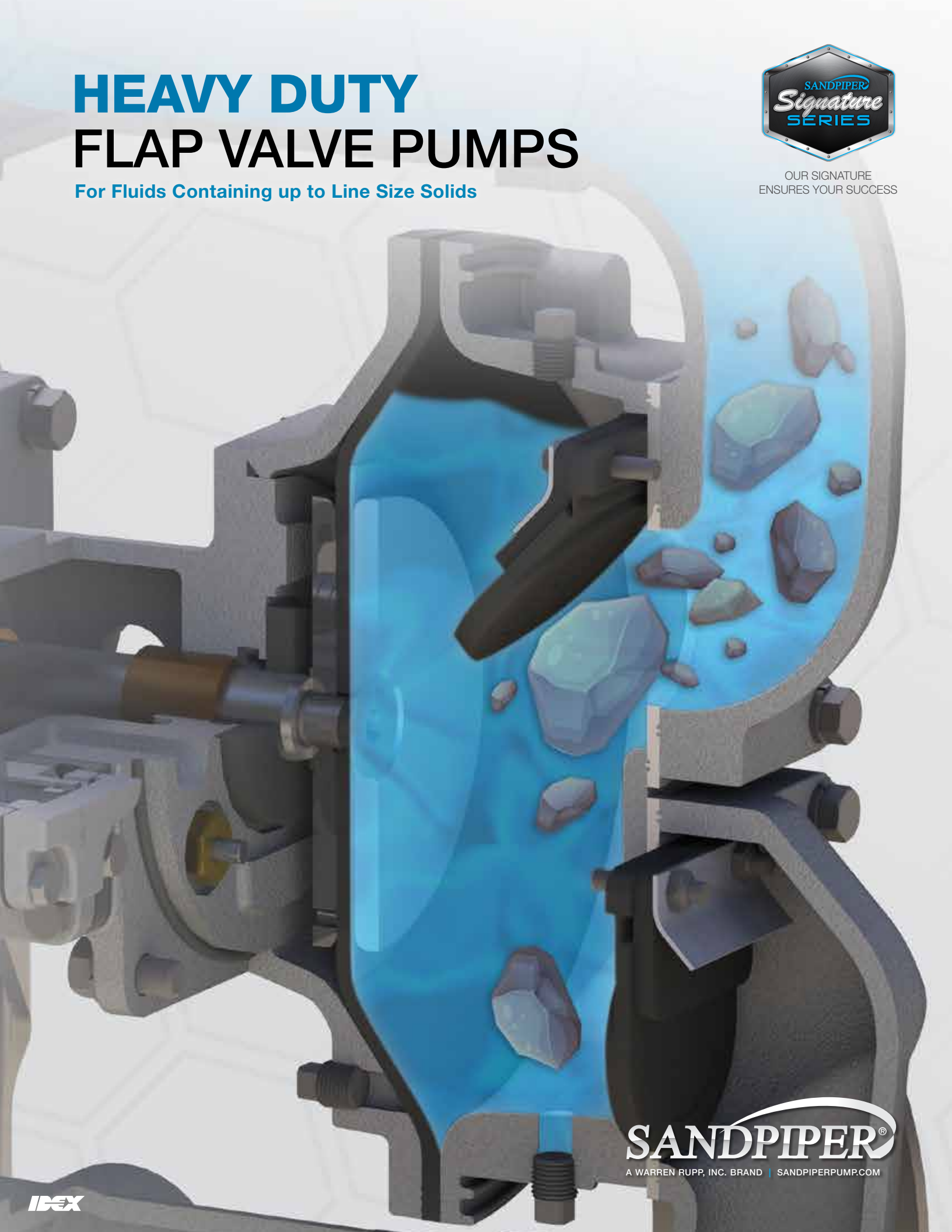
HEAVY DUTY
FLAP VALVE PUMPS

For Fluids Containing up to Line Size Solids

SANDPIPER Signature SERIES

OUR SIGNATURE
ENSURES YOUR SUCCESS



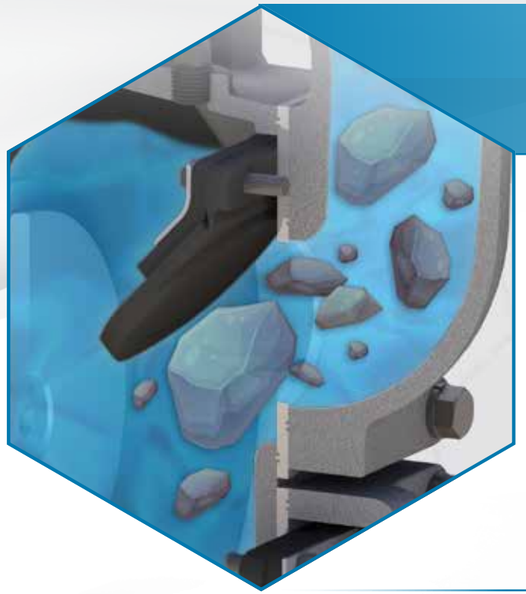
SANDPIPER®

A WARREN RUPP, INC. BRAND | SANDPIPERPUMP.COM

IDEX

KEY ADVANTAGES OF SANDPIPER HEAVY DUTY FLAP VALVE PUMPS

AN IDEAL SOLUTION FOR ABRASIVE SLURRIES, SUSPENDED, NON-SUSPENDED & LINE SIZE SOLIDS REQUIREMENTS



LINE SIZE SOLIDS
FLAP VALVE VS. BALL VALVE PUMPS

Flap Check Valve Pumps

Have a large flow area to allow up to line size solids to pass directly through the pump. Additionally, the bottom discharge design helps prevent these solids from settling in the unit.

Ball Check Valve Pumps

Have much less flow area for solids to pass through. Large solids get stuck in the suction manifold and small solids can settle in the outer chamber, affecting pump performance.

