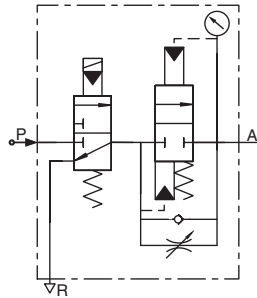




# Pneumatic Air Preparation - ASD Series Soft-Start/Dump Valves



ASD Series Valves



NITRA® pneumatic soft start/dump valves are available with 1/8", 1/4", 3/8" or 1/2" NPT female port sizes and 24VDC or 120VAC solenoid voltages to meet a broad range of pneumatic air supply applications. The three-way, two-position (3 threaded ports) design is used to gradually increase air pressure downstream when the solenoid is energized and to shut off upstream pressure and relieve downstream pressure when it is de-energized.

Provided with a mounting bracket for stand-alone applications, the modular design also enables easy field assembly with NITRA pneumatic filters, regulators and lubricators (using modular assembly brackets purchased separately).

## Features

- 1/8", 1/4", 3/8" or 1/2" NPT ports
- 24 VDC or 120 VAC solenoid coils
- 11 mm DIN style wiring connector w/LED indication
- Modular design enables easy field assembly with other NITRA components
- Maximum pressure 130psi
- 2 year warranty



See [www.AutomationDirect.com](http://www.AutomationDirect.com) for a wide variety of fitting options

ASD Soft-Start/Dump Valve Series Specifications										
Model	ASD-21-24D	ASD-21-120A	ASD-22-24D	ASD-22-120A	ASD-32-24D	ASD-32-120A	ASD-33-24D	ASD-33-120A	ASD-44-24D	ASD-44-120A
Price	\$50.50	\$50.50	\$50.50	\$50.50	\$56.00	\$56.00	\$56.00	\$56.00	\$88.00	\$88.00
Weight (lbs)	0.9	0.9	0.9	0.9	1.4	1.4	1.4	1.4	2.0	2.0
Fluid	Air									
Port Size (FNPT)	1/8"		1/4"				3/8"		1/2"	
Exhaust Size	1/4"				3/8"				1/2"	
Flow Coefficient (Cv)	7.0		7.5		12		15		24	
Acting Type	Solenoid Operated, 3/2 Soft-Start									
Temperature	0 to 160°F (-18 to 71°C)									
Operating Pressure	35-130 psi, (0.24-0.90 MPa), (2.4-9.0 bar)									
Maximum Pressure	145 psi, (1.0 MPa), (10 bar)									
Proof Pressure	215 psi, (1.5 MPa), (15 bar)									
Power Connection	11 mm DIN									
Voltage	24 VDC	120 VAC	24 VDC	120 VAC	24 VDC	120 VAC	24 VDC	120 VAC	24 VDC	120 VAC
Voltage Range	-15% to +10%									
Insulation	B class									
Power Consumption	3.0 W	3.5 VA	3.0 W	3.5 VA	3.0 W	3.5 VA	3.0 W	3.5 VA	3.0 W	3.5 VA



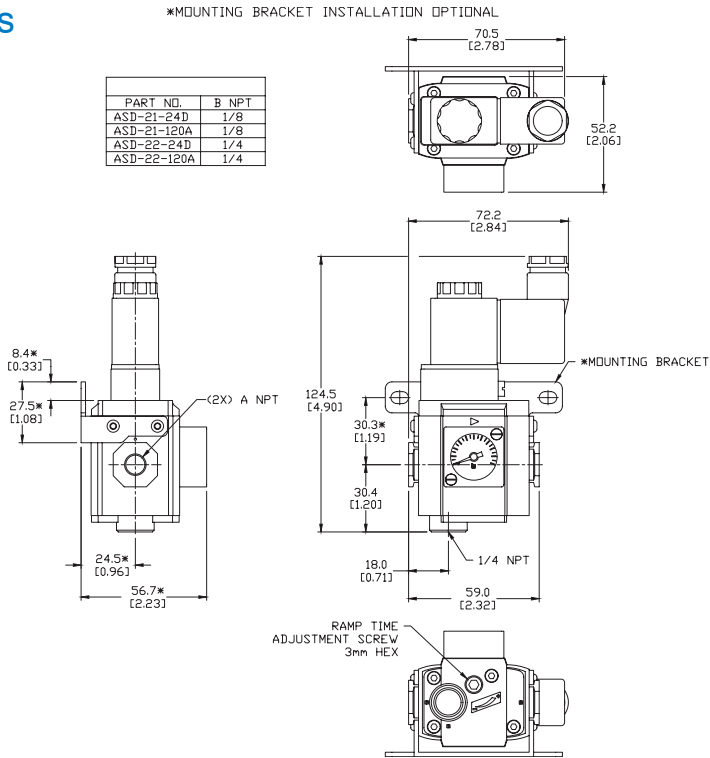
# Pneumatic Air Preparation - ASD Series Soft-Start/Dump Valves

