



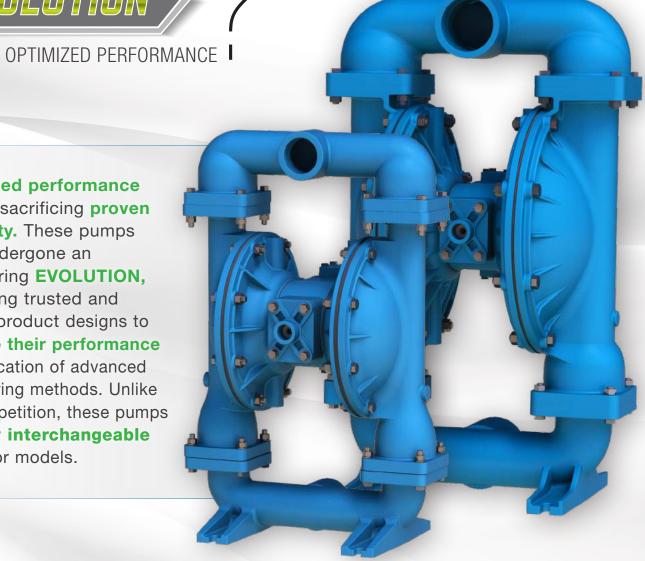


PRODUCT CATALOG



What is

Optimized performance without sacrificing proven reliability. These pumps have undergone an engineering **EVOLUTION**, leveraging trusted and proven product designs to improve their performance by application of advanced engineering methods. Unlike the competition, these pumps are fully interchangeable with prior models.



OUR SIGNATURE ENSURES YOUR SUCCESS

For fluids containing settling, suspended & floating solids.

SANDPIPER Signature Series AODD pumps are engineered to deliver industry leading durability and performance, even for your most severe applications and environments.

LEARN MORE AT: SANDPIPERPUMP.COM/SIGNATURE-SERIES

WHEREVER YOU SEE THIS BADGE:

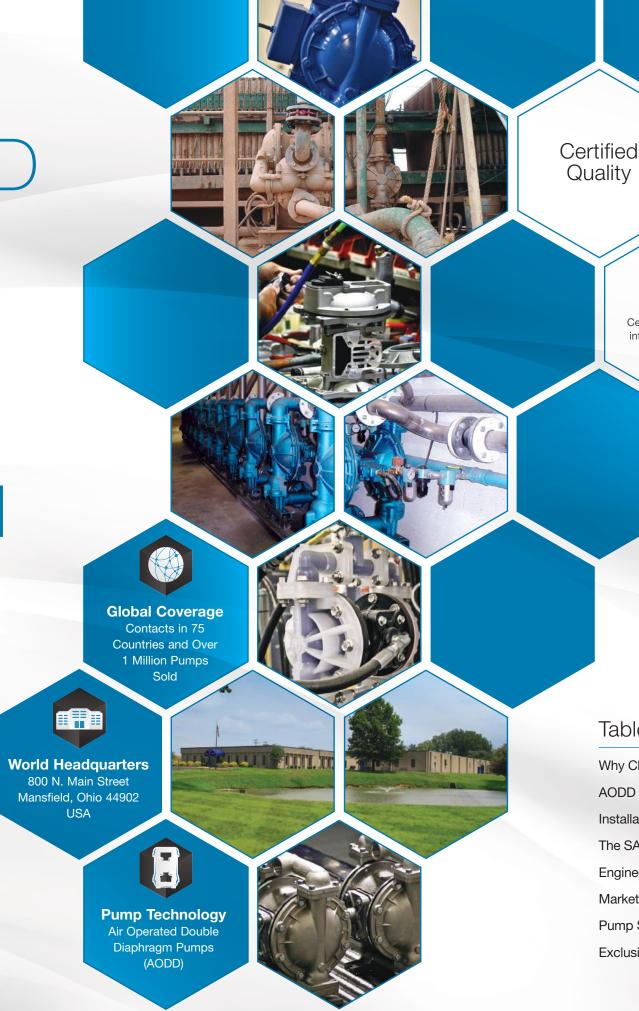
These pumps have gone through our Evolution performance improvement. Watch for more Engineering Evolutions to come in the near future!

LEARN MORE AT: SANDPIPERPUMP.COM/EVOLUTION

environment and pump.

ENGINEERED PUMPING SOLUTIONS WITH MORE WAYS THAN ONE

For over 50 years, SANDPIPER, a Warren Rupp, Inc. brand, has been a leading global Air Operated Double Diaphragm (AODD) pump company, featuring the broadest range of products to meet the needs of a wide variety of applications. Decades of innovation, combined with world class engineering expertise, allows the SANDPIPER team to create products that meet the demand of an ever-changing marketplace.





CE

Products are Declared Compliant to Directive 2006/42/EC - Machinery Safety



ATEX

Products are Either EC-Type or Type Examination Certified to Directive 94/9/ EC - Machinery for Use in Potentially Explosive Atmospheres

ERE

EurAsian Conformity

Certified to sell products into Eurasian Economic Union



CSA

G-Series Natural Gas Operated Pumps are CSA Certified to ANSI LC6:2008 and Canadian Technical Letter No. R-14



ISO 9001 Quality

Quality System Certified to Ensure Every Product is Made with Care and Quality Control



ABS Marine & Offshore

American Bureau of Shipping Type Approval of Metal SANDPIPER Pumps and Tranquilizer Surge Suppressors



FDA

FDA Accepted Materials of Construction



EC1935

Food Processing T-Series Model Plastic and Elastomer Food Contact Components Meet the Requirements of EU Regulation 1935/2004/EC



Underwriters Laboratories

U1F Model Pumps are UL Listed to UL79 Standard for Use in Fuel Transfer and Pumping Flammable Fluids

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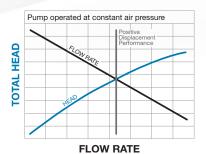


WHY CHOOSE AODD PUMPS

PERFORMING IN THE MOST CHALLENGING APPLICATIONS, AODD PUMPS DELIVER UNIQUE BENEFITS THAT ARE UNRIVALED BY OTHER PUMP TECHNOLOGIES

AODD pumps are air (or natural gas) operated displacement type pumps which uniquely differ from all other positive displacement pumps. As a result of air pressure acting on the entire surface of the diaphragm, the diaphragm is in a balanced condition while pumping. This measurably extends diaphragm life over that of mechanically operated diaphragm pumps. Because compressed air is limited, the maximum pressure developed by the pump is also safely limited. Thus, AODD pumps are appropriately selected for on-demand intermittent requirements.

Unique Performance



Although the AODD pump is a displacement type, it is actually a hybrid and defies strict classification. While its pressure versus capacity characteristics resemble those of a centrifugal pump, it is best defined as a sealless, non (or semi) positive displacement pump.

Features & Benefits



Dry-run without damaging the pump or system



Pumps 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



No electricity required, and can be fully grounded



Low initial purchase price compared to other technologies



Submersible, can be submerged completely without safety or performance issues



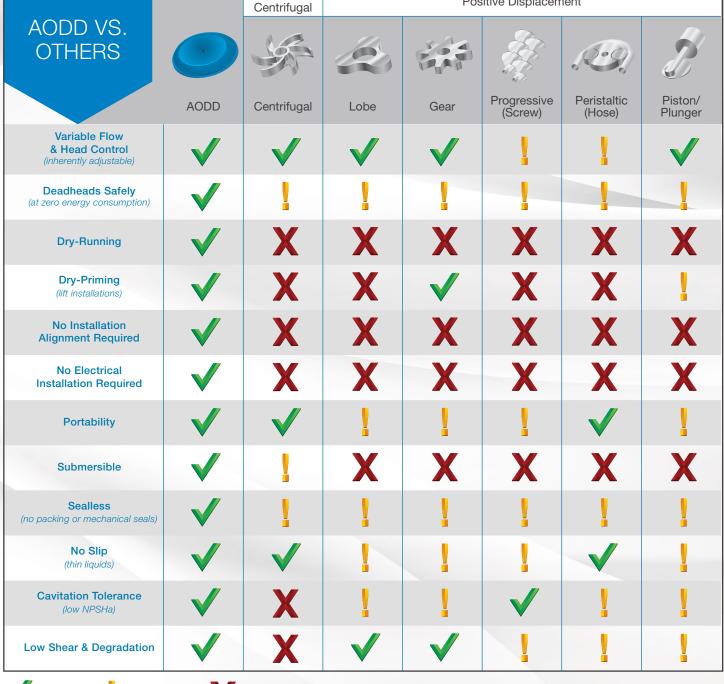
Sealless design, no expensive mechanical seals or packing are required



Variable flow and head pressures, without sophisticated controls



Optional bottom discharge porting depending on fluid characteristics









Kinetic



Positive Displacement

OPERATION & INSTALLATION

FIXED, MOUNTED OR PORTABLE SANDPIPER PUMPS ARE DESIGNED TO PERFORM IN THE MOST DIFFICULT CONDITIONS



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.

2

Discharge Cycle
Compressed air fills right inne

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

Installation Versatility

All installations are run-dry capable. Electricity and heat generation are not required for optimum performance.



Suction Lift

- Self-priming
- High vacuum capable
- Max lift of 32' (9.8m)





Submerged

- Capable of full submersion
- Screened inlet option

NOTE: Consult your distributor or owners manual for proper materials of construction and installation for your application.





THE SANDPIPER ADVANTAGE

WITH NEARLY 50 YEARS OF PUMPING EXPERTISE, WE PROVIDE APPLICATION DRIVEN PUMPING SOLUTIONS



All Bolted Construction

Superior reliability is defined by our all bolted pump construction that allows for instant part alignment, uniform torquing of seals, and high pressure capabilites



Various Power Sources

SANDPIPER pumps operate at optimum performance using compressed air, but we also have pumps available for running off of your local reserve of natural gas **LEARN MORE ON PAGE 46**



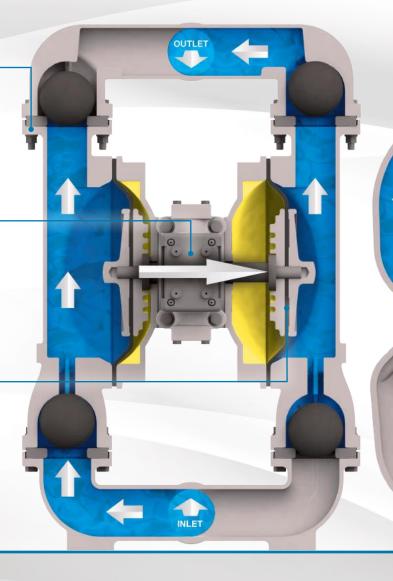
Tested Quality -

SANDPIPER pumps are 100% wet tested after final assembly to ensure proper functionality; Testing includes, but is not limited to, deadheading, priming, and sealing

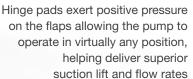


ESADS+Plus Air Valve

Externally Serviceable Air Distribution System



Superior Performance





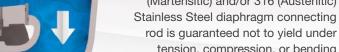
Flap check valves allow for maximum solids passage of up to 3" (75mm)



Guaranteed Connecting Rod

Our durable, corrosion resistant 416 (Martensitic) and/or 316 (Austenitic) tension, compression, or bending









ROBUST DIAPHRAGM CONNECTING ROD

Guaranteed not to yield under tension, compression, or bending.



5 YEAR LIMITED PRODUCT WARRANTY

5 Year Guarantee for defects in material or workmanship.



ESADS+PLUS AIR DISTRIBUTION SYSTEM

Allows for quick and easy access to the pilot and spool valves.



Bottom Discharge Porting

Eliminate the damage from settling solids in your pump, with the exclusive bottom discharge capabilities of our Heavy Duty Ball Valve and Heavy Duty Flap Valve pump lines.



Prevent broken diaphragm plates



Eliminate diaphragm rod damage

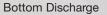


Ensure even diaphragm wear for longevity



See our connecting rod guarantee







Top Discharge





ENGINEERING CAPABILITIES

NO MATTER THE CIRCUMSTANCES, WE PROVIDE CUSTOM ENGINEERED SOLUTIONS TO MAXIMIZE THE PRODUCTIVITY OF ALL PROCESSES

Custom Engineered Systems

Some examples of our custom systems include:

- Skid systems
- · High pressure, filter press feed systems
- Mobile skid systems
- Custom environmental protection packaging
- Heat jacket systems
- · Nuclear industry waste handling and flushing systems

Quality Assurance

To complete the pump assembly process, the following tests are run to ensure a quality built product:

1. Dry Cycled Test

- · Checked for rhythmic cycling
- Checked for abnormal vibrations
- · Checked for motion abnormalities

2. Wet Cycled Test

- Checked for dry priming
- Checked for cycling characteristics
- Checked for abnormal noise levels

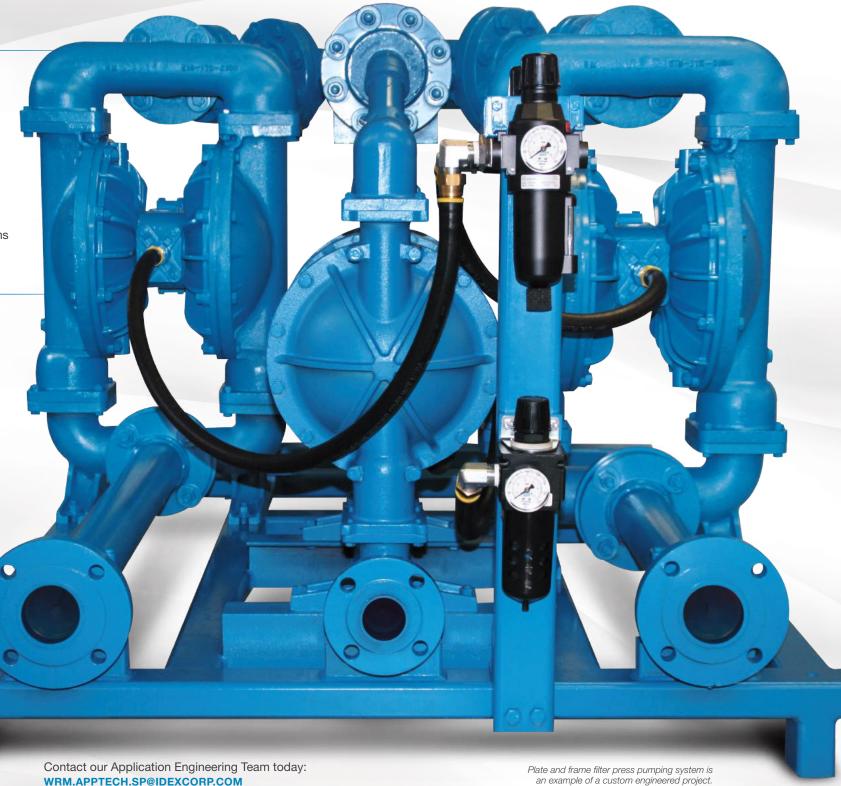
3. Vacuum Characteristics Test

4. Dead Head Characteristics Test

- · Checked for maximum fluid pressure
- Checked for leakage
- Checked for valving bypass

5. Visual Inspection

- Hardware checked
- · Mating surfaces checked
- · Paint quality checked
- · Packaging checked



Product Services



Performance Testing

Assembly cycle with hold pressure vacuum readings (standard), one-point head capacity, and dry lift



Pressure Testing

Hydro/pneumatic testing 90 psi (standard), hydro/pneumatic 1.5 times maximum operating pressure



Repair Services

Pump repair services for labor only



Material & Pump Certificates

Certificate of origin, conformance (pump) and compliance (material), material tests reports, non-certified or certified dimensional outlines (contact SANDPIPER Application Engineering to order)



Custom Coating

Epoxy, water based, two part (exterior only), customer specific, PTFE, Halar®, nickel plated midsection



Custom Products

Custom and engineered products, product dimensional outlines and systems



Custom Nameplates

Custom stainless steel nameplates (4 lines, 24 letter maximum)



Material Testing

PMI (Positive Material Identification), hardness testing, liquid penetrant testing, radiographic testing, magnetic particle testing, and others upon request



Additional Pump Testing

Impact test, seismic test, sound test, and others upon request

HALAR is a registered trademark of Solvay Solexis, Inc.





