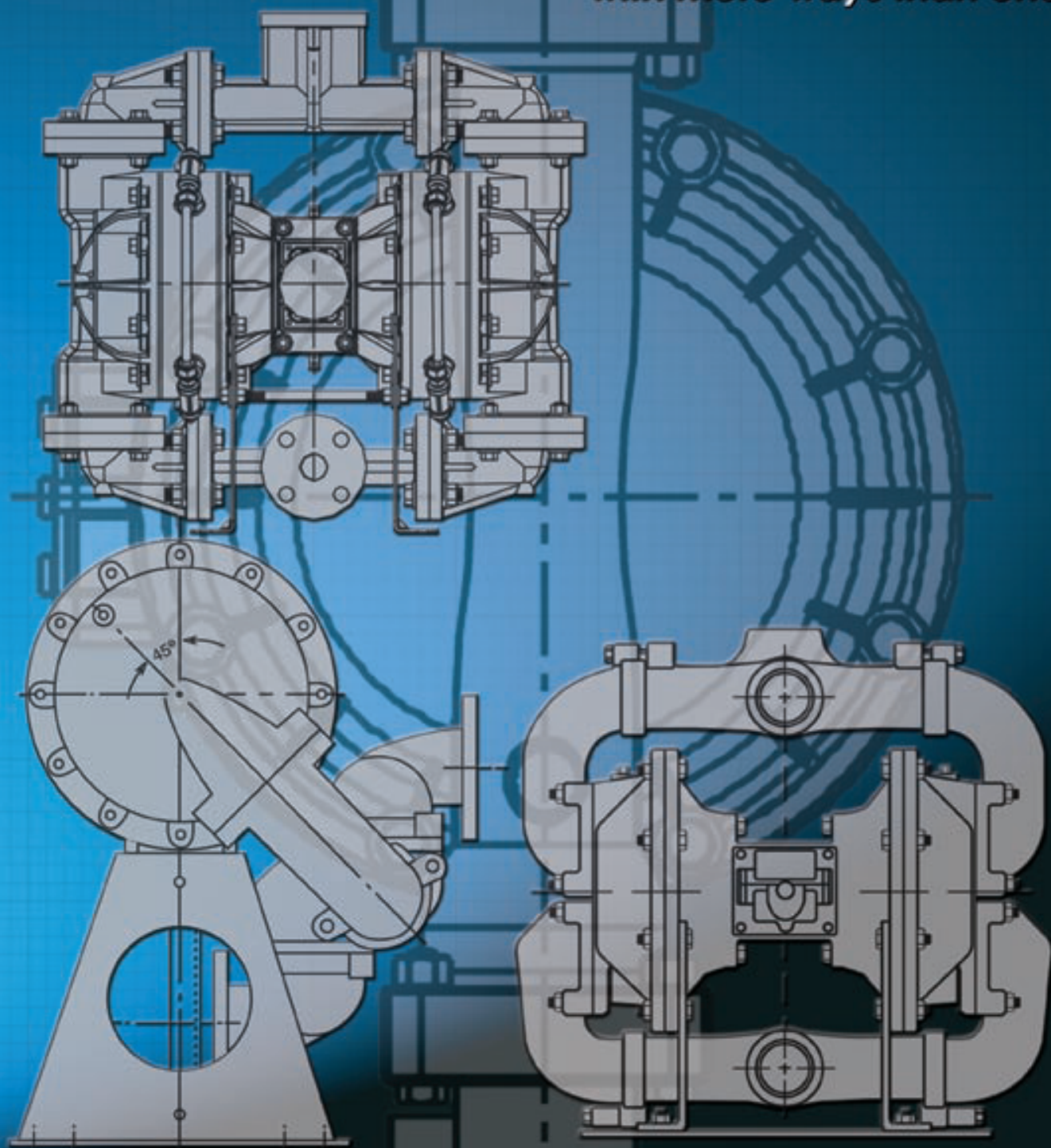


Discover

# SANDPIPER® Pumping Solutions

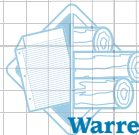
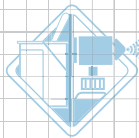
A WARREN RUPP PUMP BRAND

