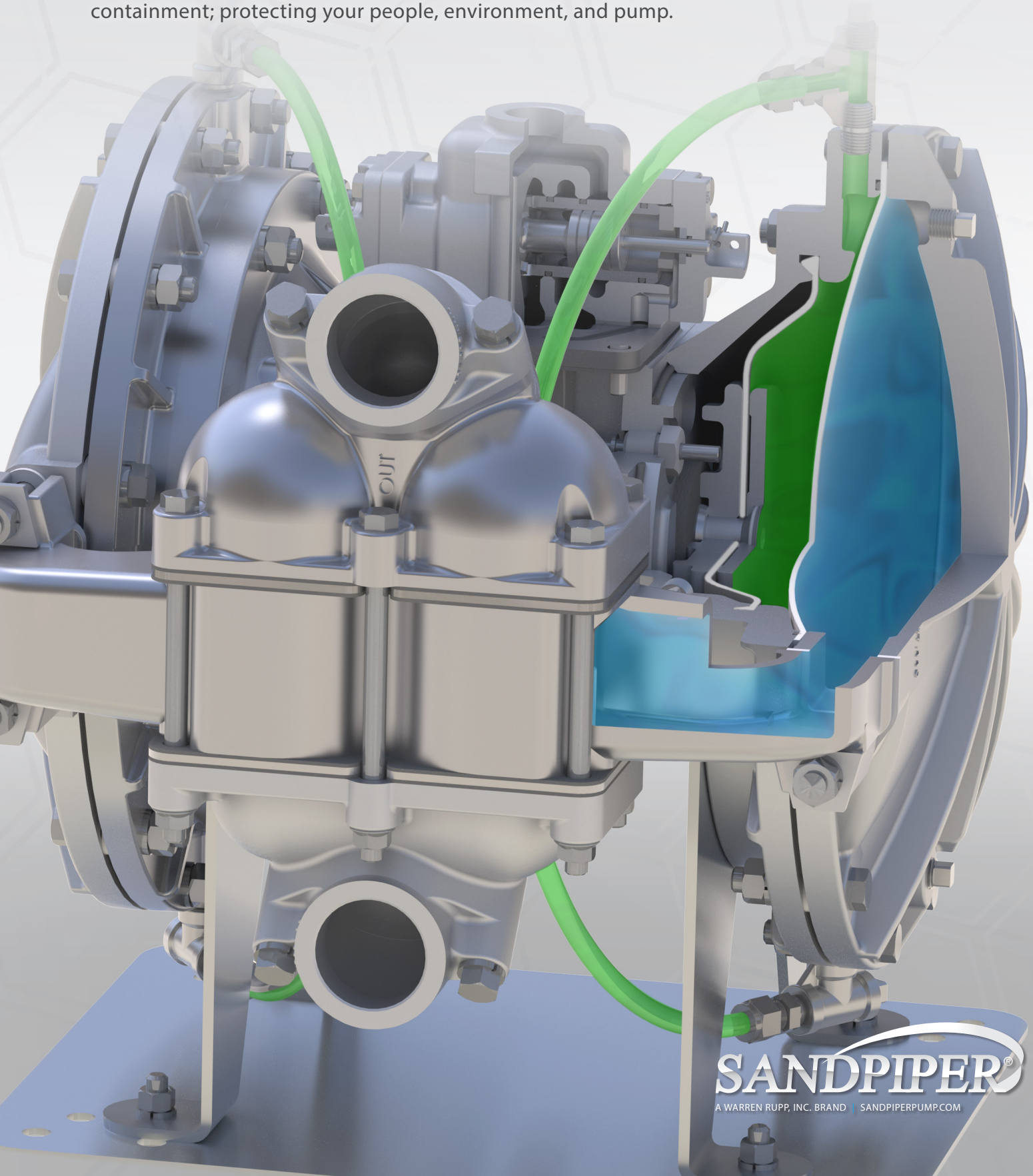
CONTAINMENT DUTY
BALL VALVE PUMPS

The only complete line of AODD pumps featuring superior fluid containment; protecting your people, environment, and pump.

