

# NDP-40 Specifications

## Port Dimensions (107 GPM Max.)

Intake & discharge connection:

Polypropylene (PPG)	1-1/2" ANSI B16.5 #150
Kynar® (PVDF)	1-1/2" ANSI B16.5 #150
Aluminum (ADC-12)	1-1/2" ANSI B16.5 #150 (with tapped 1-1/2" Female NPT)
Stainless Steel (316)	1-1/2" ANSI B16.5 #150 or 1-1/2" Female NPT
Cast Iron	1-1/2" Female NPT
Air inlet (incl. ball valve):	1/2" Female NPT
Air exhaust (incl. silencer):	1" Female NPT

## Maximum Liquid Temperature\*

Diaphragm Material	Temperature
Neoprene	180°F (82°C)
Buna N	180°F (82°C)
EPDM	212°F (100°C)
Hytrell® (TPC-ET)	248°F (120°C)
Santoprene® (TPE)	212°F (100°C)
Viton® fluoroelastomer	248°F (120°C)
Teflon® (PTFE)	212°F (100°C)

\*The maximum liquid temperature for metal and Kynar®-fitted pumps is determined by the elastomer (diaphragm material). 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 kfg/cm)

## Discharge Volume Per Cycle

Rubber diaphragm: 0.73 gallons (2.74 liters)

PTFE diaphragm: 0.37 gallons (1.40 liters)

## Maximum Cycles Per Minute

Rubber diaphragm: 148

PTFE diaphragm: 270

## Maximum Size Solid

9/32" (7 mm)

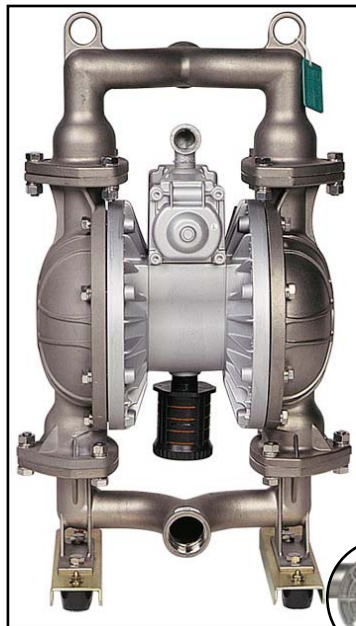
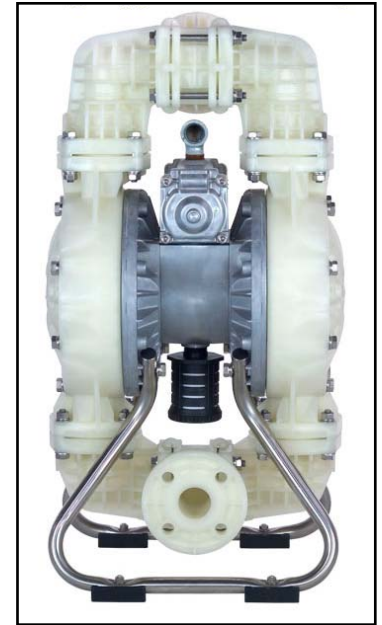
## Maximum Dry Suction Lift

Rubber-fitted pump capability: 18-feet

## Aluminum Air Motor – Standard

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

All Polypropylene, Aluminum, Cast Iron, and Stainless Steel Hytrell® fitted pumps include Buna N check balls & o-rings and Santoprene® fitted pumps include EPDM check balls & wetted o-rings. Kynar® (PVDF) pumps fitted with Santoprene®, Hytrell®, or Teflon® include Teflon® check balls & o-rings. Kynar®/EPDM fitted pumps include EPDM check balls & o-rings and Viton® fitted include Viton® balls & o-rings.



