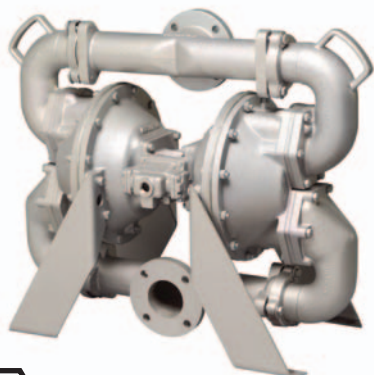


**WARREN  
RUPP®**

Quality System  
ISO9001 Certified

Environmental  
Management System  
ISO14001 Certified

**IDEX**  
IDEX CORPORATION



Ex II 2GD b T5

CE

**SANDPIPER®**

A WARREN RUPP PUMP BRAND

## Heavy Duty Flap Valve HDF3-A Type 7 HDF4-A Type 7

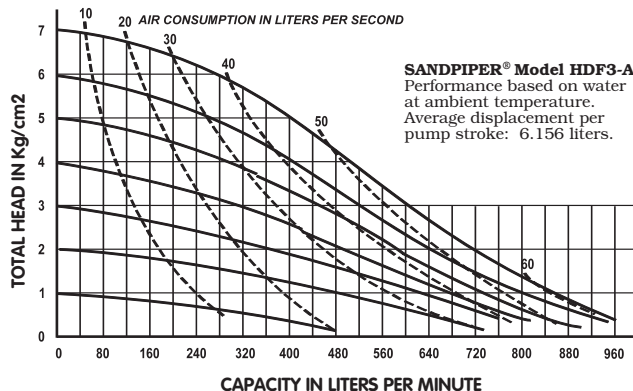
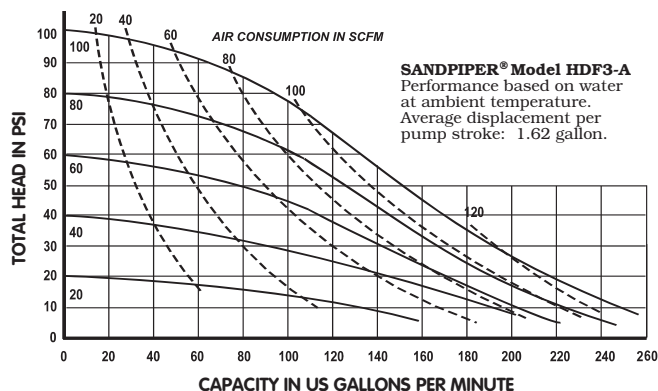
### Air-Powered Double-Diaphragm Pump

ENGINEERING, PERFORMANCE  
& CONSTRUCTION DATA

INTAKE/DISCHARGE PIPE SIZE	CAPACITY	AIR VALVE	SOLIDS-HANDLING	HEADS UP TO
3" (75mm) 125# ASA FLANGE	0 to 260 gallons per minute (0 to 988 liters per minute)	No-lube, no-stall design.	Up to nearly 3" (75mm)	125 psi or 289 ft. of water (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



### MATERIALS OF CONSTRUCTION

HDF3-A Type 7	Manifold Porting  Bottom	Manifold Elbow	Outer Chamber	Inner Chamber	Outer Diaphragm Plate	Inner Diaphragm Plate	Intermediate Housing	Diaphragm Rod	Valve Seat	Hard- ware	Diaphragm	Flap Valve Material	Seat Gasket	Manifold Gasket Sealing Rings	Shipping Wt.(lbs)
DA-7	X	356-T6AL	356-T6AL	356-T6AL	Alm35AL	Alm35AL	356-T6AL	416SS	SS	PS	N	R	A	B	245
DN-7	X	356-T6AL	356-T6AL	356-T6AL	Alm35AL	Alm35AL	356-T6AL	416SS	SS	PS	N	N	A	B	245
DB-7	X	356-T6AL	356-T6AL	356-T6AL	Alm35AL	Alm35AL	356-T6AL	416SS	SS	PS	B	B	A	B	245
DK-7	X	356-T6AL	356-T6AL	356-T6AL	Alm35AL	Alm35AL	356-T6AL	416SS	SS	PS	N	H	A	B	245
DS-7	X	356-T6AL	356-T6AL	356-T6AL	Alm35AL	Alm35AL	356-T6AL	416SS	SS	PS	S	S	A	B	245

