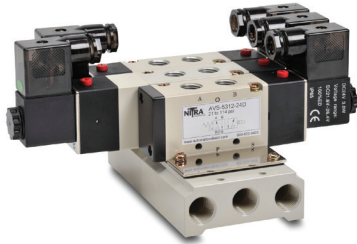


Pneumatic Directional Control Solenoid Valves – AVS-5 Series

AVS-5211



AVS-5221 *Stacked solenoids shown mounted on optional manifold*

NITRA™ pneumatic AVS-5 series directional control solenoid valves are body ported 5-port (4-way) spool valves. Available port sizes are 1/8", 1/4", 3/8" or 1/2" NPT with flow coefficients (Cv) from 0.50 to 2.79. Models are available with single solenoid, spring return or double solenoid 2-position operation. In addition, double solenoid models are available with 3-position, center closed or center exhaust operation. Solenoid coils are available in either 24VDC or 120VAC control voltages. The AVS-5 series can be used in individual valve applications or multiple valves can be field assembled on AM-5 series manifolds simplifying piping connections. AM-5 series manifolds are available in 2, 4, 6 or 8 stations. The DIN style wiring connector includes LED indication of the solenoid coil status.

Features

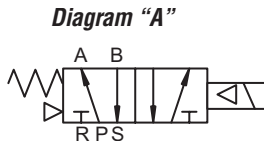
- Body ported, 5-port (4-way) spool valves
- 1/8", 1/4", 3/8" or 1/2" NPT ports
- 2-position, single solenoid normally closed, spring return;
2-position, double solenoid, energize open/energize closed;
3-position, double solenoid center closed or center exhaust
- 24VDC or 120VAC solenoid coils
- DIN style wiring connector with LED indication
- Single valve or multiple manifold mounted valve applications
- Locking manual operator
- 2 year warranty



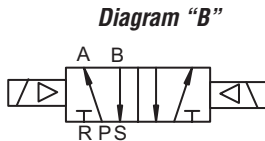
AVS-5 Series Specifications																
Model	AVS-5111-24D	AVS-5111-120A	AVS-5121-24D	AVS-5121-120A	AVS-513C1-24D	AVS-513C1-120A	AVS-513E1-24D	AVS-513E1-120A	AVS-5211-24D	AVS-5211-120A	AVS-5221-24D	AVS-5221-120A	AVS-5212-24D	AVS-5212-120A	AVS-5222-24D	AVS-5222-120A
Weight (lb)	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.8	0.8	0.5	0.5	0.8	0.8
Valve Type	5 port 2 position				5 port 3 position				5 port 2 position							
Acting	Internally Piloted															
Diagram	A		B		C		D		A		B		A		B	
Port Size	In/Out/Exhaust=1/8"				In/Out/Exhaust=1/8"				In/Out/Exhaust=1/8"				In/Out=1/4", Exhaust=1/8"			
Orifice Size	12mm ² (Cv=0.67)				9mm ² (Cv=0.50)				14mm ² (Cv=0.78)				16mm ² (Cv=0.89)			
Fluid	Air (to be filtered by 40µ filter element)															
Pressure	Working: 20-115 psi, (0.15-0.8 MPa), (1.5-8.0 bar); Proof: 215 psi, (1.48 MPa), (14.8 bar)															
Voltage (VAC @ 50/60 Hz)	24VDC single solenoid	120VAC single solenoid	24VDC double solenoid	120VAC double solenoid	24VDC center closed double solenoid	120VAC center closed double solenoid	24VDC center exhaust double solenoid	120VAC center exhaust double solenoid	24VDC single solenoid	120VAC single solenoid	24VDC double solenoid	120VAC double solenoid	24VDC single solenoid	120VAC single solenoid	24VDC double solenoid	120VAC double solenoid
Power Consumption	DC: 2.5W AC: 2.5 VA; continuous duty (100% ED)								DC: 3.0W AC: 3.5 VA; continuous duty (100% ED)							
Max Frequency	5 cycles/sec				3 cycles/sec				5 cycles/sec							
Operating Life	50,000,000 cycles															
Insulation	B class															
Min Response	0.05 sec															
Temperature	-5-60°C (23-140°F)															
Lubrication	Not Required															
Protection	IP65 (DIN40050)															
Connection	9.4 mm DIN Terminal								11mm DIN Terminal							
Body	Aluminum Alloy															
Agency Approvals	Solenoid CE marked; RoHS															



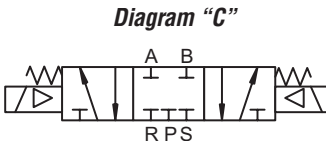
Pneumatic AVS Directional Control Solenoid Valves – AVS-5 Series



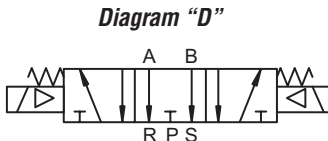
2-Pos, Spring Return



2-Pos, Double Solenoid



3-Pos, Closed Center



3-Pos, Exhaust Center

AVS-5 Series Specifications																
Model	AVS-5312-24D	AVS-5312-120A	AVS-5322-24D	AVS-5322-120A	AVS-5313-24D	AVS-5313-120A	AVS-5323-24D	AVS-5323-120A	AVS-523C1-24D	AVS-523C1-120A	AVS-523E1-24D	AVS-523E1-120A	AVS-523C2-24D	AVS-523C2-120A	AVS-523E2-24D	AVS-523E2-120A
Price										\$56.00	\$56.00	\$56.00	\$56.00	\$56.00	\$56.00	\$44.50
Weight (lb)	0.8	0.8	1.0	1.0	0.7	0.7	1.0	1.0	0.9	0.8	0.9	0.9	0.9	0.8	0.9	0.8
Valve Type	5 port 2 position								5 port 3 position							
Acting	Internally Piloted															
Diagram	A		B		A		B		C		D		C		D	
Port Size	In/Out/Exhaust=1/4"				In/Out=3/8", Exhaust=1/4"				In/Out/Exhaust=1/8"				In/Out=1/4", Exhaust=1/8"			
Orifice Size	25mm ² (Cv=1.4)				30mm ² (Cv=1.68)				12mm ² (Cv=0.67)							
Fluid	Air (to be filtered by 40µ filter element)															
Pressure	Working: 20–115 psi, (0.15–0.8 MPa), (1.5–8.0 bar); Proof: 215 psi, (1.48 MPa), (14.8 bar)															
Voltage (VAC @ 50/60 Hz)	24VDC single solenoid	120VAC single solenoid	24VDC double solenoid	120VAC double solenoid	24VDC single solenoid	120VAC single solenoid	24VDC double solenoid	120VAC double solenoid	24VDC center closed double solenoid	120VAC center closed double solenoid	24VDC center exhaust double solenoid	120VAC center exhaust double solenoid	24VDC center closed double solenoid	120VAC center closed double solenoid	24VDC center exhaust double solenoid	120VAC center exhaust double solenoid
Power Consumption	DC: 3.0W AC: 3.5 VA; continuous duty (100% ED)															
Max Frequency	4 cycles/sec								3 cycles/sec							
Operating Life	50,000,000 cycles															
Insulation	B class															
Min Response	0.05 sec															
Temperature	-5–60°C (23–140°F)															
Lubrication	Not Required															
Protection	IP65 (DIN40050)															
Connection	11mm DIN Terminal															
Body	Aluminum Alloy															
Agency Approvals	Solenoid CE marked; RoHS															