MARKETS & APPLICATIONS

SANDPIPER PUMPS ARE BUILT TO EXCEED THE DEMANDS OF YOUR SUMP WASTE TREATMENT AND OTHER APPLICATIONS LISTED BELOW



Automotive

Applications include oil transfer, fuel transfer, machine coolant, auto wash, auto lube and much more



Marine

Applications include oil transfer, fuel transfer, cargo cleanup, deck dewatering, cargo oil transfer, lubricants transfer and much more



Ceramics

Chemical

Coatings

Construction

Food Processing

Applications include batching, mixing, casting machines, day tank transfer, mold filling / cleaning, glaze spray, slip transfer / recirculation and much more

Applications include packaging, drum / tote,

processing, injection, mixing and much more

Applications include pigment milling,

Applications include portable utility, oil transfer,

fuel transfer, site dewatering, seal coating, road

Applications include food packaging, product

transfer, wine tank over, FDA compliance,

fermentation / pumpover and much more

low degradation requirements, wine

striping, municipal utility and much more

paint filtration, mixing tanks, filling

machines, tank transfer, low shear

requirements and much more



Applications include oil transfer, fuel transfer, water evacuation, mine face dewatering, drift dewatering and much more



Pharma / Personal Care

Applications include day tank transfer, batching, chemical feed, FDA compliant, personal hygienic / cosmetics and much more



Pulp & Paper

Applications include bulk transfer, day tank transfer, batching, bleaching, converter / packaging, adhesives / ink and much more



Oil & Gas

Applications include natural gas fields, service rigs, offshore platform requirements, settling pond transfer, diesel fuel transfer, spill clean-up, salt water transfer / disposal, flare knockout and much more



Applications include municipal portable utility, neutralize wastewater, waste activated sludge, return activated sludge, thickened sludge, belt



Wastewater

press feed and much more





SCAN FOR A COMPLETE LIST OF MARKETS & APPLICATIONS

SANDPIPERPUMP.COM/MARKETS

PUMP SELECTION

A FUNDAMENTAL REVIEW OF FLUID CHARACTERISTICS, INTENDED INSTALLATION & DUTY REQUIREMENTS ARE RECOMMENDED FOR "BEST FIT" DESIGN SELECTIONS

Pump Characteristics

Whether measuring mean time between failures, repairs, changes or maintenance, this design selection best practice will ensure the longest pump life.









	SIGNATURE CON	NFIGURATIONS	Heavy Duty Flap Valve	Heavy Duty Ball Valve	Containment Duty Ball Valve	Standard Duty Ball Valve · Metallic	Standard Duty Ball Valve · Non-Metallic
	Suction / Disc	charge Port Sizes	1" through 4"	1" through 4"	1" through 3"	1/4" through 3"	1/4" through 3"
S	Max Flow F	Rate Per Minute	310 Gal. (1173 L)	300 Gal. (1136 L)	260 Gal. (988 L)	285 Gal. (1079 L)	280 Gal. (1060 L)
Specifications	Max Disc	charge Heads	289' (88m) of water @125psi	231' (70m) of water @100psi			
pecific	Max Displace	ement Per Stroke	1.62 Gal. (6.15 L)	1.8 Gal. (6.8 L)	1.25 Gal. (4.73 L)	0.94 Gal. (3.56 L)	0.9 Gal. (3.41 L)
S	Max I	Dry Prime	24' (7m)	20' (6m)	18' (5.5m)	20' (6m)	20' (6m)
	Max Sol	ids Handling	3" (75mm)	.88" (22mm)	.44" (10mm)	.38" (10mm)	.71" (18mm)
	٧	Vater	+	+	+	+	+
	Susper	nded Solids	+	+	✓	+	✓
	Non-Susp	pended Solids	+		X		X
stics	Line S	Size Solids	+	X	X	X	X
Fluid Characteristics	Sludg	ge / Slurry	+	+		✓	
Char	High Viscosity	/ (Flowable Fluids)	✓	+	✓	✓	✓
Fluid		High	+	+	ļ	✓	
	Erosion / Abrasive Fluids	Moderate	+	+	ļ	✓	!
		Low	+	+	✓	+	✓
	Co	rrosion	✓	✓	+	√	+
	Per	manent	+	+	✓	✓	✓
	Po	ortable	+	+	+	+	+
ation	Containme	ent / Prevention	<u> </u>	!	+	<u> </u>	1
Installation	Floode	ed Suction	✓	+	✓	✓	✓
	Suc	etion Lift	+	√	✓	✓	✓
	Sub	omerged	V	V	!	✓	ļ
£	Intermitten	t / On-Demand	+	+	+	+	+
Duty	Cor	ntinuous	V	+	✓	✓	✓

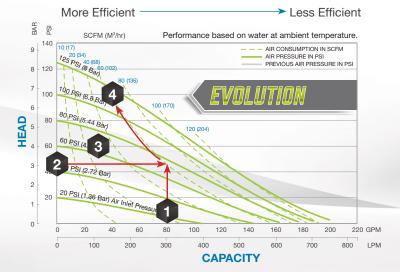
Pump Performance

- Select Flow Rate (GPM)
 Example: 80 GPM
- 2 Determine Discharge Head (PSI) Example: 45 PSI
- 3 See Inlet Air Pressure (PSI) Example: 78 PSI
- 4 See Air Consumption (SCFM) Example: 60 SCFM

Selection Tip: Size-Up

See the MTBF section below to learn the impact of sizing up your pump to increase energy savings and reduce wear on the pump to measurably reduce total cost of ownership

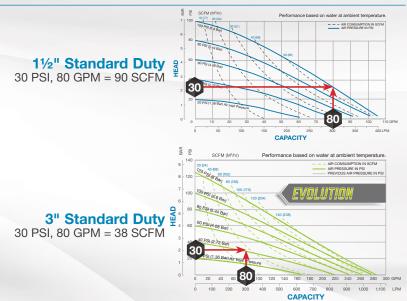




Sizing to Extend Mean Time Between Failures

Pumping requirements (flow & head) for most applications can be met by multiple sizes of pumps. Talk to SANDPIPER's application engineers to assist you with a size selection which best fits your total cost of ownership budget. An appropriately sized-up pump will lower the consolidated initial investment, repair, labor and energy costs. This **BEST PRACTICE** ensures desirable returns on the initial investment frequently measurable in weeks.

Experienced application engineers are available to help you determine the best fit pump size for your application. Call our factory or email: WRM.APPTECH.SP@IDEXCORP.COM



Additional Resources

Chemical Guide

Available through our mobile app (sandpiper.aoddpumponline.com) or online, this chemical compatibility guide will help you zero in on the pump that fits your process best. CHEMGUIDE.SANDPIPERPUMP.COM



Technical Resources

Find further information on sizing and selection of SANDPIPER products at SANDPIPERPUMP.COM/TECH_RESOURCES

EXCLUSIVE PUMP CONFIGURATIONS

WITH THE BROADEST RANGE OF CONFIGURATIONS, SANDPIPER HAS A SOLUTION FOR YOUR PUMPING PROBLEM, WITH MORE WAYS THAN ONE





Unique features for this configuration include:

- Pumps up to line size solids
- Bottom discharge porting, discharges settling solids
- · Superior suction lift of up to 24 ft.
- Easy access to serviceable components
- Thick manifold and chamber walls
- Diaphragm wear pads extend service life



HEAVY DUTY BALL VALVE

Unique features for this configuration include:

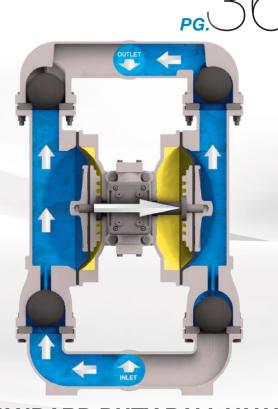
- Down ported option, discharges settling solids
- · Weighted check balls for handling viscous fluids
- Top ported option, discharges floating solids, suspended solids or entrained gases
- Side ported option for use in confined spaces
- Thick manifold and chamber walls
- · Diaphragm wear pads extend service life



CONTAINMENT DUTY BALL VALVE

Unique features for this configuration include:

- Containment chamber with leak detection
- Hydraulically balanced / coupled pumping and driver diaphragm assemblies
- Solids range +.25" (6mm) to .71" (18mm)
- Dry primes up to 18' of water
- Free standing support base



STANDARD DUTY BALL VALVE

Unique features for this configuration include:

- Solids range +.03" (1mm) to .71" (18mm)
- Dry primes up to 20' of water
- ESADS+ Air Distribution System



ALL SANDPIPER PUMPS feature the exclusive ESADS+Plus performance guaranteed, in-line serviceable, air valve system.





ALL SANDPIPER PUMPS come with a guaranteed diaphragm connecting rod.





HEAVY DUTY FLAP VALVE PUMPS



FOR FLUIDS CONTAINING UP TO LINE SIZE SOLIDS

HDF Pumps are recommended for abrasive slurries, suspended and non-suspended solids and line-size solids requirements. All SANDPIPER Heavy Duty Flap Valve Pumps are configured in bottom discharge porting arrangements and provide superior suction lift. HDF pumps are thick wall constructed of Sand Casted Aluminum, Cast Iron and Stainless Steel with elastomer, TPE (thermal plastic elastomers) and PTFE options in diaphragms and check valves. HDF pumps are enhanced with an extended wear package.



Durable Diaphragm Connecting Rods

Reliable and consistent diaphragm control



Lightweight & Portable

Weights range from 48 lbs (21 kg)



ESADS+Plus Air Valve

Externally Serviceable Air Distribution System



Bottom Discharge

For pumping out of tough areas



Flap Check Valves

Provide large solid abilities



All Bolted Construction

Durable and high pressure capable



Dynamic Manifold Connections

90° - 180° rotation options



Solids Range

+1" (25mm) to 3" (75mm)



Superior Dry Prime

Up to 24' (7m) of water



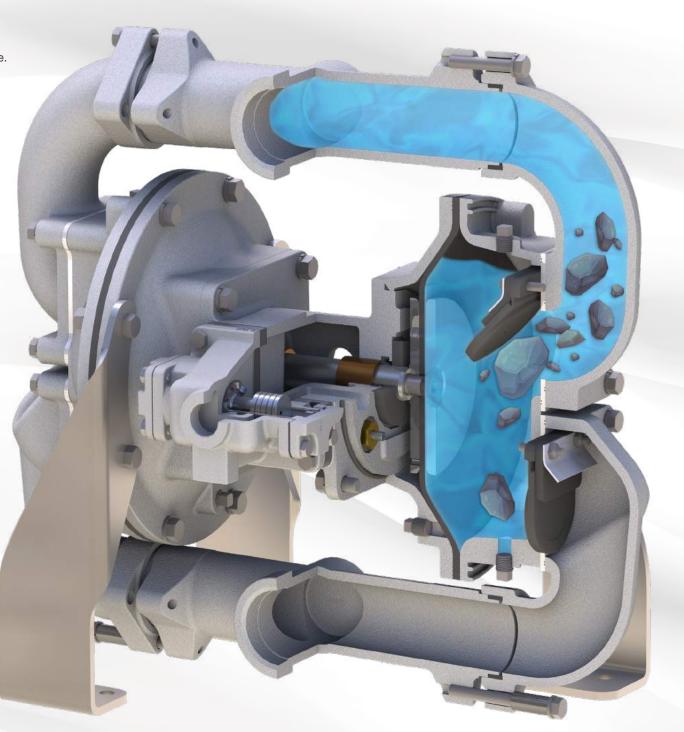
Certifications Available











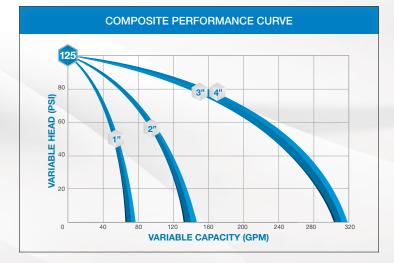














HEAVY DUTY FLAP VALVE PUMPS

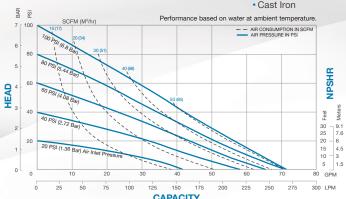
PERFORMANCE & SPECIFICATIONS



HDF1 Metallic Performance





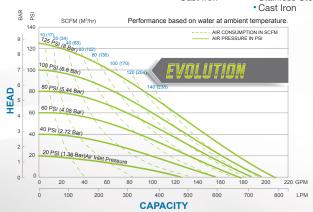




HDF2 Metallic Performance

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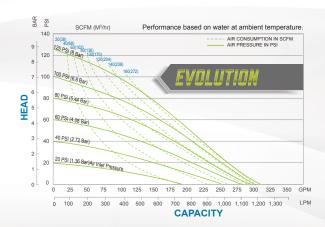
MAX FLOW PORTING AIR END **WET END** • 208 GPM (787 LPM) • NPT / BSP Aluminum Aluminum Cast Iron Stainless Steel

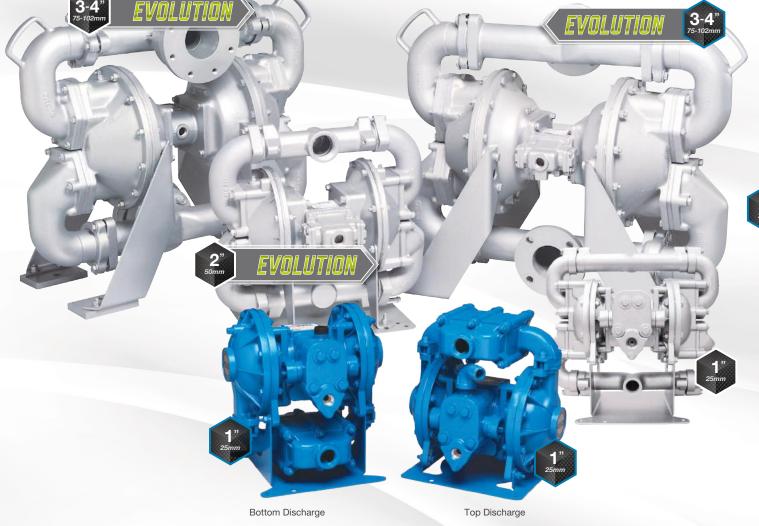




HDF3-A / 4-A Metallic Performance & CE

PORTING AIR END **WET END MAX FLOW** •310 GPM (1,173 LPM) • ANSI Flange • Aluminum





SPECIF	ICATIONS										
	А	В	С	D	E		Pipe	Displacement	Max	Max	Max
PUMP MODELS	Height	Width	Depth	Bottom of Base to Suction	Center Line of: Discharge	Connection Style	Size	Per Stroke	Flow Per Minute	Solids Handling	Discharge Pressure
	inches (mm)	inches (mm)	inches (mm)	inches (mm)	inches (mm)		inch (mm)	gal (liter)	gal (liter)	inch (mm)	psi (bar)
HDF1	15.69 (398)	16.75 (425)	10.81 (274)	14.06 (356)	2.56 (65)	1" NPT / BSP	1 (25)	.10 (.38)	70 (265)	1 (25)	125 (8.6)
HDF2	20.31 (516)	21.75 (552)	13.63 (346)	17.69 (449)	2.56 (65)	2" NPT only	2 (50)	.47 (1.78)	208 (787)	2 (50)	125 (8.6)
HDF3-A	29.5 (749)	36.56 (929)	16.25 (413)	25.75 (654)	4.25 (108)	3" 125# ANSI	3 (75)	1.60 (6.06)	310 (1173)	3 (75)	125 (8.6)
HDF3-M	30.25 (768)	32.31 (821)	16.19 (411)	26.5 (673)	5 (127)	3" 125# ANSI	3 (75)	1.15 (4.35)	303 (1147)	3 (75)	125 (8.6)
HDF4-A	31 (787)	36.56 (929)	21.25 (540)	26.5 (673)	5 (127)	4" 125# ANSI	4 (102)	1.60 (6.06)	310 (1173)	3 (75)	125 (8.6)
HDF4-M	31 (787)	32.31 (821)	16.19 (411)	26.5 (673)	5 (127)	4" 125# ANSI	4 (102)	1.15 (4.35)	303 (1147)	3 (75)	125 (8.6)
SA1	12.38 (314)	11.36 (288)	11.26 (286)	10.69 (271)	10.69 (271)	1" NPT / BSP	1 (25)	.09 (.34)	42 (159)	1 (25)	125 (8.6)

Dimensional Tolerance: ±1/8" (± 3mm) • See service manual for complete specifications.