SANDPIPER Signature SERIES

OUR SIGNATURE
ENSURES YOUR SUCCESS



SANDPIPER®

A WARREN RUPP, INC. BRAND | SANDPIPERPUMP.COM

KEY ADVANTAGE

WHAT HAPPENS WHEN THE PUMPING DIAPHRAGM IS BREACHED

TYPICAL AODD PUMP

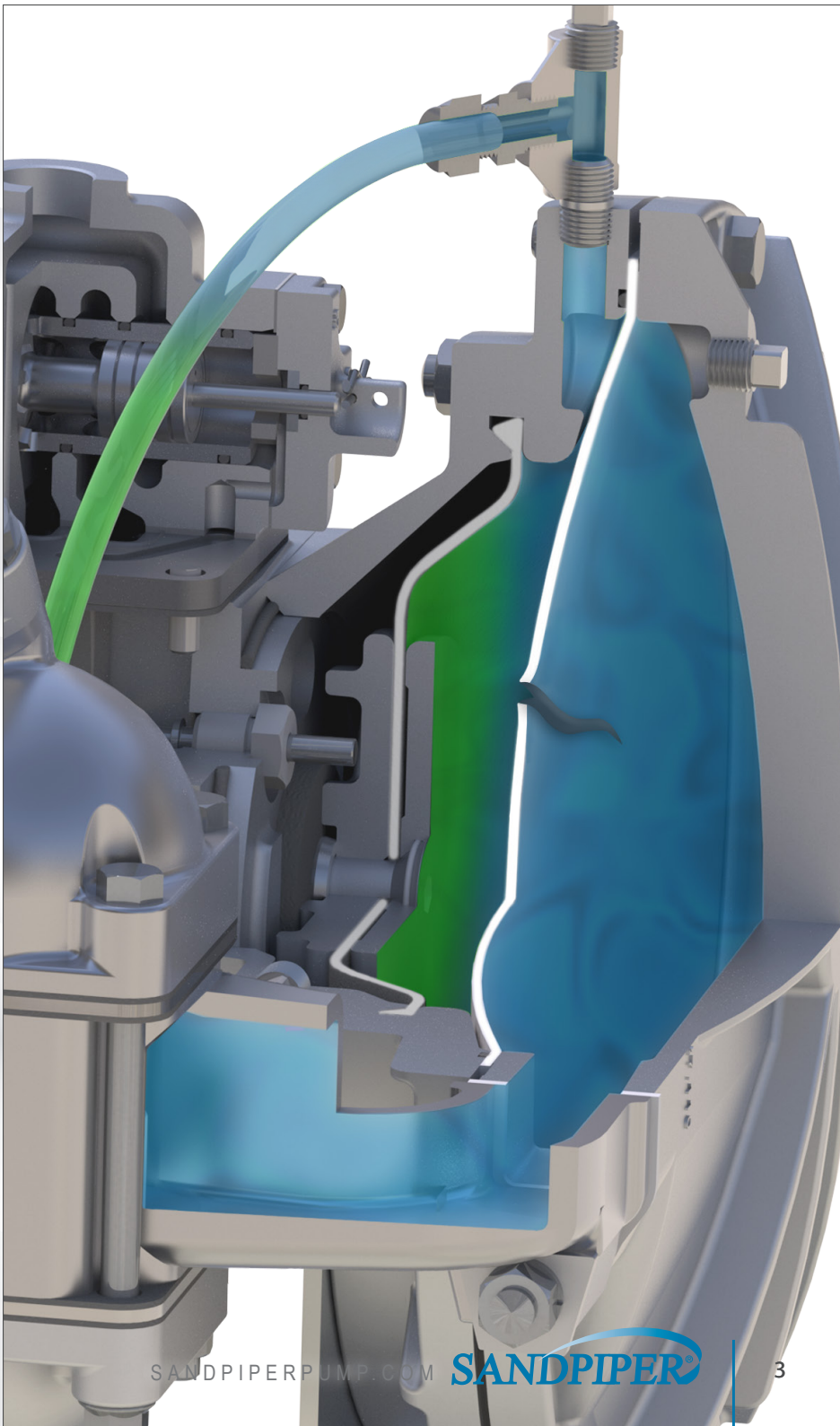
When the pumping diaphragm is breached, the fluid enters the air distribution system and escapes into the environment through the muffler, requiring immediate service.
This results in:

- Safety & Environmental Hazards
- Costly Clean-up & Maintenance
- Interruption of Operations
- Loss of System Fluid
- Extended Downtime
- Potential for Product / Process Contamination from Air Supply

CONTAINMENT DUTY

When the pumping diaphragm is breached, the fluid enters the containment chamber and visual indicator sight tubes, alerting the user. The fluid is fully contained so the pump can continue running until the operation is complete or maintenance can be scheduled.

