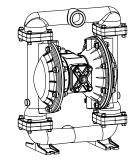
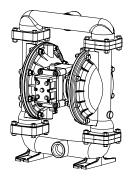


**Quality System** ISO9001 Certified

Environmental Management System ISO14001 Certified









U.S. Patent #5,996,627 & 6,241,487 Other U.S. Patents Applied for



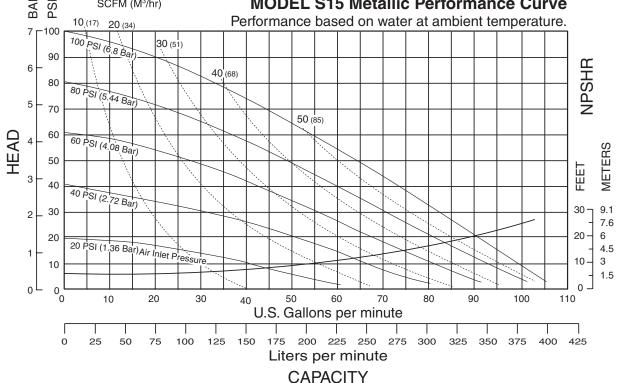


# **\$15** Metallic **Design Level 1 Ball Valve**

**Air-Powered Double-Diaphragm Pump** 

ENGINEERING, PERFORMANCE & CONSTRUCTION DATA

| INTAKE/DISCHARGE PIPE SIZE 1½" NPT(internal) 1½" BSPT Tapered (internal) | CAPACITY 0 to 106 gallons per minute (0 to 401 liters per minute) | <b>AIR VALVE</b><br>No-lube, no-stall<br>design    | SOLIDS-HANDLING<br>Up to .25 in. (6mm) | HEADS UP TO<br>125 psi or 289 ft. of water<br>(8.6 Kg/cm² or 86 meters) | DISPLACEMENT/STROKE .41 Gallon / 1.55 liter |  |  |
|--|---|--|--|---|---|--|--|
|  |   |  |  |   |   |  |  |
| BAR<br>PSI   | FM (M³/hr)  | MODEL S  | 315 Metallic Pe                        | rformance Cu  | rve   |  |  |
| m  | 20 (34)   | Performance based on water at ambient temperature. |  |   |   |  |  |



