

MINING APPLICATIONS

AIR OPERATED DOUBLE DIAPHRAGM (AODD) PUMP

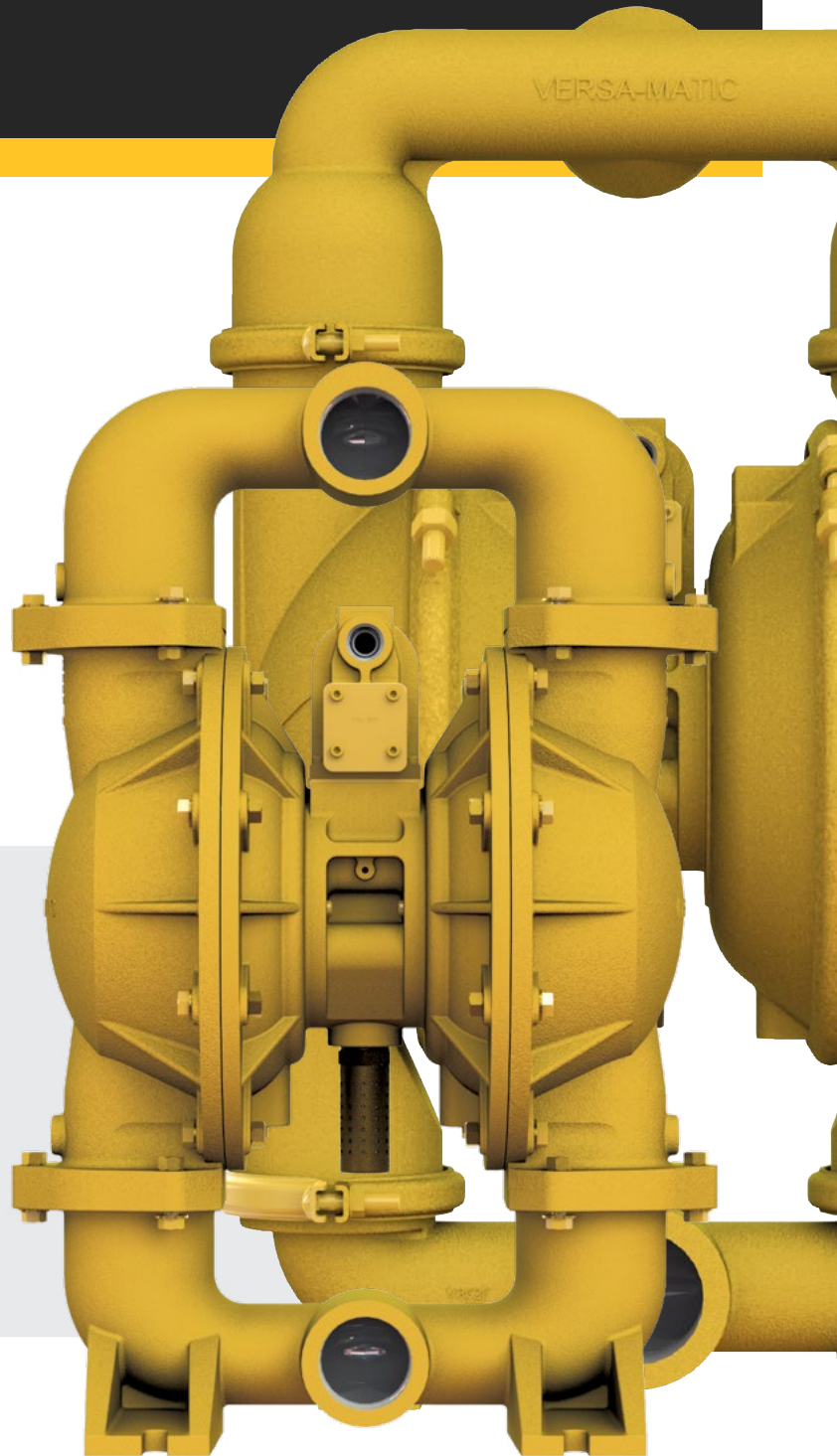
PRIMARY MINING APPLICATIONS

DEWATERING

ORE PROCESSING

VEHICLE MAINTENANCE

WASTEWATER TREATMENT



VERSAMATIC[®]
PUMPING MADE EASY

VERSAMATIC.COM

MINING APPLICATIONS - AODD PUMPING SOLUTIONS

Versamatic Air-Operated Double Diaphragm (AODD) Pumps are the right choice for safe and reliable fluid transfer. From acidic mine water to harsh leaching chemicals, Versamatic AODD pumps offer the broadest range of products to meet and exceed your application needs.