## Dimensions

mm [inches]

ASD-2x

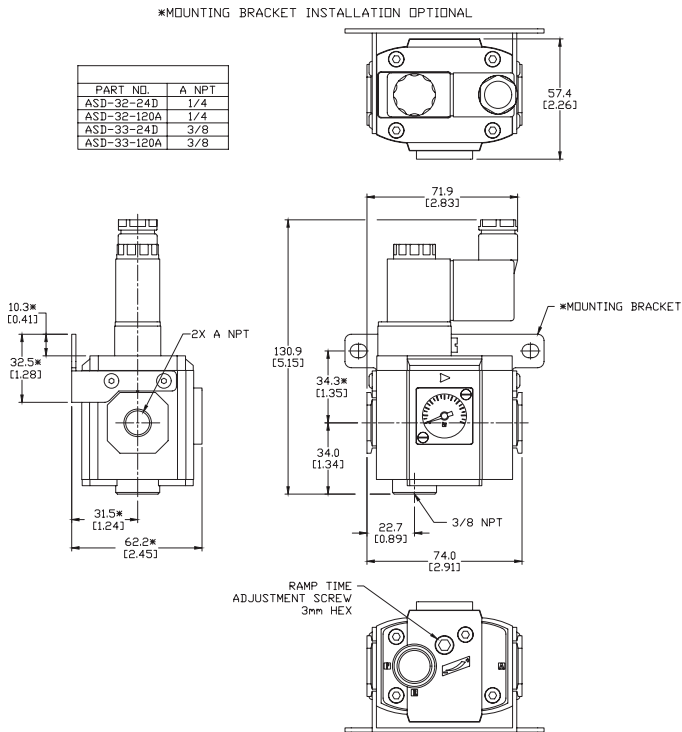
PART NO.	B NPT
ASD-21-24D	1/8
ASD-21-120A	1/8
ASD-22-24D	1/4
ASD-22-120A	1/4



ASD-3x

\*MOUNTING BRACKET INSTALLATION OPTIONAL

PART NO.	A NPT
ASD-32-24D	1/4
ASD-32-120A	1/4
ASD-33-24D	3/8
ASD-33-120A	3/8



See our Web site [www.AutomationDirect.com](http://www.AutomationDirect.com)  
for complete Engineering drawings.

