

# VERSAMATIC® PUMPING MADE EASY

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AIR OPERATED DOUBLE DIAPHRAGM PUMPS

## WHY VERSAMATIC?

Service of the servic

Since 1983, Versamatic has provided reliable, quality AODD pumping solutions globally to customer who value simplicity, quick delivery and convenience.

When purchasing Versamatic products, you can be confident knowing you are fully supported by experienced teams of professionals from product selection to installation and beyond.



80,000 square foot manufacturing plant. Award-winning facility, ensuring continuous improvement.



Ensures product performance and drives product enhancements.



OF THE ART TEST LAB

performance, and endurance.

Improved overall efficiency.



From product selection, to troubleshooting, our team of experts are ready to help.



Enables consistent quality through scientific processes.



Provide guaranteed quality and ease of maintenance.





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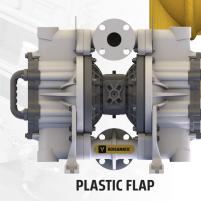


THE ALL STREET OF STREET

Providing product expertise, personalized service, and after sales support.



We make pumping easy with our complete line of bolted metal, bolted plastic and clamped metal AODD pumps offered in a wide range of sizes and flow rates. We've set the standard of performance in AODD pumps, and are committed to providing quality AODD pumps for customers who value reliability, quick delivery and convenience.

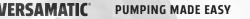


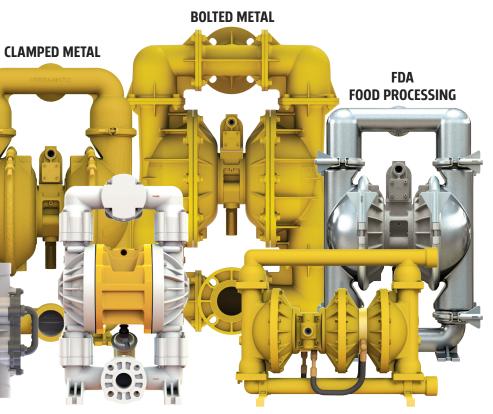


EXTENSIVE GLOBAL DISTRIBUTION NETWORK



PRODUCT ASSURANCE





**BOLTED PLASTIC** 

**HIGH-PRESSURE** 

**QUICK SHIP PROGRAM** 

**PRODUCT TESTING** 



#### DESIGNED AND ASSEMBLED IN THE USA

Enhanced sealing capabilities, reliability, and ease of assembly and disassembly.

> CLAMPED OR BOLTED CONSTRUCTION





## **RELIABLE PUMPING MADE EASY**

Proudly assembled in Mansfield, Ohio you count on the consistency, reliability and trouble-free operation of Versamatic's air-operated double-diaphragm (AODD) pumps to keep your process running.



**RELIABLE PERFORMANCE** Versamatic pumps are designed to reduce downtime, which leads to more effective and efficient processes.



**GLOBAL DISTRIBUTION** Get expert solutions, convenience, local service and support no matter where you're located in the world.



SIMPLE CONSTRUCTION An AODD pump's simple design and easy-to-understand principles

keep your processes working at

top speed.



**COMPLETE PRODUCT OFFERING** Our diverse portfolio of AODD pumps gives you the versatility and flexibility you need to make pumping easy.



**APPLICATION VERSATILITY** 

Your pump should be able to effectively handle a broad array of fluid types, from water to products that are viscous or abrasive.



#### WORLD-CLASS **MANUFACTURING & SUPPORT**

When you partner with Versamatic you can expect short lead times and on-time delivery. We have the part you need - when you need it - in stock.



### WHY AODD PUMPS?

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PUMP TYPE:	AODD	Centrifugal	Lobe	Gear	Progressive (screw)	Peristaltic (hose)	Piston/ Plunger
TECHNOLOGY:	Non PD Reciprocating	Kinetic	PD Rotary	PD Rotary	PD Rotary	PD Rotary	PD Reciprocating
Variable Flow & Head Control: (inherently adjustable)	$\checkmark$	Ĩ	!		I	1	Ĩ
Deadheads Safely: (at zero energy consumption)	$\checkmark$	1	1		1	1	ž.
Dry-Running:		×	×	×	×	×	×
Dry-Priming: (lift installations)	$\checkmark$	×	×	×	×	×	ž.
No Installation Alignment Required:		×	×	×	×	×	×
No Electrical Installation Required:		×	×	×	×	×	×
Portability:							1
Submersible:		Ţ	×	×	×	×	×
Sealless: (no packing or mechanical seals)	$\checkmark$	1	Į.		1		1
<b>No Slip:</b> (thin liquids)		1	1		1	1	1
Cavitation Tolerance: (low NPSHa)	$\checkmark$	×	1				<u> </u>
Low Shear & Degradation:	$\checkmark$	×	Į.	Ţ	I	Ţ	ž.
🧹 = Best Fit 🛛 📲 = Limitatio	ons 🗶 = Not	Recommende	d				

- Run-dry without damaging the pump or system
- Pump solid laden fluids without pump or product damage
- Self-priming, works in suction lift applications
- Deadheads safely, with no pump or product damage
- Shear sensitive, does not shear or separate product being pumped
- fully grounded Low initial purchase price compared to other technologies
- Submersible, can be submerged completely without safety or performance issues

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- No electricity required, and can be
- Sealless design, no expensive mechanical seals or packing are required
- Variable flow and head pressures, without sophisticated controls



