



SAV series - VSD Screw Air Compressor

SAV08 – 200 VSD energy-saving series

SAV15 – 75 VSD IPM series



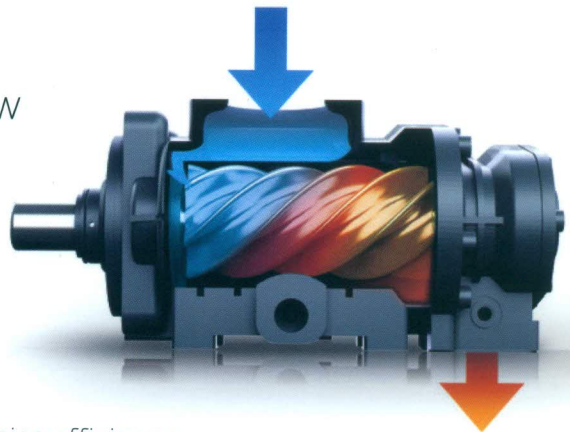
Highly Energy-Saving driven

- Simple structure for high reliability.
- Compact body design from coupling, motor bracket, motor to gearbox for 100% transmission efficiency
- The amount of lubricant for bearings, compression chamber and gears are carefully calculated to minimize the oil resistance during compression and maximize the efficiency.



High Efficiency Airend Induce Air Flow from Axial and Radial directions

- High efficiency airend is designed by Fusheng Global R&D Center in Germany. The optimum design of rotor profile, volume and power consumption provides low rotational speed and increase the operating efficiency.
 - ▶ Lower operational noise level
 - ▶ Longer service life of airend and bearings.
 - ▶ Fully utilize effective rotor length to maximize the compression efficiency.



Highly Efficient Design



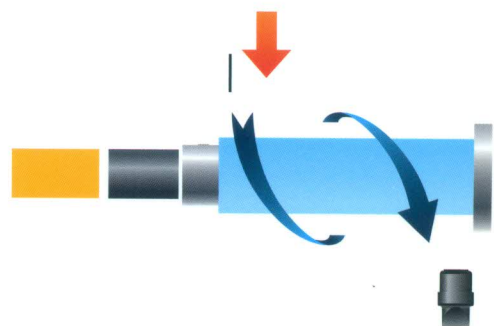
Inlet valve

One valve serves as non-return valve, shut-off valve and modulation control valve (optional) all together. The low pressure drop design optimizes air intake efficiency. The compressor adjusts itself automatically with the actual need for compressed air as it operates, allowing for more accurate control of unload pressure and thus greater energy efficiency.



All end faces are sealed to completely remove the leakage

An environment-protective zinc-connector is mounted for connection and the end faces are sealed to completely remove the leakage.