DEWATERING

When mining underground, water will travel to the lowest point. AODD pumps are used to move this water to a central basin where it is then pumped above ground for treatment. Common locations for dewatering include: drift dewatering, face dewatering under the drilling equipment, mud and muck pumping, and belt dewatering.



FUELS & LUBRICATIONS

In order to keep vehicles and heavy machinery running properly, the correct oil, fuels and lubricants need to be used. With our ATEX certification, Versamatic AODD pumps are the perfect solution for safe, reliable fluid transfer of hydraulic oil, motor oil, tire filling (brine) and diesel.



ORE PROCESSING, CHEMICAL LEACHING, AND WINNOWING

Once the ore-laden rock has been removed from the mine, it makes its way to the mill where it will be ground to a slurry. After grinding, depending on the material, a chemical will be introduced to extract the metal from the ore via leaching then electro-winning. Water from the holding ponds can also be used in the refining process when needed, reutilizing this resource before or after treatment.



WATER TREATMENT

Water is neutralized in holding ponds prior to being reintroduced into the water system. AODD pumps are used to add neutralizers and flocculants to the waste water. AODD pumps are also heavily used for filter and belt press feed applications.



BALL VALVE PUMPING TECHNOLOGY



PERFORMANCE:

Ball Valve Pumping Technology

E2 2" FEATURED, OTHER SIZES AVAILABLE ARE 1/2", 1", 1 1/2" and 3".

Flow Rates

Adjustable to273 gpm (1,033 lpm)

Port Sizes

Suction 1/4" - 3" (6.35 - 76.2mm)

Discharge 1/4" - 3" (6.35 - 76.2mm)

Air Inlet 3/8" - 1/2" NPT (9.5 - 12.7mm)

Air Exhaust 3/8" - 1" NPT (9.5 - 25.4mm)

Max Solid Size

(Diameter) up to 3/8" (9.5mm)

Shipping Weights See Service Manual

KEY APPLICATIONS:

- Dewatering
- Ore Processing
- Vehicle Maintenance: (Lubricants, Hydraulic Fluid, Fuel and Tire Filling)
- Water Treatment

ADVANTAGES:

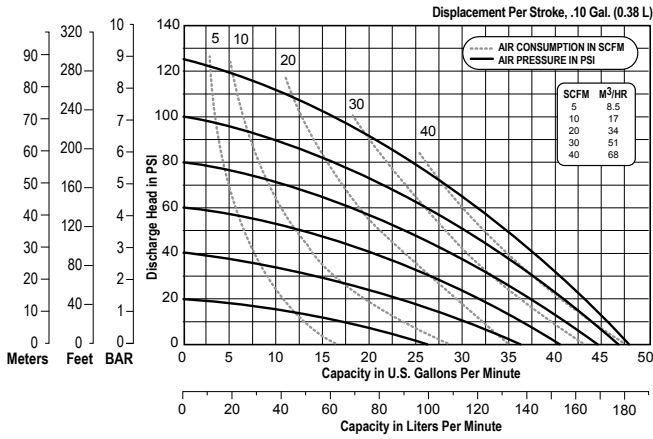
Ball valve pumps in both clamped and bolted configurations:

- Models available to handle everything from acidic mine water, slurries to harsh leaching chemicals, and beyond safely.
- Delivers flow rates up to 273 gpm (1,033 lpm)
- No-Stall Guarantee, including lube free operation and On/Off reliability
- Clamped design makes tearing down and rebuilding the pump a quick and easy process
- Bolted design provides safe, leak-free transfer of thin fluids while still maintaining ease of rebuild
- Light weight designs for safe portability



FEATURED PUMPS

E1 METAL BOLTED | 1" (25.4MM)

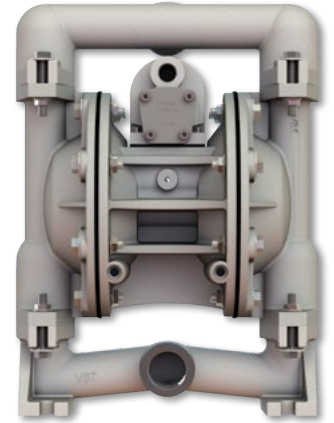


MAX FLOW:
49 gpm (185 lpm)

