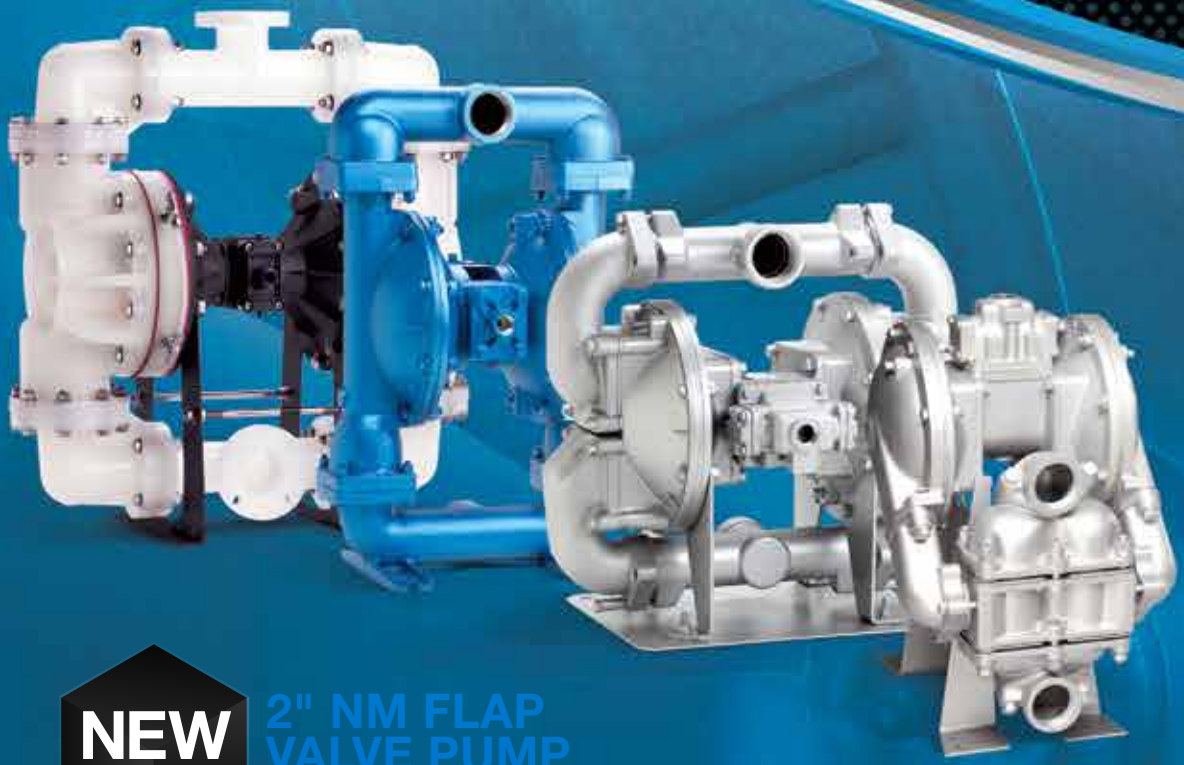
ENGINEERED PUMPING SOLUTIONS WITH MORE WAYS THAN ONE

SANDPIPER®

A WARREN RUPP, INC. BRAND | SANDPIPERPUMP.COM



NEW PRODUCT

2" NM FLAP VALVE PUMP

SEE PAGE 34

50 1965 2015 - Rugged from the Start -

IDEX

ENGINEERED PUMPING SOLUTIONS WITH MORE WAYS THAN ONE

For nearly 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.
LEARN MORE AT SANDPIPERPUMP.COM

Certified Quality

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

GOST-R
Certified to Sell Products into Russia

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

Global Coverage
Contacts in 75 Countries and Over 1 Million Pumps Sold

World Headquarters
800 N. Main Street
Mansfield, Ohio 44902
USA

Pump Technology
Air Operated Double Diaphragm Pumps (AODD)

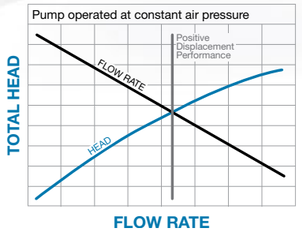
Table of Contents

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

AODD VS. OTHERS

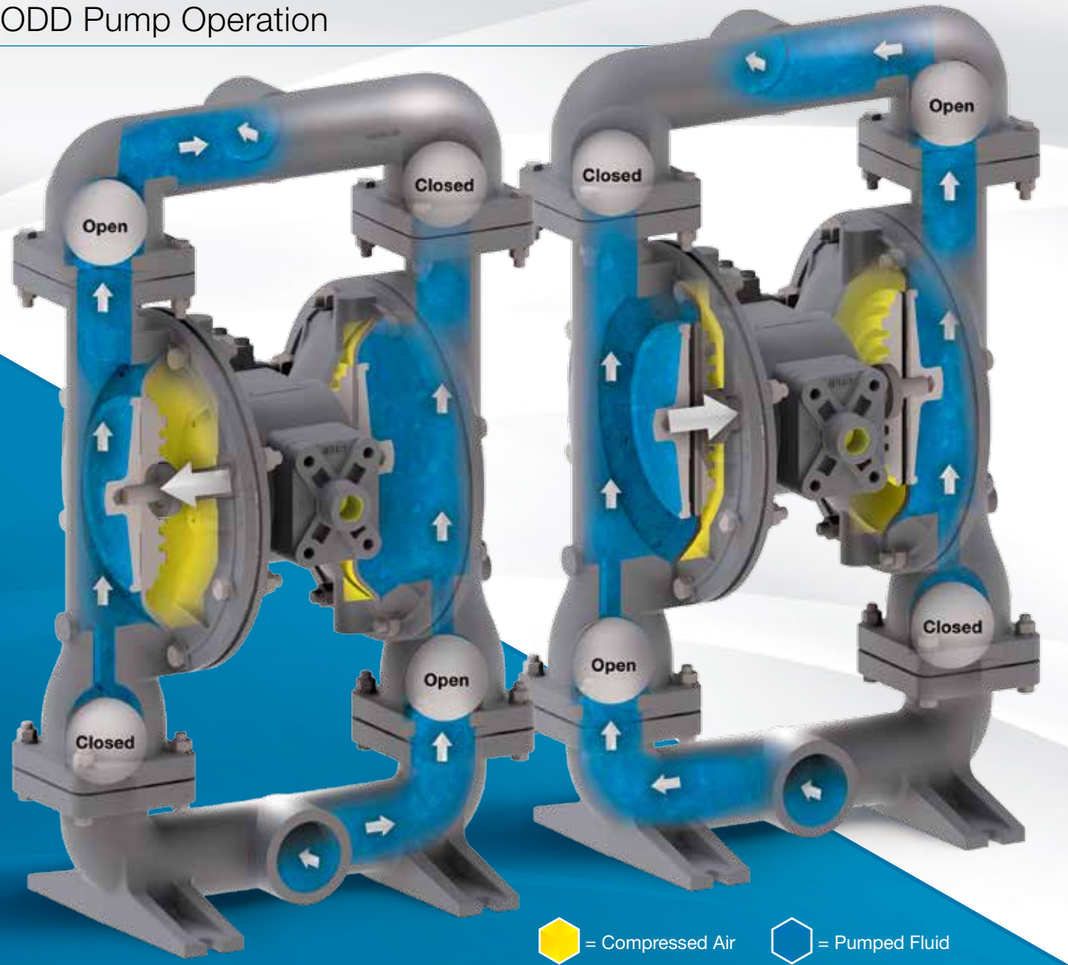
	PUMPING PRINCIPLE						
		Kinetic Centrifugal	Positive Displacement				
	AODD	Centrifugal	Lobe	Gear	Progressive (Screw)	Peristaltic (Hose)	Piston/ Plunger
Variable Flow & Head Control *(inherently adjustable)*	✓	✓	✓	✓	!	!	✓
Deadheads Safely *(at zero energy consumption)*	✓	!	!	!	!	!	!
Dry-Running	✓	X	X	X	X	X	X
Dry-Priming *(lift installations)*	✓	X	X	✓	X	X	!
No Installation Alignment Required	✓	X	X	X	X	X	X
No Electrical Installation Required	✓	X	X	X	X	X	X
Portability	✓	✓	!	!	!	✓	!
Submersible	✓	!	X	X	X	X	X
Sealless *(no packing or mechanical seals)*	✓	!	!	!	!	!	!
No Slip *(thin liquids)*	✓	✓	!	!	!	✓	!
Cavitation Tolerance *(low NPSHa)*	✓	X	!	!	✓	!	!
Low Shear & Degradation	✓	X	✓	✓	!	!	!

✓ = Suitable ! = Limitations X = Not Recommended

OPERATION & INSTALLATION

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

AODD Pump Operation



= Compressed Air = Pumped Fluid

1 Suction Cycle

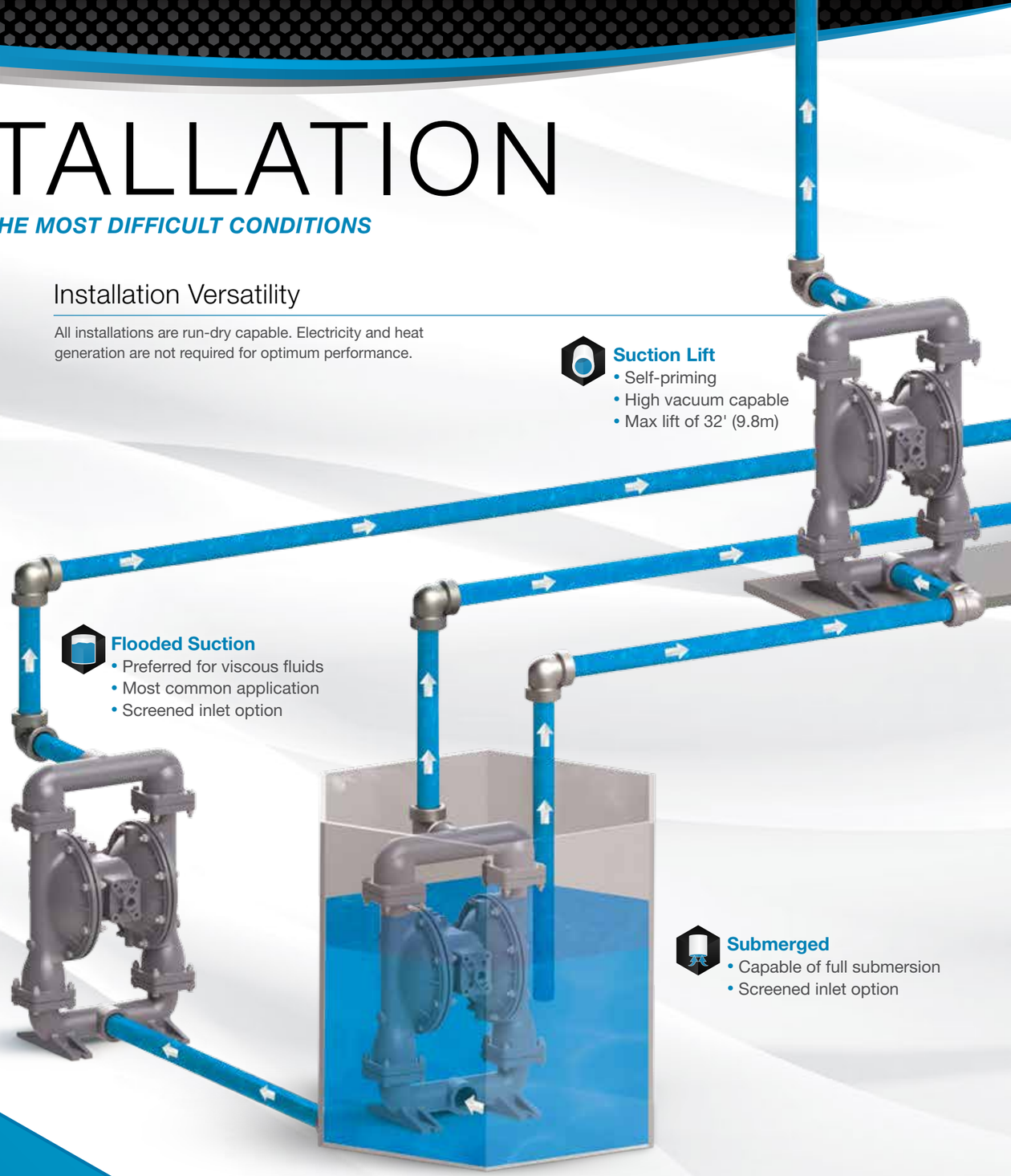
Compressed air fills left inner chamber, causing the opposing diaphragm to create suction, lifting the lower valve ball, pulling in fluid at inlet. Simultaneously, the left chamber is in “Discharge” cycle.

2 Discharge Cycle

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

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)

Flooded Suction
- Preferred for viscous fluids
- Most common application
- Screened inlet option

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

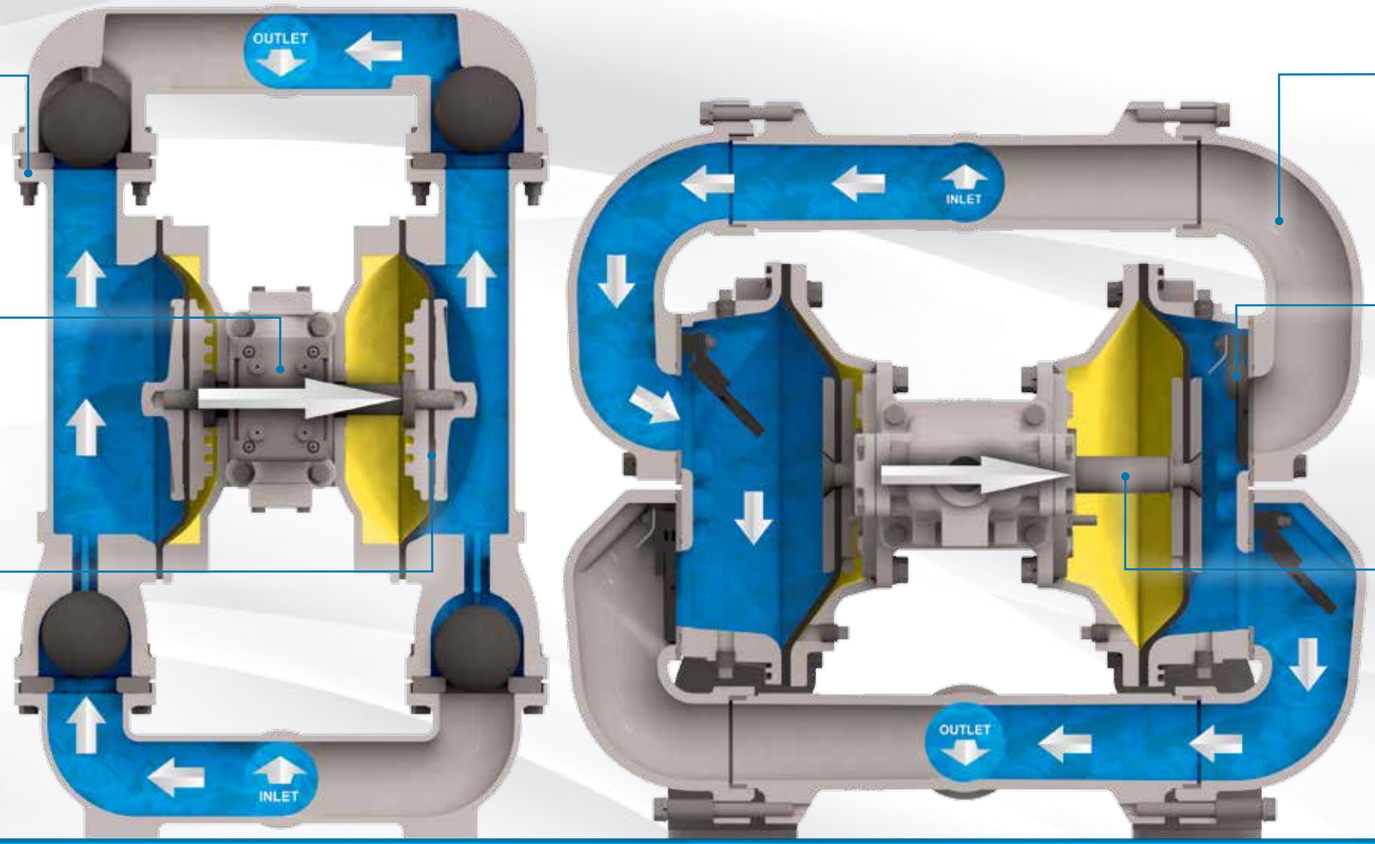
All Bolted Construction
Superior reliability is defined by our all bolted pump construction that allows for instant part alignment, uniform torquing of seals, and high pressure capabilites

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 44

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
Hinge pads exert positive pressure on the flaps allowing the pump to operate in virtually any position, helping deliver superior suction lift and flow rates

Flap Check Valve
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) Stainless Steel diaphragm connecting rod is guaranteed not to yield under tension, compression, or bending

EXCLUSIVE SANDPIPER FEATURE

ESADS+Plus Air Distribution System

Independent of the pilot valve position, the cross-drilled pressure ports in the main directional air valve spool provide a pneumatic bias of the spool at either end of travel. This is accomplished by directing (inner) chamber pressure to the end of the spool, boosting and sustaining pilot pressure until point-of-shift of the pilot valve.

Externally Serviceable Air Distribution System Includes:

- Complete in-line serviceability
- Lube free, consistent restarts
- On-Off-On reliability guaranteed
- PATENTED cross-drilled pressure ports

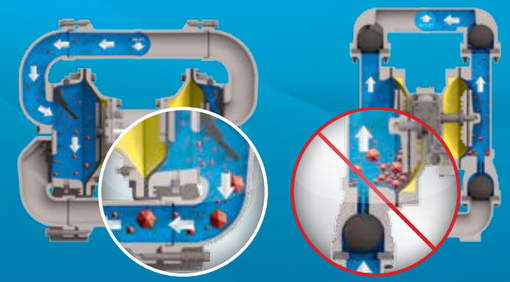
SCAN TO WATCH THE ESADS+PLUS VIDEO
SANDPIPERPUMP.COM/ESADSVIDEO

EXCLUSIVE SANDPIPER FEATURE

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



Bottom Discharge | 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

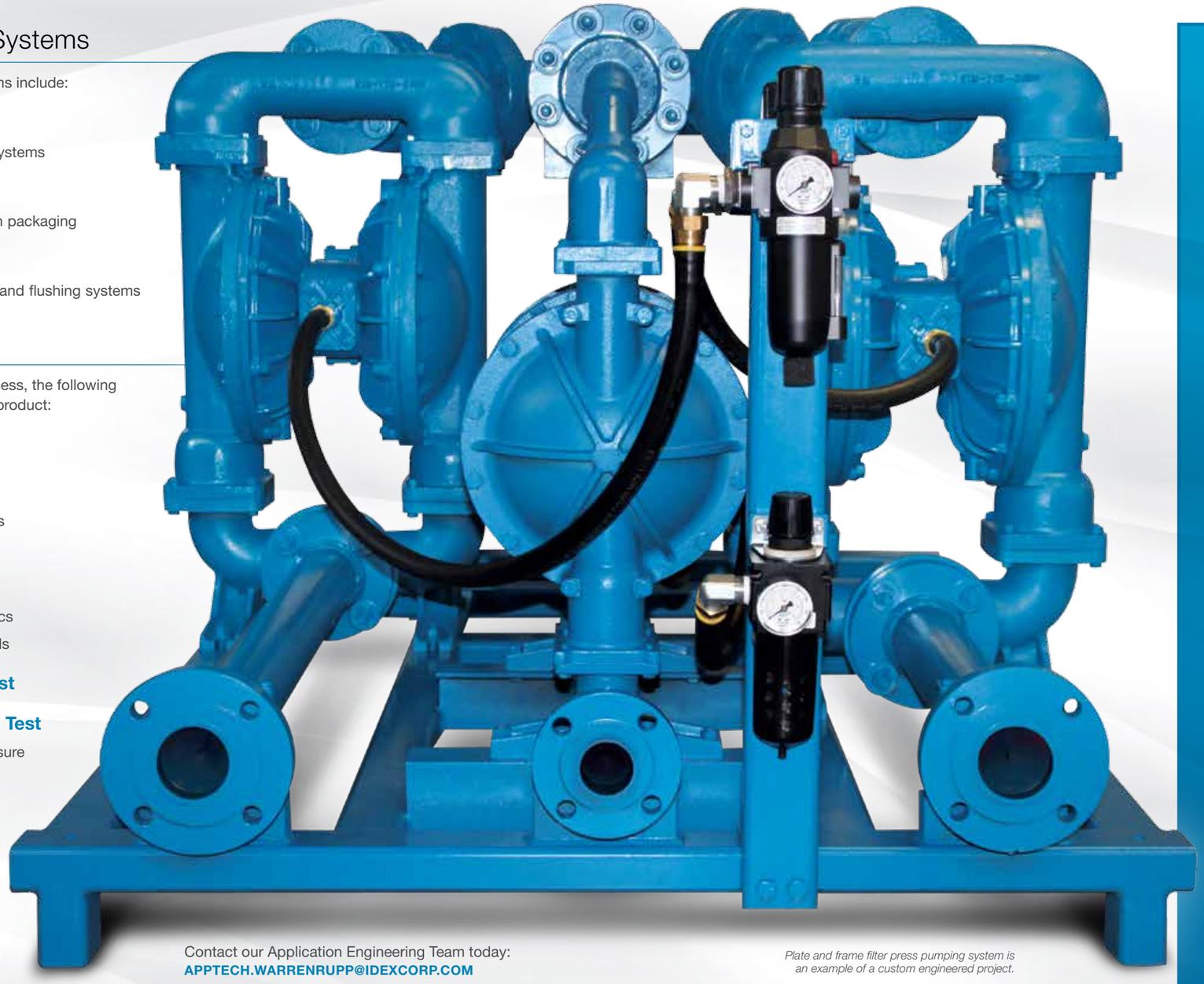
3. Vacuum Characteristics Test

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



Contact our Application Engineering Team today:
APPTECH.WARRENRUPP@IDEXCORP.COM

Plate and frame filter press pumping system is an example of a custom engineered project.

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

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

Chemical
Applications include packaging, drum / tote, processing, injection, mixing and much more

Coatings
Applications include pigment milling, paint filtration, mixing tanks, filling machines, tank transfer, low shear requirements and much more

Construction
Applications include portable utility, oil transfer, fuel transfer, site dewatering, seal coating, road striping, municipal utility and much more

Food Processing
Applications include food packaging, product transfer, wine tank over, FDA compliance, low degradation requirements, wine fermentation / pumpover and much more

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

Mining
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

Wastewater
Applications include municipal portable utility, neutralize wastewater, waste activated sludge, return activated sludge, thickened sludge, belt press feed and much more

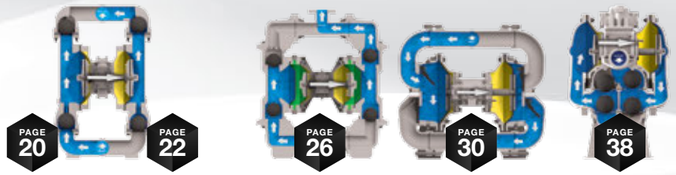
SCAN FOR A COMPLETE LIST OF MARKETS & APPLICATIONS
SANDPIPERPUMP.COM/MARKETS

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 CONFIGURATIONS		Standard Duty Ball Valve · Metallic	Standard Duty Ball Valve · Non-Metallic	Containment Duty Ball Valve	Heavy Duty Flap Valve	Heavy Duty Ball Valve
Specifications	Suction / Discharge Port Sizes		¼" through 3"	¼" through 3"	1" through 3"	1" through 4"	1" through 4"
	Max Flow Rate Per Minute		238 Gal. (901 L)	238 Gal. (901 L)	260 Gal. (988 L)	260 Gal. (988 L)	260 Gal. (988 L)
	Max Discharge Heads		289' (88m) of water @125psi	231' (70m) of water @100psi	289' (88m) of water @125psi	289' (88m) of water @125psi	289' (88m) of water @125psi
	Max Displacement Per Stroke		0.94 Gal. (3.56 L)	0.9 Gal. (3.41 L)	1.25 Gal. (4.73 L)	1.62 Gal. (6.15 L)	1.8 Gal. (6.8 L)
	Max Dry Prime		20' (6m)	20' (6m)	18' (5.5m)	24' (7m)	20' (6m)
	Max Solids Handling		.38" (10mm)	.71" (18mm)	.44" (10mm)	3" (75mm)	.88" (22mm)
Fluid Characteristics	Water		+	+	+	+	+
	Suspended Solids		+	✓	✓	+	+
	Non-Suspended Solids		!	X	X	+	!
	Line Size Solids		X	X	X	+	X
	Sludge / Slurry		✓	!	!	+	+
	High Viscosity (Flowable Fluids)		✓	✓	✓	✓	+
	Erosion / Abrasive Fluids	High	✓	!	!	+	+
		Moderate	✓	!	!	+	+
		Low	+	✓	✓	+	+
	Corrosion		✓	+	+	✓	✓
Installation	Permanent		✓	✓	✓	+	+
	Portable		+	+	+	+	+
	Containment / Prevention		!	!	+	!	!
	Flooded Suction		✓	✓	✓	✓	+
	Suction Lift		✓	✓	✓	+	✓
	Submerged		✓	!	!	✓	✓
Duty	Intermittent / On-Demand		+	+	+	+	+
	Continuous		✓	✓	✓	✓	+

+ = Best Type ✓ = Suitable ! = Limitations X = Not Recommended

Pump Performance

1 Select Flow Rate (GPM)
Example: 80 GPM

2 Determine Discharge Head (PSI)
Example: 45 PSI

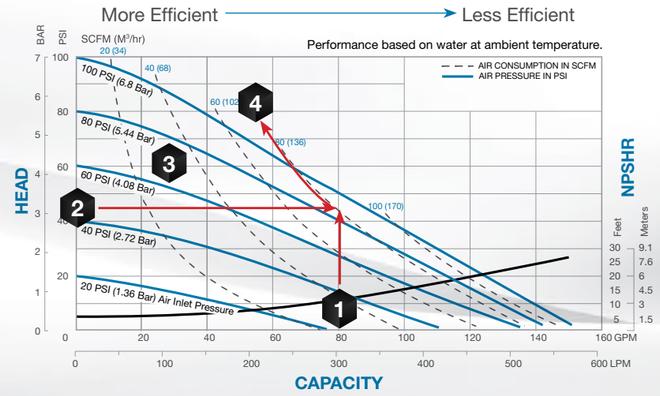
3 See Inlet Air Pressure (PSI)
Example: 60 PSI

4 See Air Consumption (SCFM)
Example: 80 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

2" Curve Example: 80 GPM, 45 PSI = 80 SCFM.

