

# NDP-15 Specifications

## Port Dimensions

(13.5 GPM Max.)

### Intake & discharge connection:

Polypropylene (PPG) ■	1/2" Female NPT
Kynar® (PVDF) ◆	1/2" Female NPT
Groundable Acetal ◆	1/2" Female NPT
Aluminum (ADC-12) ▲	1/2" Female NPT
Stainless Steel (316) ▲	1/2" Female NPT
Air inlet (includes ball valve):	1/4" Female NPT
Air exhaust (internal silencer):	3/8" Female NPT

- Polypropylene pumps may be fitted with ball or flat check valves. Ball-type check valves are recommended for flooded suction applications. Flat-type check valves are recommended for suction lift applications.
- ◆ Kynar® and Groundable Acetal pumps are fitted with flat check valves only.
- ▲ Aluminum and Stainless Steel pumps are fitted with ball check valves only.

## Maximum Liquid Temperature\*

Diaphragm Material	Temperature
Buna N	180°F (82°C)
Neoprene	180°F (82°C)
Santoprene® (TPO)	180°F (82°C)
PTFE	212°F (100°C)
Hytrell® (TPEE)	248°F (120°C)
Viton® fluoroelastomer	248°F (120°C)

\*The maximum liquid temperature for metal and Kynar® fitted pumps is determined by the elastomer (diaphragm material). Polypropylene and Groundable Acetal pumps have a maximum liquid temperature of 180°F (82°C) regardless of diaphragm material.

## Air Supply Pressure (All Models)

20–100 PSI (1.4–7 kfg/cm)

## Discharge Volume Per Cycle

0.0338 gallons (128 cc)

## Maximum Cycles Per Minute

All diaphragms: 400

## Maximum Size Solid: 1/32" (1 mm)

## Maximum Dry Suction Lift

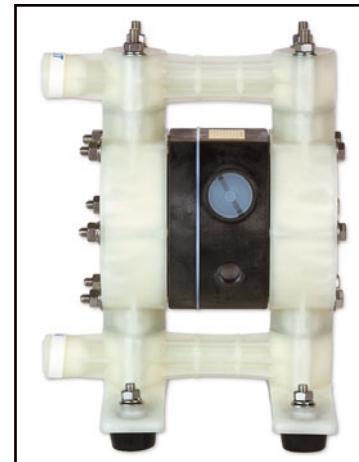
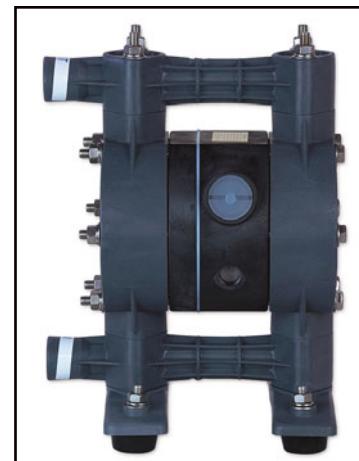
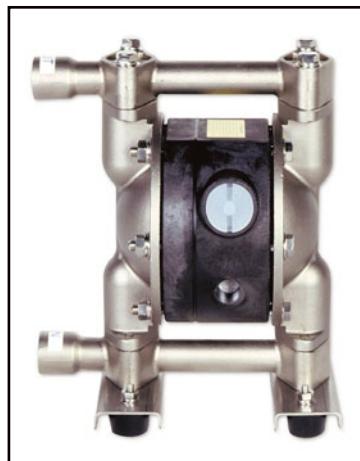
Flat-type check valve: 8-feet

Ball-type check valve: 5-feet

## Pump Air Motor:

Ryton® air motor standard

Notes: Hytrell® fitted pumps include Buna N wetted o-rings. Santoprene® fitted pumps include EPDM wetted o-rings.



