

**WARREN  
RUPP®**

Quality System  
ISO9001 Certified

Environmental  
Management System  
ISO14001 Certified

**IDEX**  
IDEX CORPORATION



**SANDPIPER®**  
A WARREN RUPP PUMP BRAND

**PHOENIX®**

**SH2-M TYPE 7  
(2:1 RATIO)**

**Air-Powered  
Diaphragm Pump**

ENGINEERING, PERFORMANCE  
& CONSTRUCTION DATA

### SandPIPER Model SH2-M (2:1 Ratio)

Air-powered diaphragm pump delivers discharge pressure, up to 250 psi maximum, equal to twice the inlet air pressure (2:1 ratio). Designed for filter press feed or similar applications where higher discharge pressures are required.

|   |   |   |   |                                    |  |
|---|---|---|---|------------------------------------|--|
| <b>INTAKE/DISCHARGE PIPE SIZE</b><br>2" (50mm) NPT(F) | <b>CAPACITY</b><br>0 to 62 gallons per minute<br>(0 to 235 liters per minute) | <b>AIR VALVE</b><br>No-lube, no-stall<br>design | <b>SOLIDS-HANDLING</b><br>Up to 2" (50mm) | <b>DISCHARGE PORTING</b><br>Bottom | <b>HEADS UP TO</b><br>250 psi or<br>577 ft. of water |
|---|---|---|---|------------------------------------|--|

#### MATERIALS OF CONSTRUCTION

| SH2-M<br>Type 7 | Suction/<br>Discharge<br>Flanges | Outer<br>Chamber | Inner<br>Chamber | Cylinder<br>Body | Piston | Intermediate<br>Housing | Diaphragm<br>Rod | Valve<br>Seat | Hardware | Diaphragm | Flap<br>Valve | Hinge<br>Pad | Cylinder<br>Cap | Shipping<br>Weight<br>(lbs) |
|-----------------|----------------------------------|------------------|------------------|------------------|--------|-------------------------|------------------|---------------|----------|-----------|---------------|--------------|-----------------|-----------------------------|
| DN-7-A          | 356-T6AL                         | 356-T6AL         | CI               | PS               | AL/BR  | 356-T6AL                | 416SS            | 316SS         | PS       | N         | N             | N            | CI              | 138                         |
| DB-7-A          | 356-T6AL                         | 356-T6AL         | CI               | PS               | AL/BR  | 356-T6AL                | 416SS            | 316SS         | PS       | B         | B             | B            | CI              | 138                         |
| DI-7-A          | 356-T6AL                         | 356-T6AL         | CI               | PS               | AL/BR  | 356-T6AL                | 416SS            | 316SS         | PS       | I         | I             | I            | CI              | 138                         |
| DV-7-A          | 356-T6AL                         | 356-T6AL         | CI               | PS               | AL/BR  | 356-T6AL                | 416SS            | 316SS         | PS       | V         | V             | V            | CI              | 138                         |
| DN-7-I          | CI                               | CI               | CI               | PS               | AL/BR  | 356-T6AL                | 416SS            | 316SS         | PS       | N         | N             | N            | CI              | 160                         |
| DB-7-I          | CI                               | CI               | CI               | PS               | AL/BR  | 356-T6AL                | 416SS            | 316SS         | PS       | B         | B             | B            | CI              | 150                         |
| DI-7-I          | CI                               | CI               | CI               | PS               | AL/BR  | 356-T6AL                | 416SS            | 316SS         | PS       | I         | I             | I            | CI              | 150                         |
| DV-7-I          | CI                               | CI               | CI               | PS               | AL/BR  | 356-T6AL                | 416SS            | 316SS         | PS       | V         | V             | V            | CI              | 150                         |

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

**Meanings of  
Abbreviations:**

AL = Aluminum  
PS = Plated Steel

BR = Brass  
B = Buna-N  
SS = Stainless Steel

CI = Cast Iron  
I = EPDM

N = Neoprene  
V = Viton®

Viton® is a registered tradename of E.I. du Pont.