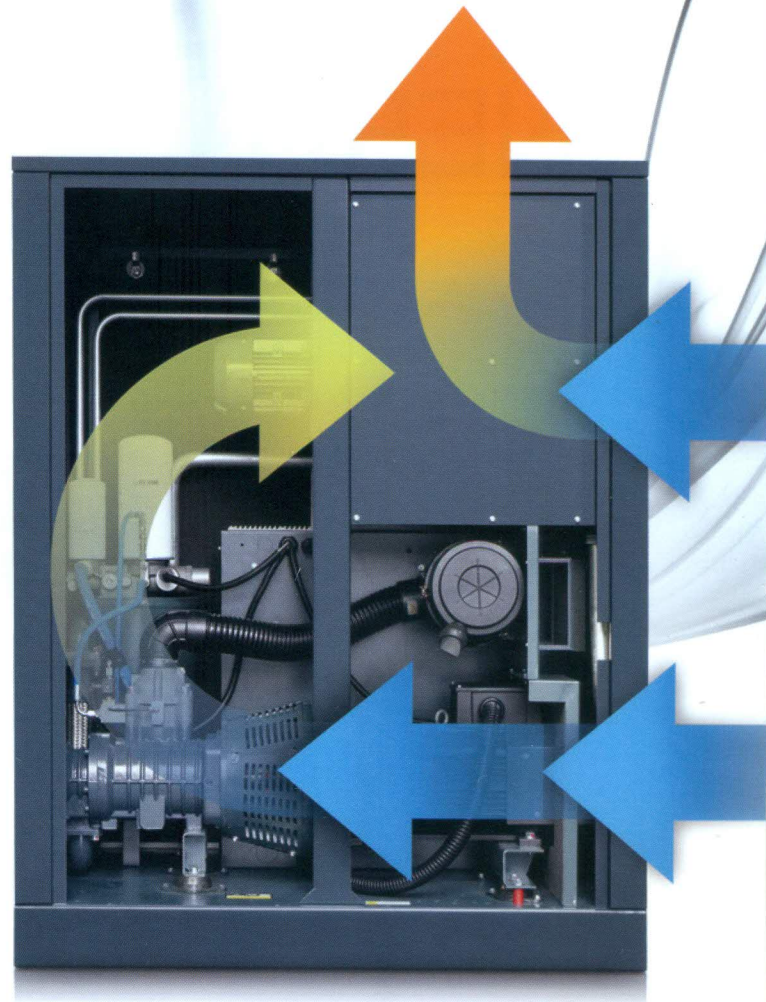


Safe and high-efficiency air filter system

- The big particle size of dust in the vacuumed air will follow the air whirl and fall into the rubber slot at front end of air filter casing instead of attaching to clog the surface of filtration core.
- The long service life filtration core is designed with large filtration area and smaller resistance against air suction to ensure that the pure air whirl is without impurities.

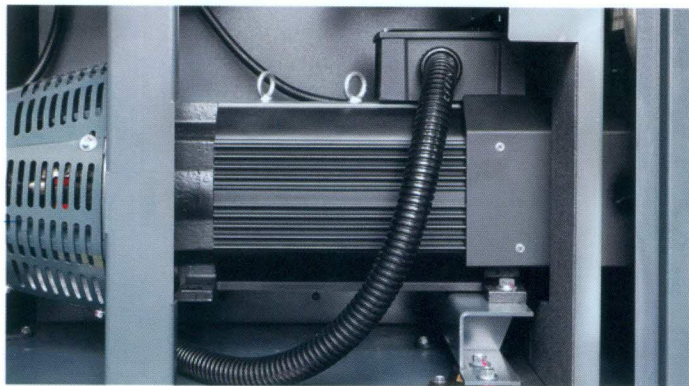
Unique cooling flow field, silence and efficiency

- In the electric control panel, the colder air is drawn in directly to ensure the best heat dissipation.
- Compressor inlet and cooler inlet are equipped with high-efficiency filters, effectively blocking the impurities into the compressor air end or attached to the cooler to ensure the cooling effect.
- With the centrifugal fan, cold air is sucked in directly from outside to cool the cooler, and hot air is dissipated out from the top; With the greater heat transfer surface, the cooler ensuring excellent cooling effect.
- The centrifugal fan located inside the unit series to suction port, discharges the hot air within the unit out from the top. This unique cooling air flow design, significantly reduces the noise generated due to the fan operation.
- During cooler cleaning, simply remove the cover without dismantle the air duct and doors.



Eco- and user-friendly idea

Permanent-Magnet motor is an option for SA series screw compressor. It gives the compressor unit greater efficiency and better energy-saving.



Small footprint but greater energy efficiency

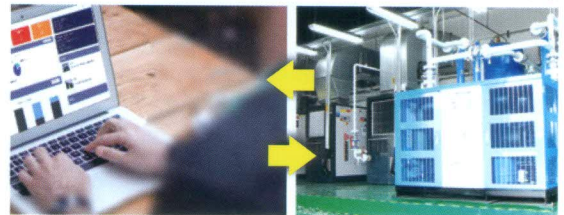


From design concepts to application of parts, Fusheng's SA series features better performance and therefore higher energy efficiency level. The high performance compact design means smaller footprint and proximity to air use locations, thus reducing loss due to pipeline significantly.