ENGINEERED PUMPING SOLUTIONS WITH MORE WAYS THAN ONE





IAX FLOW	PORTING
303 GPM (1,147 LPM)	 ANSI Flange

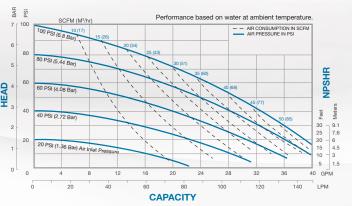
AIR END Cast Iron **WET END** Cast Iron

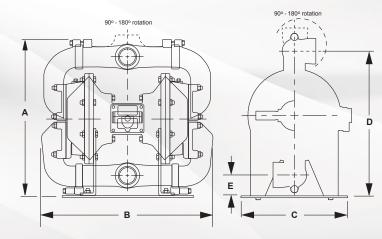
	BAR	IS 140	SCFM (M³/hr)	Performance based on water at ambient temperature.
	9		10(17) 20(34)	AIR CONSUMPTION IN SCFM AIR PRESSURE IN PSI
	8	120	125 PSI (6 Bar) 80(136) 100(170)	
	7	100	120(204) 100 BSI (6.8 Ba); 140(238)	EVOLUTION
9	6		80 PSI (5.44 Bar)	160(272)
HEAD	5 -		60 PSI (4,08 Bar)	
	3	40	40 PSI (2.72 Bar)	
	2	20	20 PSI (1 36 Park)	
	1	20	20 PSI (1:36 Bar/Air Inlet Pressure	
	0	0	0 25 50 75 100 12	5 150 175 200 225 250 275 300 325 350 GPM
			0 100 200 300 400 5	00 600 700 800 900 1,000 1,100 1,200 1,300 LPM
				CAPACITY





MAX FLOW PORTING AIR END WET END • 42 GPM (159 LPM) • NPT / BSP Aluminum Aluminum Cast Iron Stainless Steel



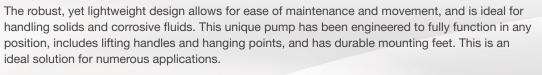






2" NON-METALLIC FLAP VALVE PUMP

YOUR MINING, GENERAL INDUSTRIAL AND CHEMICAL SOLUTION



Lightweight & Durable

it easily portable at 53 lbs (24 kg)

Reliability Guarantee

in operation

Rugged Design -

when pumping solids laden fluids

Optimum Solids Handling-

superior suction lift and flow rates

Purpose Built Base

Polypropylene mounting feet

Hinge pads exert positive pressure on

the flaps, allowing the pump to operate in virtually any position; they help deliver

A proven diaphragm design in conjunction with exclusive wear pads reduce plate abrasion, delivering extended life

The threaded version features stainless steel mounting feet and the flanged version features

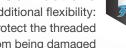


Addition of stainless steel hanging points located on the manifold allow for multiple mounting options





Optional flanged or threaded connection for additional flexibility: Stainless steel reinforcing rings help protect the threaded manifold connections from being damaged



Ergonomic Handle

Lifting handles come standard, allowing for easy pump transport; handles can be rotated 90 degrees for proper ergonomics, depending on desired use



- Unsurpassed Performance

Industry leading flow rates, suction lift, air efficiency and displacement per stroke



Versatile Design

This pump will function in any position, including uneven surfaces



Simple Maintenance With our signature ESADS+Plus (Externally Serviceable Air Distribution System) air valve design and externally serviceable flap valve modules, in-field service is quick and easy, saving you from unnecessary downtime



Visit SANDPIPERPUMP.COM/ESADSVIDEO

to see how easy the ESADS air valve makes maintaining the 2" Non-Metallic Flap Valve.



ENGINEERED PUMPING SOLUTIONS WITH MORE WAYS THAN ONE





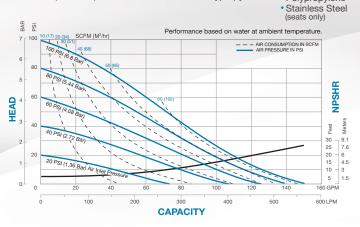
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PERFORMANCE & SPECIFICATIONS



HD20F Non-Metallic Performance

MAX FLOW PORTING **AIR END WET END** • 150 GPM (567 LPM) • NPT / BSPT Polypropylene Polypropylene



Ease of Valve Maintenance

To help increase productivity and reduce downtime, the 2" Non-Metallic Flap Valve Pump was engineered with ease of maintenance in mind.

QUICK ACCESS TO SERVICEABLE COMPONENTS

1. 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.

2. Modular Check Valve Access

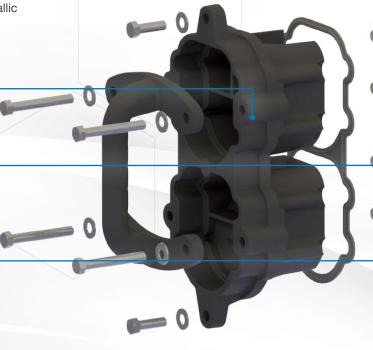
With the clean-out cap removed, the flap valves can be inspected and / or replaced as needed. Four bolts hold the modular flap valves in place for quick maintenance and repair.

3. ESADS+Plus-

Proven air distribution system allows for maintenance and / or repair of both pilot valve and air valve components without removing the pump from service.



Visit SANDPIPERPUMP.COM/ESADSVIDEO to see how easy the ESADS air valve makes maintaining the 2" Non-Metallic Flap Valve.





2" NPT / BSPT

2 (50)

.50 (1.9)

150 (567)

1.8 (46)

100 (7)

29.7 (754) Dimensional Tolerance: ±1/8" (± 3mm) • See service manual for complete specifications.

12.65 (321)

17.56 (446)

2 (50)



20.89 (531)

HD20F

HEAVY DUTY BALL VALVE PUMPS

FOR FLUIDS CONTAINING SETTLING, SUSPENDED & FLOATING SOLIDS

HDB Metallic Pumps are ideal for thin to highly viscous and small solids-laden fluids, while providing excellent suction lift capability and exclusive variable porting options (side, top, bottom and dual). HDB pumps are thick wall constructed of Sand Casted Aluminum, Cast Iron, Stainless Steel or Alloy C with elastomer, TPE (thermal plastic elastomers) and PTFE options in diaphragms and check valves. HDB pumps are enhanced with an extended wear package.



Bottom or Top Porting Positions Greater process connection flexibility



All Bolted Construction Durable and high pressure capable



Lightweight & Portable Weights as low as 31 lbs (14 kg)



Ball Check Valves

Provide powerful, high flow pumping



Diaphragm Connecting Rods Reliable and consistent diaphragm control



ESADS+Plus Air Valve

Externally Serviceable Air Distribution System



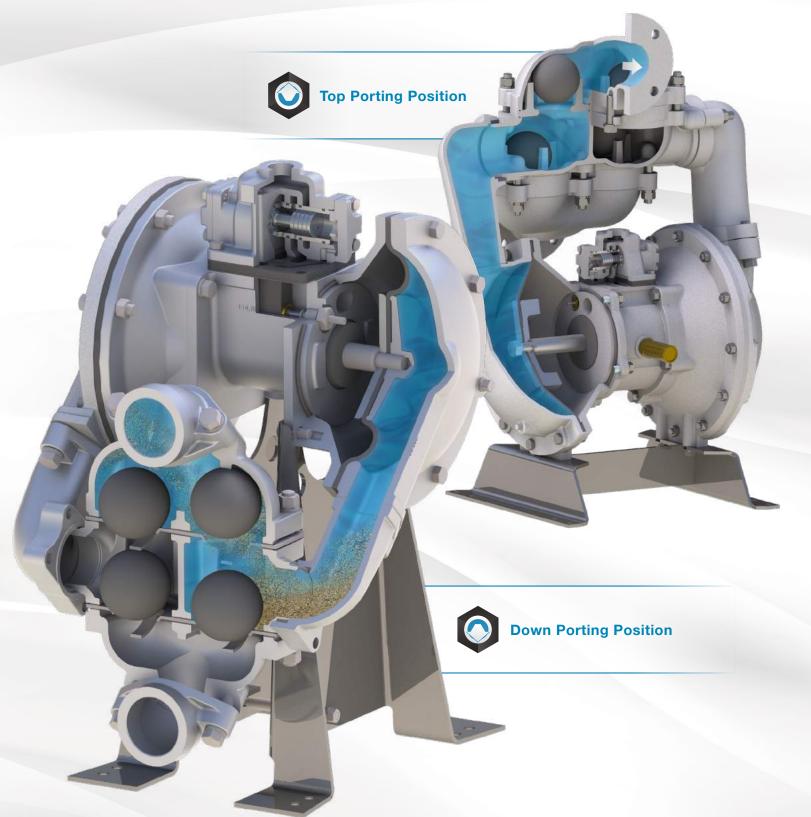
Dynamic Manifold Connections Can be vertically or horizontally mounted



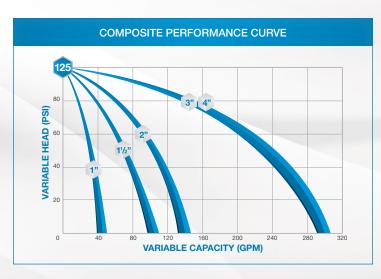
Certifications Available

















HEAVY DUTY BALL VALVE PUMPS

PERFORMANCE & SPECIFICATIONS

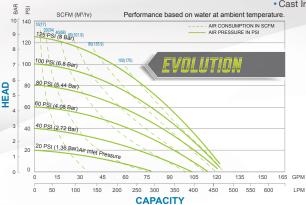


HDB1½ Metallic Performance

€x⟩ **(€**

MAX FLOW PORTING • 122 GPM (462 LPM) • NPT / BSP Available in side port only AIR END Aluminum Cast Iron

WET END Aluminum Stainless Steel Allov C

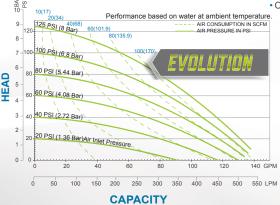




HDB2 Metallic Performance

€≥ **(€**



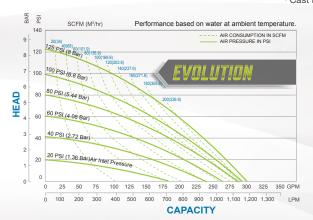


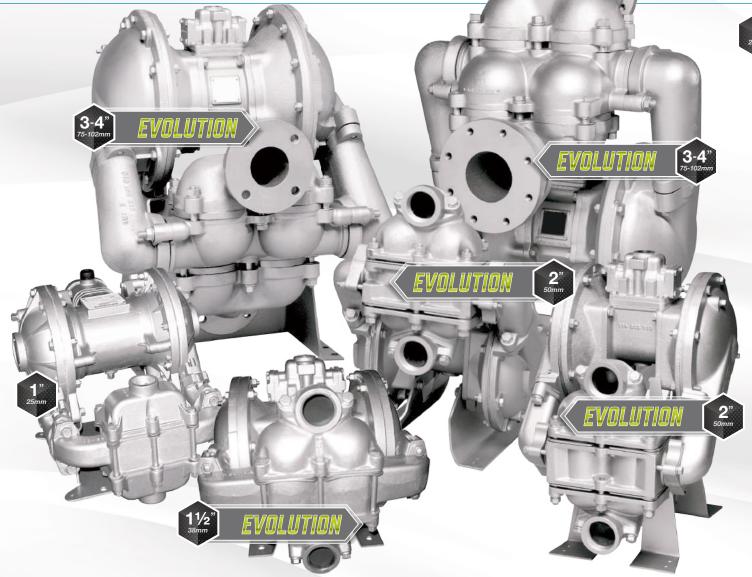


HDB3 / HDB4 Metallic Performance **(∑) (€)**

MAX FLOW PORTING •300 GPM (1,136 LPM) • ANSI Flange AIR END · Cast Iron

WET END Stainless Steel Cast Iron





SPECIFICATIO	SPECIFICATIONS													
	Α	В	С	D	Е			Pipe	Displacement	Max	Max	Max Discharge Pressure		
PUMP MODELS	Height	Width	Depth	Bottom of Base of: Suction	to Center Line Discharge		Connection Style	Size	Per Stroke	Flow Per Minute	Solids Handling			
	inches (mm)	inches (mm)	inches (mm)	inches (mm)	inches (mm)			inch (mm)	gal (liter)	gal (liter)	inch (mm)	psi (bar)		
SB1 / SB25	14.44 (367)	11.75 (298)	13.28 (337)	5.25 (133)	13 (330)		1" NPT/BSP	1 (25)	.09 (.34)	42 (159)	.25 (6)	125 (8.6)		
SB1 TOP	13.5 (342)	11.75 (298)	14.88 (378)	5.62 (142)	13.5 (342)		1" NPT/BSP	1 (25)	.09 (.34)	42 (159)	.25 (6)	125 (8.6)		
SB1 B0TT0M	13.69 (347)	11.75 (298)	14.88 (378)	2.22 (21)	8.44 (214)		1" NPT/BSP	1 (25)	.09 (.34)	42 (159)	.25 (6)	125 (8.6)		
HDB1½ TOP	19.22 (488)	15.5 (419)	17 (432)	8.14 (207)	18.08 (459)		1½" NPT/BSP	1.5 (38)	.37 (1.4)	122 (462)	.25 (6)	125 (8.6)		
HDB2 TOP	22.19 (564)	15.5 (394)	16.81 (427)	9.12 (232)	20.88 (530)		2" NPT	2 (50)	.46 (1.7)	135 (511)	.38 (9)	125 (8.6)		
HDB2 BOTTOM	23.25 (591)	15.5 (394)	16.81 (427)	3.44 (87)	15.19 (386)		2" NPT	2 (50)	.46 (1.7)	135 (511)	.38 (9)	125 (8.6)		
HDB3 TOP	37.13 (943)	26 (661)	20.75 (527)	20 (509)	33.33 (848)		3" 125# ANSI	3 (75)	2.0 (7.6)	300 (1136)	.87 (22)	125 (8.6)		
HDB3 BOTTOM	31.25 (794)	26 (661)	24.62 (625)	5.75 (146)	19.33 (492)		3" 125# ANSI	3 (75)	2.0 (7.6)	300 (1136)	.87 (22)	125 (8.6)		
HDB4 TOP	37.88 (962)	26 (661)	23.75 (603)	20 (509)	33.33 (848)		4" 125# ANSI	4 (102)	2.0 (7.6)	300 (1136)	.87 (22)	125 (8.6)		
HDB4 BOTTOM	31.25 (793)	26 (661)	27.5 (699)	5.75 (146)	19.33 (492)		4" 125# ANSI	4 (102)	2.0 (7.6)	300 (1136)	.87 (22)	125 (8.6		

Dimensional Tolerance: ±1/8" (± 3mm) • See service manual for complete specifications.



