

# AIR OPERATED DIAPHRAGM AOD® PUMPS





# TABLE OF CONTENTS

WHY CHOOSE PRICE PUMP®	2
FAMILY CURVE	3
ANATOMY OF AN AOD®	
METALLIC AOD®	5-6
TECHNICAL INFORMATION	7-8
NONMETALLIC AOD®	9-10
Accessories	11-12
ABOUT PRICE PUMP®	13
POR 2008 1998	





### WHY CHOOSE PRICE PUMP®

AOD® PUMPS OPERATE SUBSTANTIALLY DIFFERENT FROM CONVENTIONAL ELECTRICALLY DRIVEN CENTRIFUGAL OR POSITIVE DISPLACEMENT PUMPS. THESE DIFFERENCES CAN MAKE THE AOD® THE MOST COST EFFECTIVE SOLUTION TO YOUR MOST DIFFICULT PUMPING PROBLEMS.

#### **FEATURES**

- WIDE RANGE OF FLUID CAPABILITIES VARIABLE FLOWS UP TO 230 GPM DRY RUN CAPABLE FULLY SUBMERSIBLE •
- OPERABLE WITH A CLOSED DISHCARGE GREAT FOR BATCHING APPLICATIONS SELF PRIMING INHERENTLY EXPLOSION PROOF •
- · HANDLES SENSITIVE AND FRAGILE LIQUIDS LIKE PAINT, INK, AND CLAY SLIPS ·

#### **ADVANTAGES**

#### **ENGINEERED EXCELLENCE**

OUR ENGINEERS HAVE ACHIEVED STALL-FREE, OIL-LESS OPERATION WHILE USING THE FEWEST AIR VALVE COMPONENTS OF ANY MAJOR DIAPHRAGM PUMP MANUFACTURER. WITH THE USE OF SELF LUBRICATING PHENOLIC PISTON RINGS, O-RINGS ARE NO LONGER NECESSARY!

WHILE OTHER DIAPHRAGM PUMP MANUFACTURERS MAY OFFER BOLTED OR CLAMPED DESIGNS, OUR ENGINEERS HAVE DESIGNED BOTH CLAMPED AND BOLTED OPTIONS FOR ALMOST EVERY PUMP!

### INDUSTRY LEADING CUSTOMER SERVICE AND LEAD TIMES

AT PRICE PUMP® WE PRIDE OURSELVES IN OUR WORLD CLASS CUSTOMER SERVICE, AND OUR DEDICATION TO CUSTOMER SATISFACTION. TO AID IN THIS, WE OFFER THE INDUSTRY'S BEST 7-10 DAY LEAD TIME ON OUR PUMPS. WE STOCK ALL MATERIAL OPTIONS ON OUR PUMPS, SO NO MATTER THE CONFIGURATION, YOUR PARTS AND PUMPS WILL BE IN STOCK AND READY TO SHIP WHEN YOU NEED THEM.

