



## PNEUMATIC VALVES AND MOTION CONTROL

2, 3, AND 4-WAY VALVES, AVAILABLE WITH ELECTRIC, MANUAL,  
MECHANICAL, AND PNEUMATIC ACTUATORS. MINIATURE TO FULL SIZE VALVES.





## About ARO®

ARO® is a worldwide manufacturer of fluid management products that are skillfully engineered to deliver performance and serviceability, allowing success to flow freely in our customers' businesses. That's why ARO® is fluid intelligence—the smart choice in fluid management products for industrial operations.

With over an 85-year legacy of premier product performance and service excellence, ARO® provides fluid management equipment for customers and industries around the globe. ARO® has the right product to meet our customers' specific needs. We offer air-operated diaphragm pumps, piston pumps and packages, filters, regulators, and lubricators (FRLs), lubrication equipment, and pneumatic valves and cylinders.

## ARO's Fluid Power Products Keep the Unknown In Check

The smallest things pose the biggest threats to your facility. Air particle contaminants, improper pressure levels, lack of safety switches, and more can cause major damage to equipment and employees. Too often than not, plant managers are unaware of these threats until suddenly an essential tool doesn't work or their facility is shut down and they lose major time diagnosing the issue. ARO® builds the quality products to keep you from getting too familiar with the unknown. ARO® valves, cylinders, logic controls, and filters/regulators/lubricators (FRLs) make it easy to manage the small stuff. ARO® products are expertly engineered to protect your equipment and your employees from unscheduled downtime, premature breakdown, and injury risks. And because they integrate perfectly together, building a complete system for full protection is a breeze.

## Our robust valve offering is broad and deep

We have a valve for almost every solenoid, manual and mechanical application. In the rare case we don't have it, we can expertly modify or customize our standard product to meet your application needs. ARO® can provide customized pneumatic control solutions to meet the needs of large customers and OEMs

## The performance you deserve. The reliability you expect

ARO® has always delivered on a promise of performance, and valves are no exception. Built with the rugged reliability to handle heavy duty and dirty applications while offering excellent flow rates, our valves can control cylinder movement and machine sequence, operate pumps, and more with top-of-the-line efficiency.

# ARO®

# Pneumatic Valves

## Descriptions

### Sierra Series

Compact 2-position, 4-way valves that are lightweight, yet durable. 15mm or 18mm wide. Body ported or sub-base mounted. Single and double solenoids available. M5 (10-32) and 1/8" ports.

### MaxAir Series

2, 3 and 4-way air solenoid, pilot and hand lever valves feature excellent flow in a compact, lightweight package.

### Alpha Series

High flow, 2-and-3-position, 4-way valves that are compact in size with many features. The family includes: Body Threaded, Stacking, Bar Manifold and Assembled Manifold. Single and double solenoids, or pilot actuators are available. 1/8", 1/4" and 3/8" ports.

### Cat Series

Small, 3-way solenoid valves. Perfect for small bore, single acting cylinders and electric to air interfacing applications. Body ported for stand alone applications, stacking or base manifold. Available as normally open or normally closed. 1/8" and 1/4" ports.

### 50 Series

3-way and 4-way body ported valves. Six manual, mechanical and pilot actuator styles available. 1/8" ports.

### E-Series

3-way and 4-way body ported valves. Nine manual, mechanical, pilot and solenoid actuator styles available. 1/4" ports.

### K-Series

Manual, Pilot and Solenoid, heavy duty 4-way valves. Available as body ported. Seven actuator styles available. Manual: 3/8" and 1/2" ports. Solenoid and Pilots: 3/8", 1/2", 3/4" and 1" ports.

### H-Series

High flow 3-and-4-way function Poppet valves. Available in solenoid, pilot and bleed actuators. 1/4", 3/8" & 1/2" ports.

### Premair™

3 & 4-way direct acting solenoid valve. Rugged construction & lightweight, stand alone & stacking. Available in 1/8" ports.

## Accessories

### Accessory Valves

- 100 Series - 3-way N.C., miniature limit valves.
- 200 Series - 3-way limit valve-ideal for sensing devices such as cylinders, slides & gates.
- 400 Series - Heavy duty 3-way limit valves, 4 actuator arms available.
- 460 Series - 3-way palm button valves.
- The 200, 400 and 460 are multipurpose valves, plumb N.O., N.C., diverter, & selector.
- In line and right angle flow controls, in line needle & check valves.

