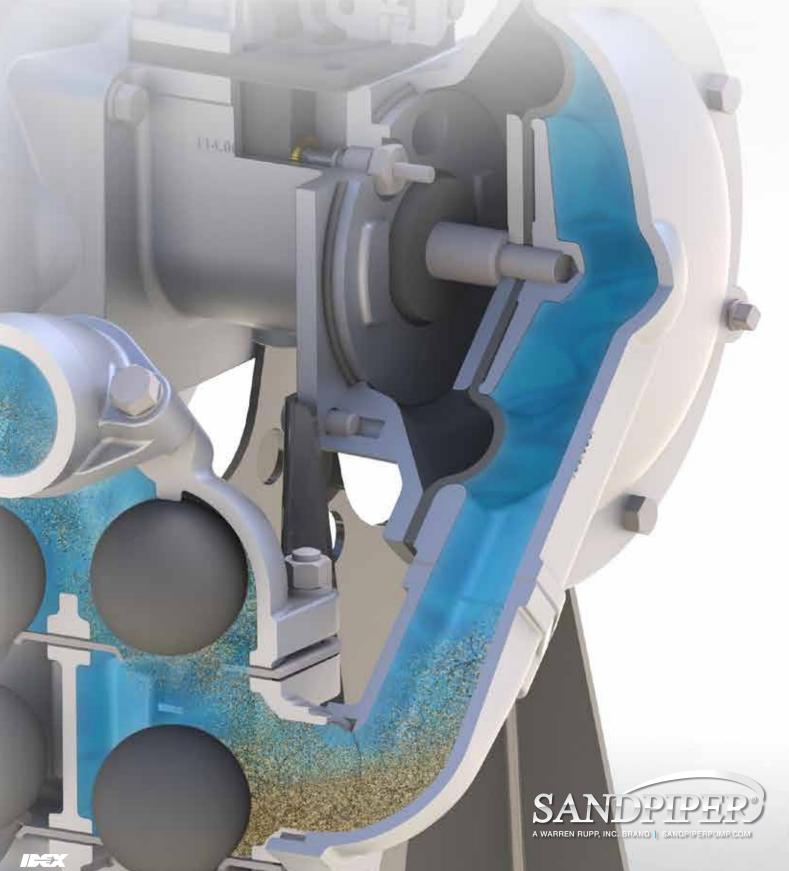
HEAVY DUTYBALL VALVE PUMPS



For Fluids Containing Settling, Suspended & Floating Solids



KEY ADVANTAGES OF SANDPIPER H

THE SOLUTION FOR FLUIDS CONTAINING SETTLING, SUSPENDED & FLOATING SOLIDS



MULTIPLE PORTING POSITIONS A SANDPIPER EXCLUSIVE

Top, Down, & Side Porting Positions

Optimized performance depending on the pumped fluid or installation requirements.

- Top Ported: For fluids containing floating solids, suspended solids, or entrained gases. The discharge port is positioned above the center of the pump for easier evacuation and less build-up of solid material or gases.
- Down Ported: For fluids containing settling solids. The discharge port is positioned below the center of the pump so solids settle in the elbow and are discharged. This helps reduce wear on the diaphragms and associated components.
- **Side Ported:** For use in confined spaces. The ports are positioned with the center of the pump, allowing for installation in smaller, confined spaces.



SANDPIPER'S EXTERNALLY SERVICEABL QUICK & EASY ACCESS TO MAXIMIZE UPTIME

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

SANDPIPER



5 MINUTES - MAINTENANCE / CLEANING

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



Saves you money by minimizing downtime

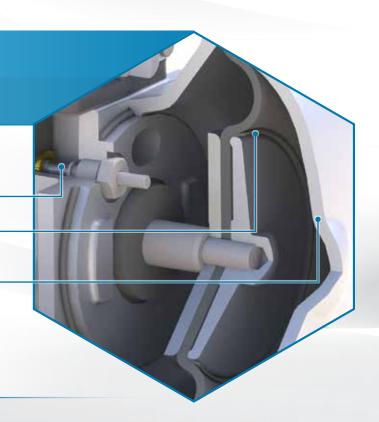


EAVY DUTY BALL VALVE PUMPS

HEAVY DUTY WEAR PARTS A SANDPIPER EXCLUSIVE

SANDPIPER Heavy Duty Ball Valve Pump Features

- Heavy duty plunger bushings and actuator pins are designed to withstand severe applications
- Diaphragm wear pads are installed between the diaphragm and outer diaphragm plate, providing a secondary wear surface which extends the life of the diaphragm
- Thicker, more robust wetted castings provide extended wear resistance
- Heavy duty weighted check valve balls are 30-60% heavier than solid rubber check balls, allowing for more consistent chamber filling



E AIR DISTRIBUTION SYSTEM (ESADS+PLUS)

Competitor pumps require disassembly and re-assembly of many parts, requiring additional knowledge and time; leading to increased downtime and cost.