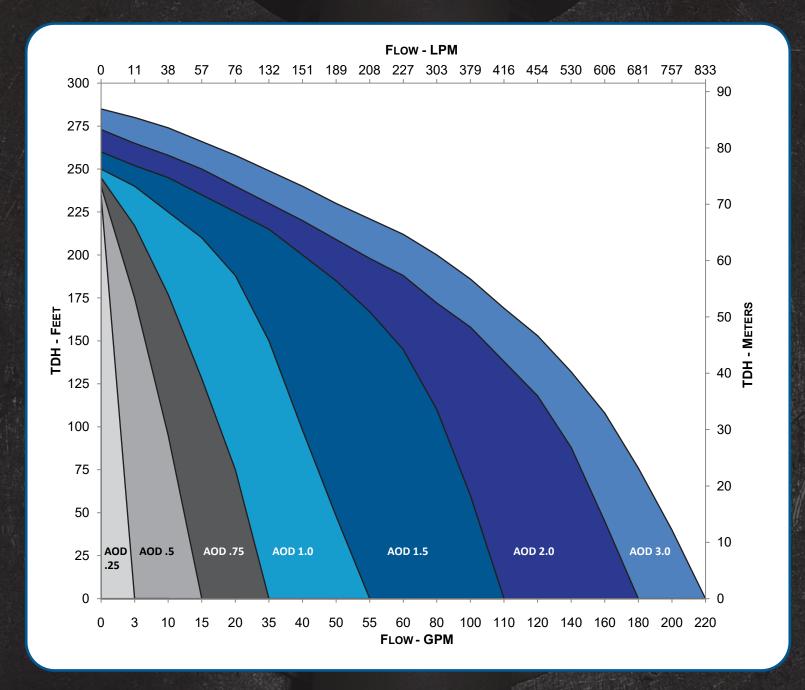
#### **EXPEDITING OPTIONS**

WE ARE ALSO PLEASED TO OFFER EXPEDITING OPTIONS ON OUR STANDARD PUMPS WITH VIP (VERY IMPORTANT PUMP) SHIPPING OPTIONS AVAILABLE! PARTS ORDERS SHIP NEXT DAY STANDARD BUT WITH OUR PONY (PARTS ORDER NEEDED YESTERDAY) PROGRAM YOUR PARTS CAN SHIP THE SAME DAY THAT YOU PLACED YOUR PURCHASE ORDER. WHEN YOU NEED A SOLUTION AND NEED IT FAST, THINK QUALITY... THINK DELIVERY... THINK PRICE®.





## **FAMILY CURVE**





# ANATOMY OF AN AOD®

EXTERNALLY SERVICEABLE
AIR VALVE COMPLIMENTED
BY A STANDARD 5 YEAR
WARRANTY

LOW MAINTENANCE
O-RING FREE AIR VALVE
DESIGN FOR OILLESS AND
STALL FREE OPERATION

LARGE SELECTION OF DIAPHRAGM MATERIALS TO HANDLE A WIDE VARIETY OF APPLICATIONS

MULTIPLE BALL/SEAT
CHECK VALVE MATERIALS
AVAILABLE TO ALLOW
PASSAGE OF SOLIDS AND
VISCOUS FLUIDS



### METALLIC AOD®



### CONFIGURATIONS

- WIDE RANGE OF SIZES AVAILABLE: 1/4", 1/2", 3/4", 1", 1 1/2", 2", AND 3"
- FLOWS RANGING FROM 3.4 TO 230 GPM
- BOLTED AND CLAMPED OPTIONS AVAILABLE

### **SPECIFICATIONS**

- Max air inlet pressure: 100 125 PSI
- MAXIMUM TEMPERATURES: 212°F to 248 °F
- AIR INLET OPTIONS: 1/4" AND 3/8" FNPT
- AIR OUTLET OPTIONS: 3/8", 1/2", AND 3/4" FNPT
- MAX SOLID SIZE: .004" TO .438"

RANGE OF SPECIFICATIONS MAY NOT BE AVAILABLE FOR ALL MODELS

### **MATERIAL OPTIONS**

- BUNA
- EPR
- SANTOPRENE®
- NEOPRENE
- TEFLON®
- VITON®
- Cast Iron
- ALUMINUM
- STAINLESS STEEL





### **APPLICATIONS**

- PAINT
- AEROSPACE
- AUTOMOTIVE
- BEVERAGE INDUSTRY
- CHEMICAL AND PETROLEUM
- GLASS AND FIBERGLASS
- MARINE
- MINE AND CONSTRUCTION
- Paper and Wood
- MANY OTHERS