*with more ways than one*



100 PSI

# HEAVY DUTY BALL



**All Bolted Construction**

**ESADS + Plus®**  
(Externally Serviceable Air Distribution System)  
**Lube Free**

**Durable Diaphragm Connecting Rod**

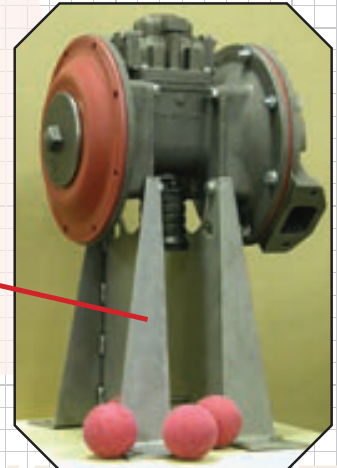
**Thick Wall Construction**

**Weighted Elastomeric Ball Checks**

**Bottom Discharge Ported**

**Rotate Porting Flange 180° to Achieve 90° Vertical Connections**

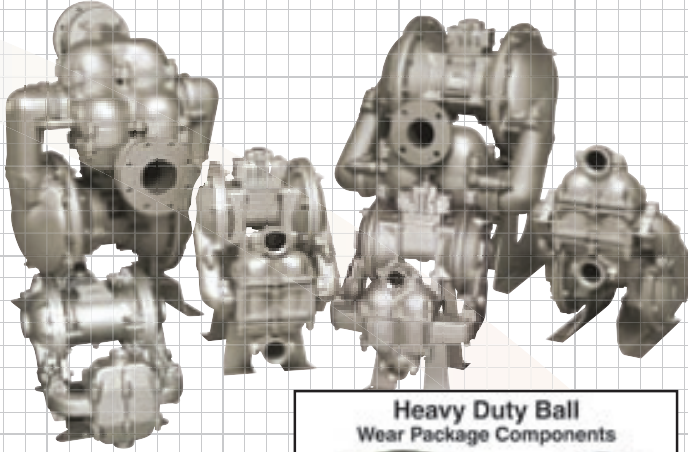
**Free Standing Support Base**



Warren Rupp Signature Features - in BLUE

VARIABLE FL

# CONFIGURATION FEATURES



## HEAVY DUTY BALL

ESADS + Plus®

All Bolted Construction

Bottom Discharge



HD Extended Wear Package (1 1/2" to 4")

Thick Wall Construction

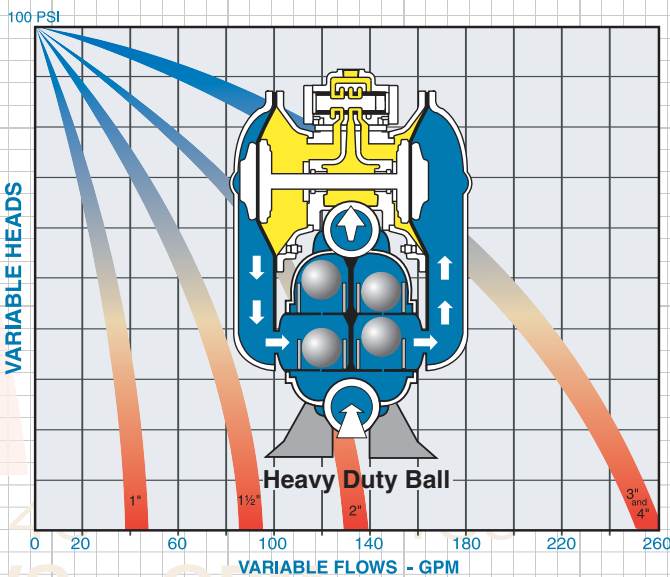
Durable Diaphragm Connecting Rod

Horizontal and Vertical Manifold Connections

Solids Range + 1/4" (6mm) to 7/8" (22mm)

Dry Primes up to 20 Feet of Water

Free Standing Support Base



### Heavy Duty Ball Bottom Discharge

Fluid Characteristics	Water (base reference)		A
	Suspended Solids		A (top discharge porting)
	Non-Suspended Solids		A (bottom discharge porting)
	Line Size Solids		X
	Sludge / Slurry		A (bottom discharge porting)
	High Viscosity (Flowable Fluids)		A (weighted check valves)
	Erosion / Abrasive Fluids	High	A
Moderate		A	
Low		A	
Corrosion		B	
Installation	Permanent		A
	Portable		B
	Containment / Prevention		C
	Flooded Suction		A (weighted check valves)
	Suction Lift		B
	Submerged		B
Duty	Intermittent / On-Demand		A
	Continuous		A

