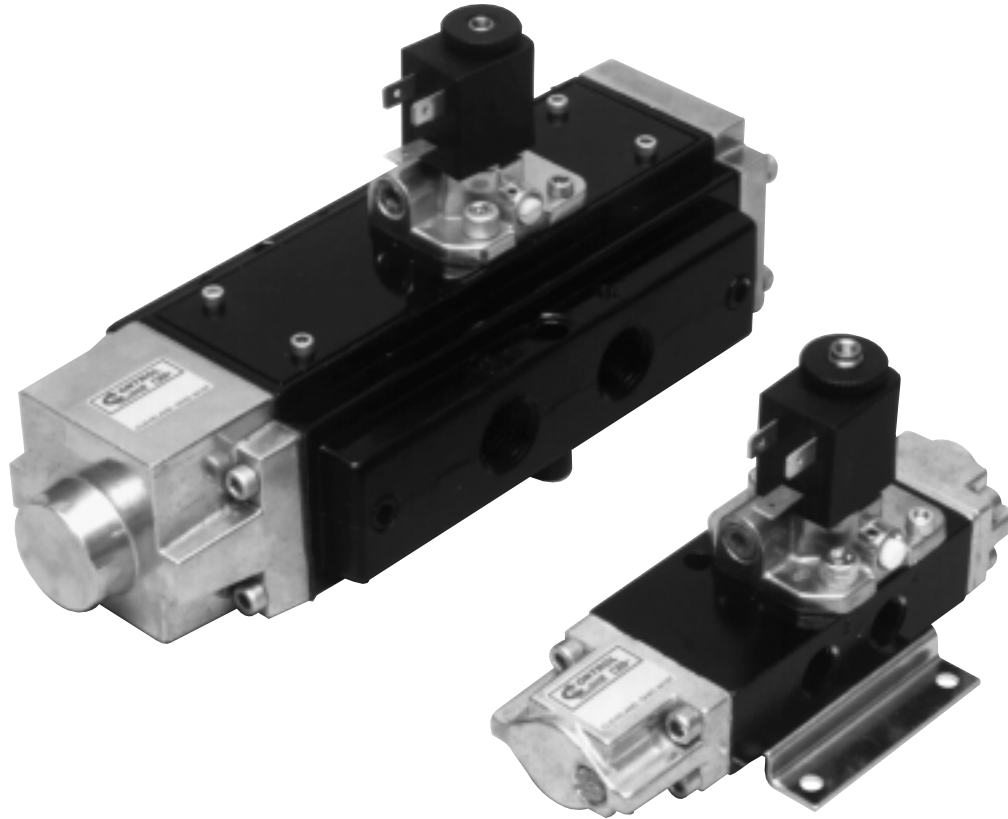


“G” & “J” SERIES HIGH FLOW SPOOL VALVES



- 1/4", 3/8" or 1/2" NPT PORTS
- 3-WAY OR 4-WAY OPERATION
- PILOT AND SOLENOID OPERATED
- 2 AND 3 POSITION CONFIGURATIONS
- C_v RANGE 1.7 TO 6.6



CONTROL LINE EQUIPMENT, INC.

