

**WARREN  
RUPP®**

Quality System  
ISO9001 Certified

Environmental  
Management System  
ISO14001 Certified

**IPEX**  
IDEX CORPORATION



# SandPIPER®

## FLAP VALVE SSA2-A TYPE 4

### 2 1/2" Air-Powered Double-Diaphragm Sanitary Pump

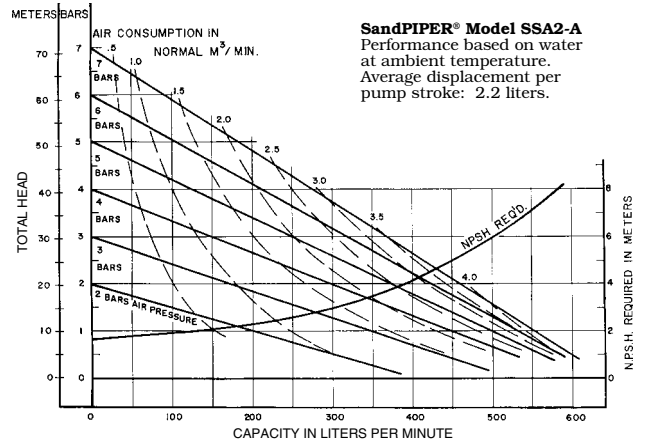
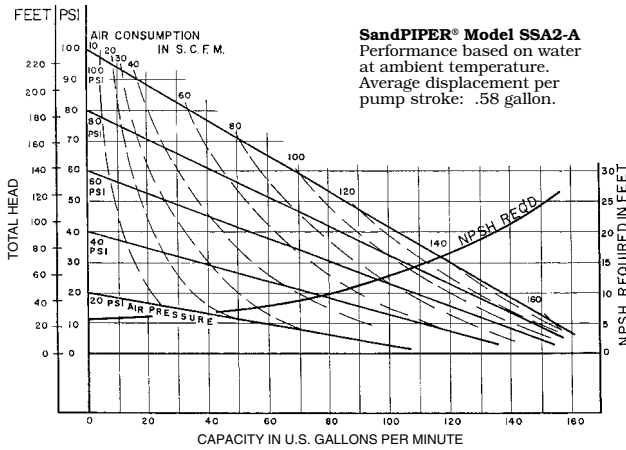
ENGINEERING, PERFORMANCE  
& CONSTRUCTION DATA

|   |  |  |  |  |
|---|--|--|--|--|
| <b>INTAKE/DISCHARGE PIPE SIZE</b><br>2 1/2" (63.5mm) SANITARY<br>PROCESS BEVEL SEAT FITTING | <b>CAPACITY</b><br>0 to 150 gallons per minute<br>(0 to 570 liters per minute) | <b>AIR VALVE</b><br>No-lube, no-stall<br>design. | <b>SOLIDS-HANDLING</b><br>1 1/16" (27.4mm) | <b>HEADS UP TO</b><br>125 psi or 289 ft. of water<br>(8.8 Kg/cm <sup>2</sup> or 88 meters) |
|---|--|--|--|--|

### PERFORMANCE CURVES

(SandPIPER® pumps are designed to be powered only by compressed air)  
Temperature Limit: 212°F - 100°C MAXIMUM