- NO Safety & Environmental Hazards
- NO Costly Clean-up & Maintenance
- NO Interruption of Operations
- NO Loss of System fluid
- NO Extended Downtime
- No Product / Process Contamination from Air Supply

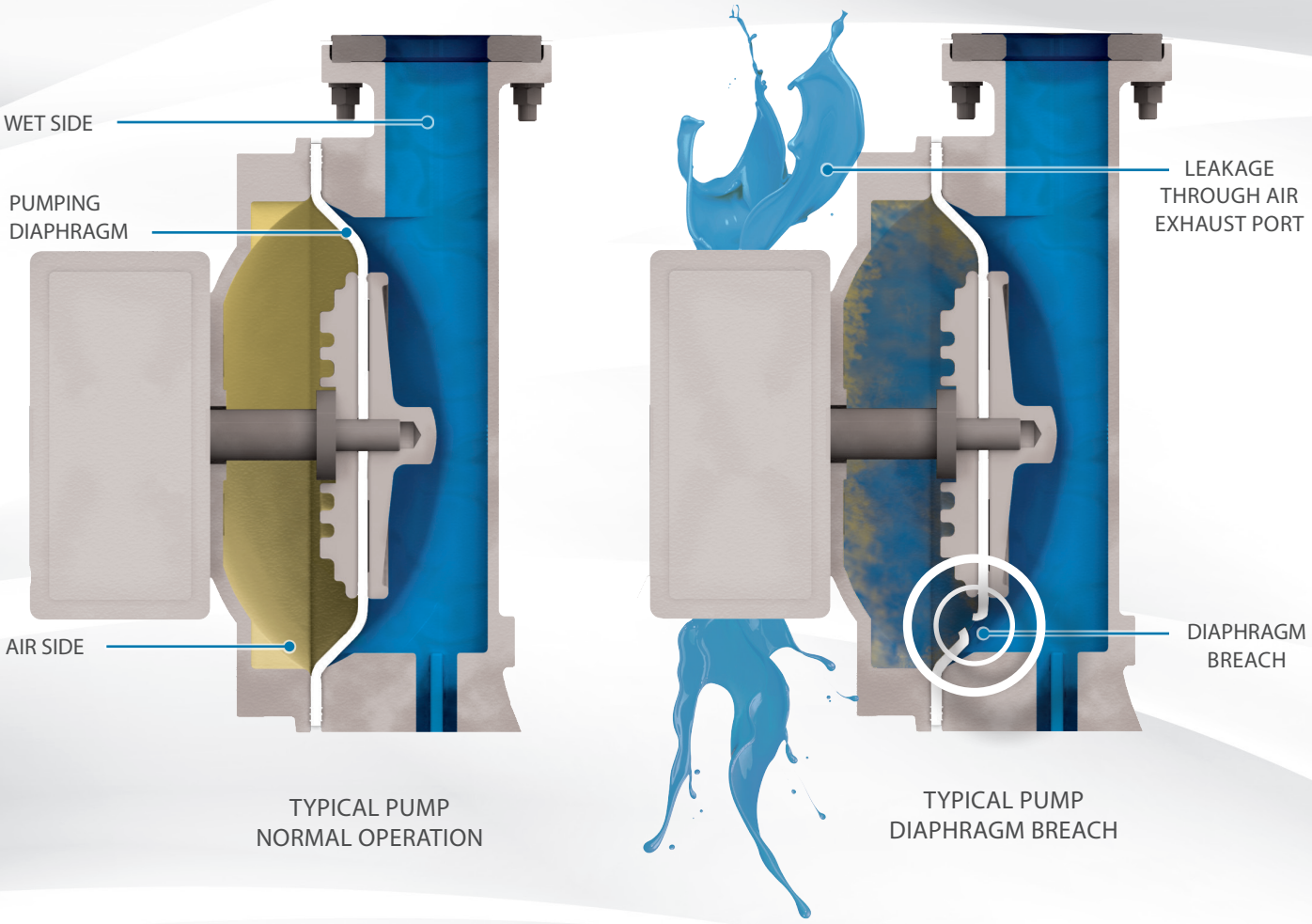


WATCH THE VIDEO
TO LEARN MORE
SANDPIPERPUMP.COM/CONTAINMENT

TWO DIAPHRAGMS ARE BET

HOW IT WORKS

TYPICAL AODD PUMP

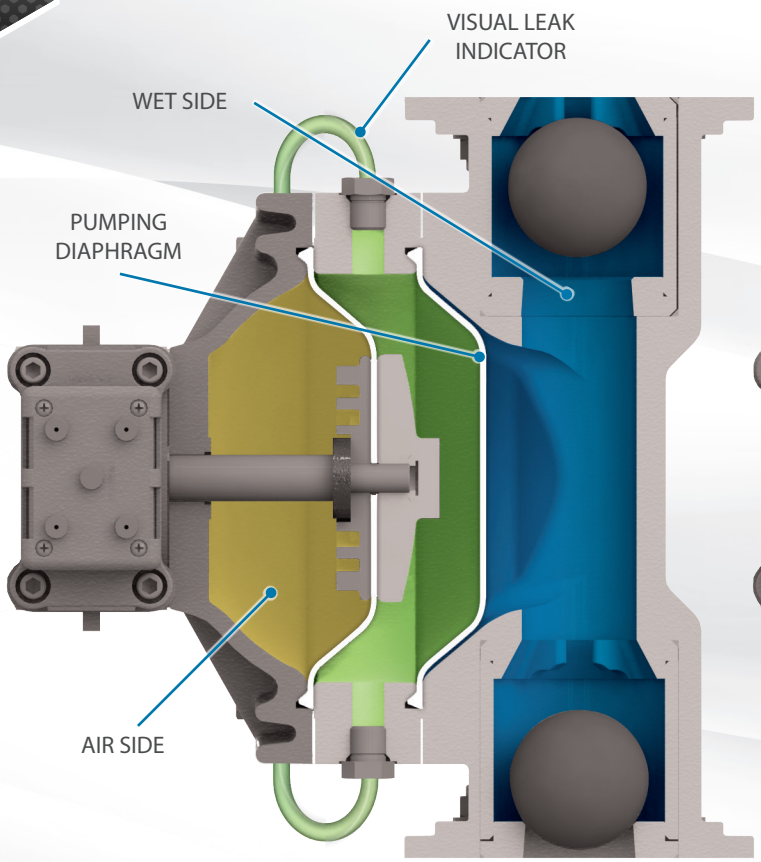


Typical AODD pump designs utilize a single pumping diaphragm to drive the fluid. The pumping diaphragm is the only barrier between the Wet Side and Air Side of the pump. This diaphragm is an elastomeric material that will eventually wear or become breached. When this occurs, the system fluid enters the Air Side of the pump and escapes to the environment through the air exhaust muffler. The pump must be immediately repaired or replaced.