### **INSTALLATION VERSATILITY**

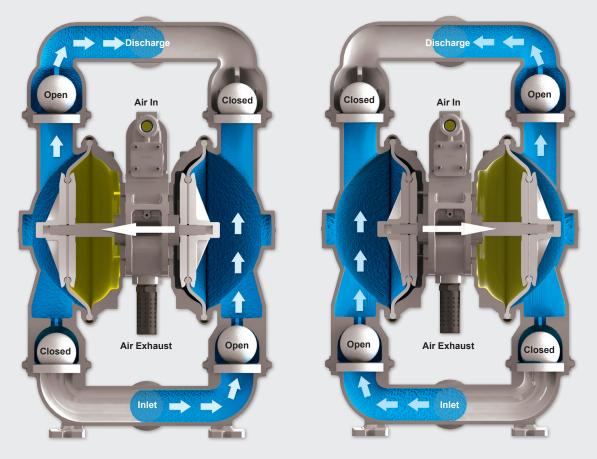
### **HOW AODD PUMPS WORKS**

All installations: Run-dry capable • No heat generation • No electricity required

### SUBMERGED **SUCTION LIFT FLOODED SUCTION** Capable of full Preferred for viscous Self-priming submersion fluids • High vacuum capable Screened inlet Most common • Max lift of 32' (9.8m) option application Screened inlet option **NOTE:** Consult your distributor or owners manual for proper materials of construction and installation for your application.

### MARKETS WE SERVE





#### **1: SUCTION CYCLE**

Compressed air fills left inner chamber, causing the opposing diaphragm to create suction, lifting the lower valve ball, pulling in fluid at inlet. Simultaneously the left chamber is in "Discharge" cycle.

= Compressed Air





### AODD PUMP OPERATION

**2: DISCHARGE CYCLE** 

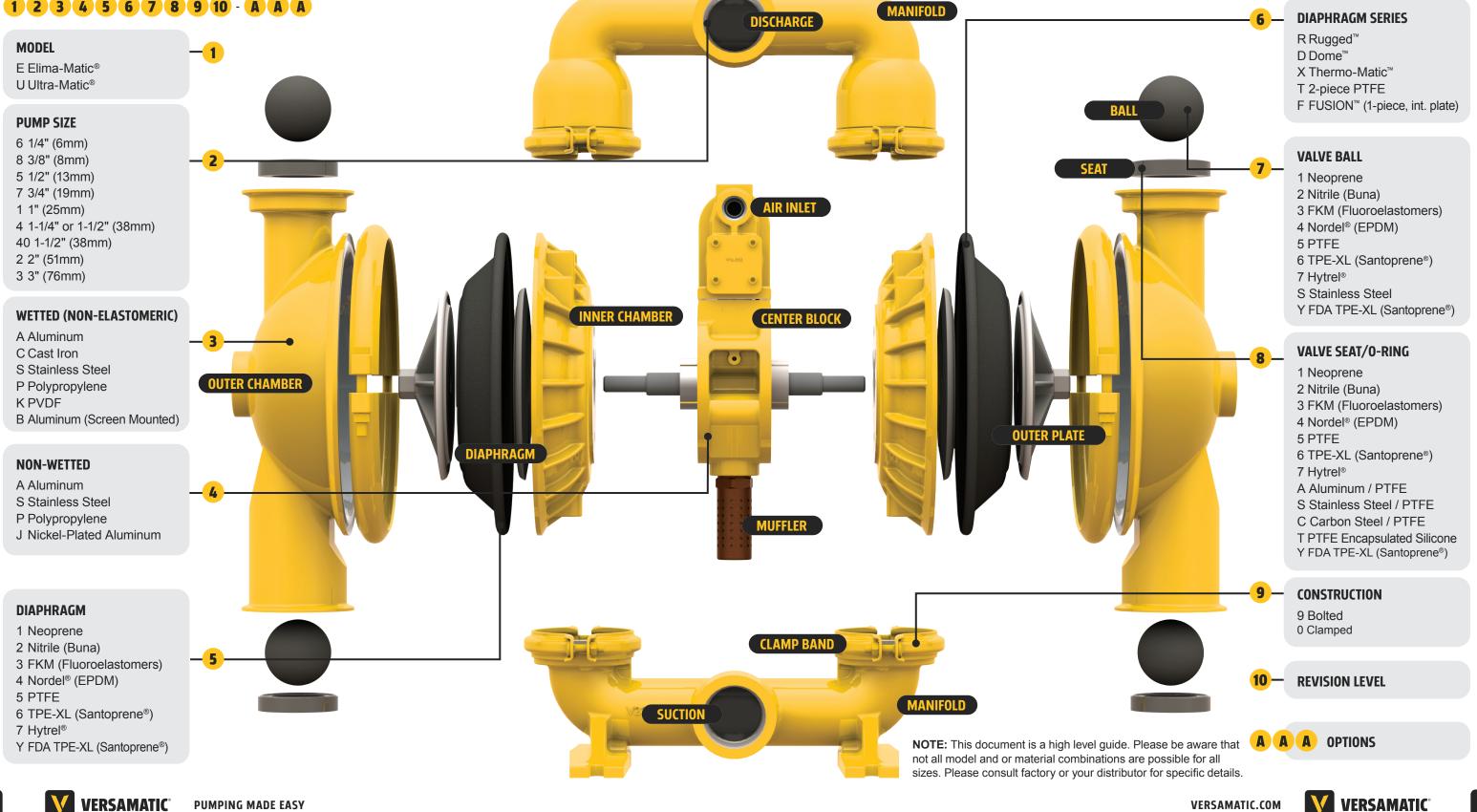
Compressed air fills right inner chamber, causing upper valve ball to open and discharge fluid. Simultaneously, the left chamber is in "Suction" cycle.

