

# AWD A Two-stage Liquid Ring Vacuum Pumps

Atlas Copco

AWD 100-660 A



**AWD A Two-stage liquid ring vacuum pumps are ideal for pumping either dry or wet gasses, with a high tolerance to liquid carryover. AWD A pumps are available in a variety of materials, which can be selected to suit the pumped process media.**

AWD A pumps feature a high efficiency impeller design and state-of-the-art compression technology to achieve reliable and efficient vacuum performance from the atmosphere down to 30 mbar(a).

The AWD A series is ideal for applications such as solvent recovery, distillation, degassing, vacuum forming, sterilization and condenser exhausting.

## 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 at once through partial recirculation or the 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 harness all the benefits of liquid ring technology whilst saving water and energy. Add easy to install accessories from 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 to 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.

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

- General manufacturing
- Mining
- Metalwork industries
- Food processing
- Brick extrusion
- Petroleum industries
- Chemical industries
- Automotive industry
- Oil and gas
- Paper and allied products
- Cement and allied products
- Plastics
- Textile industry
- Power and utilities

### Summary of key features







- State-of-the-art bearing design allowing for reduced clearances and improved suction performance
- High efficiency interstage separation for optimum compression ratio at target pressure ranges
- 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: stainless steel fitted, stainless steel complete
- Atlas Copco quality approved accessories
- Short lead times, minimum life cycle costs and optimized reliability.
- Interconnecting manifold included as standard for reduced footprint
- Low noise level

## Materials of construction

Component	Version	
	Stainless steel fitted	Stainless steel full
Casing	Carbon Steel	SS 316
Port plate	Cast Iron	SS 316
Impeller	SS 316	SS 316
Shaft*	CS 420	SS 317
Mechanical seal	SiC/Carbon/FKM	SS/Carbon/PTFE

\*Shaft not in contact with process

### Summary of key benefits

-  Application flexibility through modularity
-  Time savings through easy installation
-  Up to 95% reduction of water consumption with total recovery
-  High reliability for a long lifetime
-  Cost savings through quick and easy maintenance
-  Low noise for a comfortable working environment

# Technical specifications

	AWD 100 A	AWD 140 A	AWD 170 A	AWD 240 A
<b>60 Hz</b>				
Nominal capacity ACFM (m <sup>3</sup> /h)	65 (110)	104 (177)	129 (219)	168 (285)
Ultimate pressure "HgV (mbar(a))	29 (30)	29 (30)	29 (30)	29 (30)
Motor power hp (kW)	5 (4)	7.5 (6)	10 (8)	15 (11)
Inlet/Outlet connection inches (DN mm)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	2 (50)
Seal Water connection inches FNPT	3/8	3/8	3/8	1
Approximate block dimensions (L x W x H) inches (mm)	21.4 x 12.2 x 16.9 (544 x 311 x 430)	23 x 12.2 x 17 (584 x 311 x 433)	25.4 x 12.2 x 17 (644 x 311 x 433)	27.4 x 17.3 x 20.4 (697 x 439 x 518)
Dry weight lbs (kg)	183 (83)	194 (88)	213 (99)	327 (148)