SUPERIOR SUCTION LIFT
FLAP VALVE VS. BALL VALVE PUMPS

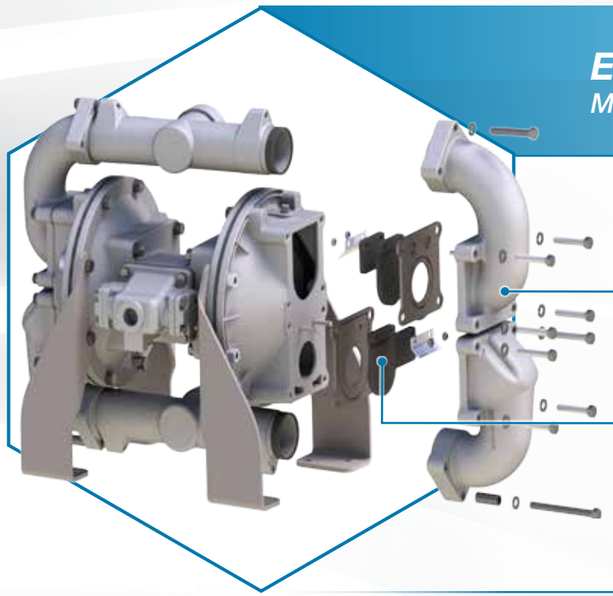
Suction Lift Advantage

SANDPIPER's Flap Valve design provides for superior suction lift capabilities up to 24 feet in water. Diaphragm placement and flap valve seating combine to create a unit capable of suction lifts 15% greater than Ball Valve pumps.

These capabilities are from a dry prime, making the SANDPIPER Flap Valve Pump an excellent solution, in situations where limited choices are available for pump priming.

UP TO **24 FT. (7.3M) SUCTION**
FLAP VALVE PUMPS

UP TO **20 FT. (6.1M) SUCTION**
BALL VALVE PUMPS



EASE OF MAINTENANCE
METALLIC PUMPS

Quick Access to Serviceable Components

To help increase productivity and reduce downtime.