### WE HAVE A PUMP TO FIT YOUR MOST COMPLICATED APPLICATIONS!

		CHEMICAL COMPATIBILITY								
	MATERIALS	Ketones	ACETATES	AROMATIC HYDROCARBONS	CHLORINATED HYDROCARBOS	OIL &GAS	WATER/ WASTEWATER	ALCOHOLS	(\$)	
LS	STAINLESS STEEL	<b>✓</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	\$\$	
METALS	ALUMINUM	<b>/</b>		<b>V</b>		<b>V</b>			\$	
Ĕ	Cast Iron			<b>/</b>	<b>V</b>	<b>V</b>			\$	
S	Buna					<b>V</b>			\$	
ů.	EPR	<b>✓</b>	<b>/</b>				<b>V</b>	<b>/</b>	\$	
ELASTOMERS	Santoprene®	<b>/</b>	<b>V</b>				<b>V</b>	<b>V</b>	\$	
	NEOPRENE						<b>/</b>		\$	
	Teflon®	<b>✓</b>	<b>/</b>	<b>V</b>	<b>/</b>	<b>V</b>	<b>V</b>	<b>/</b>	\$\$\$	
	VITON®			<b>V</b>	<b>V</b>	<b>V</b>	V	<b>V</b>	\$\$	

THIS INFORMATION PROVIDED IS COMPILED FROM VARIOUS RESOURCES AND IS TO BE USED AS A REFERENCE ONLY. PLEASE SEE SPECIFIC FLUID PROPERTIES ON A CORROSION RESISTANCE GUIDE FOR COMPATIBILITY.



# **TECHNICAL INFORMATION**



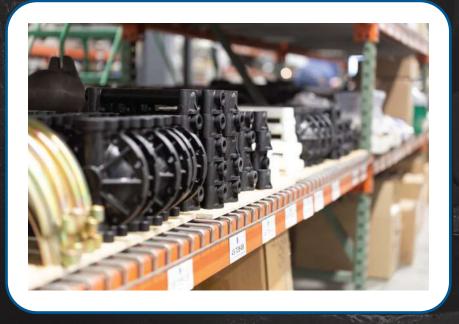
### METALLIC AOD® - TECHNICAL INFORMATION AND SPECIFICATIONS

Model Number/ Specification	MAX FLOW GPM (LPM)	DISPLACE G. (LITE		MAX INLET PSI (BAR)	MAX SOLID SIZE INCHES (MM)	HIGH TEMP LIMIT  °F  (°C)  AL SS CI		LOW TEMP LIMIT  °F  (°C)  AL SS CI			SHIPPING WEIGHT LBS (KG)			
.25 AOD	3.4 12.9	.009	.0085	100 6.9	.004 .1	212 100	212 100					4.3 1.95	6.9 3.13	
.5 AOD	12.4 46.9	.03 .11	.031 .117	100 6.9	1/32 1.0	248 120	248 120					12 5.44	16.6 7.53	
.75 AOD	27.3 103	.14 .53	.10 .38	100 6.9	1/16 1.6	248 120	248 120					24.8 11.25	35.8 16.23	
1 AOD	35	.18	.12	125	1/8	248	248	248	32	32	32	34	45	53
	132	.68	.45	8.8	3.2	120	120	120	0	0	0	15.4	20.4	24.0
1.5 AOD	75	.35	.20	125	3/16	248	248	248	32	32	32	48	85	88
	284	1.3	.75	8.8	4.7	120	120	120	0	0	0	21.8	36.6	39.9
2 AOD	170	.85	.80	125	3/8	248	248	248	32	32	32	96	165	161
	643	3.2	3.0	8.8	9.5	120	120	120	0	0	0	43.5	74.8	73
3 AOD	230	.87	.82	125	7/16	248	248	248	32	32	32	124	230	223
	871	3.3	3.1	8.8	11	120	120	120	0	0	0	56.2	104	101