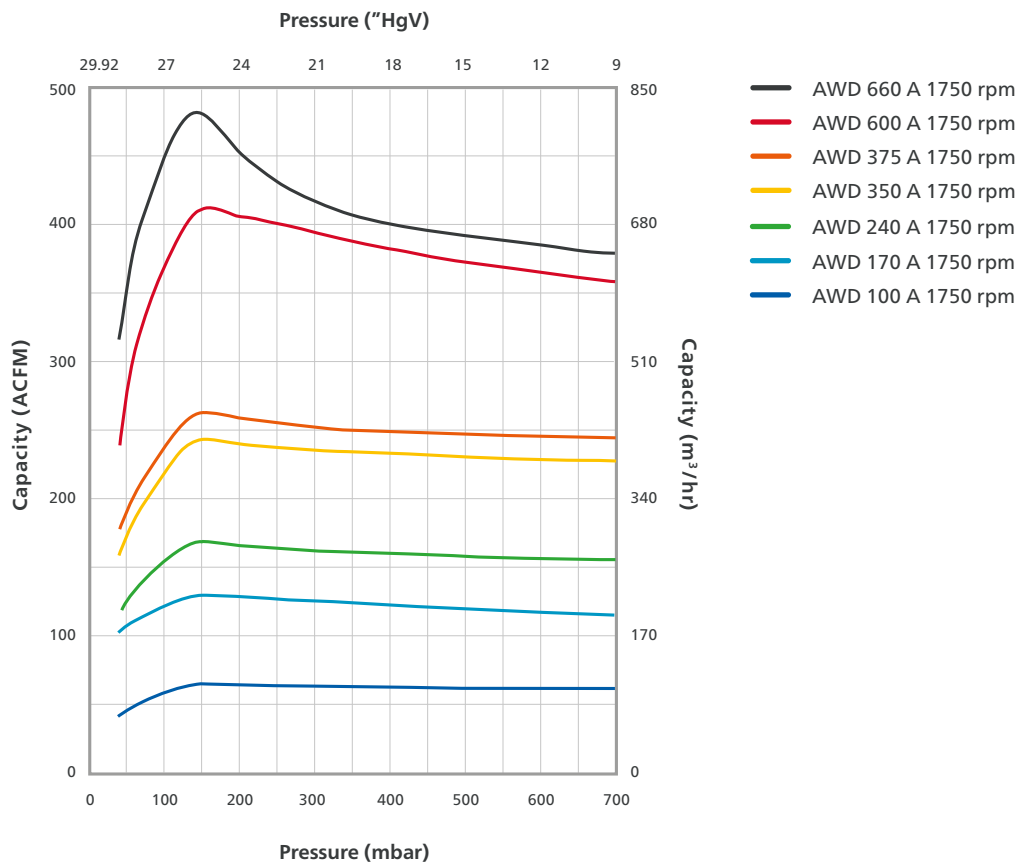
	AWD 350 A	AWD 375 A	AWD 600 A	AWD 660 A
<b>60 Hz</b>				
Nominal capacity ACFM (m <sup>3</sup> /h)	240 (408)	259 (440)	406 (690)	480 (816)
Ultimate pressure "HgV (mbar(a))	29 (30)	29 (30)	29 (30)	29 (30)
Motor power hp (kW)	20 (15)	25 (19)	40 (30)	50 (37)
Inlet/Outlet connection inches (DN mm)	2 (50)	2 (50)	3 (80)	3 (80)
Seal Water connection inches FNPT	1	1	1-1/4	1-1/4
Approximate block dimensions (L x W x H) inches (mm)	30 x 17.3 x 20.4 (762 x 439 x 518)	32 x 17.3 x 20.4 (812 x 439 x 518)	35 x 19.3 x 25.2 (888 x 490 x 640)	38.3 x 19.3 x 25.2 (973 x 490 x 640)
Dry weight lbs (kg)	349 (158)	371 (168)	495 (225)	539 (245)

	AWD 100 A	AWD 140 A	AWD 170 A	AWD 240 A
<b>50 Hz</b>				
Nominal capacity ACFM (m <sup>3</sup> /h)	52 (89)	84 (142)	104 (176)	135 (229)
Ultimate pressure "HgV (v(a))	29 (30)	29 (30)	29 (30)	29 (30)
Motor power hp (kW)	4 (3)	6 (5)	7.5 (6)	11 (8)
Inlet/Outlet connection inches (DN mm)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	2 (50)
Seal Water connection inches FNPT	3/8	3/8	3/8	1
Approximate block dimensions (L x W x H) inches (mm)	21.4 x 12.2 x 16.9 (544 x 311 x 430)	23 x 12.2 x 17 (584 x 311 x 433)	25.4 x 12.2 x 17 (644 x 311 x 433)	27.4 x 17.3 x 20.4 (697 x 439 x 518)
Dry weight lbs (kg)	183 (83)	194 (88)	213 (97)	327 (148)

	AWD 350 A	AWD 375 A	AWD 600 A	AWD 660 A
<b>50 Hz</b>				
Nominal capacity ACFM (m <sup>3</sup> /h)	193 (328)	208 (354)	327 (555)	386 (656)
Ultimate pressure "HgV (mbar(a))	29 (30)	29 (30)	29 (30)	29 (30)
Motor power hp (kW)	14 (11)	18 (13)	30 (23)	35 (26)
Inlet/Outlet connection inches (DN mm)	2 (50)	2 (50)	3 (80)	3 (80)
Seal Water connection inches FNPT	1	1	1-1/4	1-1/4
Approximate block dimensions (L x W x H) inches (mm)	30 x 17.3 x 20.4 (762 x 439 x 518)	32 x 17.3 x 20.4 (812 x 439 x 518)	35 x 19.3 x 25.2 (888 x 490 x 640)	38.3 x 19.3 x 25.2 (973 x 490 x 640)
Dry weight lbs (kg)	349 (158)	371 (168)	495 (225)	539 (245)

# AWD A Two-stage capacity performance

## AWD A 60 Hz



## AWD A 50 Hz

