

# NDP-20 Specifications

**3/4" Port Size (28 GPM Max. Capacity)**

## Port Dimensions

*Intake & discharge connection:*

Polypropylene (PPG)	3/4" Female NPT or 3/4" ANSI Flange B16.5 #150
Aluminum (ADC-12)	3/4" Female NPT
Stainless Steel (316)	3/4" Female NPT
Air inlet (incl. ball valve):	1/4" Female NPT
Air exhaust (incl. silencer):	3/4" Female NPT

## Maximum Liquid Temperature\*

Diaphragm Material	Temperature
Neoprene	180°F (82°C)
Buna N	180°F (82°C)
EPDM	212°F (100°C)
Hytrel	248°F (120°C)
Santoprene	225°F (107°C)
Viton	248°F (120°C)
Teflon (PTFE)	212°F (100°C)

\*Polypropylene 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 kgf/cm)

## Discharge Volume Per Cycle

Rubber diaphragm: 0.14 gallons (490 cc)  
PTFE diaphragm: 0.10 gallons (290 cc)

## Maximum Cycles Per Minute

Rubber diaphragm: 195  
PTFE diaphragm: 195

## Maximum Size Solid

1/16" (2.0 mm)

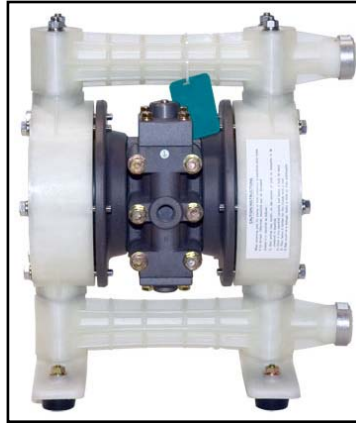
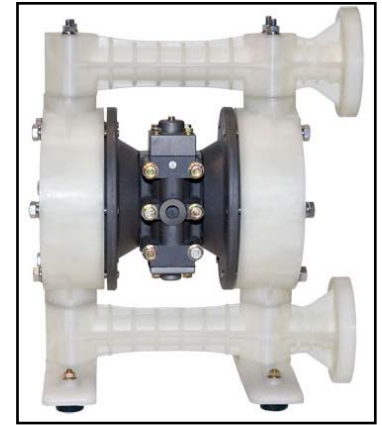
## Maximum Dry Suction Lift

Rubber-fitted pump capability: 18-feet

## Aluminum Air Motor—Standard

Optional: Epoxy-coated, Teflon-coated, or Electroless Nickel Plate

Notes: Hytrel-fitted pumps include Buna N check balls & wetted o-rings. Santoprene-fitted pumps include EPDM check balls & wetted o-rings.



## Aluminum (NPT)

### Dimensions:

9.80" W x 12.60" H

**Net Wt.:** 19.8 lbs. (9.0 kg)

**Shipping Wt.:** 23 lbs.

## Polypropylene

### ANSI Flange Dimensions:

12.44" W x 14.75" H

### NPT Dimensions:

12.44" W x 14.50" H

**Net Wt.:** 29 lbs. (10.9 kg)

**Shipping Wt.:** 30 lbs.

## Stainless Steel (NPT)

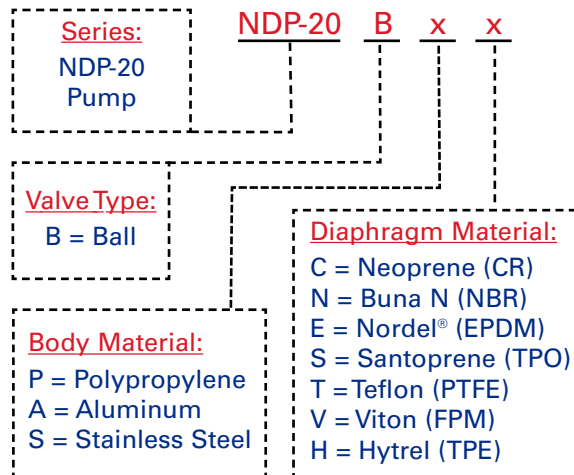
### Dimensions:

9.80" W x 12.60" H

**Net Wt.:** 30.8 lbs. (13.9 kg)

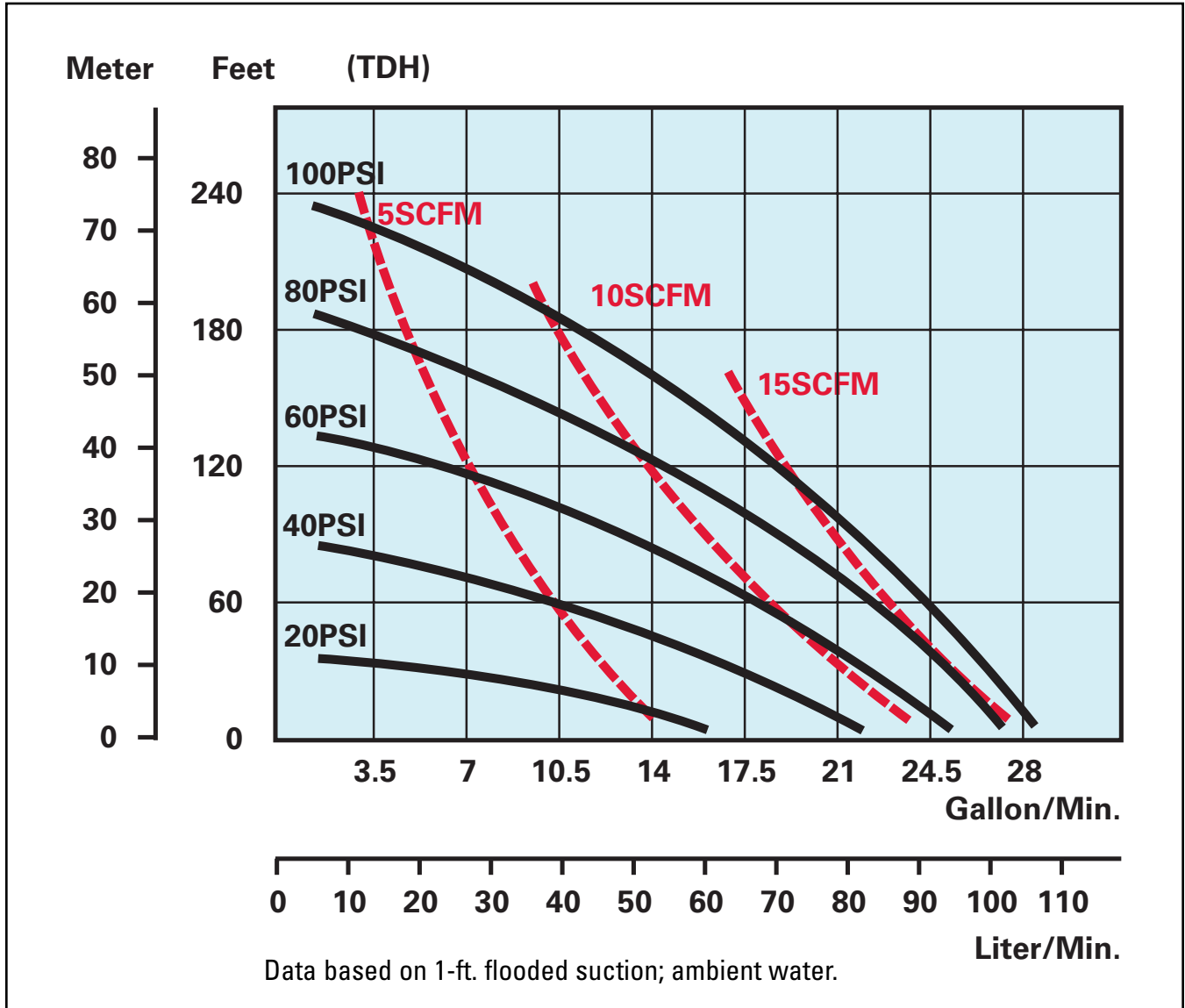
**Shipping Wt.:** 32 lbs.