### Non-metallic AOD® - Technical Information and Specifications

Model Number/ Specification	MAX FLOW GPM (LPM)	<b>DISPLAC</b> G/ (LITE	AL	MAX INLET PSI (BAR)	MAX SOLID SIZE INCHES (MM)	HIGH TEMP LIMIT °F (°C)		LOW TEMP LIMIT  °F  (°C)		SHIPPING WEIGHT LBS (KG)	
		ELAS	TEF			PolyPro	PVDF	PolyPro	PVDF	PolyPro	PVDF
.25 AOD	3.4 12.9	.009	.0085 .035	100 6.9	.004 .1	180 82	212 100	32 0	32 0	4.0 1.8	4.7 2.1
.5 AOD	15 57	.04 .015	.014 .05	125 8.8	1/8 3.2	180 82	248 180	32 0	32 0	11 5.0	13.5 6.1
.75 AOD	27.3 103	.14 .53	.10 .38	100 6.9	1/16 1.6	180 82	N/A	32 0	N/A	22.6 10.25	N/A
1 AOD	35 132	.12 .45	.10 .38	125 8.8	3/16 4.7	180 82	248 120	32 0	32 0	39 17.7	44.5 20.2
1.5 AOD	115 435	.74 2.8	.37 1.4	100 6.9	9/32 7.0	180 82	248 120	32 0	32 0	78 35.4	78 35.4
2 AOD	170 643	.85 3.2	.80 3.0	125 8.8	3/8 9.5	180 82	248 120	32 0	32 0	82 37	105 47
3 AOD	213 806	2.25 8.5	1.0 3.8	100 6.9	13/32 10.0	180 82	N/A	32 0	N/A	178 81	N/A





## Non-metallic AOD®



### **CONFIGURATIONS**

- WIDE RANGE OF SIZES AVAILABLE: 1/4", 1/2", 3/4", 1", 1 1/2", 2", AND 3"
- FLOWS RANGING FROM 3.4 TO 213 GPM
- FLANGED AND THREADED OPTIONS AVAILABLE

### SPECIFICATIONS

- Max air inlet pressure: 100 125 PSI
- MAXIMUM TEMPERATURES: 180°F to 248°F
- AIR INLET OPTIONS: 1/4", 3/8, AND 3/4" FNPT
- AIR OUTLET OPTIONS: 3/8", 1/2", 3/4", AND 1" FNPT
- MAX SOLID SIZE: .004" TO .406" RANGE OF SPECIFICATIONS MAY NOT BE AVAILABLE FOR ALL MODELS

### **MATERIAL OPTIONS**

- Buna
- EPR
- SANTOPRENE®
- NEOPRENE
- TEFLON®
- VITON®
- KYNAR
- POLYPROPYLENE





### **APPLICATIONS**

- PAINT
- AEROSPACE
- AUTOMOTIVE
- BEVERAGE
- CHEMICAL AND PETROLEUM
- GLASS AND FIBERGLASS
- MARINE
- MINE AND CONSTRUCTION
- Paper and Wood
- Many Others



### WE HAVE A PUMP TO FIT YOUR MOST COMPLICATED APPLICATIONS!

		CHEMICAL COMPATIBILITY								
	MATERIALS	KETONES	ACETATES	AROMATIC HYDROCARBONS	CHLORINATED HYDROCARBOS	OIL &GAS	WATER/ WASTEWATER	ALCOHOLS	(\$)	
POLYMER	Knyar	V	V	~	~	V	~	~	\$\$	
Pol	POLYPROPYLENE						•	•	\$	
Ŋ	Buna					<b>V</b>			\$	
Ē	EPR	<b>&gt;</b>	<b>'</b>				<b>'</b>	<b>'</b>	\$	
0	Santoprene®	<b>/</b>	<b>V</b>				<b>V</b>	<b>V</b>	\$	
ELASTOMERS	NEOPRENE						<b>V</b>		\$	
Щ Г	TEFLON®	<b>&gt;</b>	~	<b>V</b>	<b>V</b>	~	<b>V</b>	<b>V</b>	\$\$\$	
	VITON®			<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	<b>'</b>	\$\$	

THIS INFORMATION PROVIDED IS COMPILED FROM VARIOUS RESOURCES AND IS TO BE USED AS A REFERENCE ONLY. PLEASE SEE SPECIFIC FLUID PROPERTIES ON A CORROSION RESISTANCE GUIDE FOR COMPATIBILITY.



### **Accessories**



### **CYCLE TIMER**

THE BATCH CONTROLLER PROVIDES BATCH CONTROL CYCLES OF A PRODUCT AT REPEATED INTERVALS. ONCE THE SPECIFIC PREDETERMINED AMOUNT HAS BEEN REACHED, THE CONTROLLER SIGNALS THE PUMP TO SHUT OFF. THE SYSTEM OFFERS 3 SEPARATE BATCH CYCLES AND IS PROGRAMMED USING A 7-BUTTON KEYPAD.