## Aluminum

**Dimensions:** 8.66" Lx5.71" Wx10.67" H

**Net Wt.:** 9.04 lbs.

**Shipping Wt.:** 11.04 lbs.

## Stainless Steel

**Dimensions:** 8.31" Lx5.71" Wx9.72" H

**Net Wt.:** 13.9 lbs.

**Shipping Wt.:** 15.9 lbs.

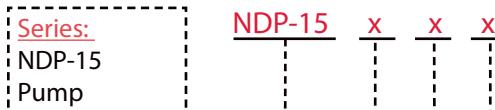
## Kynar® (PVDF)

**Dimensions:** 8.66" Lx7.09" Wx11.69" H

**Net Wt.:** 9.46 lbs.

**Shipping Wt.:** 11.46 lbs.

## Model Number Nomenclature



\* Flat valves are available for plastic pumps only.

### Valve Type:

B = Ball

F = Flat\*

### Body Material:

P = Polypropylene

V = Kynar® (PVDF)

D = Groundable Acetal

A = Aluminum

S = Stainless Steel

### Diaphragm Material:

C = Neoprene (CR)

N = Buna N (NBR)

S = Santoprene® (TPO)

T = PTFE

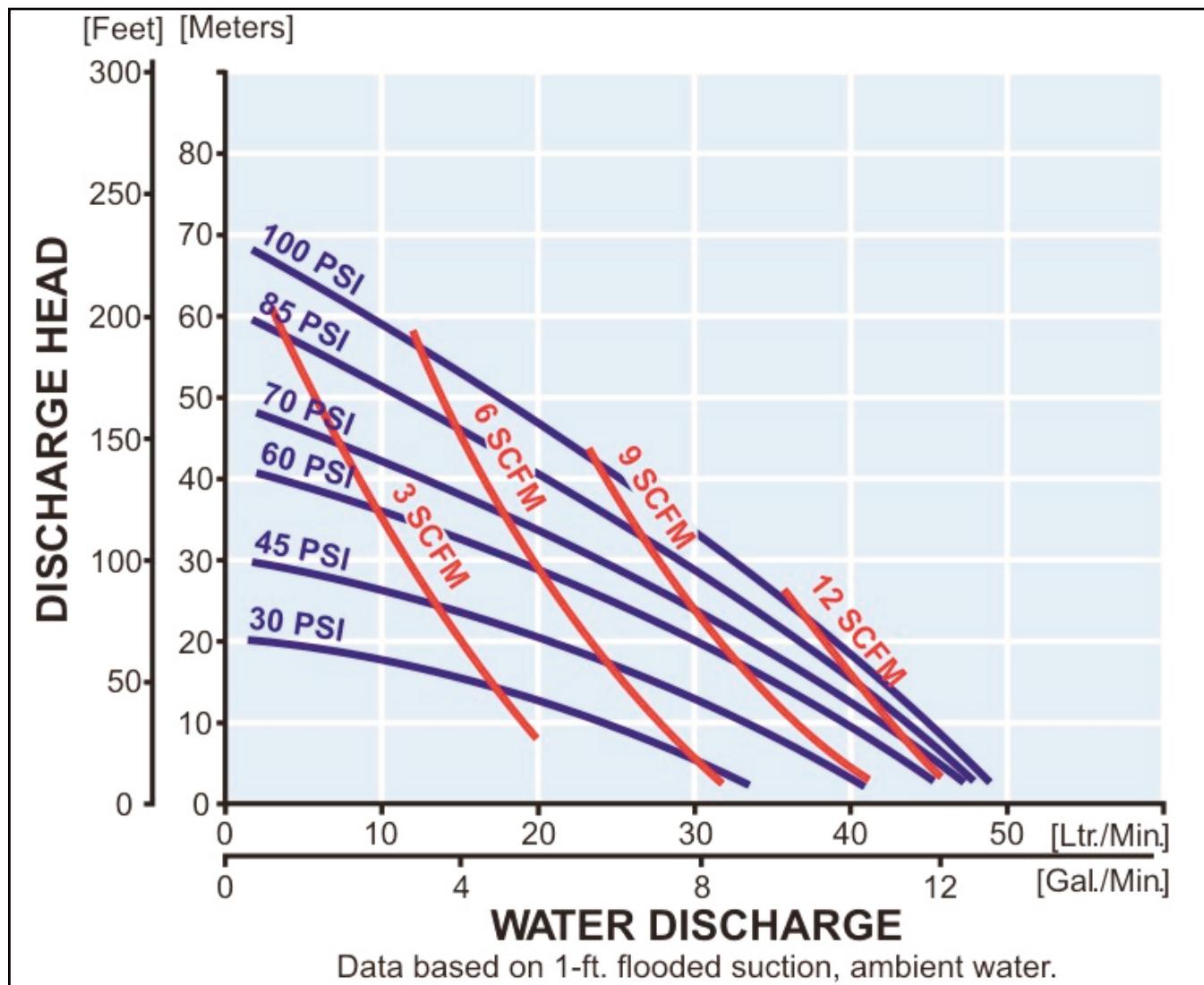
V = Viton® (FPM)