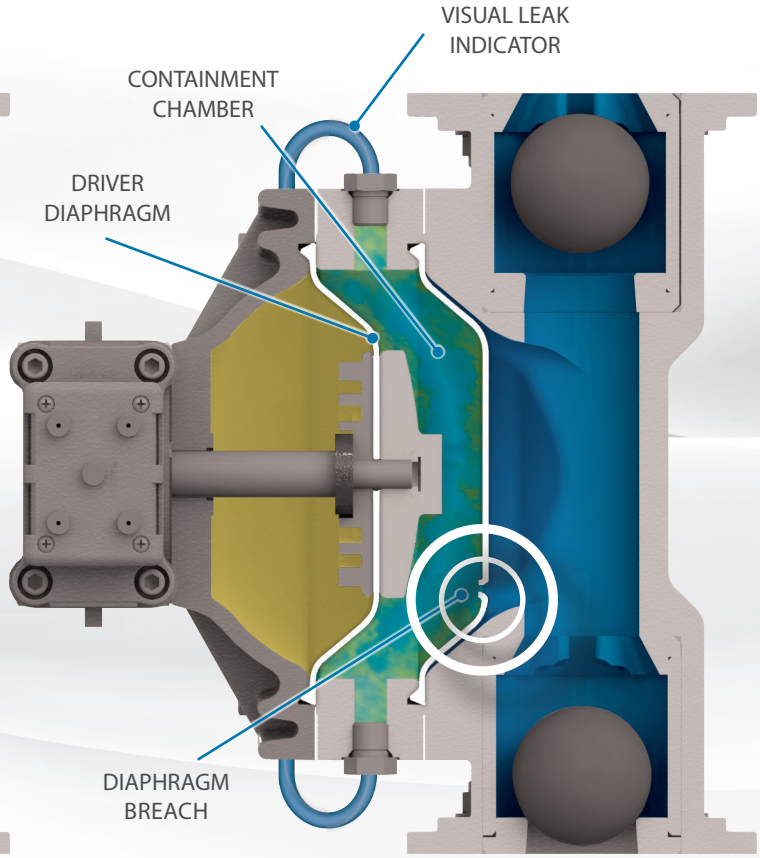
TTER THAN ONE

S

CONTAINMENT DUTY



CONTAINMENT PUMP
NORMAL OPERATION



CONTAINMENT PUMP
DIAPHRAGM BREACH

SANDPIPER Containment Duty pumps feature an additional driver diaphragm. The space between the pumping and driver diaphragms is called the containment chamber. It is filled with a "system compatible" fluid and is void of air. This hydraulically locks the two diaphragms together. When the driver diaphragm is breached, the system fluid enters the containment chamber and the indicator system alerts the user of a breach. However, the system can continue operating until maintenance can be scheduled. The system fluid does not escape to the environment, which eliminates the cost of a major cleanup.

