



# SandPIPER®

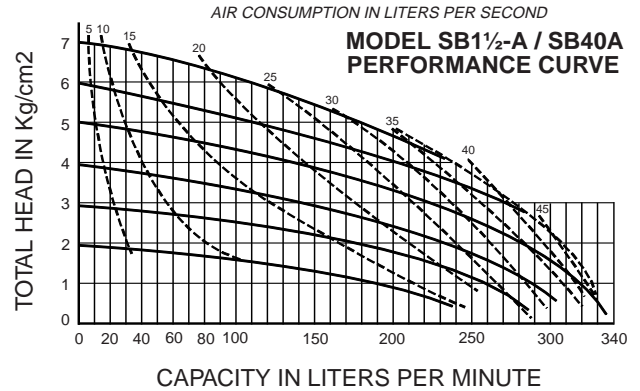
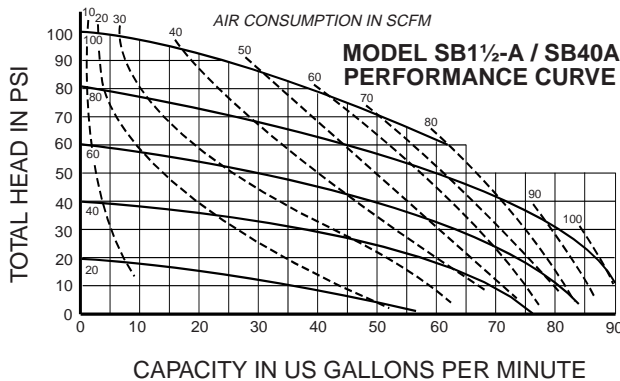
## SB 1 1/2-A Type 6 SB40-A Type 6 Ball Valve

### Air-Powered Double-Diaphragm Pump

ENGINEERING, PERFORMANCE  
& CONSTRUCTION DATA

<b>INTAKE/DISCHARGE PIPE SIZE</b> SB1½-A: 1½: NPT (F) (37.5mm)	<b>CAPACITY</b> 0 to 90 gallons per minute	<b>AIR VALVE</b> No-lube, no-stall	<b>SOLIDS-HANDLING</b> Up to ¼ in. (6.3mm)	<b>HEADS UP TO</b> 125 psi or 289 ft. of water	<b>DISPLACEMENT/STROKE</b> .34 Gallon / 1.29 liter
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SandPIPER® pumps are designed to be powered **only** by compressed air.  
Temperature Limit: 212°F - 100°C