14750 Industrial Parkway • Cleveland, Ohio 44135
(216) 433-7766 • FAX: (216) 433-7664

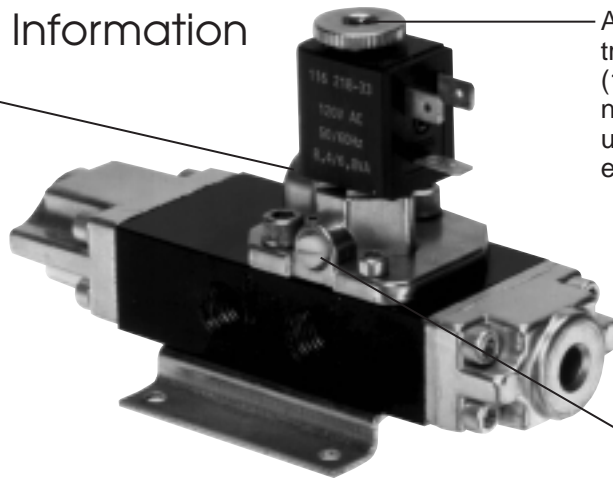
“G” Series 3-Way & 4-Way Valves

Application Information

- Available in pilot and solenoid models only.
- These 1/4" NPTF port valves have self-aligning stacked spacers and O-rings, which assure O-ring seal while allowing increased air flow.
- These valves are ideal for high cycle applications and for operation of larger bore cylinders and air tools.
- The hard anodized, ground and polished spool increases valve life by resisting wear and corrosion while assuring start-ups without hang-ups.
- The ground and polished spool permits operation with no additional lubrication for a cleaner environment and reduced product contamination.
- The low profile aluminum body is lightweight and corrosion resistant.
- These valves are rated at 200 PSIG to 28" of mercury and will operate in high or low pressure or vacuum applications.
- All 4-way valves may be ordered with bottom ports for subplate or manifold mounting.
- Repair kits available.
- Class F coil is rated for 100% duty cycle.
- Standard features include a manual locking override and a pilot override. Override must be depressed and turned to operate.

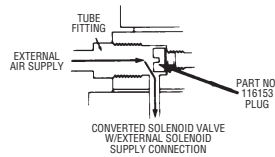
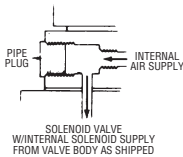
Feature / Benefit Information

Standard external solenoid supply enables valve operation for vacuum service for low pressure operations. Remove and discard the pipe plug. Assemble the 10-32 threaded plug. (part no. 116153 plug kit, order separately), with o-ring assembled into the threaded port to block the internal supply connection. Connect the external air supply to the 1/8 NPTF port.



Air pressure (50 PSI minimum) introduced at the solenoid exhaust port (10-32 thread) will override the solenoid. This is a convenient way to set-up and troubleshoot circuits without electrical power to the solenoids.

Manual locking override is standard. Simply depress and turn the override button to shift the valve.



Specifications

Lubrication: Valves are pre-lubed and can be operated without air line lubrication. If air cylinders or other air line devices require lubrication, ensure that lubrication oils are compatible with valve seals and of sufficient viscosity to assure adequate lubrication.

Flow: 61.6 SCFM

C_v Factor: 1.72

Weights: Pilot — .7 to 1.3 lbs.
Solenoid — 1.8 to 3.4 lbs.

Minimum Pilot Pressure:
Spring return — 40 PSI
Pilot return — 20 PSI

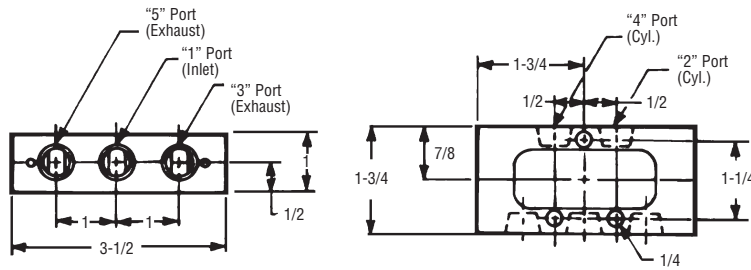
Standard Operating Pressure:

Pilot — Vacuum to 200 PSI
Solenoid — Vacuum to 150 PSI

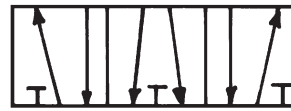
Temperature Range: -10° to 180°F

"G" Series 4-Way Dimensions

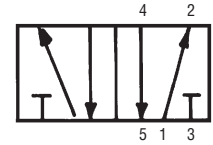
4-Way Basic Valve



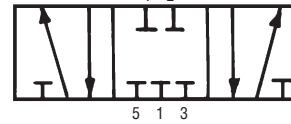
3 Position, Cylinder Ports Open, Inlet Blocked