Removable Elbows

By removing the bolts that secure the elbows, it allows access to clear simple clogs without disassembling the entire pump.

Flap Check Valves

With the elbows removed, the flap valves can be inspected and / or replaced as needed.

EASE OF MAINTENANCE
NON-METALLIC PUMPS

Quick Access to Serviceable Components

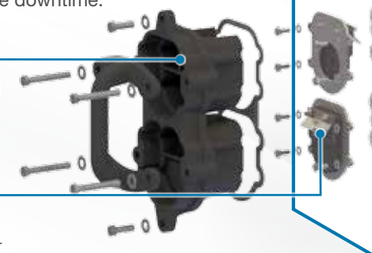
To help increase productivity and reduce downtime.

Remove Clean-Out Cap

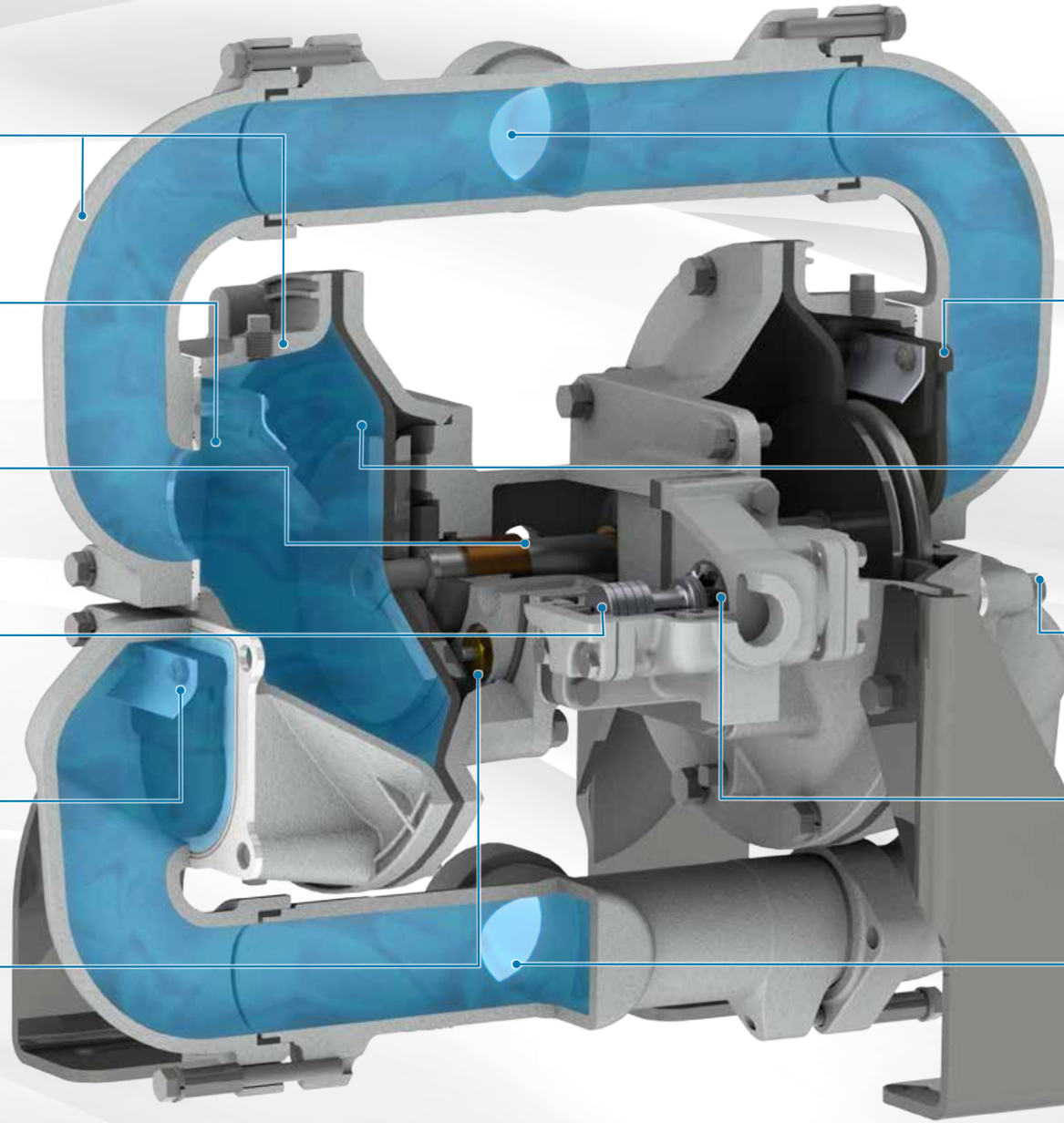
By simply removing six bolts securing the clean-out cap in place, it allows access to clear simple clogs without disassembling the entire pump.

