together to offer comprehensive fluid automation solutions for a wide range of industry-focused applications. When combined with our deep process expertise, these solutions provide lower cost of ownership, greater asset availability, and improved productivity. The company's product line includes over 50,000 solenoid valves, an extensive selection of air

preparation and control equipments, and a comprehensive set of position indicators. ASCO Numatics products and technologies are ideal for life sciences, power generation, biofuels, food and beverage, air ride suspension, petroleum and chemical, water and wastewater, pulp and paper, packaging, commercial appliance, and HVAC.



## Fluid Control

ASCO offers the world's largest line of flow control components including solenoid pilot valves, angle body piston valves, Namur valves, redundant control system, actuator control system and pressure sensors.

## Fluid Power

Numatics provides a broad range of pneumatic and motion control products for industrial applications. These include valve manifolds, filters, regulators, lubricators (FRLs), cylinders, grippers, slides and gantries.





## ASCO 2-Way Solenoid Valves

Two-way (2/2) general service solenoid valves have one inlet port and one outlet port.

- Control of air, water, light oil, non-corrosive media.
- Normally Closed (opens when energized) and Normally Open (closes when energized) operations.
- Sizes range from 1/8" to 3".

## Angle Body Piston Valves

Angle body piston valves are two-way (2/2) air operated valves that can replace motorized or air actuated ball valve packages in any applications.

- Normally Closed and Normally Open operation.
- Straight through flow for maximum Cv.
- Proportional control.
- Sizes range from 3/8" to 2 1/2".



## Hot Water / Steam 2/2 NC Valves

Hot water and Steam valves are built with rugged materials to stand up to the harsh media and the environmental conditions of water/steam applications.

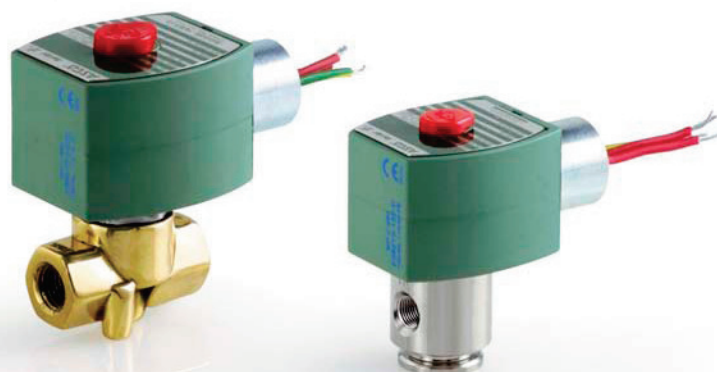
- Two-way (2/2) Normally Closed and Normally Open operations.
- Two-way (2/2) Normally Closed (open when energized) slow closing operation to reduce water hammer effects
- Sizes range from 1/4" to 2".



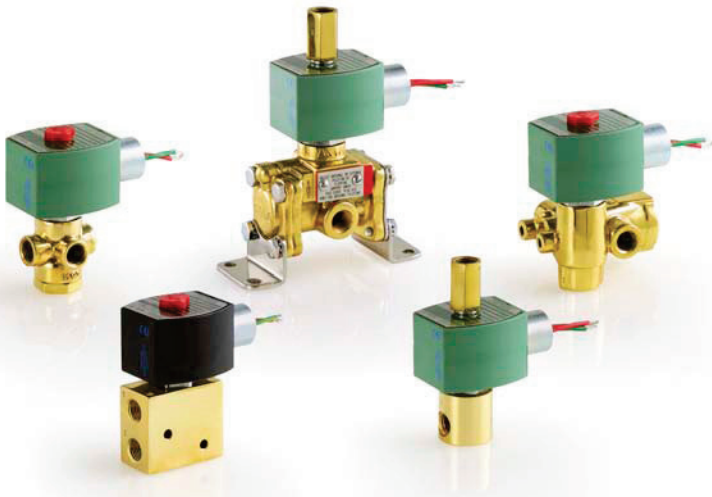
## Cryogenic 2/2 NC Valves

Cryogenic valves are constructed with special materials in order to withstand the severe services encountered when controlling cryogenic fluids such as liquid oxygen, liquid nitrogen, liquid argon, and liquid CO2.

- Two-way (2/2) Normally Closed operation.
- Sizes range from 1/8" to 1/2".







## ASCO 3-Way Solenoid Valves

Three-way (3/2) general service solenoid valves have three ports and two orifices. When one orifice is opened, the other is closed.

- Control of air, water, light oil, non-corrosive media.
- Normally Closed (pressure to cylinder port when energized) operation.
- Normally Open (cylinder port to exhaust when energized) operation.
- Universal (can function as NC, NO, diverter of one fluid, or selector of two fluids) operation.
- Sizes range from 1/8" to 1".

## ASCO 4-Way & 5-Way Solenoid Valves

Four-way four ports (4/2) and five ports (5/2) general service solenoid valves have one pressure port, two cylinder ports, and either one or two exhaust ports.

- Control of air, water, light oil, non-corrosive media.
- Sizes range from 1/4" to 3/4".
- Single and Dual solenoid operation.
- Inline (pipe connections) and NAMUR (industry standard direct mount) configurations.