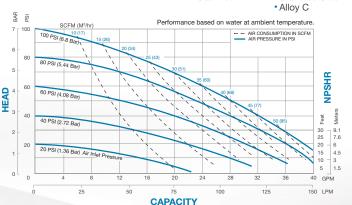
MAX FLOW **PORTING** AIR END • 42 GPM (159 LPM)

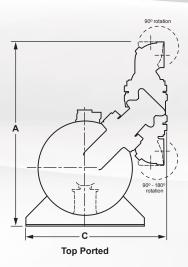
• NPT / BSP

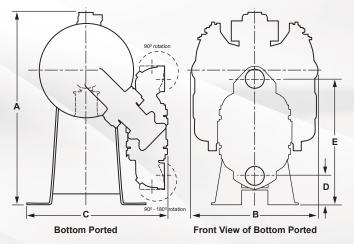
Aluminum

 Aluminum Cast Iron Stainless Steel

WET END









CONTAINMENT DUTY BALL VALVE PUMPS

THE ONLY COMPLETE LINE OF AODD PUMPS FEATURING SUPERIOR FLUID CONTAINMENT; PROTECTING YOUR PEOPLE, ENVIRONMENT, AND PUMP

Containment Duty Metallic and Non-Metallic Pumps are ideal for highly corrosive and hazardous chemical fluid requirements. All containment duty pumps are exclusively designed with containment chambers, hydraulically balanced/coupled pumping diaphragm and driver diaphragm assemblies. All containment chambers are designed to accommodate visual, mechanical and low voltage leak detection devices. CD pumps are constructed of Aluminum, Cast Iron, Stainless Steel, Alloy C, Polypropylene and PVDF with TPE (thermal plastic elastomers), PTFE options in diaphragms and check valves.



All Bolted Construction

Durable and high pressure capable



Top Discharge

For pumping out of tough areas



Diaphragm Connecting Rods

Reliable and consistent diaphragm control



Ball Check Valves

Provides powerful, high flow pumping



ESADS+Plus Air Valve

Externally Serviceable Air Distribution System



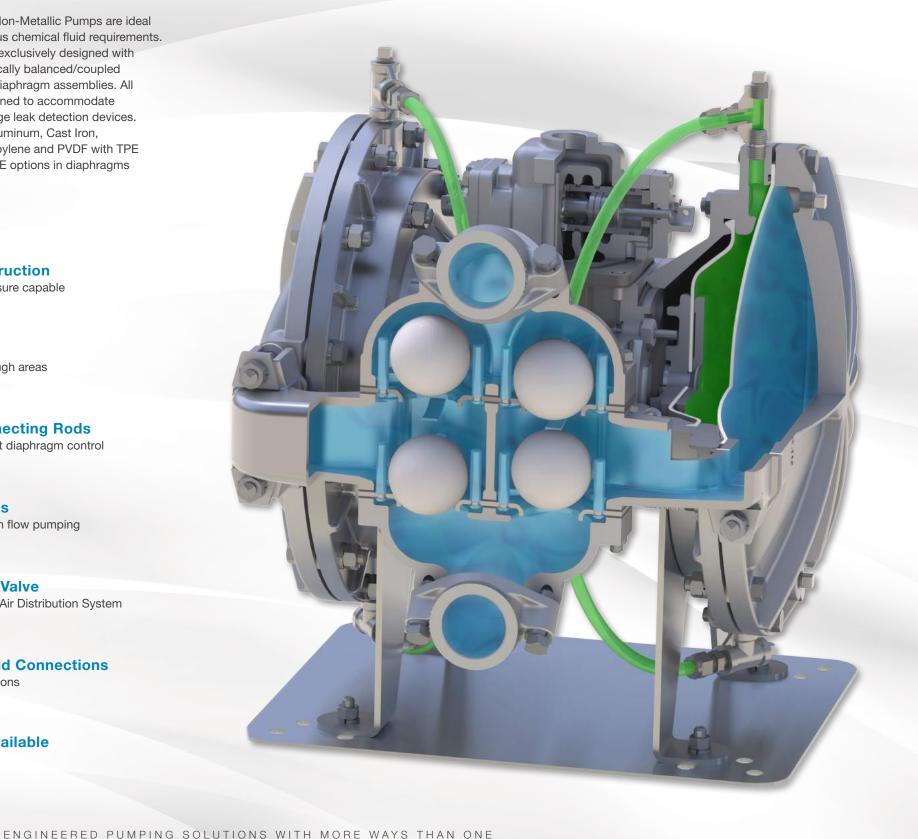
Dynamic Manifold Connections

90° - 180° rotation options

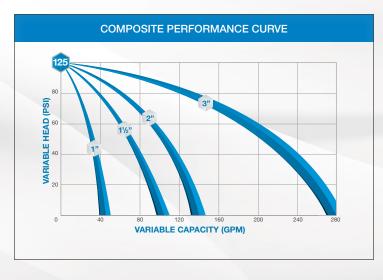


Certifications Available











CONTAINMENT DUTY BALL VALVE PUMPS

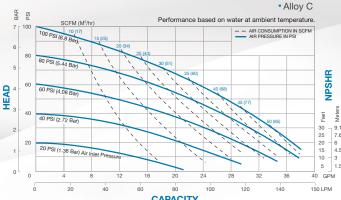
PERFORMANCE & SPECIFICATIONS



ST1 / ST25 Metallic Performance









ST1½ / ST40 Metallic Performance



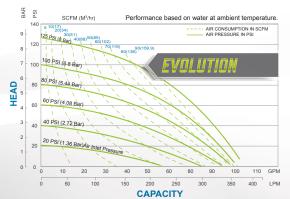
MAX FLOW •106 GPM (401 LPM) •NPT / BSP

Cast Iron

Aluminum

WET END Aluminum

 Stainless Steel Alloy C





S1F Non-Metallic Performance

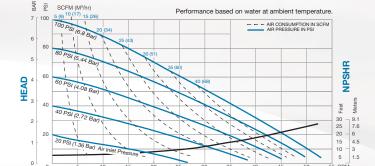
AIR END PORTING • 53 GPM (200 LPM) ANSI Flange DIN Flange

Polypropylene

WET END Polypropylene

PVDF*

CE



CAPACITY

Genuine Parts Service Videos

We make it easy for you to repair your pump with detailed service videos that teach you how to maintain your SANDPIPER pump right, from the advice of our experienced and certified support team.

LEARN MORE AT SANDPIPERPUMP.COM/VIDEOS



S15 Non-Metallic Performance

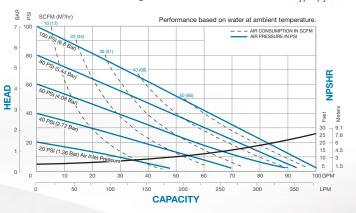
WET END



PORTING • DIN Flange

AIR END Polypropylene

PVDF Polypropylene





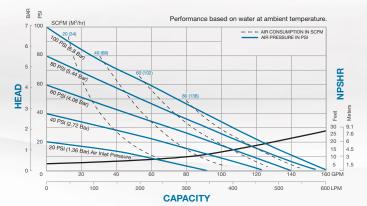
S20 Non-Metallic Performance

 ϵ

MAX FLOW PORTING • 160 GPM (605 LPM) • Universal Flange

AIR END Polypropylene

WET END Polypropylene





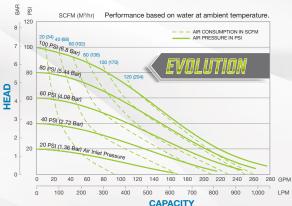
S30 Non-Metallic Performance

PORTING • 280 GPM (1,061 LPM) • ANSI Flange • DIN Flange

AIR END Glass Filled Polypropylene

WET END Polypropylene

CE



*Conductive versions of this material are available





OFFERING THE WIDEST RANGE OF PERFORMANCE AND APPLICATION CAPABILITIES

Standard Duty Metallic Pumps are ideally suited for intermittent / on-demand, portable, moderately abrasive fluids, and suspended solids. Standard duty pumps are constructed in Aluminum, Cast Iron, Stainless Steel and non-metallic materials such as PTFE, Polypropylene, and PVDF with elastomer TPE (thermal plastic elastomers) and PTFE options in diaphragms and check valves.



Lightweight & Portable Weights as low as 4 lbs (1.8 kg)



All Bolted Construction Durable and high pressure capable



Top Discharge

For pumping out of tough areas



Ball Check Valves

Provide powerful, high flow pumping



Diaphragm Connecting Rods

Reliable and consistent diaphragm control



ESADS+Plus Air Valve

Externally Serviceable Air Distribution System



Dynamic Manifold Connections

90° - 180° rotation options

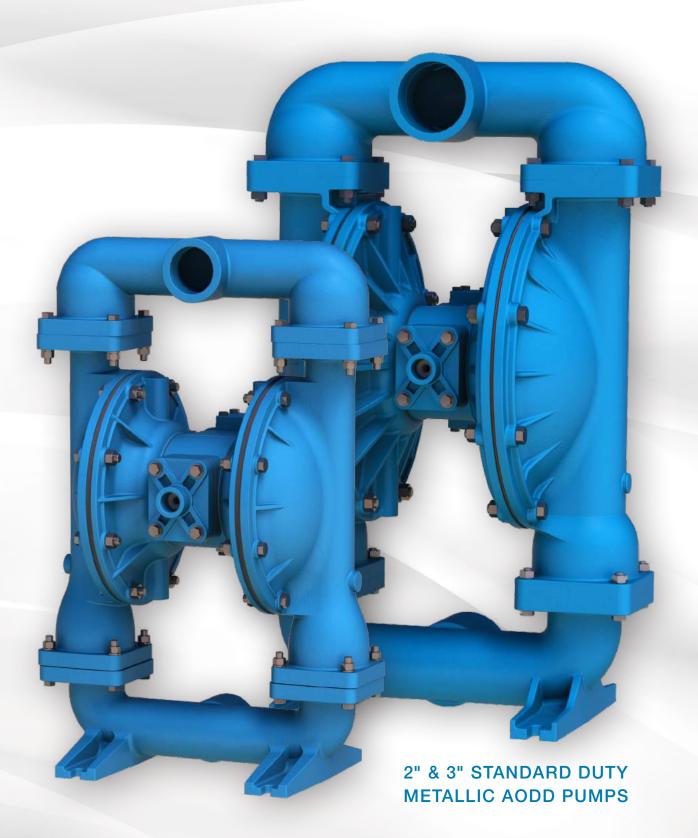


Certifications Available









	CHARACT	ERISTICS	Metallic	Non-Metallic
	,	Vater	+	+
	Suspe	nded Solids	+	√
	Non-Sus	pended Solids	!	X
stics	Line S	Size Solids	X	X
Fluid Characteristics	Slud	ge / Slurry	√	!
l Char	High Viscosit	y (Flowable Fluids)	V	√
Fluid		High	V	!
	Erosion / Abrasive Fluids	Moderate	V	!
		Low	+	V
	Co	orrosion	√	+
	Per	rmanent	\checkmark	V
_	P	ortable	+	+
Installation	Containme	ent / Prevention	!	!
Instal	Flood	ed Suction	V	✓
	Suc	ction Lift	\checkmark	V
	Suk	omerged	V	<u>!</u>
Duty	Intermitter	nt / On-Demand	+	+
۵	Cor	ntinuous	V	V
= 6	Best Type = Suitabl	e	Not Recommended	





OPTIMIZED PERFORMANCE |

Optimized performance without sacrificing proven reliability. These pumps have undergone an engineering EVOLUTION, leveraging trusted and proven product designs to improve their performance by application of advanced engineering methods. Unlike the competition, these pumps are fully interchangeable with prior models.

Check out the S20 & S30 Metallic updates on page 39. Watch for more Engineering Evolutions to come in the near future!

PERFORMANCE & SPECIFICATIONS



PERFORMANCE & SPECIFICATIONS



MAX FLOW

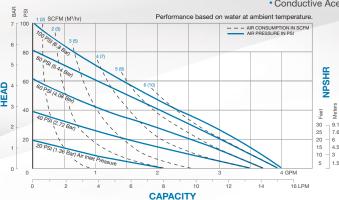
PB 1/4 Non-Metallic Performance **PORTING**



WET END

• 4 GPM (15 LPM) NPT Polypropylene Polypropylene Conductive Acetal • PVDF Conductive Acetal Performance based on water at ambient temperature

AIR END

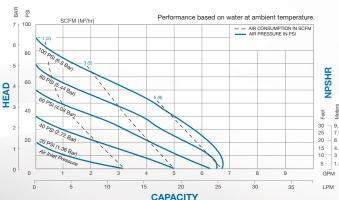




WR10 Non-Metallic Performance

 ϵ

WET END **MAX FLOW PORTING AIR END** • 6.8 GPM (26 LPM) • NPT / BSP PTFE PTFF PVDF





S05 Non-Metallic Performance

EX CE

ENGINEERED PUMPING SOLUTIONS WITH MORE WAYS THAN ONE

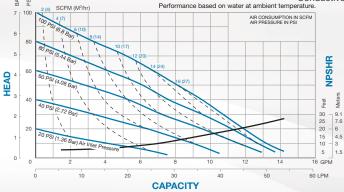
MAX FLOW **PORTING** •14 GPM (52 LPM) • NPT / BSP

AIR END Polypropylene

WET END

• Polypropylene / Conductive Polypropylene Conductive Polypropylene

 PVDF / Conductive PVDF Conductive Acetal



time and money by allowing you to track your pump maintenance, submit quotes for kit purchasing and have instant access to many other tools and resources.