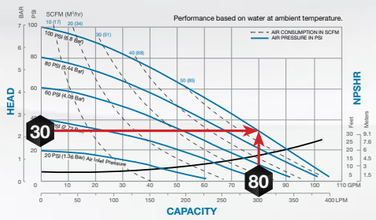


Sizing to Extend Mean Time Between Failures

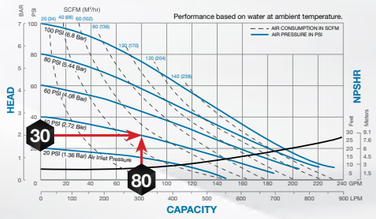
Pumping requirements (flow & head) for most applications can be met by multiple sizes of pumps. Talk to SANDPIPER'S application engineers to assist you with a size selection which best fits your total cost of ownership budget. An appropriately sized-up pump will lower the consolidated initial investment, 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: **APPTECH.WARRENRUPP@IDEXCORP.COM**

1½" Standard Duty
30 PSI, 80 GPM = 90 SCFM



3" Standard Duty
30 PSI, 80 GPM = 45 SCFM



Additional Resources

Technical Resources

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

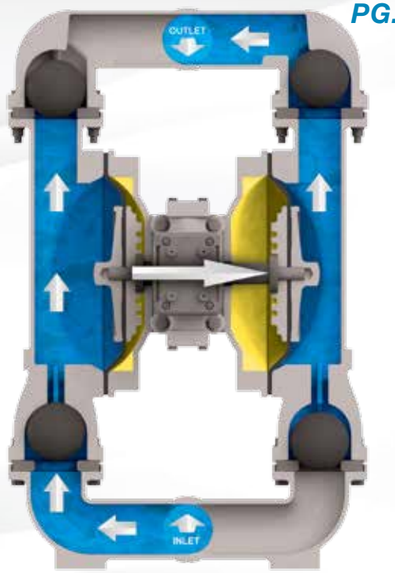
Chemical Guide

Available as both a free mobile app or PDF, this chemical compatibility guide will help you zero in on the pump that fits your process best. **SANDPIPERPUMP.COM/CHEM**

EXCLUSIVE PUMP CONFIGURATIONS

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

PG. 18

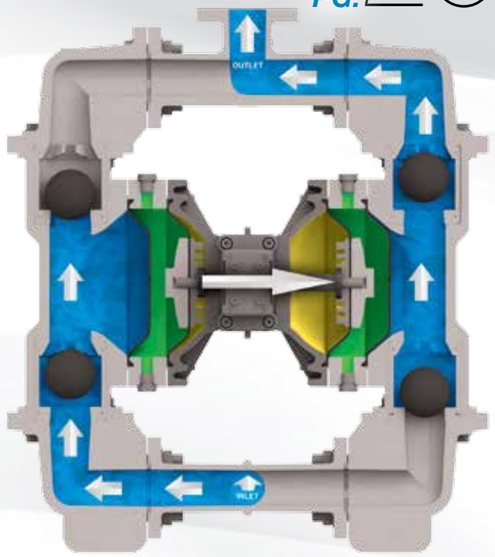


STANDARD DUTY BALL VALVE

Unique features for this configuration include:

- Solids Range +.13" (3mm) to .71" (18mm)
- Dry Primes Up to 20' of Water

PG. 26

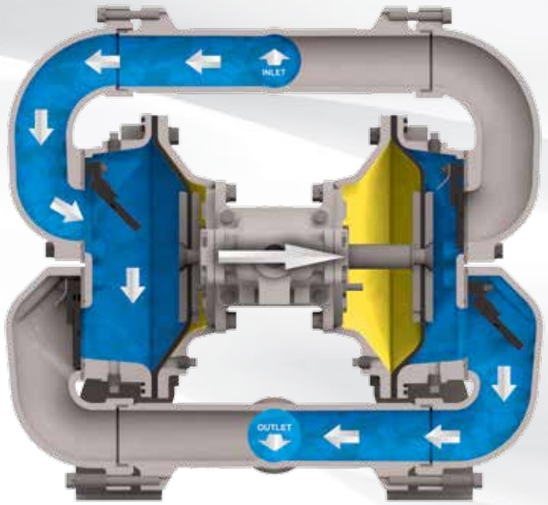


CONTAINMENT DUTY BALL VALVE

Unique features for this configuration include:

- Containment Chamber with Leak Detection
- Hydraulically Balanced / Coupled Pumping and Driver Diaphragm Assemblies
- Solids Range +.25" (6mm) to .44" (10mm)
- Dry Primes Up to 18' of Water
- Free Standing Support Base

PG. 30



HEAVY DUTY FLAP VALVE

Unique features for this configuration include:

- Hinged Flap Check Valves
- Solids Range +1" (25mm) to 3" (75mm)
- Dry Primes Up to 24' of Water
- Bottom Discharge Porting, Eliminates Settling Solids

PG. 38

HEAVY DUTY BALL VALVE

Unique features for this configuration include:

- Weighted Ball Check Valves
- Solids Range +.25" (6mm) to .88" (22mm)
- Dry Primes Up to 20' of Water
- Bottom Discharge Porting, Eliminates Setting Solids

EXCLUSIVE SANDPIPER FEATURE

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

SCAN TO LEARN MORE
SANDPIPERPUMP.COM/ESADS

EXCLUSIVE SANDPIPER FEATURE

ALL SANDPIPER PUMPS come with a guaranteed diaphragm connecting rod.

STANDARD DUTY BALL VALVE PUMPS

SANDPIPER'S MOST POPULAR PRODUCT LINE, OFFERING A LARGE VARIETY 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

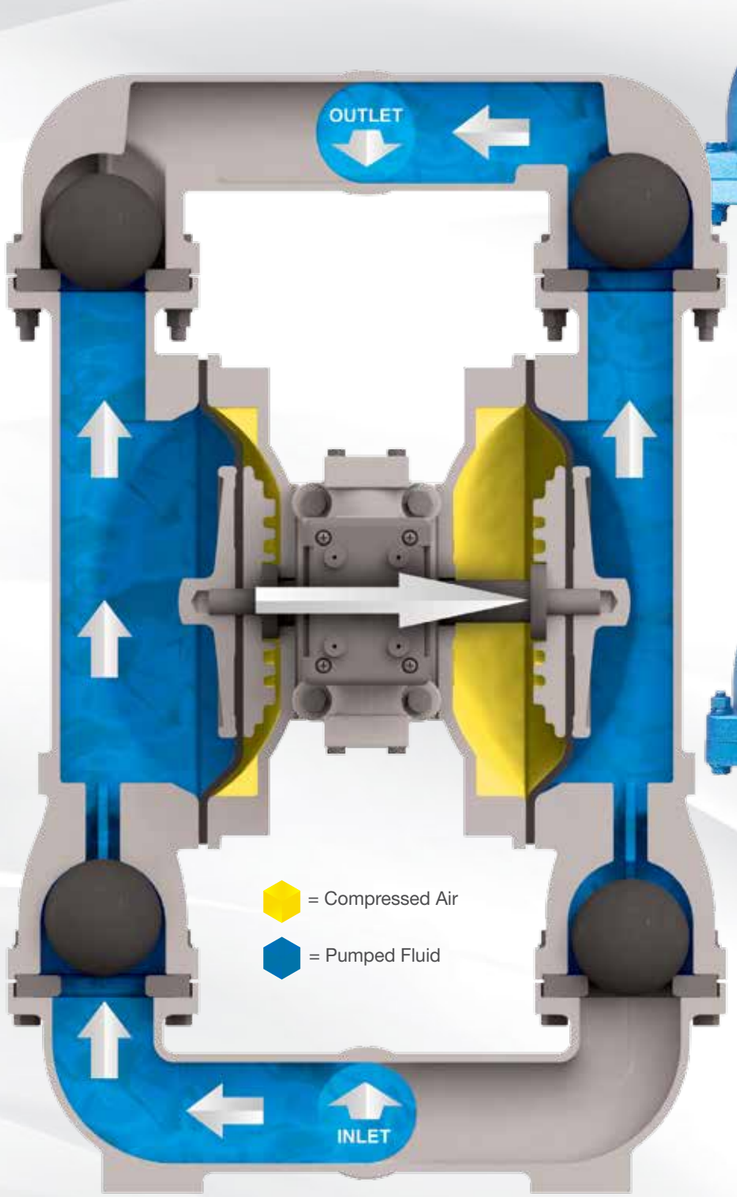
Ball Check Valves
Provide powerful, high flow pumping

Diaphragm Connecting Rods
Reliable and consistent diaphragm control

ESADS+Plus Air Valve
Externally Serviceable Air Distribution System

Dynamic Manifold Connections
90° - 180° rotation options

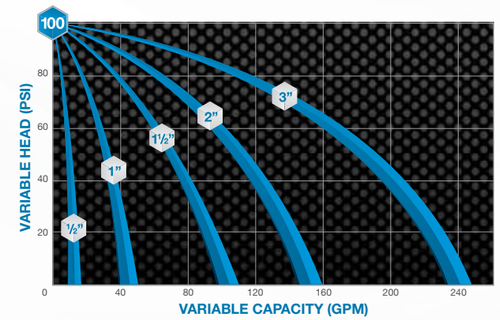
Certifications Available



	CHARACTERISTICS		Metallic	Non-Metallic
Fluid Characteristics	Water		+	+
	Suspended Solids		+	✓
	Non-Suspended Solids		!	X
	Line Size Solids		X	X
	Sludge / Slurry		✓	!
	High Viscosity (Flowable Fluids)		✓	✓
	Erosion / Abrasive Fluids	High	✓	!
		Moderate	✓	!
		Low	+	✓
	Corrosion		✓	+
Installation	Permanent		✓	✓
	Portable		+	+
	Containment / Prevention		!	!
	Flooded Suction		✓	✓
	Suction Lift		✓	✓
	Submerged		✓	!
Duty	Intermittent / On-Demand		+	+
	Continuous		✓	✓

+ = Best Type ✓ = Suitable ! = Limitations X = Not Recommended

Composite Performance Curve



STANDARD DUTY BALL VALVE PUMPS

PERFORMANCE & SPECIFICATIONS

SCAN TO LEARN MORE
SANDPIPERPUMP.COM/STANDARDDUTYPUMPS

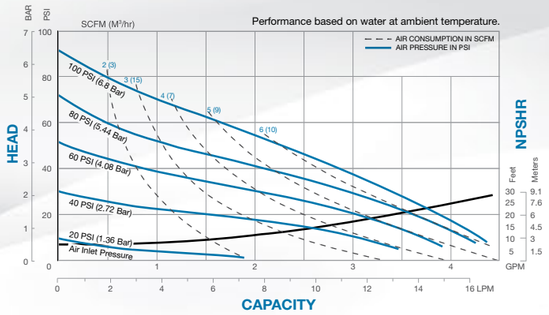
1/4" 6mm E02 / X02 Metallic Performance

MAX FLOW
- 4.75 GPM (18 LPM)

PORTING
- BSP Parallel

AIR END
- Stainless Steel

WET END
- Stainless Steel



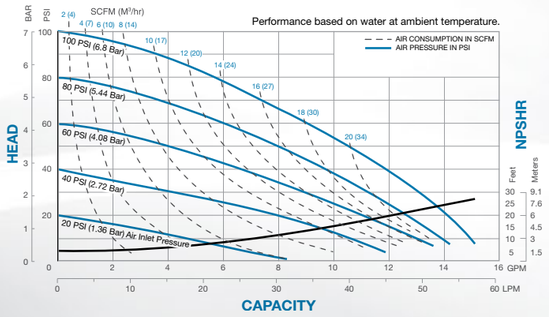
1/2" 12mm S05 Metallic Performance

MAX FLOW
- 15 GPM (57 LPM)

PORTING
- NPT / BSP
- ANSI Flange

AIR END
- Aluminum

WET END
- Aluminum
- Stainless Steel



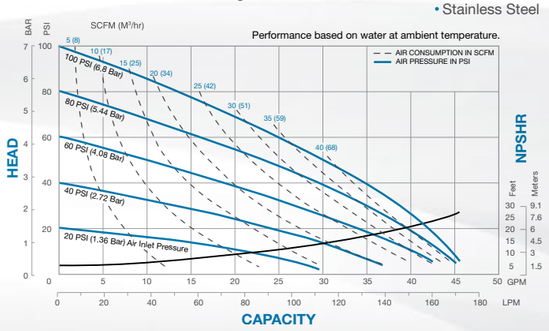
1" 25mm S1F Metallic Performance

MAX FLOW
- 45 GPM (170 LPM)

PORTING
- NPT / BSP
- ANSI Flange

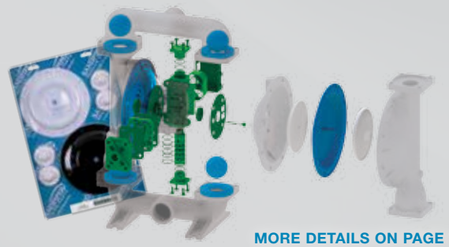
AIR END
- Aluminum

WET END
- Cast Iron
- Aluminum
- Stainless Steel



Genuine Parts Service Kits

- Everything in One Place.
- Reduce Frequency of Repairs.
- Increase Uptime.
- Save Time and Money.



MORE DETAILS ON PAGE 70

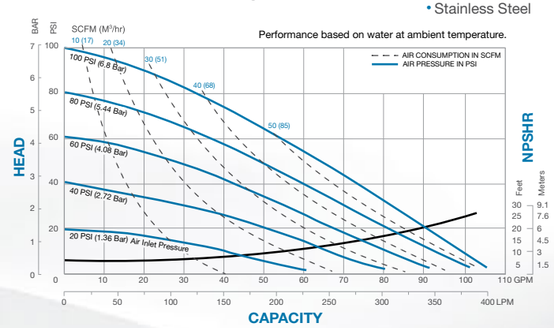
1½" 38mm S15 Metallic Performance

MAX FLOW
- 106 GPM (401 LPM)

PORTING
- NPT / BSP
- ANSI Flange

AIR END
- Aluminum

WET END
- Cast Iron
- Aluminum
- Stainless Steel



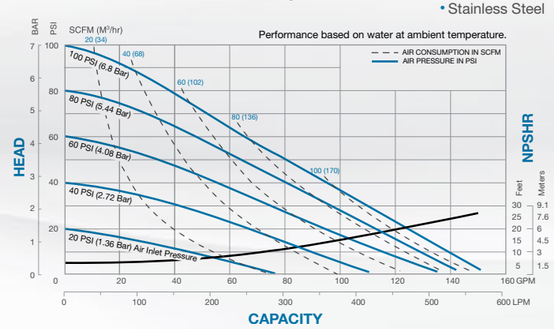
2" 50mm S20 Metallic Performance

MAX FLOW
- 150 GPM (567 LPM)

PORTING
- NPT / BSP
- ANSI / DIN Flange

AIR END
- Aluminum

WET END
- Cast Iron
- Aluminum
- Stainless Steel



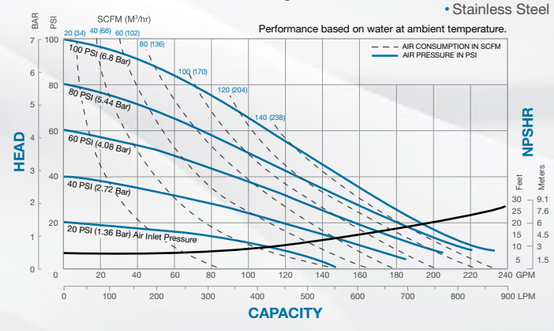
3" 75mm S30 Metallic Performance

MAX FLOW
- 235 GPM (889 LPM)

PORTING
- NPT / BSP
- ANSI / DIN Flange

AIR END
- Aluminum

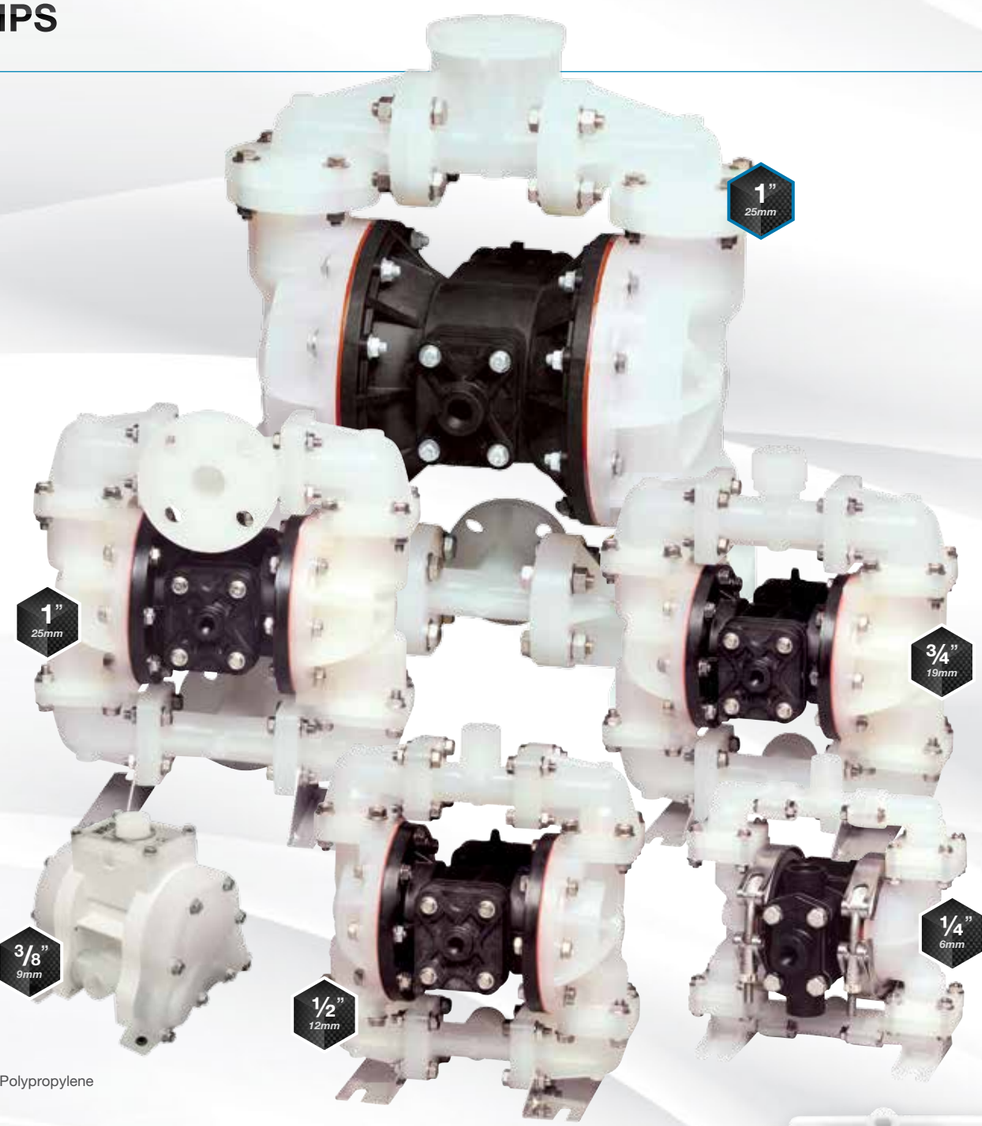
WET END
- Cast Iron
- Aluminum
- Stainless Steel



STANDARD DUTY BALL VALVE PUMPS

PERFORMANCE & SPECIFICATIONS

SCAN TO LEARN MORE
SANDPIPERPUMP.COM/STANDARDDUTYPUMPS



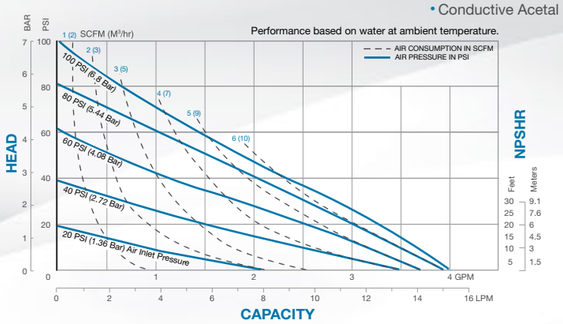
1/4" 6mm PB ¼ Non-Metallic Performance

MAX FLOW
- 4 GPM (15 LPM)

PORTING
- NPT

AIR END
- Polypropylene
- Conductive Acetal

WET END
- Polypropylene
- PVDF
- Conductive Acetal



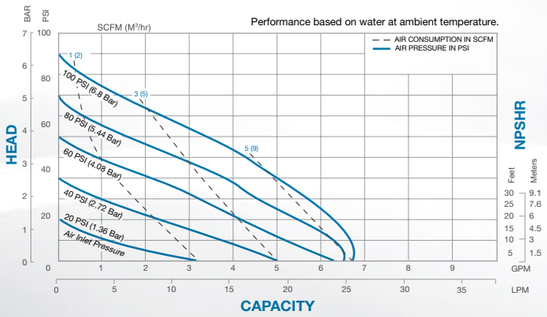
3/8" 9mm WR10 Non-Metallic Performance

MAX FLOW
- 6.8 GPM (26 LPM)

PORTING
- NPT / BSP

AIR END
- PTFE

WET END
- PTFE
- PVDF



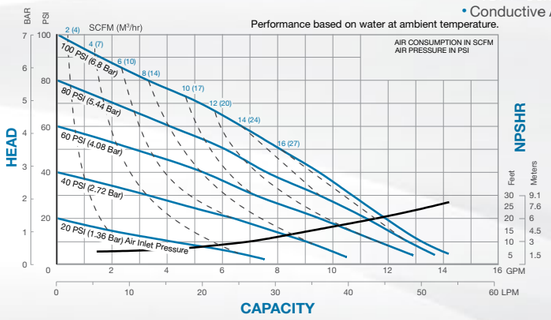
1/2" 12mm S05 Non-Metallic Performance

MAX FLOW
- 14 GPM (52 LPM)

PORTING
- NPT / BSP

AIR END
- Polypropylene
- Conductive Polypropylene

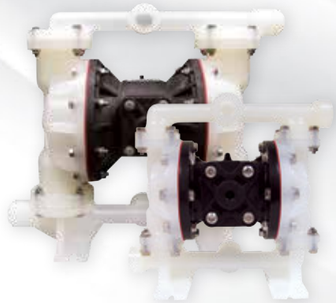
WET END
- Polypropylene / Conductive Polypropylene
- Nylon
- PVDF / Conductive PVDF
- Conductive Acetal



SANDPIPER Mobile App

The SANDPIPER Mobile App can save you 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.