### Aluminum (top left)

**Dimensions:** 16.18" W x 27.91" H

**Net Wt.:** 68 lbs. (28.9 kg)

**Shipping Wt.:** 75 lbs.

### Polypropylene or Kynar® (top right)

**Dimensions:** 15.75" W x 29.61" H

**Net Wt.:** 70 lbs. (29.9 kg)

**Shipping Wt.:** 78 lbs.

### Cast Iron or Stainless Steel (left)

**Dimensions:** 16.18" W x 27.75" H

**Net Wt.:** C. Iron: 112 lbs. (59.8 kg)

SS: 98 lbs. (39.9 kg)

**Ship Wt.:** C. Iron: 120 lbs.

SS: 106 lbs.

Note: ANSI Flange available for Stainless Steel

## Model Number Nomenclature

Series: **NDP-40 B x x**  
NDP-40 Pump

Valve Type:  
B = Ball

Body Material:  
P = Polypropylene  
V = Kynar®  
A = Aluminum  
S = Stainless Steel  
F = Cast Iron

Diaphragm Material:  
C = Neoprene (CR)  
N = Buna N (NBR)  
E = Nordel™ (EPDM)  
S = Santoprene® (TPO)  
T = Teflon® (PTFE)  
V = Viton® (FKM)  
H = Hytrell® (TPE)

Note: For NPT-fitted Stainless Steel, add "NPT" at end of model number nomenclature.



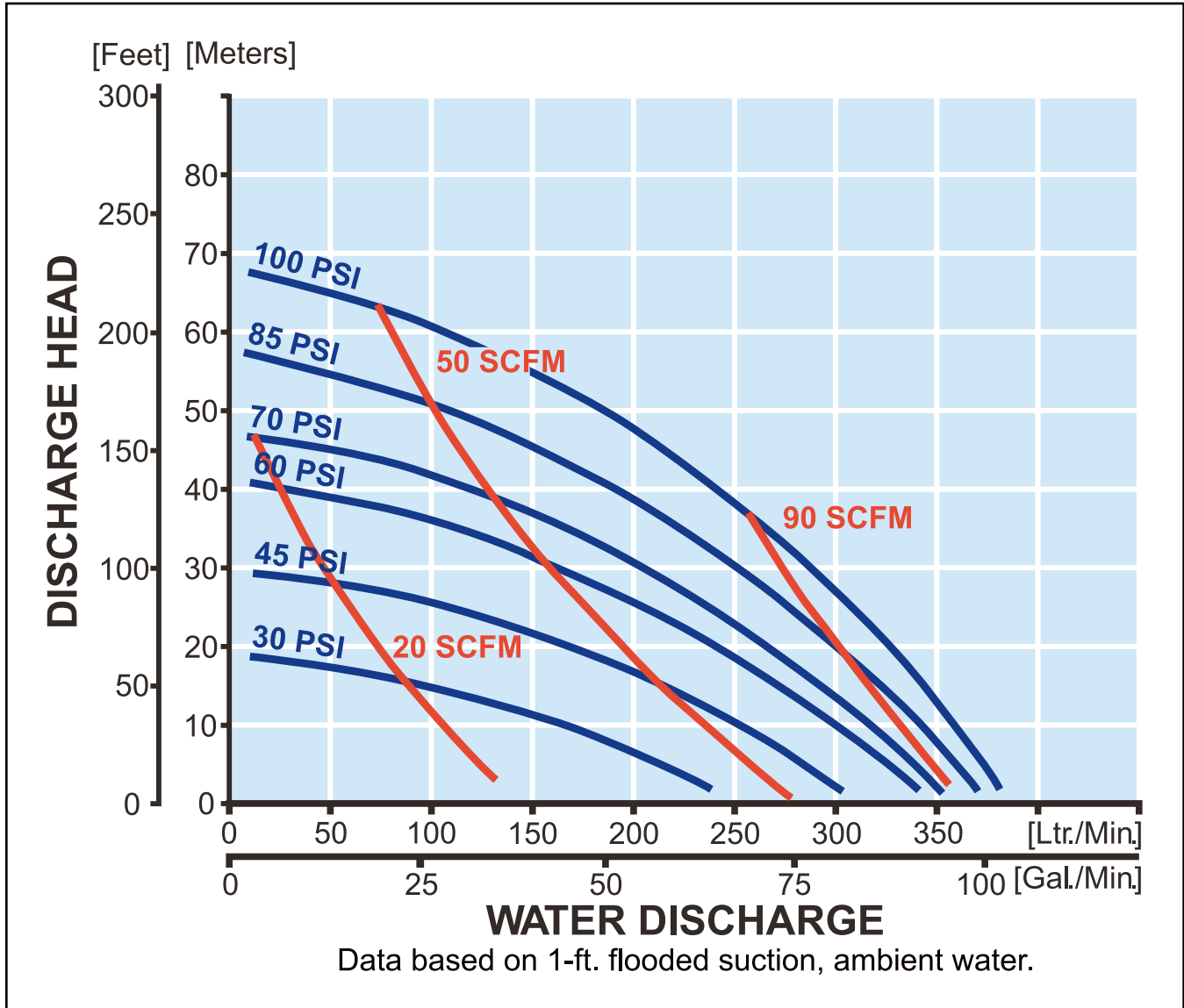
**Yamada America, Inc.** 955 E. Algonquin Road, Arlington Heights, IL 60005