= Pumped Fluid



## **PUMP MODEL CODES**

### HOW TO READ VERSAMATIC MODEL CODES **1 2 3 4 5 6 7 8 9 10 - A A A**





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### **BOLTED METAL**



	PORT SIZE	1/0" (10 7 MANA)	3/4" (19 MM)	1" (25.4 MM)	1.5" (38 MM)	2" (50.8 MM)	2" (50.8 MM)	3" (76.2 MM)	3" (76.2 MM)
	PURI SIZE	1/2" (12.7 MM)	5/4 (19 MIMI)	1 (23.4 191191)		2 (JU.O MIM)	2 (30.0 19119)	5 (70.2 IVIIVI)	5 (70.2 WIW)
	Pump Model	E5	E7	E1	E40	E2	E2	E3	E3
	Wetted Material Option	AL / SS	AL	AL / SS	AL / CI / SS	AL	CI / SS	AL	SS
	Air Side material	AL / PP	AL / PP	AL / PP / AL-NP	AL / SS / AL-NP	AL	AL / SS	AL	AL / SS
	Max Flow Rate Per Minute	12 gpm (45.4 lpm)	12 gpm (45.4 lpm)	49 gpm (181.7 lpm)	123 gpm (465 lpm)	163 gpm (617 lpm)	160 gpm (606 lpm)	273 gpm (1033 lpm)	273 gpm (1033 lpm)
	Porting Configurations	Suction: Center Horz. Discharge: Center Horz.	Suction: Center Horz. Discharge: Center Horz.	Suction: Center Horz. Discharge: Center Horz.	Suction: Center Horz. Discharge: Center Horz.	Suction: Center Horz. Discharge: Center Horz.	Suction: Center Horz Discharge: Center Horz or Vert	Suction: Center Horizontal* Discharge: Center Horizontal*	Suction: Center Horizontal Discharge: Center Horizontal
	Connection Type	1/2" NPT	3/4" NPT	1" NPT or BSP	1.5" NPT or BSP	2" NPT or BSP	2" ANSI / DIN 2" NPT / BSP"	3" ANIS / DIN 3" NPT / BSP	3" ANIS / DIN 3"" NPT / BSP
SNC	Maximum Dry Suction Lift	13' (3.9 m)	13' (3.9 m)	15' (4.6 m)	19' (5.8 m)	18' (5.5 m)	14' (4.3 m)	16' (4.9 m)	16' (4.9 m)
<b>SPECIFICATIONS</b>	Air Inlet: Port Air Exhaust: Port	Inlet: 3/8" NPT Exhaust: 3/8" NPT	Inlet: 3/8" NPT Exhaust: 3/8" NPT	Inlet: 3/8" NPT Exhaust: 1/2" NPT	Inlet: 1/2" NPT (3/4" NPT, SS) Exhaust: 1" NPT	Inlet:1/2" NPT Exhaust:1" NPT	Inlet: 1/2" NPT (3/4" NPT, SS) Exhaust: 1" NPT	Inlet: 1/2" NPT Exhaust: 1" NPT	Inlet: 1/2" NPT (3/4" NPT, SS) Exhaust: 1" NPT
PECI	Max Solids Handling	0.063" (1.6 mm)	0.063" (1.6 mm)	0.125" (3.2mm)	0.25" (6.3 mm)	0.43" (11.1 mm)	0.25" (6.3 mm)	0.375" (9.5 mm)	0.500 (12.7 mm)
S	Max. Displacement per stroke	0.022 gal (0.08 L)	0.022 gal (0.08 L)	0.1 gal (0.38 L)	0.44 gal (1.67 L)	0.60 gal (2.27 L)	0.49 gal (1.85 L)	1.46 gal (5.5 L)	1.46 gal (5.5 L)
	Maximum Air Inlet Pressure	125 psi (8.6 bar)	125 psi (8.6 bar)	125 psi (8.6 bar)	125 psi (8.6 bar)	125 psi (8.6 bar)			
	Shipping weight	11-17 lbs (3.9-7.7 kg)	11-17 lbs (3.9-7.7 kg)	27-40 lbs (12.2-18.1 kg)	55-92 lbs (25-41.7 kg)	81 lbs (36.7 kg)	114 lbs (51.7 kg)	146 lbs (66.2 kg)	245 lbs (111.1 kg)
	Height	10.05" (255.3 mm)	10.05" (255.3 mm)	14.54" (369.3 mm)	22.2" (563.9 mm)	26.66" (677.1 mm)	27.77" (705.4 mm)	36.31" (922.3 mm)	36.26" (919.2 mm)
	Width	8.39" (213.1 mm)	8.39" (213.1 mm)	10.75" (273.5 mm)	18.55" (471.2 mm)	17.72" (450.1 mm)	17.72" (450.1 mm)	25.12" (638.1 mm)	22.06" (560.3 mm)
	Depth	6.25" (158.8 mm)	6.25" (158.8 mm)	9.33" (237 mm)	12.22" (310.4 mm)	13.13" (333.5 mm)	12.03" (305.6 mm)	16.11" (409.2 mm)	16.08" (408.4 mm)
	Base to Suction	0.95" (24.1 mm)	0.95" (24.1 mm)	1.56" (38.6 mm)	3.13" (79.5mm)	2.52" (64.0 mm)	3.39" (86.1 mm)	4.38" (111.3 mm)	4.44" (112.8 mm)
	Base to Discharge	9.35" (237.5 mm)	9.35" (237.5 mm)	13.73" (348.7 mm)	20.9" (530.9 mm)	24.88" (363.0 mm)	27.77" (705.4 mm)	32.38" (822.5 mm)	32.32" (820.9 mm)