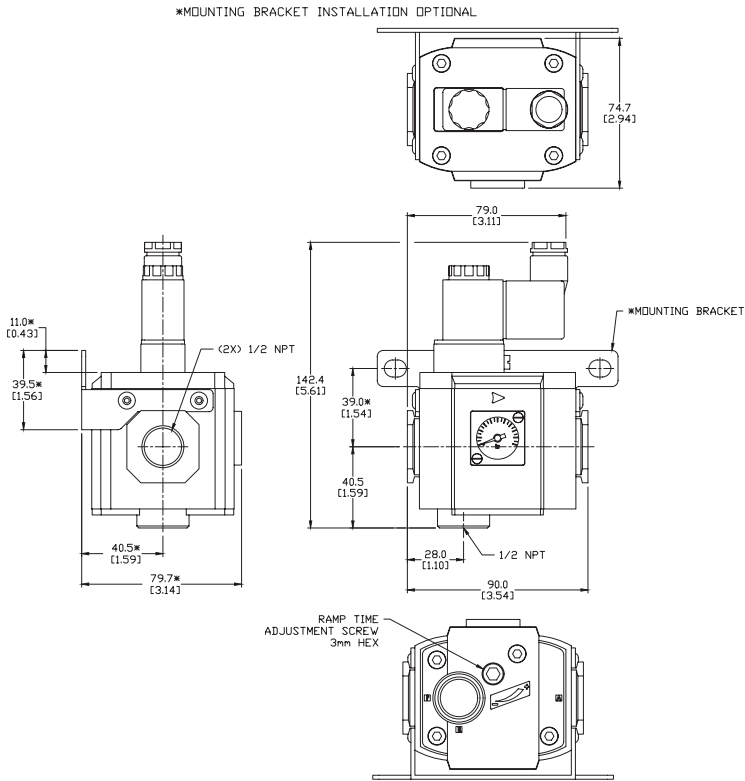


# Pneumatic Air Preparation - ASD Series Soft-Start/Dump Valves

## Dimensions

mm [inches]

ASD-4x



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# Pneumatic Air Preparation Accessories