In-line ported options also available on S05 and S1F

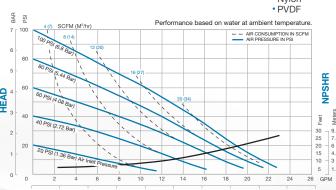
S07 Non-Metallic Performance

 ϵ

MAX FLOW PORTING • 23 GPM (87 LPM) • NPT / BSP

AIR END WET END Polypropylene

 Polypropylene Nylon



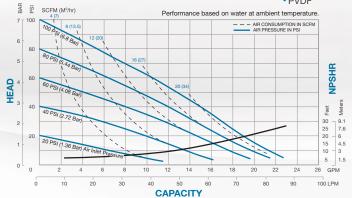


S10 Non-Metallic Performance

CE



CAPACITY



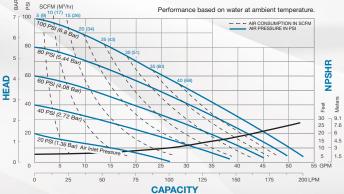


S1F Non-Metallic Performance

② (€

WET END MAX FLOW PORTING AIR END •53 GPM (200 LPM) • ANSI Flange • Polypropylene Polypropylene • DIN Flange • 40% Glass Filled • PVDF

• NPT Polypropylene Conductive Polypropylene





PERFORMANCE & SPECIFICATIONS

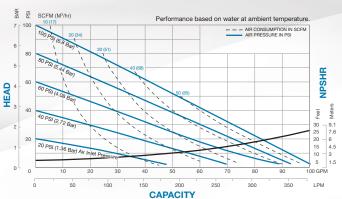


S15 Non-Metallic Performance

MAX FLOW • 100 GPM (378 LPM) • ANSI Flange • Polyproylene • DIN Flange

PORTING AIR END

WET END Polypropylene Conductive Polyproylene



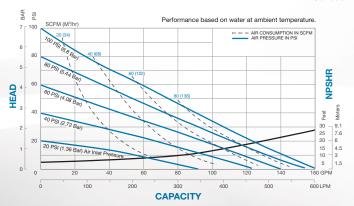


S20 Non-Metallic Performance

EX CE

MAX FLOW PORTING Polyproylene
 Conductive Polyproylene
 Polyproylene
 POlyproylene • 160 GPM (605 LPM) • Universal Flange

WET END Polypropylene





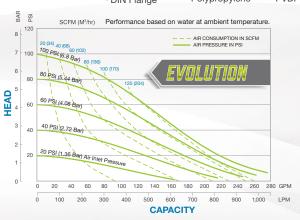
S30 Non-Metallic Performance

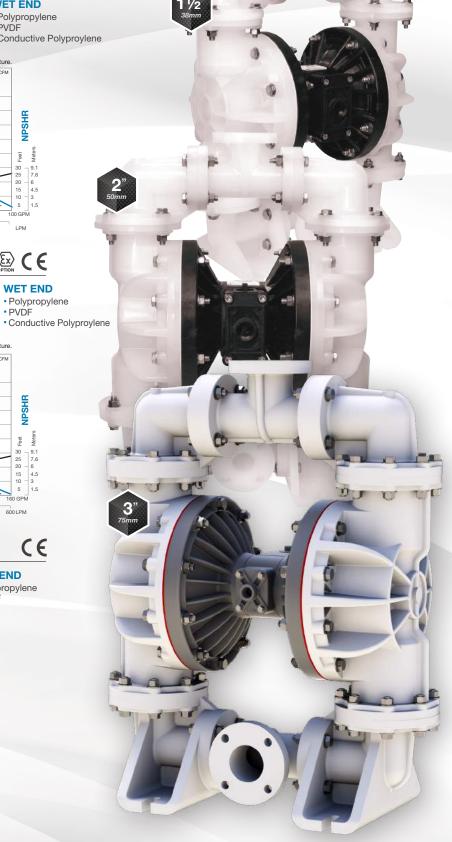
CE

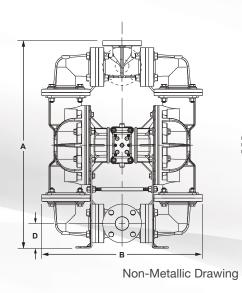
MAX FLOW PORTING •280 GPM (1,061 LPM) • ANSI Flange DIN Flange

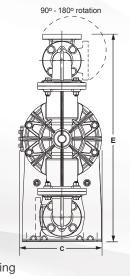
AIR END Glass Filled Polypropylene

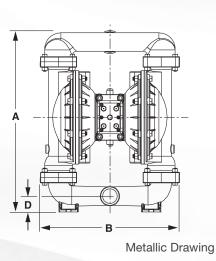
WET END Polypropylene

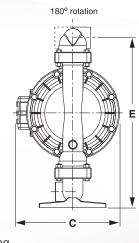












METALLIC :	SPECIFICATI	ONS									
	А	В	С	D	E		Pipe	Displacement	Max	Max	Max
PUMP MODELS	Height	Width	Depth	Bottom of Base s Suction	to Center Line of: Discharge	Connection Style	Size	Per Stroke	Flow Per Minute	Solids Handling	Discharç Pressur
	inches (mm)	inches (mm)	inches (mm)	inches (mm)	inches (mm)		inch (mm)	gal (liter)	gal (liter)	inch (mm)	psi (bar
X02	5.81 (148)	7.44 (189)	4.38 (111)	.63(16)	5.41 (138)	1/4" NPT/BSP	.25 (6)	.003 (.01)	4.75 (18)	.08 (2)	125 (8.6
S05 AL	11.5 (292)	10.25 (260)	7.44 (179)	1.94 (33)	11.5 (292)	½" NPT/BSP	.5 (12)	.026 (.098)	15 (57)	.13 (3)	125 (8.6
S05 SS	10.38 (264)	10.25 (260)	7.44 (179)	1.31 (33)	9.72 (247)	1/2" NPT/BSP	.5 (12)	.026 (.098)	15 (57)	.13 (3)	125 (8.6
S1F AL / CI	12.72 (323)	10.25 (260)	10.38 (264)	1.09 (28)	11.84 (301)	1" NPT/BSP	1 (25)	.11 (.42)	45 (170)	.25 (6)	125 (8.6
S1F SS	12.84 (326)	10.25 (260)	10.38 (264)	1.22 (31)	11.97 (304)	1" NPT/BSP	1 (25)	.11 (.42)	45 (170)	.25 (6)	125 (8.6
S15 AL / CI	21.58 (548)	16.66 (423)	12.36 (314)	1.91 (49)	20.31 (516)	1½" NPT/BSP	1.5 (38)	.41 (1.55)	106 (401)	.25 (6)	125 (8.6
S15 SS	21.66 (550)	16.66 (423)	12.36 (314)	1.97 (50)	20.38 (518)	11/2" NPT/BSP	1.5 (38)	.41 (1.55)	106 (401)	.25 (6)	125 (8.6

24.63 (625)

24.75 (629)

29.97 (761)

30.19 (767)

2" NPT/BSP

2" NPT/BSP

3" NPT/BSP

3" NPT /BSP

2 (50)

2 (50)

3 (75)

3 (75)

.42 (1.59)

.94 (3.56)

.94 (3.56)

200 (758)

200 (758)

285 (1,078)

285 (1,078)

.25 (6)

.38 (9.5)

.38 (9.5)

125 (8.6)

125 (8.6)

125 (8.6)

125 (8.6)

Dimensional Tolerance: ±1/8" (± 3mm) • See service manual for complete specifications.

16.88 (428)

16.88 (428)

19.66 (499)

19.66 (499)

12.59 (320)

12.59 (320)

15.75 (400)

15.75 (400)

1.88 (48)

2 (50)

2.34 (60)

2.28 (65)

26.31 (669)

26.31 (669)

32.06 (814)

32 .28 (820)

S20 AL / CI

S20 SS

S30 AI/CI

S30 SS

	Α	В	С	D	E		Dina	Diamlacament	Max	Max	Max
PUMP MODELS	Height	Width	Depth	Bottom of Base of: Suction	to Center Line Discharge	Connection Style	Pipe Size	Displacement Per Stroke	Flow Per Minute	Solids Handling	Discharge Pressure
	inches (mm)	inches (mm)	inches (mm)	inches (mm)	inches (mm)		inch (mm)	gal (liter)	gal (liter)	inch (mm)	psi (bar)
PB¼	7.81 (198)	7 (178)	5.5 (140)	.75 (19)	7.81 (198)	1/4" NPT	.25 (6)	.01 (.04)	4 (15)	.03 (1)	100 (6.9)
WR10	5.32 (135)	4.09 (104)	5.72 (145)	0.94 (24)	0.94 (24)	%" NPT	.375 (10)	.009 (.034)	6.8 (26)	0.1 (2.25)	100 (6.9)
S05	11.31 (287)	10.13 (257)	7.06 (179)	1.38 (35)	11.31 (287)	1/2" NPT	.5 (13)	.026 (.098)	14 (52)	.125 (3)	100 (6.9)
S07T*	13.34 (339)	11.81 (300)	7.06 (179)	1.81 (46)	13.34 (339)	34" NPT	.75 (19)	.026 (.059)	13 (48)	.38 (9)	100 (6.9)
S07	13.34 (339)	11.81 (300)	7.06 (179)	1.81 (46)	13.34 (339)	34" NPT	.75 (19)	.026 (.098)	23 (87)	.15 (4)	100 (6.9)
S10	13.81 (351)	11.81 (300)	7.56 (192)	2.5 (64)	11.69 (297)	1" ANSI	1 (25)	.026 (.098)	23 (87)	.15 (4)	100 (6.9)
S1F	21 (533)	17 (433)	11.63 (295)	2.5 (64)	21 (533)	1" U	1 (25)	.19 (.72)	53 (200)	.25 (6)	100 (6.9)
S15	28.75 (730)	23 (584)	13 (330)	3.5 (89)	25.19 (640)	1½" ANSI or DIN	1.5 (38)	.36 (1.36)	100 (378)	.47 (12)	100 (6.9)
S20	32.25 (819)	23.81(605)	13 (330)	3.81 (97)	28.19 (716)	2" U	2 (50)	.36 (1.36)	160 (605)	.66 (17)	100 (6.9)
S30	40.66 (1033)	32.31 (821)	16.19 (411)	4.85 (123)	40.66 (1033)	3" ANSI or DIN	3 (75)	1.0 (3.78)	280 (1061)	.75 (19)	100 (6.9)

Dimensional Tolerance: ±1/8" (± 3mm) • See service manual for complete specifications

U = Universal: Fits both ANSI or DIN.



SPECIAL DUT

THE SAME QUALITY SANDPIPER PRODUCTS DESIGNED TO FIT SPECIFIC NEEDS



NATURAL GAS PUMPS

CSA certified to ANSI LC6 standard and Canadian Technical Letter No. R-14 for operation using sweet or sour natural gas



UL LISTED PUMPS (UL)

Designed to meet UL79 standards for diaphragm pumps handling lammable liquids



SUBMERSIBLE CENTRIFUGAL PUMPS

Lightweight and powerful pumps great for high flow and close quarters pumping situations



PREMIUM FDA COMPLIANT PUMPS

Regulation 1935/2004/EC Compliant and the ultimate in leak protection and clean pumping with the paired performance of AODD technology



FDA COMPLIANT PUMPS

Regulation 1935/2004/EC Compliant and ideally suited for a variety of food processing, pharmaceutical and cosmetic industry applications



HIGH PRESSURE PUMPS

Deliver discharge pressure twice the inlet pressure, up to 250 PSI (17 BAR)





Natural Gas - G20



SANDPIPER PUMPS EXCEL IN EVERY ASPECT OF SAFETY AND RELIABILITY WITHIN THE OIL & GAS INDUSTRY

WIDEST AVAILABLE RANGE	SIZE &	0.0
3" 2" Flap 1½" 1" Flap 1" ½" 285 GPM 200 GPM 208 GPM 108 GPM 70 GPM 45 GPM 15 GPM (1,076 LPM) (757 LPM) (767 LPM) (401 LPM) (265 LPM) (170 LPM) (57 LPM)	FLOW	1/2" 1" 15 GPM S3 GPM (S7 LPM) (201 LPM)
WIDEST TEMPERATURE RANGE		
-10°F (-23°C) 180°F (82°C)	ТЕМР	32°F (0°C) 125°F (52°C)
BROADEST CERTIFICATIONS IN THE INDUSTRY SAFETY COMPLIANCE WITH:		SAFETY COMPLIANCE WITH:
Technical Letter ANSI LO8 No. R-14 Technical Letter ANSI LO8	SAFETY	Technical Letter No. R-14 ANSI LC6 Only 16" and 1" sizes
LARGEST SOLIDS PASSAGE		
TOP & BOTTOM DISCHARGE Up to 2" BOTTOM DISCHARGE For Solids-Laden Fluids	SOLIDS HANDLING	TOP DISCHARGE ONLY Up to 1/4"
EASE OF REPAIR & LESS DOWNTIME		
5 minutes of on-site main or pilot valve repair with one wrench and removal of only 4 bolts	GAS / AIR VALVE REPAIR	55 minutes of off-site main and pilot valve repair with a variety of tools needed to remove pump from line and transport for repair
ENHANCED TEMPERATURE RESISTANCE AND CHEMICAL COMPATIBILITY		
Aluminum Stainless Steel Nitrile or FKM Elastomers	GAS / AIR END MATERIALS	LIMITED Aluminum only Nitrile Elastomers only
BEST GUARANTEE IN THE INDUSTRY		
Diaphragm Connecting Rod Guarantee Non-Stalling Air/Gas Valve Performance Guarantee 5-Year Limited Warranty	PERFORMANCE RELIABILITY	Connecting Rod prone to bending 5-year Limited Warranty

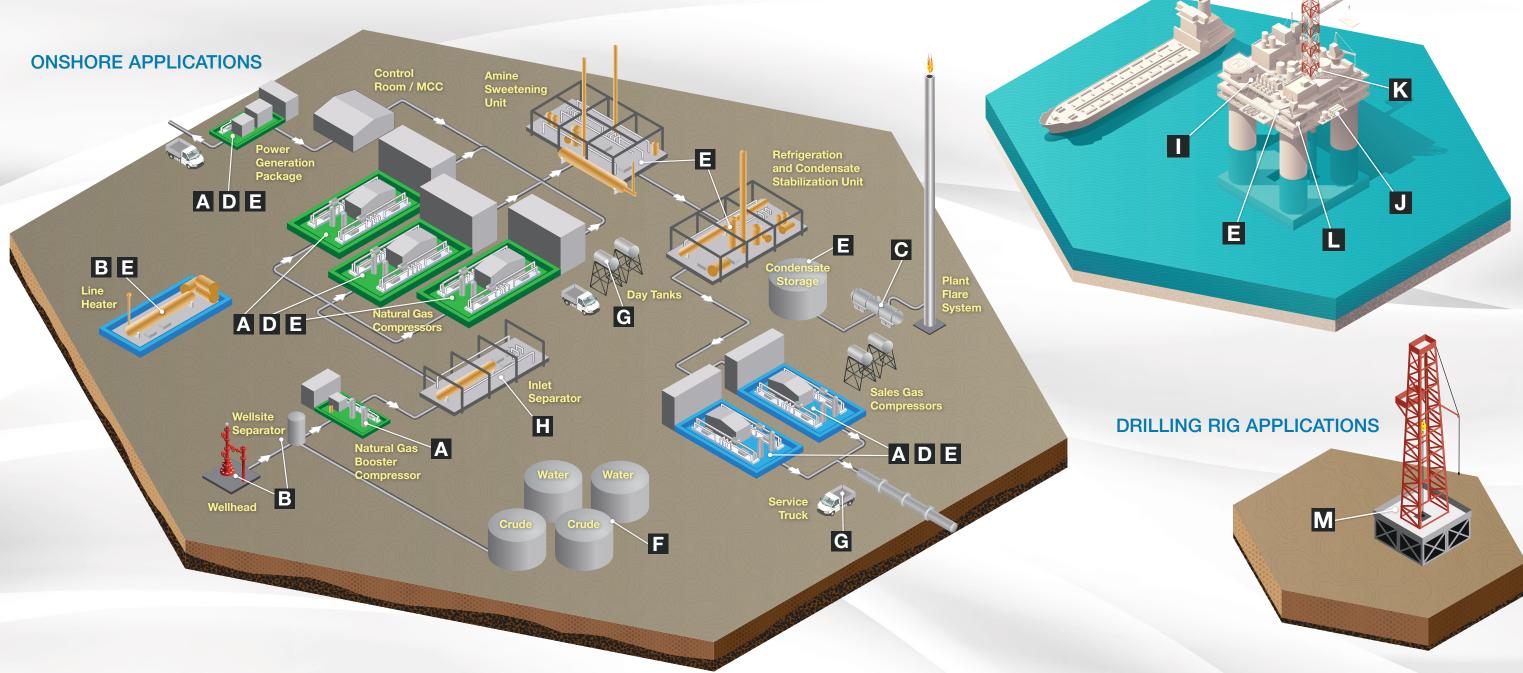




OIL & GAS PROCESS MAP

LAND, OFFSHORE & DRILLING RIG APPLICATIONS

OFFSHORE APPLICATIONS



APPLICATIONS KEY:

- A Lube Oil Transfer (G05, G1F)
- **B** Glycol Recirculation / Heat Trace (G05, G1F)
- C Flare Knockout (G1F, G15, G20, ST1, ST1½)
- D Glycol Transfer / Water Make-Up (G05, G1F)
- E Sump / General Transfer (G05, G1F, G15, G10F, G20F)
- F Tank Bottom Recirculation / Transfer (G10F, G20F, G20, G30, GH2-M)