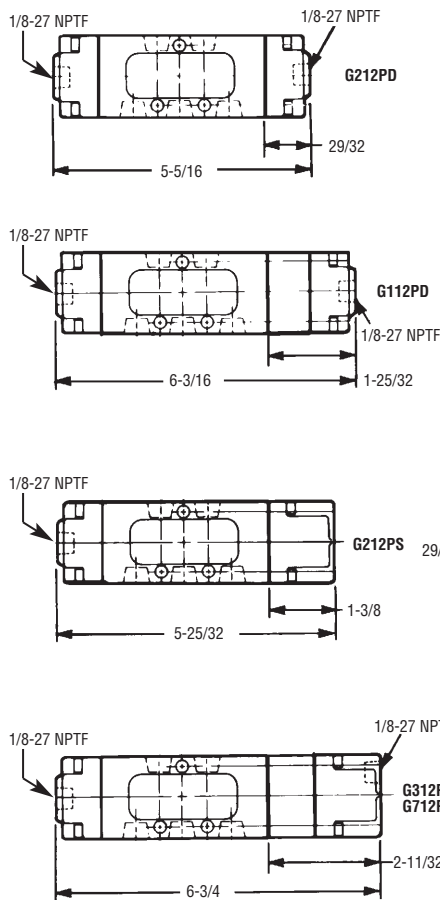
2 Position



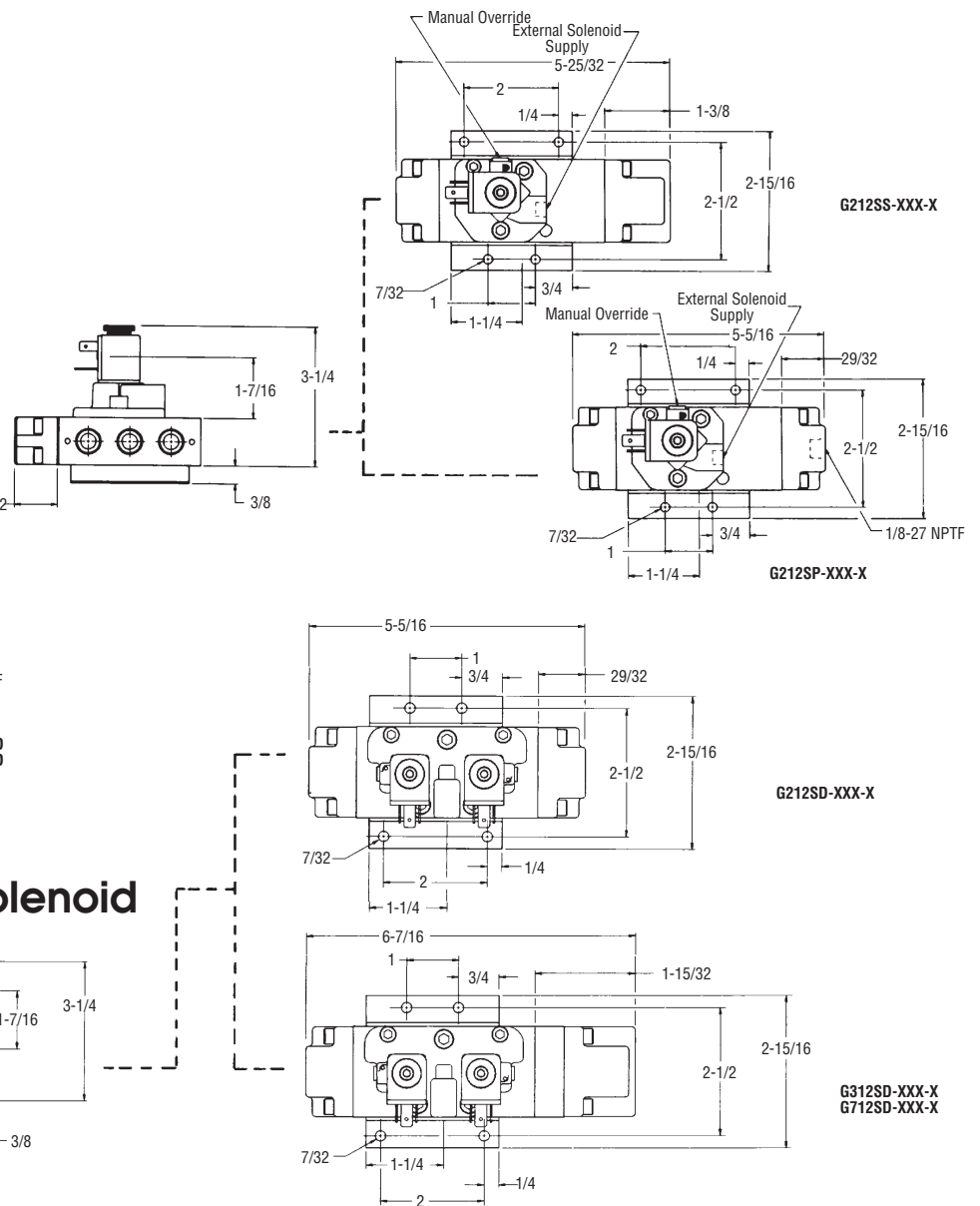
3 Position All Ports Blocked



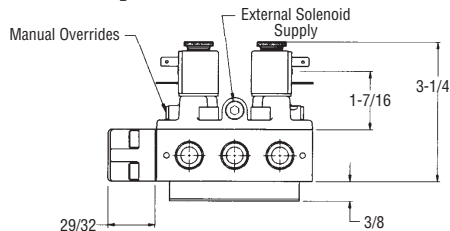
4-Way Pilot



4-Way Single Solenoid