PUMP ANATOMY

CONTAINMENT DUTY

Containment Chamber
The area between the pumping and driver diaphragms that contains the fill fluid; This creates a barrier between the fluid and the air distribution system / environment

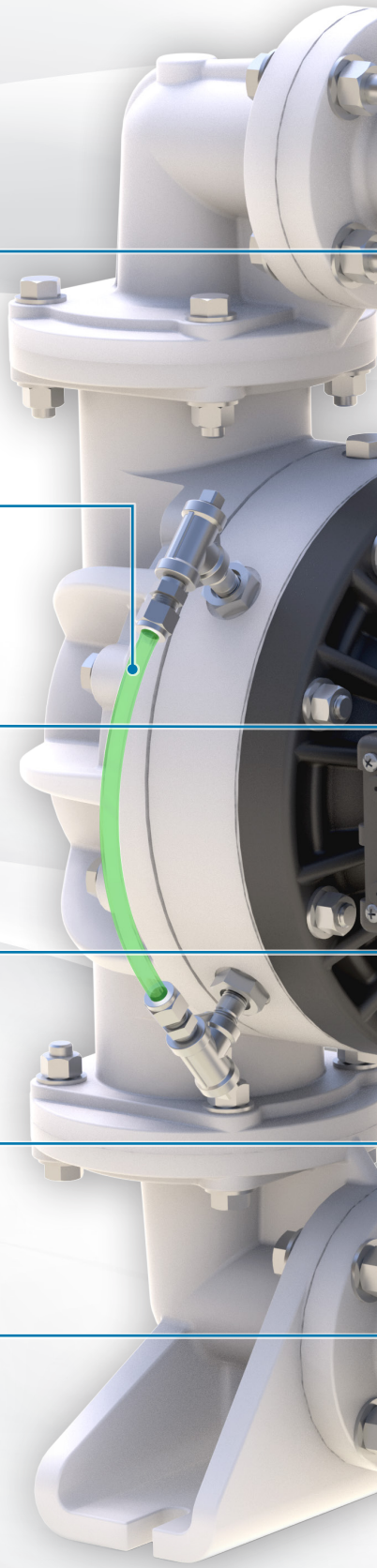
Leak Detection
Alerts the user of a breach in the pumping diaphragm when equipped with visual, electronic, or mechanical leak detectors

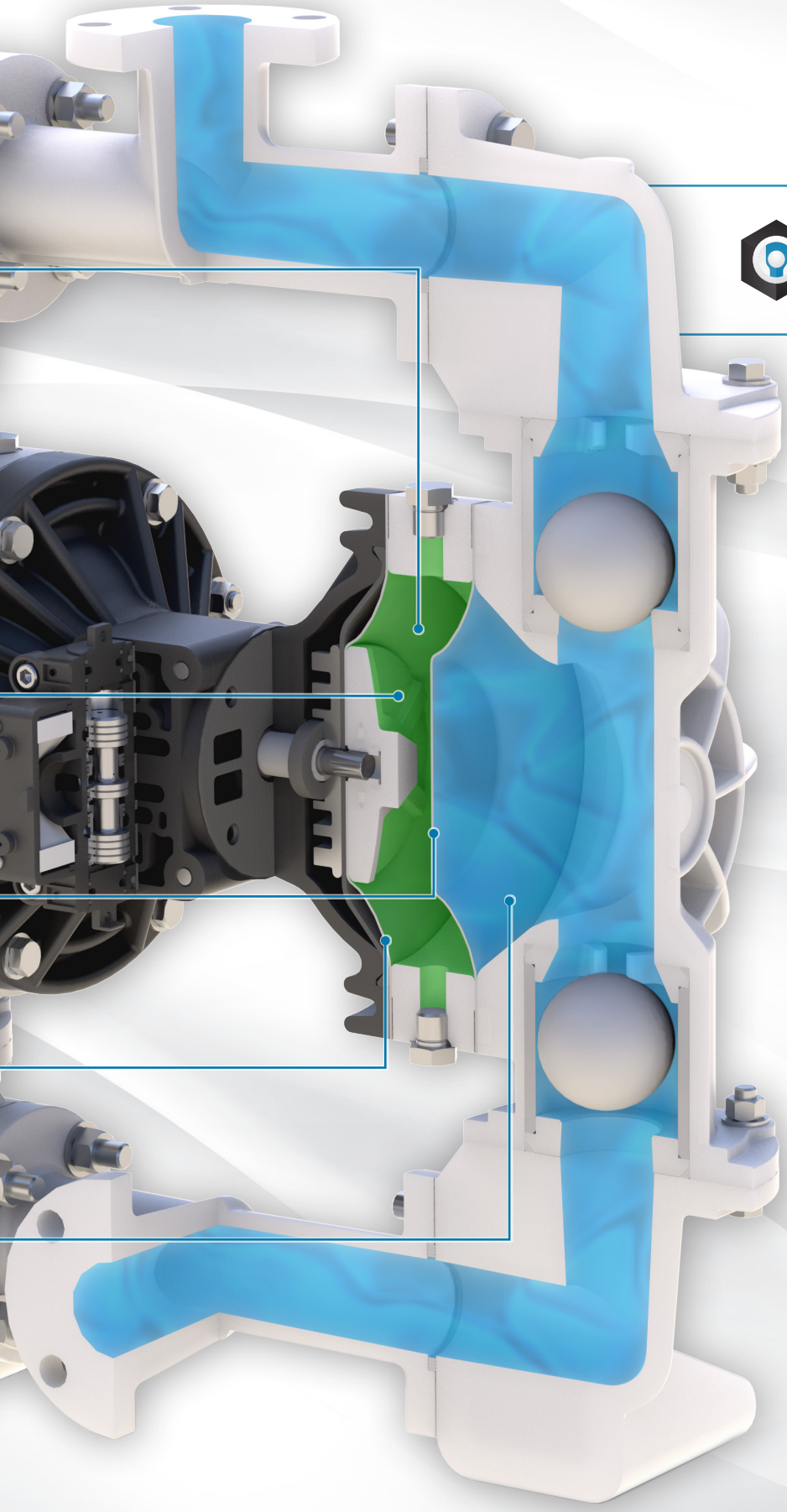
Fill Fluid
A compatible liquid that hydraulically couples the pumping and driver diaphragms, allowing them to operate in tandem

