Common Installation and Operation Mistakes for **AIR-OPERATED DOUBLE-DIAPHRAGM PUMPS**

PSG a DOVER company — Where Innovation Flows

ALL-FLO

AIR-OPERATED DOUBLE-DIAPHRAGM (AODD) PUMPS

Since 1986, All-Flo AODD pumps have been engineered to handle just about any application. From water-like to highly viscous liquids, if you can pour it, All-Flo can pump it. However, proper installation and operation can have an impact on how long your AODD Pump will last. The following outline demonstrates common mistakes that can significantly decrease the life of your AODD Pump and Parts.

COMMON MISTAKES

- Running the pump dry continuously
- Running the pump with dirty or humid air
- Starting the pump at full or high inlet pressure
- Installing improper sized inlet and discharge piping
- Not choosing the right diaphragm for the application
- Not taking suction lift and viscosity into account

INCORRECTLY SIZED INLET/ DISCHARGE FLUID PIPING

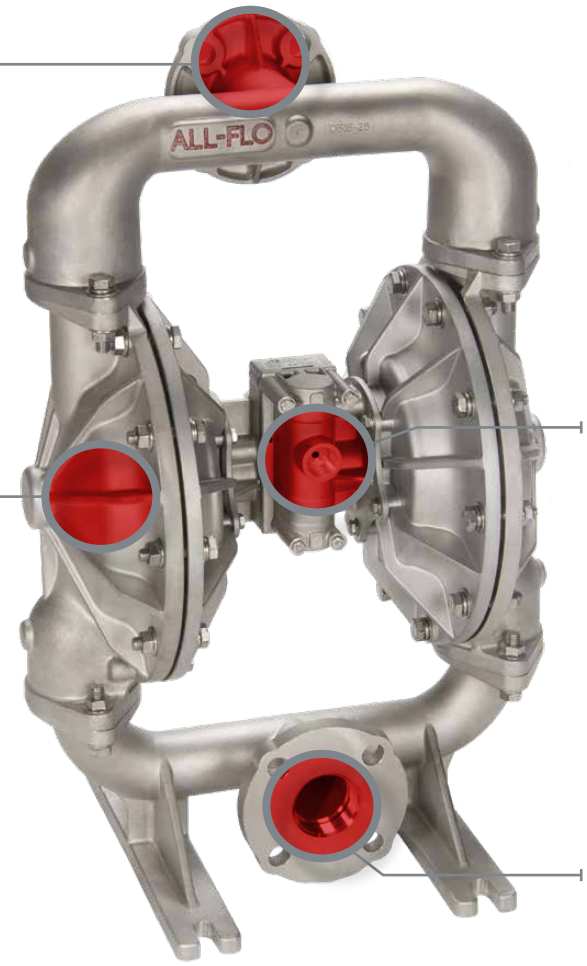
An inlet fluid pipe that is too small can end up causing cavitation within the pump. A discharge fluid pipe that is too small will cause pressure losses and reduce flow performance.

NOT CHOOSING THE RIGHT DIAPHRAGM FOR THE APPLICATION

Utilize All-Flo's chemical compatibility guide to determine what diaphragm material works best for your application. Choosing diaphragms that are not chemically compatible can not only harm your pump and damage your product, but have significant plant safety implications. The proper shape/design of the diaphragm can also play a significant role in diaphragm life.

NOT TAKING SUCTION LIFT AND VISCOSITY INTO CONSIDERATION

When choosing your AODD Pump, it's important to understand your application's suction lift and viscosity in order to properly maximize its performance.



REDUCING OPERATIONAL COSTS AND MAINTENANCE

Following installation and operation recommendations can help your pump last longer, increase the life of wear parts, and maximize pump performance. For complete installation and operation instructions, including advanced troubleshooting techniques, please see pump manual.

RUNNING PUMP WITH DIRTY/ HUMID AIR

An air line that is dirty and/or filled with humid air can end up causing damage to the air valve. It also can clog the muffler.

STARTING AT FULL/HIGH AIR INLET PRESSURE

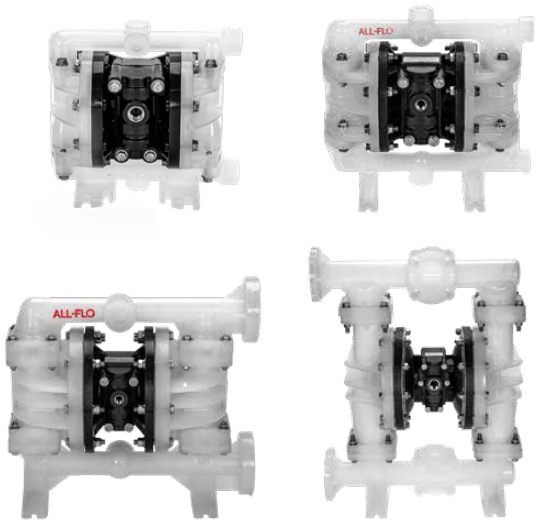
It is always recommended to run the pump slow at initial start up. Not doing so will not only results in a loud banging sound, but also cause the pump to change over too quickly so that the ball valves do not close properly and end up creating a vacuum within the pump.

