

Yamada Air Powered Double Diaphragm Pumps

Characteristics, Features & Benefits

Portable

APDD pumps are compact and light weight and can be moved and operated in almost any work site or environment.

Air Powered

APDD pumps use Compressed Air to operate the pumps internal mechanisms

Self Priming

A Diaphragm Pump is able to achieve a good level of wet or dry suction lift even at startup.

Can Pump a Huge Variety of Chemicals

By choosing a combination of Body materials and Diaphragm & Valve materials, it is possible to pump almost any chemical safely and easily.

Simple Installation

By simply connecting an air supply line and liquid lines the pump is ready to perform anywhere anytime.

Variable Flow Rates

By adjusting either the air volume or liquid discharge settings it is possible to safely stop the pump or operate at full capacity.

Variable Discharge Pressures

An APDD pump is a 1:1 ratio pump so by raising or lowering air inlet pressure the fluid discharge pressure is also changed accordingly (Air Pressure = Fluid Discharge pressure)

Can Run Dry

Because there are no close fitting, turning or sliding parts the pump can run dry without damage.

Dead Head

The discharge line may be closed at any time without damage or wear to the pump. There will be no power consumed and no temperature increase, the pump will simply stop.

No Pressure Relief or Bypass Required

As Discharge pressure cannot exceed air pressure, there is no need for pressure relief system at the pump. This saves on installation expenses and possible operational problems.

Non-Polluting

Yamada Diaphragm Pumps do not require Air Line Oil and are not pre-packed with Grease. Operating the pump will not release pollutants into the local atmosphere

Pumping Efficiency Remains Relatively Constant

The pump does not use rotors, gears, vanes, or pistons etc, which will wear out over time leading to a gradual decline in pumping performance.

Cannot Overheat

Diaphragm Pumps are naturally cooled during operation by the supply of Compressed air

Intrinsically Safe

Diaphragm pumps have no electrical connections and are able to be used safely in almost any explosive environment.

No Mechanical Seals, Couplings, Gears or Motors

This eliminates the majority of leaks and costly maintenance associated with other kinds of pumps.

Submersible

Provided the pump is chemically compatible, by attaching a hose to the exhaust port the pump can be submerged into the fluid it is pumping.

Can Pump Liquid Slurries

APDD pumps can pump many fluids containing abrasive particles or solids.

Can Pump Viscose Fluids

Diaphragm pumps are self priming and produce a relatively high discharge pressure. They are able to pump many viscous fluids like Oils and Glues etc

Can Pump Certain Powders

With some special modifications an APDD pump can pump many types of powder

High Pressure Pump

With some modifications a standard APDD can be changed to a 2:1 ratio pump and can achieve a discharge pressure up to 200Psi. This kind of pump is often used in Filter Presses or for High Head situations

Shear Sensitive

Due to the nature of operation, Diaphragm Pumps are excellent choices for shear sensitive fluids like Wine, Ink or Milk.

Clean Process Pump

A Diaphragm pump can be installed into Food or Pharmaceutical process applications where cleanliness and contamination are major considerations.

Simple Maintenance

Diaphragm pumps are portable and have very few moving parts. They have no special Seals or Gears and can be easily dismantled in any location. They also do not require any specialized tools.

Relatively Inexpensive

With a very simple operating principle the AODD is relatively easy and inexpensive to operate and maintain. This can cut down on the “cost of owning a pump”. This alone is a major reason to choose an AODD over many another kinds of pumps.