## Model Number Nomenclature



# NDP-20 Performance Curve — Rubber

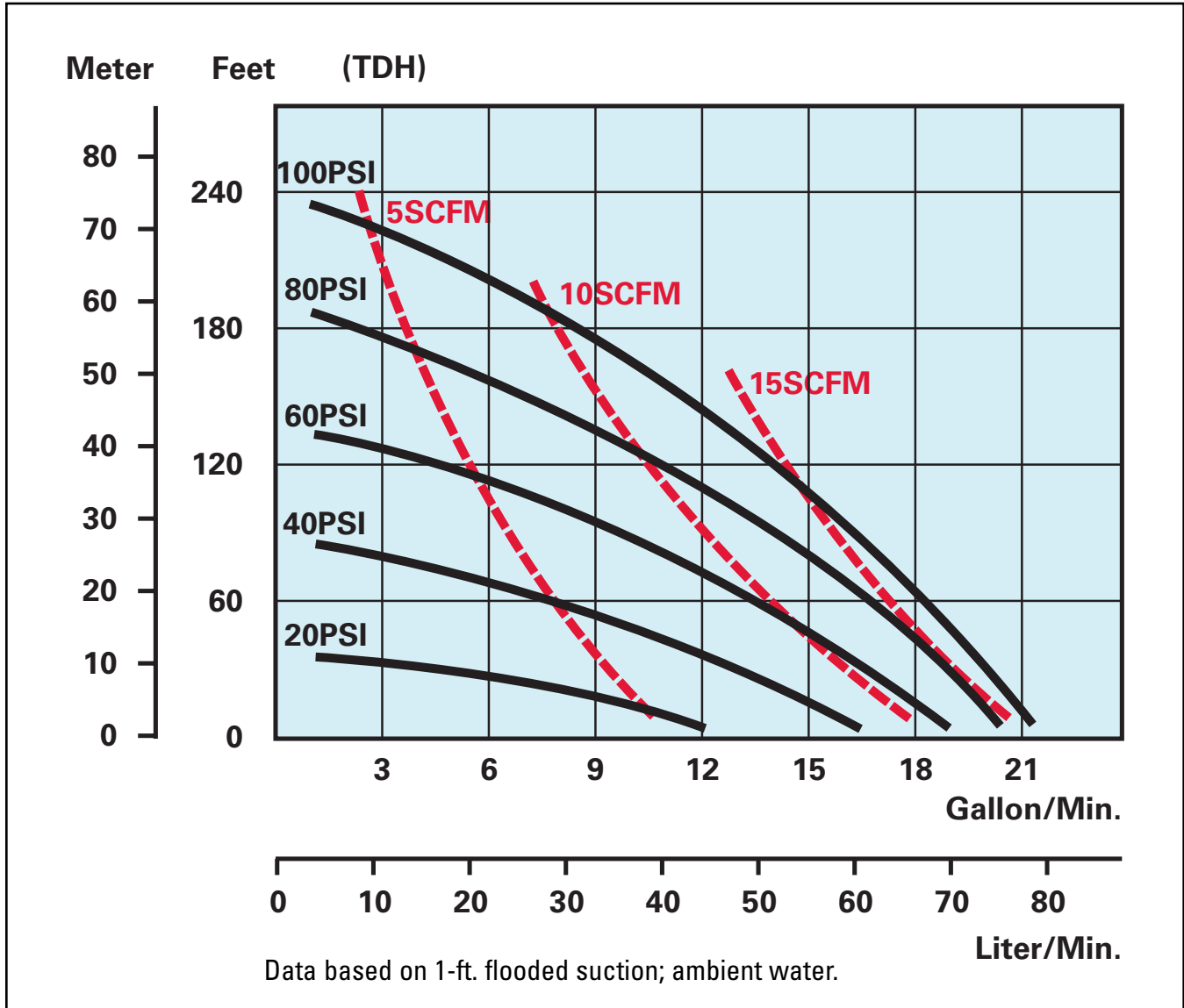
## Rubber Diaphragm Performance