H = Hytrell® (TPE)

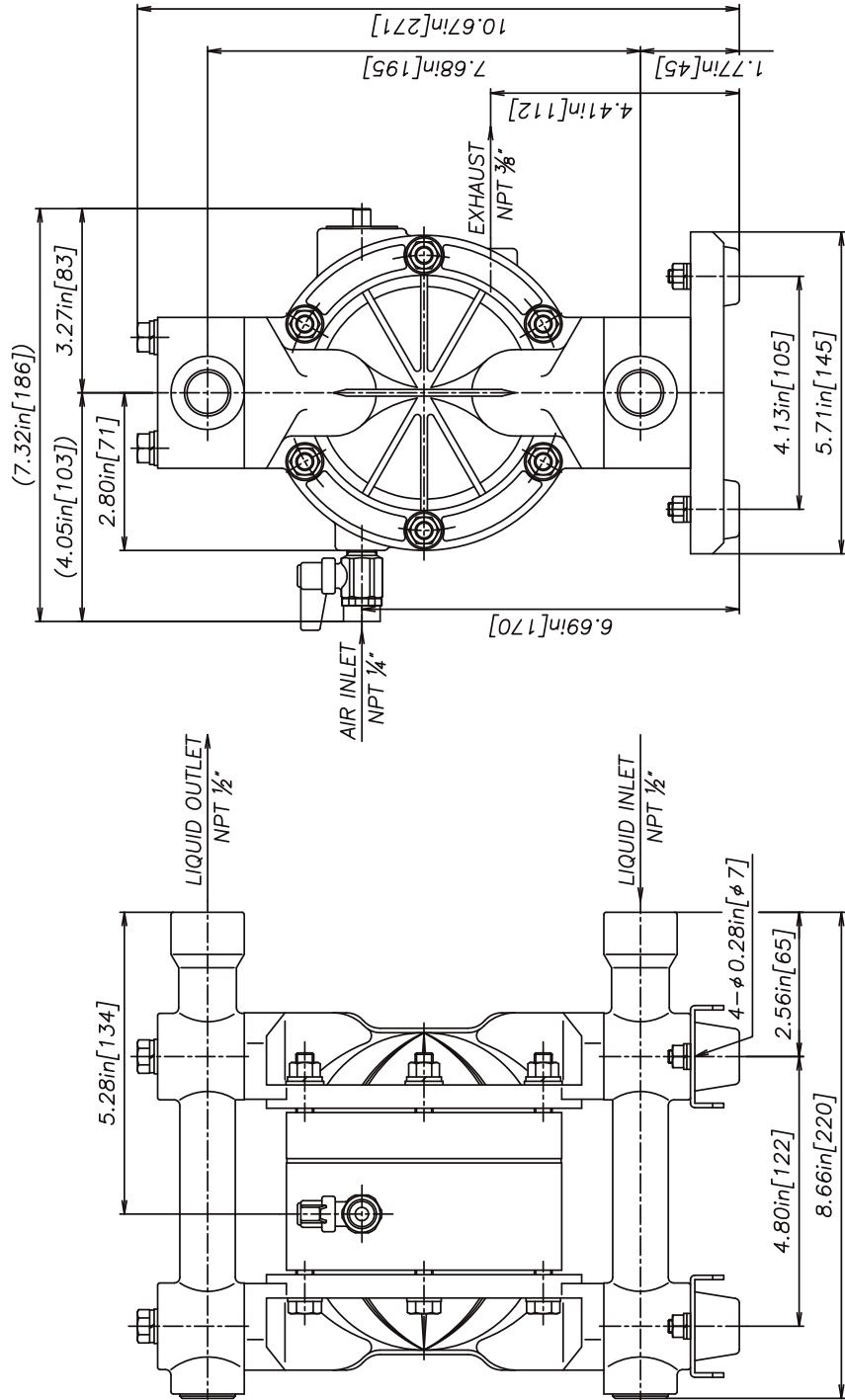


# NDP-15 Performance Curve – All Valves

## All Diaphragm Materials