### Valve Accessories and Special Valves

- Bleed valves: manual button and pilot operated.
- Quick exhaust valves for enhancing cylinder speed.
- One shot pulse valve to convert continuous air supply to a momentary output.
- Shuttle valves operate as a check when two inlets are required.
- Micro switch converts pneumatic signal into an electric signal.
- Exhaust mufflers, exhaust speed controls, breather vents.

### Pneumatic Logic Controls

- Two-hand anti-tie-down unit for monitoring operators hands during work cycle.
- Pneumatic pulse and delay timers for use in simple valve circuitry.
- Pneumatic counters.

# Selection Charts

## Product line size range - body style solenoid valves

Valve Series (Page No.)	10-32 Port Size	1/8" Port Size	1/4" Port Size	3/8" Port Size	1/2" Port Size	3/4" Port Size	1" Port Size
<b>Sierra</b> (PG 4-12)	9 SCFM (0.25 Cv)	30 SCFM (0.70 Cv)					
<b>Premair</b> (PG 28,29)		10 SCFM (0.144 Cv)					
<b>Maxair</b> (PG 13-17)			26 SCFM (0.70 Cv)	61 SCFM (1.65 Cv)	150 SCFM (1.70 Cv)		
<b>Alpha</b> (PG 18-23)		30 SCFM (0.90 Cv)	50 SCFM (1.50 Cv)	61 SCFM (0.70 Cv)			
<b>E</b> (PG 42-47)			26 SCFM (0.70 Cv)				
<b>H</b> (PG 52,55)			55 SCFM (1.51 Cv)	81 SCFM (2.27 Cv)	85 SCFM (2.40 Cv)		
<b>K</b> (PG 48-51)				83 SCFM (2.30 Cv)	90 SCFM (2.57 Cv)	270 SCFM (7.54 Cv)	280 SCFM (7.80 Cv)

## Product line size range - manifold/stacking solenoid valves

<b>Sierra</b> (PG 4-12)	9 SCFM (0.25 Cv)	30 SCFM (0.70 Cv)					
<b>Premair</b> (PG 28,29)		10 SCFM (0.14 Cv)					
<b>Maxair</b> (PG 13-17)			26 SCFM (0.70 Cv)	61 SCFM (1.65 Cv)	150 SCFM (1.75 Cv)		
<b>Alpha</b> (PG 16-23)		43 SCFM (1.32 Cv)	54 SCFM (1.60 Cv)	54 SCFM (1.60 Cv)	57 SCFM (1.75 Cv)		
<b>Cat</b> (PG 24-27)		1.8 SCFM (0.048 Cv)	2.2 SCFM (0.062 Cv)				

## Product line size range - body style manual/mechanical

Valve Series (Page No.)	5/32" Push to Connect	1/8" Port Size	1/4" Port Size	3/8" Port Size	1/2" Port Size	3/4" Port Size	1" Port Size
<b>200</b> (PG 56-57)	4 SCFM (0.104 Cv)	7.5 SCFM (0.195 Cv)					
<b>400</b> (PG 60-61)	4 SCFM (0.104 Cv)	7.5 SCFM (0.195 Cv)					
<b>50</b> (PG 32-35)		16 SCFM (0.43 Cv)					
<b>Maxair</b> (PG 36-40)		8 SCFM (0.70 Cv)	26 SCFM (1.14 Cv)				
<b>E</b> (PG 42-47)			26 SCFM (0.70 Cv)				
<b>K</b> (PG 48-51)				83 SCFM (2.30 Cv)	90 SCFM (2.57 Cv)		