COMPETITORS



55+ MINUTES 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



FEATURES & BENEF

EXCLUSIVE TO SANDPIPER HEAVY DUTY BALL VALVE PUMPS



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



Cross-Drilled Directional Spool Valve

Guarantees the pump will not stall and ensures on / off reliability



All Bolted Construction

Ensure sealing forces are applied evenly across the pump for leak-free operation



Heavy Duty Actuator Plungers

Ensure reliable pilot valve operation



Robust Diaphragm Connecting Rod

Guaranteed not to bend or break; assures reliable and consistent diaphragm operation



Diaphragm Wear Pads -

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



Weighted Elastomeric Check Balls

For reliable pump performance with viscous fluids



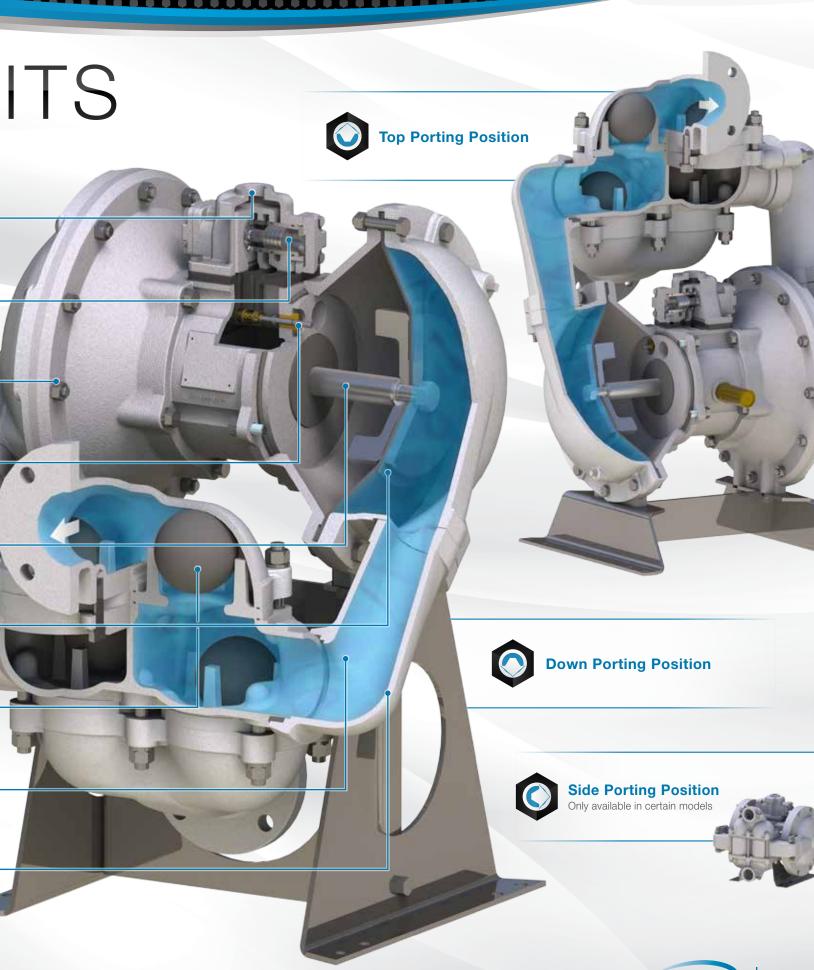
Large Flow Area

Reduces fluid velocity through pump, which often lessens wear



Thick Manifold & Chamber Walls

Greater wear resistance when pumping solids and solid laden slurries, providing extended service life



HEAVY DUTY BALL VALVE PUMPS

PERFORMANCE & SPECIFICATIONS



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	
SIZES 1 - 4" 25 - 102 mm	FLOW 42 - 300 GPM 159 - 1136 LPM
SOLIDS HANDLING .25875" 6.3 - 22.2 mm	DISPLACEMENT .09 - 2 gallon .34 - 7.6 liter