Curve



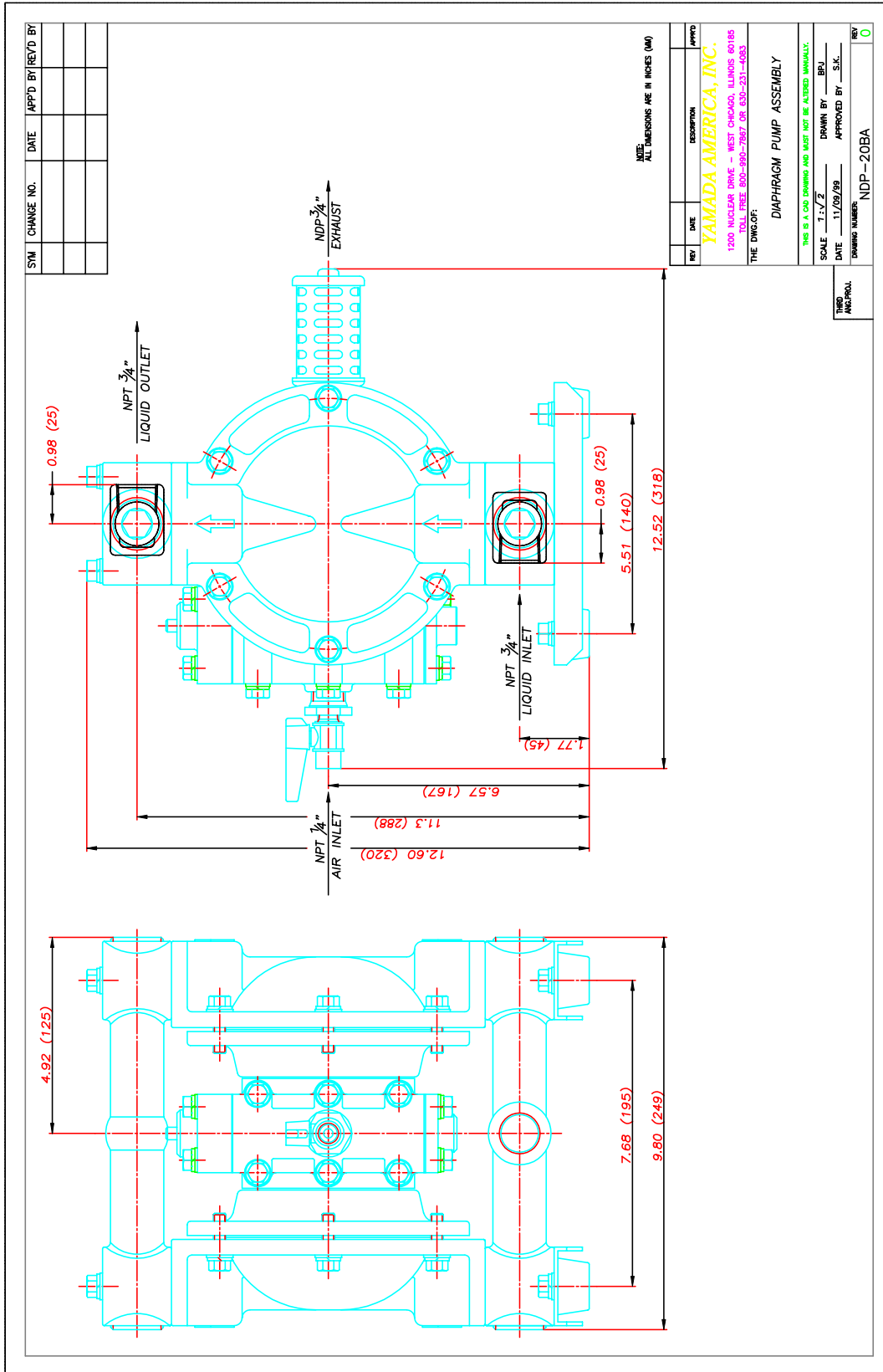
To calculate performance for Santoprene and Hytrel-fitted pumps, use Rubber Diaphragm Curve.