### MATERIALS OF CONSTRUCTION

Type	Manifold Porting			Manifold	Outer Chamber	Inner Chamber	Outer Diaphragm Plate	Inner Diaphragm Plate	Intermediate Housing	Diaphragm Rod	Valve Seat	Hard-ware	Diaphragm	Ball Valve Material	Manifold Seat Gasket	Manifold Sealing Rings	Shipping Wt. (lbs)
	Top	Side	Bottom														
SB-6-A	X			356-T6AL	356-T6AL	380AL	380AL	380AL	356-T6AL	416SS	316SS	PS	B	B	A	A	75
SC-6-A	X			356T6AL	356T6AL	380AL	380AL	380AL	356T6AL	416SS	316SS	PS	V	T	T	T	75
SI-6-A	X			356T6AL	356T6AL	380AL	380AL	380AL	356T6AL	416SS	316SS	PS	I	I	A	A	75
SN-6-A	X			356T6AL	356T6AL	380AL	380AL	380AL	356T6AL	416SS	316SS	PS	N	N	A	A	75
SV-6-A	X			356T6AL	356T6AL	380AL	380AL	380AL	356T6AL	416SS	316SS	PS	V	V	T	T	75
SGN-6-A	X			356T6AL	356T6AL	380AL	380AL	380AL	356T6AL	416SS	316SS	PS	N/T	T	T	T	75
SS-6-A	X			356T6AL	356T6AL	380AL	380AL	380AL	356T6AL	416SS	316SS	PS	S	S	A	A	75
SB-6-CI	X			CI	CI	380AL	CI	380AL	356T6AL	416SS	316SS	PS	B	B	A	A	102
SC-6-CI	X			CI	CI	380AL	CI	380AL	356T6AL	416SS	316SS	PS	V	T	T	T	102
SI-6-CI	X			CI	CI	380AL	CI	380AL	356T6AL	416SS	316SS	PS	I	I	A	A	102
SN-6-CI	X			CI	CI	380AL	CI	380AL	356T6AL	416SS	316SS	PS	N	N	A	A	102
SV-6-CI	X			CI	CI	380AL	CI	380AL	356T6AL	416SS	316SS	PS	V	V	T	T	102
SGN-6-CI	X			CI	CI	380AL	CI	380AL	356T6AL	416SS	316SS	PS	N/T	T	T	T	102
SS-6-CI	X			CI	CI	380AL	CI	380AL	356T6AL	416SS	316SS	PS	S	S	A	A	102
SB-6-II	X			CI	CI	CI	CI	CI	CI	416SS	316SS	PS	B	B	A	A	104
SC-6-II	X			CI	CI	CI	CI	CI	CI	416SS	316SS	PS	V	T	T	T	104
SI-6-II	X			CI	CI	CI	CI	CI	CI	416SS	316SS	PS	I	I	A	A	104
SN-6-II	X			CI	CI	CI	CI	CI	CI	416SS	316SS	PS	N	N	A	A	104
SV-6-II	X			CI	CI	CI	CI	CI	CI	416SS	316SS	PS	V	V	T	T	104
SGN-6-II	X			CI	CI	CI	CI	CI	CI	416SS	316SS	PS	N/T	T	T	T	104
SS-6-II	X			CI	CI	CI	CI	CI	CI	416SS	316SS	PS	S	S	A	A	104
SB-6-SS	X			WR-S	WR-S	380AL	WR-S	380AL	356T6AL	416SS	316SS	PS	B	B	A	A	107
SC-6-SS	X			WR-S	WR-S	380AL	WR-S	380AL	356T6AL	416SS	316SS	PS	V	T	T	T	107
SI-6-SS	X			WR-S	WR-S	380AL	WR-S	380AL	356T6AL	416SS	316SS	PS	I	I	A	A	107
SN-6-SS	X			WR-S	WR-S	380AL	WR-S	380AL	356T6AL	416SS	316SS	PS	N	N	A	A	107
SV-6-SS	X			WR-S	WR-S	380AL	WR-S	380AL	356T6AL	416SS	316SS	PS	V	V	T	T	107
SGN-6-SS	X			WR-S	WR-S	380AL	WR-S	380AL	356T6AL	416SS	316SS	PS	N/T	T	T	T	107
SGV-6-SS	X			WR-S	WR-S	380AL	WR-S	380AL	356T6AL	416SS	316SS	PS	V/T	T	T	T	107
SS-6-SS	X			WR-S	WR-S	380AL	WR-S	380AL	356T6AL	416SS	316SS	PS	S	S	A	A	107
SB-6-SI	X			WR-S	WR-S	CI	WR-S	CI	CI	416SS	316SS	PS	B	B	A	A	107
SC-6-SI	X			WR-S	WR-S	CI	WR-S	CI	CI	416SS	316SS	PS	V	T	T	T	107
SI-6-SI	X			WR-S	WR-S	CI	WR-S	CI	CI	416SS	316SS	PS	I	I	A	A	107
SN-6-SI	X			WR-S	WR-S	CI	WR-S	CI	CI	416SS	316SS	PS	N	N	A	A	107
SV-6-SI	X			WR-S	WR-S	CI	WR-S	CI	CI	416SS	316SS	PS	V	V	T	T	107
SGI-6-SI	X			WR-S	WR-S	CI	WR-S	CI	CI	416SS	316SS	PS	I/T	T	T	T	107
SGN-6-SI	X			WR-S	WR-S	CI	WR-S	CI	CI	416SS	316SS	PS	N/T	T	T	T	107
SGV-6-SI	X			WR-S	WR-S	CI	WR-S	CI	CI	416SS	316SS	PS	V/T	T	T	T	107
SS-6-SI	X			WR-S	WR-S	CI	WR-S	CI	CI	416SS	316SS	PS	S	S	A	A	107

# SBI 1/2-A & SB40-A Ball Valve

# SandPIPER®

## Meanings of Abbreviations:

A = Compressed Fibre  
AL = Aluminum  
B = Buna-N  
CI = Cast Iron

DC = Die Cast  
H/T = Hytrel® Backup/PTFE Overlay  
I = EPDM  
I/T = EPDM Backup/PTFE Overlay