# Premair

## Ordering

### Miniature 3-Way and 4-Way Valves

Model	Description
P114400	END PLATE FOR 3-WAY OR 4-WAY VALVE STACK
114806	MOUNTING BRACKET FOR INLINE VALVES
114807	ISOLATOR PLUG KIT FOR STACKING VALVES
CSN-MICRO	CONNECTOR, STRAIN RELIEF
P251SS-012-D	3-WAY BODY PORTED, LEAD WIRE, 12 DC
P251SS-012-E	3-WAY BODY PORTED, PLUG-IN, 12 DC
P251SS-024-D	3-WAY BODY PORTED, LEAD WIRE, 24 DC
P251SS-024-E	3-WAY BODY PORTED, PLUG-IN, 24 DC
P251SS-120-A	3-WAY BODY PORTED, LEAD WIRE, 120 AC
P251SS-120-B	3-WAY BODY PORTED, PLUG-IN, 120 AC
P261SS-012-D	3-WAY STACKING, LEAD WIRE, 12 DC
P261SS-012-E	3-WAY STACKING, PLUG-IN, 12 DC
P261SS-024-D	3-WAY STACKING, LEAD WIRE, 24 DC
P261SS-024-E	3-WAY STACKING, PLUG-IN, 24 DC
P261SS-120-A	3-WAY STACKING, LEAD WIRE, 120 AC
P261SS-120-B	3-WAY STACKING, PLUG-IN, 120 AC
P211SS-012-D	4-WAY BODY PORTED, LEAD WIRE, 12 DC
P211SS-012-E	4-WAY BODY PORTED, PLUG-IN, 12 DC
P211SS-024-D	4-WAY BODY PORTED, LEAD WIRE, 24 DC
P211SS-024-E	4-WAY BODY PORTED, PLUG-IN, 24 DC
P211SS-120-A	4-WAY BODY PORTED, LEAD WIRE, 120 AC
P211SS-120-B	4-WAY BODY PORTED, PLUG-IN, 120 AC
P211SC-012-D	4-WAY BODY PORTED W/SPEED CONTROL, LEAD WIRE, 12 DC
P211SC-012-E	4-WAY BODY PORTED W/SPEED CONTROL, PLUG-IN, 12 DC
P211SC-024-D	4-WAY BODY PORTED W/SPEED CONTROL, LEAD WIRE, 24 DC
P211SC-024-E	4-WAY BODY PORTED W/SPEED CONTROL, PLUG-IN, 24 DC
P211SC-120-A	4-WAY BODY PORTED W/SPEED CONTROL, LEAD WIRE, 120 AC
P211SC-120-B	4-WAY BODY PORTED W/SPEED CONTROL, PLUG-IN, 120 AC
P221SS-012-D	4-WAY STACKING, LEAD WIRE, 12 DC
P221SS-012-E	4-WAY STACKING, PLUG-IN, 12 DC
P221SS-024-D	4-WAY STACKING, LEAD WIRE, 24 DC
P221SS-024-E	4-WAY STACKING, PLUG-IN, 24 DC
P221SS-120-A	4-WAY STACKING, LEAD WIRE, 120 AC
P221SS-120-B	4-WAY STACKING, PLUG-IN, 120 AC
P221SC-012-D	4-WAY STACKING W/SPEED CONTROL, LEAD WIRE, 12 DC
P221SC-012-E	4-WAY STACKING W/SPEED CONTROL, PLUG-IN, 12 DC
P221SC-024-D	4-WAY STACKING W/SPEED CONTROL, LEAD WIRE, 24 DC
P221SC-024-E	4-WAY STACKING W/SPEED CONTROL, PLUG-IN, 24 DC
P221SC-120-A	4-WAY STACKING W/SPEED CONTROL, LEAD WIRE, 120 AC
P221SC-120-B	4-WAY STACKING W/SPEED CONTROL, PLUG-IN, 120 AC



3-Way Body Ported



4-Way Body Ported



4-Way Body Ported  
with Speed Controls



3-Way and 4-Way Stacking Valves



#### 114806

#### Mounting Bracket

Kit is designed for use with both 3-Way and 4-Way valves. Kit consists of a bracket, two #6-32 screws, and two nuts.



#### P114400

#### End Plate Kit

Kit consists of two end plates, two o-rings, and two bolts. One kit required for each valve stack. Can be used for 3-Way or 4-Way valves, or any combination of valves.



#### CSN-MICRO Connector

Plug-in DIN type connector conforms to Industrial Micro Type C. Order separately.

#### 114807 Isolator Plug Kit

Kit consists of two plugs. Plugs can be used on stacking valves to convert 4-ways to 3-ways, or 3-ways to 2-ways. Also can be used to provide multiple pressures to a valve stack.





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