Flap Check Valves

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.



FEATURES & BENEFITS - METALLIC



Thick Manifold & Chamber Walls
Greater wear resistance when pumping solids and solid laden slurries, providing extended service life

Stainless Steel Seats
Provide long-lasting abrasion resistance and solids handling durability

Robust Diaphragm Connecting Rod
Guaranteed not to bend or break; assures reliable and consistent diaphragm operation

Cross-Drilled Directional Spool Valve
Guarantees the pump will not stall and ensures on/off reliability

Easy Access To Flap Valves
Check Valve Flaps can be quickly cleaned or replaced without removing the pump from service

Heavy Duty Actuator Plungers
Ensures reliable pilot valve operation

Dynamic Manifold Connections
Allow suction and discharge manifolds to be positioned in various directions

Flap Valve Construction
Can pass up to line size solids, enabling higher suction lift

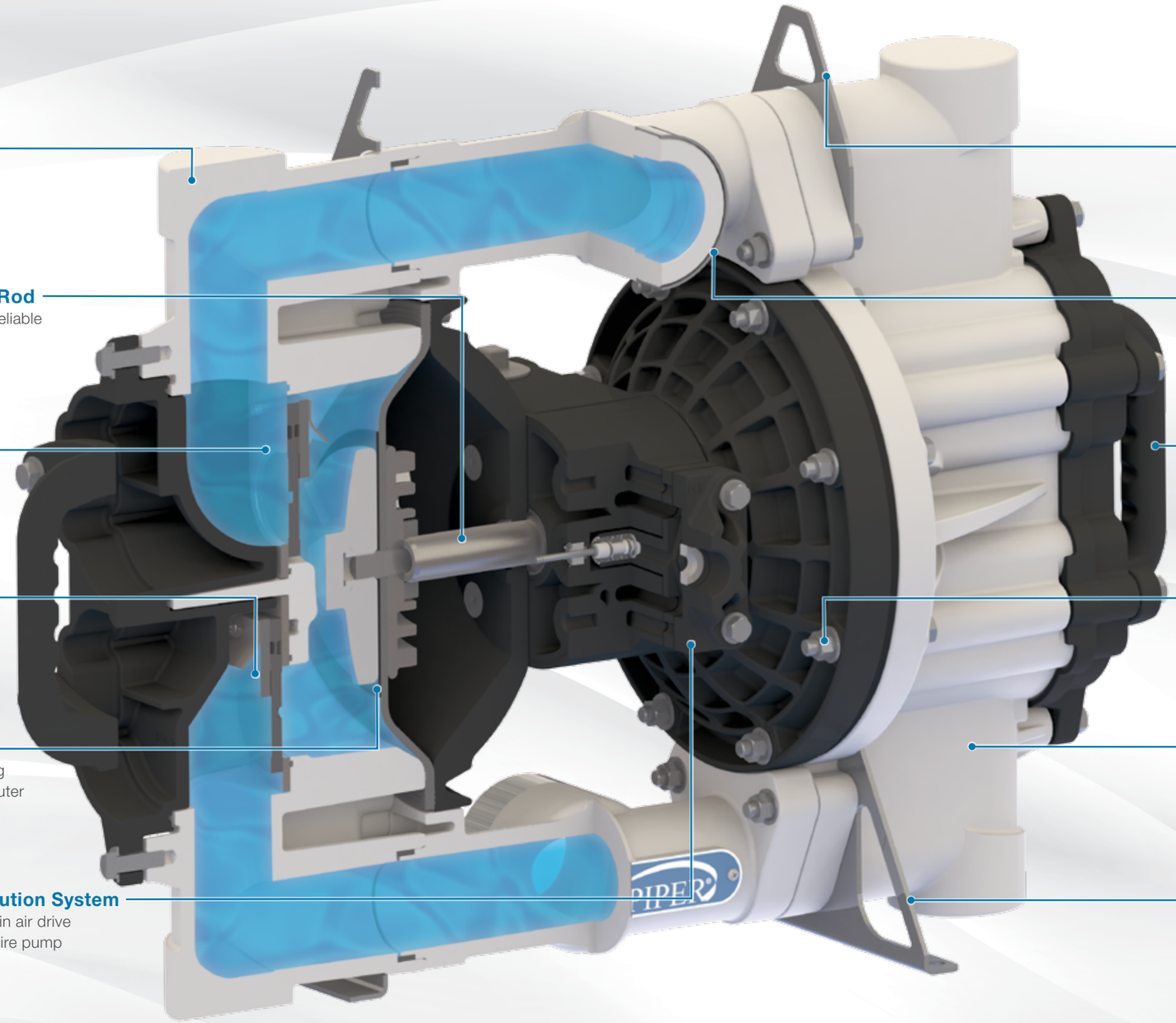
Diaphragm Wear Pads
Extend the life of the diaphragm by reducing the frictional stresses associated with the outer diaphragm plate during operation

All Bolted Construction
Ensures sealing forces are applied evenly across the pump for leak-free operation

Externally Serviceable Air Distribution System
Allows for quick and easy access to the main air drive components without disassembly of the entire pump and / or removing it from service

Top Suction, Bottom Discharge Porting
Easier evacuation of fluids containing large solids and settling materials

FEATURES & BENEFITS - NON-METALLIC



