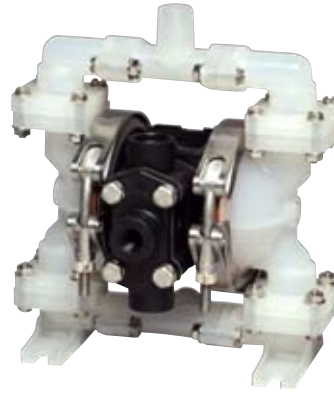


Quality System
ISO9001 Certified

Environmental
Management System
ISO14001 Certified



U.S. Patent #
5,996,627 and
6,241,487



**Model PB^{1/4}-A
Type 3**

**Air-Operated
Double Diaphragm Pump**

Engineering, Performance
& Construction Data

INTAKE/DISCHARGE PIPE SIZE ¼" (6mm) NPT (internal) ½" (13mm) NPT (external)	CAPACITY 0 to 4 gallons per minute (0 to 15 liters per minute)	AIR VALVE No-lube, no-stall design	SOLIDS-HANDLING Up to 1/32" (1mm)	HEADS UP TO 125 psi or 289 ft. of water (8.6 Kg/cm² or 86 meters)	DISPLACEMENT/STROKE .01 US Gallons / .04 liters
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CAUTION! Operating temperature limitations are as follows:

Materials	Operating Temperatures		
	Maximum*	Minimum*	Optimum**
Santoprene® Injection molded thermoplastic elastomer with no fabric layer. Long mechanical flex life. Excellent abrasion resistance.	275°F 135°C	-40°F -40°C	50° to 212°F 10° to 100°C
Virgin PTFE Chemically inert, virtually impervious. Very few chemicals are known to react chemically with PTFE: molten alkali metals, turbulent liquid or gaseous fluorine and a few fluoro-chemicals such as chlorine trifluoride or oxygen difluoride which readily liberate free fluorine at elevated temperatures.	220°F 104°C	-35°F -37°C	50° to 212°F 10° to 100°C
PVDF	250°F 121°C	0°F -18°C	
Polypropylene	180°F 82°C	32°F 0°C	
Conductive Acetal	190°F 88°C	-20°F -29°C	

Explanation of Pump Nomenclature

PB ^{1/4} -A	Manifold	Outer Chamber	Outer Diaphragm Plate	Inner Diaphragm Plate	Intermediate Housing	Diaphragm Rod	Hardware	Valve Seat	Diaphragm	Ball Valve Material	Air Valve	Cap	Options	Shipping Weight (lbs.)
TS-3-PP	PP	PP	PP	2011-AL	PP*	416SS	301/302SS	PP	S	S	PP*	PP*	-	4
TU-3-PP	PP	PP	PP	2011-AL	PP*	416SS	301/302SS	PP	S	T	PP*	PP*	-	4
TT-3-PP	PP	PP	PP	2011-AL	PP*	416SS	301/302SS	PP	T	T	PP*	PP*	-	4
TS-3-K	K	K	K	2011-AL	PP*	416SS	301/302SS	K	S	S	PP*	PP*	-	5
TU-3-K	K	K	K	2011-AL	PP*	416SS	301/302SS	K	S	T	PP*	PP*	-	5
TT-3-K	K	K	K	2011-AL	PP*	416SS	301/302SS	K	T	T	PP*	PP*	-	5
TS-3-CA	CA	CA	CA	2011-AL	CA*	416SS	301/302SS	AC	S	S	CA*	CA*	-	4
TU-3-CA	CA	CA	CA	2011-AL	CA*	416SS	301/302SS	AC	S	T	CA*	CA*	-	4
TT-3-CA	CA	CA	CA	2011-AL	CA*	416SS	301/302SS	AC	T	T	CA*	CA*	-	4
TS-3-PPE0	PP	PP	PP	2011-AL	PP*	416SS	301/302SS	PP	S	S	E	PP*	0	4
TS-3-PPE1	PP	PP	PP	2011-AL	PP*	416SS	301/302SS	PP	S	S	E	PP*	1	4
TS-3-PPE2	PP	PP	PP	2011-AL	PP*	416SS	301/302SS	PP	S	S	E	PP*	2	4
TS-3-PPE3	PP	PP	PP	2011-AL	PP*	416SS	301/302SS	PP	S	S	E	PP*	3	4
TS-3-PPE4	PP	PP	PP	2011-AL	PP*	416SS	301/302SS	PP	S	S	E	PP*	4	4
TS-3-PPE5	PP	PP	PP	2011-AL	PP*	416SS	301/302SS	PP	S	S	E	PP*	5	4
TS-3-PPE6	PP	PP	PP	2011-AL	PP*	416SS	301/302SS	PP	S	S	E	CA*	6	4
TS-3-PPE7	PP	PP	PP	2011-AL	PP*	416SS	301/302SS	PP	S	S	E	CA*	7	4