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

11/05

## **Explanation of Pump Nomenclature**

## S15 Metallic · Design Level 1 · Ball Valve

| MODEL           | Pump<br>Brand | Pump<br>Size | Check<br>Valve<br>Type | Design<br>Level | Wetted<br>Material | Diaphragm/<br>Check Valve<br>Materials | Check<br>Valve<br>Seat | Non-Wetted<br>Material<br>Options | Porting<br>Options | Pump<br>Style | Pump<br>Options | Shipping<br>Kit<br>Options | Weight<br>lbs. (kg) |
|-----------------|---------------|--------------|------------------------|-----------------|--------------------|--|------------------------|-----------------------------------|--------------------|---------------|-----------------|----------------------------|---------------------|
| S15B1ABWANS000. | S             | 15           | В                      | 1               | Α                  | В                                      | W                      | Α                                 | N                  | S             | 0               | 00.                        | 53 (24)             |
| S15B1ACTANS000. | S             | 15           | В                      | 1               | Α                  | С                                      | Т                      | Α                                 | N                  | S             | 0               | 00.                        | 53 (24)             |
| S15B1AEWANS000. | S             | 15           | В                      | 1               | Α                  | Е                                      | W                      | Α                                 | N                  | S             | 0               | 00.                        | 53 (24)             |
| S15B1AGTANS000. | S             | 15           | В                      | 1               | Α                  | G                                      | Т                      | Α                                 | N                  | S             | 0               | 00.                        | 53 (24)             |
| S15B1ANWANS000. | S             | 15           | В                      | 1               | Α                  | N                                      | W                      | Α                                 | N                  | S             | 0               | 00.                        | 53 (24)             |
| S15B1A1WANS000. | S             | 15           | В                      | 1               | Α                  | 1                                      | W                      | Α                                 | N                  | S             | 0               | 00.                        | 53 (24)             |
| S15B1AVWANS000. | S             | 15           | В                      | 1               | Α                  | ٧                                      | W                      | Α                                 | N                  | S             | 0               | 00.                        | 53 (24)             |
| S15B1IBWANS000. | S             | 15           | В                      | 1               | 1                  | В                                      | W                      | Α                                 | N                  | S             | 0               | 00.                        | 93 (42)             |
| S15B1ICTANS000. | S             | 15           | В                      | 1               | 1                  | С                                      | Т                      | Α                                 | N                  | S             | 0               | 00.                        | 93 (42)             |
| S15B1IEWANS000. | S             | 15           | В                      | 1               | 1                  | E                                      | W                      | Α                                 | N                  | S             | 0               | 00.                        | 93 (42)             |
| S15B1IGTANS000. | S             | 15           | В                      | 1               | 1                  | G                                      | Т                      | Α                                 | N                  | S             | 0               | 00.                        | 93 (42)             |
| S15B1INWANS000. | S             | 15           | В                      | 1               | 1                  | N                                      | W                      | Α                                 | N                  | S             | 0               | 00.                        | 93 (42)             |
| S15B1I1WANS000. | S             | 15           | В                      | 1               | 1                  | 1                                      | W                      | Α                                 | N                  | S             | 0               | 00.                        | 93 (42)             |
| S15B1IVWANS000. | S             | 15           | В                      | 1               | 1                  | ٧                                      | W                      | Α                                 | N                  | S             | 0               | 00.                        | 93 (42)             |
| S15B1IEWANS000. | S             | 15           | В                      | 1               | 1                  | Е                                      | W                      | Α                                 | N                  | S             | 0               | 00.                        | 93 (42)             |
| S15B1SBWANS000. | S             | 15           | В                      | 1               | S                  | В                                      | W                      | Α                                 | N                  | S             | 0               | 00.                        | 95 (43)             |
| S15B1SCTANS000. | S             | 15           | В                      | 1               | S                  | С                                      | Т                      | Α                                 | N                  | S             | 0               | 00.                        | 95 (43)             |
| S15B1SGTANS000. | S             | 15           | В                      | 1               | S                  | G                                      | Т                      | Α                                 | N                  | S             | 0               | 00.                        | 95 (43)             |
| S15B1SNWANS000. | S             | 15           | В                      | 1               | S                  | N                                      | W                      | Α                                 | N                  | S             | 0               | 00.                        | 95 (43)             |
| S15B1S1WANS000. | S             | 15           | В                      | 1               | S                  | 1                                      | W                      | Α                                 | N                  | S             | 0               | 00.                        | 95 (43)             |
| S15B1SVWANS000. | S             | 15           | В                      | 1               | S                  | V                                      | W                      | Α                                 | N                  | S             | 0               | 00.                        | 95 (43)             |

**Pump Brand** 

S= SANDPIPER®

**Pump Size** 

15=11/2"

