

S30 METALLIC PUMP TECHNICAL DATA SHEET

SERIES

STANDARD DUTY BALL VALVE PUMPS

Offering the widest range of performance and application capabilities

PERFORMANCE

SUCTION / DISCHARGE PORT SIZE

- 3" NPT or 3" BSP Tapered
- 3" ANSI Flange or 3" DIN Flange

CAPACITY

- 0 to 285 gallons per minute (0 to 1,078 LPM)

AIR DISTRIBUTION VALVE

- No-lube, no-stall design

SOLIDS-HANDLING

- Up to .38 in. (9.65mm)

HEADS UP TO

- 125 psi or 289 ft. of water
(8.6 Kg/cm² or 86 meters)

MAXIMUM OPERATING PRESSURE

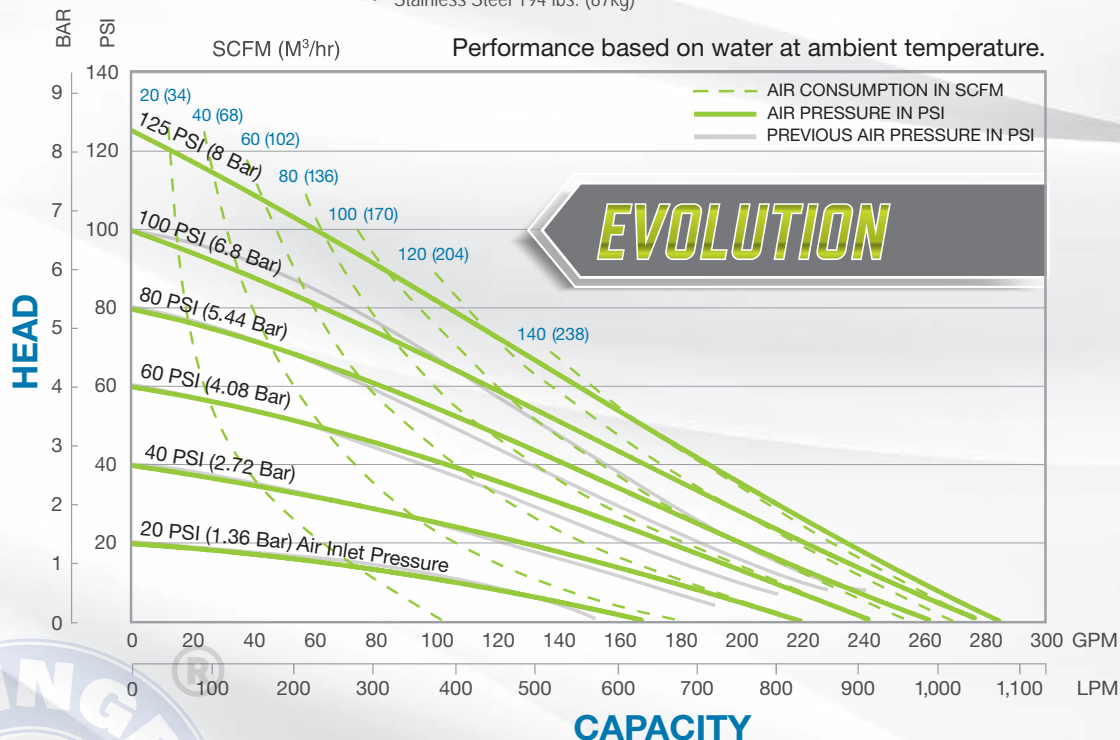
- 125 psi (8.6 bar)

DISPLACEMENT/STROKE

- 1.00 Gallon / 3.79 liter

WEIGHTS

- Aluminum 116 lbs. (53kg)
- Cast Iron 215 lbs. (98kg)
- Stainless Steel 194 lbs. (87kg)



5 YEAR LIMITED PRODUCT WARRANTY

5 Year Guarantee for defects in material or workmanship. See sandpiperpump.com/content/warranty-certifications for complete warranty, including terms and conditions, limitations and exclusions.



USE ONLY GENUINE SANDPIPER PARTS

All certification, standards, guarantees & warranties originally supplied with this pump will be invalidated by the use of service parts not identified as "Genuine SANDPIPER Parts."