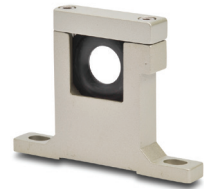
Pneumatic Air Preparation Accessories			
Part No.	Price	Description	Weight (lbs)
<b>AGP-21</b>	\$5.75	NITRA pneumatic gauge port adapter plate, 1/8 inch NPT female port, with mounting screws. Easy field assembly with NITRA pneumatic AR-2 series regulators and AFR-2 series filter / regulators.	0.03
<b>AGP-32</b>	\$5.75	NITRA pneumatic gauge port adapter plate, 1/4 inch NPT female port, with mounting screws. Easy field assembly with NITRA pneumatic AR-3, AR-4 and AR-6 series regulators and AFR-3, AFR-4 and AFR-6 series filter / regulators.	0.04
<b>ADB-21</b>	\$11.00	NITRA pneumatic distribution block with four (4) 1/8 inch NPT female ports. Modular design enables easy field assembly with NITRA pneumatic AF-21 series filters, AR-21 series regulators, AL-21 series lubricators and AFR-21 series filter / regulators.	0.1
<b>ADB-22</b>	\$11.00	NITRA pneumatic distribution block with four (4) 1/4 inch NPT female ports. Modular design enables easy field assembly with NITRA pneumatic AF-22 series filters, AR-22 series regulators, AL-22 series lubricators and AFR-22 series filter / regulators.	0.1
<b>ADB-32</b>	\$15.00	NITRA pneumatic distribution block with four (4) 1/4 inch NPT female ports. Modular design enables easy field assembly with NITRA pneumatic AF-32 series filters, AR-32 series regulators, AL-32 series lubricators and AFR-32 series filter / regulators.	0.2
<b>ADB-33</b>	\$15.00	NITRA pneumatic distribution block with four (4) 3/8 inch NPT female ports. Modular design enables easy field assembly with NITRA pneumatic AF-33 series filters, AR-33 series regulators, AL-33 series lubricators and AFR-33 series filter / regulators.	0.2
<b>ADB-44</b>	\$16.50	NITRA pneumatic distribution block with four (4) 1/2 inch NPT female ports. Modular design enables easy field assembly with NITRA pneumatic AF-44 series filters, AR-44 series regulators, AL-44 series lubricators and AFR-44 series filter / regulators.	0.4
<b>AB-2T</b>	\$8.00	NITRA pneumatic modular assembly and mounting T-bracket with two mounting tangs, used to assemble and mount individual NITRA AF-2 series filters, AR-2 series regulators, AL-2 series lubricators and AFR-2 series filter/regulators as a combined unit	0.2
<b>AB-2L</b>	\$8.00	NITRA pneumatic modular assembly and mounting L-bracket with one mounting tang, used to assemble and mount individual NITRA AF-2 series filters, AR-2 series regulators, AL-2 series lubricators and AFR-2 series filter/regulators as a combined unit	0.2
<b>AB-2U</b>	\$8.00	NITRA pneumatic modular assembly U-bracket (no mounting tangs), used to assemble individual NITRA AF-2 series filters, AR-2 series regulators, AL-2 series lubricators and AFR-2 series filter/regulators as a combined unit	0.1
<b>AB-3T</b>	\$9.00	NITRA pneumatic modular assembly and mounting T-bracket with two mounting tangs, used to assemble and mount individual NITRA AF-3 series filters, AR-3 series regulators, AL-3 series lubricators and AFR-3 series filter/regulators as a combined unit	0.3
<b>AB-3L</b>	\$9.00	NITRA pneumatic modular assembly and mounting L-bracket with one mounting tang, used to assemble and mount individual NITRA AF-3 series filters, AR-3 series regulators, AL-3 series lubricators and AFR-3 series filter/regulators as a combined unit	0.3
<b>AB-3U</b>	\$9.00	NITRA pneumatic modular assembly U-bracket (no mounting tangs), used to assemble individual NITRA AF-3 series filters, AR-3 series regulators, AL-3 series lubricators and AFR-3 series filter/regulators as a combined unit	0.2
<b>AB-4T</b>	\$10.50	NITRA pneumatic modular assembly and mounting T-bracket with two mounting tangs, used to assemble and mount individual NITRA AF-4 series filters, AR-4 series regulators, AL-4 series lubricators and AFR-4 series filter/regulators as a combined unit	0.5
<b>AB-4L</b>	\$10.50	NITRA pneumatic modular assembly and mounting L-bracket with one mounting tang, used to assemble and mount individual NITRA AF-4 series filters, AR-4 series regulators, AL-4 series lubricators and AFR-4 series filter/regulators as a combined unit	0.5
<b>AB-4U</b>	\$10.50	NITRA pneumatic modular assembly U-bracket (no mounting tangs), used to assemble individual NITRA AF-4 series filters, AR-4 series regulators, AL-4 series lubricators and AFR-4 series filter/regulators as a combined unit	0.4
<b>AB-6T</b>	\$15.50	NITRA pneumatic modular assembly and mounting T-bracket with two mounting tangs, used to assemble and mount individual NITRA AF-6 series filters, AR-6 series regulators, AL-6 series lubricators and AFR-6 series filter/regulators as a combined unit	1.3
<b>AB-6L</b>	\$15.50	NITRA pneumatic modular assembly and mounting L-bracket with one mounting tang, used to assemble and mount individual NITRA AF-6 series filters, AR-6 series regulators, AL-6 series lubricators and AFR-6 series filter/regulators as a combined unit	1.2
<b>AB-6U</b>	\$15.50	NITRA pneumatic modular assembly U-bracket (no mounting tangs), used to assemble individual NITRA AF-6 series filters, AR-6 series regulators, AL-6 series lubricators and AFR-6 series filter/regulators as a combined unit	0.8