LEARN MORE AT SANDPIPERPUMP.COM/MOBILEAPP



In-line ported options also available on S05 and S1F

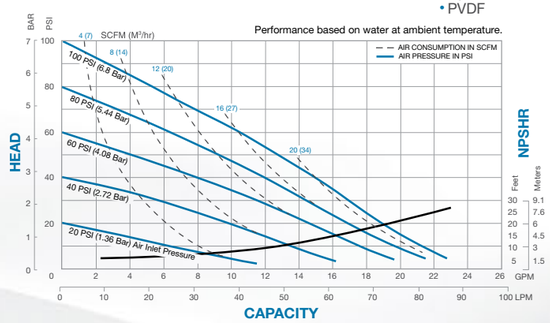
3/4" 19mm S07 Non-Metallic Performance

MAX FLOW
- 23 GPM (87 LPM)

PORTING
- NPT / BSP

AIR END
- Polypropylene

WET END
- Polypropylene
- Nylon
- PVDF



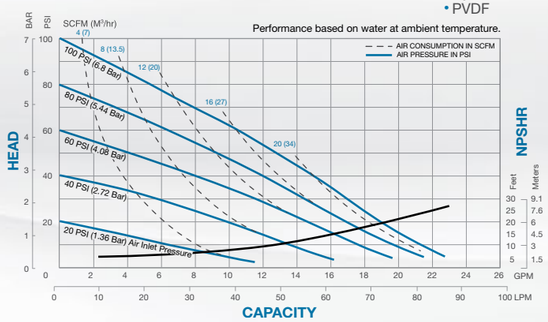
1" 25mm S10 Non-Metallic Performance

MAX FLOW
- 23 GPM (87 LPM)

PORTING
- ANSI Flange

AIR END
- Polypropylene

WET END
- Polypropylene
- Nylon
- PVDF



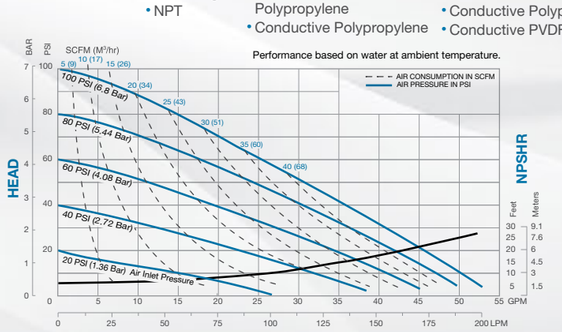
1" 25mm S1F Non-Metallic Performance

MAX FLOW
- 53 GPM (200 LPM)

PORTING
- ANSI Flange
- DIN Flange
- NPT

AIR END
- Polypropylene
- 40% Glass Filled Polypropylene
- Conductive Polypropylene

WET END
- Polypropylene
- PVDF
- Conductive Polypropylene
- Conductive PVDF



STANDARD DUTY BALL VALVE PUMPS

PERFORMANCE & SPECIFICATIONS

SCAN TO LEARN MORE
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1½" 38mm S15 Non-Metallic Performance

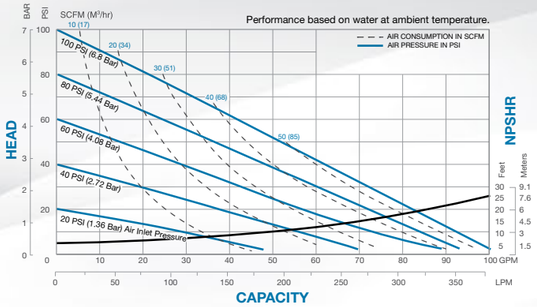
OPTION

MAX FLOW
• 100 GPM (378 LPM)

PORTING
• ANSI Flange
• DIN Flange

AIR END
• Polyproylene
• Conductive Polyproylene

WET END
• Polypropylene
• PVDF
• Conductive Polyproylene



2" 50mm S20 Non-Metallic Performance

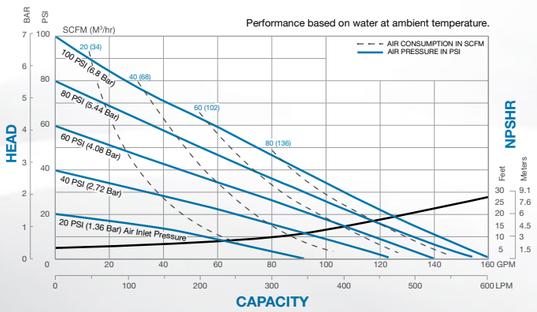
OPTION

MAX FLOW
• 160 GPM (605 LPM)

PORTING
• Universal Flange

AIR END
• Polyproylene
• Conductive Polyproylene

WET END
• Polypropylene
• PVDF
• Conductive Polyproylene



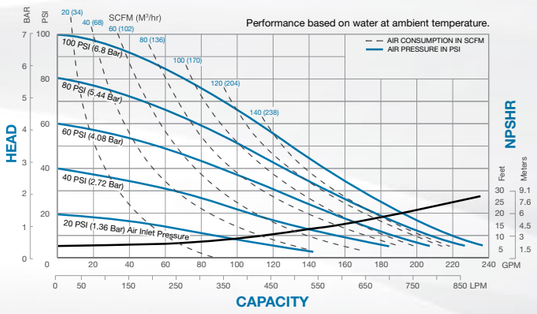
3" 75mm S30 Non-Metallic Performance

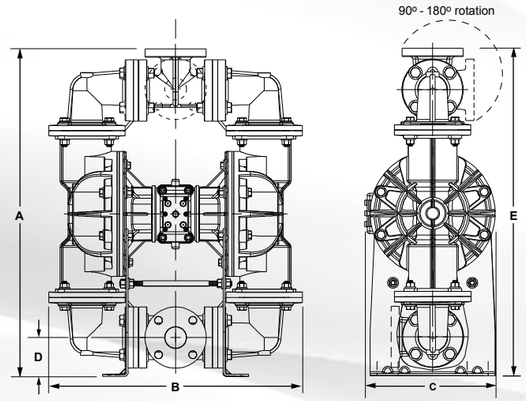
MAX FLOW
• 238 GPM (901 LPM)

PORTING
• ANSI Flange
• DIN Flange

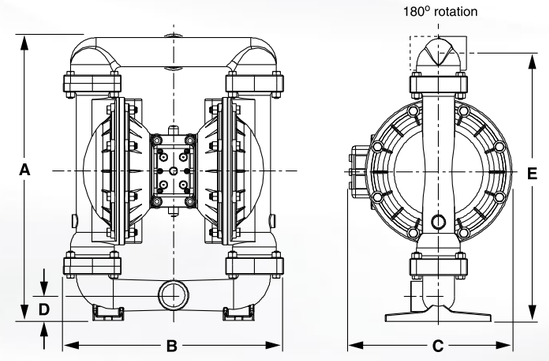
AIR END
• Epoxy Coated Aluminum

WET END
• Polypropylene
• PVDF





Non-Metallic Drawing



Metallic Drawing

METALLIC SPECIFICATIONS

PUMP MODELS	A Height	B Width	C Depth	D Bottom of Base to Center Line of: Suction	E Bottom of Base to Center Line of: Discharge	Connection Style	Pipe Size	Displacement Per Stroke	Max Flow Per Minute	Max Solids Handling	Max Discharge Pressure
	inches (mm)	inches (mm)	inches (mm)	inches (mm)	inches (mm)		inch (mm)	gal (liter)	gal (liter)	inch (mm)	psi (bar)
E02 / X02	5.81 (148)	7.44 (189)	4.38 (111)	.63(16)	5.41 (138)	¼" 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 (56)	.13 (3)	125 (8.6)
S05 SS	10.38 (264)	10.25 (260)	7.44 (179)	1.31 (33)	9.72 (247)	½" NPT/BSP	.5 (12)	.026 (.098)	15 (56)	.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)	1½" NPT/BSP	1.5 (38)	.41 (1.55)	106 (401)	.25 (6)	125 (8.6)
S20 AL / CI	26.31 (669)	16.88 (428)	125.59 (320)	1.88 (48)	24.63 (625)	2" NPT/BSP	2 (50)	.42 (1.59)	150 (567)	.25 (6)	125 (8.6)
S20 SS	2.31 (669)	16.88 (428)	12.59 (320)	2 (50)	24.75 (629)	2" NPT/BSP	2 (50)	.42 (1.59)	150 (567)	.25 (6)	125 (8.6)
S30 Al/CI	32.06 (814)	19.66 (499)	15.75 (400)	2.34 (60)	29.97 (761)	3" NPT/BSP	3 (75)	.94 (3.56)	235 (889)	.38 (9.5)	125 (8.6)
S30 SS	32 .28 (820)	19.66 (499)	15.75 (400)	2.28 (65)	30.19 (767)	3" NPT /BSP	3 (75)	.94 (3.56)	235 (889)	.38 (9.5)	125 (8.6)

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

NON-METALLIC SPECIFICATIONS

PUMP MODELS	A Height	B Width	C Depth	D Bottom of Base to Center Line of: Suction	E Bottom of Base to Center Line Discharge	Connection Style	Pipe Size	Displacement Per Stroke	Max Flow Per Minute	Max Solids Handling	Max 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)	¼" 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)	⅜" 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)	½" 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)	¾" 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)	¾" 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	40.63 (1032)	33.38 (848)	18.25 (464)	4.88 (124)	40.63 (1032)	3" ANSI or DIN	3 (75)	.9 (3.41)	238 (901)	.71 (18)	100 (6.9)

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

U = Universal: Fits both ANSI or DIN.
*T = Trihedral.

CONTAINMENT DUTY PUMPS

DEPEND ON THE PROVEN LEAK PROOF DESIGN

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

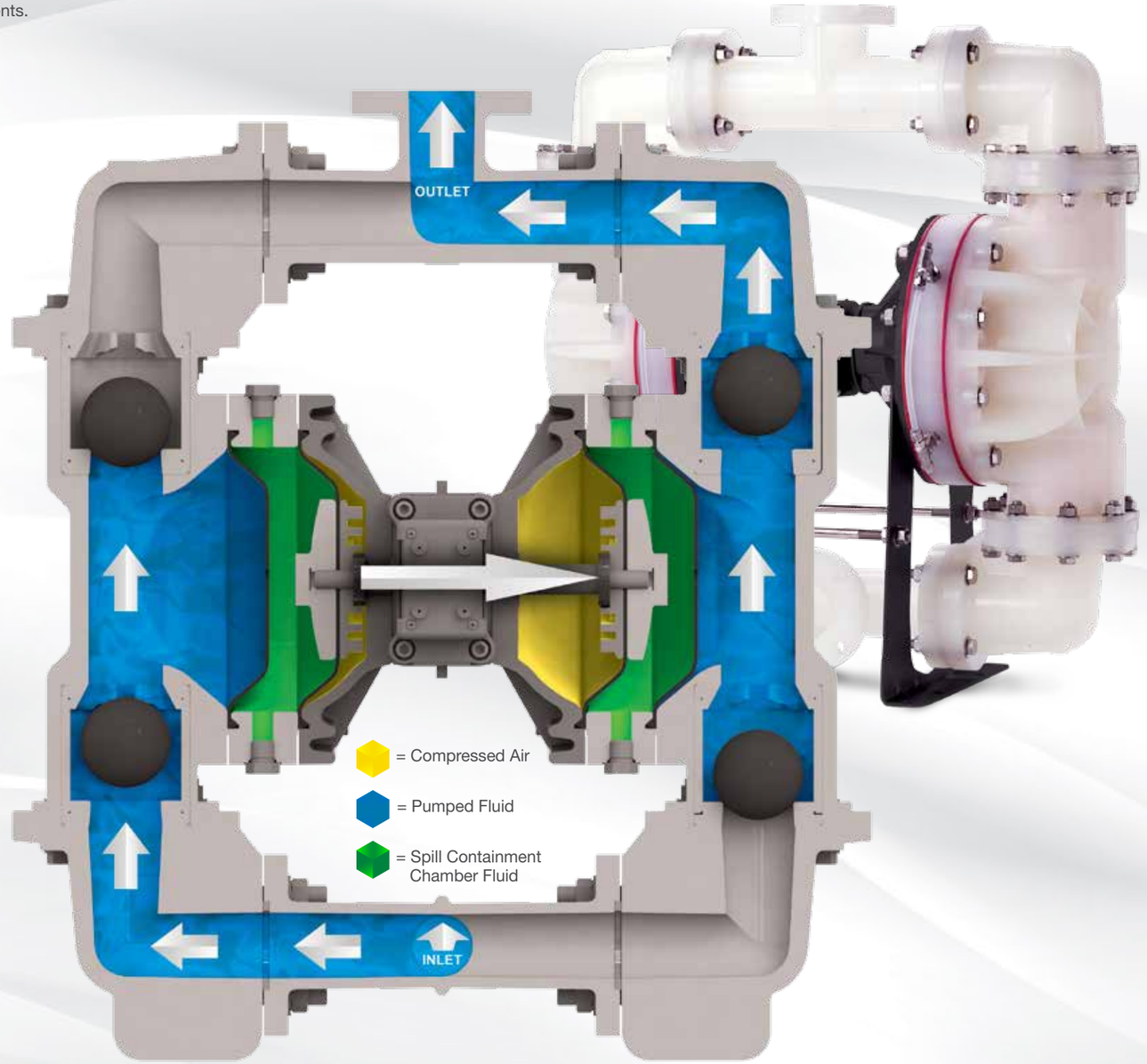
Diaphragm Connecting Rods
Reliable and consistent diaphragm control

Ball Check Valves
Provides powerful, high flow pumping

ESADS+Plus Air Valve
Externally Serviceable Air Distribution System

Dynamic Manifold Connections
90° - 180° rotation options

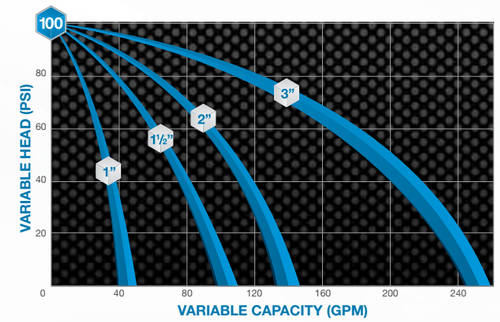
Certifications Available



PUMP CHARACTERISTICS			Non-Metallic
Fluid Characteristics	Water		+
	Suspended Solids		✓
	Non-Suspended Solids		X
	Line Size Solids		X
	Sludge / Slurry		!
	High Viscosity (Flowable Fluids)		✓
	Erosion / Abrasive Fluids	High	!
		Moderate	!
		Low	✓
	Corrosion		+
Installation	Permanent		✓
	Portable		+
	Containment / Prevention		+
	Flooded Suction		✓
	Suction Lift		✓
	Submerged		!
Duty	Intermittent / On-Demand		+
	Continuous		✓

+ = Best Type ✓ = Suitable ! = Limitations X = Not Recommended

Composite Performance Curve



CONTAINMENT DUTY PUMPS

PERFORMANCE & SPECIFICATIONS

SCAN TO LEARN MORE
SANDPIPERPUMP.COM/CONTAINMENTPUMPS

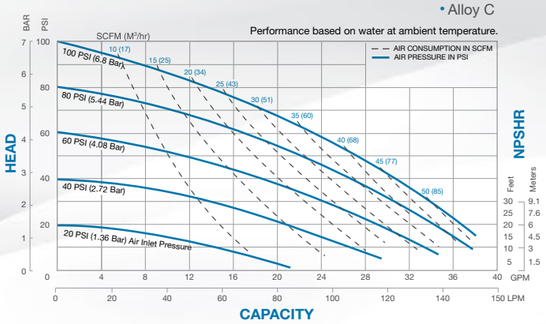
1" 25mm ST1 / ST25 Metallic Performance

MAX FLOW
- 42 GPM (159 LPM)

PORTING
- NPT / BSP

AIR END
- HDPE*
- Aluminum

WET END
- Aluminum
- Stainless Steel
- Alloy C



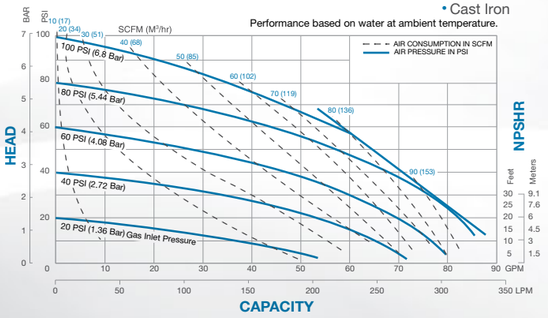
1½" 38mm ST1½ / ST40 Metallic Performance

MAX FLOW
- 90 GPM (340 LPM)

PORTING
- NPT / BSP

AIR END
- Cast Iron
- Aluminum

WET END
- Aluminum
- Stainless Steel
- Alloy C
- Cast Iron



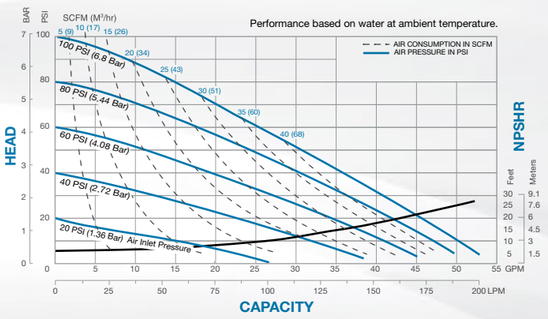
1" 25mm S1F Non-Metallic Performance

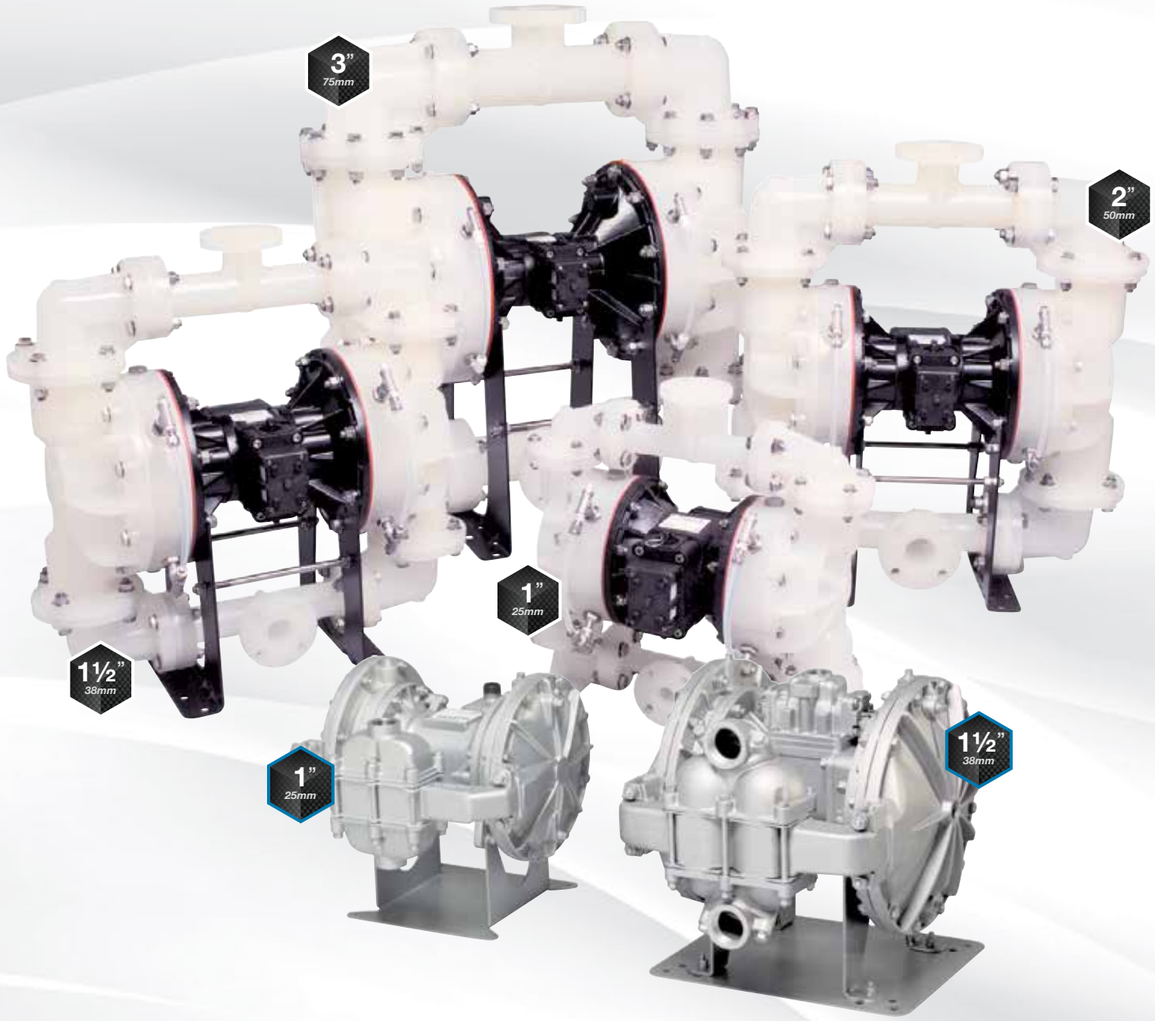
MAX FLOW
- 53 GPM (200 LPM)

PORTING
- ANSI Flange
- DIN Flange

AIR END
- Polypropylene

WET END
- Polypropylene
- PVDF*





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

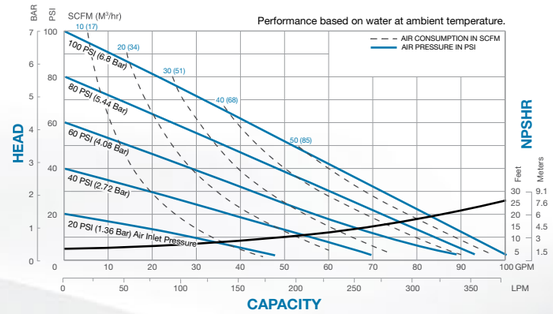
1½" 38mm S15 Non-Metallic Performance

MAX FLOW
- 100 GPM (378 LPM)

PORTING
- ANSI Flange
- DIN Flange

AIR END
- Polypropylene

WET END
- PVDF
- Polypropylene



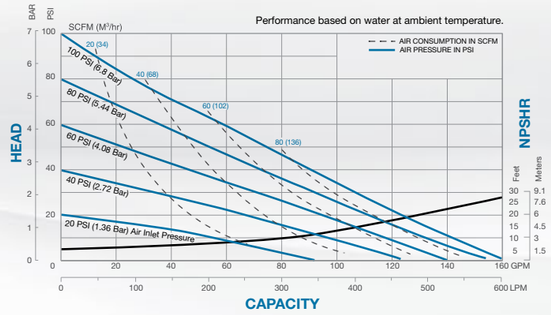
2" 50mm S20 Non-Metallic Performance

MAX FLOW
- 160 GPM (605 LPM)

PORTING
- Universal Flange

AIR END
- Polypropylene

WET END
- Polypropylene
- PVDF



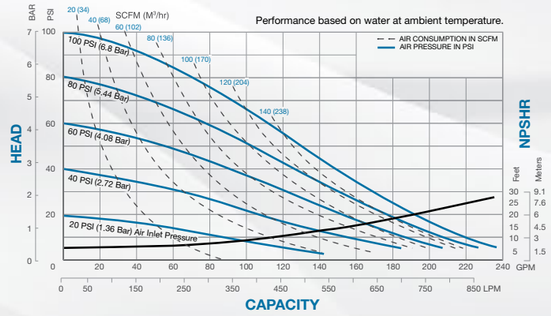
3" 75mm S30 Non-Metallic Performance

MAX FLOW
- 238 GPM (901 LPM)

PORTING
- ANSI Flange
- DIN Flange

AIR END
- Epoxy Coated Aluminum

WET END
- Polypropylene
- PVDF



*Conductive versions of this material are available.

