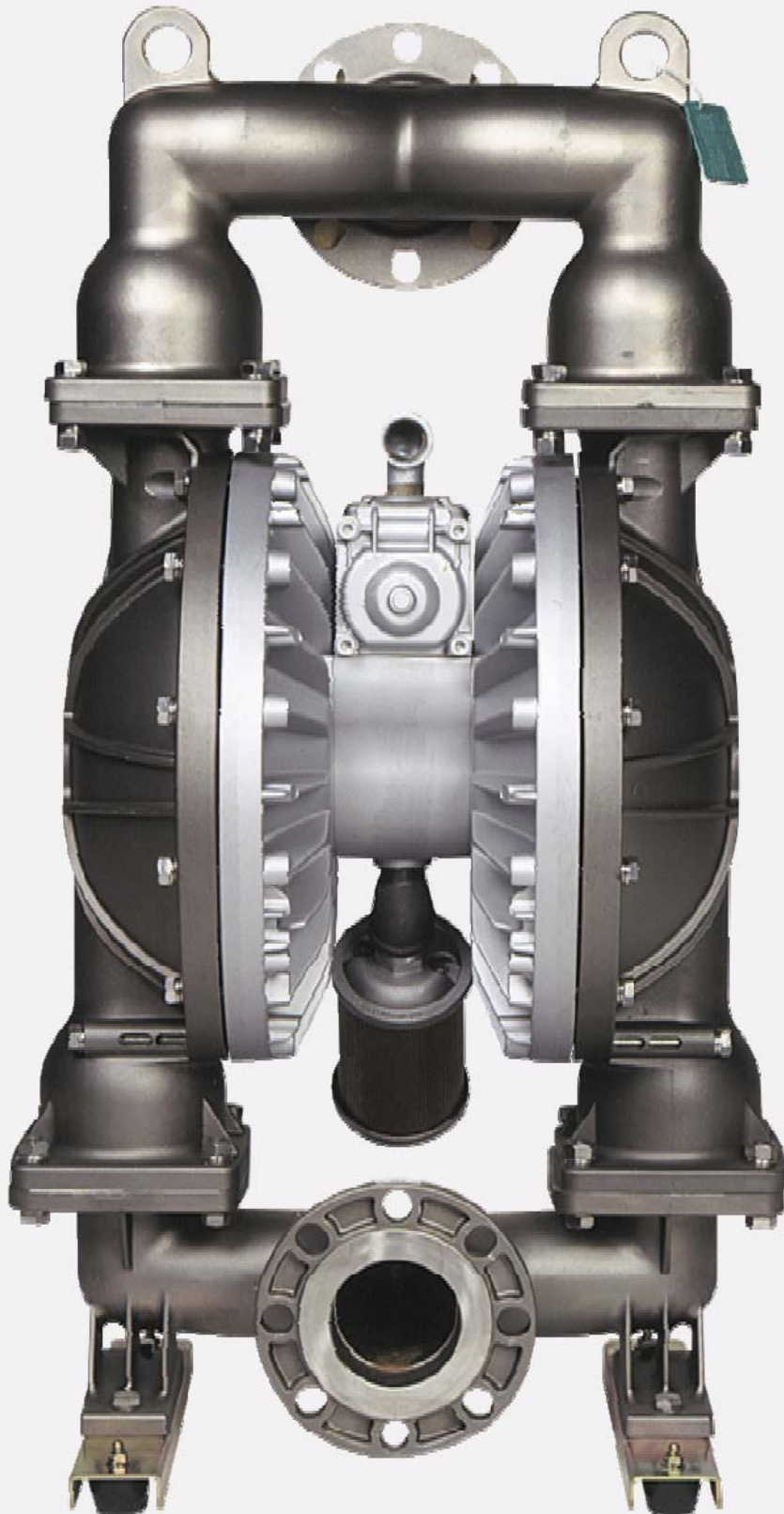


Yamada Air Powered Double Diaphragm Pumps



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APDD Pump Characteristics, Features & Benefits

Portable

Air Powered Double Diaphragm Pumps (APDDs) are a compact, light weight and portable Pump that can be used in almost any work site or environment.

Air Powered

APDDs use Compressed Air to operate the Pumps internal mechanisms and so do not require Electricity. They are completely safe to use even when transferring Flammable Liquids or in Flammable Environments.

Self Priming

A Diaphragm Pump is able to achieve a good level of Wet or Dry Suction Lift even at Pump startup.

Can Pump a Huge variety of Chemicals

APDDs have a huge range of Body Material options making it possible to pump almost any Chemical safely and easily.

Simple Installation

By connecting the Air Supply and Liquid Lines, the Pump is ready to perform.

Variable Flow Rates

Pump capacities range from 10 Liters per Min to around 850. Also any Pump can run anywhere between fully stopped, to full capacity just by changing the Air supply or Liquid Line settings.

Variable Discharge Pressures

An APDD Pump is a 1:1 Ratio Pump. 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, a Diaphragm Pump can Run Dry without damage.

Can Run at Dead Head

The Discharge Line may be closed fully 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 a Pressure Relief System at the Pump. This saves on installation costs and operation problems.

Non Polluting

Yamada Diaphragm Pumps do not require an Air Line Oil Lubricator and do not have Pre-Packed Grease. The Pump will not exhaust Pollutants into the Local Atmosphere.

Pumping Efficiency Remains Relatively Constant

The pump does not use Rotors, Gears, Vanes, or Pistons etc, which will gradually wear out over time and will lead to a decline in Pumping Performance.

Cannot Overheat

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

Intrinsically Safe

Diaphragm Pumps have no Electrical Connections and can be used safely in Flammable or Explosive Environments.

No Mechanical Seals, 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 completely submerged into the fluid it is pumping.

Can Pump Liquid Slurries

APDD Pumps can transfer Fluids containing Abrasive Particles or even Solids up to 30mm in size.

Can Pump Viscous Fluids

Diaphragm Pumps are Self Priming and produce a relatively high Discharge Pressure. They are therefore able to move Viscous Fluids like Oils, Inks and liquid Glues etc.

Can Pump Certain Powders

With some special modifications an APDD Pump can transfer many types of Powder

High Pressure Pump

A standard APDD can be modified into a 2:1 Ratio Pump and can achieve a discharge pressure up to 200Psi. This kind of Pump is used in Filter Presses or for High Head fluid transfer.

Shear Sensitive

Due to the gentle Nature of Operation, Diaphragm Pumps are possibly the best choice for Shear Sensitive Fluids like Wine, Ink or Milk etc.

Clean Process Pump

A Diaphragm pump can be installed into Food, Pharmaceutical or even specialized Semiconductor manufacturing 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 only require a few simple Tools.

Relatively Inexpensive

With a very simple operating principle, the APDD Pump is relatively easy and inexpensive to operate and maintain. This can cut down on the “Cost of Owning a Pump”. This feature alone is a major reason to choose an APDD over many another kinds of Pumps.