ENGINEERED PUMPING SOLUTIONS WITH MORE WAYS THAN ONE

G Utility / General Transfer (G05, G1F, G15, G10F, G20F)

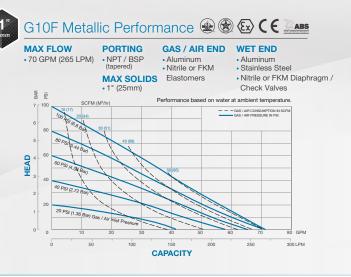
- H Separators & Knockout Drums (G20, GH2-M)
- I General Duty Spill Clean-Up (G20F, G20, G30)
- J Diesel Fuel Transfer (G15)
- K Sea Water Pump for Drilling Mud Make-Up (G30)
- L Produced Water / Condensate Transfer (G1F)
- M Cellar Pump-Out & Mud Transfer (G20F, HDF2, HDF3, SMA3)

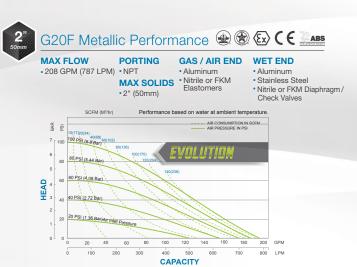


DUAL POWER NATURAL GAS OR AIR OPERATED PUMPS

CSA CERTIFIED

1 1







Remote Site Serviceability

ESADS+Plus Air / Gas System allows for an on-site maintenance time of only 5 minutes



Temperature Limits

10°F (-23°C) to 180°F (82°C)



Hydrostatic Strength Test 500 PSI (34.5 BAR)



Nitrile or FKM Elastomers Air / Gas End options for varying temperatures and chemical compatibility





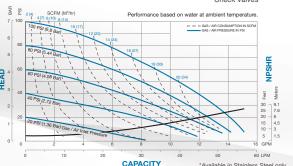
• 15 GPM (57 LPM) • NPT / BSP

· ANSI Flange*

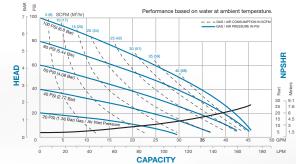
• Aluminum Nitrile or FKM

• Aluminum

 Stainless Steel Nitrile or PTFE Diaphragm / Check Valves







G20 Metallic Performance 🐵 🕸 🖎 🕻 € 🍱

Nitrile or FKM

GAS / AIR END WET END

Nitrile or PTFE Diaphragm /

PORTING

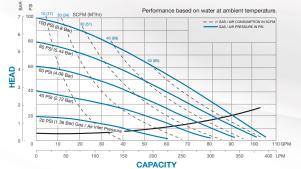
ANSI Flange

MAX FLOW • 106 GPM (401 LPM) • NPT / BSP

PORTING ANSI Flange GAS / AIR END Aluminum · Stainless Stee Nitrile or FKM

Aluminum

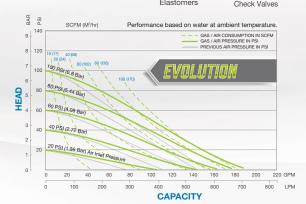
 Stainless Stee Nitrile or PTFE Diaphragm / Check Valves





MAX FLOW

• 200 GPM (758 LPM) • NPT / BSP









DESIGNED & TESTED TO BE SAFELY POWERED BY COMPRESSED AIR OR NATURAL GAS

All SANDPIPER G-Series™ pumps feature *Dual Power* capabilities and may be safely powered by compressed air or natural gas depending on the application, which offers simplified purchasing, maintenance and training while reducing inventory.

UL LISTED PUMPS

PERFORMANCE & SPECIFICATIONS

SUBMERSIBLE CENTRIFUGAL PUMPS

PERFORMANCE & SPECIFICATIONS

UL (Underwriters Laboratories) Listed Pumps are designed to meet UL79 standards for diaphragm pumps handling flammable liquids. All Aluminum construction with approved Nitrile or Virgin PTFE UL elastomers. Fully groundable to prevent static discharge.



MAX FLOW

• 45 GPM (170 LPM)

UL: Underwriters Laboratories

• NPT / BSP



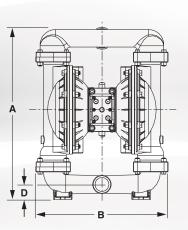
U1F Metallic Performance

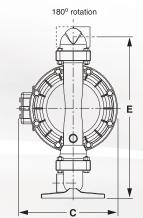
€≥ (€ **AIR END**

Aluminum

WET END Aluminum

Performance based on water at ambient temperature

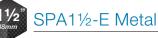








The PortaPump® Submersible, Battery-Powered Pump operates using any 12-volt car or truck battery. It comes equipped with cables and battery clips. Extremely portable, the pump weighs only 33 pounds (15 kg) and can fit through openings as small as 10" (25cm). Electrically safe and whisper quiet.



SPA1½-E Metallic Performance

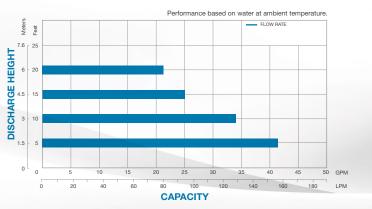
WET END

 ϵ

MAX FLOW • 43 GPM (163 LPM)

PORTING • NPT / BSP

Aluminum



The SludgeMaster™ Submersible, Air-Powered Trash Pump handles mud, leaves, twigs, sand, sludge, trash-laden water and soft solids to 11/2" (3.8cm). High capacity, low head. The pump weighs only 59 pounds (26kg), and can fit through an opening as small as 14" (35cm). Sturdy construction for rough handling and long life. Optional rock screen available.

SMA3 Metallic Performance

 ϵ

MAX FLOW		TING		END	WET END		
300 GPM (1140	LPM) • NPT	/ BSP	• Alur	minum	 Aluminum 		
BAR		Perfor	mance based	on water at a	mbient tempera	ature.	
2.0					CONSUMPTION IN S PRESSURE IN PSI	SCFM	
1.75 - 24	30						
1.5 - 20 80 PS/ (5.44 B)							
1.25 - 60 PSI (4.08 B)	a _n						
.75 - 12	80 PSI (5.44 Bar)			AIR CONSUMPTION	ON AT 100 PSI		
.50 - 8	4.08 Bar)						
.25 - 4	4.00 Bar)						
0 0	50 100	150	200	250	300	350 G	
0	200 400	600	800	1000	1200	1400	

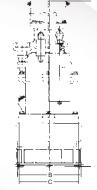
CAPACITY

SCAN TO LEARN MORE

SPECIFICATIONS											
	А	В	С	D	Е		Pipe	Displacement	Max	Max	Max
PUMP MODELS	Height	Width	Depth	Bottom of Bas of: Suction	ttom of Base to Center Line Suction Discharge		Size	Per Stroke	Flow Per Minute	Solids Handling	Discharge Pressure
	inches (mm)	inches (mm)	inches (mm)	inches (mm)	inches (mm)		inch (mm)	gal (liter)	gal (liter)	inch (mm)	psi (bar)
U1F	12.72 (323)	10.25 (260)	10.38 (264)	1.09 (28)	11.84 (301)	1" NPT	1 (25)	.11 (.42)	45 (170)	.25 (6)	125 (8.6)

ENGINEERED PUMPING SOLUTIONS WITH MORE WAYS THAN ONE

Dimensional Tolerance: $\pm 1/8"$ (± 3 mm) • See service manual for complete specifications





SCAN TO LEARN MORE SANDPIPERPUMP.COM/SUBMERSIBLE

SPECIF	SPECIFICATIONS													
	А	В	С	D	E		Pipe	Max	Max	Max				
PUMP MODELS	Height	Width	Depth	Base to Center Discharge	Weight	Connection Style	Size	Flow Per Minute	Solids Handling	Discharge Height				
	inches (mm)	inches (mm)	inches (mm)	inches (mm)	Pounds (kg)		inch (mm)	gal (liter)	inch (mm)	feet (m)				
SPA½-E	22 (560)	8.88 (225)	6.19 (157)	4.71 (119)	33 (15)	1½" NPT	1.5 (38)	43 (163)	.06 (1)	25 (7.6)				
SMA3	23.51 (597)	13 (330)	9 (229)	7.11 (180)	59 (26)	3" NPT	3 (75)	300 (1140)	1.5 (40)	65 (19.8)				

Dimensional Tolerance: ±1/8" (± 3mm) • See service manual for complete specifications



PREMIUM FDA COMPLIANT PUMPS

PERFORMANCE & SPECIFICATIONS

Our Premium FDA (Food & Drug Administration) Material Compliant Pumps are ideally suited for the ultimate in leak protection and clean pumping with the paired performance of AODD technology. Whether in a clean-in-place or clean-out-of-place application, these pumps will exceed the need for reliability and cleanability. Some of their most exceptional features include:



Leak Detection

Pair with Electronic Leak Detection LEARN MORE ON PAGE 63



Materials Of Construction

Electropolished 316 and 302/304 Stainless Steel Components

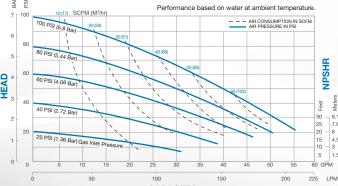


Porting Options

Rotatable manifolds



MAX FLOW	PORTING		AIR END	WET END
• 54 GPM (204 LPM)	• Tri-Clamp		Nickel Plated Aluminum	• Stainless Steel
7 [100	M³/hr)	Performance	e based on water at am	bient temperature.

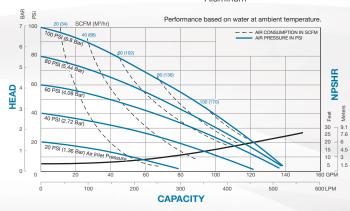




SSB2 Metallic Performance

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MAX FLOW	PORTING	AIR END	WET END
• 125 GPM (473 LPM)	 Tri-Clamp 	 Nickel Plated 	 Stainless Stee
		Aluminum	







Food Processing plastic and elastomer food contact components meet the requirements of EU Regulation 1935/2004/EC. Refer to declaration of

SPECIFICA	ATIONS												
	А	В	С	D E		Pipe	Displacement	Max	Max	Max			
PUMP MODELS	Height	Width	Depth	Bottom of Bas of: Suction	Bottom of Base to Center Line of: Suction Discharge		Connection Style	Size	Per Stroke	Flow Per Minute	Solids Handling	Discharge Pressure	
	inches (mm)	inches (mm)	inches (mm)	inches (mm)	inches (mm)			inch (mm)	gal (liter)	gal (liter)	inch (mm)	psi (bar)	
SSB1/DSB1	17.44 (443)	15.69 (398)	10.69 (271)	2.38 (60)	15.94 (404)		1½" Tri-Clamp	1 (25)	.09 (.34)	54 (204)	.25 (6)	125 (8.6)	
SSB2	22.63 (575)	18.88 (479)	12.81 (325)	2.75 (70)	21 (533)		2" Tri-Clamp	2 (50)	.36 (1.36)	125 (473)	.25 (6)	125 (8.6)	
SSA2	25.63 (651)	20.06 (510)	16.25 (413)	3.94 (100)	24.13 (612)		2½" Tri-Clamp	2 (50)	.63 (2.39)	150 (570)	1.06 (27)	125 (8.6)	
SET1	17.88 (454)	19 (483)	10.19 (268)	2.38 (60)	15.75 (400)		1" Tri-Clamp	1 (25)	.09 (.34)	54 (204)	.25 (6)	125 (8.6)	
SET2	23.5 (597)	24.13 (613)	13 (330)	2.38 (60)	21.25 (540)		2" Tri-Clamp	2 (50)	.36 (1.36)	123 (465)	.25 (6)	125 (8.6)	

Dimensional Tolerance: ±1/8" (± 3mm) • See service manual for complete specifications.



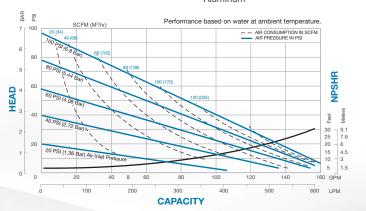


MAX FLOW • 150 GPM (567 LPM) • Tri-Clamp

PORTING

AIR END Nickel Plated Aluminum

WET END Stainless Steel

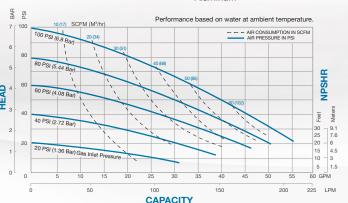




SET1 Metallic Performance

CE

MAX FLOW PORTING AIR END **WET END** • 54 GPM (204 LPM) Tri-Clamp Nickel Plated Stainless Steel Aluminum





SET2 Metallic Performance

• 123 GPM (465 LPM) • Tri-Clamp

PORTING

AIR END WET END Nickel Plated Stainless Steel Aluminum

Performance based on water at ambient temperature.

CAPACITY



STANDARD FDA COMPLIANT PUMPS

PERFORMANCE & SPECIFICATIONS

FDA (Food & Drug Administration) Material Compliant Pumps are ideally suited for a variety of food processing, pharmaceutical and cosmetic industry applications. The pumps are available in 1" through 3" ball check valve designs and a 2" (line size solids handling) flap check valve design. Variable flow capacities across the range are 0-235 gallons per minute. These special duty pumps are constructed of FDA compliant material components of Stainless Steel (wetted castings) and a selection of FDA Santoprene®, FDA Nitrile and PTFE diaphragms, check valves and valve seats. Standard non-wetted components are white Epoxy Coated Aluminum with Stainless Steel hardware. 1", 11/2", 2", 3" pumps are offered with sanitary clamp fittings and 3" pumps are offered with an ANSI flange.



Materials Of Construction

316 Stainless Steel components



Porting Options

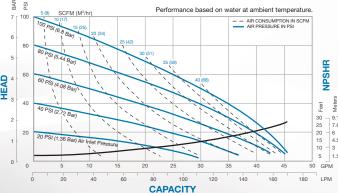
Rotatable manifolds and top or bottom discharge available



Γ1F Metallic Performance

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MAX FLOW	PORTING	AIR END	WET END
• 45 GPM (170 LPM)	• Tri-Clamp	 Epoxy Coated Aluminum 	 Stainless Steel
E =			

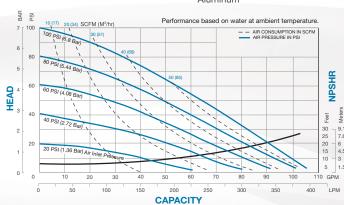




[15 Metallic Performance

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MAX FLOW	PORTING	AIR END	WET END
• 106 GPM (401 LPM)	• Tri-Clamp	 Epoxy Coated Aluminum 	Stainless Steel







EC1935

EVOLUTIO

Food Processing plastic and elastomer food contact components meet the requirements of EU Regulation 1935/2004/EC. Refer to declaration of conformity for compliant models.

OF LOII	ICATIONS											
	А	В	С	D	Е		Pipe	Displacement	Max	Max	Max	
PUMP MODELS	Height	Width	Depth	Bottom of Bas of: Suction	se to Center Line Discharge	Connection Style	Size	Per Stroke	Flow Per Minute	Solids Handling	Discharge Pressure	
	inches (mm)	inches (mm)	inches (mm)	inches (mm)	inches (mm)		inch (mm)	gal (liter)	gal (liter)	inch (mm)	psi (bar)	
T1F	12.97 (326)	10.25 (260)	10.38 (264)	1.22 (31)	11.97 (304)	1½" Tri-Clamp	1 (25)	.11 (.42)	45 (170)	.25 (6)	125 (8.6)	
T15	21.81 (554)	16.66 (423)	12.36 (314)	1.97 (50)	20.38 (518)	2" Tri-Clamp	1.5 (38)	.41 (1.55)	106 (401)	.25 (6)	125 (8.6)	
T20	26.56 (674)	16.88 (428)	12.59 (320)	2 (50)	24.75 (629)	2½" Tri-Clamp	2 (50)	.42 (1.59)	200 (758)	.25 (6)	125 (8.6)	
T30	32.28 (820)	19.66 (499)	15.75 (400)	4.22 (107)	30.84 (808)	4" Tri-Clamp	3 (75)	.94 (3.56)	285 (1,078)	.38 (9.5)	125 (8.6)	
TSA2	20.81 (529)	21.25 (539)	13 (330)	2.56 (55)	17.56 (447)	21/2" Tri-Clamp	2 (50)	.43 (1.60)	140 (530)	2 (50)	125 (8.6)	

Dimensional Tolerance: ±1/8" (± 3mm) • See service manual for complete specifications.