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

Robust Diaphragm Connecting Rod
Guaranteed not to bend or break; assures reliable and consistent diaphragm operation

Stainless Steel Seats
Provide long-lasting abrasion resistance and solid handling durability

Easy Access To Flap Valves
Check Valve Flaps can be quickly cleaned or replaced without removing the pump from service

Diaphragm Wear Pads
Extend the life of the diaphragm by reducing the frictional stresses associated with the outer diaphragm plate during operation

Externally Serviceable Air Distribution System
Allows for quick and easy access to the main air drive components without disassembly of the entire pump and / or removing it from service

Stainless Steel Hanging Brackets
Stainless steel hanging points located on the manifold allow for multiple mounting options

Dynamic Manifold Connections
Allow suction and discharge manifolds to be positioned in various directions

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

All Bolted Construction
Ensures sealing forces are applied evenly across the pump for leak-free operation

Versatile Design
This pump will function in most positions, including uneven surfaces

Purpose Built Base
The threaded port version features stainless steel mounting feet and the flanged port version features Polypropylene mounting feet

What is EVOLUTION?

OPTIMIZED PERFORMANCE

Optimized performance without sacrificing proven reliability. These pumps have undergone an engineering EVOLUTION, leveraging trusted and proven product designs to improve their performance by application of advanced engineering methods.