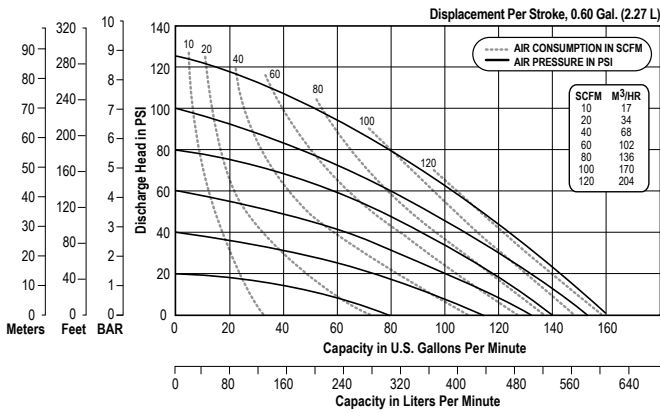
PORTING:
Center Horizontal

CENTER SECTION:
Aluminum

WETTED SECTION:
Aluminum
Stainless Steel



E2 METAL BOLTED • ALUMINUM | 2" (50.8MM)



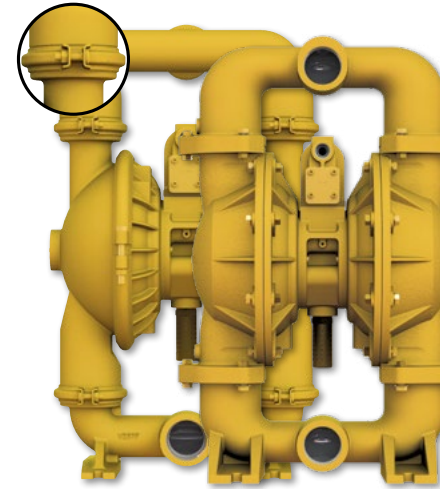
MAX FLOW:
163 gpm (617 lpm)

PORTING:
Center Horizontal

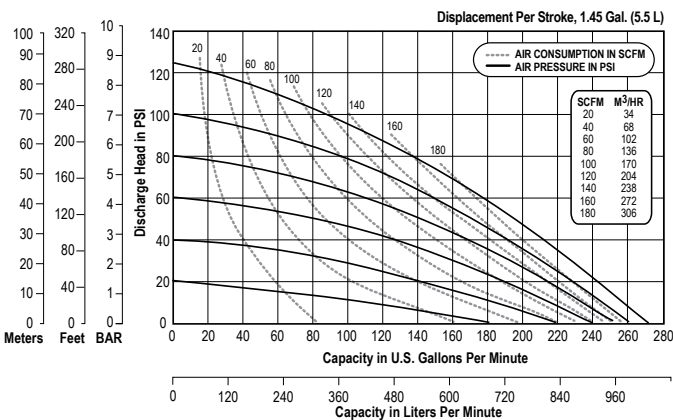
CENTER SECTION:
Aluminum

WETTED SECTION:
Aluminum
Cast Iron (Clamped)

OPTIONS:
Clamped



E3 METAL BOLTED | 3" (76.2MM)



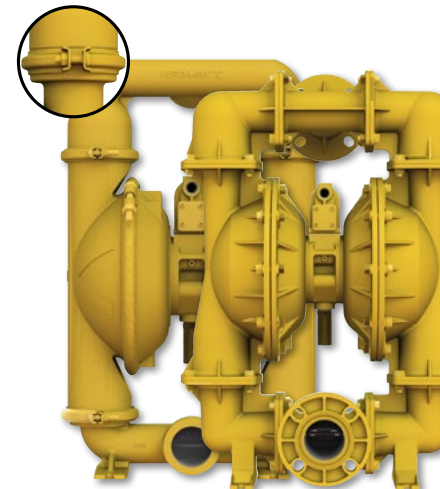
MAX FLOW:
273 gpm (1,033 lpm)