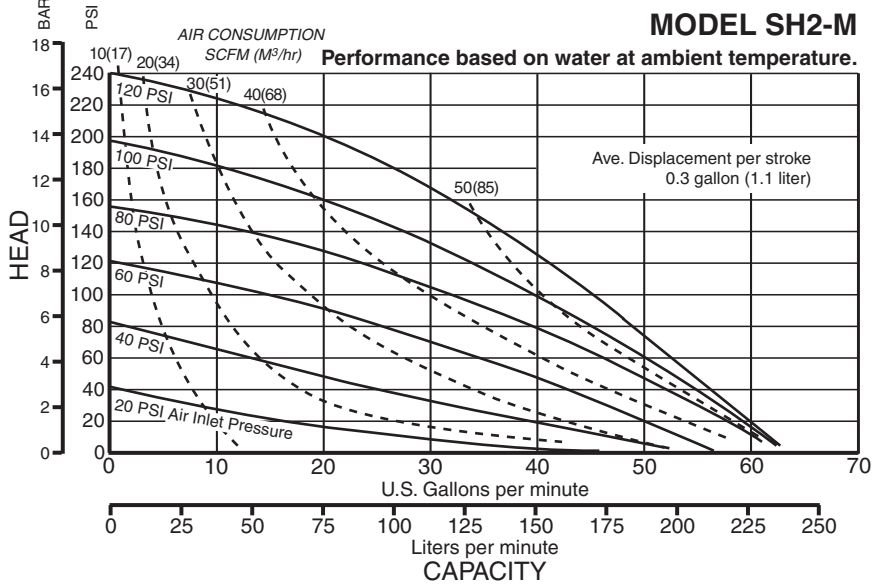
**Available  
Parts Kits:**

**Air End Kit:**  
No. 476-100-000

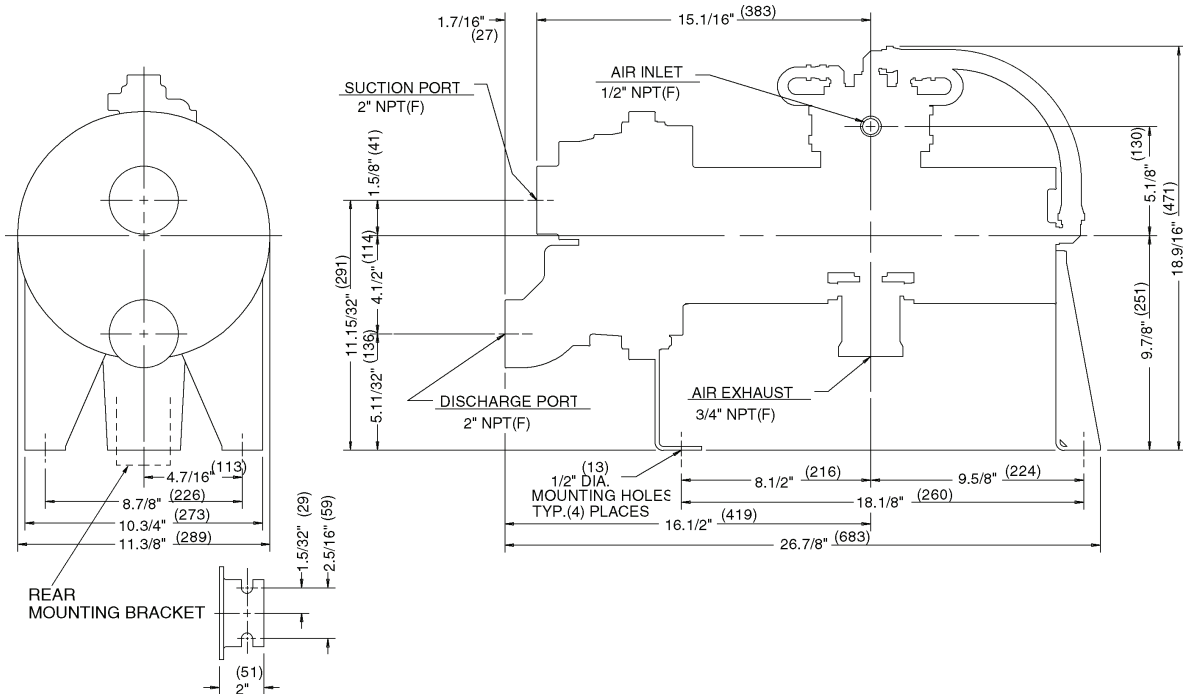
**Wetted End Kits:**  
Nos. 476-055-365 476-055-364  
476-055-360 476-055-363

## PERFORMANCE CURVE

(SANDPIPER<sup>®</sup> pumps are designed to be powered **only** by compressed air)



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



**2" NPT(F) SUCTION & DISCHARGE • 1/2" NPT(F) AIR INLET PORT • 3/4" NPT(F) AIR EXHAUST PORT**