Horizontal suction and vertical discharge are standard. All combinations of suction and discharge are available.

Meanings of

Abbreviations:

AC = Acetal
AL = Aluminum
CA = Conductive Acetal**
K = PVDF

PP = Polypropylene
SS = Stainless Steel
T = PTFE
S = Santoprene

E0 = Solenoid Kit w/24 VDC Coil
E1 = Solenoid Kit w/24 VDC Explosion Proof Coil
E2 = Solenoid Kit w/24 VAC/12VDC Coil
E3 = Solenoid Kit w/24 VAC/12VDC Explosion Proof Coil

E4 = Solenoid Kit w/110VAC Coil
E5 = Solenoid Kit w/110VAC Explosion Proof Coil
E6 = Solenoid Kit w/220VAC Coil
E7 = Solenoid Kit w/220VAC Explosion Proof Coil

ATEX Compliant ONLY with no options.

* Designates Glass Filled

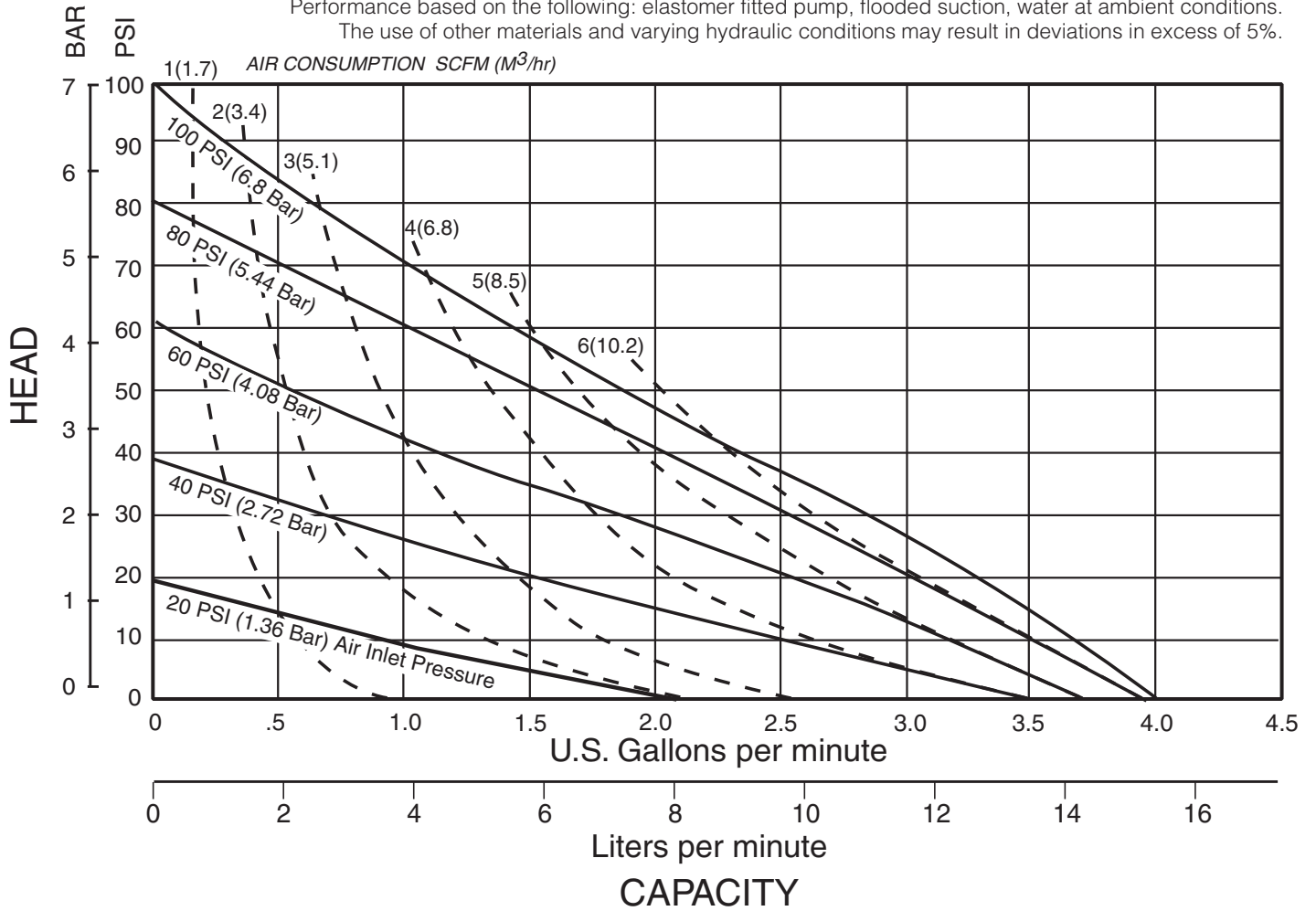
** Note: Only Conductive Acetal equipped pumps with no options are ATEX compliant