HEAVY DUTY FLAP VALVE PUMPS

THE SOLIDS HANDLING WORKHORSES OF THE SANDPIPER PUMP LINE

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

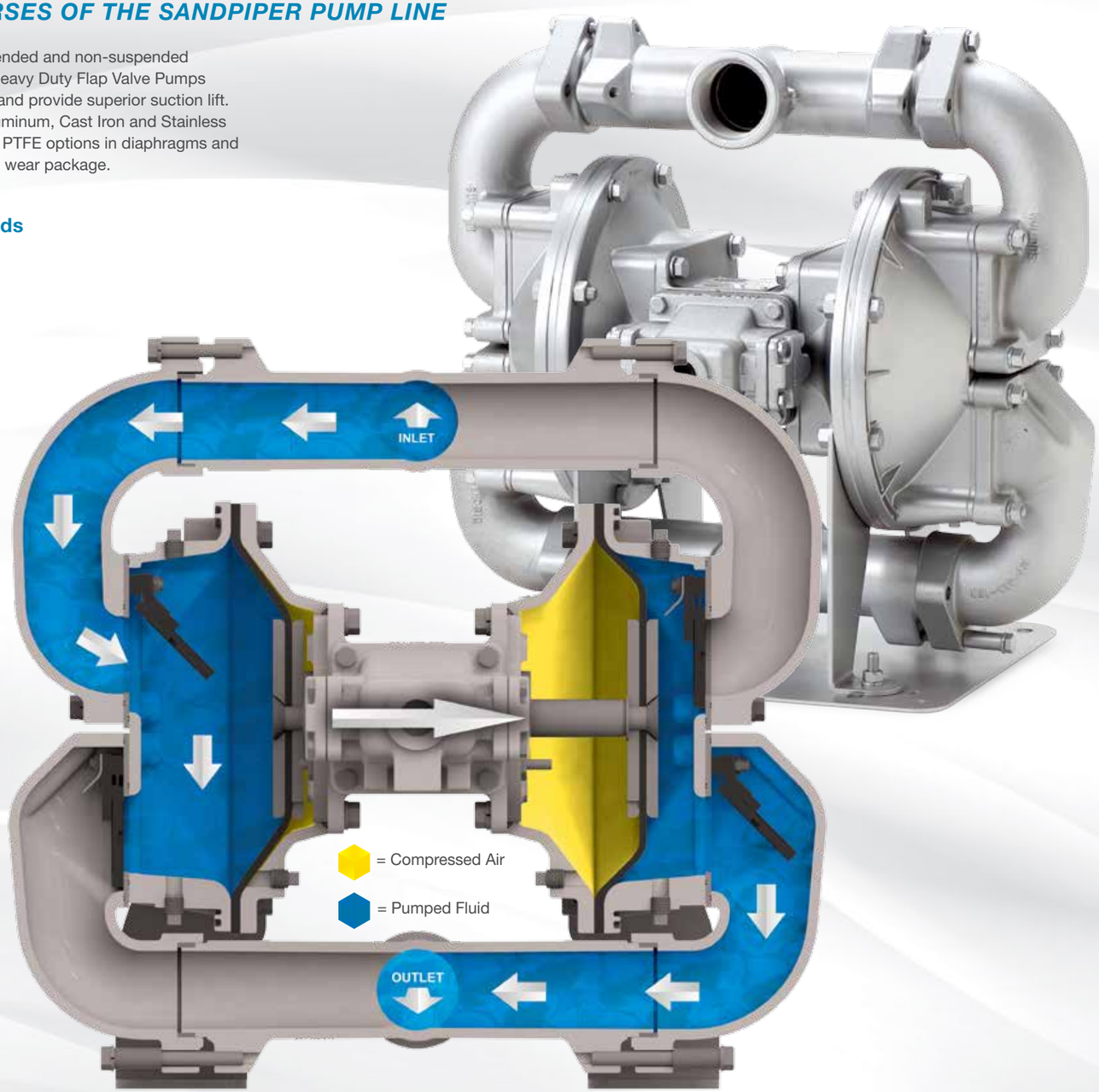
All Bolted Construction
Durable and high pressure capable

Dynamic Manifold Connections
90° - 180° rotation options

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

Superior Dry Prime
Up to 24' (7m) of water

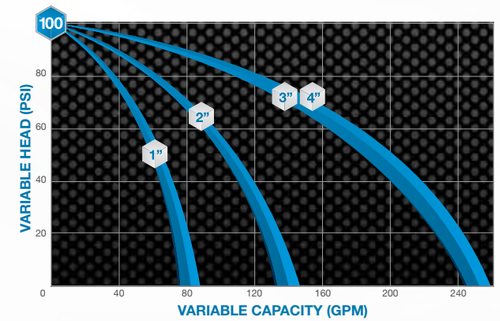
Certifications Available



PUMP CHARACTERISTICS			Metallic
Fluid Characteristics	Water		+
	Suspended Solids		✓
	Non-Suspended Solids		+
	Line Size Solids		+
	Sludge / Slurry		+
	High Viscosity (Flowable Fluids)		✓
	Erosion / Abrasive Fluids	High	+
		Moderate	+
		Low	+
	Corrosion		✓
Installation	Permanent		+
	Portable		+
	Containment / Prevention		!
	Flooded Suction		✓
	Suction Lift		+
	Submerged		✓
Duty	Intermittent / On-Demand		+
	Continuous		✓

+ = Best Type ✓ = Suitable ! = Limitations X = Not Recommended

Composite Performance Curve



HEAVY DUTY FLAP VALVE PUMPS

PERFORMANCE & SPECIFICATIONS

SCAN TO LEARN MORE
SANDPIPERPUMP.COM/HDFPUMPS

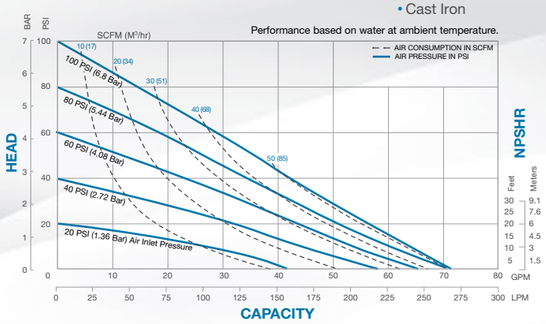
1" 25mm HDF1 Metallic Performance

MAX FLOW
• 70 GPM (265 LPM)

PORTING
• NPT / BSP

AIR END
• Aluminum
• Cast Iron

WET END
• Aluminum
• Stainless Steel
• Cast Iron



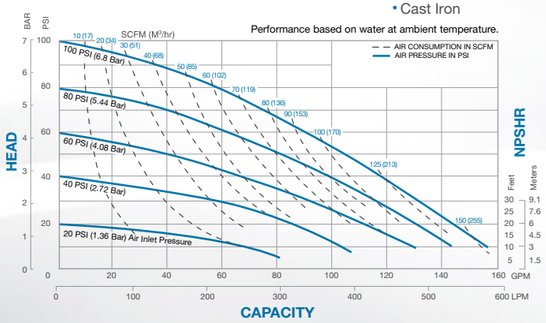
2" 50mm HDF2 Metallic Performance

MAX FLOW
• 140 GPM (530 LPM)

PORTING
• NPT / BSP

AIR END
• Aluminum
• Cast Iron

WET END
• Aluminum
• Stainless Steel
• Cast Iron



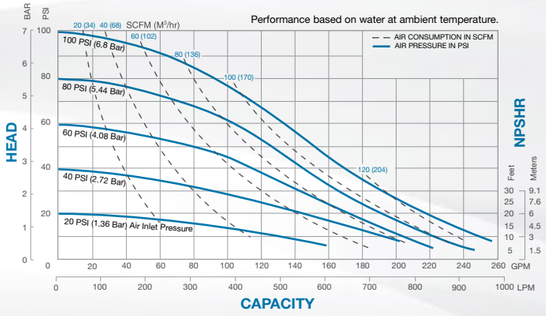
3-4" 75-102mm HDF3-A / 4-A Metallic Performance

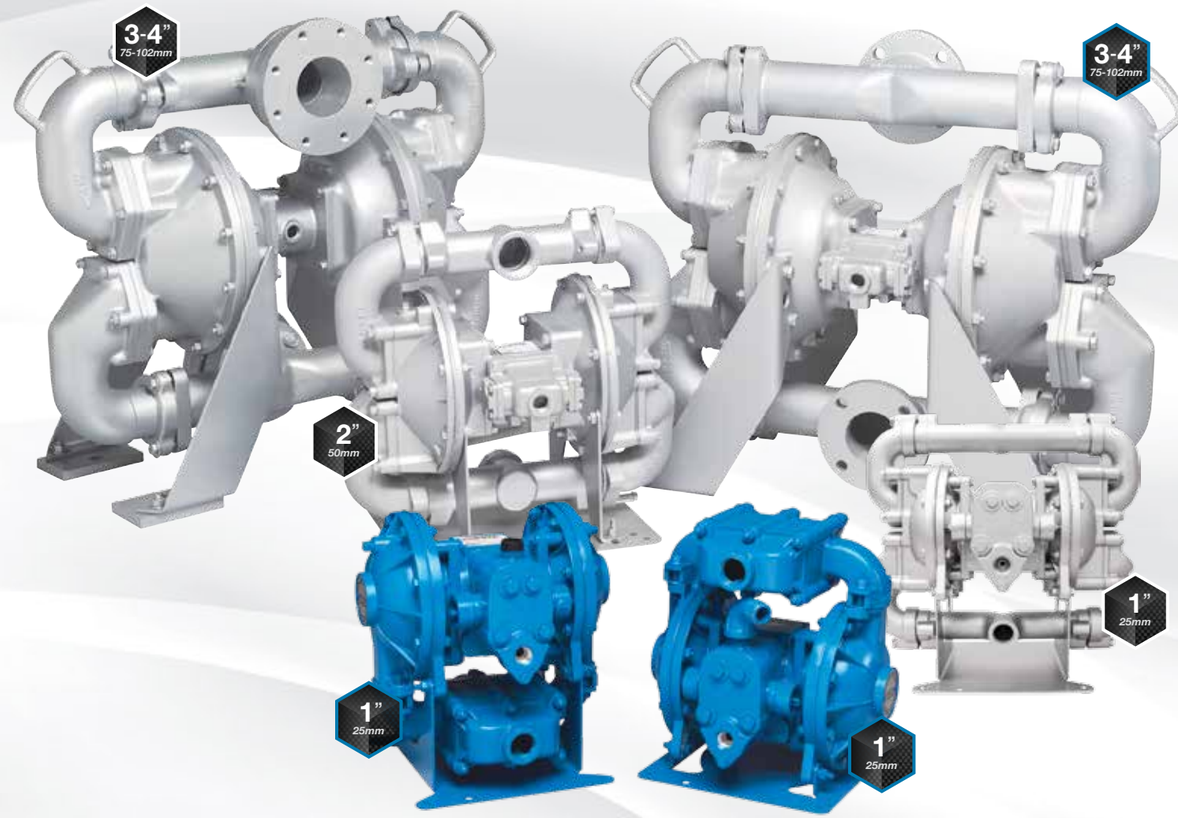
MAX FLOW
• 260 GPM (988 LPM)

PORTING
• ANSI Flange

AIR END
• Aluminum

WET END
• Aluminum





Bottom Discharge

Top Discharge

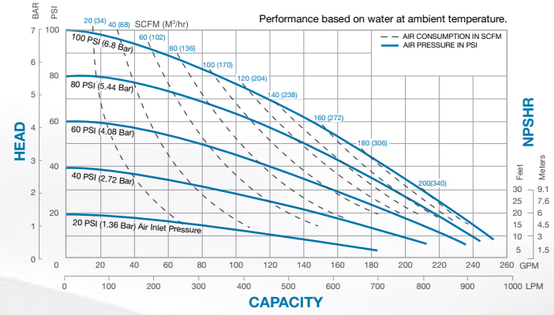
3-4" 75-102mm HDF3-M / 4-M Metallic Performance

MAX FLOW
• 260 GPM (988 LPM)

PORTING
• ANSI Flange

AIR END
• Cast Iron

WET END
• Cast Iron



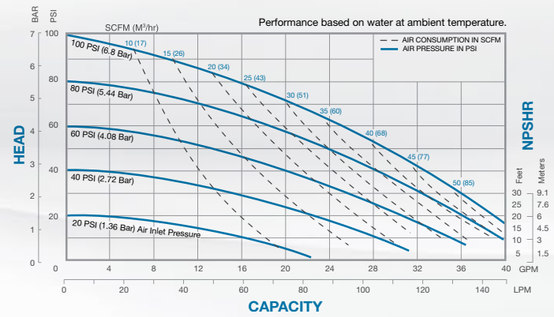
1" 25mm SA1 Metallic Performance

MAX FLOW
• 42 GPM (159 LPM)

PORTING
• NPT / BSP

AIR END
• Aluminum
• Cast Iron

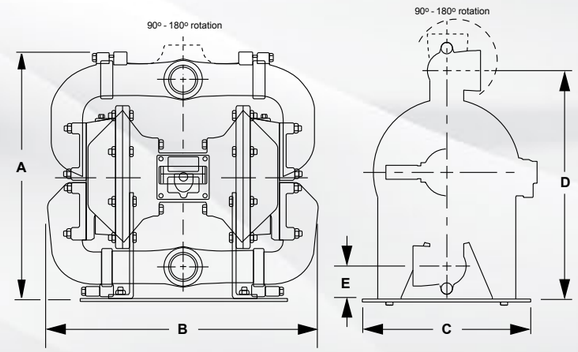
WET END
• Aluminum
• Stainless Steel



SPECIFICATIONS

PUMP MODELS	A Height inches (mm)	B Width inches (mm)	C Depth inches (mm)	D Bottom of Base to Center Line of: Suction inches (mm)	E Bottom of Base to Center Line of: Discharge inches (mm)	Connection Style	Pipe Size inch (mm)	Displacement Per Stroke gal (liter)	Max Flow Per Minute gal (liter)	Max Solids Handling inch (mm)	Max Discharge Pressure 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)	.43 (1.60)	140 (530)	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)	1.62 (6.15)	260 (988)	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)	1.23 (4.66)	260 (988)	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)	1.62 (6.15)	260 (988)	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)	1.23 (4.66)	260 (988)	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.

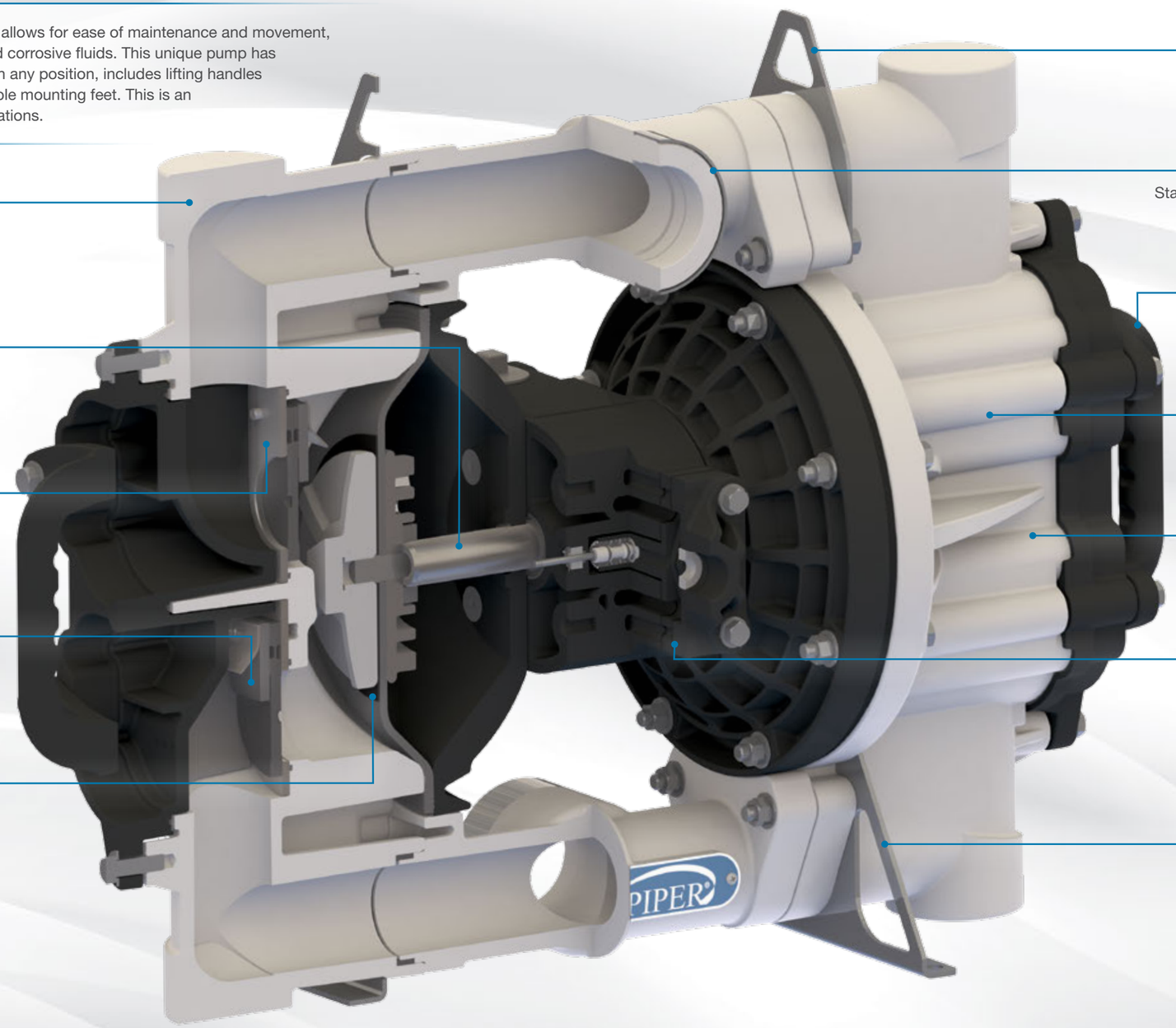


NEW PRODUCT

2" NON-METALLIC FLAP VALVE PUMP

YOUR MINING, GENERAL INDUSTRIAL AND CHEMICAL SOLUTION

The robust, yet lightweight design allows for ease of maintenance and movement, and is ideal for handling solids and corrosive fluids. This unique pump has been engineered to fully function in any position, includes lifting handles and hanging points, and has durable mounting feet. This is an ideal solution for numerous applications.



Lightweight & Durable
The non-metallic, lightweight design makes it easily portable at 53 lbs (24 kg)

Reliability Guarantee
Strongest diaphragm connecting rod in the industry is guaranteed to not bend or yield in operation

Rugged Design
Stainless steel seats prevent abrasion when pumping solids laden fluids

Optimum Solids Handling
Hinge pads exert positive pressure on the flaps, allowing the pump to operate in virtually any position, helping deliver superior suction lift and flow rates

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

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

Strong Manifold Connections
Stainless steel reinforcing rings help protect the threaded manifold connections from being damaged from overtightening and excessive piping or hose stress

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

Purpose Built Base
Stainless steel, corrosion resistant mounting feet allow for pump stability while reducing potential housing damage

NEW PRODUCT

HEAVY DUTY NON-METALLIC FLAP VALVE PUMP

PERFORMANCE & SPECIFICATIONS

SCAN TO LEARN MORE
SANDPIPERPUMP.COM/2INCHNMFLAP

2" 50mm

HD20F Non-Metallic Performance

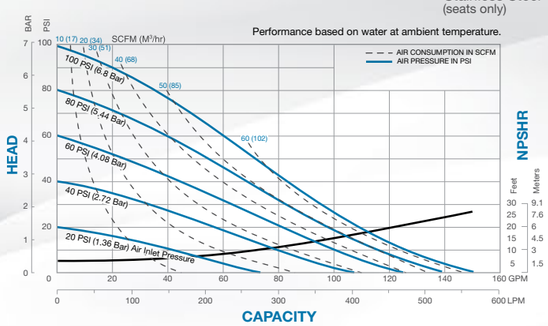
CE

MAX FLOW
- 150 GPM (567 LPM)

PORTING
- NPT / BSPT

AIR END
- Polypropylene

WET END
- Polypropylene
- Stainless Steel (seats only)



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.

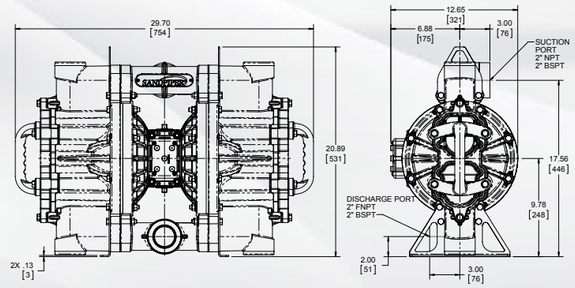
3. ESADS+Plus
Proven air distribution system allows for maintenance and / or repair of both pilot valve and air valve components without removing the pump from service.

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

SPECIFICATIONS

PUMP MODEL	A Height	B Width	C Depth	D Bottom of Base to Center Line of: Suction	E Bottom of Base to Center Line of: Discharge		Connection Style	Pipe Size	Displacement Per Stroke	Max Flow Per Minute	Max Solids Handling	Max Discharge Pressure
	inches (mm)	inches (mm)	inches (mm)	inches (mm)	inches (mm)			inch (mm)	gal (liter)	gal (liter)	inch (mm)	psi (bar)
HD20F	20.89 (531)	29.7 (754)	12.65 (321)	17.56 (446)	2 (50)		2" NPT / BSPT	2 (50)	.50 (1.9)	150 (567)	1.8 (46)	100 (7)

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



HEAVY DUTY BALL VALVE PUMPS

THE ULTIMATE IN POWERFUL AND DURABLE PERFORMANCE

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 Discharge
For pumping out of tough areas

All Bolted Construction
Durable and high pressure capable

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

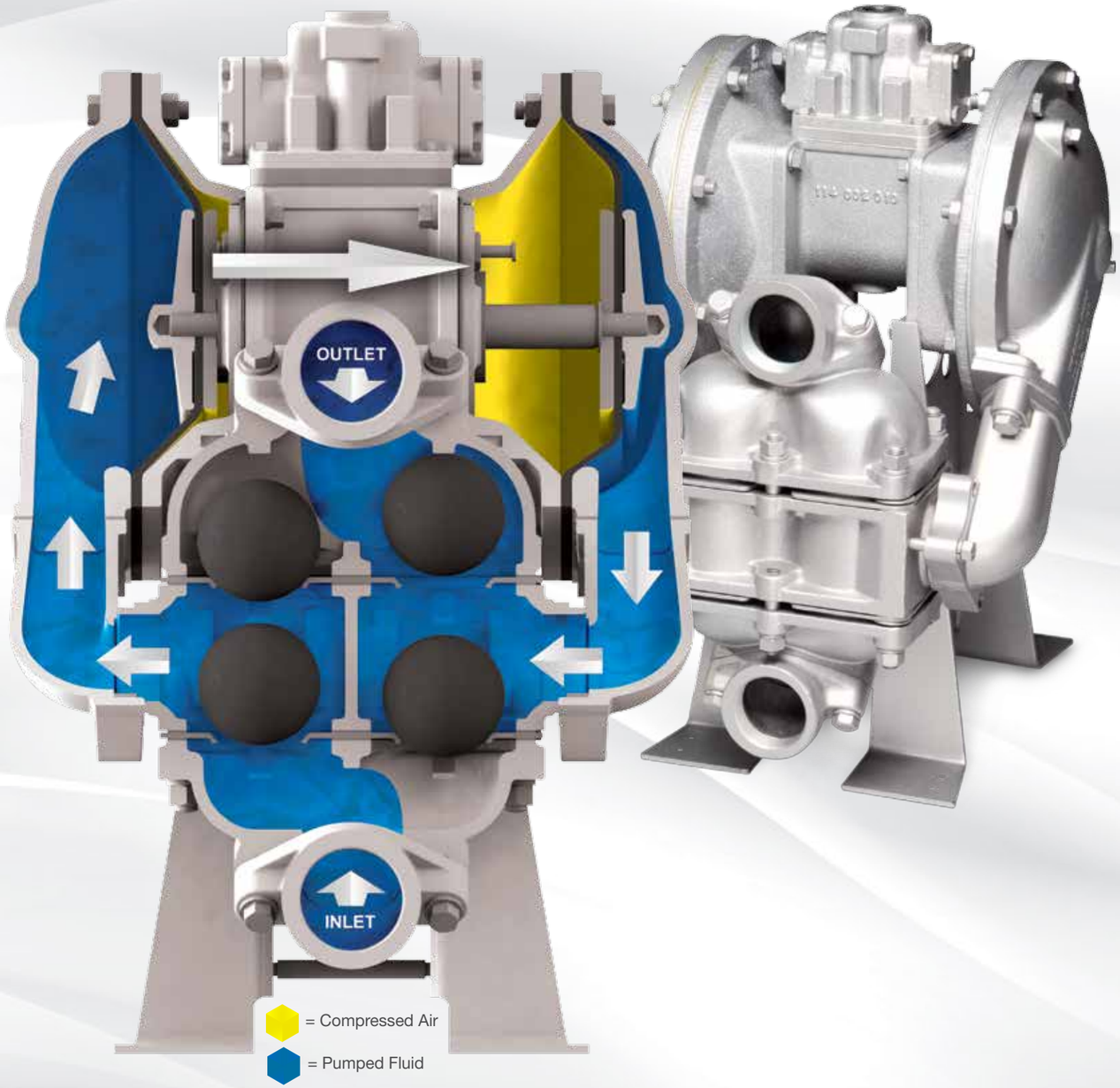
Ball Check Valves
Provide powerful, high flow pumping

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

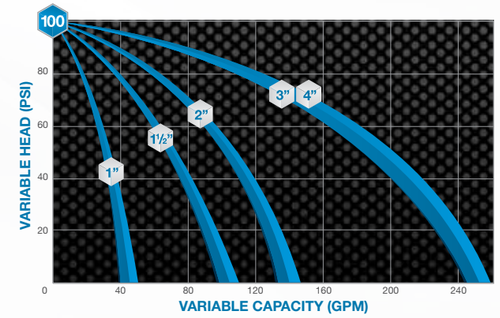
Certifications Available



PUMP CHARACTERISTICS			Metallic
Fluid Characteristics	Water		+
	Suspended Solids		+
	Non-Suspended Solids		+
	Line Size Solids		X
	Sludge / Slurry		+
	High Viscosity (Flowable Fluids)		+
	Erosion / Abrasive Fluids	High	+
		Moderate	+
		Low	+
	Corrosion		✓
Installation	Permanent		+
	Portable		✓
	Containment / Prevention		!
	Flooded Suction		+
	Suction Lift		✓
	Submerged		✓
Duty	Intermittent / On-Demand		+
	Continuous		+

