

# 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)
Hytrel® (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)

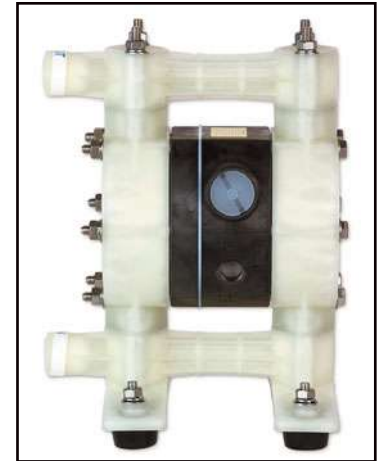
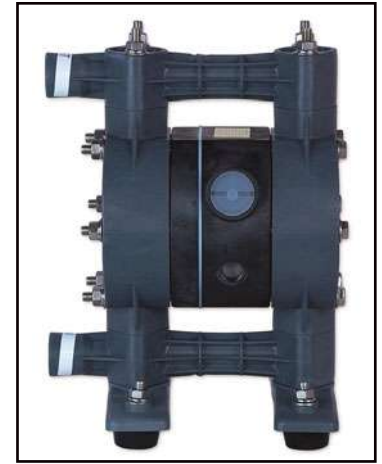
## Maximum Dry Suction Lift

Flat-type check valve: 8-feet

Ball-type check valve: 5-feet

## Pump Air Motor: Ryton® air motor standard

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



### Aluminum

Dimensions: 8.66" W × 10.71" H

Net Wt.: 9 lbs. (4 kg)

Shipping Wt.: 11 lbs.

### Stainless Steel

Dimensions: 8.31" W × 9.7" H

Net Wt.: 13.6 lbs. (6.16 kg)

Shipping Wt.: 15.5 lbs.

### Kynar® (PVDF)

Dimensions: 8.66" W × 11.73" H

Net Wt.: 9.4 lbs. (4.2 kg)

Shipping Wt.: 11 lbs.

### Groundable Acetal

Dimensions: 8.66" W × 11.73" H

Net Wt.: 9 lbs. (4 kg)

Shipping Wt.: 11 lbs.

### Polypropylene

Dimensions: 8.66" W × 11.73" H

Net Wt.: 7.7 lbs. (3.5 kg)

Shipping Wt.: 9.5 lbs.