ENGINEERED PUMPING SOLUTIONS WITH MORE WAYS THAN ONE

Santoprene is a registered trademark of Exxon Mobil Corporation.

T20 Metallic Performance

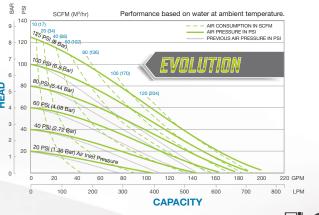
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MAX FLOW • 200 GPM (758 LPM) • Tri-Clamp

PORTING

AIR END Epoxy Coated Aluminum

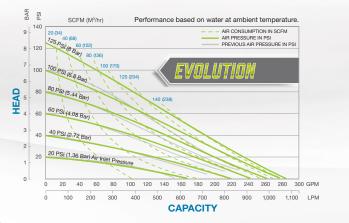
WET END



T30 Metallic Performance

प्रौ (€

MAX FLOW PORTING • 285 GPM (1.078 LPM) • ANSI Flange AIR END **WET END** Epoxy Coated
 Stainless Steel Aluminum

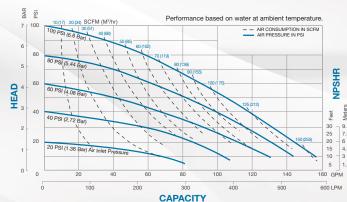


TSA2 Metallic Performance

MAX FLOW • 140 GPM (530 LPM) • Tri-Clamp

PORTING

WET END AIR END Epoxy Coated Stainless Steel Aluminum







HIGH PRESSURE PUMPS

PERFORMANCE & SPECIFICATIONS

Air-Powered Single Diaphragm High Pressure Metallic Pumps deliver discharge pressure twice the inlet pressure, up to 250 PSI (17.2 BAR). Designed for filter press feed and applications requiring higher discharge pressures. Available in Aluminum, Cast Iron and Stainless Steel with various elastomer options. Equipped with elastomeric seals and components that are compatible with the various chemicals normally expected to be found in natural gas.

The Blagdon B25 and B50 High Pressure Pumps provide enhanced power in applications where pressure is paramount and flow rate is an issue. Using two air chambers to double the air per stroke, these pumps achieve discharge pressure up to 238 PSI (16 Bar) with flow rates as high as 28 GPM (106 LPM) for B25 and as high as 92 GPM (350 LPM) with B50.



Maximum Flow Control

High pressure capabilities allow for optimum control



Heavy Duty

Bolted construction and made with robust materials



Unique Orientation

SH2-M Metallic Performance

PORTING

Single end discharge and suction available



Reliability

Tested to ensure the long lasting performance



MAX FLOW

• 120 GPM (454 LPM)

SCEM (M3/hr)

Non-Freezing, Non-Stalling

Patented air valve will never unexpectedly stop

CAPACITY

AIR END

Performance based on water at ambient temperature

€x) (€

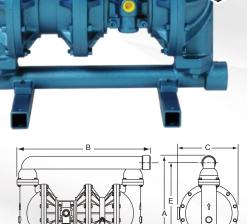
WET END

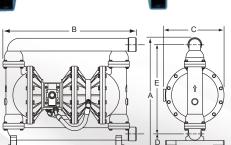
Aluminum

Cast Iron











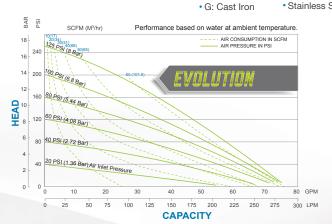
EH2-M / GH2-M Metallic Performance & CE



MAX FLOW • 74 GPM (280 LPM)

PORTING NPT

AIR END WET END • E: Aluminum Cast Iron



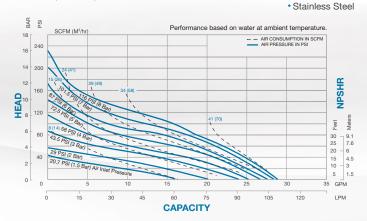


B25 Metallic Performance



MAX FLOW PORTING AIR END • 28 GPM (106 LPM) • NPT / BSP

WET END Aluminum Aluminum



B50 Metallic Performance

€x (€

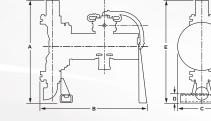
MAX FLOW • 92 GPM (350 LPM)

PORTING • NPT / BSP

AIR END Aluminum WET END Aluminum Stainless Steel

Performance based on water at ambient temperature

CAPACITY



SPECIFICATIONS													
	А	В	С	D	Е			Pipe	Displacement Per Stroke	Max	Max	Max Fluid	Max Air/ Gas Inlet Pressure
PUMP MODELS	Height	Width	Depth	Bottom of Base of: Suction	e to Center Line Discharge		Connection Style	Size		Flow Per Minute	Solids Handling	Discharge Pressure	
	inches (mm)	inches (mm)	inches (mm)	inches (mm)	inches (mm)			inch (mm)	gal (liter)	gal (liter)	inch (mm)	psi (bar)	psi (bar)
EH2-M/GH2-M	25 (635)	25.81 (656)	11.75 (298)	2.18 (56)	25 (635)		2" NPT	2 (50)	.36 (1.4)	74 (280)	.25 (6)	250 (17)	125 (8.6)
SH2-M	18.56 (471)	26.87 (683)	11.37 (289)	11.47 (291)	5.34 (136)		2" NPT	2 (50)	.30 (1.1)	120 (454)	2 (50)	250 (17)	125 (8.6)
B25	15.94 (405)	18.27 (464)	11.02 (280)	1.97 (50)	14.95 (380)		1" BSP	1 (25)	.13 (.5)	28 (106)	.13 (3)	232 (16)	117 (8)
B50	24.41 (620)	28.70 (729)	13.07 (332)	3.66 (93)	22.95 (583)		2" BSP	2 (50)	.42 (1.9)	92 (350)	.25 (6)	232 (16)	117 (8)

Dimensional Tolerance: ±1/8" (± 3mm) • See service manual for complete specifications.



ACCESSORIES

ALL OF THE ITEMS YOU NEED TO COMPLETE YOUR SYSTEM



Enhanced Pump Performance and **Productivity**



Extended MTBF (Mean Time Between Failure)



Protection of Ancillary Equipment in Fluid Flow Path



Enhanced Safety and Environmental Responsibility



Precision Pump Control and Air Efficiency

Liquid Level Control

Automatic, float actuated control unit that opens and closes the air supply to your AODD pump, especially useful in sump and liquid transfer situations.

LEARN MORE ON PAGE 66

Water Separator

This point-of-use water separator is designed to remove 99% of the water, rust and other contaminants commonly present in compressed air lines. Clean, dry air enhances the life and performance of pneumatically-driven equipment.

Electronic Speed Control

Provides accurate control of variable flow rates, from zero flow to maximum. Operates on 110 or 220VAC with on-board, single turn potentiometer or automatic mode for remote control using the optional 4-20 mA input terminal.

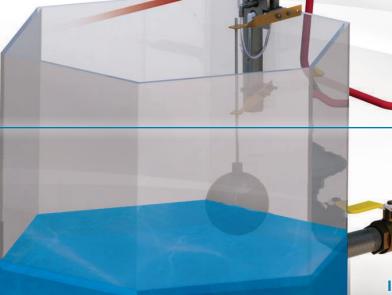
Air Filter / Regulator -

Provides clean, dry air to your AODD pump. The SANDPIPER Filter / Regulator line offers modular convenience for easy installation and service.

LEARN MORE ON PAGE 64

Stroke Counter / Batch Control

Offers performance and repeatability with an interfaceable electronic control to program repetitive diaphragm pump operations. The complete system requires the Batch Controller, the Pulse Output Kit & the Air Line Solenoid.



Inlet Stabilizer

Blacoh® Sentry® Inlet Stabilizers reduce pressure fluctuations and assist pump head filling during each inlet stroke. In high suction applications, stabilizer will momentarily maintain the flow of the accelerated fluid.

-Air Line Solenoid

Pulsation

Suppressor

Dampener / Surge

Provides virtually pulse-

free discharge flow, for

steadier pressure with

series is self-charging

and self-venting.

less system vibration and noise. Our Tranquilizer®

LEARN MORE ON PAGE 61

Provides automatic on/
off operation of air-driven
equipment. 110/120VAC and
220/240VAC (50/60 hertz) kits
operate with the SANDPIPER
or customer's control units.
12VDC and 24VDC kits
operate with customersupplied controls only.

Muffler

Rugged polymer or metallic housing that work as effective sound dampening for SANDPIPER pumps, meeting OSHA dBA requirements.

Pulse Output Kit

Offered in a wide variety of sizes and voltages. These controls interface with the SANDPIPER Batch Controller, or your own process controls (PLCs). Available in kits for field installation, or factory built into a new pump.

Leak Detection

Electronic versions provide a signal via warning lights, an audible alarm, and the pump can be shut down.

Visual versions simply have a sight tube that fills with fluid if a diaphragm breaks.

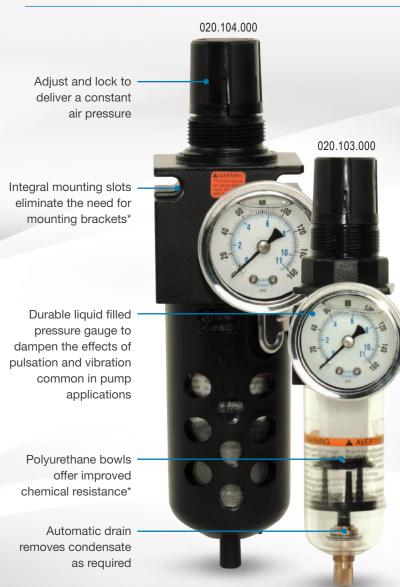
Mechanical leak detection opens an air valve, which activates a customer supplied solenoid to trigger a signal. For use with the Containment Duty Spill Containment SANDPIPER pumps only.





FILTER REGULATORS

RELIABLE FILTER / REGULATORS SPECIFICALLY DEVELOPED FOR AIR OPERATED DOUBLE DIAPHRAGM PUMPS





Lower Operating Costs Reduced air consumption and less compressor demand

Extended Pump Life Reduced stress on wear components by proportioning the air pressure

Engineered to optimize pump performance

Protect Efficiently removing air line solids and liquid contaminants to protect air valve

Safe Operation Operate at the lowest required air pressure

Compact & Convenient Filter and regulate your air supply in a single, easy to install unit

Precise Pump Control Easy air pressure adjustment to vary the pump's flow rate and operation speed

Lubricators

In applications with very dry air supplies or where nitrogen is being utilized to operate the pump, lubrication of the compressed air supply is required. For these situations, we offer a complete line of Lubricators that easily connect to our Filter / Regulators.

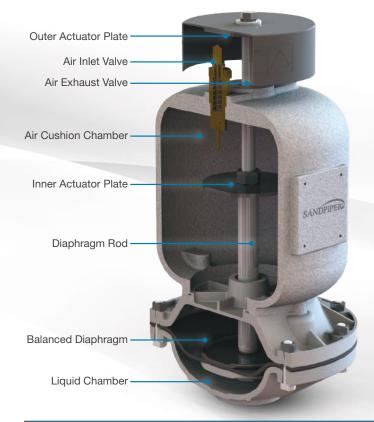
^{*} Up to ¾" units.

TECHNICAL SPECIFICATIONS													
Part Number	Port Size	Max Flow (SCFM)	Description	Max Inlet Pressure	Regulating Pressure Range	Replacement Filter Element Part Number	Lockout Valve Part Number	Mounting Bracket Kit Part Number	Replacement Pressure Gauge Part Number	Lubricator Part Number			
020.103.000	1⁄4" NPT	35	Filter/Regulator w/ gauge (20 micron)	150 psi (10.2 bar)	0 -125 psi (0 - 8.6 bar)	020.049.004	020.049.002	020.049.007	020.101.000	020.113.000			
020.104.000	½" NPT	80	Filter/Regulator w/ gauge (40 micron)	150 psi (10.2 bar)	0 -125 psi (0 - 8.6 bar)	020.050.004	020.050.002	020.050.007	020.101.000	020.114.000			
020.105.000	34" NPT	150	Filter/Regulator w/ gauge (40 micron)	150 psi (10.2 bar)	0 -125 psi (0 - 8.6 bar)	020.051.004	020.051.002	020.051.007	020.102.000	020.115.000			
020.106.000	1" NPT	250	Filter/Regulator w/ gauge & mounting bracket kit (40 micron)	175 psi (12.1 bar)	0 -125 psi (0 - 8.6 bar)	020.052.004	020.052.002	020.052.007	020.102.000	020.116.000			
020.107.000 for AirVantage	1" NPT	250	Filter/Regulator w/ gauge & mounting bracket kit (20 micron)	175 psi (12.1 bar)	0 -125 psi (0 - 8.6 bar)	020.070.004	020.052.002	020.052.007	020.102.000	Not Recommended			

Temperature Ratings: 40°F to 125°F (4.4°C to 52°C).

