

Pneumatic Directional Control Solenoid Valves – AVS-5 Series

AVS-5211





AVS-5221

Stacked solenoids shown mounted on optional manifold

NITRATM 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



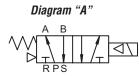


AVS-5 Series Specifications																		
Model	AVS-5111-24D	AVS-5111-120A	AVS-5121-24D	AVS-5121-120A	AVS-513C1-24D	AVS-513C1-120A	AVS-513E1-24D	AVS-513E1-120A	AVS-5211-24D	AVS-5211-120A	AVS-5221-24D	AVS-5221-120A	AVS-5212-24D	AVS-5212-120A	AVS-5222-24D	AVS-5222-120A		
Weight (lb)	0.3	0.3	0.4	0.4	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			3				
Port Size		In/Out/Ext	naust=1/8"		In/Out/Exhaust=1/8"				In/Out/Exhaust=1/8"				In/Out=1/4", Exhaust=1/8"					
Orifice Size	12mm² (Cv=0.67) 9mm² (Cv=0.50)			14mm² (Cv=0.78)		16mm² (Cv=0.89)					
Fluid							Air (to be	filtered by	40µ filter	element)								
Pressure				Wor	king: 20~	115 psi, (0	.15~0.8 M	Pa), (1.5~8	8.0 bar); P	roof: 215	psi, (1.48 ľ	MPa), (14.8	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 Freqency	5 cycles/sec 3 cycles/sec								5 cycles/sec									
Operating Life								50,000,0	00 cycles									
Insulation								Вс	ass									
Min Response	0.05 sec																	
Temperature		-5~60°C (23~140°F)																
Lubrication		Not Required																
Protection								IP65 (DI	N40050)									
Connection				9.4 mm DII	N Terminal							11mm DIN	V Terminal					
Body								Aluminu	ım Alloy									
Agency Approvals							Sol	enoid CE r	narked; Ro	HS								



Pneumatic AVS Directional Control Solenoid Valves – AVS-5 Series





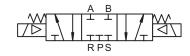
2-Pos, Spring Return

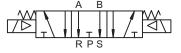
Diagram "B"

2-Pos, Double Solenoid

Diagram "D"

Diagram "C"





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
M-t-t-t-(II-)	0.0	0.0	4.0	4.0	0.7	0.7	4.0	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Weight (lb)	0.8	8.0	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			laters - U	. Dilatari			5 port 3	position			
Acting	Internally Piloted A B A B C D C D															
Diagram Port Size	/			3				C D								
Orifice Size		In/Out/Ext			In/Out=3/8", Exhaust=1/4"				In/Out/Exhaust=1/8" In/Out=1/4", Exhaust=1/8"							/δ
Fluid		25mm² (Cv=1.4) 30mm² (Cv=1.68) 12mm² (Cv=0.67) Air (to be filtered by 40μ filter element)														
Pressure				۱۸/	l.i 20	115 poi /0				roof: 215	noi /1 /10	MDa) (1.4	0 har\			
Voltage (VAC @ 50/60 Hz)	24VDC single solenoid	120VAC single solenoid	24VDC double solenoid	120VAC double solenoid	24VDC single solenoid	120VAC single	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 cycl	es/sec							3 cycl	es/sec			
Operating Life								50,000,0	00 cycles							
Insulation								Вс	lass							
Min Response	0.05 sec															
Temperature								-5~60°C (23~140°F))						
Lubrication								Not Re	equired							
Protection									N40050)							
Connection								11mm DII	V Terminal							
Body								Aluminu	ım Alloy							
Agency Approvals							Sol	lenoid CE ı	marked; Ro	HS						