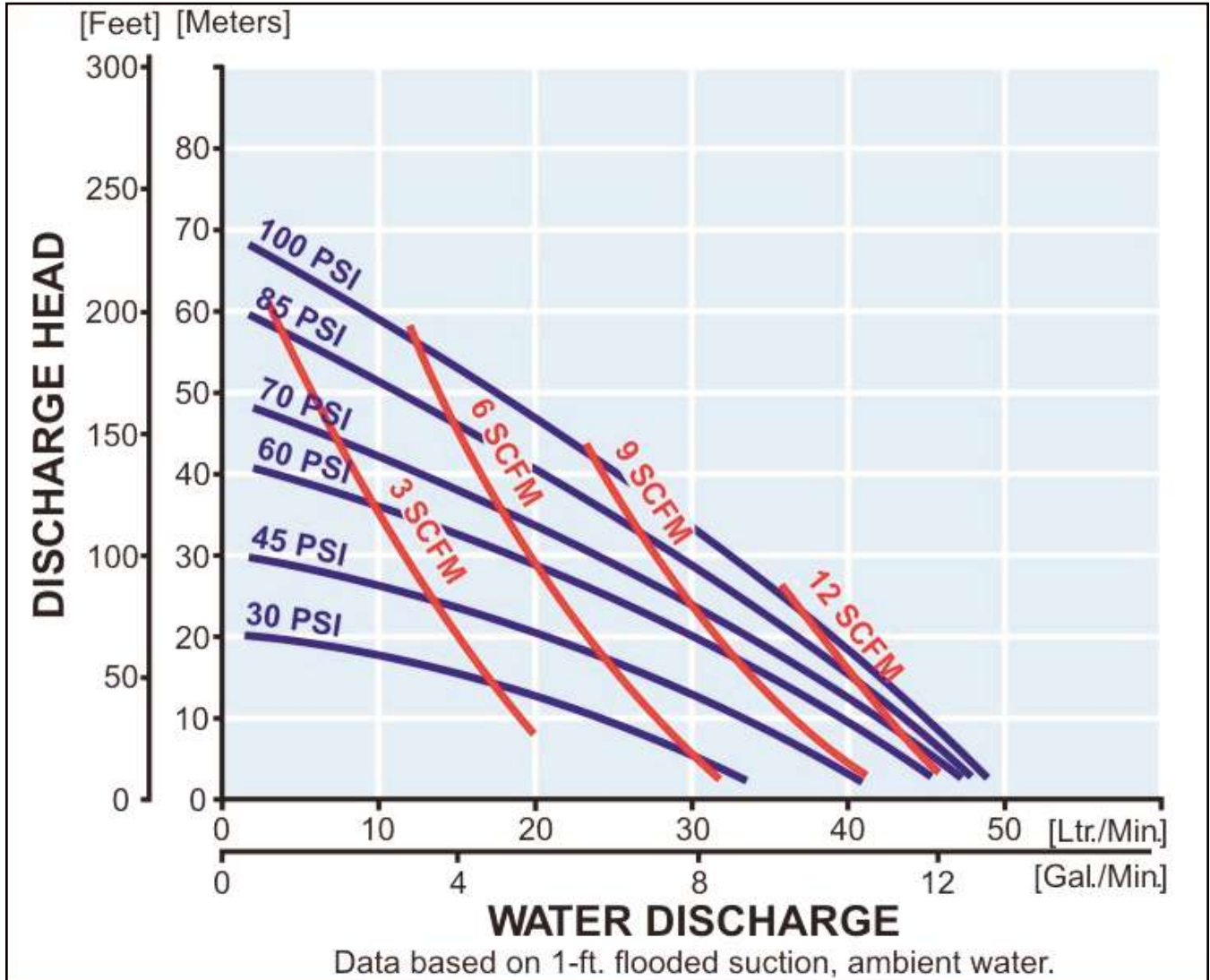
## Model Number Nomenclature

Series:	NDP-15	x	x	x
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 = Hytrel® (TPE)			