Performance Curves

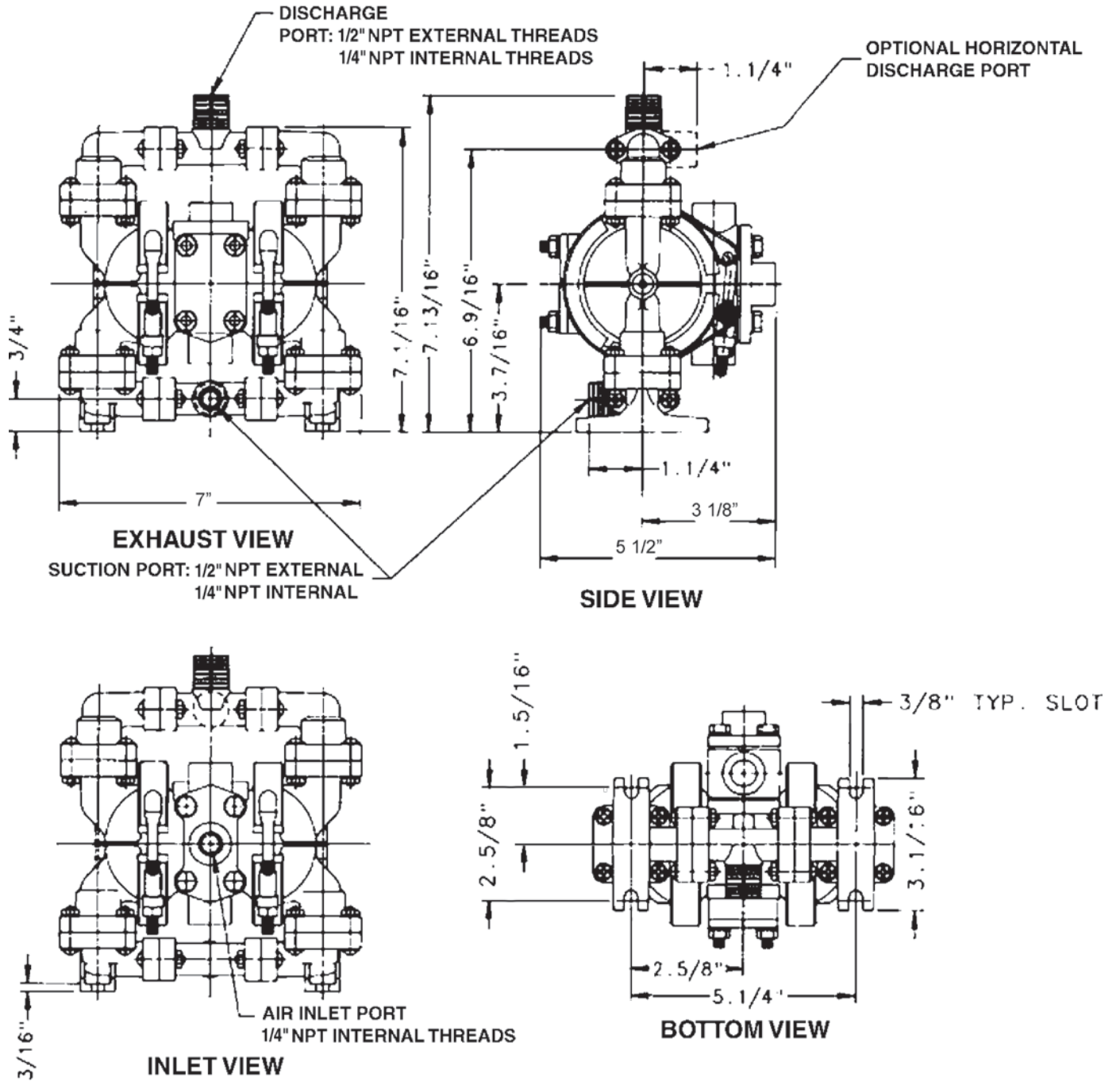
(SANDPIPER® pumps are designed to be powered only by compressed air)

