

AWS A Single Stage Liquid Ring Pumps

LIQUID RING VACUUM PUMP WITH PROVEN AND ROBUST DESIGN

General Description

The Atlas Copco AWS A single stage liquid ring pump range are high performance, low maintenance, well-engineered vacuum pump that are ideal for use in a wide range of rough vacuum applications. Especially where the process contains high levels of vapor, liquid carry-over or contamination by solids. Efficient and robust, the AWS A range offers a versatile vacuum pump that is reliable and solid. With one of the oldest vacuum technologies at it's core, the AWS A range of liquid ring pumps brings a high level of performance with an impressively low requirement for servicing and maintenance.



The AWS A liquid ring pumps are available in a range of configurations and a range of materials of construction. Our flat port plate design single stage pumps are optimized for operation across the whole rough vacuum range. Providing reliable performance from atmospheric pressure down to ultimate vacuum.

Key features

The AWS A range of pumps are available with motor sizes from 15kW to 45kW and with flow ranges from 528 to 1380 m³/h.

AWS A liquid ring pumps are constructed with the following major components:

- Multiple configuration offering with or without motor or pre-fixed flange coupling.
- Flat port plate design single stage pumping element – deep ultimate pressure and optimized performance across the whole vacuum range.
- Curved blade impeller design for high efficiency operation.
- Flexible port arrangement for optimized compression throughout the rough vacuum range.
- Compact design suitable for installation where space is limited.
- Engineered in the USA using quality components and built to the highest standard.
- Mechanical shaft seals - Leak tight design with reduced maintenance compared to packed glands.
- Available in Cast Iron, Stainless Steel Fitted or Fully Stainless Steel materials of construction for process compatibility assurance and longer lasting performance.
- Reduced wear design offering exceptional long life and reduced maintenance ownership.



Operating Principle

Process gases and vapors are drawn into the pump element along with a stream of cool seal water. Once in the pump, they are compressed and displaced using the ring of seal liquid that is created by the rotation of the eccentrically mounted impeller. The compressed process gases, condensed vapors and seal liquid exit the pumping element.

Durable and resilient

Designed to operate on harsh processes in industrial environments, the AWS A range of liquid ring pumps are the perfect choice for applications where process contamination is a concern. Often without the need for pre-filtration like other vacuum pumps, Atlas Copco liquid ring pumps can thrive in conditions where other technologies fall.