**This pump is USDA-Accepted for meat and poultry.**



### MATERIALS OF CONSTRUCTION

| SSA2-A<br>Type 4 | Manifold Porting |        | Manifold | Outer Chamber | Inner Chamber | Inner Diaphragm Plate | Intermediate Housing | Diaphragm Rod | Flap Valve Seat | Hardware  | Diaphragm | Flap Valve Material | Air Valve | Sealing Rings | Shipping Weight (lbs) |
|------------------|------------------|--------|----------|---------------|---------------|-----------------------|----------------------|---------------|-----------------|-----------|-----------|---------------------|-----------|---------------|-----------------------|
|                  | Top              | Bottom |          |               |               |                       |                      |               |                 |           |           |                     |           |               |                       |
| TF-4-SS          | X                |        | WR-S     | WR-S          | AL356-T6      | AL356-T6              | AL356-T6             | 416SS         | K               | 302/304SS | FDA-N     | R                   | AL356-T6  | FDA-N         | 158                   |
| TF-4-SP5         | X                |        | WR-Sa    | WR-Sa         | AL356-T6      | AL356-T6              | AL356-T6             | 416SS         | K               | 302/304SS | FDA-N     | Ra                  | AL356-T6  | FDA-N         | 158                   |
| DF-4-SS          |                  | X      | WR-S     | WR-S          | AL356-T6      | AL356-T6              | AL356-T6             | 416SS         | K               | 302/304SS | FDA-N     | R                   | AL356-T6  | FDA-N         | 158                   |
| DF-4-SP5         |                  | X      | WR-Sa    | WR-Sa         | AL356-T6      | AL356-T6              | AL356-T6             | 416SS         | K               | 302/304SS | FDA-N     | Ra                  | AL356-T6  | FDA-N         | 158                   |
| TY-4-SS          | X                |        | WR-S     | WR-S          | AL356-T6      | AL356-T6              | AL356-T6             | 416SS         | K               | 302/304SS | FDA-I     | V                   | AL356-T6  | FDA-I         | 158                   |
| DY-4-SS          |                  | X      | WR-S     | WR-S          | AL356-T6      | AL356-T6              | AL356-T6             | 416SS         | K               | 302/304SS | FDA-I     | V                   | AL356-T6  | FDA-I         | 158                   |

SEE BACK FOR TEMPERATURE LIMITATIONS.

#### Meanings of Abbreviations:

= Electropolished  
à = Electropolished to a #5 Finish  
◊ = Electroless Nickel Plated