PORTING:
Center Horizontal &
Center Vertical

CENTER SECTION:
Aluminum
Stainless Steel

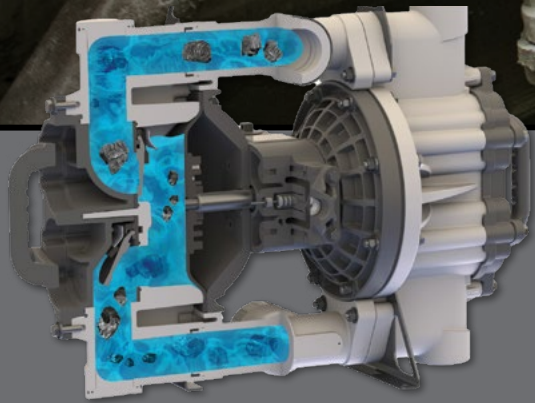
WETTED SECTION:
Aluminum
Stainless Steel
Cast Iron (Clamped)

OPTIONS:
Clamped



FOR SPECIFICATIONS AND OPTIONS ON THE COMPLETE PRODUCT RANGE, VISIT VERSAMATIC.COM

FLAP VALVE PUMPING TECHNOLOGY



PERFORMANCE:

Flap Valve Pumping Technology

Flow Rates

Adjustable to170 gpm (644 lpm)

Port Sizes

Suction2" (50.8mm)

Discharge2" (50.8mm)

Air Inlet3/4" NPT (19.5 mm)

Air Exhaust1" NPT (25.4mm)

Max Solid Size

(Diameter) up to 1 1/8" (28.6mm)

Shipping Weights 58 lbs (27 kg)

KEY APPLICATIONS:

- Dewatering (Solids and Slurry handling / Acidic water)
- Pit / Sump transfer

ADVANTAGES:

Flap Check Valve:

- Hinge pads exert positive pressure on the flaps allowing the pump to operate in virtually any position; this helps deliver superior suction lift and flow rates up to 170 gpm (644 lpm)

Superior Solids Handling:

- The flap valve design allows for greater solids handling up to 1 1/8" (28.6mm) due to the open internal pump tolerances and its top suction bottom discharge gravity assistance flow though design

Top Suction / Bottom Discharge:

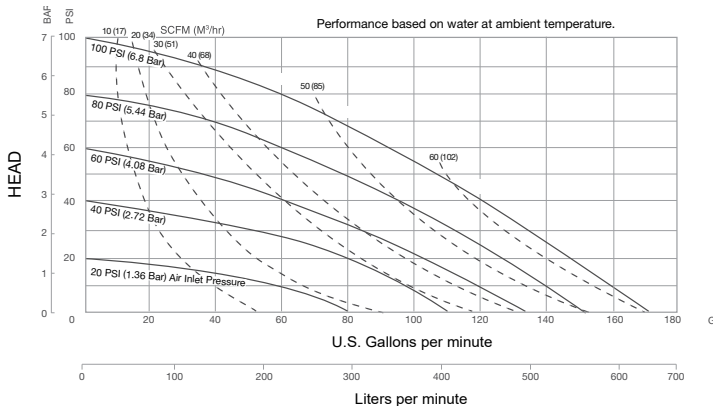
- The bottom discharge, top suction design is optimum for handling settling solids and slurry
- Working with gravity, solids are quickly evacuated helping to reduce potential diaphragm failures



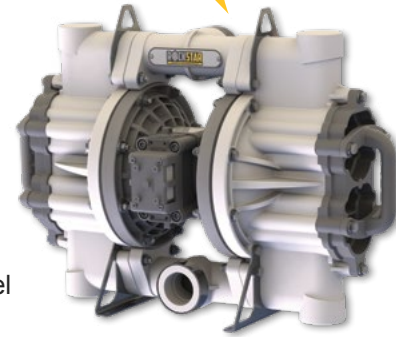
FEATURED PUMPS

VMB20F PLASTIC FLAP • FLAP | 2" (50.8M)

**ONLY 58 LBS.
(27 KG)**



- MAX FLOW:** 170 gpm (644 lpm)
 - PORTING:** Center Horizontal
 - CENTER SECTION:** Polyethylene
 - WETTED SECTION:** Polyethylene (Stainless Steel Flap Valves)
- CE**