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# NDP-40 Performance Curve — Rubber

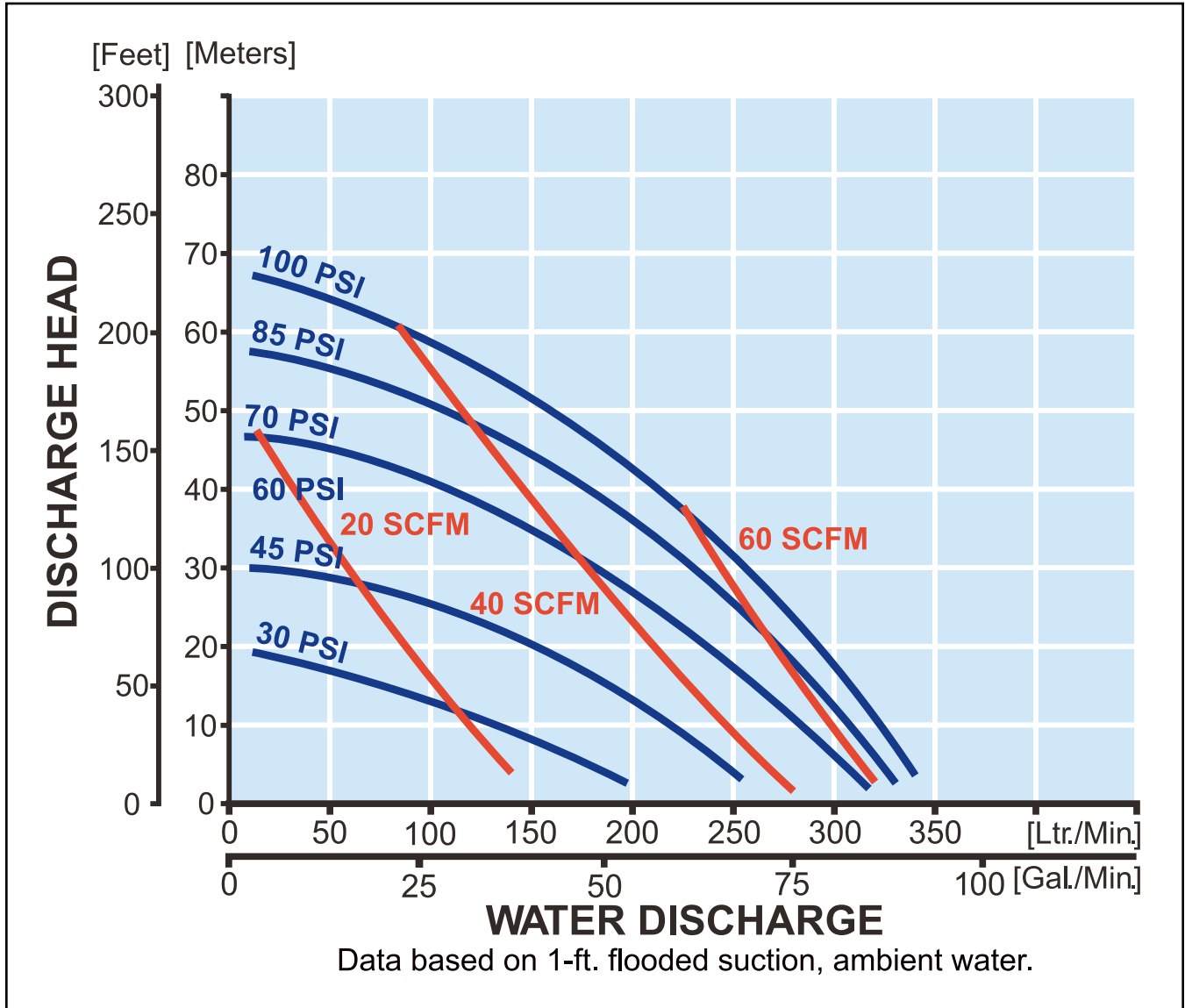