	PUMP CHARA	CTERISTICS	Metallic
	١	1	
	Susper	nded Solids	/
	Non-Suspended Solids		
stics	Line Size Solids		⚠ Use Flap Value Pump
acteri	Sludge / Slurry		
Fluid Characteristics	High Viscosity	y (Flowable Fluids)	/
Fluid	Erosion / Abrasive Fluids	High	/
		Moderate	/
		Low	√
	Corrosion		√
88	Permanent		√
88	Portable		✓
ation	Containment / Prevention		
Instal	Flooded Suction		/
	Suc	√	
	Submerged		/
ţ.	Intermittent / On-Demand		/
ď	Cor	1	

✓= Best ✓= Suited ✓= Limitations △ = Use listed pump

For more detailed Performance and Specification information, please visit SANDPIPERPUMP.COM



SB1 / SB25 Metallic - Porting: Top, Side, Down





SOLIDS HANDLING

Up to .25" (6.3 mm)

MAX FLOW

42 GPM (159 LPM)

MAX PRESSURE

125 psi (8.6 bar)

DISPLACEMENT

.09 gallon (.34 liter)

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

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





HDB1½ / HDB40 Metallic - Porting: Top, Side, Down



SOLIDS HANDLING Up to .25" (6.3 mm) MAX FLOW 122 GPM (462 LPM) MAX PRESSURE 125 psi (8.6 bar) **DISPLACEMENT**

.37 gallon (1.4 liter)

OPTIONS				
Porting	Wet End	Elastomers		Air End
11/2" NPT / BSP Threaded	Aluminum	Nitrile (Buna)	Fluorocarbon (FKM)	Aluminum
	Stainless Steel	Neoprene	Hytrel®	Cast Iron
	Cast Iron	Santoprene®	EPDM	
	Alloy C	PTFE		





HDB2 Metallic - Porting: Top, Down

135 GPM (511 LPM)



SOLIDS HANDLING Up to .375" (9 mm)

MAX FLOW

MAX PRESSURE 125 psi (8.6 bar) **DISPLACEMENT**

.46 gallon (1.7 liter)

OPTIONS				
Porting	Wet End	Elastomers		Air End
2" NPT	Aluminum	Nitrile (Buna)	Fluorocarbon (FKM)	Aluminum
	Stainless Steel	Neoprene	Hytrel [®]	Cast Iron
	Cast Iron	Santoprene®	EPDM	
	Alloy C	PTFE		



Side porting not available for this model



HDB3 / HDB4 Metallic - Porting: Top, Down



SOLIDS HANDLING Up to .875" (22.2 mm)

MAX FLOW

MAX PRESSURE

DISPLACEMENT

300 GPM (1136 LPM) 125 psi (8.6 bar) 2.0 gallon (7.6 liter)

OPTIONS				
Porting	Wet End	Elasto	omers	Air End
3" ANSI Flange	Stainless Steel	Nitrile (Buna)	Fluorocarbon (FKM)	Cast Iron
4" ANSI Flange	Cast Iron	Neoprene	PTFE	
		Santoprene®		
		EPDM		



Side porting not available for this model

SANDPIPER'S EXCLUSIVE DOWN PORTED ADVANTAGE

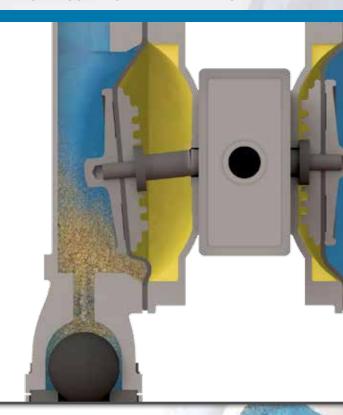
SANDPIPER

HEAVY DUTY BALL VALVE PUMP

TYPICAL

TOP DISCHARGE BALL VALVE PUMP





What happens when solids settle in the pump?

- Nothing impedes the operation of the pump
- As solids settle, they collect in the elbow instead of the diaphragm chamber and are discharged; this limits wear on the diaphragm and associated components

What happens when solids settle in the pump?

- X Bent, broken diaphragm plates
- X Non-uniform diaphragm wear
- ✗ Bent, broken diaphragm connecting rods
- Restriction on the suction side of the pump

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