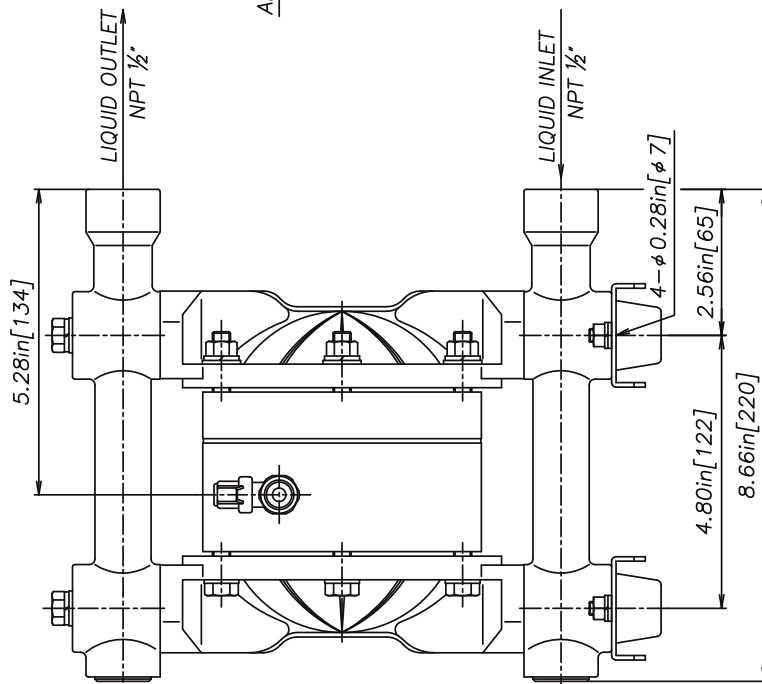
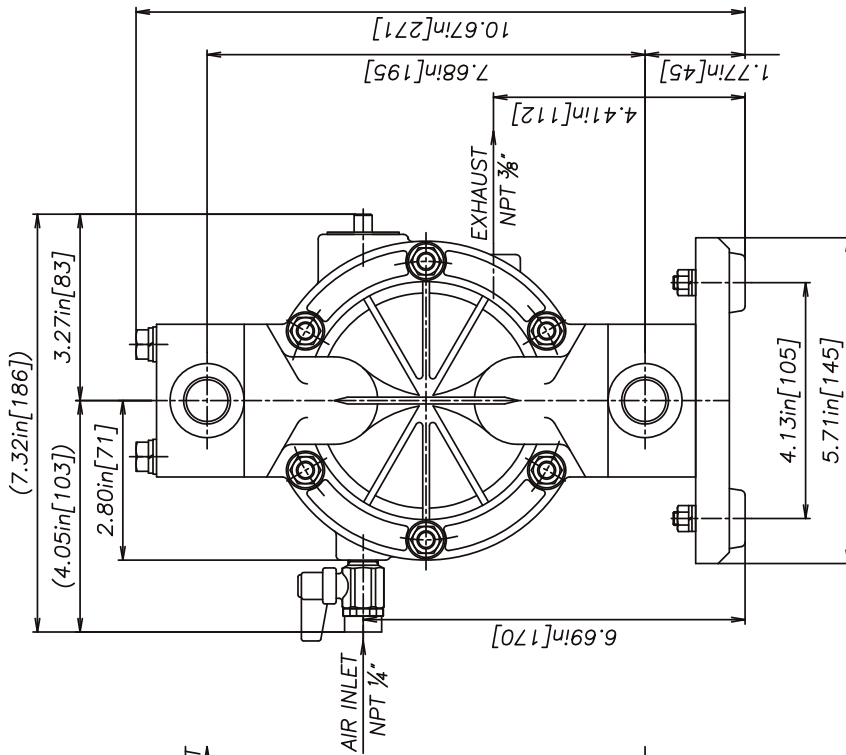
\* Flat valves are available for plastic pumps only.