SANDPIPER
SANDPIPERPUMP.COM

Warren Rupp, Inc. • A Unit of IDEX Corporation
800 N. Main St., Mansfield, Ohio 44902 USA
Telephone 419.524.8388 • Fax 419.522.7867



Tel: 866-777-6060
Fax: 866-777-6383
Int'l: +001 267 404 2910

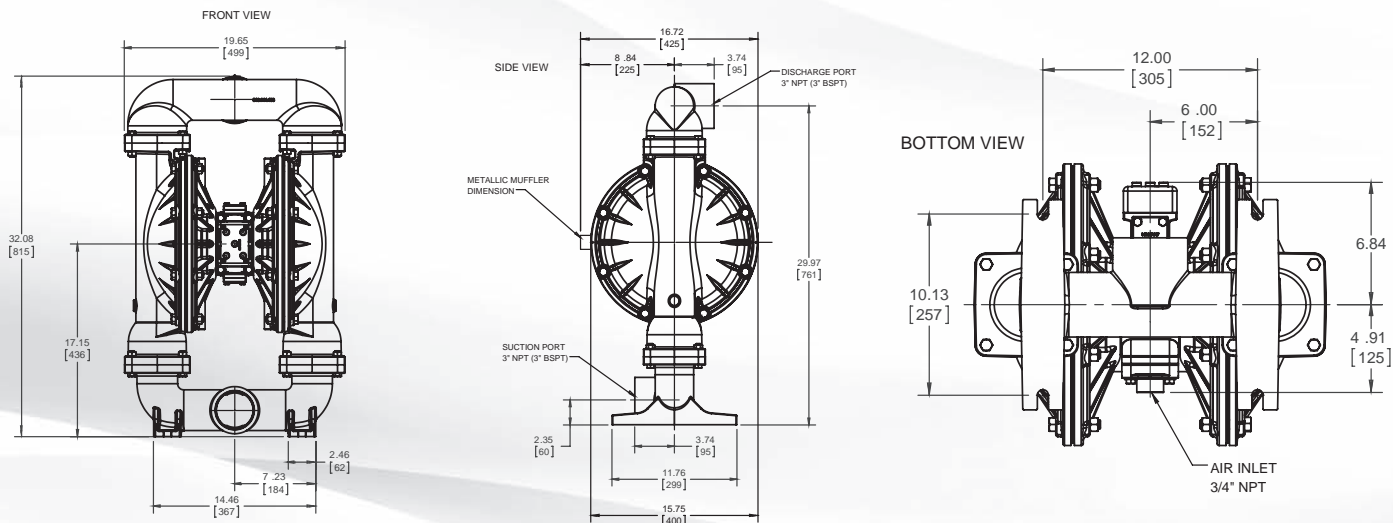
Springer Pumps, LLC
Springer Parts®

Websites: www.springerpumps.com
www.springerparts.com

DIMENSIONS

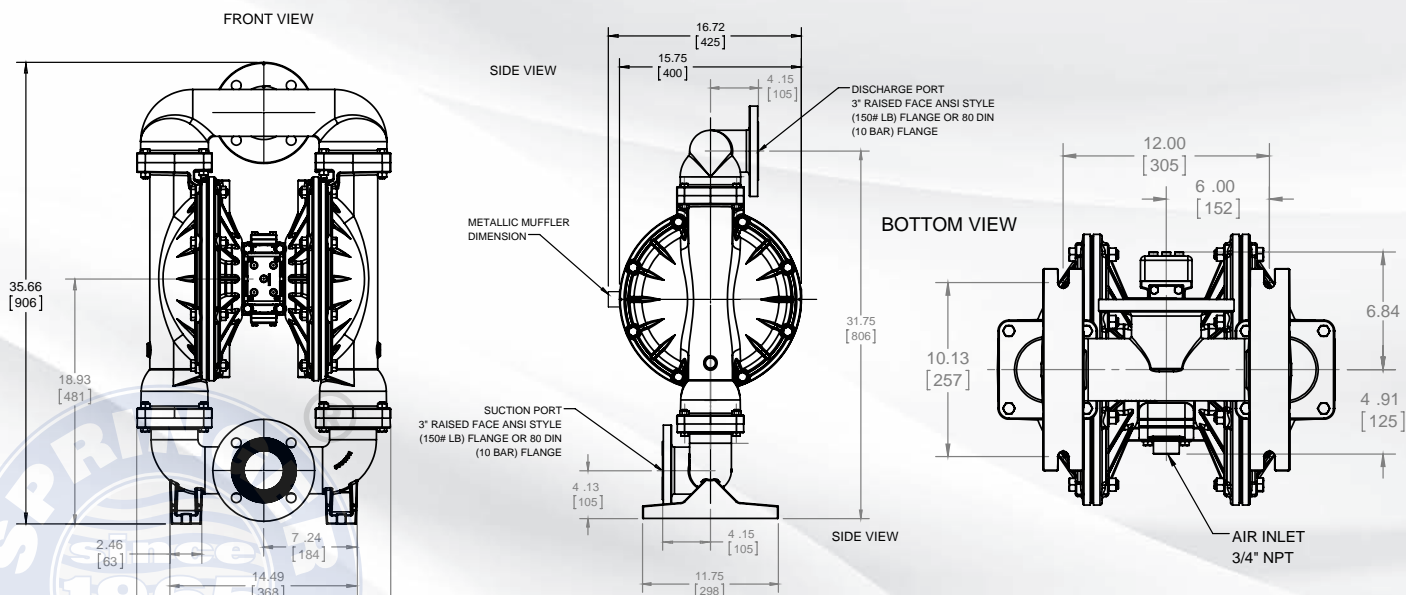
S30 Metallic, Threaded Ports

Dimensional Tolerance: $\pm 1/8"$ [$\pm 3\text{mm}$]



S30 Metallic, Flanged Ports

Dimensions in Inches. Dimensional Tolerance: $\pm 1/8"$ [$\pm 3\text{mm}$]



SANDPIPER®
SANDPIPERPUMP.COM

Warren Rupp, Inc. • A Unit of IDEX Corporation
800 N. Main St., Mansfield, Ohio 44902 USA
Telephone 419.524.8388 • Fax 419.522.7867

SPRINGER®
PARTS

Tel: 866-777-6060
Fax: 866-777-6383
Int'l: +001 267 404 2910

Springer Pumps, LLC
Springer Parts®

Websites: www.springerpumps.com
www.springerparts.com

EXPLANATION OF PUMP NOMENCLATURE

Your Model #: **S**

(fill in from
pump nameplate)

Pump Config.	Pump Size	Check Valve	Design Level	Wetted Material	Diaphragm/ Check Valve	Check Valve Seat	Non-Wetted Material	Porting Options	Pump Style	Pump Options	Kit Options
Model #:	S	XX	X	X	X	X	X	X	X	X	XX
PUMP BRAND			Check Valve Seat			PORTING OPTIONS			E4. Solenoid Kit with 110VAC Coil		
S SANDPIPER®			M Santoprene/PTFE			A 150# Raised Face 3" ANSI Flange (Integral Manifold)			KIT OPTIONS (CONTINUED)		
PUMP SIZE			N Neoprene/Neoprene			D 80 DIN Flange (Integral Manifold)			E5. Solenoid Kit with 110VAC Explosion-Proof Coil		
30 3"			CHECK VALVE SEAT			N NPT Threads			E6. Solenoid Kit with 220VAC Coil		
