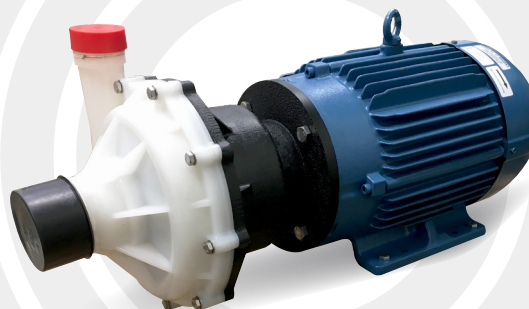




## ARO® Air Operated Diaphragm Pump Competitive Zone

vs Centrifugal Pumps



### ARO® diaphragm pump advantages include:

- Self Priming
- Reliable operation over the full flow range
- Broad viscosity / chemical compatibility (PTFE)
- Abrasive and solids containing fluids
- Ability to “dead head” without failure
- “Process Ready” standard on EXP Series



### Target Centrifugal Pump Applications:

- Various / changing process set points
- Highly acidic / basic fluids
- Abrasive fluid transfer
- Filter presses
- Hazardous applications



Most Favorable



Least Favorable

ARO®

CENTRIFUGAL



Initial Purchase Cost



Dosing Accuracy



Chemical Compatibility



Abrasives



Viscous Liquids



Solids



Low Fluid Shear



Stall Capability



Run Dry



Rotating Seals



Self Priming



### ARO® AODD PUMP ADVANTAGE

### CENTRIFUGAL MAG DRIVE PUMP

Consistent reliability over operating range	Narrow Best Efficiency Point (BEP) and Preferred Operating Range (POR)
Easily deadhead / stall with no additional equipment	Deadhead / stall causes severe damage
No degradation due to changing conditions	Process changes can lead to cavitation
Simple pump selection (Pressure/Flow/Chem Comp)	Difficult to choose proper pump
No spinning shaft seals/alignment necessary	Shaft alignment difficult to maintain
Excellent dry suction/self priming	Not self priming
Can be used in hazardous applications	Special requirements for hazardous use

See reverse side for additional information.

# ARO® Air Operated Diaphragm Pump Competitive Zone

## vs Centrifugal Pumps



ARO® AODD pumps have a broad reliable operating window allowing customer flexibility to make changes in their process without changing the pump. ARO® AODD pumps can run dry, stall, and significantly reduce the possibility of cavitation during operation.



### Potential customer centrifugal pump problems:

- Deadhead or stall can cause damage the system
- Shaft seal failures / alignment problems (vibration)
- Narrow reliable operating window – cavitation, recirculation, low bearing life
- Lack of self priming requires additional input at startup
- Run dry will quickly burnout magnetic drive destroying the pump
- Inability to run fluids that crystalize or settle when not running



### Key tips to EXP diaphragm pump technology:

#### Reliability

Quick Dump™ Checks - Reduces downtime by eliminating pump ice-up

SimulShift™ Valve - Provides an ultra-positive, reliable shift signal that avoids stall-out

Unbalanced Major Air Valve - Eliminates valve centering and pump stall-out even under low air inlet pressure

#### Efficiency

Positive Seal, Ceramic “D” Valve - No energy wasted during pump idle, ensures optimum energy efficiency while avoiding costly air “blow-by”

#### Serviceability

Simplified Major Air Valve Block - Easy to access, simple to service and lube free

#### Control and Monitoring

Automation Ready - Enhanced with Electronic Interface

Capability providing accurate, electronically controlled dosing

- Available for use in hazardous duty environments
- Leak detection option detects diaphragm failure to help reduce costly production downtime
- Compatible with almost any automation system
- Internal cycle sensor and end-of-stroke signals has ability to gather feedback and pump data