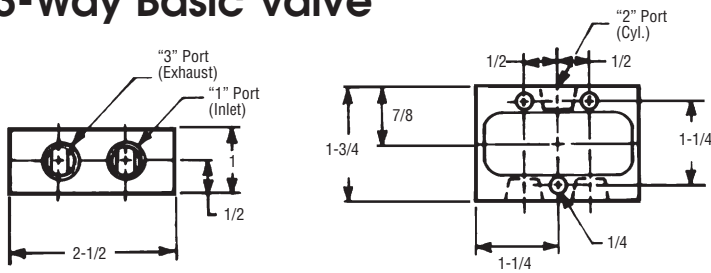


4-Way Double Solenoid

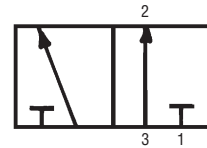


"G" Series 3-Way Dimensions

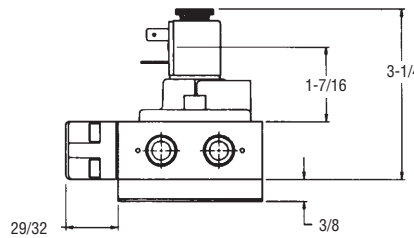
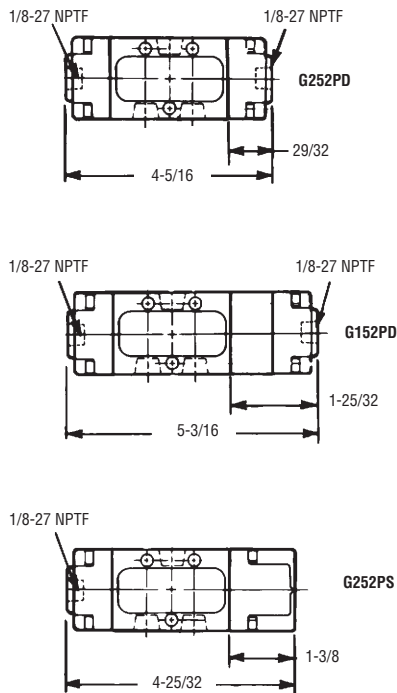
3-Way Basic Valve