CHECK VALVE TYPE			A Aluminum			B BSP (Tapered) Threads			E7. Solenoid Kit with 220VAC Explosion-Proof Coil		
B Ball			B Nitrile			PUMP STYLE			E8. Solenoid Kit with 110VAC, 50 Hz Explosion-Proof Coil		
DESIGN LEVEL			C Carbon Steel			S Standard			E9. Solenoid Kit with 230VAC, 50 Hz Explosion-Proof Coil		
1 Design Level			E EPDM			PUMP OPTIONS			SP. Stroke Indicator Pins		
WETTED MATERIAL			N Neoprene			0 None			A1. Solenoid Kit with 12 VDC ATEX Compliant Coil		
A Aluminum			S Stainless Steel			6 Metal Muffler			A2. Solenoid Kit with 24 VDC ATEX Compliant Coil		
I Cast Iron			T PTFE			KIT OPTIONS			A3. Solenoid Kit with 110/120 VAC 50/60 Hz ATEX Compliant Coil		
S Stainless Steel			V FKM			00. None			A4. Solenoid Kit with 220/240 VAC 50/60 Hz ATEX Compliant Coil		
H Alloy C			W UHMW Polyethylene			P0. 10.30VDC Pulse Output Kit					
X Unpainted Aluminum			NON-WETTED MATERIAL OPTIONS			P1. Intrinsically-Safe 5.30VDC, 110/120VAC 220/240 VAC Pulse Output Kit					
DIAPHRAGM/CHECK VALVE MATERIALS			A Painted Aluminum			P2. 110/120 or 220/240VAC Pulse Output Kit					
1 Santoprene/Santoprene			I Cast Iron			E0. Solenoid Kit with 24VDC Coil					
2 PTFE-Santoprene/PTFE			J Painted Aluminum w/PTFE Coated Hardware			E1. Solenoid Kit with 24VDC Explosion-Proof Coil					
B Nitrile/Nitrile			S Stainless Steel with Stainless Steel Hardware			E2. Solenoid Kit with 24VAC/12VDC Coil					
C FKM/PTFE			Y Painted Aluminum with Stainless Steel Hardware			E3. Solenoid Kit with 12VDC Explosion-Proof Coil					
E EPDM/EPDM			Z Cast Iron with Stainless Steel Hardware								
I EPDM/Santoprene											
G PTFE-Neoprene/PTFE											