AL-Aluminum, CI-Cast Iron, SS-Stainless Steel, AL-NP-Nickle Plated Aluminum PP-Polypropylene See service manual for complete specifications \*Standard Configuration













### **CLAMPED METAL**

## FDA / HYGIENIC

	PORT SIZE	1.5" (38 MM)	2" (50.8 MM)	3" (76.2 MM)
	Pump Model	E4	E2	E3
	Wetted Material Option	AL / CI / SS	AL / CI / SS	AL / CI / SS
	Air Side Material	AI / AL-NP	AI / SS / AL-NP	AI / SS / AL-NP
	Max Flow Rate Per Minute	71 gpm (268 lpm)	185 gpm (700 lpm)	234 gpm (886 lpm)
	Porting Configurations	Suction: Center Horz Discharge: Center Vert	Suction: Center Horz Discharge: Center Vert	Suction: Center Horz Discharge: Center Vert
	Connection Type	Suction: 1 1/2" NPT or BSP Discharge: 1 1/4" NPT or BSP	Suction: 2" NPT or BSP Discharge: 2" NPT or BSP	Suction: 3" NPT or BSP Discharge: 3" NPT or BSP
	Maximum Dry Suction Lift	19' (5.8 m)	17' (5.2 m)	20' (6.1 m)
ONS	Air Inlet: Port Air Exhaust: Port	Inlet: 1/2" NPT Exhaust: 3/4" NPT	Inlet: 1/2" NPT (3/4" NPT, SS) Exhaust: 1" NPT	Inlet: 1/2" NPT (3/4" NPT, SS) Exhaust: 1" NPT
FICAT	Max Solids Handling	0.188" (4.8 mm)	0.25" (6.4 mm)	.375" (9.5 mm)
<b>SPECIFICATIONS</b>	Max. Displacement Per Stroke	.25 gal (0.95 L)	0.60 gal (2.3 L)	1.36 gal (5.1 L)
•••	Maximum Air Inlet Pressure	125 psi (8.6 bar)	125 psi (8.6 bar)	125 psi (8.6 bar)
	Shipping Weight	55-95 lbs (25-43 kg)	65-144 lbs (29.5-65.3 kg)	108-233 lbs (49.0-105.7 kg)
	Height	AL: 17.11" (434.6 mm) Cl: 16.88" (428.6 mm) SS: 16.7" (425.8 mm)	AL: 26.69" (678.0 mm) Cl: 26.19" (665.2 mm) SS: 26.22" (666.0 mm)	AL: 32.09" (815.1 mm) Cl: 32.78" (832.5 mm) SS: 32.01" (813.1 mm)
	Width	AL: 14.17" (360.0 mm) CI: 14.36" (364.7 mm) SS: 14.40" (365.7 mm)	AL: 16.38" (416.1 mm) Cl: 16.38" (416.1 mm) SS: 15.87" (403.1 mm)	20.01" (508.2 mm)
	Depth	11.50" (292.1 mm)	13.59" (345.2 mm)	15.01" (381.1 mm)
	Base to Suction	AL: 2.55" (64.77 mm) CI: 2.63" (66.7 mm) SS: 2.55" (64.77 mm)	AL: 2.03" (51.6 mm) CI: 2.53" (64.3 mm) SS: 1.72" (43.7 mm)	AL: 2.25" (57.2 mm) CI: 2.49" (63.3 mm) SS: 2.31" (58.7 mm)
	Base to Discharge	AL: 17.11" (434.6 mm) CI: 16.88" (428.6 mm) SS: 16.76" (425.8 mm)	AL: 25.05" (636.3 mm) Cl: 24.55" (623.6 mm) SS: 24.72" (627.9 mm)	AL: 29.90" (759.4 mm) CI: 30.43" (772.9 mm) SS: 29.76" (755.9 mm)

AL-Aluminum, CI-Cast Iron, SS-Stainless Steel, AL-NP-Nickle Plated Aluminum See service manual for complete specifications \*Standard Configuration