A = Best Type  
B = Suitable

C = Caution (Limitations)  
X = Unsuitable

100 PSI

# HEAVY DUTY BALL

**HDB4-A (SB4-A)**  
Top Ported

**HDB3-A (SB3-A)**  
Bottom Ported

**HDB2-A (SB2-A)**  
Bottom Ported

**HDB2-A (SB2-A)**  
Top Ported

**HDB1½-A (SB1½-A)**  
Bottom Ported

**SB1-A**  
Bottom Ported



**HDB (SB) Metallic Pumps** are ideal for thin to viscous and small solids laden fluids. SANDPIPER® Heavy Duty Ball Valve Pumps provide superior 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.

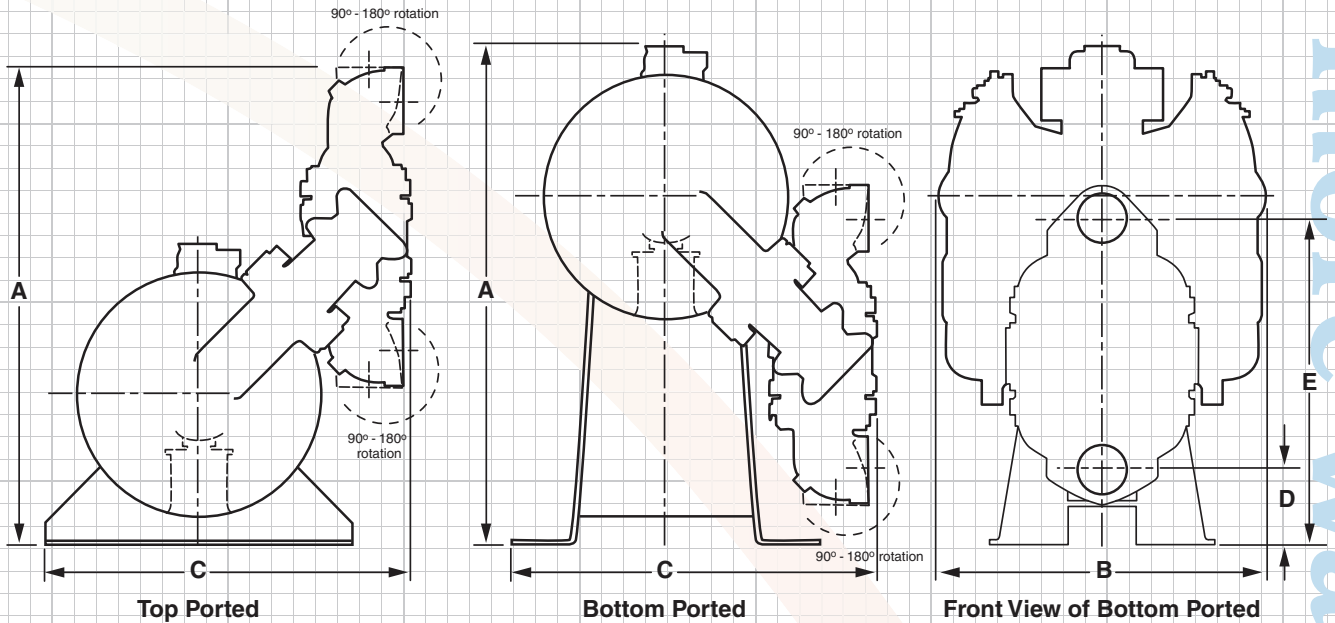
**3" HDB bottom discharge ported pump installed as a plate & frame filter press, pre-coat supply pump.**