SPECIFICATIONS

METALLIC

SIZES
1 - 4" (25.4 - 101.6mm)

MAX FLOW
70 - 310 GPM (265 - 1173 LPM)

SOLIDS HANDLING
1 - 3" (25.4 - 75mm)

DISPLACEMENT
0.10 - 1.6 gallon (0.37 - 6.06 liter)

NON-METALLIC

SIZES
2" (50mm)

MAX FLOW
150 GPM (568 LPM)

SOLIDS HANDLING
1.8" (46mm)

DISPLACEMENT
0.50 gallon (1.9 liter)

1" 25mm HDF1 Metallic

SOLIDS HANDLING
Up to 1" (25.4 mm)

MAX FLOW
70 GPM (265 LPM)

MAX PRESSURE
125 psi (8.6 bar)

DISPLACEMENT
0.10 gallon (.37 liter)

OPTIONS

Porting	Wet End	Elastomers		Air End
1" NPT / BSP Threaded	Aluminum Cast Iron Stainless Steel	Nitrile (Buna) Neoprene Hytrel® Santoprene®	Fluorocarbon (FKM) EPDM Urethane	Aluminum Cast Iron

Santoprene® is a registered tradename of Exxon Mobil Corp. Hytrel® is a registered trademark of E.I. du Pont de Nemours and Company.

2" 50mm HDF2 Metallic

SOLIDS HANDLING
Up to 2" (50 mm)

MAX FLOW
208 GPM (787 LPM)

MAX PRESSURE
125 psi (8.6 bar)

DISPLACEMENT
0.47 gallon (1.8 liter)

OPTIONS

Porting	Wet End	Elastomers		Air End
2" NPT / BSP Threaded	Aluminum Cast Iron Stainless Steel	Nitrile (Buna) Neoprene Hytrel® Santoprene®	Fluorocarbon (FKM) EPDM Urethane	Aluminum Cast Iron

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

SOLIDS HANDLING
Up to 3" (75 mm)

MAX FLOW
310 GPM (1,173 LPM)

MAX PRESSURE
125 psi (8.6 bar)

DISPLACEMENT
1.6 gallon (6.06 liter)

OPTIONS

Porting	Wet End	Elastomers		Air End
3" ANSI Flange 4" ANSI Flange	Aluminum	Nitrile (Buna) Neoprene Santoprene®	EPDM Urethane	Aluminum

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

SOLIDS HANDLING
Up to 3" (75 mm)

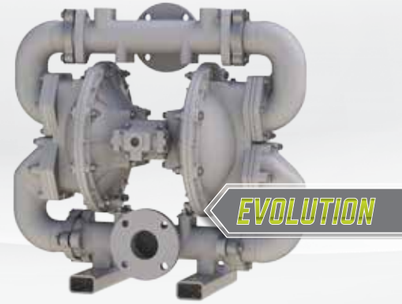
MAX FLOW
303 GPM (1,147 LPM)

MAX PRESSURE
125 psi (8.6 bar)

DISPLACEMENT
1.15 gallon (4.35 liter)

OPTIONS

Porting	Wet End	Elastomers		Air End
3" ANSI Flange 4" ANSI Flange	Cast Iron	Nitrile (Buna) Neoprene Santoprene®	EPDM Urethane	Cast Iron



2" 50mm HD20F Non-Metallic

SOLIDS HANDLING
Up to 1.8" (46mm)

MAX FLOW
150 GPM (568 LPM)

MAX PRESSURE
100 psi (7.0 bar)

DISPLACEMENT
0.50 gallon (1.9 liter)