IoT smart real-time service system (optional)

The IoT compressor management system in the cloud platform realizes the unification of monitoring, malfunction diagnosis and servicing in one package. The messages of compressor malfunction and real-time status are sent to the designated professionals by SMS and email.

GoService



Vibration reducing device



The vibrations are reduced efficiently as the compressor is operating. It also prevents the propagation of low-frequency noises through resonance of solid objects while prolonging the compressor's service life.

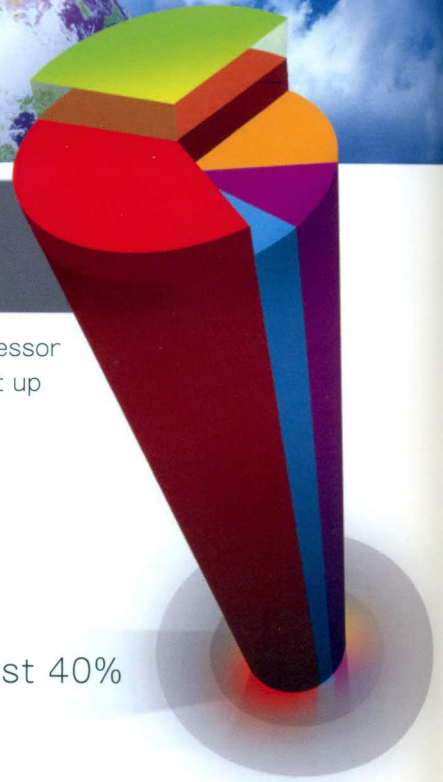
SAVING ENERGY



Energy Saving benefit of Variable-Speed air compressor

The variable-speed air compressor is able to save Operation cost up to 40% in its service life.

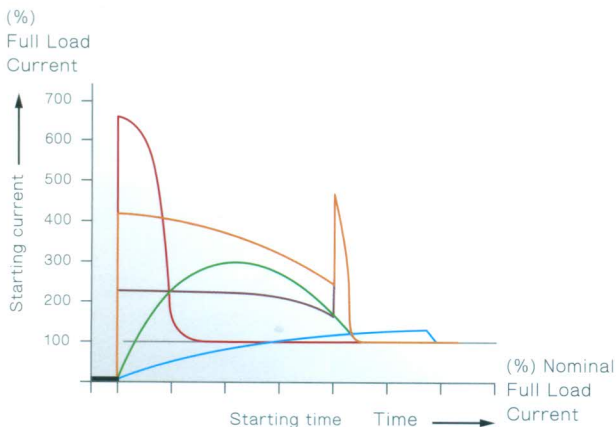
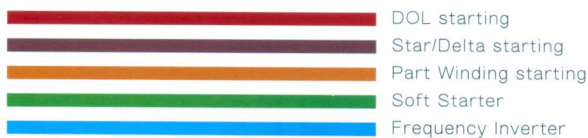
- Maintenance cost 5%
- Installation cost 10%
- Purchase cost 15%
- Energy cost 70%
- Energy saving cost 40%



Highly integrated and high-efficiency air end

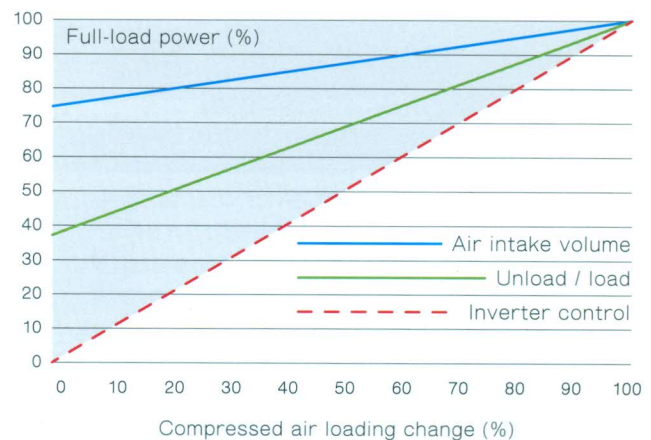
VSD Starting / Running

- Starting current is reduced
- Starting current is eliminated for Y-Δ switching
- Extending service life of compressor