# NDP-15 Performance Curve – All Valves

## All Diaphragm Materials

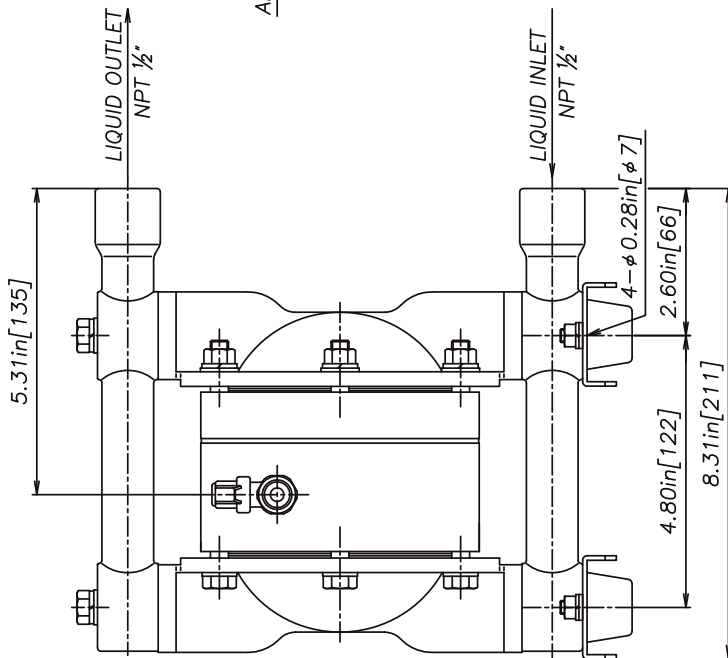
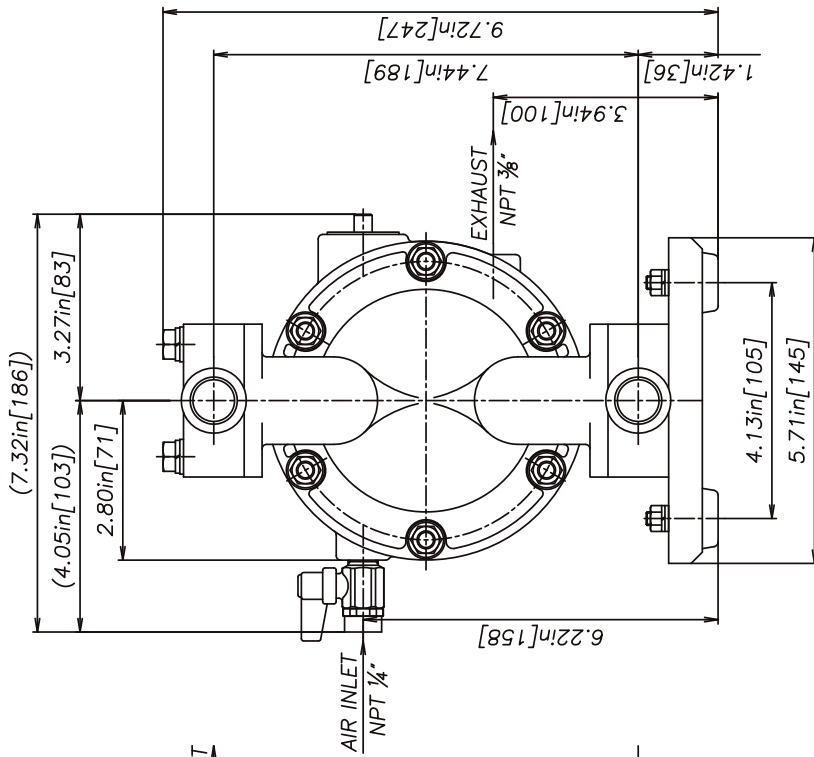