+ = Best Type ✓ = Suitable ! = Limitations X = Not Recommended

Composite Performance Curve



HEAVY DUTY BALL VALVE PUMPS

PERFORMANCE & SPECIFICATIONS

SCAN TO LEARN MORE
SANDPIPERPUMP.COM/HDBPUMPS

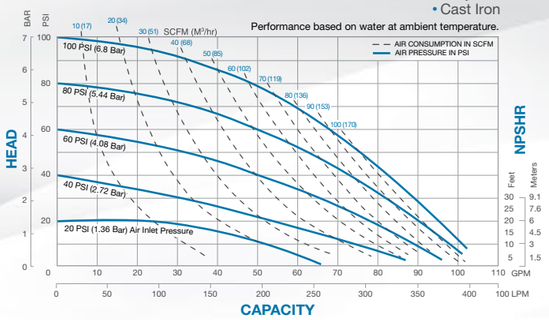
1½" 38mm HDB1½ Metallic Performance

MAX FLOW
- 105 GPM (397 LPM)

PORTING
- NPT / BSP

AIR END
- Aluminum
- Cast Iron

WET END
- Aluminum
- Stainless Steel
- Alloy C
- Cast Iron



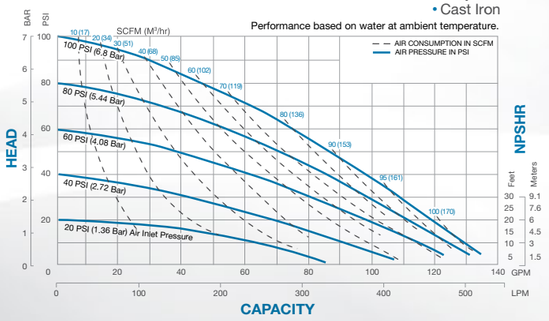
2" 50mm HDB2 Metallic Performance

MAX FLOW
- 135 GPM (511 LPM)

PORTING
- NPT

AIR END
- Aluminum
- Cast Iron

WET END
- Aluminum
- Stainless Steel
- Alloy C
- Cast Iron



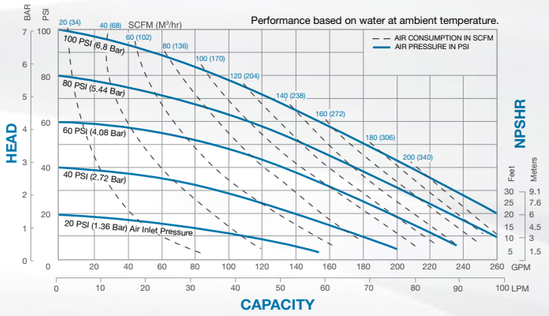
3-4" 75-102mm HDB3 / HDB4 Metallic Performance

MAX FLOW
- 260 GPM (988 LPM)

PORTING
- ANSI Flange

AIR END
- Cast Iron

WET END
- Stainless Steel
- Cast Iron



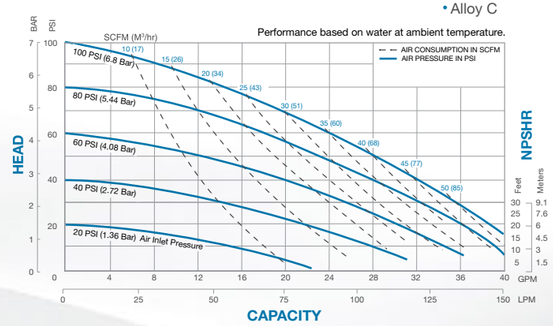
1" 25mm SB1 / SB25 Metallic Performance

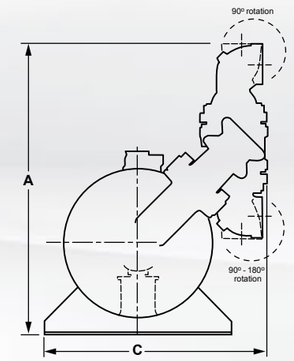
MAX FLOW
- 42 GPM (159 LPM)

PORTING
- NPT / BSP

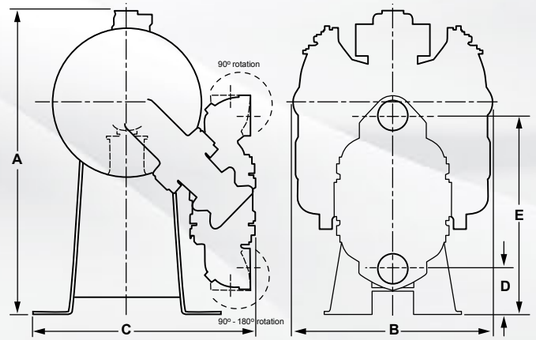
AIR END
- Aluminum
- Cast Iron

WET END
- Aluminum
- Stainless Steel
- Alloy C





Top Ported



Bottom Ported

Front View of Bottom Ported

SPECIFICATIONS

PUMP MODELS	A Height	B Width	C Depth	D Bottom of Base to Center Line of: Suction	E Bottom of Base to Center Line of: Discharge	Connection Style	Pipe Size	Displacement Per Stroke	Max Flow Per Minute	Max Solids Handling	Max Discharge Pressure
	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 BOTTOM	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)	.34 (1.29)	105 (397)	.25 (6)	125 (8.6)
HDB1½ BOTTOM	18.56 (471)	15.5 (419)	17 (432)	6.14 (156)	16 (406)	1½" NPT/BSP	1.5 (38)	.34 (1.29)	105 (397)	.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)	.43 (1.63)	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)	.43 (1.63)	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)	1.8 (6.81)	260 (988)	.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)	1.8 (6.81)	260 (988)	.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)	1.8 (6.81)	260 (988)	.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)	1.8 (6.81)	260 (988)	.87 (22)	125 (8.6)

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

SPECIAL DUTY PUMPS

THE SAME QUALITY SANDPIPER PRODUCTS DESIGNED TO FIT SPECIFIC NEEDS

PAGE 44

NATURAL GAS PUMPS

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

PAGE 48

HIGH EFFICIENCY PUMPS

Save substantial amounts of energy, with the same performance and reliability

PAGE 50

UL LISTED PUMPS

Designed to meet UL79 standards for diaphragm pumps handling flammable liquids

PAGE 51

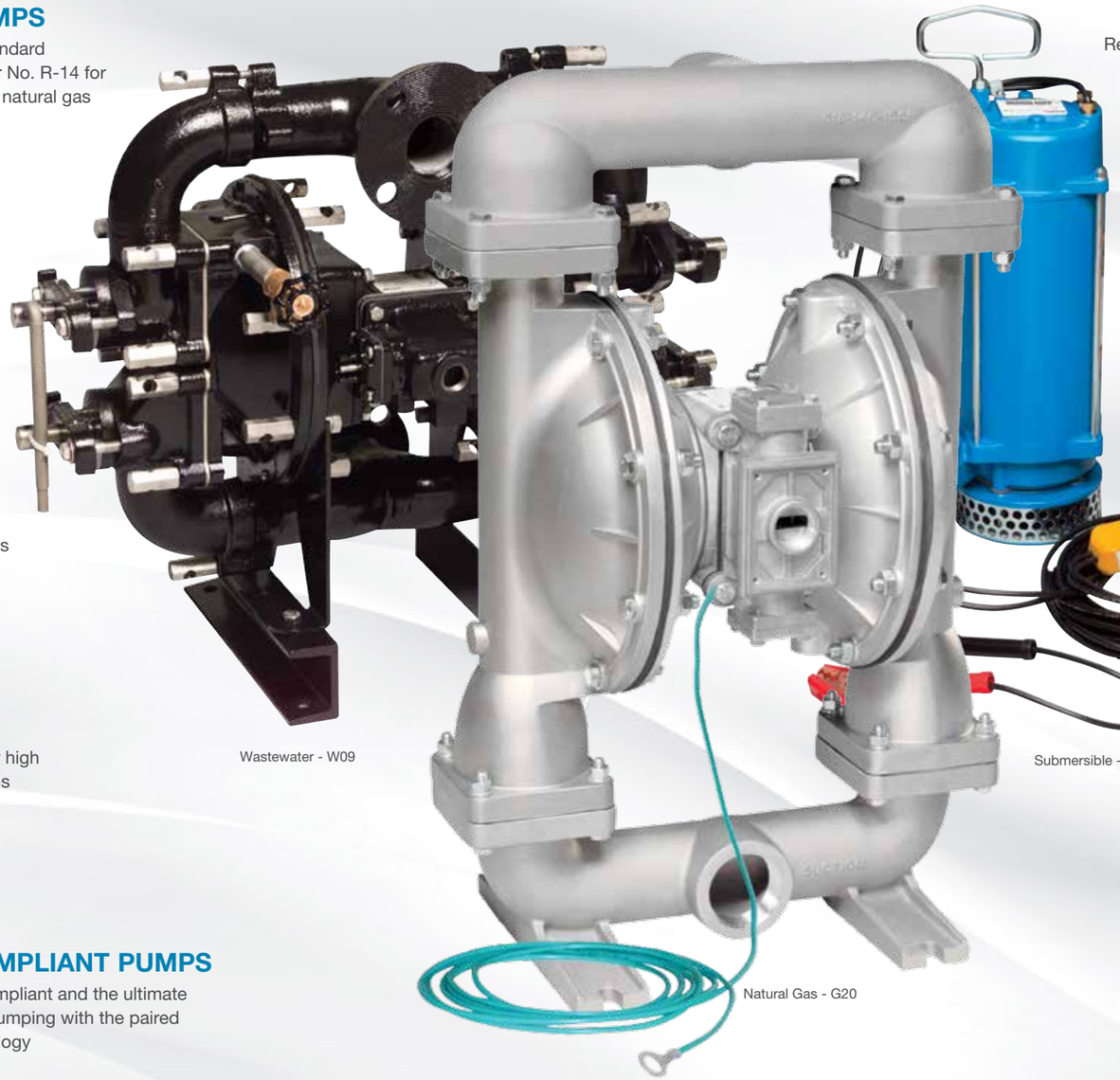
SUBMERSIBLE PUMPS

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

PAGE 52

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



Wastewater - W09

Natural Gas - G20

Submersible - PortaPump

FDA COMPLIANT PUMPS

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

PAGE 54

MINE & CONSTRUCTION PUMPS

The most durable and reliable pump line we offer, for the best quality at your next site

PAGE 56

HIGH PRESSURE PUMPS

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

PAGE 58

FILTER PRESS SYSTEMS

Combine a high volume fill pump with a high pressure feed pump

PAGE 60

WASTEWATER PUMPS

Flap Valve for superior performance with slurry and solids-laden materials

PAGE 61

DUAL POWER NATURAL GAS OR AIR OPERATED PUMPS

CSA CERTIFIED

SCAN TO LEARN MORE
SANDPIPERPUMP.COM/GASPUMPS

FLAP VALVE PUMPS

1" 25mm G10F Metallic Performance

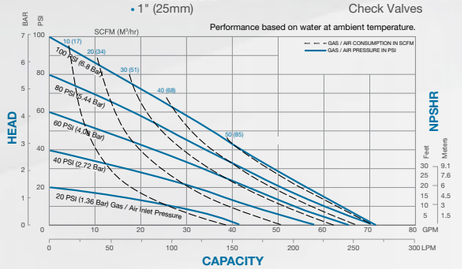
MAX FLOW
• 70 GPM (265 LPM)

PORTING
• NPT / BSP (tapered)

MAX SOLIDS
• 1" (25mm)

GAS / AIR END
• Aluminum
• Nitrile or FKM Elastomers

WET END
• Aluminum
• Stainless Steel
• Nitrile or FKM Diaphragm / Check Valves



2" 50mm G20F Metallic Performance

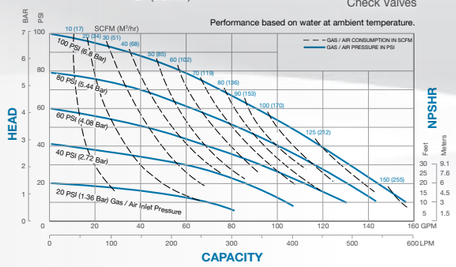
MAX FLOW
• 140 GPM (530 LPM)

PORTING
• NPT

MAX SOLIDS
• 2" (50mm)

GAS / AIR END
• Aluminum
• Nitrile or FKM Elastomers

WET END
• Aluminum
• Stainless Steel
• Nitrile or FKM Diaphragm / Check Valves



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

Hydrostatic Strength Test
500 PSI (34.5 BAR)

Temperature Limits
-10°F (-23°C) to 180°F (82°C)

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

CSA is the Canadian Standards Association, an international organization for testing products to ensure public safety, and the governing agency for the Natural Gas Industry.

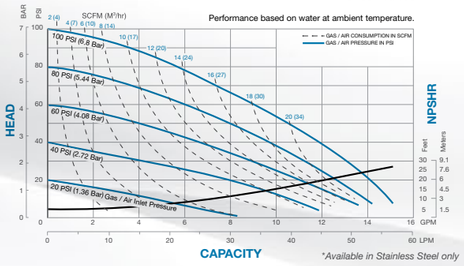
½" 12mm G05 Metallic Performance

MAX FLOW
• 15 GPM (57 LPM)

PORTING
• NPT / BSP (tapered)
• ANSI Flange*

GAS / AIR END
• Aluminum
• Nitrile or FKM Elastomers

WET END
• Aluminum
• Stainless Steel
• Nitrile or PTFE Diaphragm / Check Valves



*Available in Stainless Steel only

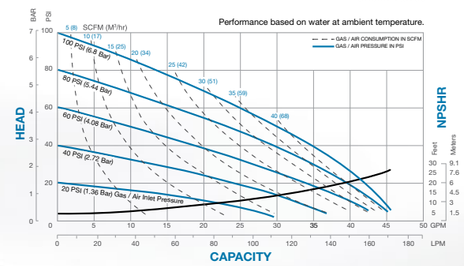
1" 25mm G1F Metallic Performance

MAX FLOW
• 45 GPM (170 LPM)

PORTING
• NPT / BSP (tapered)
• ANSI Flange

GAS / AIR END
• Aluminum
• Nitrile or FKM Elastomers

WET END
• Aluminum
• Stainless Steel
• Nitrile or PTFE Diaphragm / Check Valves



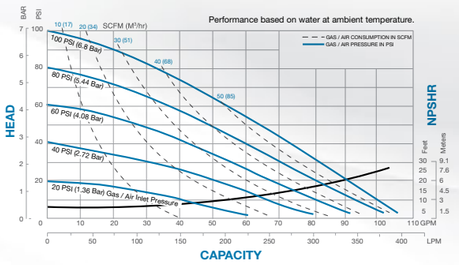
1½" 38mm G15 Metallic Performance

MAX FLOW
• 106 GPM (401 LPM)

PORTING
• NPT / BSP (tapered)
• ANSI Flange

GAS / AIR END
• Aluminum
• Stainless Steel
• Nitrile or FKM Elastomers

WET END
• Aluminum
• Stainless Steel
• Nitrile or PTFE Diaphragm / Check Valves



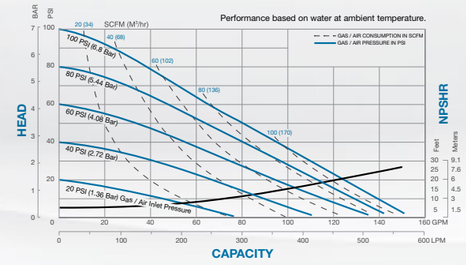
2" 50mm G20 Metallic Performance

MAX FLOW
• 150 GPM (568 LPM)

PORTING
• NPT / BSP (tapered)
• ANSI Flange

GAS / AIR END
• Aluminum
• Stainless Steel
• Nitrile or FKM Elastomers

WET END
• Aluminum
• Stainless Steel
• Nitrile or PTFE Diaphragm / Check Valves



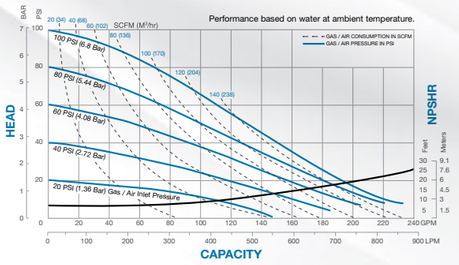
3" 75mm G30 Metallic Performance

MAX FLOW
• 235 GPM (890 LPM)

PORTING
• NPT / BSP (tapered)
• ANSI Flange
• DIN Flange

GAS / AIR END
• Aluminum
• Stainless Steel
• Nitrile or FKM Elastomers

WET END
• Aluminum
• Stainless Steel
• Nitrile or PTFE Diaphragm / Check Valves



DUAL POWER

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.

OIL & GAS INDUSTRY PUMPS

PERFORMANCE & SPECIFICATIONS

SANDPIPER DRILLERS SERIES

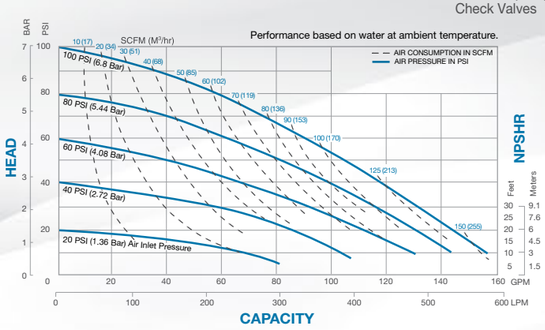
2" 50mm DMF2 Metallic Performance

MAX FLOW
• 140 GPM (530 LPM)

PORTING
• NPT

AIR END
• Aluminum
• Nitrile Elastomers

WET END
• Aluminum
• Nitrile Diaphragm / Check Valves



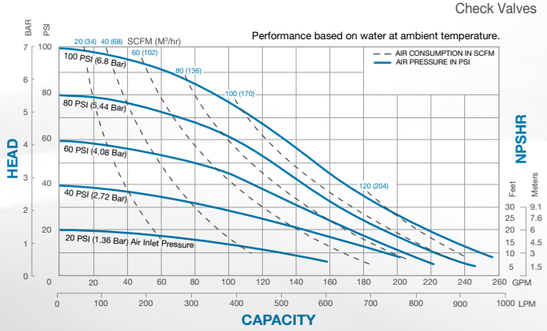
3" 75mm DMF3 Metallic Performance

MAX FLOW
• 260 GPM (988 LPM)

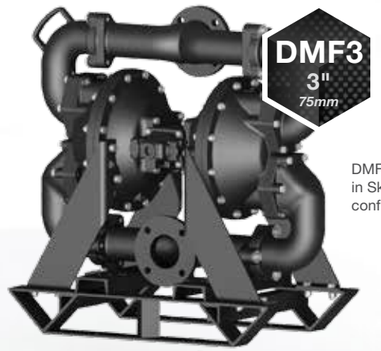
PORTING
• ANSI Flange

AIR END
• Aluminum
• Nitrile Elastomers

WET END
• Aluminum
• Nitrile Diaphragm / Check Valves



SANDPIPER Drillers Series pumps operate on compressed air and are designed for the toughest drilling applications. The durable roll cage and skid base configurations provide portability and pump protection. The flap check valve design allows passage of larger solids than traditional ball valve pumps and is ideal for your drilling applications. The exclusive bottom discharge porting arrangement provides superior suction lift and eliminates the damage from settling solids in your pump. This Heavy Duty pump features thick wall construction and is enhanced with an extended wear package.



DMF3 is available in Skid Base configuration

DMF2 is available in Roll Cage or Skid Base configuration

SPECIFICATIONS

PUMP MODELS	A Height	B Width	C Depth	D Bottom of Base to Center Line of: Suction	E Bottom of Base to Center Line of: Discharge	Porting (Standard)	Pipe Size	Displacement Per Stroke	Max Flow Per Minute	Max Solids Handling	Max Fluid Discharge Pressure	Max Air/ Gas Inlet Pressure
	inches (mm)	inches (mm)	inches (mm)	inches (mm)	inches (mm)		inch (mm)	gal (liter)	gal (liter)	inch (mm)	psi (bar)	psi (bar)
G05	11.5 (292)	10.25 (260)	7.06 (179)	1.31 (33)	11.5 (292)	½" NPT / BSP	.5 (12)	.026 (.098)	15 (56)	.125 (3)	100 (7)	100 (7)
G1F	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)	100 (7)	100 (7)
G10F	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)	100 (7)	100 (7)
G15	21.58 (548)	16.66 (423)	12.36 (314)	1.91 (49)	20.31 (516)	1½" NPT / BSP	1.5 (38)	.41 (4.55)	106 (401)	.25 (6)	100 (7)	100 (7)
G20F	20.31 (516)	21.75 (552)	13.63 (346)	17.69 (449)	2.56 (65)	2" NPT	2 (50)	.43 (1.60)	140 (530)	2 (50)	100 (7)	100 (7)
G20	26.31 (668)	16.88 (428)	12.59 (320)	1.88 (48)	24.63 (625)	2" NPT / BSP	2 (50)	.42 (1.59)	150 (567)	.25 (6)	100 (7)	100 (7)
G30	32.06 (814)	19.66 (499)	15.75 (400)	2.34 (60)	29.97 (761)	3" NPT / BSP	3 (75)	.94 (3.56)	235 (889)	.38 (9)	100 (7)	100 (7)
DMF2	26.04 (661)	32 (813)	18.5 (470)	8.73 (222)	23.85 (606)	2" NPT	2 (50)	.42 (1.59)	140 (530)	2 (50)	125 (8.6)	125 (8.6)
DMF3	34.09 (866)	36.72 (933)	18.5 (470)	8.84 (224)	30.34 (771)	3" ANSI	3 (75)	1.62 (6.15)	260 (988)	3 (75)	125 (8.6)	125 (8.6)

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

G05 (Stainless Steel only), G1F, G15, G20 also available in ANSI Raised Face or Weld Neck flange. G30 available in DIN & ANSI Raised Face.

SANDPIPER G SERIES VS COMPETITOR

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

WIDEST AVAILABLE RANGE — SIZE & FLOW

SANDPIPER							COMPETITOR	
3"	2"	2" Flap	1½"	1" Flap	1"	½"	½"	1"
235 GPM (890 LPM)	150 GPM (568 LPM)	140 GPM (530 LPM)	106 GPM (401 LPM)	70 GPM (265 LPM)	45 GPM (170 LPM)	15 GPM (57 LPM)	15 GPM (57 LPM)	53 GPM (201 LPM)

WIDEST TEMPERATURE RANGE — TEMP

SANDPIPER		COMPETITOR	
-10°F (-23°C)	180°F (82°C)	32°F (0°C)	125°F (52°C)

BROADEST CERTIFICATIONS IN THE INDUSTRY — SAFETY

SAFETY COMPLIANCE WITH:

Technical Letter No. R-14 · ANSI LC6 · Ex · CE · NACE Standard MR0175/ ISO15156 · ABS

SAFETY COMPLIANCE WITH:

Technical Letter No. R-14 · ANSI LC6 · Ex · CE

ONLY ½" AND 1" SIZES

LARGEST SOLIDS PASSAGE — SOLIDS HANDLING

TOP & BOTTOM DISCHARGE
Up to 2"

BOTTOM DISCHARGE
For Solids-Laden Fluids

TOP DISCHARGE ONLY
Up to ¼"

EASE OF REPAIR AND LESS DOWNTIME — GAS / AIR VALVE REPAIR

5 MINUTES of on-site main or pilot valve repair with one wrench and removal of only 4 bolts

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 — GAS / AIR END MATERIALS

Aluminum
Stainless Steel
Nitrile or FKM Elastomers

LIMITED
Aluminum only
Nitrile Elastomers only

BEST GUARANTEE IN THE INDUSTRY — PERFORMANCE RELIABILITY

Diaphragm Connecting Rod Guarantee
Non-Stalling Air / Gas Valve Performance Guarantee
5-Year Limited Warranty

LIMITED
Connecting Rod prone to bending
5-year Limited Warranty

HIGH EFFICIENCY AirVantage®

PERFORMANCE & SPECIFICATIONS

ENERGY SAVING TECHNOLOGY

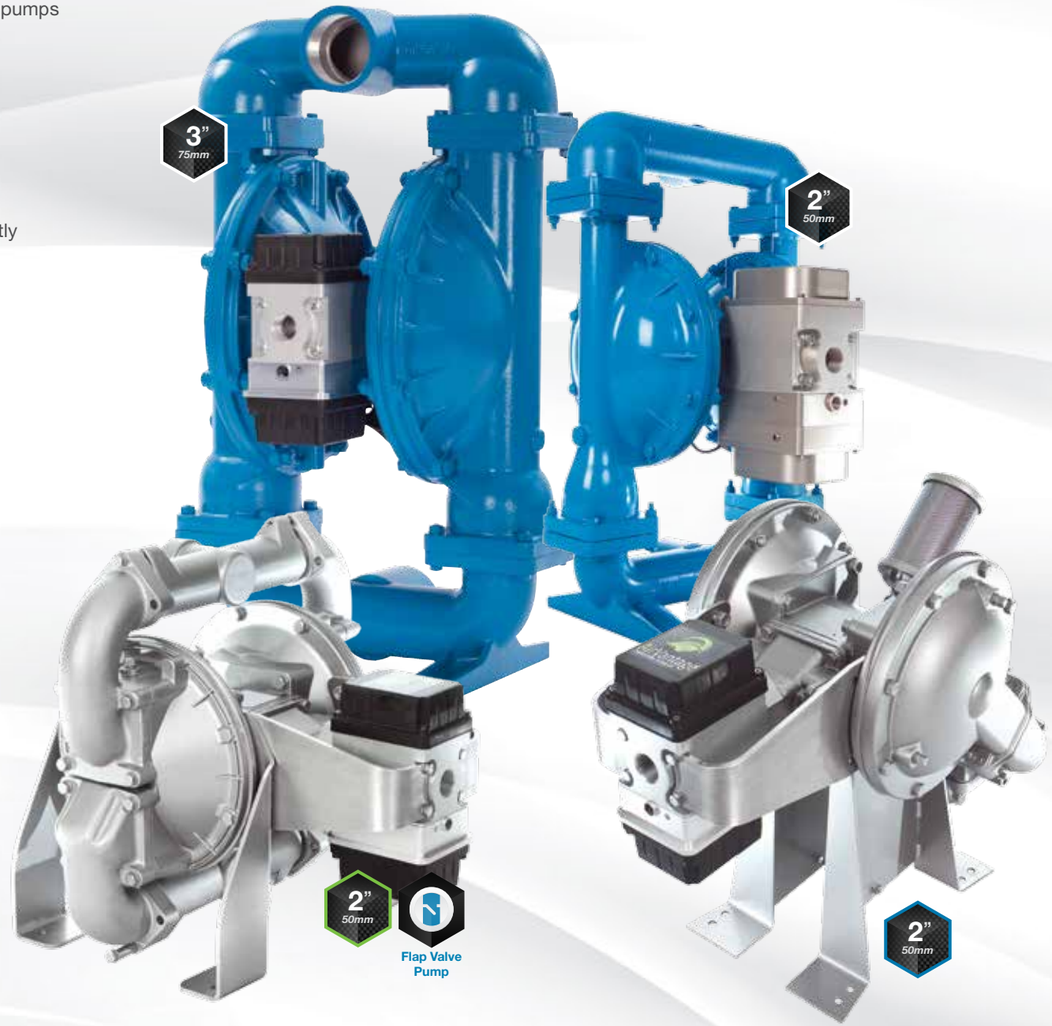
SCAN TO LEARN MORE
SANDPIPERPUMP.COM/AIRVANTAGEPUMPS

AirVantage is an innovative technology for Air Operated Double Diaphragm pumps that significantly reduces air consumption over conventional AODD pumps.