## Rubber Diaphragm Performance Curve



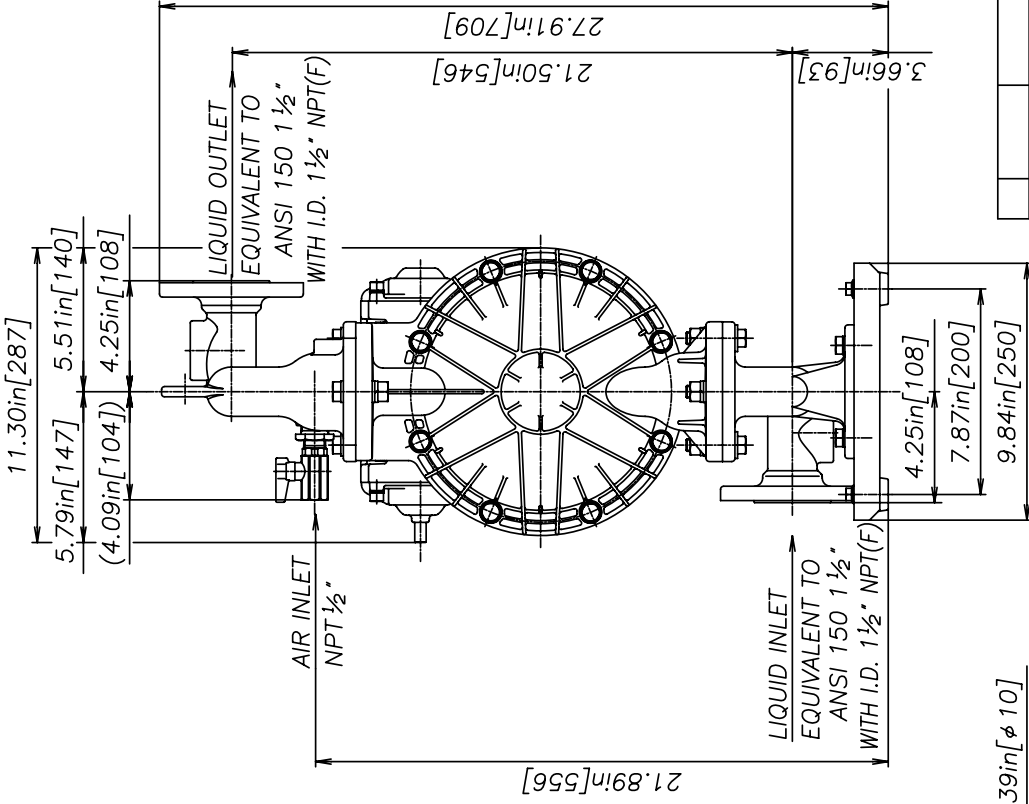
To calculate performance for Santoprene and Hytrel-fitted pumps, use Rubber Diaphragm Curve.