PORT SIZE         1/2" (12.7 MM)         1" (25.4 MM)         1.5" (38 MM)         2" (50.8 MM)         3" (76.2           Pump Model Wetted Material Options         E5         E1         E4         E2         E3           Air Side Material Options         316 SS         316 SS<	? MM)
Wetted Material Options316 SS316 SS316 SS316 SS316 SS316 SSAir Side MaterialPPPP / AL-NPAL-NPSS / AL-NPSS / AL-NPMax Flow Rate Per Minute12 gpm (45.4 lpm)46 gpm (174.1 lpm)70 gpm (265 lpm)185 gpm (700 lpm)234 gpm (8Porting ConfigurationsSuction: Center Horz Discharge: Center HorzSuction: Center Horz Discharge: Center HorzSuction: Center Horz Discharge: Center HorzSuction: Center Horz 	
Options316 SS316	
Max Flow Rate Per Minute12 gpm (45.4 lpm)46 gpm (174.1 lpm)70 gpm (265 lpm)185 gpm (700 lpm)234 gpm (8Porting ConfigurationsSuction: Center Horz Discharge: Center HorzSuction: Center Horz Discharge: Center Discharge: Center HorzSuction: Center Horz Discharge: Center Discharge: Center HorzSuction: Center Horz Discharge: Center HorzSuction: Center Horz Discharge: Center Discharge: Center HorzSuction: Center Horz Discharge: Center Discharge: Center Horz <t< th=""><th>SS</th></t<>	SS
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Porting ConfigurationsDischarge: Center HorzDischarge: Center Horz	386 lpm)
Maximum Viscosity, cSt / SSU         cSt - 2,000 SSU -9,400         cSt - 2,000 SSU -9,401         cSt - 90,000 SSU - 415,500         cSt - 90,000 SSU - 415,501         cSt - 90 SSU - 42           Maximum Dry         12' (2.0 m)         15' (4.0 m)         15' (4.6 m)         17' (5.1 m)         20' (6.1 m)	: Center
Viscosity, cSt / SSU         SSU -9,400         SSU -9,401         SSU - 415,500         SSU - 415,501         SSU - 47           Maximum Dry         121 (2.0 m)         161 (4.0 m)         151 (4.6 m)         171 (5.1 m)         201 (6.1 m)	lamp
Maximum Dry         13' (3.9 m)         16' (4.9 m)         15' (4.6 m)         17' (5.1 m)         20' (6.1 m)	
Suction Lift 13 (3.9 III) 10 (4.9 III) 13 (4.0 III) 17 (3.1 III) 20 (0.	1 m)
Air Inlet: Port Air Exhaust: PortInlet: 3/8" NPTInlet: 3/8" NPTInlet: 3/8" NPTInlet: 1/2" NPTInlet: 1/2" NPTInlet: 1/2" NPTInlet: 1/2" NPTInlet: 1/2" NPTInlet: 1/2" NPTAir Exhaust: PortInlet: 3/8" NPTInlet: 3/8" NPTInlet: 3/8" NPTInlet: 3/8" NPTInlet: 3/8" NPTInlet: 1/2" NPTInlet: 1/2" NPTAir Exhaust: 3/8" NPTInlet: 3/8" NPTInlet: 3/8" NPTInlet: 3/8" NPTInlet: 3/8" NPTInlet: 3/8" NPT	T, SS)
Max Solids Handling         0.063" (1.6 mm)         0.125" (3.2mm)         0.18" (4.76 mm)         0.25" (6.3 mm)         0.375" (9.1000000000000000000000000000000000000	∂.5 m)
Max. Displacement Per Stroke         0.022 gal (0.08 L)         0.09 gal (0.34 L)         0.25 gal (0.95 L)         0.60 gal (2.27 L)         1.36 gal	(5.1 L)
Maximum Air Inlet Pressure         100 psi (6.8 bar)         100 psi (6.8 bar)         125 psi (8.6 bar)         125 psi (8.6 bar)         125 psi (8.6 bar)	3.6 bar)
Cleaning / Clean Out of Place Cl	
Wetted Casting Surface Finish, Microinches (Micrometers)         Ra 125 μ-in (3.175 μ-m)         Ra 125 μ-in (3.175 μ-	
Diaphragm Material OptionsHytrel, FDA Santoprene, 2-Piece PTFE, IP Bonded PTFEHytrel, FDA Santoprene, 2-Piece PTFE, IP Bonded PTFE	rene , PTFE,
Shipping Weight         17 lbs (7.7 kg)         36 lbs (16.3 kg)         57 lbs (25.9 kg)         106 lbs (48.1 kg)         189-23 (86-108)	
Height         10.41" (264.41 mm)         14.44" (366.8 mm)         17.33" (440.2 mm)         26.22" (666 mm)         32.01" (8-1)	13 mm)
Width         8.20" (208.3 mm)         10.72" (272.4 mm)         16.66" (423.2 mm)         17.18" (436.3 mm)         21.54" (54)	17 mm)
Depth         8.19" (208.1 mm)         8.13" (206.4 mm)         13.66" (345.0 mm)         13.62" (346 mm)         16.96" (43	
Base to Suction         0.98" (25 mm)         1.56" (39.6 mm)         2.56" (65.0 mm)         1.72" (43.6 mm)         2.31" (58	0.7 mm)
Base to Discharge         9.42" (239.3 mm)         13.63" (346.2 mm)         17.33" (440.2 mm)         24.72" (627.9 mm)         29.76" (75	,

SS-Stainless Steel, AL-NP-Nickle Plated Aluminum, PP-Polypropylene, See service manual for complete specifications-\*Standard Configuration