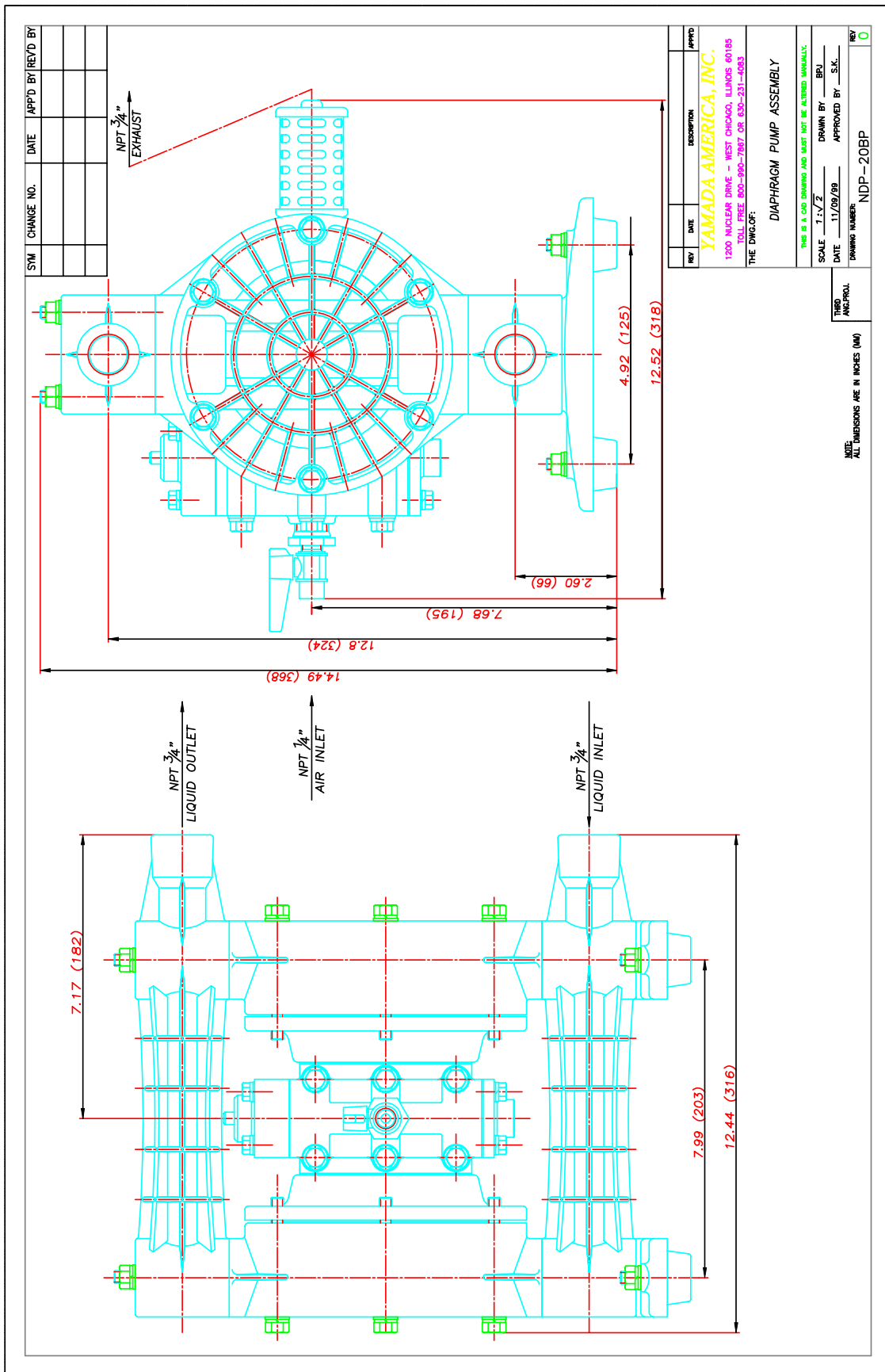
# NDP-20 Performance Curve — PTFE

## PTFE Diaphragm Performance Curve



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





SYM	CHANGE NO.	DATE	APPD BY	REVD BY

REV	DATE	DESCRIPTION	APPD

**YAMADA AMERICA, INC.**  
 1200 NUCLEAR DRIVE - WEST CHICAGO, ILLINOIS 60185  
 TOLL FREE 800-990-7867 OR 630-231-4083

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

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

SCALE: 1:1  
 DATE: 11/09/99  
 DRAWN BY: BFL  
 APPROVED BY: S.K.