# NDP-40 Performance Curve — PTFE

## PTFE Diaphragm Performance Curve



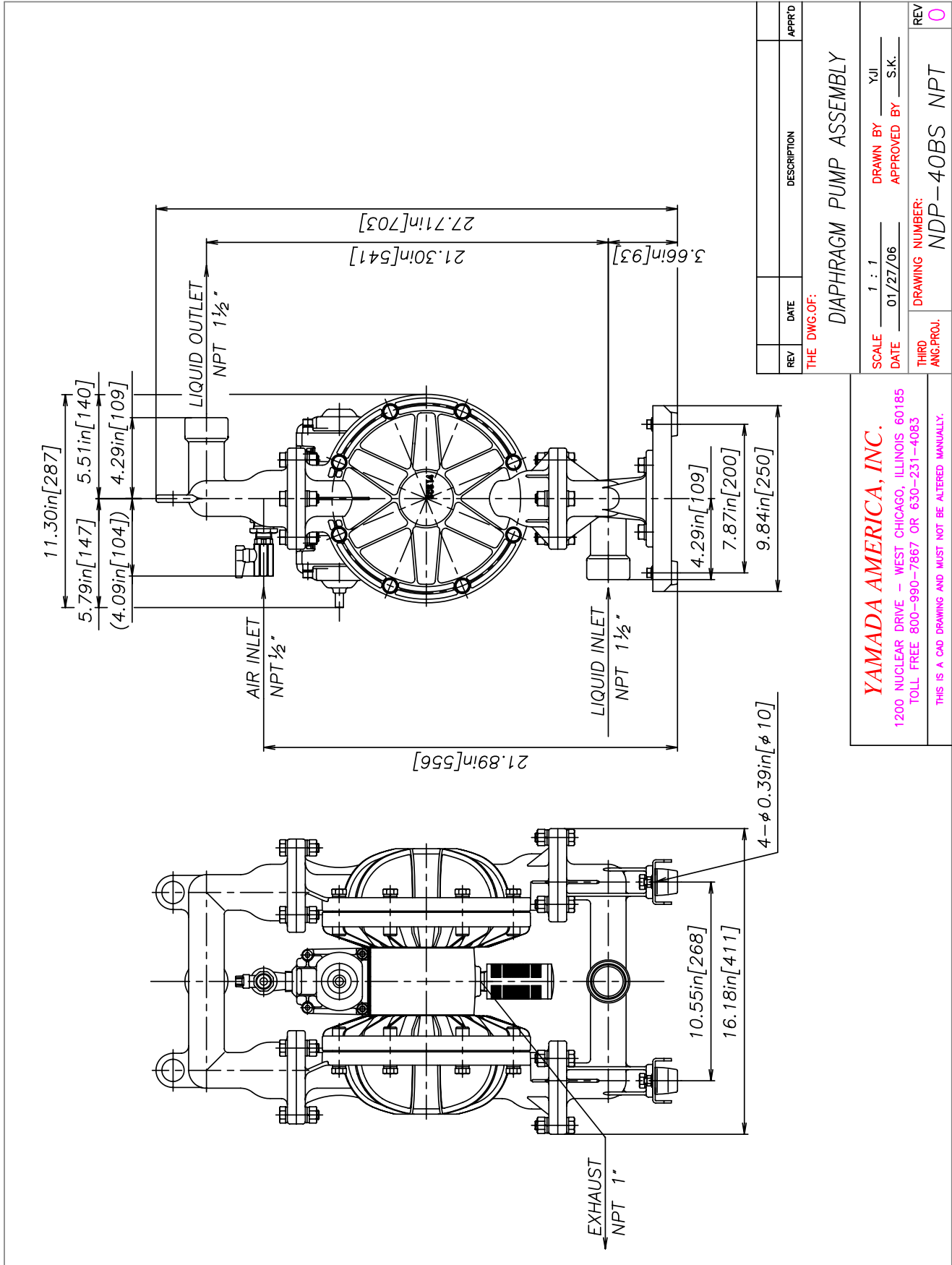
To calculate performance for Santoprene and Hytrel-fitted pumps, use Rubber Diaphragm Curve.