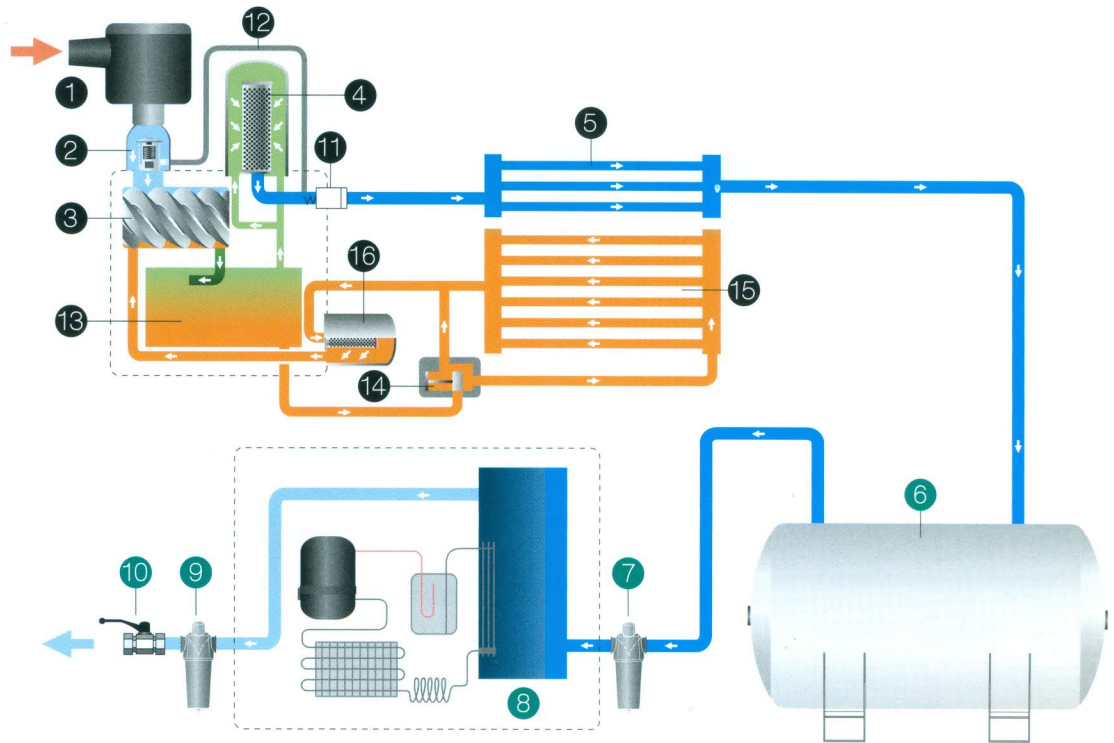


Frequency inverting control for energy saving

Variable-Speed air compressor can provide 30%~100% turndown range of capacity control. According to actual compressed-air demand of system to automatically adjust rotational speed of motor to meet the requirement. Providing optimum energy saving solution in variable loading management and reducing the operation cost up to 45%.



System flow chart



08-11

Air Flow

- 1 Air filter
- 2 Air inlet valve
- 3 Air compressor aierend
- 4 Oil fine separator
- 5 After cooler
- 6 Air receiver (Optional)
- 7 Precision filter (Optional)
- 8 Refrigeration dryer (Optional)
- 9 Post precision filter (Available if required)
- 10 Compressed air outlet valve (Optional)
- 11 Minimum pressure valve (MPV)
- 12 Air inlet control piping

Oil Flow

- 13 Air/Oil separator tank
- 14 Thermal control valve
- 15 Oil cooler
- 16 Oil filter