Smart Learning System
Modulates pump performance to optimize energy usage and match changes in system demand

Adaptable Efficiency
Automatically adapts to changing process conditions by constantly managing the amount of air that is used to drive the pump

Completely Self Sustaining
Self-contained 12v power generation module, only requires compressed air. No need for batteries or hard-wiring



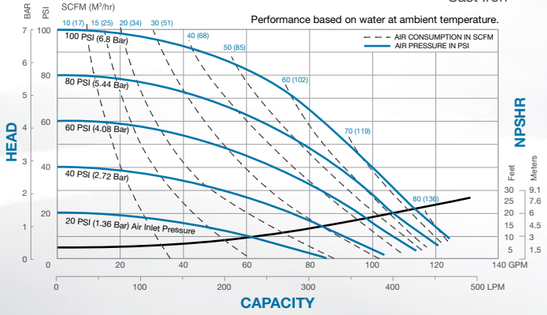
2" 50mm RHDB2 Metallic Performance

MAX FLOW
• 130 GPM (492 LPM)

PORTING
• NPT / BSP

AIR END
• Aluminum

WET END
• Aluminum
• Stainless Steel
• Cast Iron



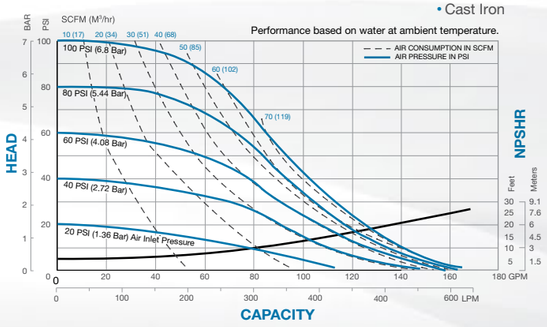
2" 50mm RHDF2 Metallic Performance

MAX FLOW
• 165 GPM (624 LPM)

PORTING
• NPT / BSP

AIR END
• Aluminum

WET END
• Aluminum
• Stainless Steel
• Cast Iron



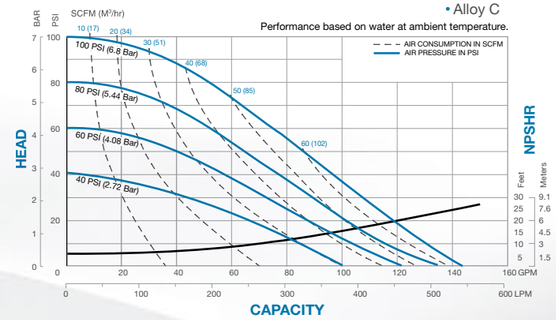
2" 50mm RS20 Metallic Performance

MAX FLOW
• 145 GPM (548 LPM)

PORTING
• NPT / BSP

AIR END
• Aluminum

WET END
• Aluminum
• Stainless Steel
• Cast Iron
• Alloy C



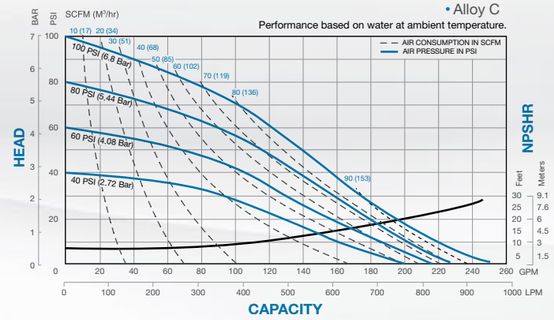
3" 75mm RS30 Metallic Performance

MAX FLOW
• 245 GPM (927 LPM)

PORTING
• NPT / BSP

AIR END
• Aluminum

WET END
• Aluminum
• Stainless Steel
• Cast Iron
• Alloy C



3" 75mm RS30 Non-Metallic Performance

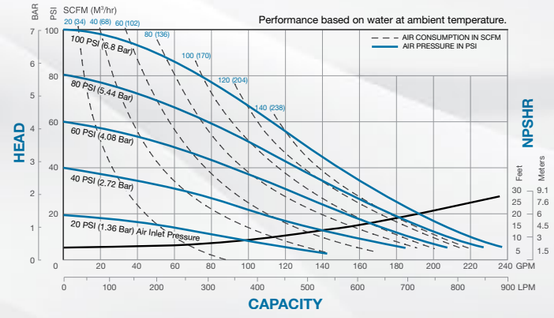
Not Pictured

MAX FLOW
• 238 GPM (901 LPM)

PORTING
• ANSI Flange
• DIN Flange

AIR END
• Aluminum

WET END
• PVDF
• Polypropylene



SPECIFICATIONS

PUMP MODELS	A Height	B Width	C Depth	D Bottom of Base to Center Line of: Suction	E Bottom of Base to Center Line of: Discharge		Connection Style	Pipe Size	Displacement Per Stroke	Max Flow Per Minute	Max Solids Handling	Max Discharge Pressure
	inches (mm)	inches (mm)	inches (mm)	inches (mm)	inches (mm)			inch (mm)	gal (liter)	gal (liter)	inch (mm)	psi (bar)
RHDB2t	22.45 (570)	15.5 (394)	26.4 (670)	9.05 (230)	20.89 (531)		2" NPT	2 (50)	.47 (1.77)	130 (492)	.325 (9)	125 (8.6)
RHDB2b	22.63 (575)	15.5 (394)	26.4 (670)	3.43 (87)	15.27 (388)		2" NPT	2 (50)	.47 (1.77)	130 (492)	.325 (9)	125 (8.6)
RHDF2	20.3 (516)	21.64 (550)	25.1 (637)	2.57 (65)	17.68 (449)		2" NPT	2 (50)	.47 (1.77)	165 (624)	2 (50)	125 (8.6)
RS20	26.38 (681)	16.94 (430)	26.31 (668)	2 (50)	24.88 (632)		2" NPT	2 (50)	.42 (1.59)	145 (548)	.25 (6)	125 (8.6)
RS30	32.19 (818)	19.65 (499)	26.31 (603)	2.34 (59)	30.08 (764)		3" NPT	3 (75)	1 (3.78)	245 (927)	.38 (9)	125 (8.6)
RS30nm	40.75 (1035)	33.125 (843)	24.95 (633)	4.75 (121)	35.75 (908)		3" Flange	3 (75)	.9 (3.41)	238 (901)	.71 (18)	100 (7)

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

UL LISTED 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.

UL: Underwriters Laboratories

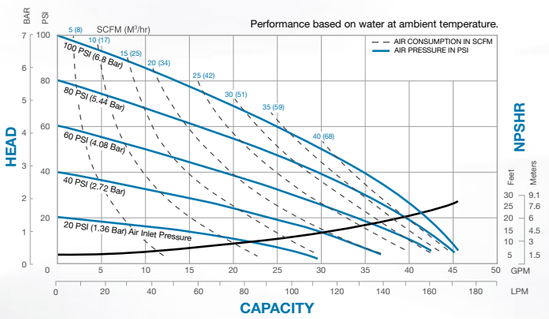
1" 25mm U1F Metallic Performance

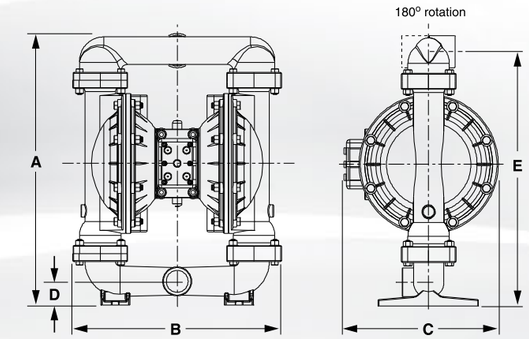
MAX FLOW
- 45 GPM (170 LPM)

PORTING
- NPT / BSP

AIR END
- Aluminum

WET END
- Aluminum





SCAN TO LEARN MORE
SANDPIPERPUMP.COM/ULPUMPS

SPECIFICATIONS

PUMP MODELS	A Height	B Width	C Depth	D Bottom of Base to Center Line of: Suction	E Bottom of Base to Center Line of: Discharge	Connection Style	Pipe Size	Displacement Per Stroke	Max Flow Per Minute	Max Solids Handling	Max 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)

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

SUBMERSIBLE CENTRIFUGAL PUMPS

PERFORMANCE & SPECIFICATIONS

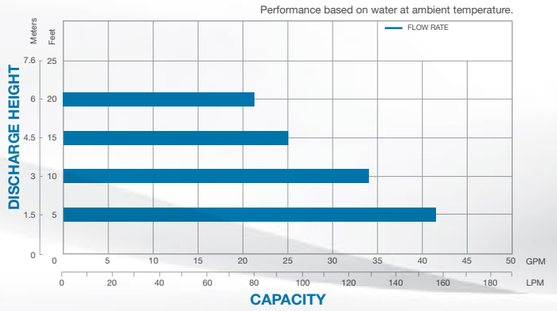
The PortaPump® Submersible, Battery-Powered Pump operates using any 12-volt car or truck battery. It comes equipped with cables and battery clips. Extremely portable, the pump weighs only 33 pounds (15 kg) and can fit through openings as small as 10" (25cm). Electrically safe and whisper quiet.

1½" 38mm SPA1½-E Metallic Performance

MAX FLOW
- 43 GPM (163 LPM)

PORTING
- NPT / BSP

WET END
- Aluminum



The SludgeMaster™ Submersible, Air-Powered Trash Pump handles mud, leaves, twigs, sand, sludge, trash-laden water and soft solids to 1½" (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.

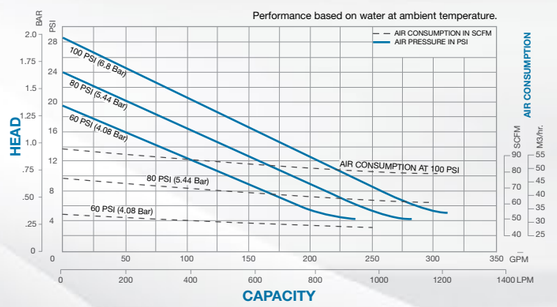
3" 75mm SMA3 Metallic Performance

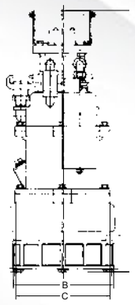
MAX FLOW
- 300 GPM (1140 LPM)

PORTING
- NPT / BSP

AIR END
- Aluminum

WET END
- Aluminum





SCAN TO LEARN MORE
SANDPIPERPUMP.COM/SUBMERSIBLE

SPECIFICATIONS

PUMP MODELS	A Height	B Width	C Depth	D Base to Center Discharge	E Weight	Connection Style	Pipe Size	Max Flow Per Minute	Max Solids Handling	Max 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

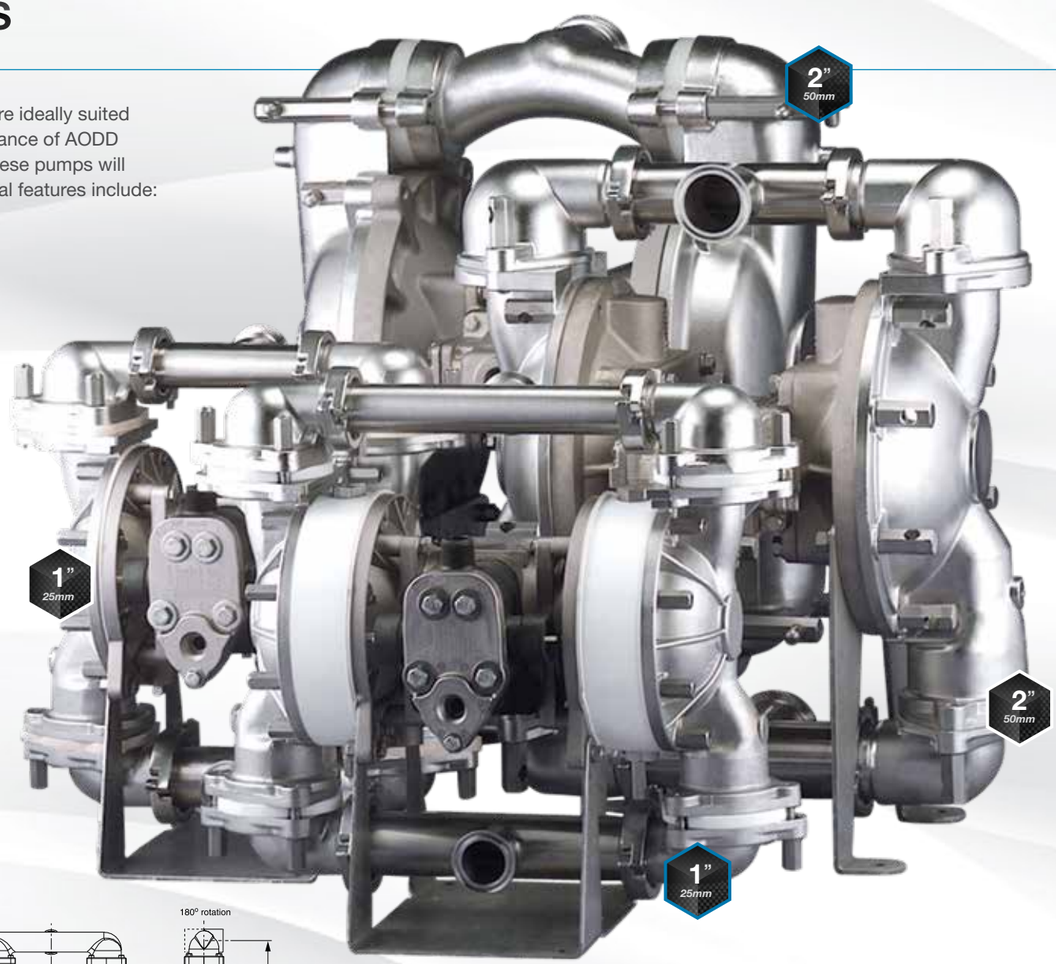
SCAN TO LEARN MORE
SANDPIPERPUMP.COM/USDAPUMPS

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**

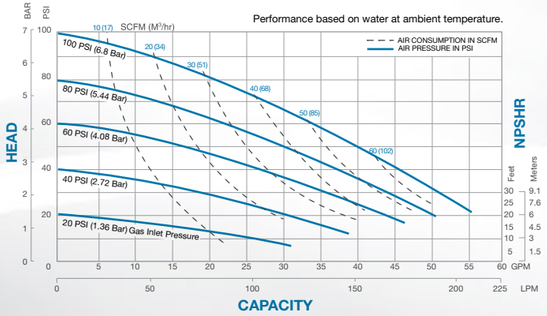
Materials Of Construction
Electropolished 316 and 302/304 Stainless Steel Components

Porting Options
Rotatable manifolds



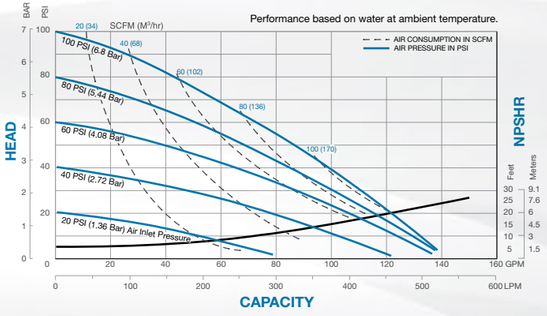
1" 25mm SSB1 / DSB1 Metallic Performance

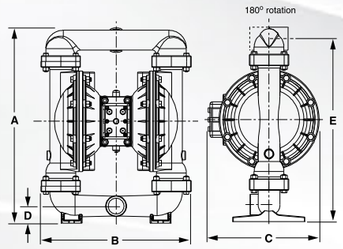
MAX FLOW • 54 GPM (204 LPM)
PORTING • Tri-Clamp
AIR END • Nickel Plated Aluminum
WET END • Stainless Steel



2" 50mm SSB2 Metallic Performance

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

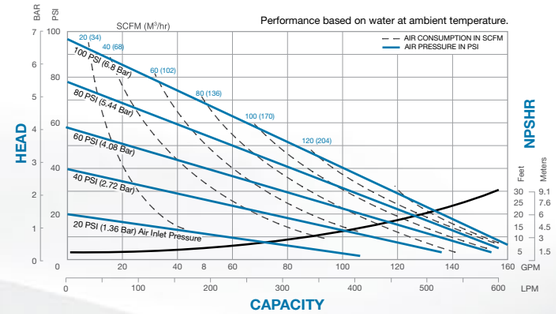




EC1935
Food Processing plastic and elastomer food contact components meet the requirements of EU Regulation 1935/2004/EC. Refer to declaration of conformity for compliant models.

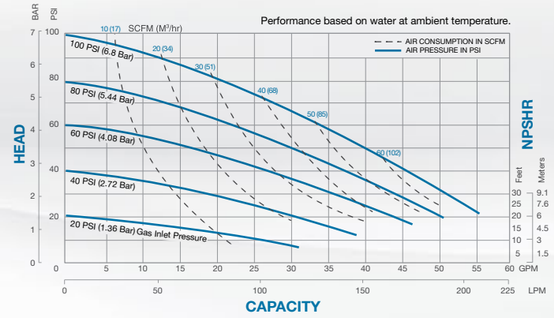
2" 50mm SSA2 Metallic Performance

MAX FLOW • 150 GPM (567 LPM)
PORTING • Tri-Clamp
AIR END • Nickel Plated Aluminum
WET END • Stainless Steel



1" 25mm SET1 Metallic Performance

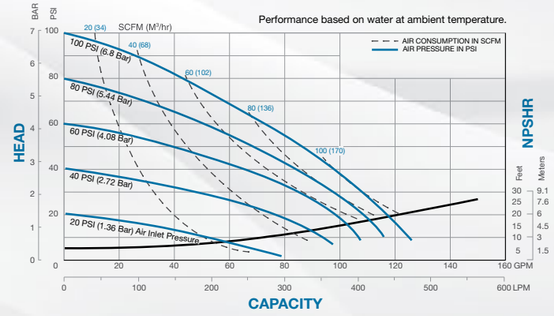
MAX FLOW • 54 GPM (204 LPM)
PORTING • Tri-Clamp
AIR END • Nickel Plated Aluminum
WET END • Stainless Steel



2" 50mm SET2 Metallic Performance

Not Pictured

MAX FLOW • 123 GPM (465 LPM)
PORTING • Tri-Clamp
AIR END • Nickel Plated Aluminum
WET END • Stainless Steel



SPECIFICATIONS

PUMP MODELS	A Height	B Width	C Depth	D Bottom of Base to Center Line of: Suction	E Bottom of Base to Center Line of: Discharge		Connection Style	Pipe Size	Displacement Per Stroke	Max Flow Per Minute	Max Solids Handling	Max 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.

STANDARD FDA COMPLIANT PUMPS

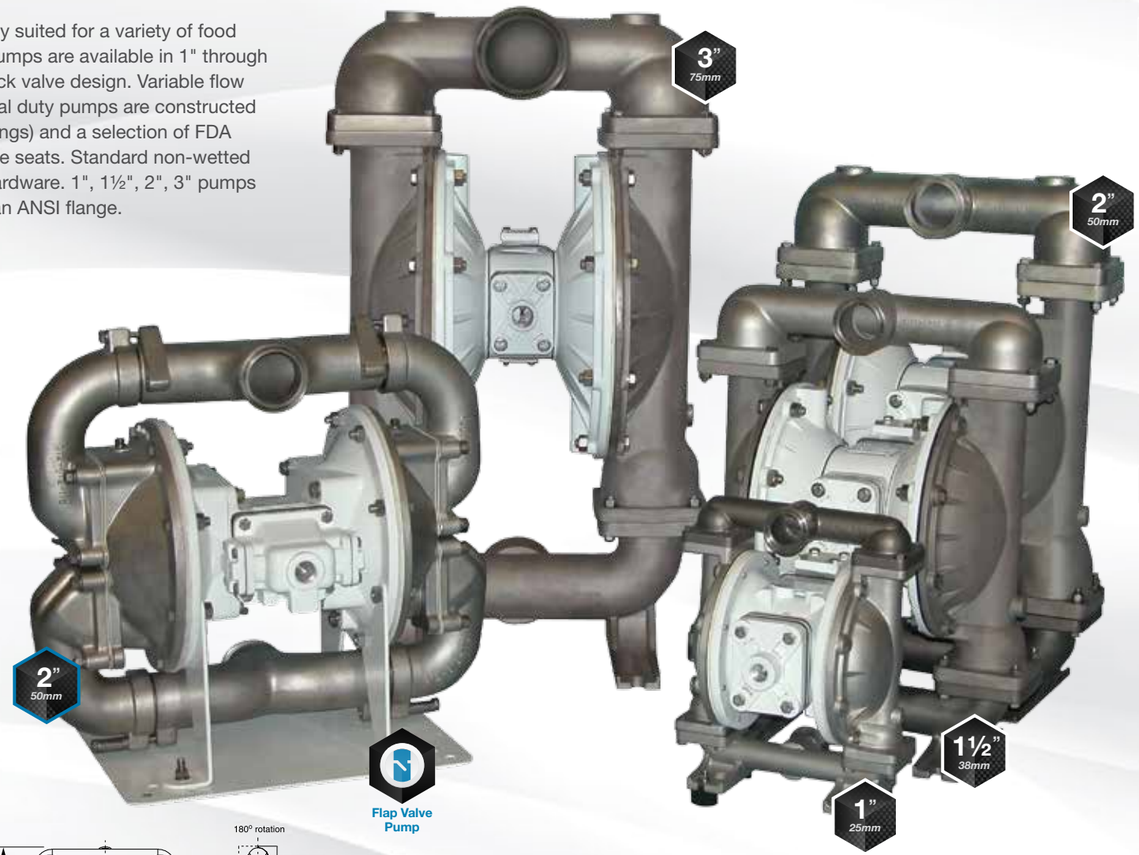
PERFORMANCE & SPECIFICATIONS

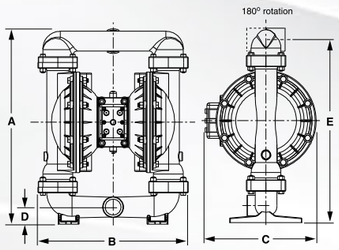
SCAN TO LEARN MORE
SANDPIPERPUMP.COM/FDAPUMPS

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", 1½", 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





1" 25mm T1F Metallic Performance

MAX FLOW
• 45 GPM (170 LPM)

PORTING
• Tri-Clamp

AIR END
• Epoxy Coated Aluminum

WET END
• Stainless Steel

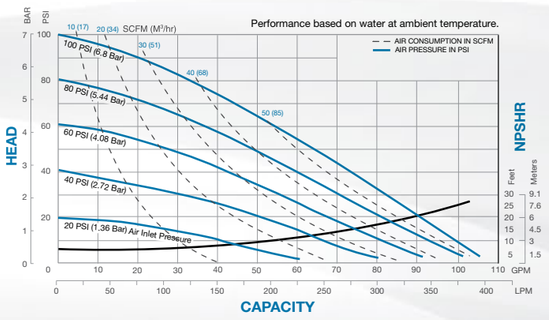
1½" 38mm T15 Metallic Performance

MAX FLOW
• 106 GPM (401 LPM)

PORTING
• Tri-Clamp

AIR END
• Epoxy Coated Aluminum

WET END
• Stainless Steel



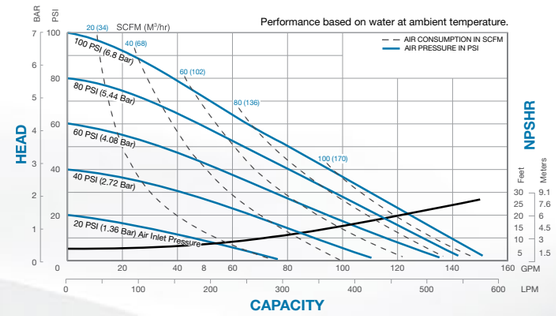
2" 50mm T20 Metallic Performance

MAX FLOW
• 150 GPM (567 LPM)

PORTING
• Tri-Clamp

AIR END
• Epoxy Coated Aluminum

WET END
• Stainless Steel



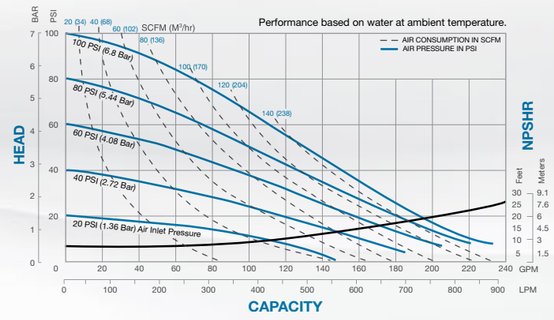
3" 75mm T30 Metallic Performance

MAX FLOW
• 235 GPM (889 LPM)

PORTING
• ANSI Flange

AIR END
• Epoxy Coated Aluminum

WET END
• Stainless Steel



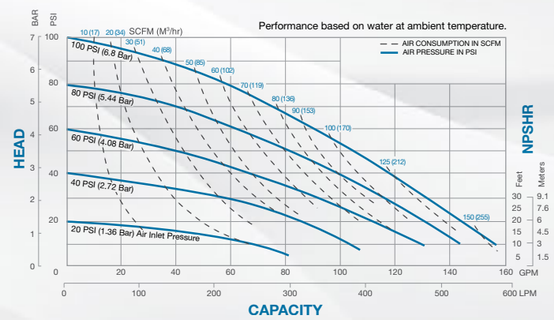
2" 50mm TSA2 Metallic Performance

MAX FLOW
• 140 GPM 530 LPM)

PORTING
• Tri-Clamp

AIR END
• Epoxy Coated Aluminum

WET END
• Stainless Steel



EC1935
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.