OPTIONS

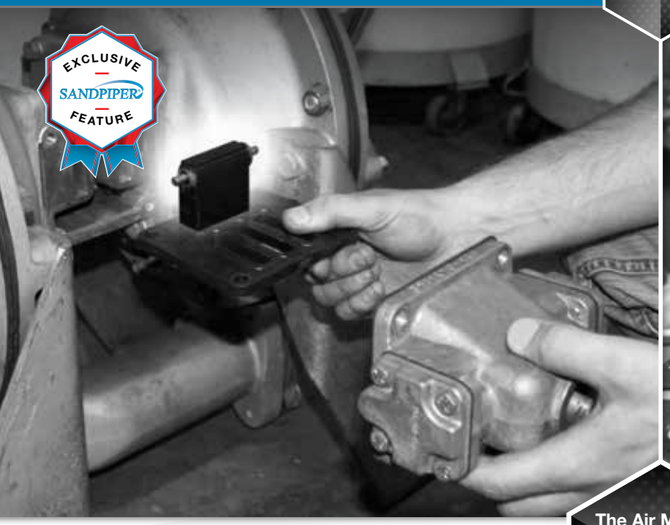
Porting	Wet End	Elastomers		Air End
2" NPT / BSP Threaded 2" ANSI / DIN Combination Flange	Polypropylene Stainless Steel (Seats only)	Nitrile (Buna) Neoprene Hytrel® Santoprene®	Fluorocarbon (FKM) EPDM Urethane	Polypropylene

Santoprene® is a registered tradename of Exxon Mobil Corp. Hytrel® is a registered trademark of E.I. du Pont de Nemours and Company.

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

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

SANDPIPER



VS

COMPETITORS

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

5 MINUTES FOR MAINTENANCE / CLEANING

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

$

Saves you money by minimizing downtime

55 MINUTES OR LONGER FOR MAINTENANCE / CLEANING

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

$$$

Costs you money due to extended downtime

PARTS & ACCESSORIES

EVERYTHING YOU NEED TO COMPLETE YOUR PUMP SYSTEM

SANDPIPER GENUINE PARTS SERVICE KITS

WET END KITS / AIR END KITS

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.

Wet End Kits

- Diaphragms
- Flaps
- Seats

Air End Kits

- Gaskets
- O-Rings
- Seals
- Retaining Rings
- Air Valve Sleeve and Spool
- Pilot Valve Assembly
- Lubricant

AIR FILTER / REGULATORS

RELIABLE FILTER / REGULATORS SPECIFICALLY DEVELOPED FOR AODD PUMPS

- Adjust and lock to deliver constant air pressure
- Polyurethane bowl offers improved chemical resistance
- Include a durable liquid filled pressure gauge to dampen the effects of pulsation and vibration
- Integral mounting slots eliminate the need for mounting brackets
- Automatic drain removes condensate

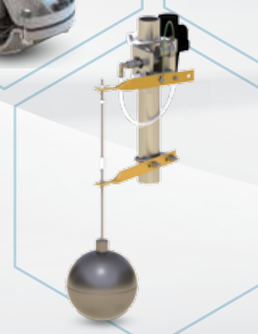
TRANQUILIZERS®

PULSATION DAMPENERS / SURGE SUPPRESSORS

- Provide virtually surge-free flow
- Steady pressure
- Less vibration and noise
- Automatically self-charging and self-venting
- Protect other system components
- Long-life balanced diaphragm