FOR SPECIFICATIONS AND OPTIONS ON THE COMPLETE PRODUCT RANGE, VISIT VERSAMATIC.COM

EASE OF MAINTENANCE

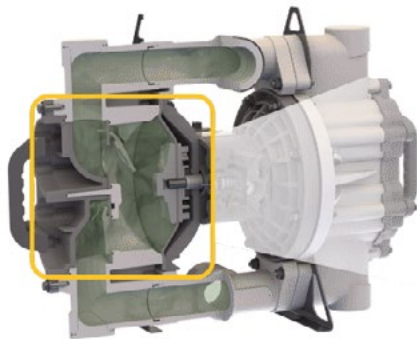
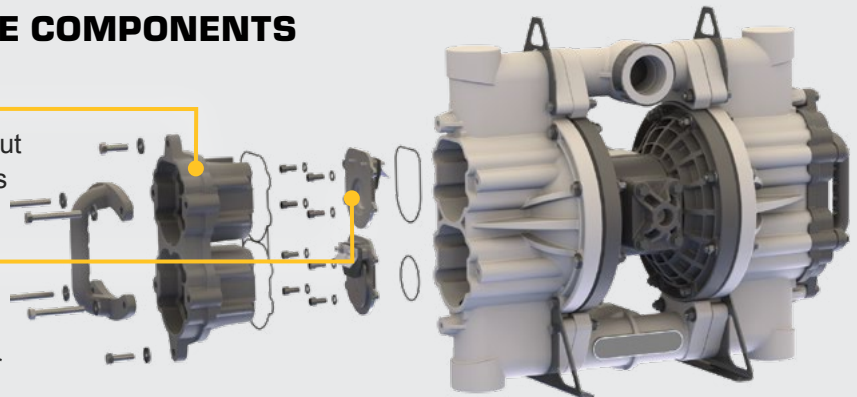
QUICK ACCESS TO SERVICEABLE COMPONENTS

Remove Clean-Out Cap

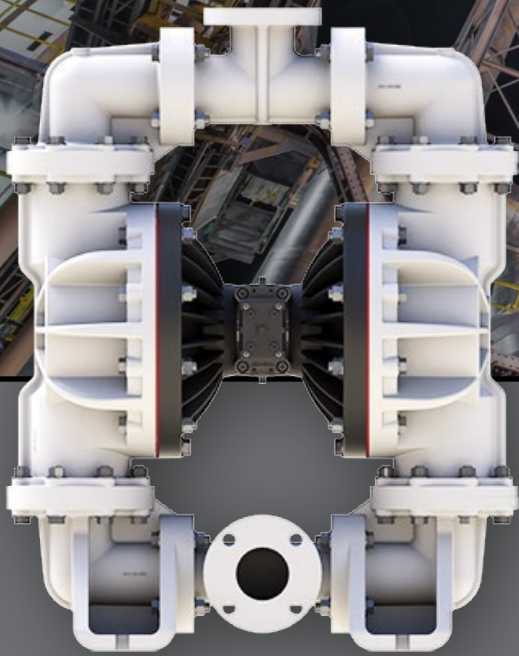
By simply removing six bolts securing the clean-out cap in place, it allows access to clear simple clogs without disassembling the entire pump

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



CHEMICAL PUMPING TECHNOLOGY



PERFORMANCE:

Chemical Pumping Technology

E3 3" FEATURED, OTHER SIZES AVAILABLE ARE 1/4", 1/2", 1", 1 1/2" and 2".

Flow Rates

Adjustable to 280 gpm (1060 lpm)

Port Sizes

Suction 1/4" - 3" (6.35 - 76.2mm)

Discharge 1/4" - 3" (6.35 - 76.2mm)

Air Inlet 3/8" - 3/4" (9.5 - 19.05mm)

Air Exhaust 3/8" - 1" NPT (9.5 - 25.4mm)

Max Solid Size

(Diameter) up to .71" (18mm)

Shipping Weights See Service Manuals

KEY APPLICATIONS:

- Chemical Transfer
- Tanker Car Unloading
- Chemical Leaching / Wining
- Filter Press Feed

ADVANTAGES:

- High chemical resistance
- Solids handling to 0.71" (18 mm)
- Wide range of sizes
- Robust, lightweight construction
- Non-freezing, Non-stalling On / Off reliability

FEATURES:

- Exclusive Patented ADS
- Chemical resistant all plastic designs
- Leading solids handling / Flow rates
- Wetted Materials
 - Polypropylene
 - PVDF