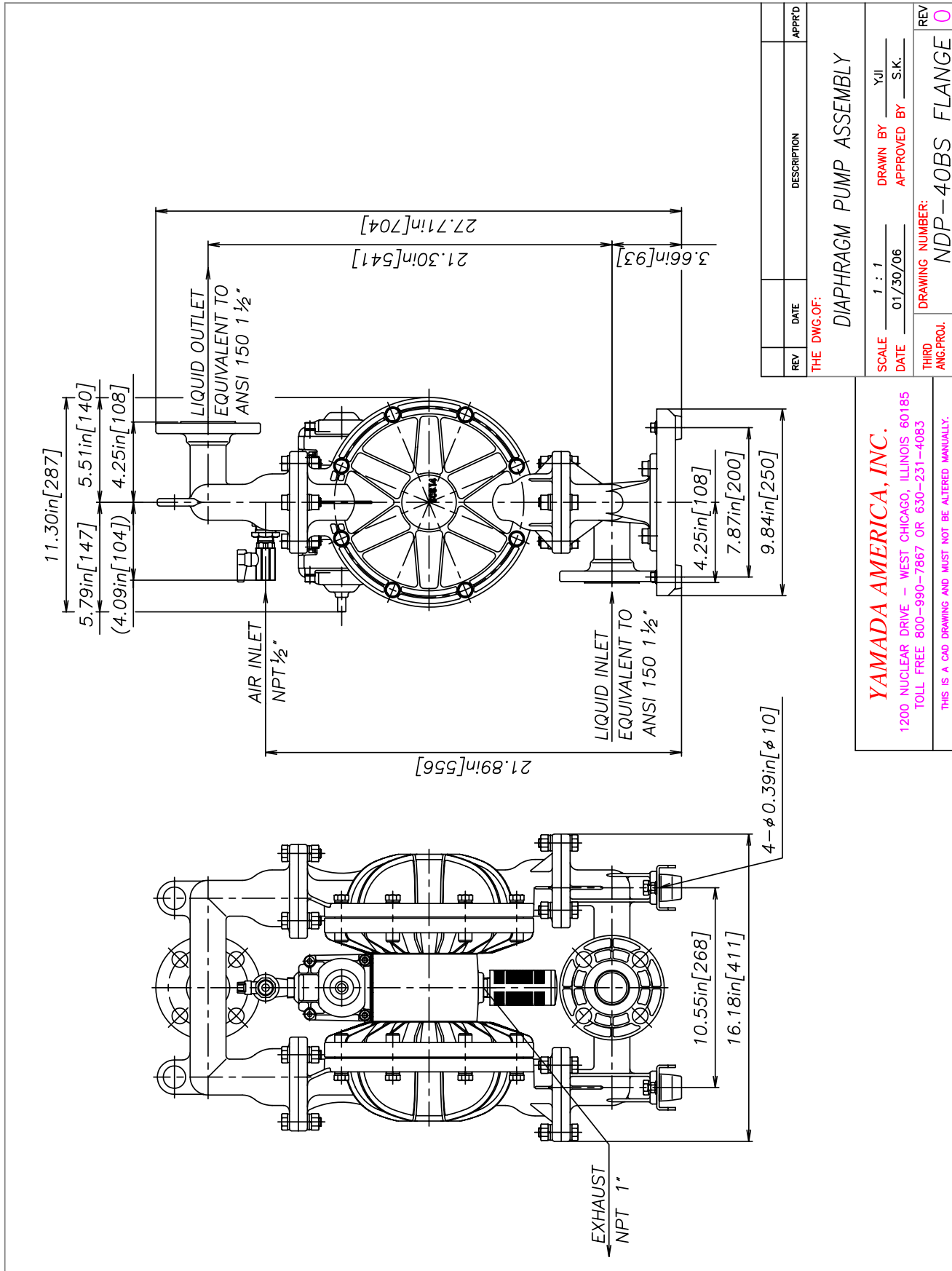


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<b>DIAPHRAGM PUMP ASSEMBLY</b>			
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DATE	01/27/06	APPROVED BY	S.K.
THIRD ANG. PROJ.	DRAWING NUMBER:	NDP-40BA	
REV			0