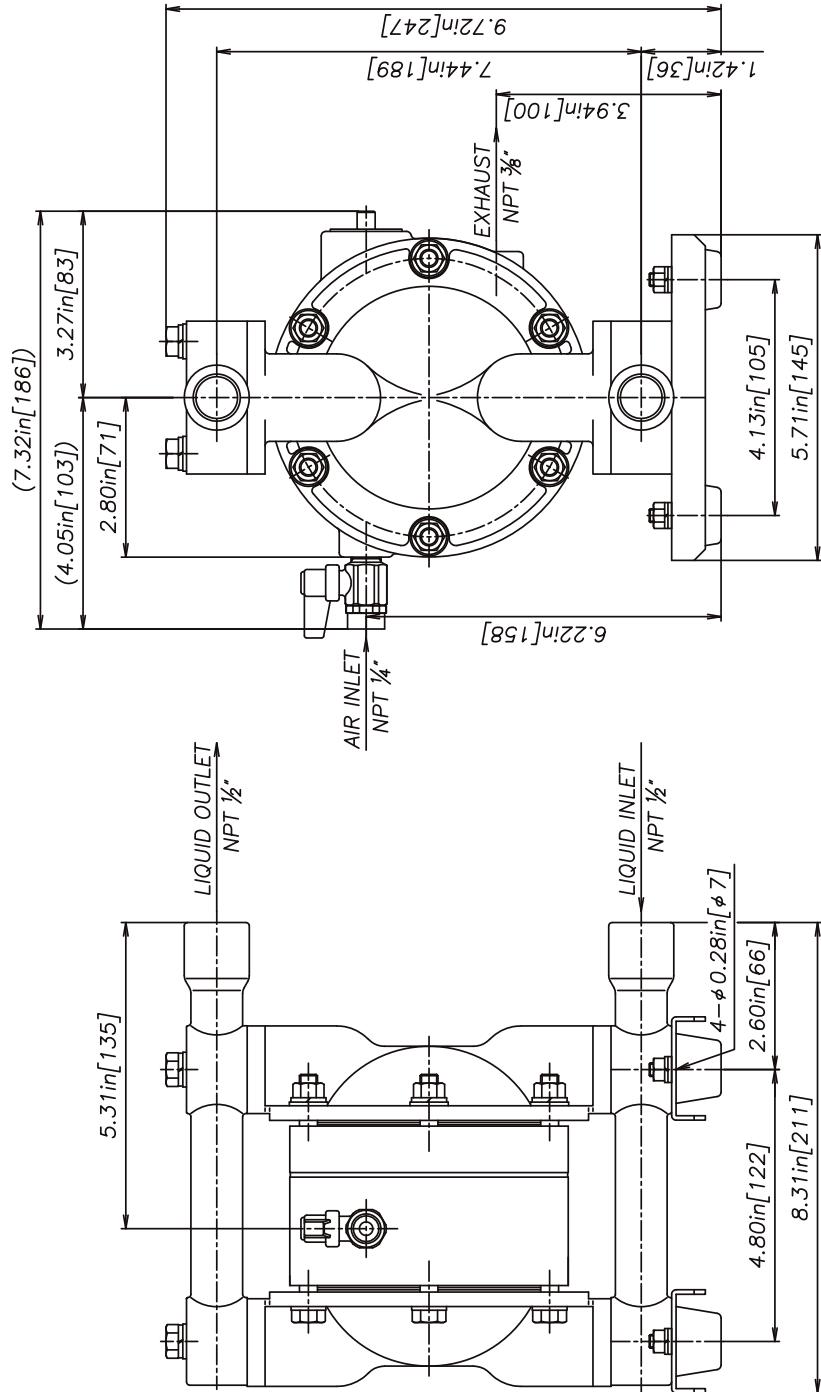
To calculate performance for Santoprene® and Hytrel®-fitted pumps, use Rubber Diaphragm Curve.