AL = Aluminum  
SS = Stainless Steel  
FDA-N = Food Grade Nitrile

K = PVDF  
R = Removable, Constructed of  
WR-S and Nitrile

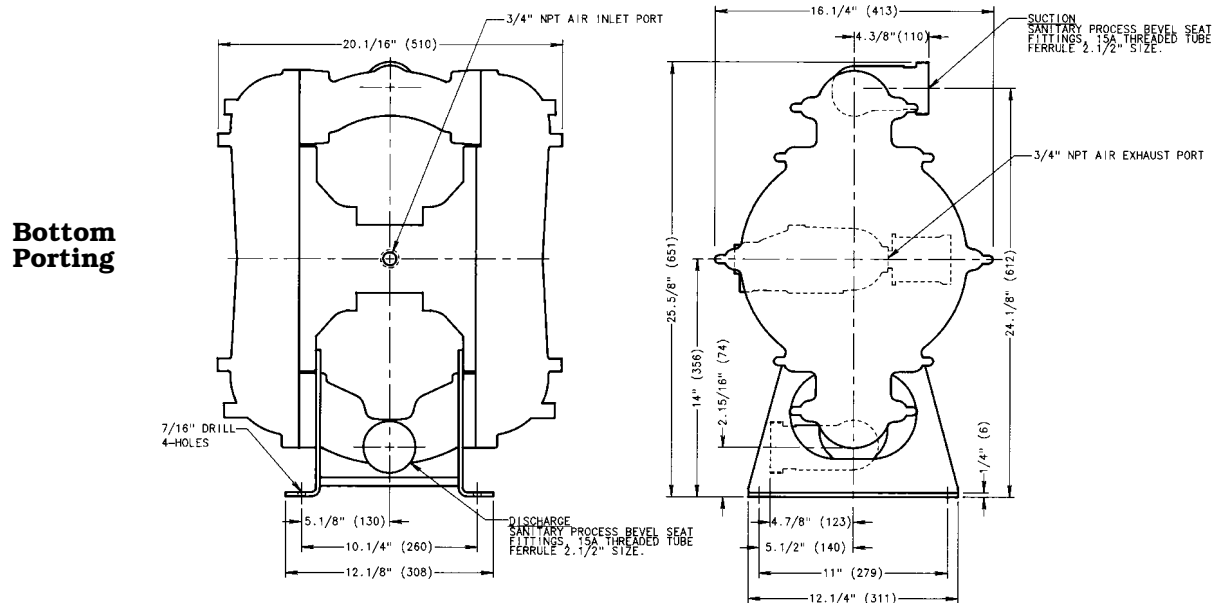
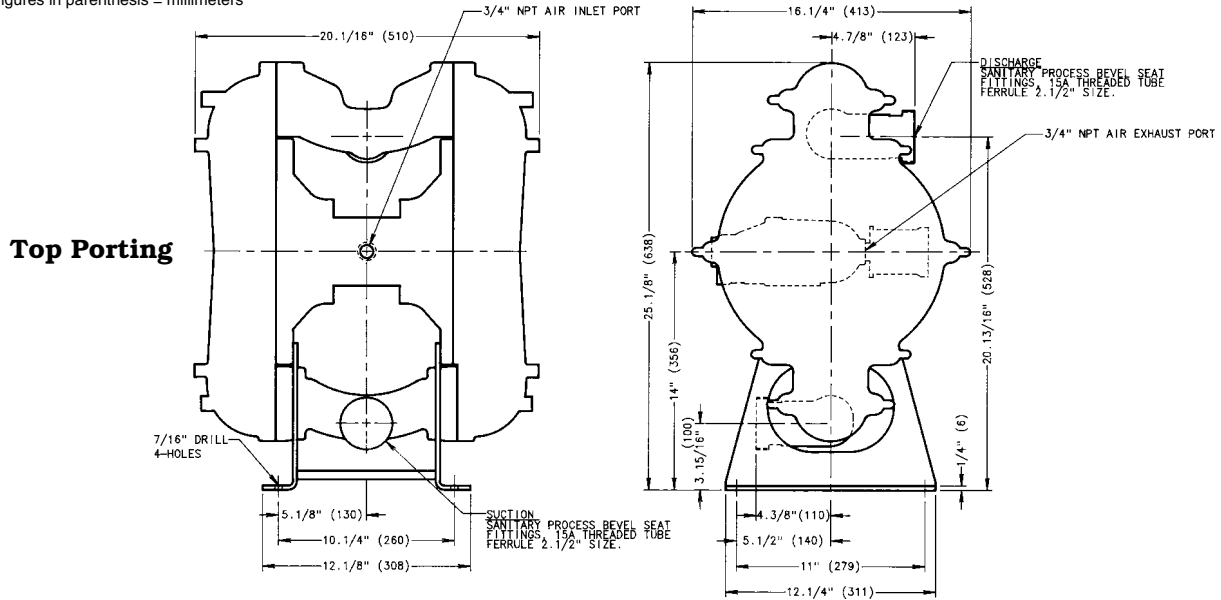
FDA-I = Food Grade EPDM  
V = Removable, constructed of 316SS & EPDM  
WR-S = Warren Rupp Alloy Type 316SS

# SSA2-A FLAP VALVE SANITARY

# SandPIPER®

| MATERIALS   | Operating Temperatures |                |                                |
|---|------------------------|----------------|--------------------------------|
|   | Maximum                | Minimum        | Optimum                        |
| <b>NITRILE</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 | 50°F to 140°F<br>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<br>100°C         | -10°F<br>-23°C | 50°F to 212°F<br>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 the Warren Rupp Chemical Resistance Chart.  |                        |                |                                |

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



**2 1/2" MALE (63.5mm) SANITARY PROCESS BEVEL SEAT FITTING - SUCTION AND DISCHARGE**  
**3/4" NPT (F) AIR INLET PORT • 3/4" NPT (F) AIR EXHAUST PORT (NOT SHOWN)**

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Specifications are subject to improvement without notice.

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