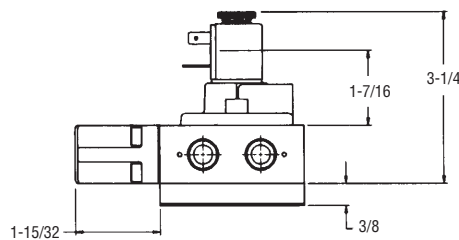
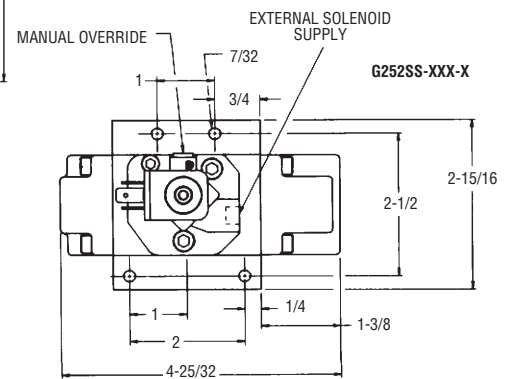
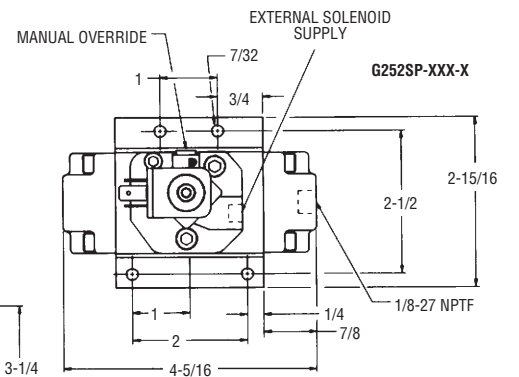
Valve Porting All Models.



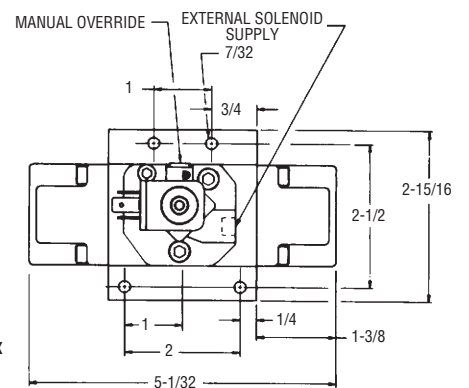
3-Way Pilot



3-Way Single Solenoid



G252SN-XXX-X



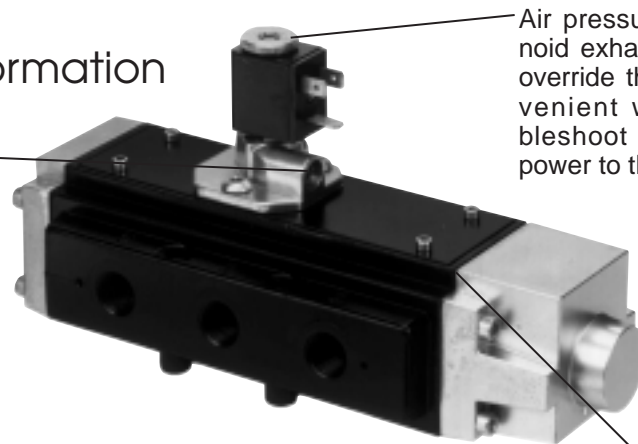
“J” Series 4-Way Valves

Application Information

- Available in pilot and solenoid models only.
- The “J” Series valve has a self-aligned stacked O-ring spacer configuration which allow it to have one of the highest air flow capacities on the market.
- A ground and polished spool permits operation with no additional lubrication for a cleaner environment and reduced product contamination.
- These valves are rated at 150 PSI to 28" of mercury for operation in high and low pressure as well as vacuum applications.
- The anodized polished spool increases valve life by resisting wear and corrosion while assuring start-ups without hang-ups.
- All solenoid actuated models are furnished with Class F coils and external solenoid supply option.
- Coils can easily be interchanged or replaced by removing nut, sliding existing coil off, a new coil on.
- Position the coil connectors where you need them. Simply loosen nut and rotate coil to desired position.
- Molded connectors protect the electrical connections against high humidity and wet environments to meet NEMA 4 classification.

Feature / Benefit Information

Standard external solenoid supply enables valve operation for vacuum service for low pressure operations. Remove and discard the pipe plug. Assemble the 10-32 threaded plug, (Part no. 116153 plug kit, order separately), with o-ring assembled into the threaded port to block the internal supply connection. Connect the external air supply to the 1/8 NPTF port.



Air pressure introduced at the solenoid exhaust port (10-32 thread) will override the solenoid. This is a convenient way to set-up and troubleshoot circuits without electrical power to the solenoids.