### **BOLTED PLASTIC**

	PORT SIZE	1/4" (6.4 MM)	3/8" (9.52 MM)	1/2" (12.7 MM)	1" (25.4 MM)	1.5" (38 MM)
	Pump Model	E6	E8	E5	E1	E40
	Wetted Material Option	PP / PVDF / ACETAL	PP / PVDF	PP / PVDF	PP / PVDF	PP / PVDF / COND PP
	Air Side material	PP / ACETAL	PP	PP	PP	PP / COND PP
	Max Flow Rate Per Minute	5 gpm (19.0 lpm)	6.8 gpm (25.7 lpm)	11 gpm (41 lpm)	43 gpm (162.8 lpm)	100 gpm (378 lpm)
	Porting Configurations	Suction: Center Horz* or Side Discharge: Center Vert* or Side	Suction: Center Horz* Discharge: Center Vert	Suction & Discharge: Side* or Center Vert or Horz	Suction: Side* or Center Discharge: Side* or Center	Suction: Center Horz* or Vert Discharge: Center Vert* or Hor
	Connection Type	1/4" FNPT Internal 1/2 MNPT External	3/8" NPT	1/2" NPT	1" 150# ANSI/DIN 325 Flange	1 1/2" ANSI / DIN Flange
NS	Maximum Dry Suction Lift	8' (2.44 mm)	8' (2.44 mm)	12' (3.6 m)	11' (3.4 m)	19' (5.8m)
<b>SPECIFICATIONS</b>	Air Inlet: Port Air Exhaust: Port	Inlet: 1/4" NPT Exhaust: 1/4" NPT	Inlet: 1/4" NPT Exhaust: 1/4" NPT	Inlet: 3/8" NPT Exhaust: 3/8" NPT	Inlet: 3/8" NPT Exhaust: 1/2" NPT	Inlet: 3/4" NPT Exhaust: 1" NPT
CIFIC	Max Solids Handling	0.031" (1 mm)	0.10" (2.54 mm)	0.063" (1.6 mm)	.125" (3.1 mm)	0.47" (12 mm)
SPE	Max. Displacement per stroke	0.01 gal (0.04 L)	0.009 gal (0.034 L)	0.022 gal (0.08 L)	0.095 gal (0.36 L)	0.43 gal (1.63 L)
	Maximum Air Inlet Pressure	100 psi (6.8 bar)	100 psi (6.8 bar)	100 psi (6.8 bar)	100 psi (6.8 bar)	100 psi (6.8 bar)
	Shipping weight	3.3-3.9 lbs (1.5-1.8 kg)	3.0-4.5 lbs (1.4-2.0 kg)	8.5-12 lbs (3.9-5.4 kg)	17-22 lbs (7.7-10 kg)	82-112 lbs (37-51 kg)
	Height	7.90" (201 mm)	5.32" 135 mm)	11.70" (297.1 mm)	16.94" (430.1 mm)	28.75" (730 mm)
	Width	7.52" (191 mm)	4.09" (104 mm)	9.30" (236.3 mm)	13.52" (343.4 mm)	23.0" (584 mm)
	Depth	5.49" (139 mm)	PP: 5.72" (145 mm) PVDF: 5.67" (144 mm)	6.25" (158.8 mm)	9.13" (231.9 mm)	13.0" (330 mm)
	Base to Suction	0.79" (20 mm)	0.94" (24 mm)	2.03" (51.5 mm)	2.50" (63.5 mm)	3.5" (89 mm)
	Base to Discharge	7.90" (201 mm)	5.32" 135 mm)	10.06" (255.5 mm)	14.75" (374.7 mm)	28.75" (730 mm)

PP-Polypropylene, PVDF-Polyvinylidene Fluoride, COND PP-Conductive Polypropylene See service manual for complete specifications

\*Standard Configuration



#### 2" (50.8 MM)

U2	

PP / PVDF

 $\mathsf{PP}$ 

192 gpm (727 lpm)

Suction: Side\* or Center Discharge: Side\* or Center · Vert or Horz 2" ANSI 150# / DIN #50 Flange

20' (6.1 m)

Inlet: 1/2" NPT Exhaust: 3/4" NPT

0.25" (6.4 mm)

0.50 gal (1.90 L)

100 psi (6.8 bar)

67-93 lbs (30-42 kg)

30.25" (768 mm)

19.88" (505 mm)

12.56" (319 mm)

3.00" (76 mm)

27.25" (692 mm)



#### 3" (76.2 MM)

E3

PP / PVDF

PP

280 gpm (1060 lpm)

Suction: Center Horz\* or Vert Discharge: Center Vert\* or Horz

3" ANSI 150# / DIN #80 Flange

20' (6.1 m)

Inlet: 3/4" NPT Exhaust: 1" NPT

0.71" (18.0 mm)

1.0 gal (3.8 L)

100 psi (6.8 bar)

208-271 lbs (94-123 kg)

40.66" (1033 mm)

32.31" (821 mm)

16.19" (411 mm)

4.85" (123 mm)

40.66" (1033 mm)