Pumping Diaphragm
This diaphragm stays in contact with the fluid and moves it though the system

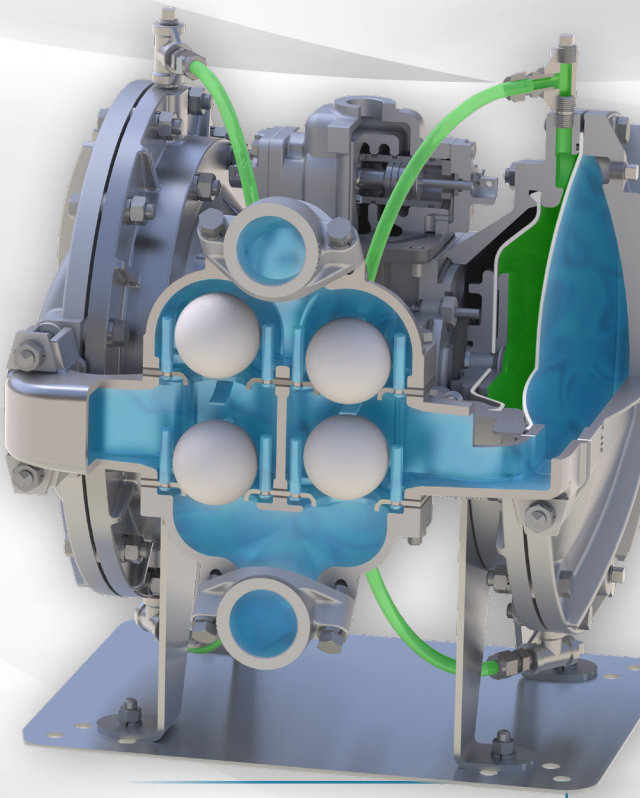
Driver Diaphragm
This diaphragm stays in contact with the fill fluid and drives the pump

System Fluid
What you are pumping





Non-Metallic

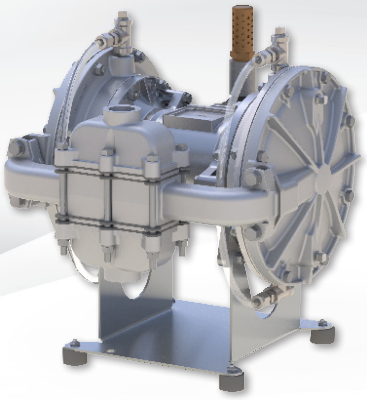


Metallic

CONTAINMENT DUTY BALL VALVE PUMPS

PERFORMANCE & SPECIFICATIONS

1" 25 mm ST1 / ST25 Metallic



SOLIDS HANDLING
Up to .25" (6.3 mm)

MAX FLOW
42 GPM (159 LPM)