Part No. AGP-21



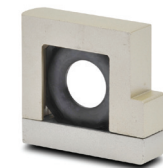
Part No. ADB-21



Part No. AB-4T



Part No. AB-4L



Part No. AB-4U



# Pneumatic Air Preparation Accessories

Pneumatic Air Preparation Accessories			
Part No.	Price	Description	Weight (lbs)
<b>AFE-23</b>	\$1.00	NITRA replacement filter element, tin-copper, 40 micron, for AF-2 series filters or AFR-2 series filter/regulators	0.02
<b>AFE-33</b>	\$2.00	NITRA replacement filter element, tin-copper, 40 micron, for AF-3 series filters or AFR-3 series filter/regulators	0.05
<b>AFE-43</b>	\$3.50	NITRA replacement filter element, tin-copper, 40 micron, for AF-4 series filters or AFR-4 series filter/regulators	0.1
<b>AFE-63</b>	\$13.00	NITRA replacement filter element, tin-copper, 40 micron, for AF-6 series filters or AFR-6 series filter/regulators	0.4
<b>AFE-21</b>	\$1.00	NITRA replacement filter element, fiber, 5 micron, for AF-2 series filters or AFR-2 series filter/regulators	0.1
<b>AFE-31</b>	\$1.25	NITRA replacement filter element, fiber, 5 micron, for AF-3 series filters or AFR-3 series filter/regulators	0.1
<b>AFE-41</b>	\$1.50	NITRA replacement filter element, fiber, 5 micron, for AF-4 series filters or AFR-4 series filter/regulators	0.1
<b>AFE-61</b>	\$13.00	NITRA replacement filter element, tin-copper, 5 micron, for AF-6 series filters or AFR-6 series filter/regulators	0.4



**Part No. AFE-43**



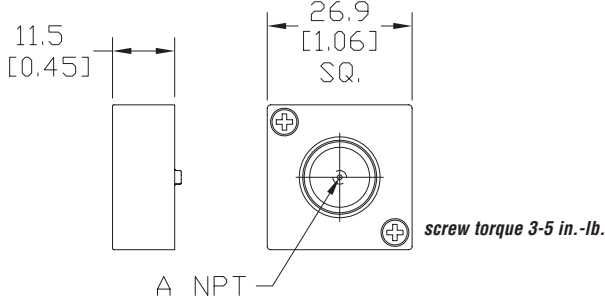
**Part No. AFE-41**

## Dimensions

mm [inches]

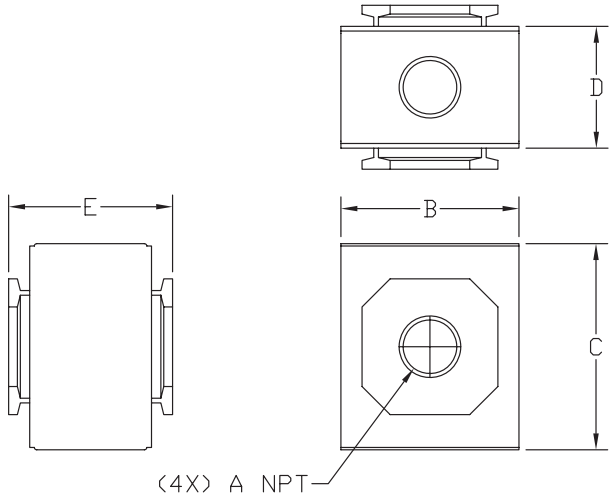
### AGP-x

PART NO.	A NPT
APG-21	1/8
APG-32	1/4



### ADB-x

PART NO.	A NPT	DIM B	DIM C	DIM D	DIM E
ADB-21	1/8	30.0 [1.18]	36.0 [1.42]	19.5 [0.77]	28.5 [1.12]
ADB-22	1/4	30.0 [1.18]	36.0 [1.42]	19.5 [0.77]	28.5 [1.12]
ADB-32	1/4	38.0 [1.50]	44.0 [1.73]	26.0 [1.02]	35.0 [1.38]
ADB-33	3/8	38.0 [1.50]	44.0 [1.73]	26.0 [1.02]	35.0 [1.38]
ADB-44	1/2	52.0 [2.05]	52.0 [2.05]	30.0 [1.18]	42.0 [1.65]



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# Pneumatic Air Preparation Accessories

## Dimensions

mm [inches]