MATERIALS

Material Profile:	Operating Temperatures:	
	Max.	Min.
CAUTION! Operating temperature limitations are as follows:		
CONDUCTIVE ACETAL: Tough, impact resistant, ductile. Good abrasion resistance and low friction surface. Generally inert, with good chemical resistance except for strong acids and oxidizing agents.	190°F 88°C	-20°F -29°C
EPDM: Shows very good water and chemical resistance. Has poor resistance to oils and solvents, but is fair in ketones and alcohols.	280°F 138°C	-40°F -40°C
FKM (FLUOROCARBON): 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(21°C)) will attack FKM.	350°F 177°C	-40°F -40°C
HYTREL®: Good on acids, bases, amines and glycols at room temperatures only.	220°F 104°C	-20°F -29°C
NEOPRENE: All purpose. Resistance to vegetable oils. Generally not affected by moderate chemicals, fats, greases and many oils and solvents. Generally attacked by strong oxidizing acids, ketones, esters and nitro hydrocarbons and chlorinated aromatic hydrocarbons.	200°F 93°C	-10°F -23°C
NITRILE: 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
NYLON: 6/6 High strength and toughness over a wide temperature range. Moderate to good resistance to fuels, oils and chemicals.	180°F 82°C	32°F 0°C

POLYPROPYLENE: A thermoplastic polymer. Moderate tensile and flex strength. Resists strong acids and alkali. Attacked by chlorine, fuming nitric acid and other strong oxidizing agents.	180°F 82°C	32°F 0°C
PVDF: (Polyvinylidene Fluoride) A durable fluoroplastic with excellent chemical resistance. Excellent for UV applications. High tensile strength and impact resistance.	250°F 121°C	0°F -18°C
SANTOPRENE®: Injection molded thermoplastic elastomer with no fabric layer. Long mechanical flex life. Excellent abrasion resistance.	275°F 135°C	-40°F -40°C
UHMW PE: A thermoplastic that is highly resistant to a broad range of chemicals. Exhibits outstanding abrasion and impact resistance, along with environmental stress-cracking resistance.	180°F 82°C	-35°F -37°C
URETHANE: Shows good resistance to abrasives. Has poor resistance to most solvents and oils.	150°F 66°C	32°F 0°C
VIRGIN PTFE: (PFA/TFE) Chemically inert, virtually impervious. Very few chemicals are known to chemically react 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
Maximum and Minimum Temperatures are the limits for which these materials can be operated. Temperatures coupled with pressure affect the longevity of diaphragm pump components. Maximum life should not be expected at the extreme limits of the temperature ranges.		
Metals:		
ALLOY C: Equal to ASTM494 CW-12M-1 specification for nickel and nickel alloy.		
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 the Chemical Resistance Chart.

SANDPIPER®
SANDPIPERPUMP.COM

Warren Rupp, Inc. • A Unit of IDEX Corporation
800 N. Main St., Mansfield, Ohio 44902 USA
Telephone 419.524.8388 • Fax 419.522.7867

NOTE: See service manual for ATEX details.

SP_DS_TemplateDataSheet_0817

Tel: 866-777-6060
Fax: 866-777-6383
Int'l: +001 267 404 2910

Springer Pumps, LLC
Springer Parts®

Websites: www.springerpumps.com
www.springerparts.com