SPECIFICATIONS

PUMP MODELS	A Height	B Width	C Depth	D Bottom of Base to Center Line of: Suction	E Bottom of Base to Center Line of: Discharge		Connection Style	Pipe Size	Displacement Per Stroke	Max Flow Per Minute	Max Solids Handling	Max 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)	150 (567)	.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)	235 (889)	.38 (9.5)	125 (8.6)
TSA2	20.81 (529)	21.25 (539)	13 (330)	2.56 (55)	17.56 (447)		2½" 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.

Santoprene is a registered trademark of Exxon Mobil Corporation.

MINE & CONSTRUCTION PUMPS

PERFORMANCE & SPECIFICATIONS

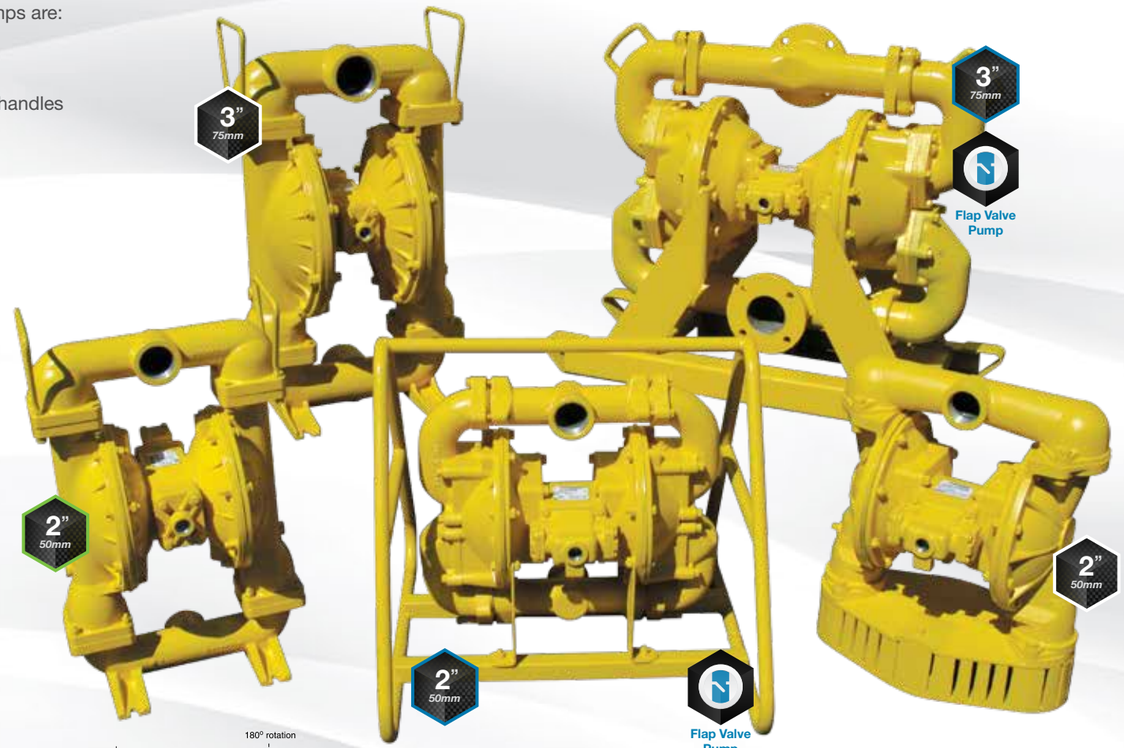
SCAN TO LEARN MORE
SANDPIPERPUMP.COM/MININGPUMPS

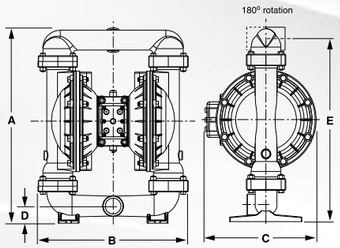
When durability and reliability are paramount in the rigorous environments of today's mines and construction sites, our mining and construction pumps are a great solution. With more ways than one, these pumps are designed to be tossed, dragged and crammed into position to get the fluids you need removed in a hurry. Some of the most attractive features of these pumps are:

Ease of Use
Superior on-off-on reliability and easy to move with built in handles

Base Mounting Options
Skid mount, roll cage, and strainer bases available

Performance
High flow and solids size options available





2" 50mm MSB2 Metallic Performance

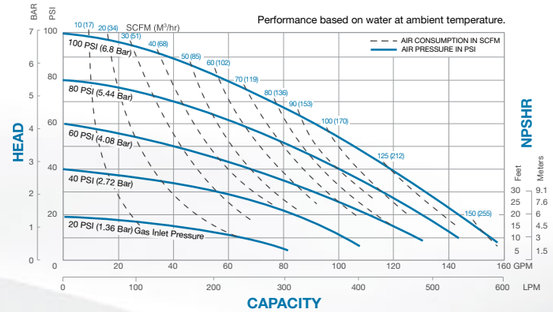
MAX FLOW • 125 GPM (473 LPM)
PORTING • NPT / BSP
AIR END • Aluminum
WET END • Aluminum

3" 75mm MSA3/MSA3-C Metallic Performance

MAX FLOW • 260 GPM (988 LPM)
PORTING • ANSI Flange
AIR END • Aluminum
WET END • Aluminum

2" 50mm MSA2 / MSA2-B / MSA2-C Metallic Performance

MAX FLOW • 140 GPM (530 LPM)
PORTING • NPT / BSP
AIR END • Aluminum
WET END • Aluminum



2" 50mm S20 Metallic Performance

MAX FLOW • 150 GPM (567 LPM)
PORTING • NPT / BSP • ANSI / DIN Flange
AIR END • Aluminum
WET END • Aluminum

3" 75mm S30 Metallic Performance

MAX FLOW • 238 GPM (901 LPM)
PORTING • NPT / BSP • ANSI / DIN Flange
AIR END • Aluminum
WET END • Aluminum

SPECIFICATIONS

PUMP MODELS	A Height inches (mm)	B Width inches (mm)	C Depth inches (mm)	D Bottom of Base to Center Line of: Suction inches (mm)	E Bottom of Base to Center Line of: Discharge inches (mm)		Connection Style	Pipe Size inch (mm)	Displacement Per Stroke gal (liter)	Max Flow Per Minute gal (liter)	Max Solids Handling inch (mm)	Max Discharge Pressure psi (bar)
MSB2	Variable	Variable	Variable	Variable	Variable		2" NPT / BSP	2 (50)	.36 (1.36)	125 (473)	.25 (6)	125 (8.6)
MSA3-C	Variable	Variable	Variable	Variable	Variable		3" #125 ANSI	3 (75)	1.62 (6.15)	260 (988)	3 (75)	125 (8.6)
MSA2	Variable	Variable	Variable	Variable	Variable		2" NPT / BSP	2 (50)	.43 (1.60)	140 (530)	2 (50)	125 (8.6)
S20	26.31 (669)	16.88 (428)	12.59 (320)	1.88 (48)	24.63 (625)		2" NPT / BSP	2 (50)	.42 (1.59)	150 (567)	.25 (6)	125 (8.6)
S30	32.06 (814)	19.66 (499)	15.75 (400)	2.34 (60)	29.97 (761)		3" NPT / BSP	3 (75)	.94 (3.56)	238 (901)	.38 (9.5)	125 (8.6)

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

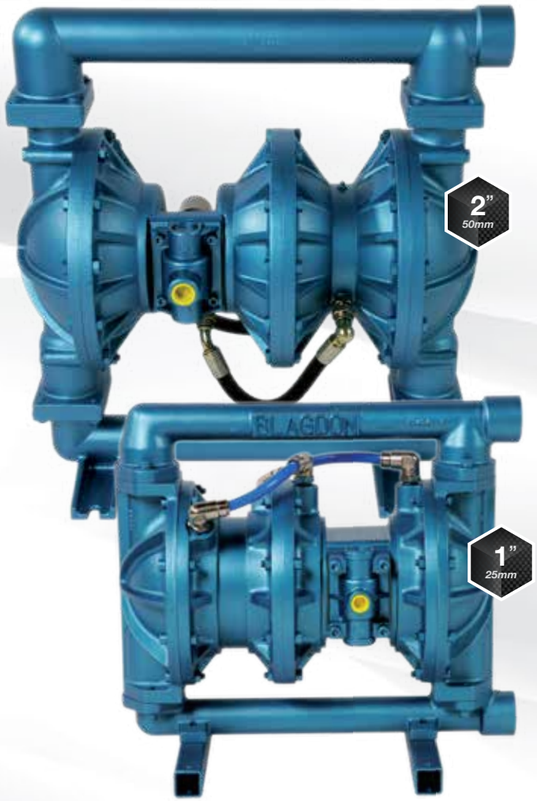
HIGH PRESSURE PUMPS

PERFORMANCE & SPECIFICATIONS

SCAN TO LEARN MORE
SANDPIPERPUMP.COM/HIGHPRESSUREPUMPS

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 N25 and N50 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 30 GPM (114 LPM) for N25 and as high as 90 GPM (341 LPM) with N50.



Maximum Flow Control
High pressure capabilities allow for optimum control

Heavy Duty
Bolted construction and made with robust materials

Unique Orientation
Single end discharge and suction available

Reliability
Tested to ensure the long lasting performance

Non-Freezing, Non-Stalling
Patented air valve will never unexpectedly stop

ONLY High Pressure Flap Valve Pump in the WORLD

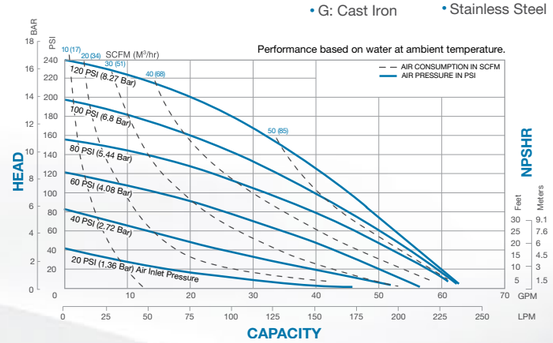
2" 50mm EH2-M / GH2-M Metallic Performance

MAX FLOW
- 62 GPM (235 LPM)

PORTING
- NPT

AIR END
- E: Aluminum
- G: Cast Iron

WET END
- Cast Iron
- Stainless Steel



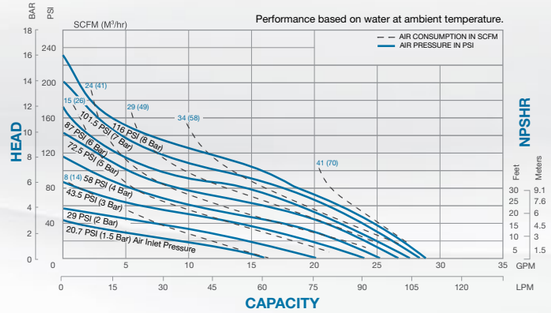
1" 25mm N25 Metallic Performance

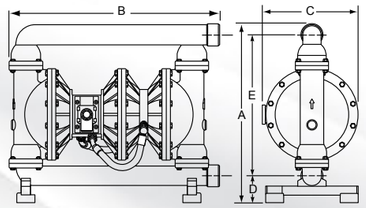
MAX FLOW
- 30 GPM (114 LPM)

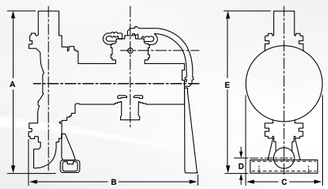
PORTING
- NPT / BSP

AIR END
- Aluminum

WET END
- Aluminum
- Stainless Steel







2" 50mm SH2-M Metallic Performance

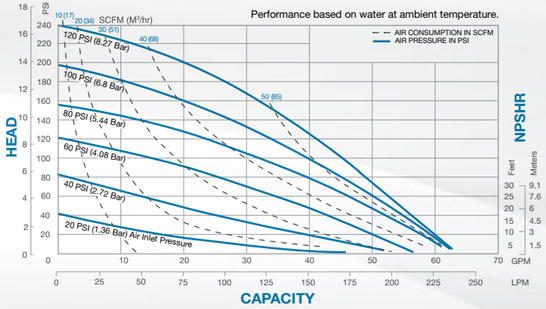
EXCLUSIVE SANDPIPER FEATURE

MAX FLOW
- 62 GPM (235 LPM)

PORTING
- NPT

AIR END
- Aluminum

WET END
- Aluminum
- Cast Iron



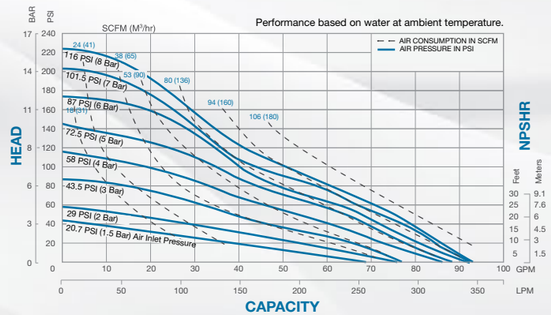
2" 50mm N50 Metallic Performance

MAX FLOW
- 90 GPM (341 LPM)

PORTING
- NPT / BSP

AIR END
- Aluminum

WET END
- Aluminum
- Stainless Steel



SPECIFICATIONS

PUMP MODELS	A Height	B Width	C Depth	D Bottom of Base to Center Line of: Suction	E Bottom of Base to Center Line Discharge		Connection Style	Pipe Size	Displacement Per Stroke	Max Flow Per Minute	Max Solids Handling	Max Fluid Discharge Pressure	Max Air/ Gas Inlet 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)	.30 (1.1)	62 (235)	.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)	62 (235)	2 (50)	250 (17)	125 (8.6)
N25	15.94 (405)	18.27 (464)	11.02 (280)	1.97 (50)	14.95 (380)		1" BSP	1 (25)	.13 (.5)	30 (125)	.13 (3)	232 (16)	117 (8)
N50	24.41 (620)	28.70 (729)	13.07 (332)	3.66 (93)	22.95 (583)		2" BSP	2 (50)	.42 (1.9)	75 (341)	.25 (6)	232 (16)	117 (8)

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

FILTER PRESS SYSTEMS

DESCRIPTION & SPECIFICATIONS

Built-to-Order, Multi-Pump Systems

Combine a high volume fill pump with a high pressure feed pump. Frequently used for filter press feed applications, the systems produce operating pressures to 250 PSI (17 BAR). This results in shortened press cycles, drier cake and less costly disposal.

Base Systems

SCAN TO LEARN MORE
SANDPIPERPUMP.COM/FILTERPRESS

040.010.000 consists of:

- (1) S20W1INCANS100
- (1) EH2-M, TN-4-I
- Filter/Regulator (1) 020.052.000
- Filter/Regulator (1) 020.051.000
- Includes base & piping with 2" flange suction & discharge connections

040.011.000. consists of:

- (1) S30W1INCANS100
- (1) EH2-M, TN-4-I
- Filter/Regulator (1) 020.052.000
- Filter/Regulator (1) 020.051.000
- Includes base & piping with 3" flange suction & discharge connections

040.003.000. consists of:

- (1) SA2-A, DA-5-II
- (1) SH2-M, DN-7-I
- Filter/Regulator (1) 020.052.000
- Filter/Regulator (1) 020.051.000
- Includes base & piping with 2" flange suction & discharge connections

040.004.000. consists of:

- (1) SA3-M, DA-2-II
- (1) SH2-M, DN-7-I
- Filter/Regulator (1) 020.052.000
- Filter/Regulator (1) 020.051.000
- Includes base & piping with 3" flange suction & discharge connections

Consult Factory For:

- Lead time
- Pricing
- Combinations of pumps for other systems

Custom built heavy duty wastewater, filter press pumping system.

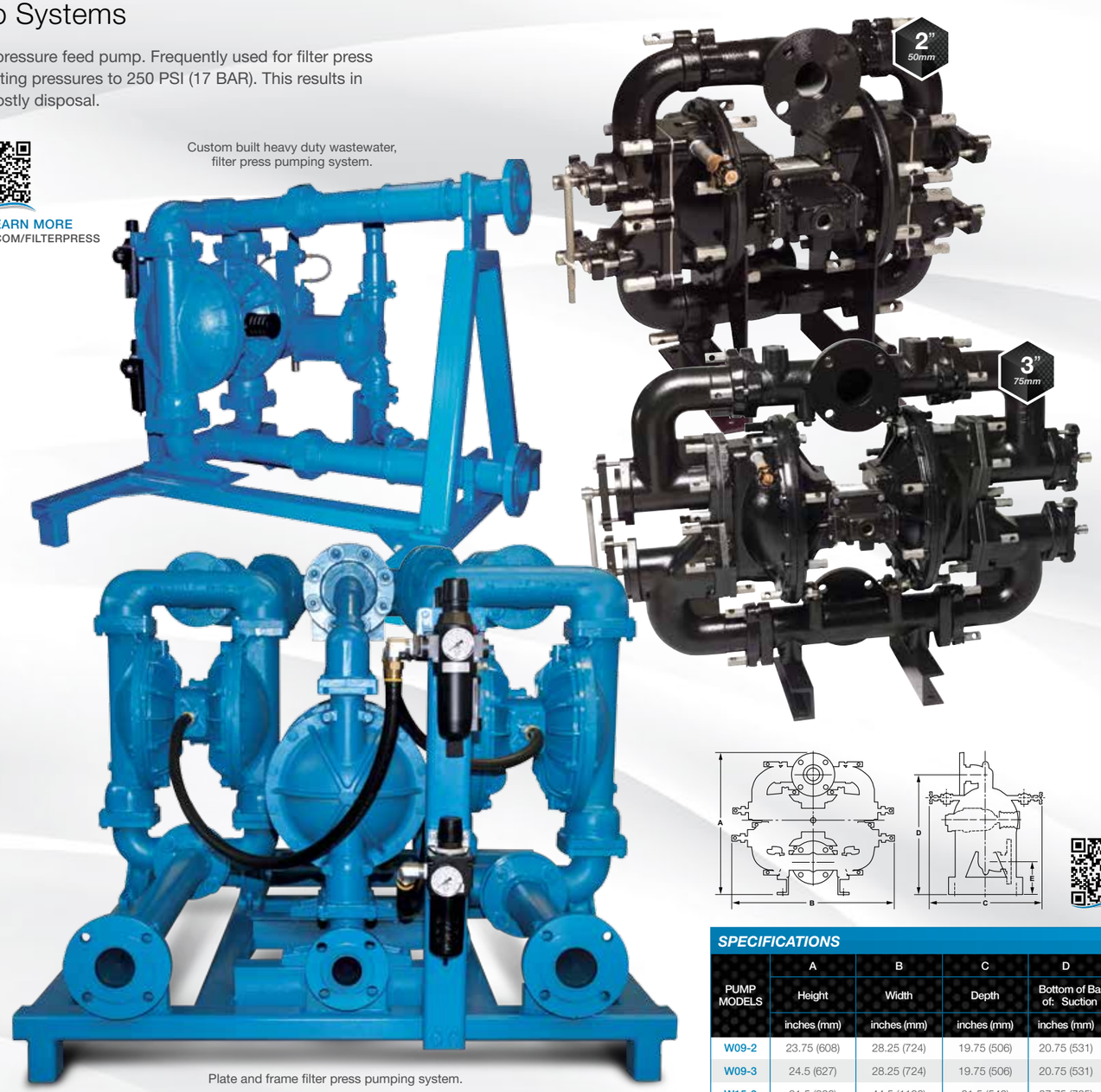


Plate and frame filter press pumping system.

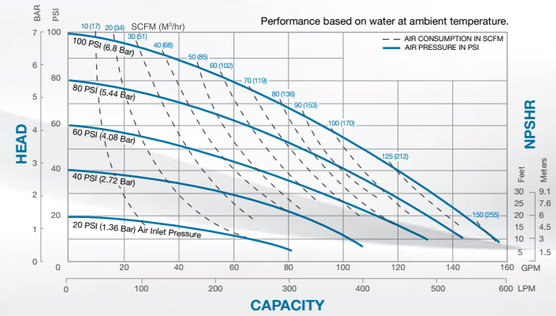
WASTEWATER PUMPS

PERFORMANCE & SPECIFICATIONS

Non-Clog Wastewater Pumps are fitted with swing check valves and easy access clean-outs. The pumps are designed specifically for slurry and solids-laden materials. Flap valves allow passage of suspended, pipe-size solids and stringy material. Constructed of cast iron and durable epoxy coating inside and out.