Low profile die cast aluminum body is lightweight and corrosion resistant.

General Specifications

Lubrication: Valves are pre-lubed and can be operated without air line lubrication. If air cylinders or other air line devices require lubrication, ensure that lubrication oils are compatible with valve seals and of sufficient viscosity to assure adequate lubrication.

- **Temperature Range:** -10° to 180°F

PORT SIZE	TYPE ACTUATOR	TYPE RETURN	PRESSURE RANGE PSI	MINIMUM PILOT PRES. PSI	FLOW* SCFM	C _v FACTOR
3/8"	All	Pilot or Solenoid	Vacuum To 150	10 15 for detent	200	5.6
3/8"	All	Spring**	Vacuum To 150	20**	200	5.6
1/2"	All	Pilot or Solenoid	Vacuum To 150	10 15 for detent	236	6.6
1/2"	All	Spring**	Vacuum To 150	20**	236	6.6

*Flow capacity approximate. [90 PSIG supply, 75 PSIG outlet.]

**Including 3-position spring centered. These valves require 50 minimum pressure.

“J” Series Valves Ordering Information

Valve Model

Series		Body Style		Current Type*	
Letter		#	Style	Letter	Type
J		1	4-way side ported	A	AC
				D	DC
				N	No Coil

*Only required when ordering solenoid operated valves. Leave blank when ordering pilot valves.

Valve Type

#	Type
1	Two Position Detent
2	Two Position
3*	Three Position Spring Centered
7**	Three Position Spring Centered

*All ports blocked in neutral
**Inlet port blocked, cylinder ports open in neutral.

Port Size

#	Size
3	3/8 NPT
4	1/2 NPT

Actuator/Return

Letter Type	
PD	Pilot/Pilot
PS	Pilot/Spring
SD	Solenoid/Solenoid
SS	Solenoid/Spring
SP	Solenoid/Pilot

Coil Voltage*

#	Voltage
005	5 Volt DC
012	12 Volt (AC or DC)
024	24 Volt (AC or DC)
120	120 Volt (AC or DC)
240	240 Volt AC
380	380 Volt AC
000	No Coil

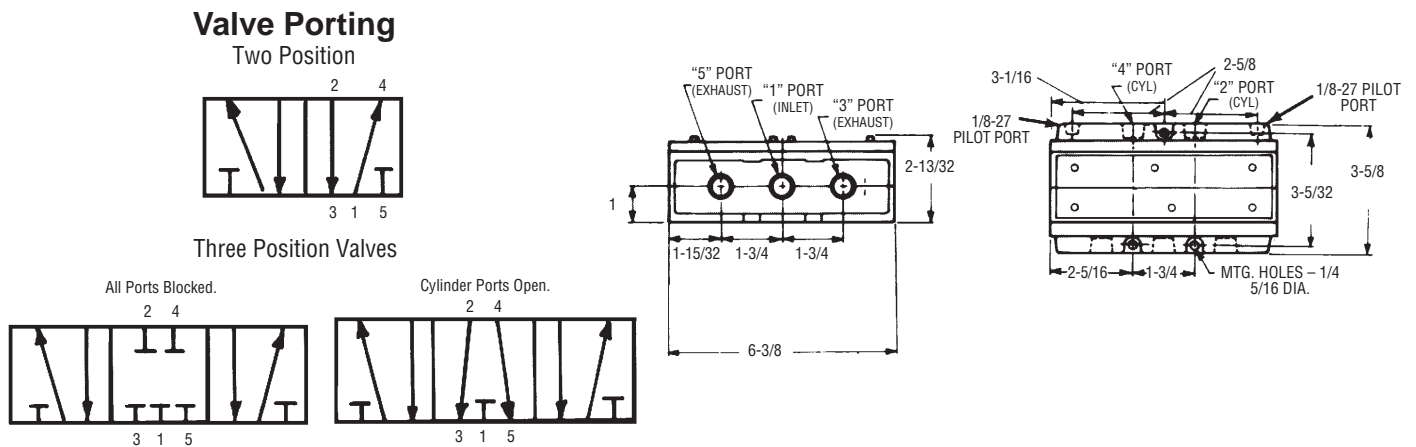
*Only required when ordering solenoid operated valves. Leave blank when ordering pilot valves.

