



Pneumatic Directional Control Solenoid Valves – AVS-3 Series



AVS-3221

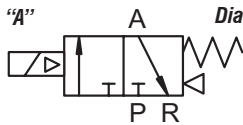
AVS-3211

NITRA™ pneumatic AVS-3 series directional control solenoid valves are body ported 3-port (3-way) spool valves. Available port sizes are 1/8", 1/4" or 3/8" NPT with flow coefficients (Cv) from 0.67 to 1.67. The single solenoid models provide 2-position, normally closed, spring return operation and the double solenoid models provide 2-position, energize open/energize closed operation. Solenoid coils are available in either 24VDC or 120VAC control voltages. The DIN style wiring connector includes LED indication of the solenoid coil status.

Features

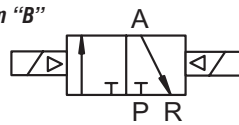
- Body ported, 3-port (3-way) spool valves
- 1/8", 1/4" or 3/8" NPT ports
- 2-position, single solenoid normally closed spring return; 2-position, double solenoid energize open/energize closed
- 24VDC or 120VAC solenoid coils
- DIN style wiring connector with LED indication
- Locking manual operator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

Diagram "A"



2-Pos, Spring Return

Diagram "B"



2-Pos, Double Solenoid



See www.AutomationDirect.com for a wide variety of fitting options

AVS-3 Series Specifications											
Model	AVS-3111-24D	AVS-3111-120A	AVS-3211-24D	AVS-3211-120A	AVS-3221-24D	AVS-3221-120A	AVS-3212-24D	AVS-3212-120A	AVS-3222-24D	AVS-3222-120A	
Price											
Weight (lb)	0.3	0.3	0.5	0.5	0.8	0.7	0.5	0.5	0.7	0.7	
Valve Type	3 port 2 position										
Acting	Internally Piloted										
Diagram	A		A		B		A		B		
Port Size	In/Out=1/8"		In/Out=1/8"				In/Out=1/4"				
Orifice Size	12mm ² (Cv=0.67)		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	24VDC single solenoid	120VAC single 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: 3.5 VA; continuous duty (100% ED)		DC: 3.0W AC: 4.5 VA; continuous duty (100% ED)								
Max Frequency	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										



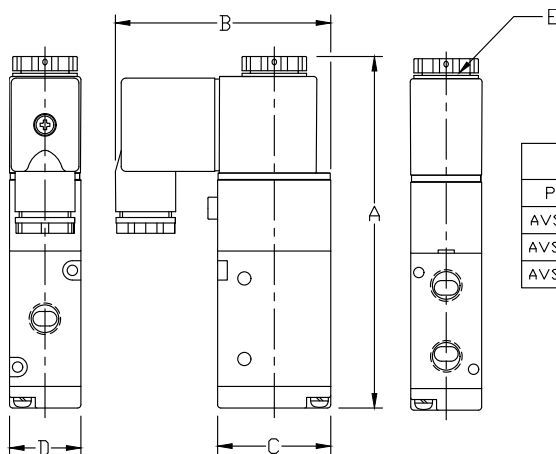
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AVS-3 Series Specifications								
Model	AVS-3312-24D	AVS-3312-120A	AVS-3322-24D	AVS-3322-120A	AVS-3313-24D	AVS-3313-120A	AVS-3323-24D	AVS-3323-120A
Price								
Weight (lb)	0.7	0.7	0.9	0.9	0.7	0.7	0.9	0.9
Valve Type	3 port 2 position							
Acting	Internally Piloted							
Diagram	A		B		A		B	
Port Size	In/Out=1/4"				In/Out=3/8"			
Orifice Size	16mm ² (Cv=1.39)				25mm ² (Cv=1.67)			
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	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: 3.0W AC: 4.5 VA; continuous duty (100% ED)							
Max Freq	5 cycles/sec							
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							

Dimensions

mm [inches]

AVS-311x,
AVS-321x,
AVS-331x



DIMENSION TABLE					
PART NO.	A	B	C	D	E
AVS-311X-XXX	88.4 [3.48]	54.6 [2.15]	27.0 [1.06]	18.0 [0.71]	M7 - 0.5
AVS-321X-XXX	109.0 [4.29]	66.7 [2.63]	35.0 [1.38]	22.0 [0.87]	M8 - 0.75
AVS-331X-XXX	119.8 [4.72]	69.1 [2.72]	40.0 [1.57]	27.0 [1.06]	M8 - 0.75

See our website www.AutomationDirect.com for complete Engineering drawings.

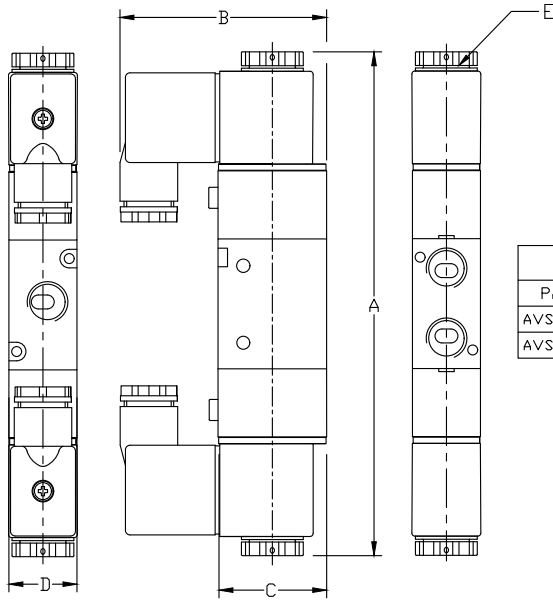


Pneumatic Directional Control Solenoid Valves – AVS-3 Series

Dimensions

mm [inches]

AVS-322x,
AVS-332x



DIMENSION TABLE						
PART NO.	A	B	C	D	E	
AVS-322X-XXX	162.8 [6.41]	66.8 [2.63]	34.8 [1.37]	22.0 [0.87]	M8	- 0.75
AVS-332X-XXX	174.8 [6.88]	69.2 [2.72]	40.0 [1.57]	27.0 [1.06]	M8	- 0.75

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