Check Valve Type

B=Ball

**Design Level** 

1= Design Level

**Wetted Material** 

A=Aluminum

I = Cast Iron

S=Stainless Steel

Diaphragm Check Valve Materials

1= Santoprene/Santoprene

B=Buna/Buna

C= Viton/ PTFE

E=EPDM/EPDM

G=PTFE -Neoprene/PTFE

N= Neoprene/Neoprene

V=Viton/Viton

**Check Valve Seat** 

A= Aluminum

C=Carbon Steel

S=Stainless Steel

W= UHMW Polyethylene

### **Non-Wetted Material Options**

A=Painted Aluminum

I= Cast Iron

S= Stainless Steel w/Stainless Steel Hardware

J= Painted Aluminum w/PTFE Coated Hardware

Y= Painted Aluminum

w/ Stainless Steel Hardware

Z= Cast Iron with Stainless Steel Hardware

#### **Porting Options**

N=NPT Threads

B=BSPT (Tapered) Threads

### **Pump Style**

S= Standard

#### **Pump Options**

0= None

1= 3M Muffler

2= Mesh Muffler

3= High temperature Air Valve w/Encapsulated Muffler

4= High temperature Air Valve w/3M Muffler

5= High temperature Air Valve w/Mesh Muffler

6= Metal Muffler\*

#### Kit Options

00.=None

P0.=0-30VDC Pulse Output Kit

P1.=Intrinsically-Safe 10-30VDC

Pulse Output Kit

P2.=110/120 or 220/240VAC

Pulse Output Kit

P3.=Intrinsically-Safe 110/120VAC

Pulse Output Kit

P4.=Intrinsically-Safe 220/240VAC

Pulse Output Kit

SP.=Stroke Indicator Pins



Note: ATEX compliant pumps must be ordered with a metal muffler





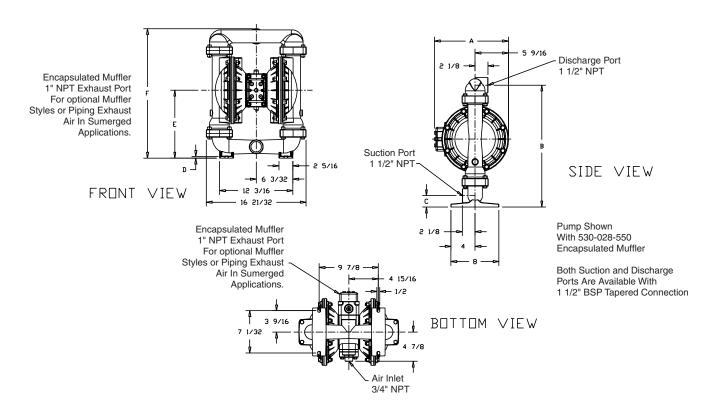
### **A** CAUTION! Operating temperature limitations are as follows:

| Materials  | Operating Temperatures  Maximum Minimum |                |  |  |  |
|--|---|----------------|--|--|--|
| <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<br>88°C                           | -10°F<br>-23°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.   | 280°F<br>138°C                          | -40°F<br>-40°C |  |  |  |
| <b>Neoprene</b> All purpose. Resistant to vegetable oil. 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.  | 200°F<br>93°C                           | -10°F<br>-23°C |  |  |  |
| Santoprene® Injection molded thermoplastic elastomer with no fabric layer. Long mechanical flex life. Excellent abrasion resistance.   | 275°F<br>135°C                          | -40°F<br>-40°C |  |  |  |
| <b>Virgin 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 fluorochemicals such as chlorine trifluoride or oxygen difluoride which readily liberate free fluorine at elevated temperatures. | 220°F<br>104°C                          | -35°F<br>-37°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.  | 350°F<br>177°C                          | -40°F<br>-40°C |  |  |  |
| UHMW PE  | 180°F<br>82°C                           | -35°F<br>-37°C |  |  |  |

For specific applications, always consult The Warren Rupp Chemical Resistance Chart

### **Dimensions: S15 Metallic**

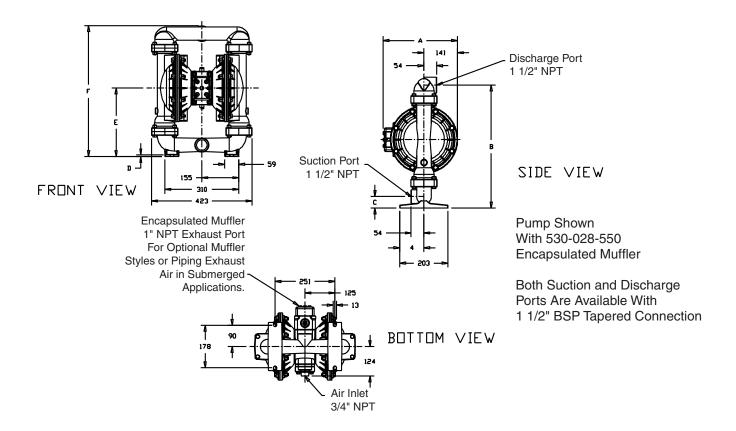
Dimensions in Inches
Dimensional Tolerance:± 1/8"



| Dimension            | Α        | В       | С       | D    | Е       | F        |
|----------------------|----------|---------|---------|------|---------|----------|
| Encapsulated Muffler | 12 11/32 |         |         |      |         |          |
| Pulse Output Kit     | 13 23/32 |         |         |      |         |          |
| Aluminum             |          | 20 5/16 | 1 29/32 | 5/16 | 11 5/16 | 21 19/32 |
| Stainless Steel      |          | 20 3/8  | 1 31/32 | 3/8  | 11 3/8  | 21 21/32 |
| Mesh Muffler         | 14 9/32  |         |         |      |         |          |
| Sound Dampening      | 14 9/32  |         |         |      |         |          |
| Metal Muffler        | 13 3/4   |         |         |      | ·       |          |

### **Dimensions: S15 Metallic**

Dimensions in Millimeters
Dimensional Tolerance:± 3mm



| Dimension            | Α   | В   | С  | D  | Е   | F   |
|----------------------|-----|-----|----|----|-----|-----|
| Encapsulated Muffler | 314 |     |    |    |     |     |
| Pulse Output Kit     | 349 |     |    |    |     |     |
| Aluminum             |     | 516 | 48 | 8  | 287 | 548 |
| Stainless Steel      |     | 518 | 50 | 10 | 289 | 550 |
| Mesh Muffler         | 379 |     |    |    |     |     |
| Sound Dampening      | 379 |     |    |    |     |     |
| Metal Muffler        | 368 |     |    |    |     |     |