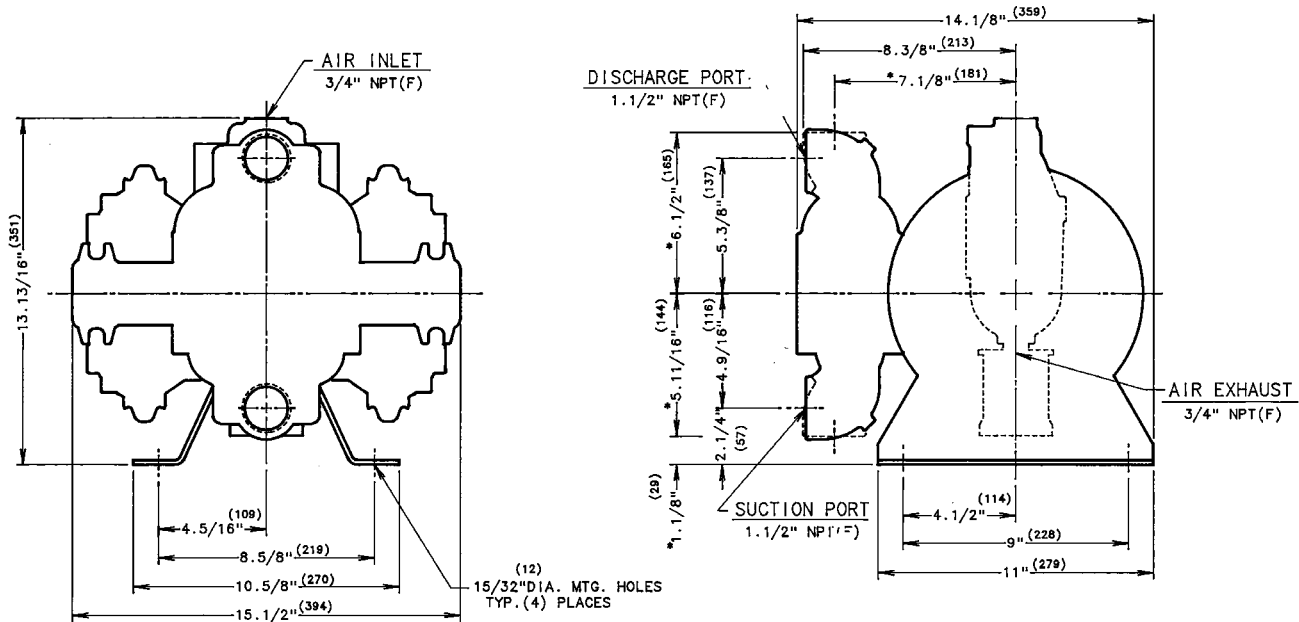
N = Neoprene  
N/T = Neoprene Backup/PTFE Overlay  
PS = Plated Steel  
S = Santoprene

SS = Stainless Steel  
T = PTFE  
V = Viton®  
WR-S = Alloy Type 316SS

Materials	Operating Temperatures		
	Maximum*	Minimum*	Optimum**
<b>BUNA-N</b> General purpose, oil-resistant. Shows good solvent, oil, water and hydraulic fluid resistance. Should not be used with highly polar solvents like acetone and MEK, ozone, chlorinated hydrocarbons and nitro hydrocarbons.	190°F 88°C	-10°F -23°C	50°F to 140°F 10°C to 60°C
<b>EPDM</b> Shows very good water and chemical resistance. Has poor resistance to oil and solvents, but is fair in ketones and alcohols.	212°F 100°C	-10°F -23°C	50°F to 212°F 10°C to 100°C
<b>NEOPRENE</b> All purpose. Resistant to vegetable oils. Generally not affected by moderate chemicals, fats, greases and many oils and solvents. Generally attacked by strong oxidizing acids, ketones, esters, nitro hydrocarbons and chlorinated aromatic hydrocarbons.	170°F 77°C	-35°F -37°C	50°F to 130°F 10°C to 54°C
<b>HYTREL®</b> Good on acids, bases, amines and glycols at room temperature.	190°F 88°C	-10°F -23°C	50°F to 140°F 10°C to 60°C
<b>PTFE</b> 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.	212°F 100°C	-35°F -37°C	50°F to 212°F 10°C to 100°C
<b>VITON®</b> shows good resistance to a wide range of oils and solvents; especially all aliphatic, aromatic and halogenated hydrocarbons, acids, animal and vegetable oils. Hot water or hot aqueous solutions (over 70°F) will attack Viton.	212°F 100°C	32°F 0°C	75°F to 212°F 24°C to 100°C
<b>Santoprene®</b> Injection molded thermoplastic elastomer with no fabric layer. Long mechanical flex life. Excellent abrasion resistance.	212°F 100°C	-10°F -23°C	50° to 212°F 10°C to 100°C
<b>WR-S</b> Warren Rupp Alloy Type 316 Stainless Steel equal to or exceeding ASTM specification A743 CF-8M for corrosion resistant iron chromium, iron chromium nickel, and nickel based alloy castings for general applications. Commonly referred to as 316 Stainless Steel in the pump industry.			
For specific applications, always consult "Chemical Resistance Chart" Technical Bulletin		* Definite reduction in service life. ** Minimal reduction in service life at ends of range.	

Dimensions are ± 1/8"  
Figures in parenthesis = millimeters

**Model SB1 1/2-A features NPT threaded connections.**  
**Model SB40-A features British Standard threaded connections.**



\* INDICATES DIMENSIONS WITH SUCTION AND DISCHARGE PORTS ROTATED 180° TO A VERTICAL POSITION.

**1 1/2" NPT(F) Suction and Discharge • 3/4" NPT(F) Air Inlet Port • 3/4" NPT(F) Air Exhaust Port (not shown)**

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SB1 1/2-A 3/02

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