MODEL PB¹/₄-A Performance Curve

Performance based on the following: elastomer fitted pump, flooded suction, water at ambient conditions.
The use of other materials and varying hydraulic conditions may result in deviations in excess of 5%.

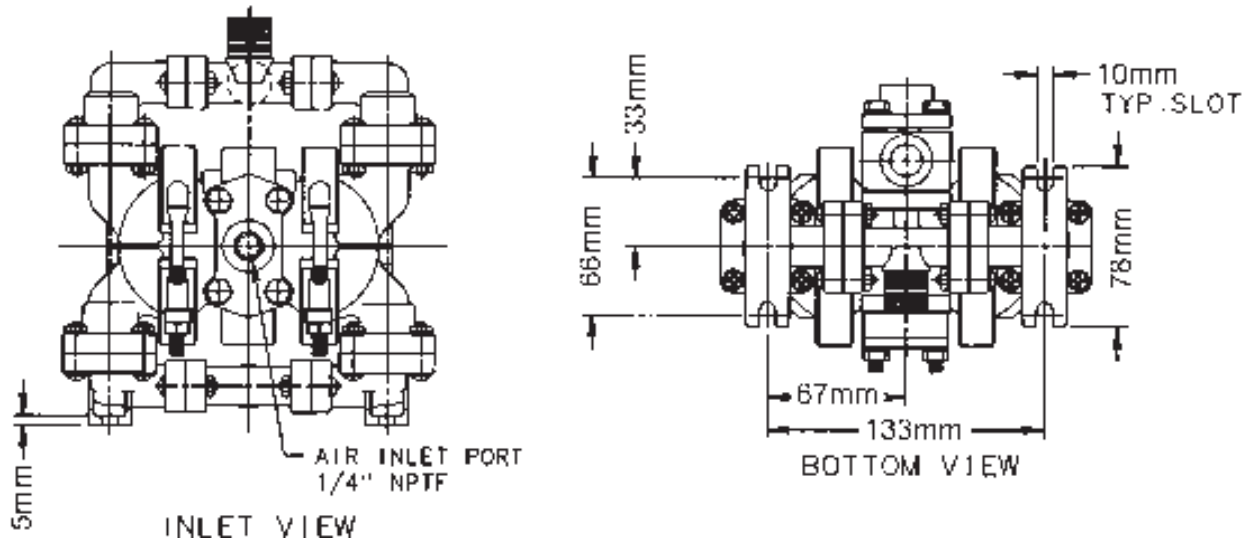