To calculate performance for Santoprene® and Hytrel®-fitted pumps, use Rubber Diaphragm Curve.



REV	DATE	DESCRIPTION	APPR'D
THE DWG. OF:			
<b>DIAPHRAGM PUMP ASSEMBLY</b>			
SCALE 1 : 1		DRAWN BY YJI	
DATE 02/08/06		APPROVED BY S.K.	
THIRD ANG. PROJ.	DRAWING NUMBER: NDP-15BA		REV 0

**YAMADA AMERICA, INC.**  
 1200 NUCLEAR DRIVE - WEST CHICAGO, ILLINOIS 60185  
 TOLL FREE 800-990-7867 OR 630-231-4083  
 THIS IS A CAD DRAWING AND MUST NOT BE ALTERED MANUALLY.

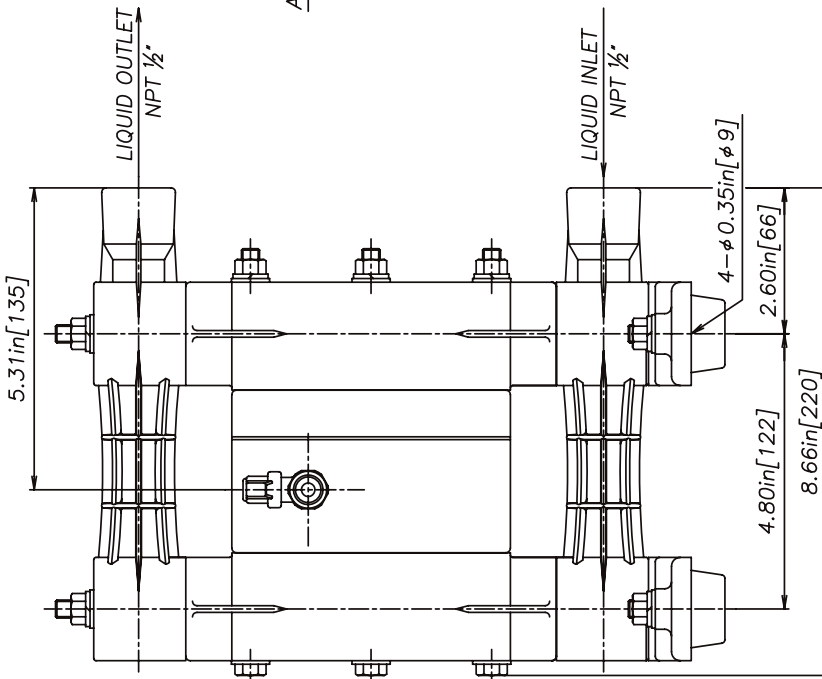
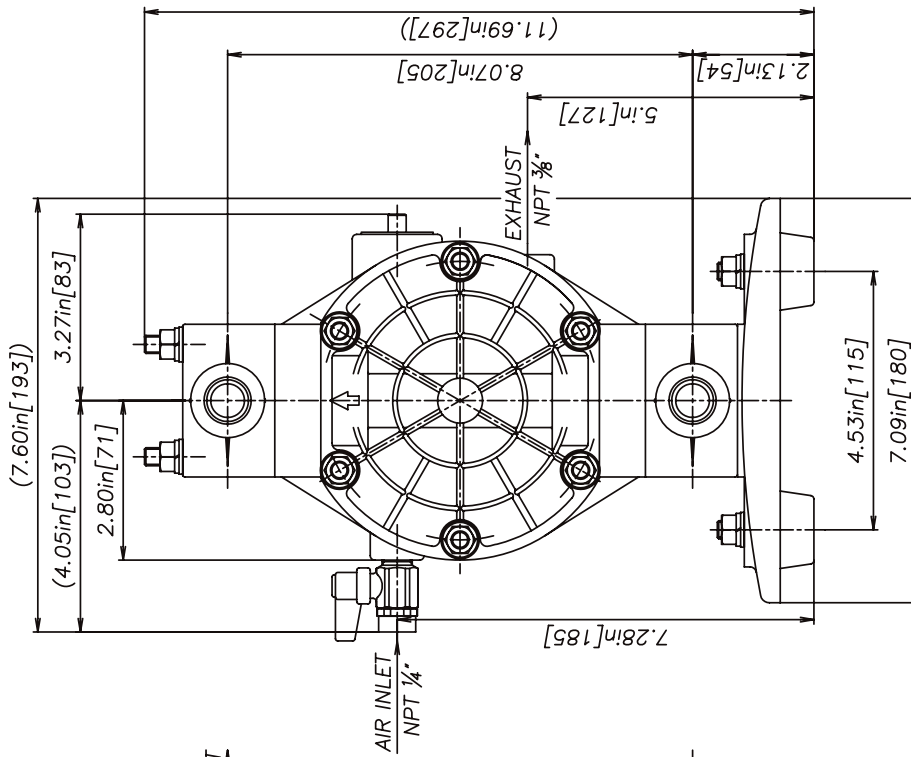


REV	DATE	DESCRIPTION	APPR'D
THE DWG. OF: <b>DIAPHRAGM PUMP ASSEMBLY</b>			
SCALE 1 : 1		DRAWN BY YJI	
DATE 02/08/06		APPROVED BY S.K.	
THIRD ANG. PROJ.	DRAWING NUMBER: <b>NDP-15BS</b>		REV <b>0</b>

**YAMADA AMERICA, INC.**

1200 NUCLEAR DRIVE - WEST CHICAGO, ILLINOIS 60185  
TOLL FREE 800-990-7867 OR 630-231-4083

THIS IS A CAD DRAWING AND MUST NOT BE ALTERED MANUALLY.



REV	DATE	DESCRIPTION	APPR'D
THE DWG. OF: <b>DIAPHRAGM PUMP ASSEMBLY</b>			
SCALE: 1 : 1		DRAWN BY: YJI	
DATE: 02/08/06		APPROVED BY: S.K.	
THIRD ANG. PROJ.	DRAWING NUMBER: <b>NDP-15F/B PLASTIC</b>		REV: 0

**YAMADA AMERICA, INC.**  
 1200 NUCLEAR DRIVE - WEST CHICAGO, ILLINOIS 60185  
 TOLL FREE 800-990-7867 OR 630-231-4083  
 THIS IS A CAD DRAWING AND MUST NOT BE ALTERED MANUALLY.

AutoCAD® is a registered trademark of Autodesk, Inc.

Hytrell® 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.