RUNNING THE PUMP DRY

Pumps that run dry for a length of time will speed up, forcing the diaphragms to take faster and more frequent strokes as well as increase air consumption.

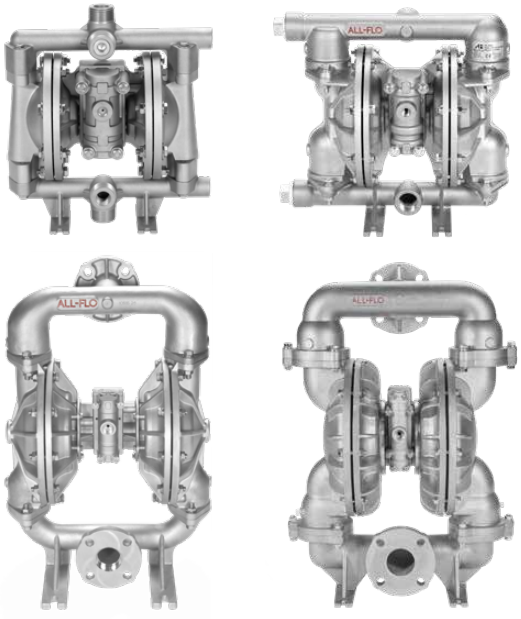
ALL-FLO STANDARD IN STOCK PLASTIC AODD PUMPS

Item	Description
A025-SPP-SSPE-S70	1/4 in. Polypropylene, Santoprene® AODD Pump
A025-SPP-TTPV-S70	1/4 in. Polypropylene, PTFE AODD Pump
A025-SPK-TTKT-S70	1/4 in. PVDF, PTFE AODD Pump
A050-SPP-SSPE-S70	1/2 in. Polypropylene, Santoprene® AODD Pump
A050-SPP-TTPT-S70	1/2 in. Polypropylene, PTFE AODD Pump
A050-SPK-TTKT-S70	1/2 in. PVDF, PTFE AODD Pump
A100-FPP-SSPE-S70	1 in. Polypropylene, Santoprene® AODD Pump
A100-FPP-TTPT-S70	1 in. Polypropylene, PTFE AODD Pump
A200-FPP-TTPT-S70	2 in. Polypropylene, PTFE AODD Pump
A200-FPP-SSPE-S70	2 in. Polypropylene, Santoprene® AODD Pump



ALL-FLO STANDARD IN STOCK METAL AODD PUMPS

Item	Description
A050-NAA-GTPN-S30	1/2 in. Aluminum, Geolast® AODD Pump
A050-NAA-TTYT-S30	1/2 in. Aluminum, PTFE AODD Pump
A050-NAA-SSPE-S30	1/2 in. Aluminum, Santoprene® AODD Pump
A050-NA3-TT3T-S70	1/2 in. Stainless Steel, PTFE AODD Pump
A050-NA3-SS3E-S70	1/2 in. Stainless Steel, Santoprene® AODD Pump
A100-NAA-GTPN-B30	1 in. Aluminum, Geolast® AODD Pump
A100-NAA-TTYT-B30	1 in. Aluminum, PTFE AODD Pump
A100-NAA-SSPE-B30	1 in. Aluminum, Santoprene® AODD Pump
A100-NA3-SS3E-B70	1 in. Stainless Steel, Santoprene® AODD Pump
A100-NA3-TT3T-B70	1 in. Stainless Steel, PTFE AODD Pump
A200-NAA-GTPN-B30	2 in. Aluminum, Geolast® AODD Pump
A200-NAA-TTYT-B30	2 in. Aluminum, PTFE AODD Pump
A200-NAA-SSPE-B30	2 in. Aluminum, Santoprene® AODD Pump
A300-NAA-GTNN-B30	3 in. Aluminum, Geolast® AODD Pump
A300-NAA-TTYT-B30	3 in. Aluminum, PTFE AODD Pump
A300-NAA-SSEE-B30	3 in. Aluminum, Santoprene® AODD Pump



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