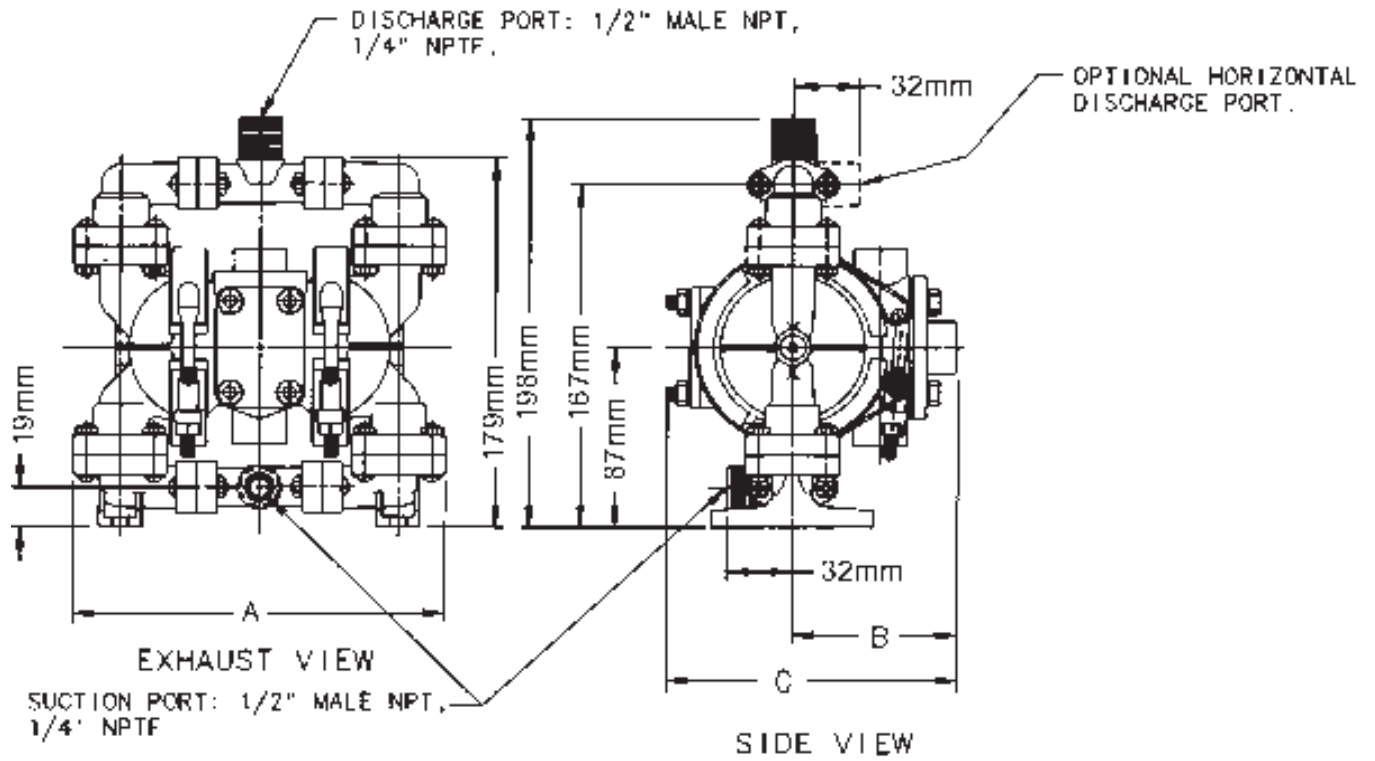


Dimensions: PB¹/₄-A Non-Metallic



Dimension	A	B	C
Standard	7"	3 1/8"	5 1/2"
Pulse Output Kit	7"	3 1/8"	5 1/2"

Metric Dimensions: PB¹/₄-A Non-Metallic



Dimension	A	B	C
Standard	178	79	140
Pulse Output Kit	178	79	140