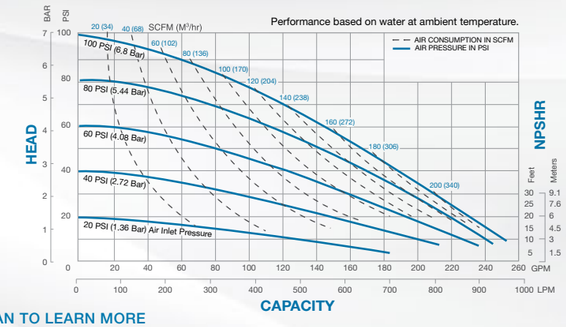
2" 50mm W09 Metallic Performance

MAX FLOW	PORTING	AIR END	WET END
• 140 GPM (530 LPM)	• ANSI Flange	• Cast Iron	• Cast Iron



3" 75mm W15 Metallic Performance

MAX FLOW	PORTING	AIR END	WET END
• 260 GPM (988 LPM)	• ANSI Flange	• Cast Iron	• Cast Iron



SCAN TO LEARN MORE
SANDPIPERPUMP.COM/WASTEWATER

SPECIFICATIONS

PUMP MODELS	A Height	B Width	C Depth	D Bottom of Base to Center Line of: Suction	E Bottom of Base to Center Line Discharge	Connection Style	Pipe Size	Displacement Per Stroke	Max Flow Per Minute	Max Solids Handling	Max Discharge Pressure
	inches (mm)	inches (mm)	inches (mm)	inches (mm)	inches (mm)		inch (mm)	gal (liter)	gal (liter)	inch (mm)	psi (bar)
W09-2	23.75 (608)	28.25 (724)	19.75 (506)	20.75 (531)	5.63 (144)	2" 125# ANSI	2 (50)	.43 (1.60)	140 (530)	2 (50)	125 (8.6)
W09-3	24.5 (627)	28.25 (724)	19.75 (506)	20.75 (531)	5.63 (144)	3" 125# ANSI	3 (75)	.43 (1.60)	140 (530)	2 (50)	125 (8.6)
W15-3	31.5 (800)	44.5 (1130)	21.5 (546)	27.75 (705)	6 (152)	3" 125# ANSI	3 (75)	1.23 (4.66)	260 (988)	3 (75)	125 (8.6)
W15-4	32.25 (819)	44.5 (1130)	21.5 (546)	27.75 (705)	6 (152)	4" 125# ANSI	4 (102)	1.23 (4.66)	260 (988)	3 (75)	125 (8.6)

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**

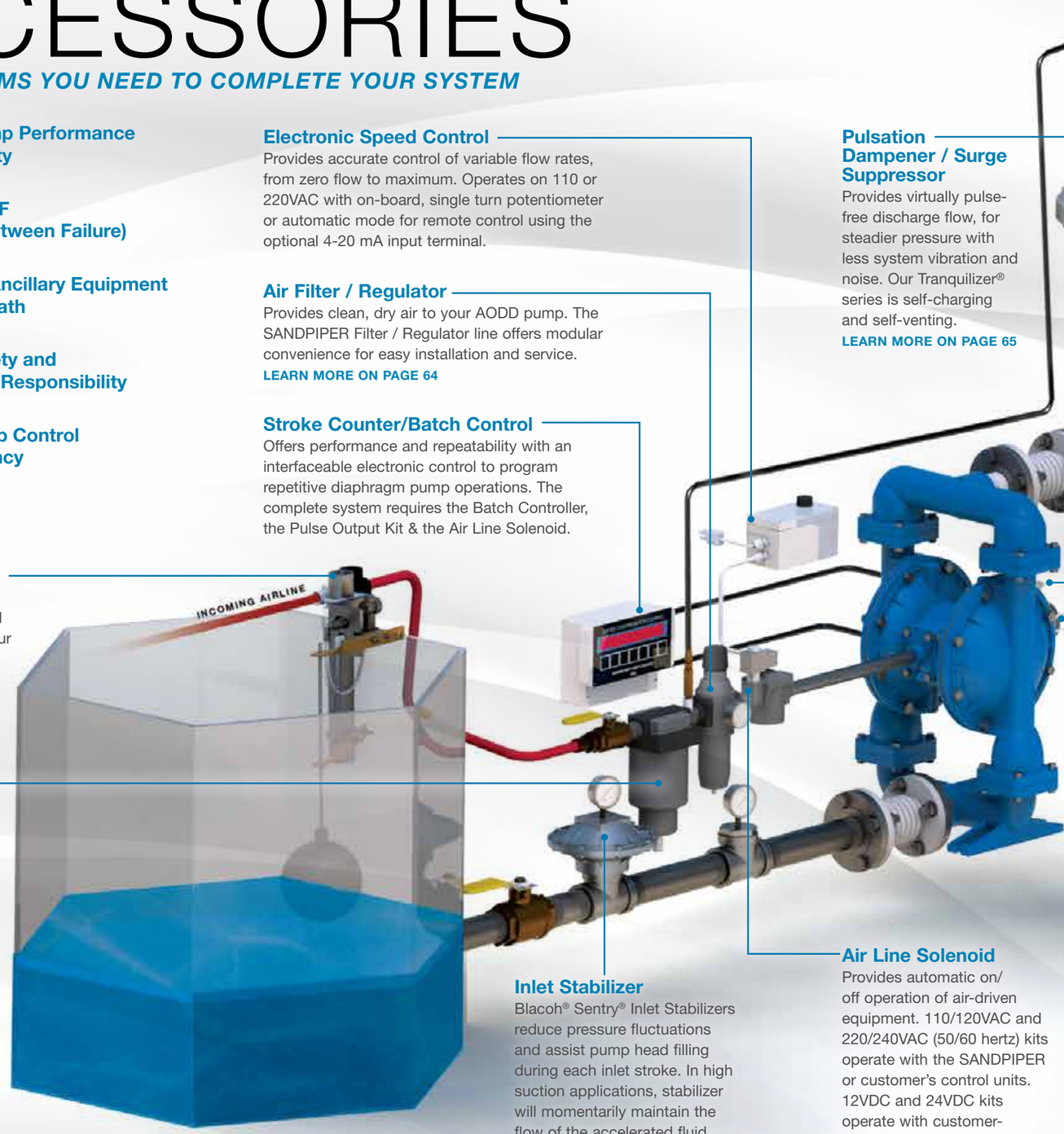
Electronic Speed Control
Provides accurate control of variable flow rates, from zero flow to maximum. Operates on 110 or 220VAC with on-board, single turn potentiometer or automatic mode for remote control using the optional 4-20 mA input terminal.

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.

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.



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
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 customer-supplied controls only.

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

Pulsation Dampener / Surge Suppressor
Provides virtually pulse-free discharge flow, for steadier pressure with less system vibration and noise. Our Tranquilizer® series is self-charging and self-venting.
LEARN MORE ON PAGE 65

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

Reduced Maintenance
Clean, regulated air

Lower Operating Costs
Reduced air consumption and less compressor demand

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

Reliable
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

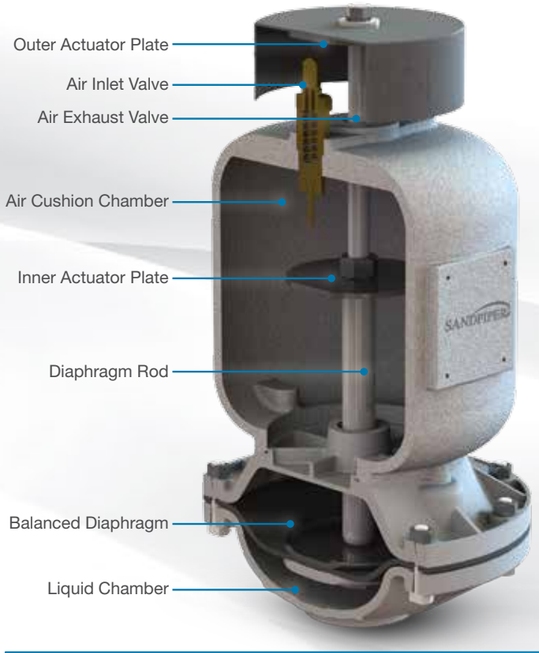
Part Number	Port Size	Max Flow (SCFM)	Description	Max Inlet Pressure	Regulating Pressure Range	Replacement Filter Element Part Number	Lockout Valve Part Number	Mounting Bracket Kit Part Number	Replacement Pressure Gauge Part Number	Lubricator Part Number
020.103.000	¼" NPT	35	Filter/Regulator w/ gauge (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	¾" 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).

TRANQUILIZERS®

PULSATION DAMPENERS / SURGE SUPPRESSORS

TRANQUILIZER



Virtually surge-free flows

Steadier pressures

Less vibration and noise

Simple installation

Automatically self-charging and self-venting

Longest life balanced diaphragm

Capable of pressures to 125 PSI (8.6 BAR)

Protects other system components

ALSO AVAILABLE THROUGH SANDPIPER:

BIACOH™ FLUID CONTROL

Dampeners & Inlet Stabilizers Designed for 1", 2" & 3" Pumps

SCAN TO LEARN MORE
SANDPIPERPUMP.COM/SURGEDAMPENERS

TECHNICAL SPECIFICATIONS

	Model	Desc.	Cert.	Air Inlet Size	Liquid Inlet Size	Height (mm)	Diameter (mm)	Available Wetted Materials: Chamber: Aluminum	Chamber: Stainless Steel	Chamber: Cast Iron	Chamber: Alloy C	Diaphragm: Neoprene	Diaphragm: Nitrile	Diaphragm: FKM	Diaphragm: EPDM	Diaphragm: Neoprene PTFE Overlay	Diaphragm: Santoprene®
Tranquilizers (Featured Above)	**TA1**	1" pumps	Ex CE	¼" NPT (external thread)	1" NPT	13.625"-15.125" (346mm-384mm)	9" (229mm) NPT(F)	✓	✓	X	X	✓	✓	✓	✓	✓	✓
	TA25	1" pumps	Ex CE	¼" NPT (external thread)	1" BSP (Tapered internal thread)	13.625"-15.125" (346mm-384mm)	9" (229mm) NPT(F)	✓	✓	X	X	✓	✓	✓	✓	✓	✓
	TA1½	1" & 1½" pumps	Ex CE	¼" NPT (external thread)	1½" NPT (Internal thread)	19.875"-21.325" (505mm-543mm)	10.5" (267mm) NPT(F)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	TA40	1" & 1½" pumps	Ex CE	¼" NPT (external thread)	1½" BSP (Tapered internal thread)	19.875"-21.325" (505mm-543mm)	10.5" (267mm) NPT(F)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	TA2	1½" & 2" pumps	Ex CE	¼" NPT (external thread)	2" NPT (Internal thread)	20.25"-23.1875" (514mm-589mm)	12.5" (317mm) NPT(F)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	TA50	1½" & 2" pumps	Ex CE	¼" NPT	2" BSP (Tapered internal thread)	20.25"-23.1875" (514mm-589mm)	12.5" (317mm) NPT(F)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	TA3	3" pumps	Ex CE	¼" NPT	3" 150# ANSI or 3" NPT (Internal)	20.125"-23.125" (511mm-587mm)	16.1875" (411mm) NPT(F)	✓	✓	✓	X	✓	✓	✓	✓	✓	✓
	TA80	3" pumps	Ex CE	¼" NPT	3" BSP (Tapered int.) or 80mm DIN	20.125"-23.125" (511mm-587mm)	16.1875" (411mm) NPT(F)	✓	✓	✓	X	✓	✓	✓	✓	✓	✓
Dampeners	**DA05**	½" pumps	CE	¼" NPT	½" NPT	7.468" (190mm) WIDTH: 5.625" (143mm)	6.9375" (176mm)	Aluminum, Stainless Steel & Polypropylene									
	DA07	¾" pumps	CE	¼" NPT	¾" NPT	7.718" (196mm) WIDTH: 5.625" (143mm)	6.9375" (176mm)	Polypropylene only									
	DA10	1" pumps	CE	¼" NPT	1" NPT	11.718" (298mm) WIDTH: 5.625" (143mm)	7.5" (191mm)	Polypropylene only									

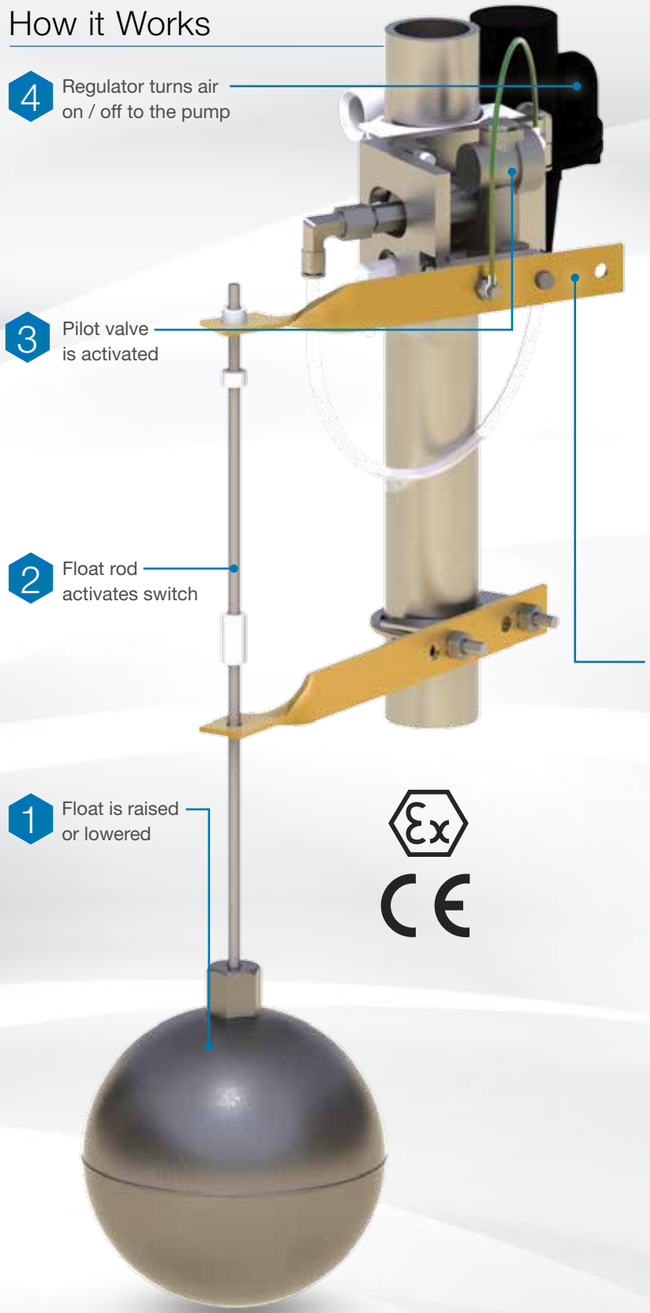
✓ = Available X = Not available

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

LIQUID LEVEL CONTROL

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

How it Works



- **Pneumatic operation** requires no electricity to properly function
- **Adjustable configurations** allow for an operating range from a few inches to 9' (2.7m)
- **Simple design** is easy to install and operate, with few moving parts
- **Versatile orientation** enables a quick, reversible operation
- **Reliable construction** accomplished with a stainless steel float and connecting rod
- **Safe operation** is defined by the unit being groundable and ATEX compliant
- **Universal fit** can be used with all Air Operated Double Diaphragm pumps

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

- Sumping
- Dewatering
- Fluid Transfer
- Tank Filling

ADDITIONAL ACCESSORIES

OTHER ACCESSORIES THAT SANDPIPER OFFERS TO HELP COMPLETE YOUR PROCESS

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
All gauge ports & vent ports are tapped 1/4" NPT
Replacement pressure gauge part number: 020.061.000

Note: The use of a relief valve is recommended for these products in accordance with NFPA 58.

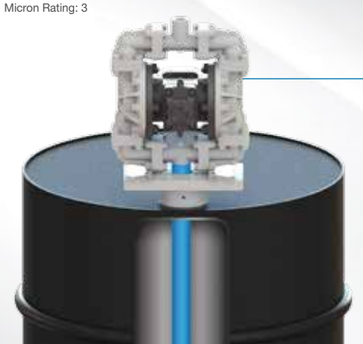
Natural Gas Filters

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 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	500 PSI (34 BAR)	175°F (80°C)	Aluminum Housing, Nitrile Seals, Molded Urethane End Seals
020.063.000	1/2" NPT	42	G1F	020.065.000			
020.064.000	3/4" NPT	133	G10F, G15, G20, G20F, G30	020.066.000			

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



Drum & Pail Transfer Kits

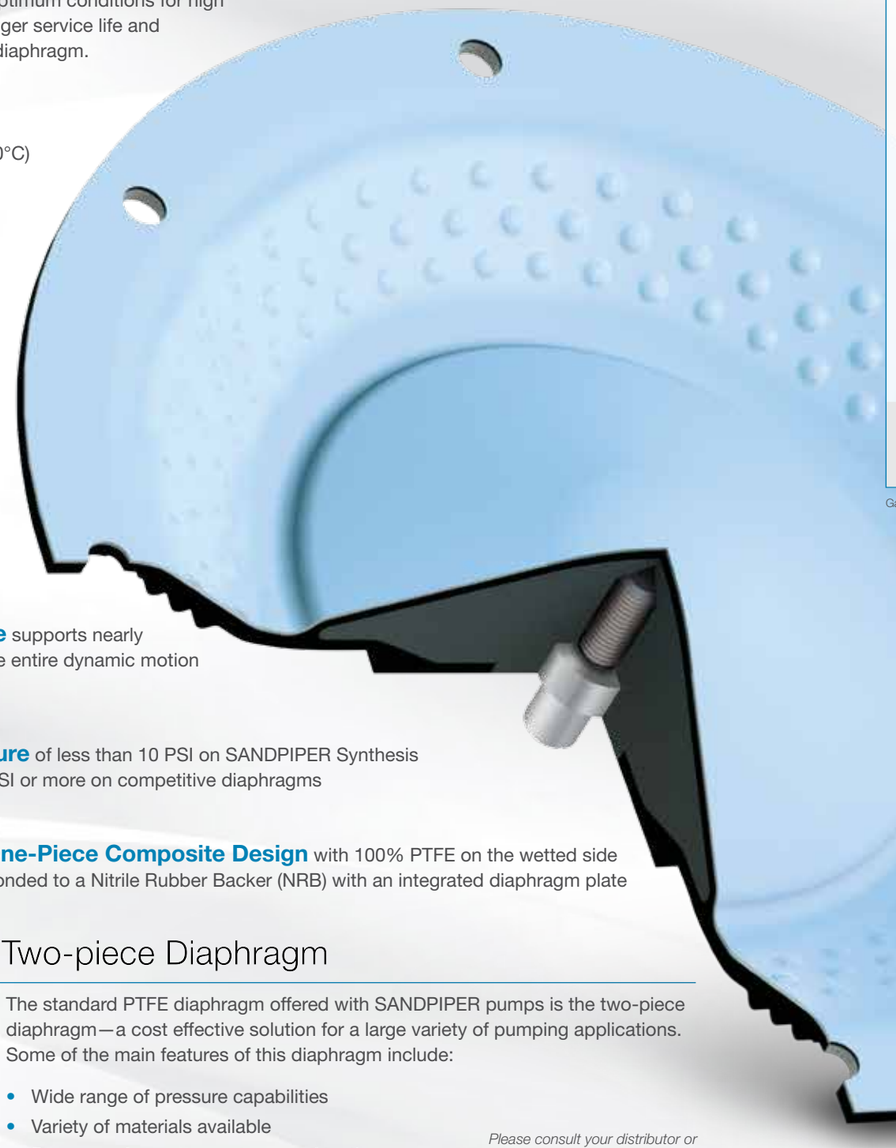
The adaptor kits are constructed of chemically-resistant materials to handle the job. Plastic pipe assembly comes complete with all the hardware needed. Simply attach the threaded end to the suction manifold and lower it into the liquid source. The 55-gallon Drum Transfer Kit includes pump support legs to minimize the vibration occurring in a diaphragm pump. The 120# Barrel Transfer Kit includes a lid with adjustment screws for a snug fit every time.

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

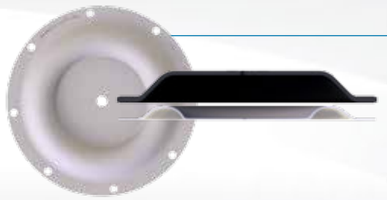
No Outer Diaphragm Plate Abrasion due to trapped fluids

Oversized Integrated Plate supports nearly 50% of the diaphragm through the entire dynamic motion

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

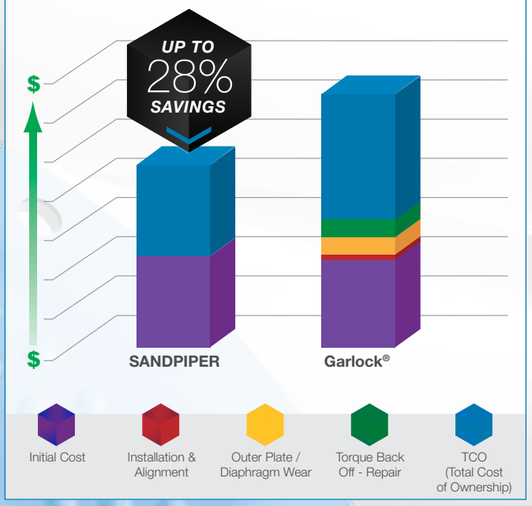


The standard PTFE diaphragm offered with SANDPIPER pumps is the two-piece diaphragm—a cost effective solution for a large variety of pumping applications. Some of the main features of this diaphragm include:

- 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.

TECHNICAL SPECIFICATIONS



Garlock® is a registered tradename of EnPro Industries, Inc.

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 SELECTION 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	!	X	!	+	+	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	+	+	✓	!	✓	190°F / 88°C	-10°F / -23°C
Santoprene®	+	+	+	+	+	275°F/135°C	-40°F/-40°C
Urethane	+	✓	!	X	!	150°F / 66°C	32°F / 0°C
PTFE Synthesis	!	✓	!	+	!	176°F / 80°C	14°F / -10°C
PTFE Two-Piece	!	!	X	+	✓	220°F / 104°C	-35°F / -37°C

For reference only, consult distributor.

+ = Best Type ✓ = Suitable ! = Limitations X = Not Recommended

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

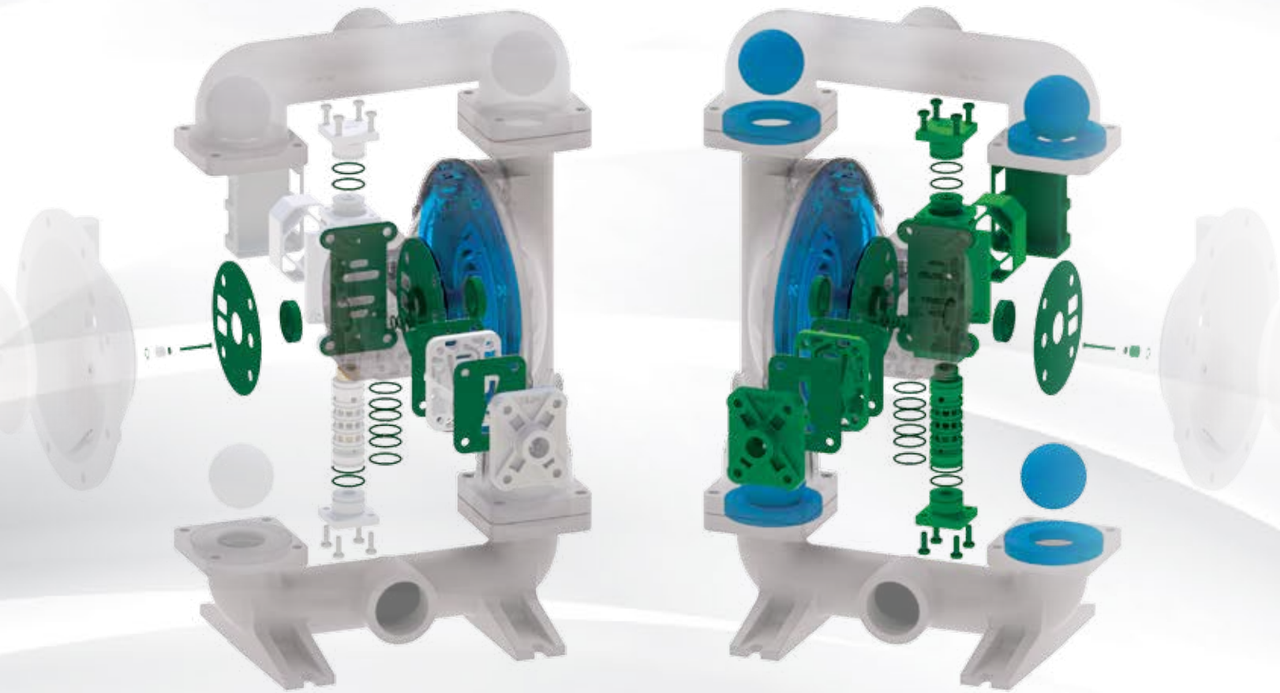
Repair it Once, Repair it Right

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

Save Time and Money
Ordering and repairs made easy



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 End Repair Kit:
- Seals
- O-rings
- Gaskets
- Retaining Rings
- Air Valve Sleeve and Spool
- Pilot Valve Assembly
- Lubricant

Delivering Superior Service

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.

SCAN TO WATCH SANDPIPER SERVICE VIDEOS
SANDPIPERPUMP.COM/VIDEOS

SANDPIPER®
GENUINE PARTS

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.**

LOOKING FOR COMPETITOR AODD SERVICE PARTS & KITS?

RIGHT PARTS
MEET OR BEAT OEM PERFORMANCE & PRICING

PUMPER PARTS
RIGHT PARTS - RIGHT NOW

RIGHT SOLUTION
47+ YEARS OF EXPERTISE IN AODD PUMPING TECHNOLOGY

THE ULTIMATE ONLINE PRODUCT & SERVICE SOLUTION

SANDPIPERPUMP.COM

Instant access, 24 hours a day, 7 days a week from any device with internet access. The new SANDPIPER website will automatically optimize for your screen size to provide the best experience when reviewing products, services, parts, tools and more.

New Product Pages

Easily find product specs, curves and literature on one page

Distributor Locator

Find your local SANDPIPER distributor quickly and easily

SANDPIPER Mobile App

The innovative SANDPIPER mobile app is designed to help you quickly and easily find the tools you need to support your pump. Instantly locate information related to your specific pump using My Pump Details, instantly review our Chemical Compatibility Guide, conveniently flip through our latest full line catalog, watch helpful service and training videos, and more.

This document is available in the languages below

English Chinese Russian Portuguese Spanish German Japanese

Contact Your Local Distributor to Place Your Order:

SANDPIPER®

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

IDEX