VARIABLE HEADS

VARIABLE FL

# Dimensional Detail



PUMP MODELS	A	B	C	D		Connection Style	Pipe Size	Displacement Per Stroke	Max Flow Per Minute	Max Solids Handling	Max Discharge Pressure	
	Height	Width	Depth	Bottom of Base to Center Line of:								
	inches (mm)	inches (mm)	inches (mm)	Suction	Discharge							
SB1-A/SB25A	14 7/16 (367)	11 3/4 (298)	13 9/32 (337)	5 1/4 (133)	13 (330)	1"	NPT/BSP	1 (25)	.09 (.34)	42 (159)	.25 (6)	125 (8.6)
SB1-A TOP	13 1/2 (342)	11 3/4 (298)	14 7/8 (378)	5 5/8 (142)	13 1/2 (342)	1"	NPT/BSP	1 (25)	.09 (.34)	42 (159)	.25 (6)	125 (8.6)
SB1-A BOTTOM	13 11/16 (347)	11 3/4 (298)	14 7/8 (378)	27/32 (21)	8 7/16 (214)	1"	NPT/BSP	1 (25)	.09 (.34)	42 (159)	.25 (6)	125 (8.6)
SB1½-A/SB40A	13 13/16 (351)	15 1/2 (394)	14 1/8 (359)	2 1/4 (57)	12 3/16 (310)	1½"	NPT/BSP	1.5 (40)	.34 (1.29)	90 (340)	.25 (6)	125 (8.6)
HDB1½-A TOP	19 7/32 (488)	15 1/2 (419)	17 (432)	8 9/64 (207)	18 5/64 (459)	1½"	NPT/BSP	1.5 (40)	.34 (1.29)	90 (340)	.25 (6)	125 (8.6)
HDB1½-A BOTTOM	18 9/16 (471)	15 1/2 (419)	17 (432)	6 9/64 (156)	16 (406)	1½"	NPT/BSP	1.5 (40)	.34 (1.29)	90 (340)	.25 (6)	125 (8.6)
SB2-A TOP	22 3/16 (564)	5 1/2 (394)	16 13/16 (427)	9 1/8 (232)	20 7/8 (530)	2"	NPT	2 (50)	.43 (1.63)	135 (511)	.38 (9)	125 (8.6)
HDB2-A TOP	22 3/16 (564)	5 1/2 (394)	16 13/16 (427)	9 1/8 (232)	20 7/8 (530)	2"	NPT	2 (50)	.43 (1.63)	135 (511)	.38 (9)	125 (8.6)
SB2-A BOTTOM	23 1/4 (591)	5 1/2 (394)	16 13/16 (427)	3 7/16 (87)	15 3/16 (386)	2"	NPT	2 (50)	.43 (1.63)	135 (511)	.38 (9)	125 (8.6)
HDB2-A BOTTOM	23 1/4 (591)	5 1/2 (394)	16 13/16 (427)	3 7/16 (87)	15 3/16 (386)	2"	NPT	2 (50)	.43 (1.63)	135 (511)	.38 (9)	125 (8.6)
SB3-A TOP	37 1/8 (943)	26 (661)	20 3/4 (527)	2 (509)	33 3/8 (848)	3"	125# ANSI	3 (75)	1.8 (6.81)	260 (984)	.87 (22)	125 (8.6)
HDB3-A TOP	37 1/8 (943)	26 (661)	20 3/4 (527)	2 (509)	33 3/8 (848)	3"	125# ANSI	3 (75)	1.8 (6.81)	260 (984)	.87 (22)	125 (8.6)
SB3-A BOTTOM	31 1/4 (794)	26 (661)	24 5/8 (625)	5 3/4 (146)	19 3/8 (492)	3"	125# ANSI	3 (75)	1.8 (6.81)	260 (984)	.87 (22)	125 (8.6)
HDB3-A BOTTOM	31 1/4 (794)	26 (661)	24 5/8 (625)	5 3/4 (146)	19 3/8 (492)	3"	125# ANSI	3 (75)	1.8 (6.81)	260 (984)	.87 (22)	125 (8.6)
SB4-A TOP	37 7/8 (962)	26 (661)	23 3/4 (603)	2 (509)	33 3/8 (848)	4"	125# ANSI	4 (100)	1.8 (6.81)	260 (984)	.87 (22)	125 (8.6)
HDB4-A TOP	37 7/8 (962)	26 (661)	23 3/4 (603)	2 (509)	33 3/8 (848)	4"	125# ANSI	4 (100)	1.8 (6.81)	260 (984)	.87 (22)	125 (8.6)
SB4-A BOTTOM	31 1/4 (793)	26 (661)	27 1/2 (699)	5 3/4 (146)	19 3/8 (492)	4"	125# ANSI	4 (100)	1.8 (6.81)	260 (984)	.87 (22)	125 (8.6)
HDB4-A BOTTOM	31 1/4 (793)	26 (661)	27 1/2 (699)	5 3/4 (146)	19 3/8 (492)	4"	125# ANSI	4 (100)	1.8 (6.81)	260 (984)	.87 (22)	125 (8.6)

All Dimensions ±.1/8 (3)

140  
180  
220  
250  
GWS - GPM

With more ways than one!