

aerospace climate control electromechanical filtration fluid & gas handling hydraulics pneumatics process control sealing & shielding



Air Saver Unit

The power saving and CO_2 reduction products





ENGINEERING YOUR SUCCESS.

An easy solution to your environmental protection efforts! The air saving unit contributes to power savings and CO2 reduction.

Air Saver Unit ASC/ASV Series

The air Saver Unit can reduce air consumption by up to 50% and improves blow efficiency in air blow applications.



When an air saver unit is used, several positive effects can be expected.

Air blow accounts for almost 50% of all compressed air used in plants. The air saver unit with a switching valve technology for air blow. Can reduce air consumption by up to 50% !

- Large reductions in plant air consumption.
- Savings in plant compressor power consumption.
- Reduction in plant CO₂ emissions.
- Big contribution to energy-saving activities.





ASV200 Series ASC/ASO500 Series VMS2408 Series ASV5000 Series



Power

Consumption

CO₂ discharge

Cost







Savings example (Using 100 ASC500, Unit 8 hours/day and 20 days)

53,600kW/month \Rightarrow 26,800kW/month17 t \Rightarrow 8.5 tUSD9,700/month \Rightarrow USD4,900/month

Total air saver unit cost reduction per year = USD\$8,000



Pulsed air by Air Saver Unit reduces air consumption.

The Air saver unit is a valve that converts a continuous air blow to a pulsed air blow without the need for any other external control. Air is blown with a series of ON and OFF pulses. When the blow is OFF, there is no air consumption. This is how the air saver unit contributes to reduction in air consumption.



Air blow efficiency is improved.



Compared to continuous air blow, the pulsed air blow hits the work repeatedly, improving the efficiency of the air blow.



Installation is simple and reduction in air consumption can be realized immediately.

 When using a solenoid valve to control air blow, the air saver unit can replace this valve which will provide you immediate reduction in air consumption with no change to you PLC.



When using manual valves such as ball valves... ASV200, ASV500 & VMS2408 do not need electrical power. Installation of the unit brings immediate reductionin air consumption and improved efficiency.

<Before introduction of the unit.>

<After introduction of the unit.>



Realized the effect of the unit! voice of customers.

[Company A] Food & beverage related manufacturer

"When we tested ASV5000, we achieved about 55% reduction of our air concumption.

As air blow efficiency was improved, we planned to use more Air Saver Units for other areas in the plant."

[Company B] Manufacturer for office document machines

"We are working on energy-saving activities. In those activities, we decided to use Air Saver Unit. We have more than 100 points of air blow, and we could reduce 42% of our air consumption by using this unit."



Variations

Series	ASV200	ASC/ASO500	VMS2408	ASV5000		
Flow({/min)	150	450	2000	5000		
Port size	M5	Rc1/8	Rc3/8	Rc1/2		
Target works	Image: Nicol RC1/2 RC1/2 Electric parts Beverage container Resin molded parts Image: Container Image: Image: Container Image: Container Image: Image: Image: Container Image: Container Image: Image: Image: Image: Image: Image: Container Image:					
Application	Diselectrification, blowing dust, Handling assist, Blowing of cutting dust.					

Specifications

	Unit	ASV200	ASC500	ASO500	VMS2408	ASV5000
Function		Normally closed	Normally closed	Normally open	Normally closed	Normally closed
Fluid		Non-lubricated air				
Flow (at 0.5MPa)	ℓ/min(ANR)	150	450	450	2000	5000
Operating temperature °C -5 ~ 50		~ 50 Note 1)				
Pressure range	MPa	0.3 ~ 0.8	0.2 ~ 0.7 Note 2)	0.2 ~ 0.5 Note 2)	0.3 ~ 0.8	0 ~ 0.8
Pilot air supply	MPa	0.3 ~ 0.8	Internal pilot	Internal pilot	0.3 ~ 0.8 Note 3)	0.3 ~ 0.8
Blow	Blow Pulse blow/ Continuous b		lous blow			
Port size (1,2)		M5	Rc1/8	Rc1/8	Rc3/8	Rc1/2
Rated voltage	V	Power is not necessary	DC2	24V	Power is not	necessary
Power consumption	W	-	1.2W		-	
Grade of Insulation		-	JIS grade E		-	
Permissible voltage fluctuation	%	-	±10		-	
Wiring		-	e-con standard 4 pole sockets		-	

Note 1) In case of using the Unit under 5°C, complete dry air by air dryer shall be supplied to prevent from freezing.

Note 2) Please note that supply air for port 1 should be more than 0.2MPa.

Note 3) Please note that supply air for port 1 should be more than 0.3MPa.





Ordering Instructions

<u>ASV200</u> - <u>AA</u> - <u>M5</u>

1 2 3

① Model No. ASV200 (Air Saver Unit pneumatic operate, internal pilot type)

2 Voltage/Wiring AA: All air (No electrical wiring)

③ Port size M5



Dimensions ASC500-1W-01 / ASO500-1W-01



Y port: Pilot exhaust port

*In order to avoid dust, air muffler is recommended to attach.

《Power distribution/Air output》 Continuous blow: Pin 1 (-), Pin 2 (+)

Ordering Instructions

<u>ASC500</u> - <u>1W</u> - <u>01</u> ① ③

 Model No.
ASC500: Normal close (2-position single solenoid) ASO500: Normal open (2-position single solenoid)

② Voltage/Wiring 1W: 24VDC, e-CON standard 4-polar socket

③ Port size 01: Rc1/8

Note: Cable with e-CON connector (Model No. ASC-D24-CL10) will be ordered separetely.





《Piping》 Port 1: Supply port (Compressor side) Port 4: Output port (Blow nozzle side) Pilot air supply port

Ordering Instructions

VMS2408 - 03 - Z11-031 (3) (1)

(2)

① Model No. VMS2408: Normal close (2-position single solenoid)

2 Port size 03: Rc3/8

③ Valid model code





《Piping》

Port 1: Supply port (Compressor side) Port 2: Output port (Blow nozzle side) Pilot air supply port

Ordering Instructions

<u>ASV5000</u> - <u>AA</u> - ① ②	<u>04</u> ③
1 Model No.	ASV5000 (2-position, Single)
② Voltage/Wiring	AA: All air (No electrical wiring)
③ Port size	No mark: without sub-base 04 : Rc1/2



Applications



Assist blow for PET bottle transfer



Liquid removal after the manufacturing process





Applications

Air saver unit ASC500/AS0500 series





Pneumatic Solutions Beverage and Bottle Plants

Process	Application	Advantage
Before blow molding PET bottles	Pulse ionized blow by Air Saving Unit in order to remove particles before PET bottle are molded.	Pulse ionized blow and its blast of each pulse increase to remove particles effectively.
After blow molding PET bottles	Cleaning blow for particles that attach to the blow molded PET bottles	Reducing about 40% of consumption air.
	Assisting blow to convey PET bottles.	Reducing about 40% of consumption air.
Conveying PET bottles	Escape blow for PET bottles when the line is stopped.	Reducing about 40% of consumption air.
	Pulse ionized blow for PET bottles before pasting labels on them.	Pulse blow and its blast of each pulse increase to remove particles effectively.
Printing machine	Pulse ionized blow for bottles or caps before printing date on them.	Pulse blow and its blast of each pulse increase to remove particles effectively.



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