AWS A single-stage Liquid Ring Vacuum Pumps



AWS 530-1400 A



Atlas Copco liquid ring pumps are ideal for pumping either dry or wet gases, with a high tolerance to liquid carryover, especially in condensable processes.

Our pumps are available in a variety of materials that can be selected to suit the pumped process media.

AWS A single-stage liquid ring vacuum pumps feature a high-efficiency impeller design and state-of-the-art compression technology to achieve reliable and efficient vacuum performance from atmospheric pressure down to the ultimate pressure of 30 mbar(a). The AWS A series is ideal for filtration, wet conveying, vacuum forming, impregnation, sterilization and rapid evacuation duties.

Plug-and-play modules

Atlas Copco takes the hassle out of selecting your vacuum system. All AW liquid ring pumps are offered as pre-engineered plug-and-play modules, suitable for operation in the once-through partial recirculation or total recovery mode. With 50 years of experience in LRVP technology and customers spanning the globe, we know how to put together a liquid ring module that works for you. We provide you with all the benefits of liquid ring technology while allowing you to save water and energy. Add easy-to-install accessories from our standard range to complete your installation.

Engineered systems

For more complex requirements, our project team is here to develop a unique engineered system tailored to your needs. Atlas Copco liquid ring pumps form the backbone of multistage systems in materials of your choice as per the specifications you need. With the help of Atlas Copco vacuum engineers, the possibilities are endless.



Suitable for a wide range of applications

Liquid ring vacuum pumps are ideal for specific, humid, dirty and/or high-capacity applications in heavy industries, a selection of which can be found below.

- Automotive industry
- Brick extrusion
- Chemical industries
- Cement and allied products
- Food processing
- General manufacturing
- Metalwork industries

The AWC A, AWS A and AWD A series are workhorses: proven, strong and reliable machines that deliver utility or process vacuum.

- Mining
- Oil and gas
- Paper and allied products
- Petroleum industries
- Plastics
- Power and utilities
- Textile industry

Summary of key features

- State-of-the-art bearing design allowing for reduced clearances and improved suction performance.
- Variable area discharge porting for optimum efficiency across all inlet pressures.
- Mechanical seals as standard.
- Robust, reliable, low maintenance construction.
- Modular design of 3 package types: once-through, partial recirculation and total recovery.
- Optional materials of construction: cast iron, stainless steel fitted, stainless steel complete.
- Atlas Copco quality approved accessories.
- Short lead times, minimum life cycle costs and optimized reliability.
- Inlet manifold and discharge manifolds included as standard for reduced footprint.
- Low noise level.



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Materials of construction

Component	Version				
	All iron	Stainless steel fitted	Stainless steel full		
Casing	Cast iron	Cast iron	SS 316		
Port plate	Cast iron	Cast iron	SS 316		
Impeller	Ductile iron	SS 316	SS 316		
Shaft*	SS 420	SS 420	SS 316		
Mechanical seal	Carbon/Carbide/Viton	Carbon/Carbide/Viton	Carbon/Carbide/PTFE		

*Shaft not in contact with process

Summary of key benefits



Application flexibility through modularity



High reliability for a long lifespan

Time savings through easy installation

Cost savings through quick and easy maintenance

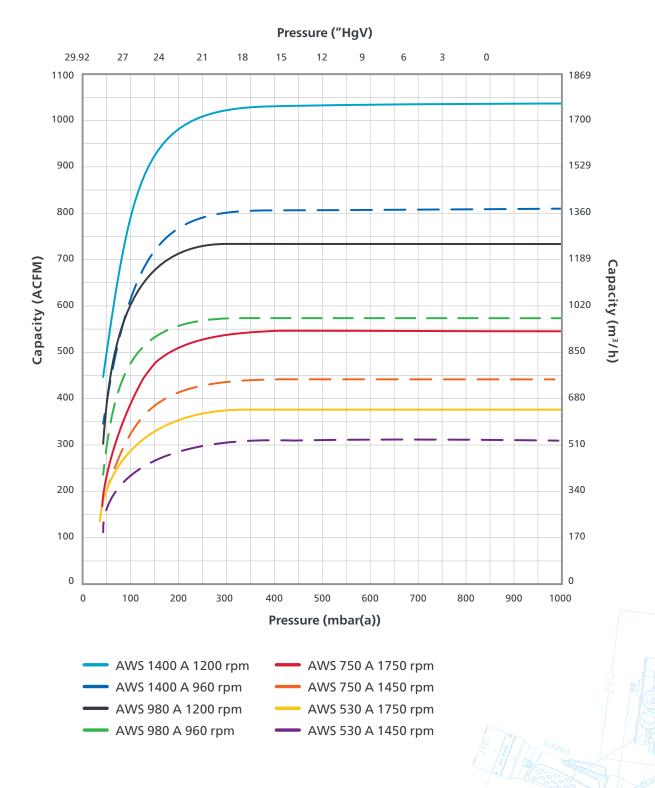
Up to 95% reduction of water consumption with total recovery

Low noise for a comfortable working environment

Technical specifications

	AWS 530 A	AWS 750 A	AWS 980 A	AWS 1400 A			
60 Hz							
Nominal capacity ACFM (m³/h)	382 (650)	545 (926)	737 (1252)	1038 (1764)			
Ultimate pressure "HgV (mbar(a))	29 (30)	29 (30)	29 (30)	29 (30)			
Motor power hp (kW)	25 (19)	40 (30)	50 (37)	75 (56)			
Inlet/Outlet connection inches (DN mm)	4 (100)	4 (100)	5 (125)	5 (125)			
Seal Water connection inches FNPT	3/4	3/4	1-1/2	1-1/2			
Approximate block dimensions (L x W x H) inches (mm)	27.4 x 18.5 x 25.1 (697 x 470 x 638)	31.5 x 18.5 x 25.1 (801 x 470 x 638)	39.1 x 23.4 x 33.5 (1008 x 595 x 851)	45.2 x 23.4 x 33.5 (1149 x 595 x 851)			
Dry weight lbs (kg)	457 (208)	516 (234)	1102 (500)	1278 (580)			
50 Hz							
Nominal capacity ACFM (m³/h)	311 (528)	443 (753)	577 (980)	812 (1380)			
Ultimate pressure "HgV (mbar(a))	29 (30)	29 (30)	29 (30)	29 (30)			
Motor power hp (kW)	20 (15)	30 (22)	40 (30)	60 (45)			
Inlet/Outlet connection inches (DN mm)	4 (100)	4 (100)	5 (125)	5 (125)			
Seal Water connection inches FNPT	3/4	3/4	1-1/2	1-1/2			
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AWS A single-stage capacity performance





Atlas Copco

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