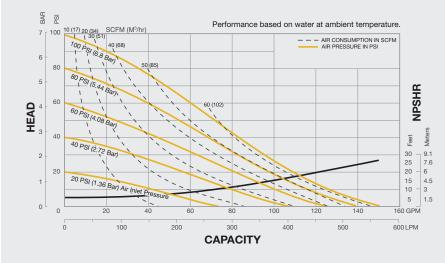
### **SPECIALTY**

		SEE MORE ON PAGE 17.				
		SOLIDS HANDLING FLAP VALVE	2:1 HIGH- PRESSURE FULL FLOW	SLUDGEMASTER PNEUMATIC SUBMERSIBLE	PORTAPUMP 12-VOLT SUBMERSIBLE	SCREENED INLET
SPECIFICATIONS	Product Description	The 2" (50.8mm) plastic flap valve pump was designed to offer superior solids handling up to 1.8" (46mm) in a chemically resistant light weight design. These attributes make it perfect for chemical sump, utility and mine dewatering applications.	When higher discharge pressures above 125 psi (8.6 bar) are required, turn to our high-pressure diaphragm pumps. They offer one of the widest ranges of sizes, flow rates, and materials options of any AODD pump in its category. Its full- flow design delivers smoother and greater flow rates to create pressures of up to 232 PSI (16 Bar).	When your situation calls for fast dewatering, the SludgeMaster delivers. It provides high flow rates safely. It handle solids with ease and can be coupled with our pneumatic liquid level control to create a simple, hassle free, all pneumatic sump pumping system.	The centrifugal PortaPump is rugged, submersible and conveniently operates using any common 12-volt vehicle battery. Fits through openings as small as 10" (25 cm). Ideal for pumping out ditches and manholes.	Screened inlet ball valve units are a perfect solution for localized dewatering. The screen base provides stability and keeps large solids out of the pump for smooth reliable operation.
	Primary Applications	* Chemical Sump transfer * Chemical transfer (containing solids) * Mine dewatering	* Filter press feed * Sludge transfer * High-pressure discharge	* Sump / Pit dewatering * Mine dewater	* Localized dewatering - Man holes, ditches, graves sites, golf course bunkers	<ul> <li>* Mine dewatering</li> <li>* Construction site dewatering</li> <li>* Utility trench dewatering</li> </ul>
	Industries	* Chemical * General Industrial * Mining	* Chemical * Industrial Waste Treatment * Mining	* Mining * Steel Mills * Construction * Marine	* Construction * Plumbing * Municipalizes and Utilities * Landscaping and Irrigation * Golf Course	* Mining * Construction * Well Drilling * Marine * Municipal Utility
	Key Features	* Top Suction / Bottom discharge * Easy access flap checks * Light weight and portable * Flanged or threaded fluid connections	* Weighted valve balls available * Stainless steel air valve standard * PTFE seals Available * Full flow design	* Light weight 59 lbs. (26.67 kg) / Portable * Small size * High Flow rates	* Waterproof stitch * Rock screen * Lightweight 33 lbs. (15 kg) * 30' Cable with clips or two-pole connectors (-AAP).	* Built in screen base * Clamped construction * Reliably air valve system * Screen inlet or female treaded suction port * Dry run design
	Wetted Materials Options	Polypropylene	Aluminum or Stainless Steel	Aluminum w/ Cast Iron Impeller	Aluminum w/ Cast Iron Impeller	Aluminum
	Performance	Max. Flow: 150 GPM (568 lpm)	Max. Flow: 1" (25mm) 33 GPM (125 lpm) / 2" (51mm) 90 GPM (341 lpm)	Max. Flow: 300 GPM (1,135.6 lpm)	Max. Flow: 43 GPM (162.8 lpm)	Max. Flow: 2" (51 mm) 185 GPM (700 lpm) / 3" (76 mm) 234 GPM (886 lpm)
	Available Sizes	2" (51.8mm)	1" (25.4 mm) and 2" (50.8 mm)	3" (76.2 mm)	1 1/2" (38 mm)	2" ( 51.8 mm) and 3" (76.2 mm)
	Maximum Fluid Discharge Pressure	100 PSI (7. Bar)	232 PSI (16 Bar)	28 PSI (2 Bar)	25' (7.6 m)	125 PSI (8.6 Bar)
	Certifications	CE, ABS	CE, ATEX	CE, ATEX	CE	CE, ATEX, ABS

### THE CHEMICALLY RESILIENT **SOLIDS HANDLING SOLUTION**

The 2" (51 mm) plastic Flap Valve Pump was designed to offer superior solids handling in a chemically resistant light weight portable design. These attributes make it perfect for chemical sump, utility and mine de-watering applications.

### PERFORMANCE



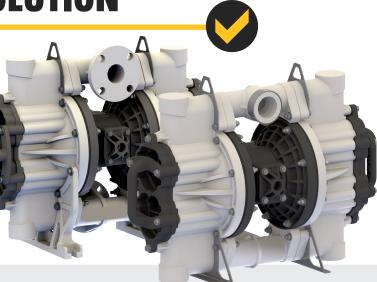
#### EASE OF MAINTENANCE Quick Access to Serviceable Components

#### **REMOVE CLEAN-OUT CAP**

By simply removing six bolts securing the clean-out cap in place, it allows access to clear simple clogs without disassembling the entire pump.

#### MODULAR CHECK VALVE ACCESS

With the clean-out cap removed, the flap valves can be inspected and / or replaced as needed; four bolts hold the modular flap valves in place for quick maintenance and repair.



#### SOLIDS HANDLING RANGE Up to 1.8" (46mm)

**LIGHTWEIGHT & PORTABLE** At 53 lbs (24 kg) it is safely and easily transported

**TOP SUCTION / BOTTOM DISCHARGE** Gravity assist is ideal for pumping liquids with settling solids

#### **BEST-IN-CLASS FLOW RATE**

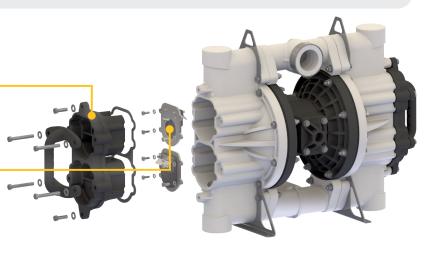
150 GPM (568 lpm)

### ALL BOLTED CONSTRUCTION

Rugged, leak free design

#### **SUPERIOR DRY PRIME**

Up to 19' (5.8m) of water





## **AODD PUMP PARTS AND ACCESSORIES TO KEEP YOU PUMPING**

Versamatic offers genuine parts and accessories to enhance the performance and improve the longevity of our air-operated double-diaphragm (AODD) pumps. From convenient service kits to accessories that boost performance, our genuine parts are tailor-made for your Versamatic AODD pump.



Visit us online to learn more about our line of accessories. Be sure to check out the video library for quick tips, installation, and repair videos.

Pilot Valve

Lubricant

Assembly

### **DIAPHRAGM PUMP SERVICE KITS – KEEP YOUR PUMP RUNNING**

### COMPLETE PUMP REPAIR KITS - KEEP YOUR PUMP RUNNING LONGER

Our repair kits are comprised of only the necessary components to ensure a complete pump repair. These kits reduce costly downtime, lost production and multiple maintenance associated with partial repairs.