HIGH PRESSURE PUMPING TECHNOLOGY



KEY APPLICATIONS:

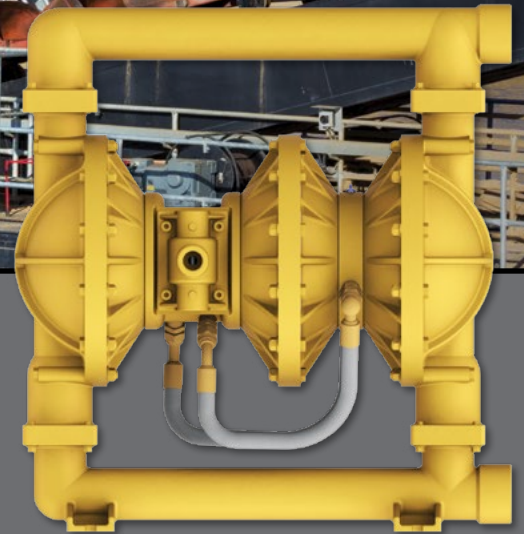
- Filter Press Feed
- Higher Viscosity Fluids
- Long Piping Runs

ADVANTAGES:

- **2:1 pump with discharge pressure ability greater than 232 psi (16.2 bar)**
- Excellent flow rates
- Ideal for Long Piping Runs and viscous product

FEATURES:

- Available in both Aluminum and Stainless Steel Designs
- Heavy duty construction - stainless steel air valve standard
- Non-freezing, Non-stalling
- On / Off reliability
- PTFE fitted units available



PERFORMANCE:

High Pressure Pumping Technology

E2 2" FEATURED, OTHER SIZE AVAILABLE IS 1".

Flow Rates

Adjustable to 92 gpm (348 lpm)

Port Sizes

Suction 2" NPT/BSPT

Discharge 2" NPT/BSPT

Air Inlet 3/4" NPT

Air Exhaust 3/4" NPT

Max Solid Size

(Diameter) up to 1/4" (6.4mm)

Shipping Weights

..... Aluminum 113.5 (51.5 kg)

..... Stainless Steel 163.3 (75 kg)

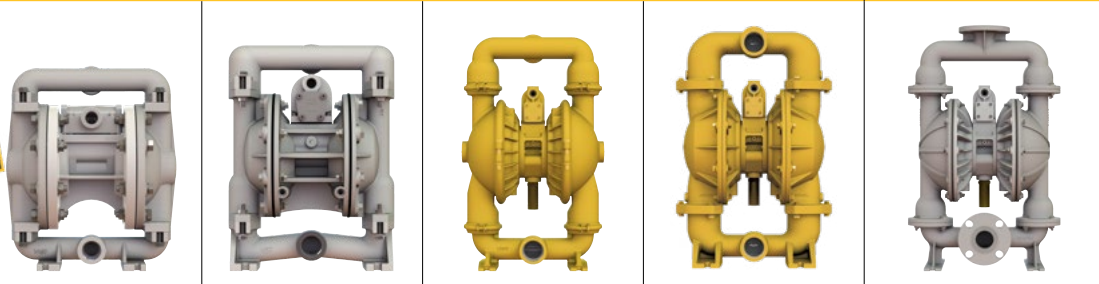
FOR SPECIFICATIONS AND OPTIONS ON THE COMPLETE PRODUCT RANGE, VISIT VERSAMATIC.COM

PUMP SELECTION GUIDE - MINING APPLICATIONS

Versamatic has the right pump for you and your mine. Offering variable flow options without damage, ranging from 0 to 273 GPM in sizes from 1/4" to 3", we're sure you can find a pump that will satisfy your needs.


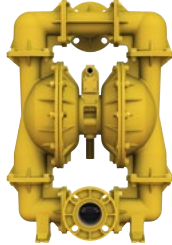
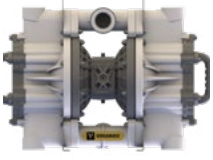