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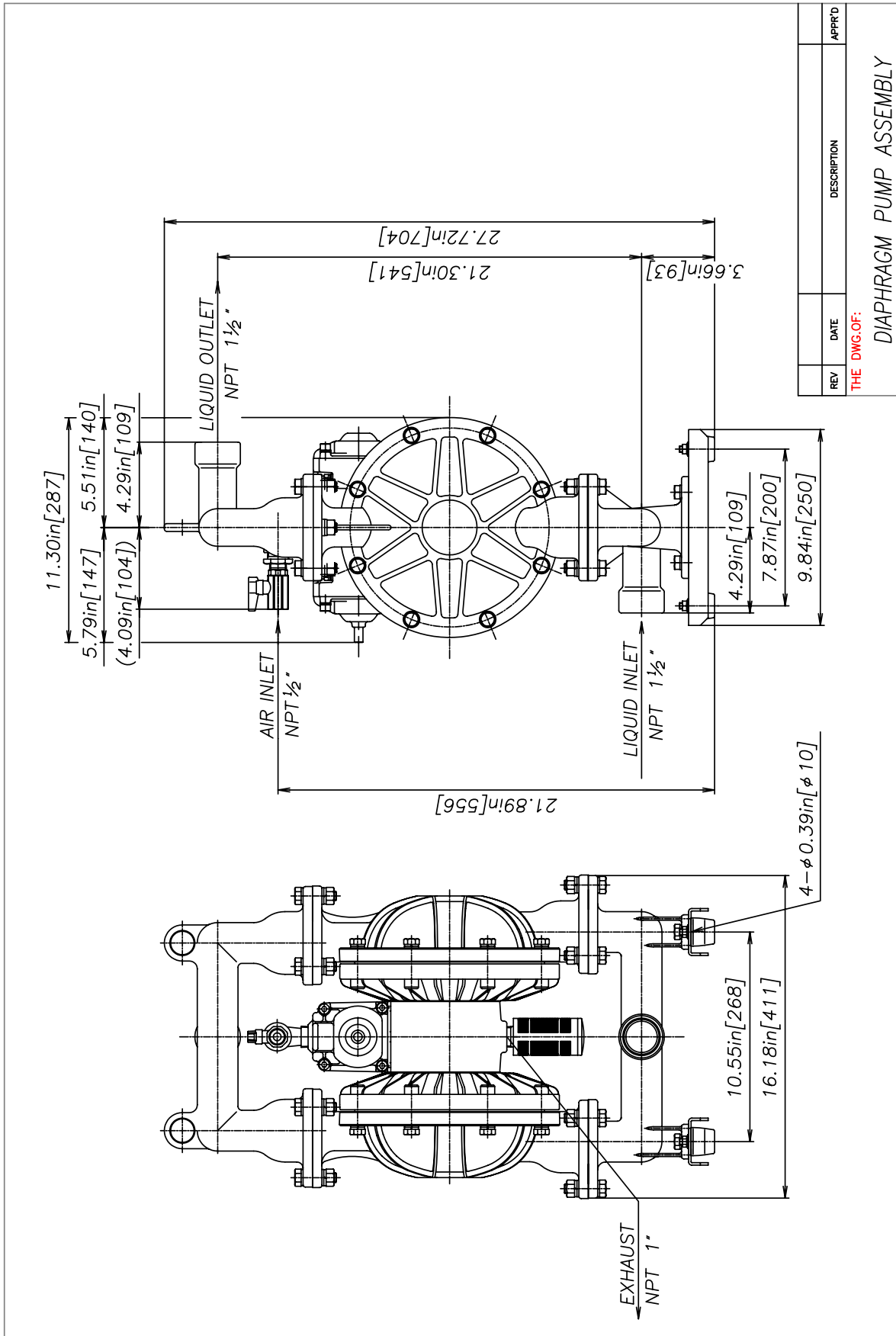