LIQUID LEVEL CONTROL

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

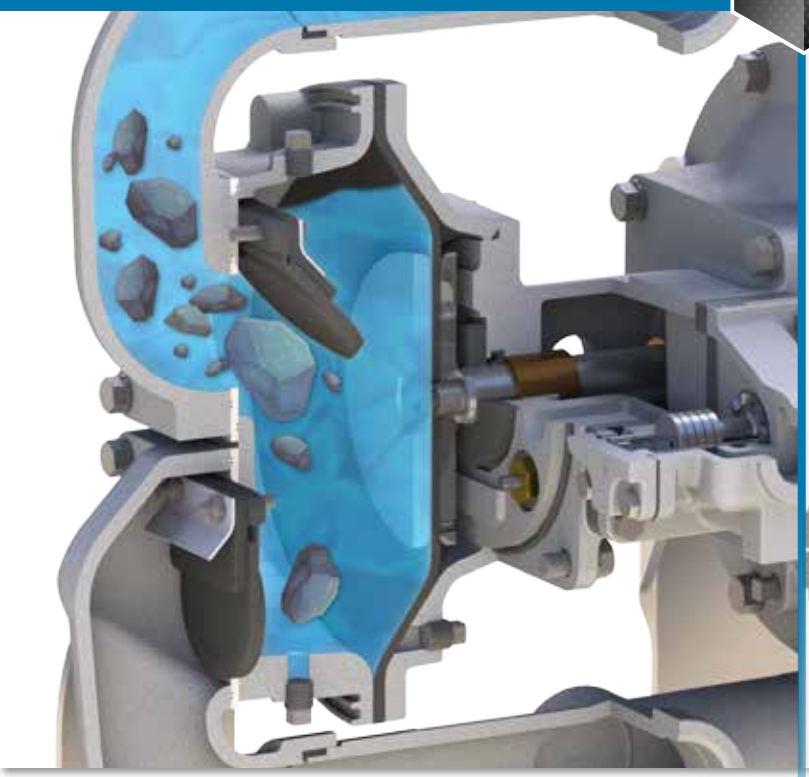


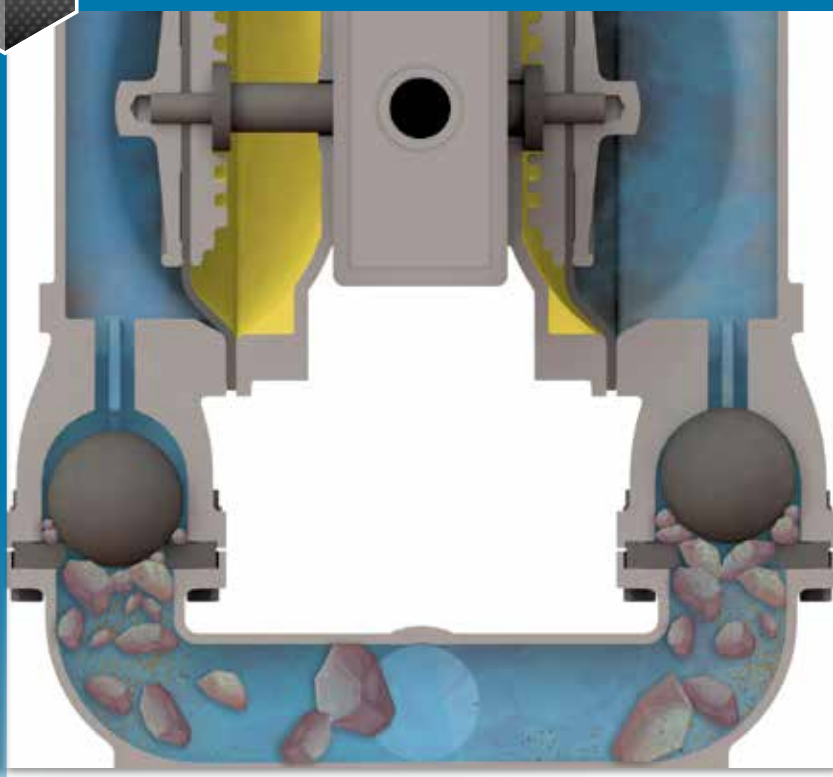
- Pneumatic operation requires no electricity
- Adjustable operating range from a few inches to 9 feet (2.7 meters)
- Simple design is easy to install and operate, with few moving parts
- Reversible operation capable

SANDPIPER
HEAVY DUTY FLAP VALVE PUMP

VS

TYPICAL
TOP DISCHARGE BALL VALVE PUMP





Large Solids Easily Pass Through The Pump

Large Solids Cannot Pass Through The Pump Affecting Operation

SANDPIPER® Signature SERIES

OUR SIGNATURE ENSURES YOUR SUCCESS

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

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