J 2 1 3 S S — 1 2 0 — A

Connector Accessories: CONSULT FACTORY FOR ADDITIONAL CONNECTOR OPTIONS

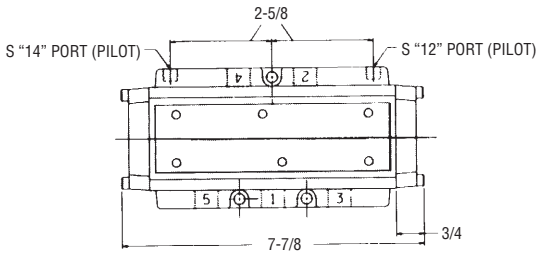
Connectors — without indicator lights or lead wire: **CDN** = 1/2" Conduit **CSN** = Strain Relief

4-Way Basic Valve Dimensional Data

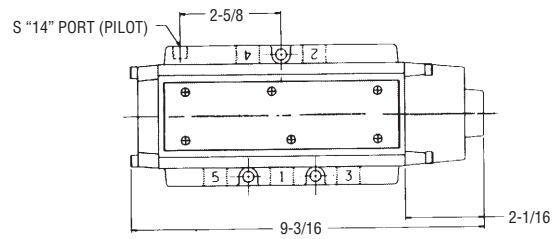


“J” Series 4-Way Dimensions

4-Way Pilot

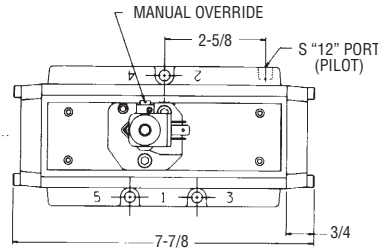
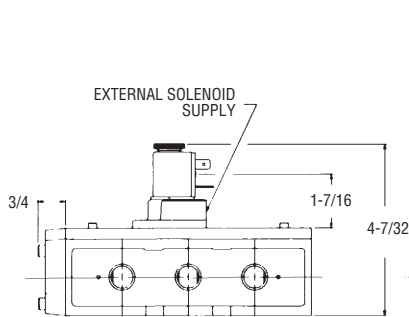


J21XPD

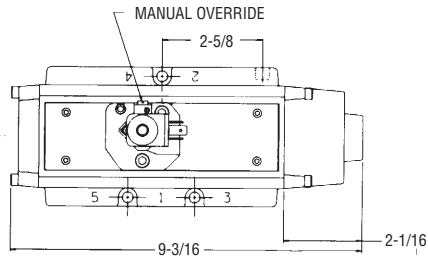


J21XPS
J11XPD
J31XPD
J71XPD

4-Way Single Solenoid

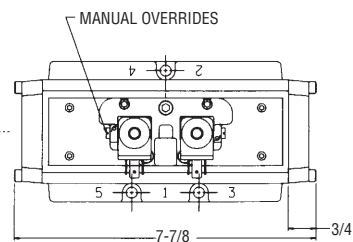
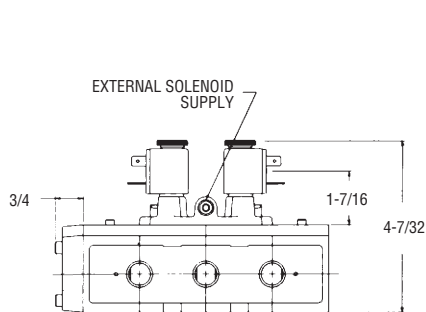


J21XSP-XXX-X

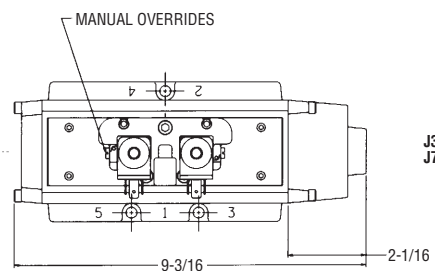


J21XSS-XXX-X

4-Way Double Solenoid



J21XSD-XXX-X



J31XSD-XXX-X
J71XSD-XXX-X