### AB-xT

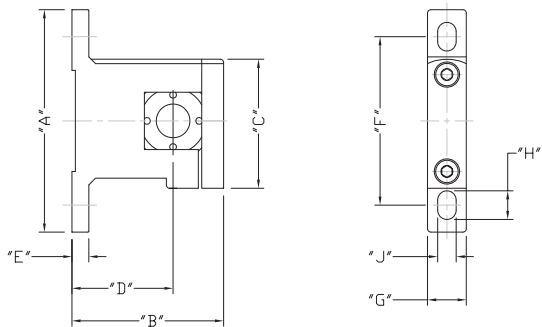


TABLE 1									
PART NUMBER	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "E"	DIM "F"	DIM "G"	DIM "H"	DIM "J"
AB-2T	66.0 [2.60]	45.0 [1.77]	38.3 [1.51]	30.0 [1.18]	5.0 [0.20]	50.0 [1.97]	11.5 [0.45]	8.5 [0.33]	5.5 [0.22]
AB-3T	88.0 [3.46]	60.5 [2.38]	49.3 [1.94]	41.5 [1.63]	7.0 [0.28]	70.0 [2.76]	12.5 [0.49]	9.0 [0.35]	6.5 [0.26]
AB-4T	104.0 [4.09]	76.0 [2.99]	58.5 [2.30]	50.0 [1.97]	7.0 [0.28]	80.0 [3.15]	15.5 [0.61]	12.0 [0.47]	8.6 [0.34]
AB-6T	128.0 [5.04]	104.0 [4.09]	79.5 [3.13]	70.0 [2.76]	10.0 [0.39]	100.0 [3.94]	19.5 [0.77]	16.0 [0.63]	11.0 [0.43]

### AB-xL

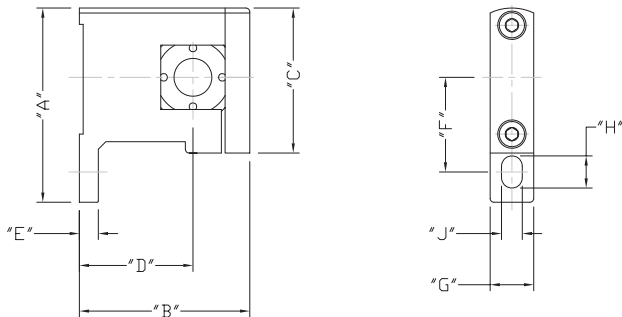


TABLE 1									
PART NUMBER	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "E"	DIM "F"	DIM "G"	DIM "H"	DIM "J"
AB-2L	51.3 [2.02]	45.0 [1.77]	38.3 [1.51]	30.0 [1.18]	5.0 [0.20]	25.0 [0.98]	11.5 [0.45]	8.5 [0.33]	5.5 [0.22]
AB-3L	68.6 [2.70]	60.5 [2.38]	49.3 [1.94]	41.5 [1.63]	7.0 [0.28]	35.0 [1.38]	12.5 [0.49]	9.0 [0.35]	6.5 [0.26]
AB-4L	79.5 [3.13]	76.0 [2.99]	58.5 [2.30]	50.0 [1.97]	7.0 [0.28]	40.0 [1.57]	15.5 [0.61]	12.0 [0.47]	8.6 [0.34]
AB-6L	103.5 [4.07]	104.0 [4.09]	79.5 [3.13]	70.0 [2.76]	10.0 [0.39]	50.0 [1.97]	19.5 [0.77]	16.0 [0.63]	11.0 [0.43]

### AB-xU

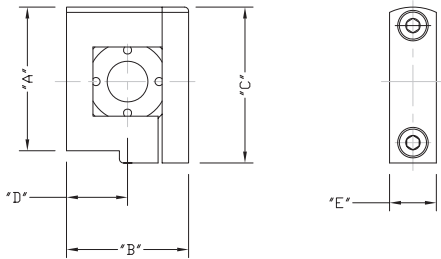


TABLE 1					
PART NUMBER	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "E"
AB-2U	35.5 [1.39]	30.0 [1.18]	38.3 [1.51]	15.0 [0.59]	11.5 [0.45]
AB-3U	43.8 [1.72]	38.0 [1.50]	49.3 [1.94]	19.5 [0.75]	12.5 [0.49]
AB-4U	52.5 [2.07]	52.0 [2.05]	58.5 [2.30]	26.0 [1.02]	15.5 [0.61]
AB-6U	76.5 [3.01]	68.0 [2.68]	79.5 [3.13]	34.0 [1.34]	19.5 [0.77]

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