NO SUPPRESSOR WITH SUPPRESSOR

TRANQUILIZER



TRANQUILIZERS®

PULSATION DAMPENERS / SURGE SUPPRESSORS

Virtually surge-free flows

Steadier pressures



Less vibration and noise



Simple installation



Automatically self-charging and self-venting



Longest life balanced diaphragm



Protects other system components







т.	TECHNICAL SPECIFICATIONS								Available Wetted Materials								
''	CHINICAL	SPECIFI	CATIONS	'				Chamber					Diaphragm				
	Model	Desc.	Cert.	Air Inlet Size	Liquid Inlet Size	Height (mm)	Diameter (mm)	Aluminum	Stainless Steel	Cast Iron	Alloy C	Neoprene	Nitrile	FKM	EPDM	Neoprene PTFE Overlay	Santoprene®
	TA1	1" pumps	®(€	1/4" NPT (external thread)	1" NPT	13.625"-15.125" (346mm-384mm)	9" (229mm) NPT(F)	√	√	X	X	✓	√	√	√	√	√
ve)	TA25	1" pumps	©C€	1/4" NPT (external thread)	1" BSP (Tapered internal thread)	13.625"-15.125" (346mm-384mm)	9" (229mm) NPT(F)	V	√	X	X	V	V	√	V	V	√
Tranquilizers (Featured Above)	TA1½	1" & 1½" pumps	®(€	1/4" NPT (external thread)	1½" NPT (Internal thread)	19.875"-21.325" (505mm-543mm)	10.5" (267mm) NPT(F)	V	√	√	√	✓	V	√	√	√	√
eature	TA40	1" & 1½" pumps	®(€	1/4" NPT (external thread)	1½" BSP (Tapered internal thread)	19.875"-21.325" (505mm-543mm)	10.5" (267mm) NPT(F)	√	√	√	√	√	V	√	√	√	√
zers (F	TA2	1½" & 2" pumps	②(€	1/4" NPT (external thread)	2" NPT (Internal thread)	20.25"-23.1875" (514mm-589mm)	12.5" (317mm) NPT(F)	V	√	√	V	V	√	√	√	√	√
ınquiliz	TA50	1½" & 2" pumps	®(€	1⁄4" NPT	2" BSP (Tapered internal thread)	20.25"-23.1875" (514mm-589mm)	12.5" (317mm) NPT(F)	V	√	√	√	√	V	√	√	√	√
Tra	TA3	3" pumps	®(€	1⁄4" NPT	3" 150# ANSI or 3" NPT (Internal)	20.125"-23.125" (511mm-587mm)	16.1875" (411mm) NPT(F)	V	√	√	X	✓	√	√	V	V	√
	TA80	3" pumps	®(€	1⁄4" NPT	3" BSP (Tapered int.) OF 80mm DIN	20.125"-23.125" (511mm-587mm)	16.1875" (411mm) NPT(F)	V	√	√	X	V	V	√	√	√	V
SIC	DA05	½" pumps	C€	1⁄4" NPT	½" NPT	7.468" (190mm) WIDTH: 5.625" (143mm)	6.9375" (176mm)	Aluminum, Stainless Steel & Polypropylene									
Dampeners	DA07	3/4" pumps	C€	1⁄4" NPT	34" NPT	7.718" (196mm) WIDTH: 5.625" (143mm)	6.9375" (176mm)	Polypropylene only									
Da	DA10	1" pumps	C€	1⁄4" NPT	1" NPT	11.718" (298mm) WIDTH: 5.625" (143mm)	7.5" (191mm)	Polypropylene only									





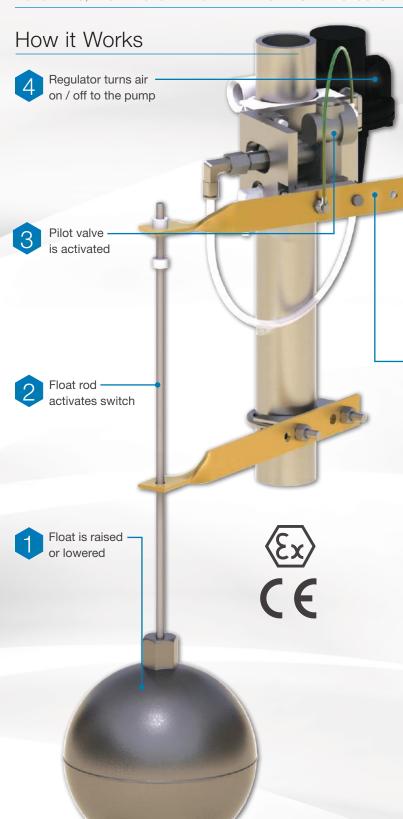
All of the TA models are CE and ATEX • Dimensional Tolerance: ±1/8" (± 3mm), • See service manual for complete specifications

LIQUID LEVEL CONTROL

ADDITIONAL ACCESSORIES

AUTOMATIC, FLOAT ACTUATED UNIT THAT OPENS AND CLOSES AIR SUPPLY TO YOUR AODD PUMP

OTHER ACCESSORIES THAT SANDPIPER OFFERS TO HELP COMPLETE YOUR PROCESS



Pneumatic No electrical power required

Adjustable
Operating range Operating range from a few inches to 9 ft (2.7 m)

Simple Facuto in Easy to install & operate

Versatile Quick reversible operation

Universal Can be used with all AODD pumps

Stainless steel float & connecting rod

Reversible Operation

Operation can be reversed by installing the top float rod bracket in the opposite direction from position shown.

Standard Operation

High Level = On, Low Level = Off

Reverse Operation

High Level = Off, Low Level = On

Common Applications



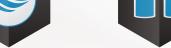
Fluid Transfer





Tank Filling







The **ONLY** CSA Certified point-of-use natural gas regulators available on the market today!

A safety port has been added to help prevent escaping gas in the case of a regulator diaphragm rupture. Simply add a pipe or hose fitting to the unit to divert or reclaim any natural gas.

SANDPIPER Natural Gas Pressure Regulators are safe, reliable and environmentally friendly. These exclusive CSA Certified and UL Listed point-of-use regulators provide superior regulation and excellent stability. All regulators include a durable glycerin filled pressure gauge to dampen the effects of pulsation and vibration common in pump applications.

TECHNICAL SPECIFICATIONS													
Part Number	Port Size	Max Flow (SCFM)	Pump Models	Max Inlet Pressure	Regulating Pressure Range	Temperature Rating	Materials of Construction						
020.057.000	1/4" NPT	25	G05	250 PSI (17.2 BAR)	0 - 120 PSI (0 - 8.3 BAR)	0°F - 160°F (-17.8°C - 71.1°C)	Aluminum, Brass, Plated Steel, Nitrile						
020.058.000	1/2" NPT	110	G1F, G10F	400 PSI (27.6 BAR)	0 - 125 PSI (0 - 8.6 BAR)	-40°F - 200°F (-40.0°C - 93.3°C)	Zinc, Aluminum, Plated Steel, Nitrile, Brass						
020.059.000	3/4" NPT	110	G15, G20	400 PSI (27.6 BAR)	0 - 125 PSI (0 - 8.6 BAR)	-40°F - 200°F (-40.0°C - 93.3°C)	Zinc, Aluminum, Plated Steel, Nitrile, Brass						
020.060.000	3/4" NPT	260	G20F, G30	400 PSI (27.6 BAR)	0 - 125 PSI (0 - 8.6 BAR)	-40°F - 200°F (-40.0°C - 93.3°C)	Zinc, Aluminum, Plated Steel, Nitrile, Brass						

Diaphragm Material: Nitrile elastomer with polyester fabric Note: The use of a relief valve is recommended for these products in accordance with NFPA 58. All gauge ports & vent ports are tapped 1/4" NPT
Replacement pressure gauge part number: 020.061.000

Natural Gas Filters

SANDPIPER Natural Gas Filters provide superior particulate protection from systems with high concentrations of solid contaminants. These point-of-use filters are built from durable and lightweight aluminum, feature very high dirt-holding capacity and offer lower pressure drop than other comparable products.

TECHNICAL	TECHNICAL SPECIFICATIONS													
Part Number	Port Size	Max Flow (SCFM)	Pump Models	Replacement Filter Element	Max Inlet Pressure	Max Temperature	Materials of Construction							
020.062.000	1/4" NPT	25	G05	020.065.000			Aluminum Housing,							
020.063.000	1/2" NPT	42	G1F	020.065.000	500 PSI (34 BAR)	175°F (80°C)	Nitrile Seals, Molded Urethane							
020.064.000	3/4" NPT	133	G10F, G15, G20, G20F, G30	020.066.000			End Seals							



Stainless Steel manual drain 1/8" NPT Micron Rating: 3

DIAPHRAGM SELECTION

GET THE MAXIMUM LONGEVITY OUT OF YOUR SANDPIPER PUMP BY SELECTING THE APPROPRIATE DIAPHRAGM FOR YOUR APPLICATION

The Synthesis Diaphragm

A premium one-piece diaphragm that creates optimum conditions for high performance pumping and reliability. Expect longer service life and reduced maintenance costs with this premium diaphragm.



Temperature Range 14°F to 176°F (-10°C to 80°C)



Torque-Free Installation Simply hand turned into position



No Center Hole for superior leak free operation and installation





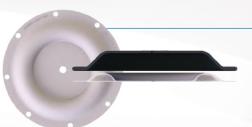




Start-Up Pressure of less than 10 PSI on SANDPIPER Synthesis Diaphragm vs. 25 PSI or more on competitive diaphragms



One-Piece Composite Design with 100% PTFE on the wetted side bonded to a Nitrile Rubber Backer (NRB) with an integrated diaphragm plate

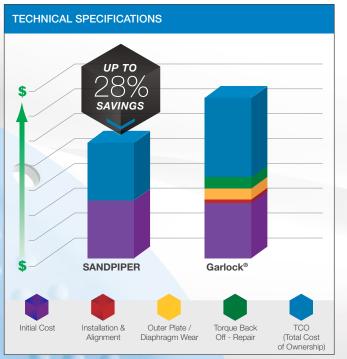


Two-piece Diaphragm

The standard PTFE diaphragm offered with SANDPIPER pumps is the two-piece diaphragm—a cost effective solution for a large variety of pumping applications. Some of the main features of this diaphragm include:

- · Wide range of pressure capabilities
- Variety of materials available
- Proven performance over years of testing

Please consult your distributor or factory experts for additional details.



Garlock® is a registered tra	adename of EnPro Industries, Inc.
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TECHNICAL SPECIFICATIONS									
Part Number (Conversion Kit)*	Inner Diaphragm Plate**	Where Used	Wet End Kit	Where Used					
286.112.000 (475.250.000)	612.218.330	SB1	476.034.659	SB1-A					
286.112.000 (475.250.000)	612.218.330	S1F Metallic	476.194.659	S1F Metallic					
286.113.000 (475.254.000)	612.217.150	S15 Metallic	476.182.659	S15 Metallic					
286.114.000 (475.255.000)	612.219.150	HDB1½	476.036.659	HDB1½					
286.114.000 (475.256.000)	612.227.150	S15 Non-Metallic	476.255.659	S15 Non-Metallic					
286.114.000 (475.256.000)	612.227.150	S20 Non-Metallic	476.257.659	S20 Non-Metallic					
286.115.000 (475.258.000)	612.220.150	S1F Non-Metallic	476.197.659	S1F Non-Metallic					
286.116.000 (475.251.000)	612.221.330	S05, S07, S10 Non-Metallic	476.202.659	S05 Non-Metallic					
286.116.000 (475.251.000)	612.221.330	S05 Metallic	476.199.659	S05 Metallic					
286.118.000 (475.252.000)	612.215.330	HDB2	476.043.659	HDB2					
286.118.000 (475.253.000)	612.214.150	S20 Metallic	476.042.659	S20 Metallic					

*Conversion Kits include (2) Diaphragms w/Studs and (2) Inner Plates. **Order this Inner Diaphragm Plate when ordering the One-Piece Diaphragm.

	MATERIAL	. SELECTIOI	N GUIDE					
	Diaphragm Material	Purchase Price	Flex Life	Abrasion Resistance	Chemical Resistance	Temp. Limitations	Temp. Max. Operating	Temp. Min. Operating
	EPDM	✓	√	✓	✓	+	280°F / 138°C	-40°F / -40°C
	FKM	ļ	X	ļ	+	+	350°F / 177°C	-40°F / -40°C
	Hytrel®	✓	+	+	✓	✓	220°F / 104°C	-20°F / -29°C
	Neoprene	+	+	✓	X	✓	200°F / 93°C	-10°F / -23°C
	Nitrile	+	+	✓	1	✓	190°F / 88°C	-10°F / -23°C
	Santoprene®	+	+	+	+	+	275°F/135°C	-40°F/-40°C
/	Urethane	+	✓	ļ	X	!	150°F / 66°C	32°F / 0°C
	PTFE Synthesis	ļ	√	!	+	!	176°F / 80°C	14°F / -10°C
	PTFE Two-Piece	!	ļ	X	+	✓	220°F / 104°C	-35°F / -37°C



Santoprene® is a registered tradename of Exxon Mobil Corp. Hytrel® is a registered tradename of E.I. DuPont.



GENUINE PARTS SERVICE KITS

SANDPIPER HAS A SOLUTION WHETHER YOUR AODD PUMP NEEDS QUICK, URGENT CARE OR A FULL SERVICE REPAIR

Repair it Once, Repair it Right



Everything in One Place

All of the parts you need to get running again



Reduce Frequency of Repairs

Reliable replacement parts are guaranteed to last

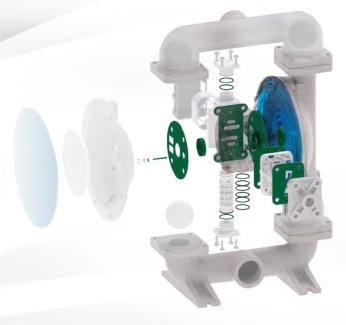


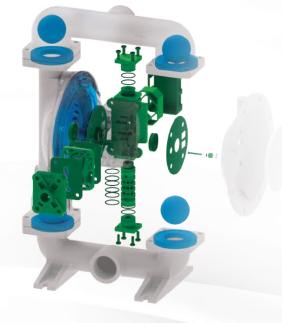
Increase Uptime

Maximize your productivity with fewer repairs









Wear Kits

Wet End Wear Kit:

Diaphragms

Air End Wear Kit:

- Gaskets
- O-rings
- Seals
- Lubricant

Repair Kits

Wet End Repair Kit:

- Diaphragms
- Balls
- Seats

- Air Valve Sleeve & Spool
- Gaskets
 - Lubricant
- Retaining Rings

Air End Repair Kit:

- Seals
- O-rings
- Pilot Valve Assembly



SANDPIPER is pleased to offer you the trusted Genuine Parts you need, sold in convenient kits or individual parts. Whatever you need to make pump repairs, we have you covered.



USE ONLY GENUINE SANDPIPER PARTS

All certification, standards, guarantees & warranties originally supplied with this pump will be invalidated by the use of service parts not identified as "Genuine SANDPIPER Parts."



SANDPIPER'S EXTERNALLY SERVICEABLE AIR DISTRIBUTION SYSTEM (ESADS+PLUS)

SANDPIPER's Externally Serviceable Air Distribution System (ESADS) allows for quick and easy access to the pilot and spool valves without removing the pump from service, maximizing up time!

SANDPIPER

VS

COMPETITORS



The Air Motor's Pilot Valve is the Most Often Serviced Part on an AODD Pump



5 MINUTES FOR MAINTENANCE / CLEANING

Accomplished in minutes without removing pump from service by removing only 4 bolts



Saves you money by minimizing downtime



55 MINUTES OR LONGER FOR MAINTENANCE / CLEANING

The air valve components can only be accessed by removing the pump from service and taking it entirely apart



Costs you money due to extended downtime



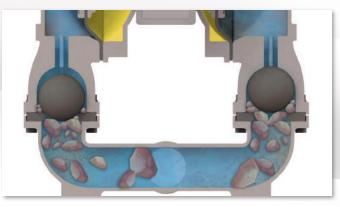


SANDPIPER VS COMPETITION

HEAVY DUTY FLAP VALVE PUMP

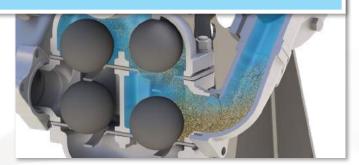


Large solids easily pass through pump

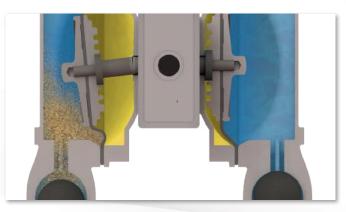


Large solids cannot pass through pump, affecting operation

HEAVY DUTY BALL VALVE PUMP

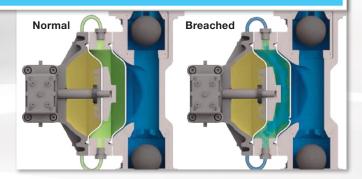


Settling solids easily pass through pump

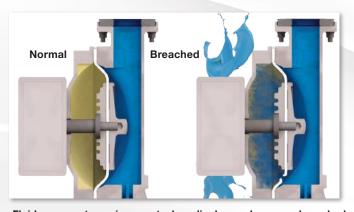


Settling solids collect inside pump, causing damage & affecting operation

CONTAINMENT DUTY PUMP



Contains fluid when diaphragm becomes breached



Fluid escapes to environment when diaphragm becomes breached.

Contact Your Local Distributor to Place Your Order:



Warren Rupp, Inc. | A Unit of IDEX Corporation 800 North Main Street, Mansfield, OH 44902 USA Phone: 419.524.8388 | Fax: 419.522.7867 SANDPIPERPUMP.COM