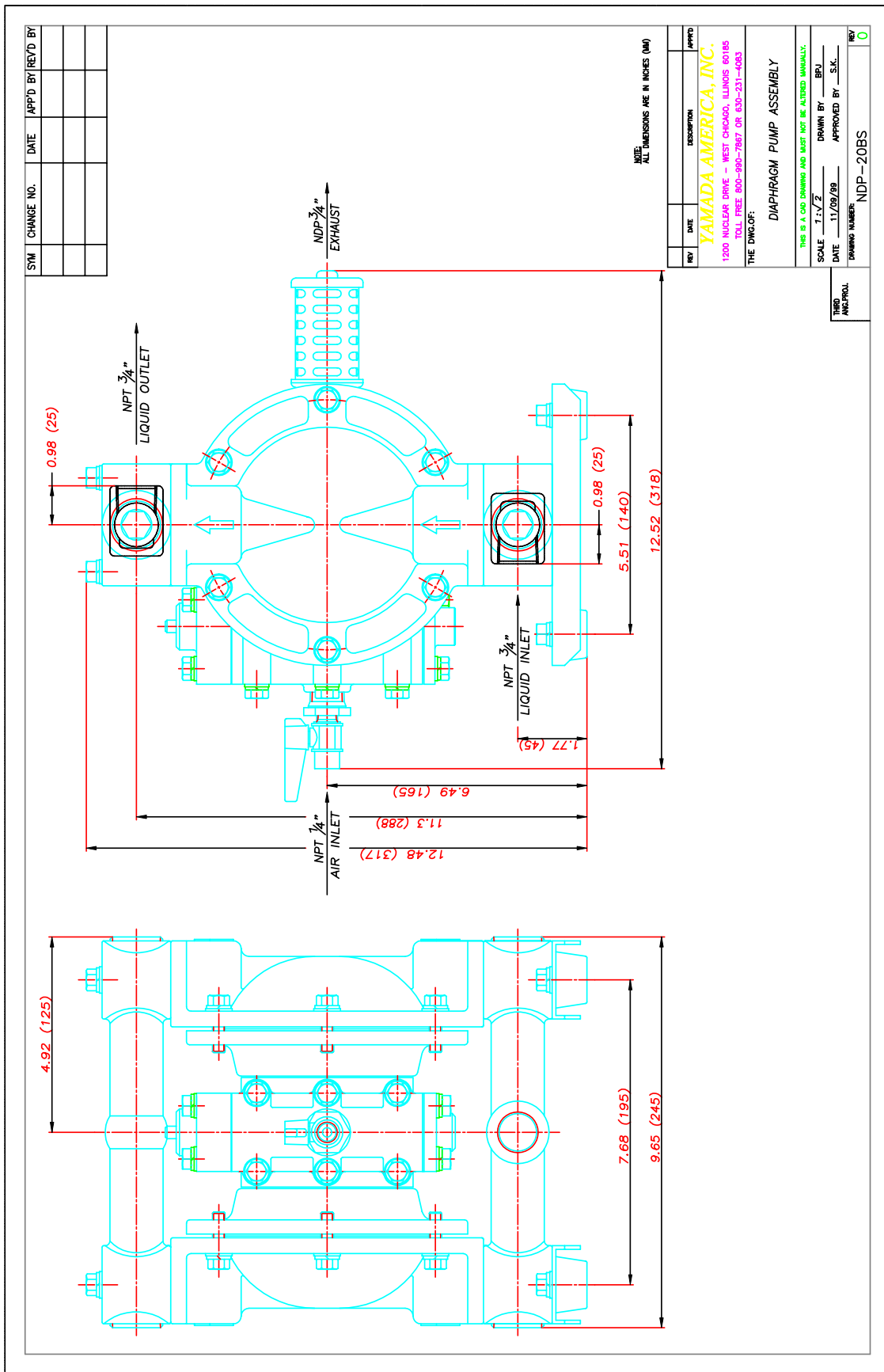
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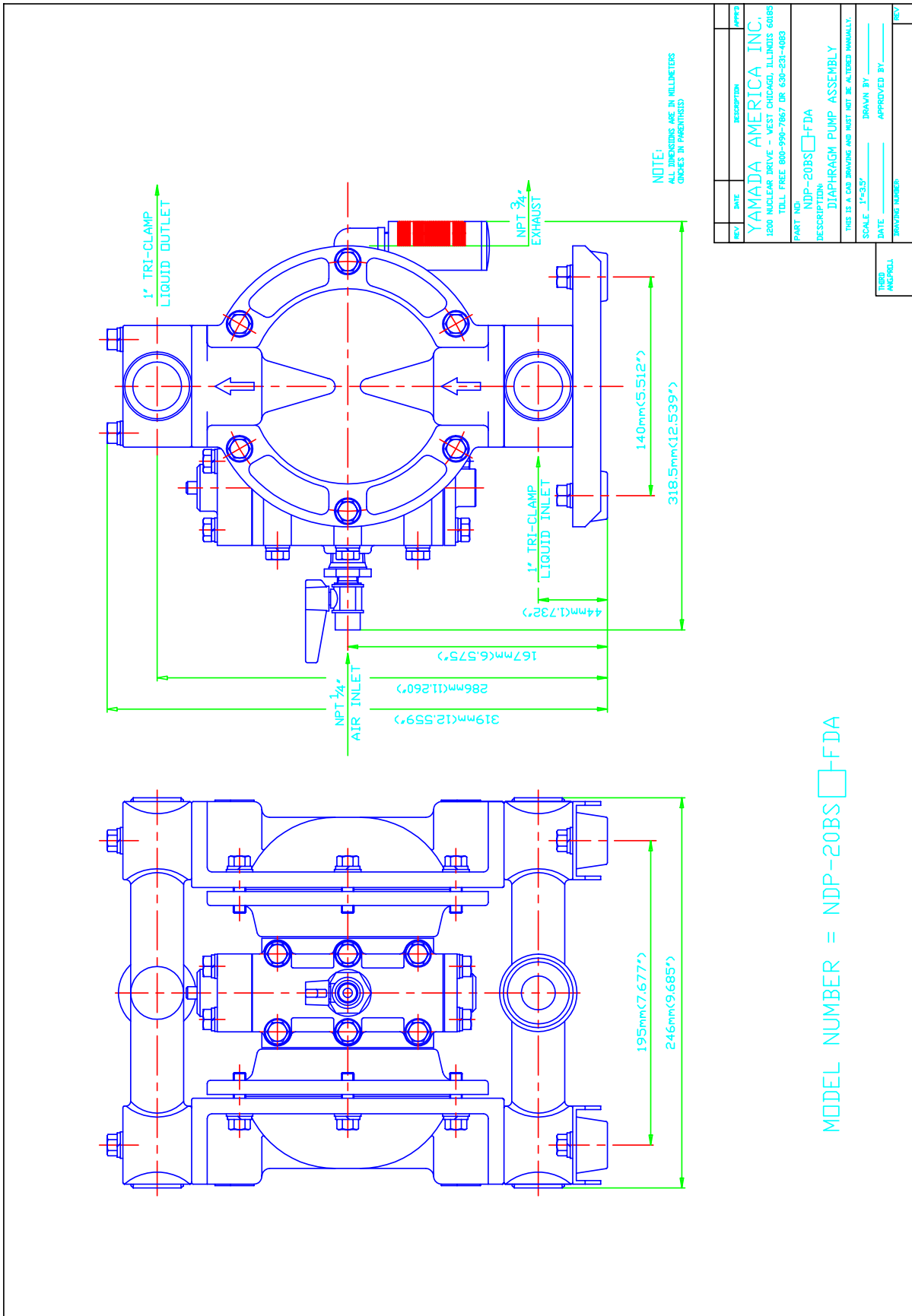
REV: **0**

NOTE: ALL DIMENSIONS ARE IN INCHES (MM)



**Yamada America, Inc.** 1200 Nuclear Drive, West Chicago, Illinois 60185  
 USA Toll-Free: 800 990-7867 Phone: 630 231-4083 Fax: 630 231-7405  
 E-mail: sales@yamadapump.com Web: [yamadapump.com](http://yamadapump.com)





REV	DATE	DESCRIPTION	APP'D

YAMADA AMERICA INC.  
1200 NUCLEAR DRIVE - WEST CHICAGO, ILLINOIS 60185  
TOLL FREE 800-990-7867 DR 630-231-4083

PART NO. NDP-20BS □ FDA  
DESCRIPTION: DIAPHRAGM PUMP ASSEMBLY

THIS IS A CAD DRAWING AND NOT A 3D MODEL. ALTERED MANUALLY.  
SCALE: 1"=3.15" DRAWN BY: \_\_\_\_\_  
DATE: \_\_\_\_\_ APPROVED BY: \_\_\_\_\_  
DRAWING NUMBER: \_\_\_\_\_

TRD  
MGP/RL

CAD DWG FILE: YAESZ114

MODEL NUMBER = NDP-20BS □ FDA