### **DIAPHRAGM MONITORING**

THE DIAPHRAGM MONITORING SYSTEM IS DESIGNED TO PROTECT YOUR PUMP AGAINST DAMAGE FROM CORROSIVE, AGGRESSIVE, OR OTHER HARMFUL PUMPED FLUIDS. POWERED BY STANDARD LINE CURRENT, THE SYSTEM AUTOMATICALLY INTERUPTS AIR SUPPLY TO THE PUMP AND/OR ACTIVATES AN INDICATOR THE MOMENT A DIAPHRAGM LEAK IS DETECTED.





### FILTER/REGULATOR

One of the most common additions to any AOD® pump is a filter/regulator. These fit easily in nearly all applications and filter plant air to 5 microns while allowing precise control of AOD® pumps.





### **PULSATION DAMPENERS**

Our pulsation dampeners and surge suppressors can economically eliminate up to 98% of low frequency, high amplitude pulsations produced by diaphragm pumps. The right sizes and materials of construction are available for every application.



### ABOUT PRICE PUMP®

#### 1932

FOUNDED BY E.L. PRICE IN EMERYVILLE, CALIFORNIA.

### 1962

PRICE PUMP® IS ACQUIRED BY LEON J. Paul and the name is retained DUE TO THE REPUTATION FOR QUALITY AND SERVICE.

### 1980

THE AGRICULTURE MARKET IS REPLACED BY CHEMICAL, LASER, AND SEMICONDUCTOR MARKETS.

### 1989

PRICE PUMP® RELOCATES TO THEIR 32,000 SQUARE FOOT SONOMA CALIFORNIA FACILITY.

### 1992

Bob Piazza JOINS AS PRESIDENT AND **BRINGS A** LIFETIME OF PUMP EXPERIENCE.



#### 1994

PRICE PUMP® CONTINUES TO INNOVATE AND LAUNCHES A LINE OF MAGNETICALLY DRIVEN SEAL-LESS PUMPS.

### 1999

AIR OPERATED DIAPHRAGM (AOD®) PUMPS ARE ACQUIRED FROM ITT-Marlow.



#### 2007

PRICE PUMP® PARTNERS WITH MITSUBISHI ELECTRIC AUTOMATION AND INTRODUCES VARIABLE FREQUENCY DRIVES (VFD).

### 2010

THE XJ400 IS INTRODUCED PRODUCING FLOWS OVER 1000 GALLONS PER MINUTE.

### 2012

PRICE PUMP® BECOMES AN ISO 9001 CERTIFIED COMPANY.



### 2012-2017

THE PURCHASE OF A NEW 3D PRINTER AND ADDITIONAL INVESTMENT IN **ENGINEERING DESIGN AND** DEVELOPMENT LEAD TO RAPID PROTOTYPING. THIS LEADS TO SEVERAL NEW PUMP RELEASES.

#### 2019

NEW CORPORATE HEADQUARTERS OPENED AT 2203 SMEED PARKWAY IN CALDWELL IDAHO. PRICE PUMP® MOVES ALL PRODUCTION TO THIS NEW FACILITY.



### 2020

PRICE PUMP® FINISHES COMPLIANCE TESTING IN THEIR NEWLY CONSTRUCTED STATE OF THE ART TEST FACILITY; VERIFICATION OF COMPLIANCE WITH DEPARTMENT OF **ENERGY PUMP ENERGY INDEX** STANDARDS IS COMPLETED.



## CHECK OUT OUR OTHER PRODUCT OFFERINGS



HORIZONTAL CENTRIFUGAL
PUMPS



SEALLESS CENTRIFUGAL PUMPS



VERTICAL CENTRIFUGAL
PUMPS

### FOR MORE INFORMATION PLEASE VISIT WWW.PRICEPUMP.COM

Notes	



FOR ALL OF OUR CURRENT OFFERINGS AND LOCAL REPRESENTATIVES
PLEASE VISIT WWW.PRICEPUMP.COM

2203 SMEED PARKWAY CALDWELL, ID 83605 1-800-345-PUMP (7867)