#### Meanings of Abbreviations:

A = Compressed Fibre  
AL = Aluminum  
Alm = Almag 35 Aluminum  
B = Buna-N

CI = Cast Iron  
H = Hytrel®  
N = Neoprene

PS = Plated Steel  
R = Rupplon®  
SS = Stainless Steel  
S = Santoprene

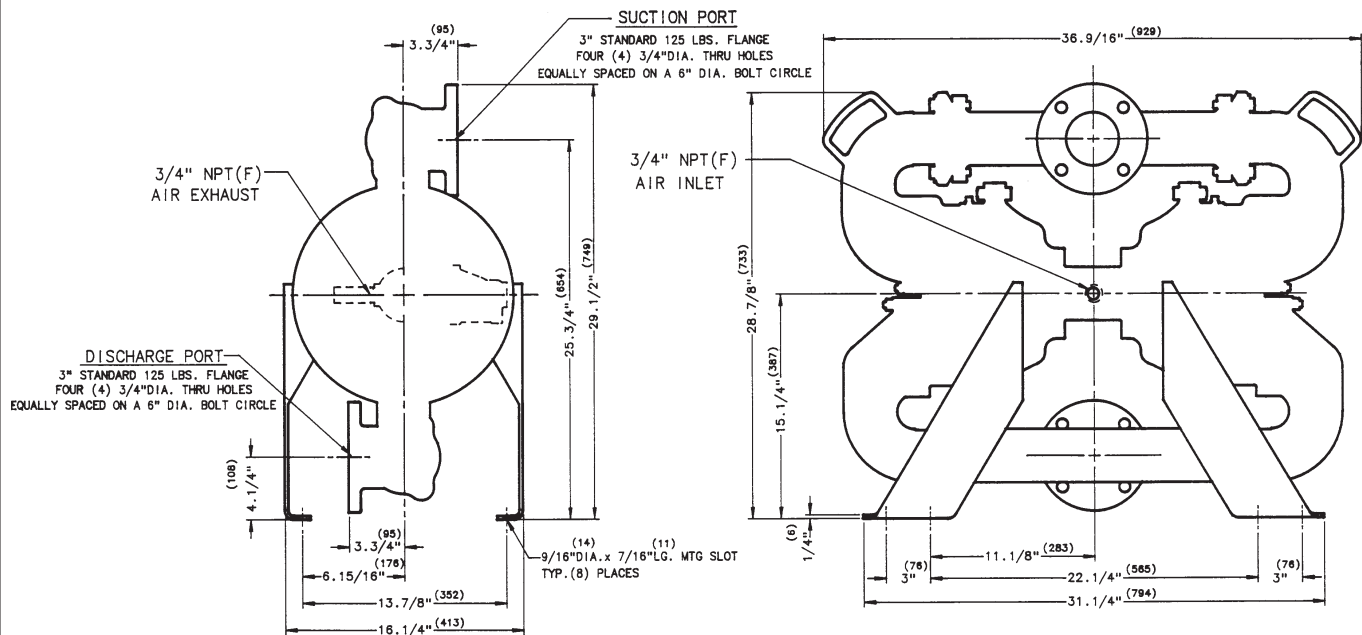
Hytrel® is a registered tradename of E.I. du Pont. ©Warren Rupp, SANDPIPER and Rupplon are registered tradenames of Warren Rupp, Inc.

# HDF3-A HDF4-A



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 88°C	-10°F -23°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
<b>HYTREL®</b> Good on acids, bases, amines and glycols at room temperature only.	190°F 88°C	-10°F -23°C
<b>RUPPLON®</b> (Urethane) Shows good resistance to abrasives. Has poor resistance to most solvents and oils.	150°F 88°C	32° F 0°C
<b>Santoprene®</b> Injection molded thermoplastic elastomer with no fabric layer. Long mechanical flex life. Excellent abrasion resistnace.		
For specific applications, always consult the Warren Rupp Chemical Resistance Chart.		*Definite reduction in service life. **Minimal reduction in service life at ends of range.

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



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