

Liquid ring vacuum pumps

AWC 160-390

Atlas Copco



The Atlas Copco AWC standard liquid ring pumps are high performance, single stage pumps with a modular-based system design

The Atlas Copco AWC range of liquid ring vacuum pumps are ideal for use in a range of industrial vacuum applications where the process contains high levels of vapor, liquid carry-over or contamination by solids.

The AWC standard liquid ring pump systems are available in once-through, partial recirculation or total recovery configurations. At the heart of each variant is our flat port plate design single stage, liquid ring pump element that is optimized for operation across the rough vacuum pressure range. The AWC product line is available with motor sizes from 4kW to 11kW and with flow ranges

from 165 to 400 m³/h (118 to 271 cfm). The AWC range of liquid ring pumps make use of an optimized design that allows for efficient seal liquid consumption while maintaining stable flow performance across the entire operating range.

Designed to operate on harsh, humid and wet processes in industrial environments, the AWC range of liquid ring pumps are the perfect choice for applications where process contamination is a concern, such as plastics extrusion, expanded polystyrene, filtration, degassing, meat and poultry evisceration and drying.

Features and benefits

- High performance to power ratio
- Robust and proven design
- Compact pumping element
- Corrosion resistant – Stainless Steel impeller as standard
- Available for use with Elec-Cab for VSD operation
- Lantern style flange mount bracket for automatic motor alignment
- Automatic center-line adjustment for seal liquid fill
- Flat port design with variable port plate

Materials of construction

| | Stainless steel fitted | Stainless steel |
|------------------|------------------------|-----------------|
| Housing | Cast iron | Stainless steel |
| Impeller | Stainless steel | Stainless steel |
| Shaft | Stainless steel | Stainless steel |
| Mechanical seals | Ceramic/C/Viton | SiC/C/PTFE |

Technical specifications

| | AWC160 | AWC220 | AWC290 | AWC390 |
|---|------------------------------|-----------------------------|---------------------------------|---------------------------------|
| 50 Hz | | | | |
| Nominal capacity (m ³ /h) | 165 | 230 | 280 | 400 |
| Ultimate pressure (mbar(a)) | 33 | 33 | 33 | 33 |
| Nominal installed motor (kW) | 4 | 5.5 | 7.5 | 11 |
| Approximate block dimensions (W x D x H) (mm) | 652 x 325 x 381 | 767 x 325 x 401 | 793 x 347 x 415 | 909 x 377 x 467 |
| Dry weight (kg) | 112 | 148 | 166 | 212 |
| 60 Hz | | | | |
| Nominal capacity (CFM) | 118 | 153 | 206 | 271 |
| Ultimate pressure (Torr) | 25 | 25 | 25 | 25 |
| Nominal installed motor (hp)* | 10 | 15 | 20 | 25 |
| Approximate block dimensions (W x D x H) (inch) | 26 x 13 x 15 | 30 x 13 x 16 | 31 x 14 x 16 | 36 x 15 x 18 |
| Dry weight (lbs) | 247 | 326 | 366 | 467 |
| Inlet/Outlet flange- universal flange | DN50 PN10/ ASME 2" CLASS 150 | DN50 PN10/ASME 2" CLASS 150 | DN65 PN10/ASME 2-1/2" CLASS 150 | DN65 PN10/ASME 2-1/2" CLASS 150 |

*Smaller motor sizes can be used in certain cases, please consult Atlas Copco for more details

Performance range