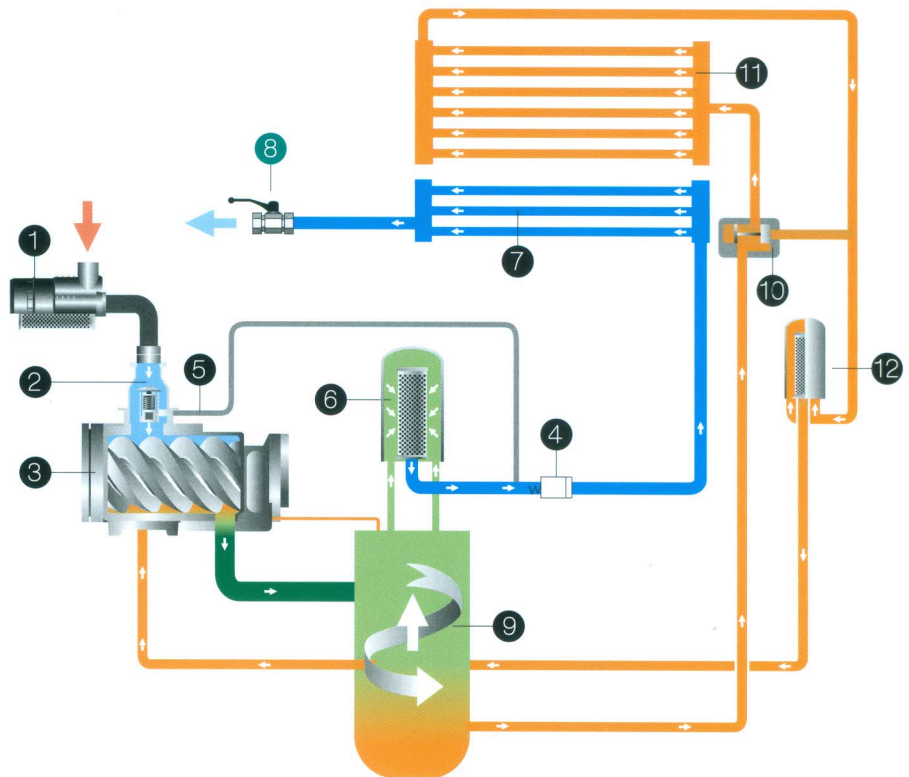
15-200

Air Flow

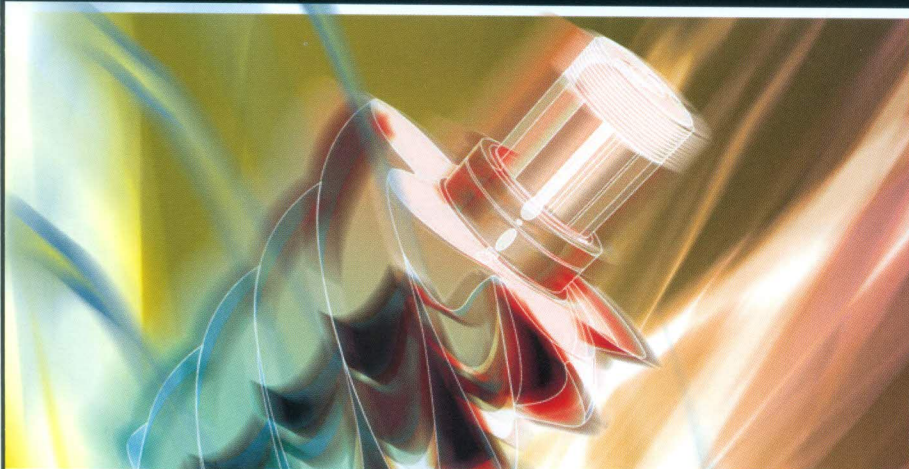
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- 4 Minimum pressure valve (MPV)
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- 7 After cooler
- 8 Air outlet valve (Optional)

Oil Flow

- 9 Air/Oil separator tank
- 10 Thermal control valve
- 11 Oil cooler
- 12 Oil filter