REV	DATE	DESCRIPTION	APPR'D

THE DWG. OF: **DIAPHRAGM PUMP ASSEMBLY**

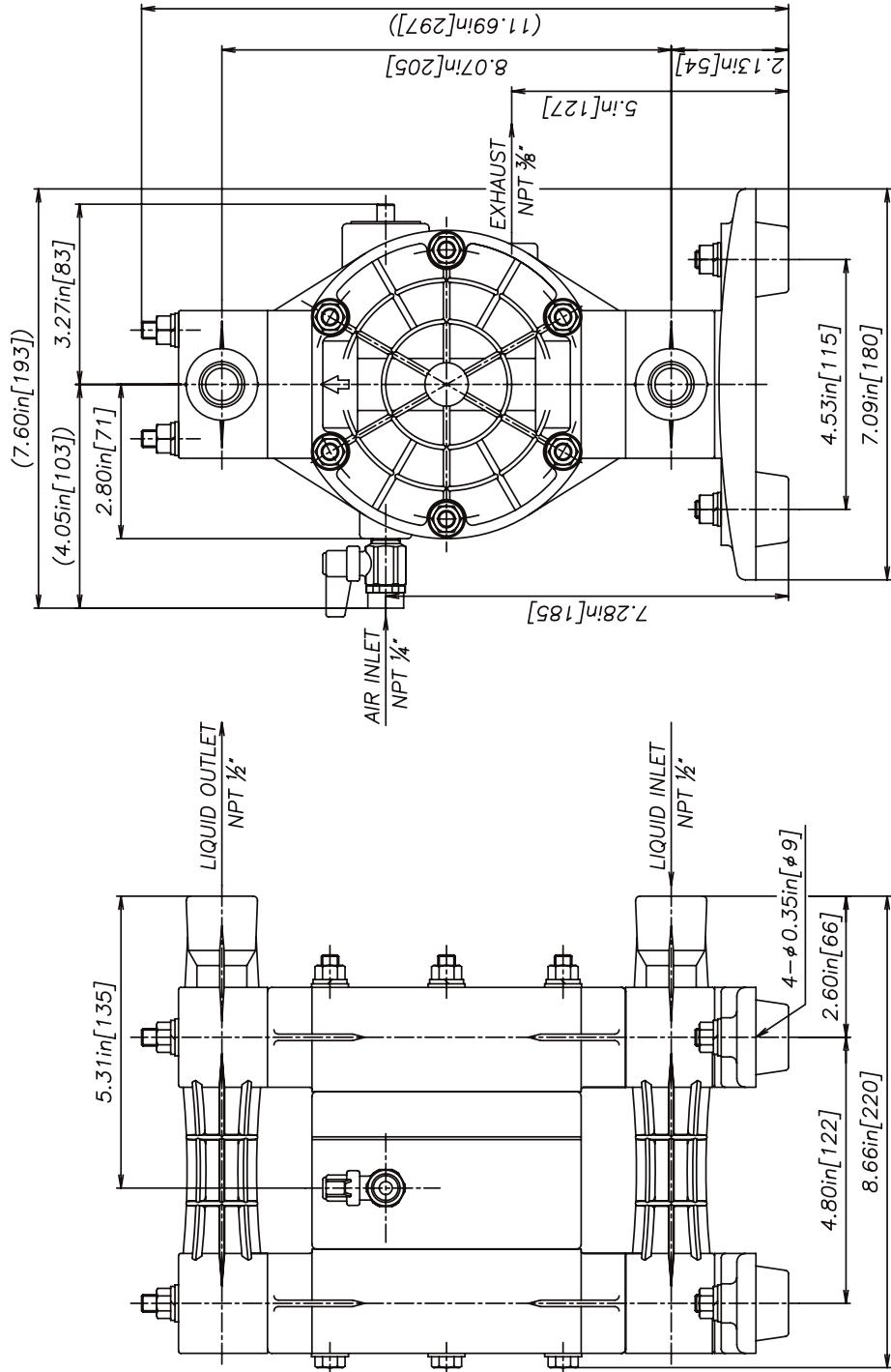
YAMADA AMERICA, INC.	SCALE <u>1 : 1</u>	DRAWN BY <u>YJL</u>
1200 NUCLEAR DRIVE – WEST CHICAGO, ILLINOIS 60185	DATE <u>02/08/06</u>	APPROVED BY <u>S.K.</u>
TO TOLL FREE: 800-990-7867 OR 630-231-4083		
THIS IS A CAD DRAWING AND MUST NOT BE ALTERED MANUALLY.	THIRD ANG.PROJ.	DRAWING NUMBER: <u>NDP-15BA</u>
	REV	<span style="color: pink;">O</span>