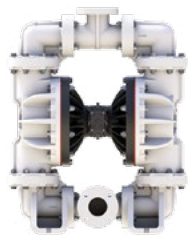



AODD BALL VALVE



PUMP MODEL	E5 BOLTED	E1 BOLTED	E2 CLAMPED	E2 BOLTED	E2 BOLTED
PORT SIZE	1/2"	1"	2"	2"	2"
WETTED MATERIAL	AL / SS	AL / SS	AL / CI / SS	AL	CI / SS
AIR SIDE MATERIAL	PP	AL / PP	AL / SS	AL	AL / SS / Coated AL*
PORTING CONFIGURATION	Horizontal	Horizontal	Horizontal / Center	Horizontal / Center	Vertical / Horizontal / Center
MAX FLOW	12 gpm (45.4 lpm)	49 gpm (185 lpm)	185 gpm (700 lpm)	163 gpm (617 lpm)	160 gpm (606 lpm)
DISCHARGE PRESSURE	125 psi (8.6 bar)	50 psi (3.4 bar)	125 psi (8.6 bar)	125 psi (8.6 bar)	125 psi (8.6 bar)
SOLIDS HANDLING	.0625" (1.6mm)	.125" (3.2mm)	.25" (6.4mm)	.43" (10.9mm)	.25" (6.4mm)
MINE DEWATERING	X	X	A	A	C
EMERGENCY RESPONSE	C	C	A	A	C
TRENCH DEWATERING	X	X	A	A	C
FILTER PRESS FEED	X	X	C	B	B
FUEL AND LUBRICATION	A	A	C	B	A
CHEMICAL TRANSFER	A	A	C	C	A

Notes: *If a Polypropylene air section is required, order a U2 Ultra-Matic Series product (U2PP).

				AODD CHEMICAL		
		AODD FLAP VALVE		AODD BALL VALVE (PLASTIC)	CENTRIFUGAL SUBMERSIBLE	
						
E3 CLAMPED	E3 BOLTED	VMB20 ROCKSTAR	E2 BOLTED	E3 BOLTED	VSM3 SLUDGEMASTER	
3"	3"	2"	2"	3"	3"	
AL / CI / SS	AL / SS	PP	PP / K	PP / K	AL	
AL / SS	AL / SS	PP	AI / SS / PP*	AL	AL	
Horizontal / Center	Horizontal / Vertical (AL) / Center	Vertical / Horizontal / Center	End / Horizontal / Center / Vertical	Vertical / Horizontal / Center	Vertical	
234 gpm (886 lpm)	273 gpm (1,033 lpm)	170 gpm (644 lpm)	177 gpm (670 lpm)	280 gpm (1,060 lpm)	300 gpm (1,136 lpm)	
125 psi (8.6 bar)	125 psi (8.6 bar)	100 psi (6.9 bar)	100 psi (6.9 bar)	100 psi (6.9 bar)	100 psi (6.9 bar)	
.375" (9.5mm)	.375" (9.5mm)	1.125" (46mm)	.25" (6.4mm)	.71" (18mm)	1.5" (38mm)	
A	A	A	B	B	A	
A	A	A	A	C	A	
A	C	A	C	C	A	
B	A	B	A	A	X	
C	C	X	B	X	X	
C	A	C	A	A	X	

MATERIAL CODES: **AL** = ALUMINUM, **CI** = CAST IRON, **H** = ALLOY C, **SS** = STAINLESS STEEL, **PP** = POLYPROPYLENE, **K** = PVDF
A = FREQUENTLY USED **B** = OFTEN USED **C** = SOMETIMES USE **X** = NEVER USED

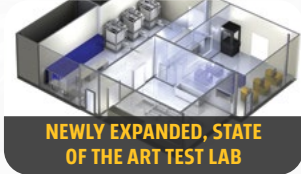
WHY VERSAMATIC?

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.



AWARD-WINNING MANUFACTURING FACILITY
80,000 square foot manufacturing plant. Award-winning facility, ensuring continuous improvement.



NEWLY EXPANDED, STATE OF THE ART TEST LAB
Increased test capacity, performance, and endurance. Improved overall efficiency.



PRODUCT ENDURANCE LAB
Ensures product performance and drives product enhancements.



APPLICATIONS ENGINEERING, CUSTOMER SERVICE & AFTER SALES SUPPORT
From product selection, to troubleshooting, our team of experts are ready to help.



QUALITY ASSURANCE
Enables consistent quality through scientific processes.



GENUINE KITS AND PARTS
Provide guaranteed quality and ease of maintenance.



DEDICATED TEAM TO SUPPORT YOU!
Providing product expertise, personalized service, and after sales support.



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