## ANZEx

Electrical Equipment in Hazardous Areas  
AUSTRALIAN CERTIFICATION SCHEMES



AB 1771 RIO  
Allen-Bradley



DeviceNet™

EtherNet/IP.



WorldFIP



## Pilot Valves for Pneumatic Actuators

Pilot valves are available in a large selection of:

- 3-, 4- and 5-way direct acting or pilot operated / pressure assisted versions
- Brass, stainless steel, aluminium and plastic valves
- Sealing materials in a wide range of resilients
- ATEX, IECEX, NEMA and other solenoid operator enclosures are available to operate from -50°C to 100°C in normal or explosive environments.

Pilot valves which operate at extremely low power levels are compatible with interfaces and their major communication protocols including ASInterface, DeviceNet, Profibus-PA, ControlNet, EtherNet IP and Foundation Fieldbus.

## Intrinsically Safe / Low Power Special Service Pilot Valves

Low power valves minimize temperature rise and power draw allowing the user to reduce wiring and operates these DC valves directly off in computer control. Intrinsically safe valves are for use in an inherently safe system which will not ignite in an explosive atmosphere.

- Three-way (3/2) normally close and universal operations.
- Four-way, four and five port (4/2 and 5/2) operation.
- Sizes range from 1/4" to 1/2".



## Manual Reset Special Service Pilot Valves

Manual reset valve uses manual reset assemblies in conjunction with the solenoid in order to prevent inadvertent valve startup in their designed failure modes.

No voltage release valves can be latched by moving the lever to the latched position when the solenoid is energized, the valve trips when the solenoid is de-energized. When tripped, the valve can be manually cycled open / closed but the solenoid must be energized to re-latch.

Electrically tripped valves can be latched when the lever is moved to the latched position and the solenoid is de-energized. The valve trips when the solenoid is energized by a continuous or momentary (0.3 seconds minimum) electrical signal.

- Three-way (3/2) universal (can function as NC, NO, diverter of one fluid, or selector of two fluids) operation.
- Sizes range from 1/4" to 1/2".



## Combustion Valves

Combustion valves are used for the control of combustible gases and fuel oil as listed.

- Two-way (2/2) Normally Closed (Shut Off) and Normally Open (vent) operations.
- Three-way (3/2) Normally Closed (pressure to cylinder port when energized) operations.
- Solenoid operated (electrically), cable operated (mechanical operation for range hoods), manual rest (conjunction of solenoid and manual operation), electro-hydraulically operated (electric motor using hydraulic pumps for operation).
- Sizes range from 1/8" to 3".





## Dust Collector Valves

Dust collector valves are high-flow, fast operating valves designed for use in dust collector systems.

- Integral pilot constructions contain solenoids for local control
- Remote constructions require a separate pilot solenoid valve
- Dust collector pilot boxes are designed for multiple remote pilot valves to be conveniently wired and protected from the environment.

## Pressure and Temperature Switches & Transducers

Pressure and temperature switches and transducers are designed to control other devices electrically based on pressure and temperature input. Pressure switches can come in various configurations such as

- Adjustable deadband (independent adjustable set and reset points) pressure switch operation.
- Fixed deadband (adjustable set points and fixed reset points) pressure switch operation.
- Two-stage fixed deadband (2 independent switches with adjustable set points and fixed reset points) pressure switch operation.



## Accessories

Numatics® manufactures a complete line of fluid power accessories that required at the downstream of the compressor. They control the air flow and help to save air and energy.

Our standard range of BSP / NPT thread of push-in fittings is available in composite reinforced with brass housing and bushing. Special requests for stainless steel and / or World Thread™ fittings are available upon request.

Our range of tubings is available in Low Density Polyethylene and Polyurethane materials. They come in either blue or black for Polyurethane material or natural for Low Density Polyethylene material.



## Cylinders

Our cylinders range from mini cylinders of piston diameter of 8 to 25mm to VDMA cylinders of piston diameter of 32 to 320mm.

Specialty cylinders such as rodless cylinders (piston diameter of 25 to 50mm), rotary cylinders (piston diameter of 32 to 125mm) and air bellows (air ports G1/8" to G1") are also available.



## Filter, Regulators & Lubricators

Our range of air preparation components such as filters and regulators maximizes system performance and safety from the compressor to the point of use. Our patented FlexiBlok™ leads the industry in the ease of assembly. FlexiBlok™ FRL line eliminates the need for connecting brackets, mounting kits and component connectors.



## Inline Valves

Numatics® unique lapped spool & sleeve assembly is literally the core of most Numatics valves. Due to its various features, it saves energy and most importantly costs:

- Long service life of up to 200 million cycles avoids costs that would arise from early replacement.
- Razor sharp edges on the spool have a perfect shear against the holes in the sleeve to resist air contaminants such as swarf, which will destroy valves with dynamic rubber seals.
- Unlike conventional valves, the spool and sleeve assembly switches without crossovers. This ensures that compressed air cannot exhaust from the inlet directly into the outlet during the switching process.
- The piston forces are balanced. Vacuum and pressure can both be applied in one valve at the same time, independent of flow direction. No additional valves or components are needed.