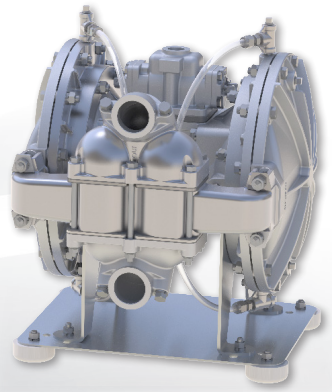
MAX PRESSURE
125 psi (8.6 bar)

DISPLACEMENT
0.09 gallon (.34 liter)

OPTIONS

Porting	Wet Side	Air Side	Driver Diaphragms	Pumping Diaphragms	Check Balls
1" NPT Threaded 25mm BSP Threaded	Aluminum Stainless Steel Alloy C	Aluminum	Neoprene Fluorocarbon (FKM) PTFE-Neoprene	PTFE	PTFE

1½" 38 mm ST1½ / ST40 Metallic



SOLIDS HANDLING
Up to .25" (6.3 mm)

MAX FLOW
106 GPM (400 LPM)

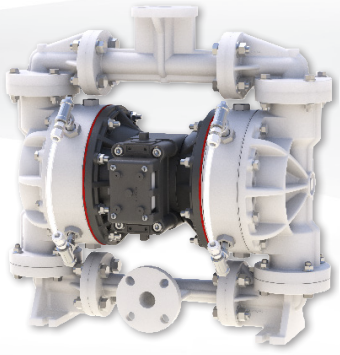
MAX PRESSURE
125 psi (8.6 bar)

DISPLACEMENT
0.37 gallon (1.4 liter)

OPTIONS

Porting	Wet Side	Air Side	Driver Diaphragms	Pumping Diaphragms	Check Balls
1-1/2" NPT Threaded 40mm BSP Threaded	Aluminum Stainless Steel Alloy C	Aluminum Cast Iron	Neoprene Fluorocarbon (FKM) EPDM	PTFE	PTFE

1" 25 mm S1F Non-Metallic



SOLIDS HANDLING
Up to .25" (6.3 mm)

MAX FLOW
53 GPM (201 LPM)

MAX PRESSURE
100 psi (7 bar)

DISPLACEMENT
.19 gallon (.72 liter)

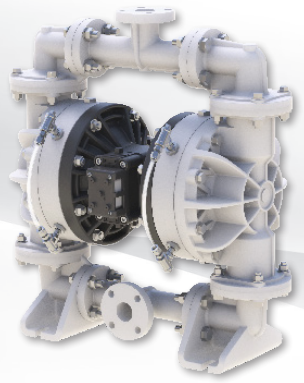
OPTIONS

Porting	Wet Side	Air Side	Driver Diaphragms	Pumping Diaphragms	Check Balls
1" ANSI Flange 25mm DIN Flange	Polypropylene PVDF	Polypropylene	PTFE-Santoprene® Santoprene® One-Piece Bonded	PTFE Santoprene®	PTFE Santoprene®

Santoprene® is a registered tradename of Exxon Mobil Corp.

For more detailed Performance and Specificatio

1½″ 38 mm S15 Non-Metallic



SOLIDS HANDLING
Up to .47″ (12 mm)

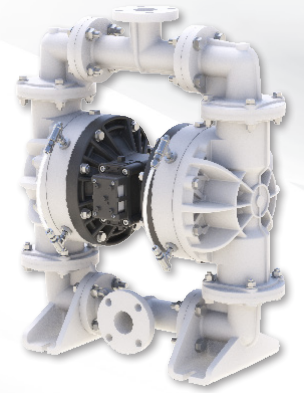
MAX FLOW
100 GPM (379 LPM)

MAX PRESSURE
100 psi (7 bar)

DISPLACEMENT
.43 gallon (1.63 liter)

OPTIONS					
Porting	Wet Side	Air Side	Driver Diaphragms	Pumping Diaphragms	Check Balls
1-1/2" ANSI Flange 40mm DIN Flange	Polypropylene PVDF	Polypropylene	PTFE-Neoprene Santoprene®	PTFE Santoprene®	PTFE Santoprene®

2″ 50 mm S20 Non-Metallic



SOLIDS HANDLING
Up to .66″ (17 mm)

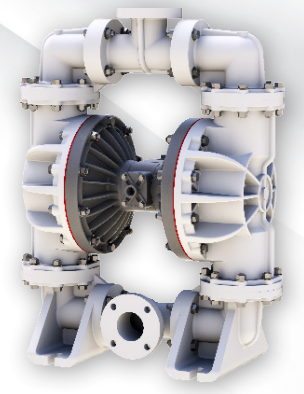
MAX FLOW
160 GPM (606 LPM)

MAX PRESSURE
100 psi (7 bar)

DISPLACEMENT
.46 gallon (1.74 liter)