SAV series - VSD Air Compressor



SAV08-37

Configuration specifications

● Standard ○ Optional × Not available

Model	compressor	Dryer	Precision filter	Air receiver	inverter
SAV	●	×	×	×	●
SAV-R	●	●	○	×	●
SAV-T	●	×	×	●	●
SAV-F	●	●	○	●	●

Model	Working pressure	Delivery	Main motor power		Voltage	Lubricating oil volume	Compressed air outlet	Length	Width	Height	Weight	Noise								
	barG	m ³ /min	kW	HP	V	Liter	inch	mm	mm	mm	kg	dB(A)								
50Hz																				
SAV08	7	0.64~1.27	7.5	10	380 415	7.5	G $\frac{3}{4}$	1200	670	1100	310	67								
SAV08-R	8	0.59~1.18									364									
SAV08-T	10	0.50~0.99									450									
SAV08-F	12	0.40~0.80									504									
SAV11	7	0.91~1.82	11	15							1545		1710	320						
SAV11-R	8	0.85~1.7									374									
SAV11-T	10	0.76~1.52									460									
SAV11-F	12	0.68~1.35									514									
SAV15	7	0.75~2.5	15	20				15	G1	1250	880		1515	540	72					
	8	0.69~2.3																		
	10	0.63~2.1																		
SAV22	7	1.17~3.9	22	30										18.5		G1 $\frac{1}{2}$	1350	940	1680	550
	8	1.11~3.7																		
	10	0.96~3.2																		
SAV37	12	0.84~2.8	37	50	1.98~6.6	1.89~6.3	1.68~5.6					1.47~4.9								
	7	1.98~6.6																		
	8	1.89~6.3																		
	10	1.68~5.6																		

* Noise level is measured according to ISO 2151

SAV55-200

Model	Working pressure	Delivery	Main motor power		Voltage	Lubricating oil volume	Compressed air outlet	Length	Width	Height	Weight	Noise		
	barG	m ³ /min	kW	HP	V	Liter	inch	mm	mm	mm	kg	dB(A)		
50Hz														
SAV55A	7	3.09~10.3	55	75	380 415	39	G2	2000	1250	1750	1660	74		
SAV55W	8	3.03~9.7									1710			
	10	2.52~8.7												
	12	2.28~7.8												
SAV75A	7	4.2~14	75	100		380 415	52	G2	2180	1330	1850	2010	76	
SAV75W	8	3.84~12.8										1998		
	10	3.54~11.8												
	12	3.18~10.6												
SAV90A	7	4.92~16.4	90	125			380 415	52	G2	2180	1330	1850	2010	76
SAV90W	8	4.59~15.3											1998	
	10	4.14~13.8												
	12	3.72~12.4												
SAV110A	7	6.30~21.0	110	150	380 415			80	3" Flange	2940 2740	1710	1725	2900	78
SAV110W	8	6.00~20.0											2800	
	10	5.10~17.0												
	12	4.59~15.3												
SAV132A	7	7.56~25.2	132	175		380 415		80	3" Flange	2940 2740	1710	1725	3600	78
SAV132W	8	6.96~23.2											3500	
	10	6.3~21.0												
	12	5.49~18.3												
SAV160A	7	8.76~29.2	160	215			380 415	80	3" Flange	2940 2740	1710	1725	3900	78
SAV160W	8	8.37~27.9											3800	
	10	7.38~24.6												
	12	6.57~21.9												
SAV185A	7	9.78~32.6	185	250	380 415			120	4" Flange	3300 2900	1860	1945	3950	81
SAV185W	8	9.12~30.4											3850	
	10	8.28~27.6												
	12	7.59~25.3												
SAV200A	7	10.56~35.2	200	270		380 415		120	4" Flange	3300 2900	1860	1945	4000	81
SAV200W	8	10.11~33.7											3900	
	10	9.09~30.3												
	12	8.31~27.7												

* Noise level is measured according to ISO 2151