#### **REPAIR KITS**

Wet End Repair Kit:

- Diaphragms
- Balls
- Seats

#### Air End Repair Kit:

- Seals
- O-rings
- Gaskets
- Assembly Retaining Rings Lubricant



### MATERIALS

	<b>OPERATING TEMP</b>			<b>OPERATING TEMP</b>	
MATERIAL PROFILE	MAX.	MIN.	MATERIAL PROFILE	MAX.	MIN.
<b>Conductive Acetal:</b> Tough, impact resistant, ductile. Good abrasion resistance and low friction surface. Generally inert, good chemical resistance except for strong acids and oxidizing agents.	190°F 88°C	-20°F -29°C			0°F -18°C
EPDM: Very good water and chemical resistance. Has poor resistance to oils and solvents, but is fair in ketones and alcohols.	280°F 138°C				-40°F -40°C
<b>FKM</b> : (Fluoroelastomers) Shows good resistance to a wide range of oils and solvents; especially all aliphatic, aromatic and halogenated hydrocarbons, acids, animal	350°F 177°C	-40°F -40°C	<b>UHMW PE:</b> A thermoplastic that is highly resistant to a broad range of chemicals. Exhibits outstanding abrasion and impact resistance, along with environmental stress-cracking resistance.	180°F 82°C	-35°F -37°C
and vegetable oils. Hot water or hot aqueous solutions (over 70°F) will attack FKM.			<b>Urethane:</b> Shows good resistance to abrasives. Has poor resistance to most solvents and oils.	150°F 66°C	32°F 0°C
<b>Hytrel®:</b> Good on acids, bases, amines and glycols at room temperatures only.	220°F 104°C	-20°F -29°C	Virgin PTFE: (PFA/TFE) Chemically inert, virtually impervious. Very few chemicals are known to chemically	220°F 104°C	-35°F -37°C
<b>Neoprene:</b> All purpose. Resistance to vegetable oils. Generally not affected by moderate chemicals, fats, greases and many oils and solvents. Generally attacked by strong oxidizing acids, ketones, esters	200°F 93°C	-10°F -23°C	react with PTFE; molten alkali metals, turbulent liquid or gaseous fluorine and a few fluoro-chemicals such as chlorine trifluoride or oxygen difluoride which readily liberate free fluorine at elevated temp.		
and nitro hydrocarbons and chlorinated aromatic hydrocarbons.			Maximum and Minimum Temperatures are the limits for which these materials can be operated. Temperatures coupled with pressure affect the longevity of diaphrag		
Nitrile: General purpose, oil-resistant. Shows good sol- vent, oil, water and hydraulic fluid resistance. Should not	190°F 88°C	-10°F -23°C	pump components. Maximum life should not be expected at the temperature ranges.	the extreme	limits of
be used with highly polar solvents like acetone and MEK, ozone, chlorinated hydrocarbons and nitro hydrocarbons.			METALS		
<b>Polypropylene:</b> A thermoplastic polymer. Moderate tensile and flex strength. Resists strong acids and alkali. Attacked by chlorine, fuming nitric acid and other strong oxidizing agents.	180°F 82°C	32°F 0°C	Stainless Steel: Equal to or exceeding ASTM specificat corrosion resistant iron chromium, iron chromium nickel castings for general applications. Commonly referred to in the pump industry.		sed alloy

## **HOW TO READ A PERFORMANCE CURVE**

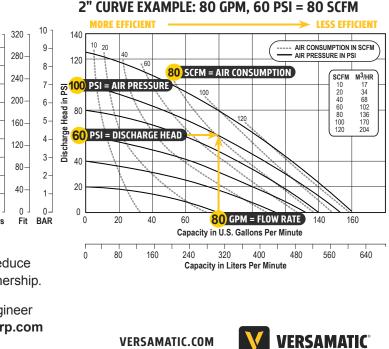
1. SELECT FLOW RATE (GPM) Example: 80 GPM	1
2. DETERMINE DISCHARGE HEAD (PSI)	90 —
Example: 60 PSI	80 -
	70 -
3. SEE INLET AIR PRESSURE (PSI)	60 -
Example: 100 PSI	50 -
4.SEE AIR CONSUMPTION (SCFM)	40 -
Example: 80 SCFM	30 -
	20 -
	10 –
	0 Meters

#### **SELECTION TIP: SIZE-UP**

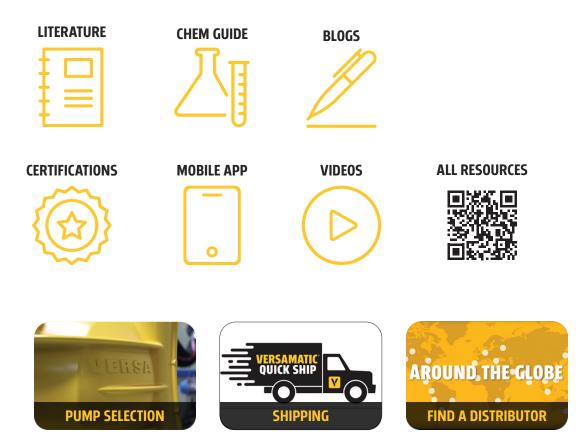
Size-up your pump to increase energy savings and reduce wear on pump to measurably reduce total cost of ownership.

Contact your distributor or Versamatic application engineer for more information: apptech.warrenrupp@idexcorp.com





### **RESOURCES AVAILABLE**





800 North Main Street Mansfield, OH 44902

419-526-7296

versamatic.com





Designed and assembled in the USA

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