OPTIONS					
Porting	Wet Side	Air Side	Driver Diaphragms	Pumping Diaphragms	Check Balls
2" Universal ANSI / DIN Flange	Polypropylene PVDF	Polypropylene	PTFE-Neoprene Santoprene®	PTFE Santoprene®	PTFE Santoprene®

3″ 75 mm S30 Non-Metallic



SOLIDS HANDLING
Up to .71″ (18 mm)

MAX FLOW
238 GPM (901 LPM)

MAX PRESSURE
100 psi (7 bar)

DISPLACEMENT
.9 gallon (3.41 liter)

OPTIONS					
Porting	Wet Side	Air Side	Driver Diaphragms	Pumping Diaphragms	Check Balls
3" ANSI Flange 75 mm DIN Flange	Polypropylene PVDF	Epoxy Coated Aluminum	PTFE-Santoprene® Santoprene®	PTFE Santoprene®	PTFE Santoprene®

n information, please visit SANDPIPERPUMP.COM

WHAT'S THE RISK?

WHY USE CONTAINMENT DUTY PUMPS?

Environmental Concerns

When these fluids escape to the environment, significant time and effort is required to clean them up. Additionally, the costs of downtime, lost production, manpower, equipment replacement, disposal fees, and fines can be excessive.

- Paints, Inks, and Coatings
- Adhesives and Resins
- Chemicals and Petrochemicals
- Oils and Hydrocarbons
- Acids, Caustics, Corrosives
- Resins and Polymers
- Contaminated Water and Wastewater
- Pesticides and Herbicides
- Fertilizers
- Preservatives
- Mercury
- Phthalates

High Cost of Lost Fluid

When these fluids escape to the environment, the cost of losing them is significant. Lost fluid means lost profit.

- Drugs and Pharmaceuticals
- Foods
- Cyanotic Based Paints
- Precious Metal Based Fluids
- Cosmetics
- Perfumes
- Printer Inks
- Beer and Alcohol
- Blood
- Creams and Lotions

Fluids That Need Contained

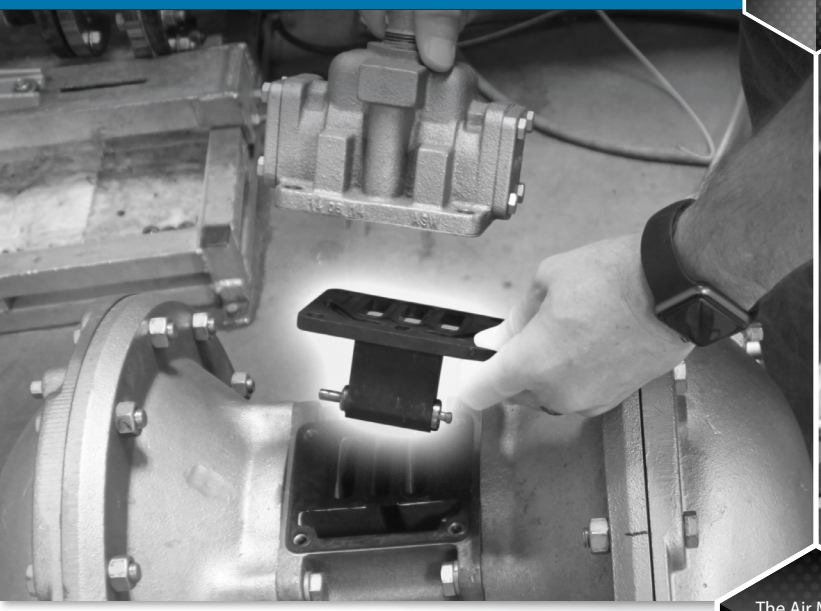
Even non-toxic fluids like clean water can create hazards, annoyances and safety concerns if your people are in or around the area surrounding a pump when a diaphragm fails.

ESADS+PLUS

SANDPIPER'S EXTERNALLY SERVICEABLE AIR DISTRIBUTION SYSTEM

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

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

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

ROBUST DIAPHRAGM CONNECTING ROD

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

5 YEAR LIMITED PRODUCT WARRANTY

5 Year Guarantee for defects in material or workmanship.

ESADS+PLUS AIR DISTRIBUTION SYSTEM

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

WHAT HAPPENS WHEN YOUR PUMP HAS A SPILL?

HOW MUCH ARE YOU WILLING TO INVEST TO PREVENT A SPILL?

Typical 1" Stainless Steel AODD Pump	$2,500
SANDPIPER 1" Containment Duty Pump	$4,000
Difference*	$1,500

*varies by size and materials of construction

SANDPIPER®

Contact Your Local Distributor to Place Your Order:

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

IDEX