REV	DATE	DESCRIPTION	APPR'D

THE DWG. OF: **DIAPHRAGM PUMP ASSEMBLY**

YAMADA AMERICA, INC.	SCALE <u>1 : 1</u>	DRAWN BY <u>YJL</u>
1200 NUCLEAR DRIVE – WEST CHICAGO, ILLINOIS 60185	DATE <u>02/08/06</u>	APPROVED BY <u>S.K.</u>
TOLL FREE 800-990-7867 OR 630-231-4083		
THIS IS A CAD DRAWING AND MUST NOT BE ALTERED MANUALLY.		
NDP-15BS	DRAWING NUMBER: <u>NDP-15BS</u>	REV <u>O</u>



REV	DATE	DESCRIPTION	APPR'D

THE DWG. OF: **DIAPHRAGM PUMP ASSEMBLY**

YAMADA AMERICA, INC.	SCALE <u>1 : 1</u>	DRAWN BY <u>YJL</u>
1200 NUCLEAR DRIVE - WEST CHICAGO, ILLINOIS 60185	DATE <u>02/08/06</u>	APPROVED BY <u>S.K.</u>
TO TOLL FREE 800-990-7867 OR 630-231-4083		
THIS IS A CAD DRAWING AND MUST NOT BE ALTERED MANUALLY.		
NDP-15F/B PLASTIC	DRAWING NUMBER: <u>NDP-15F/B</u>	REV <u>O</u>
THIRD ANG.PROJ.		

AutoCAD® is a registered trademark of Autodesk, Inc.

Hytrel® is a registered trademark of E.I. du Pont de Nemours and Company.

Kynar® is a registered trademark of Arkema.

Nordel™ is a trademark of DuPont Dow Elastomers.

Ryton® is a registered trademark of Chevron Phillips Chemical Company.

Santoprene® is a registered trademark of Advanced Elastomer Systems.

Swagelok® & VCR® are trademarks of the Swagelok Companies.

Viton® is a registered trademark of DuPont Performance Elastomers.

Due to Yamada's continued commitment to product improvement, specifications may change without notice.