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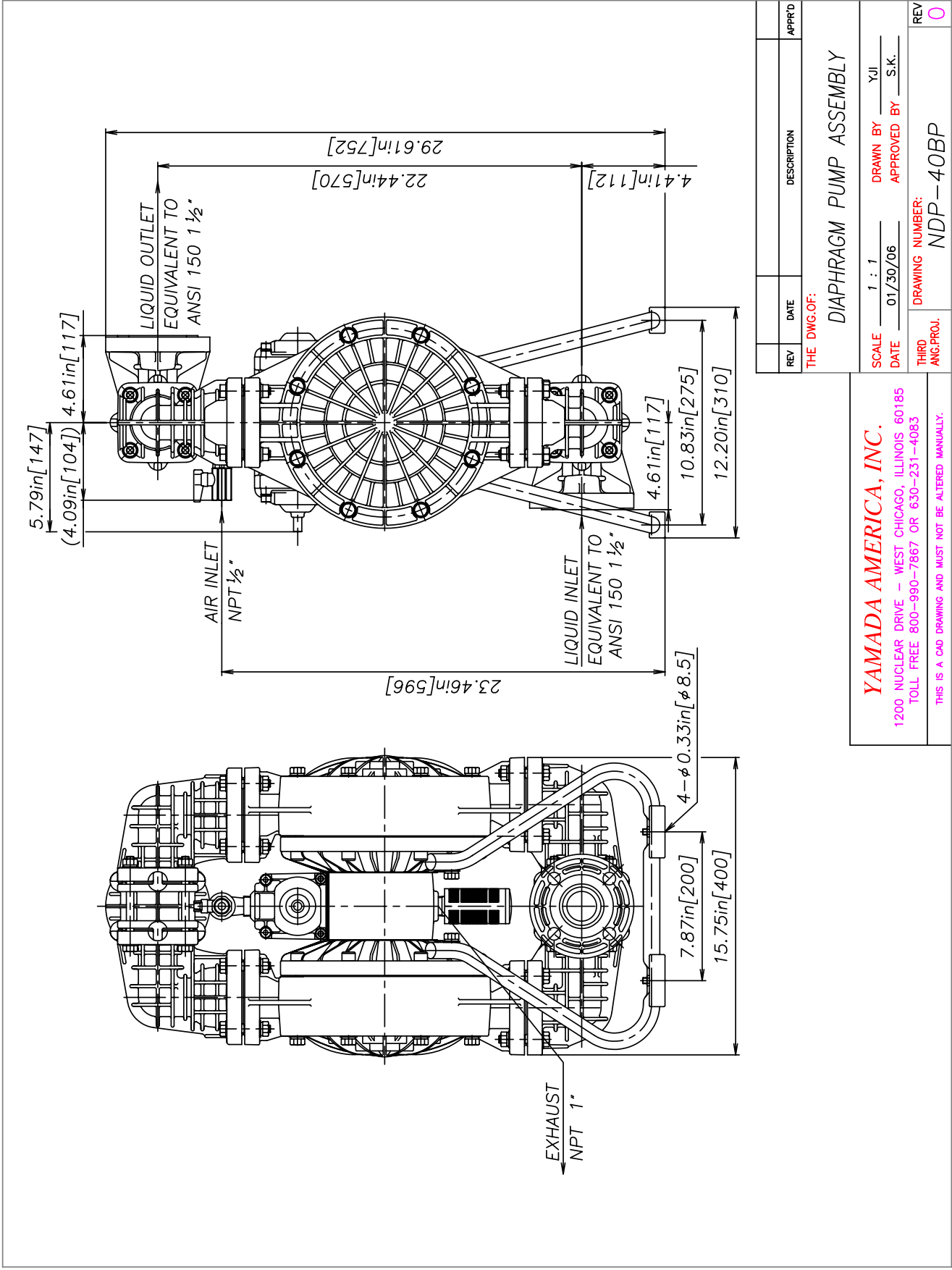
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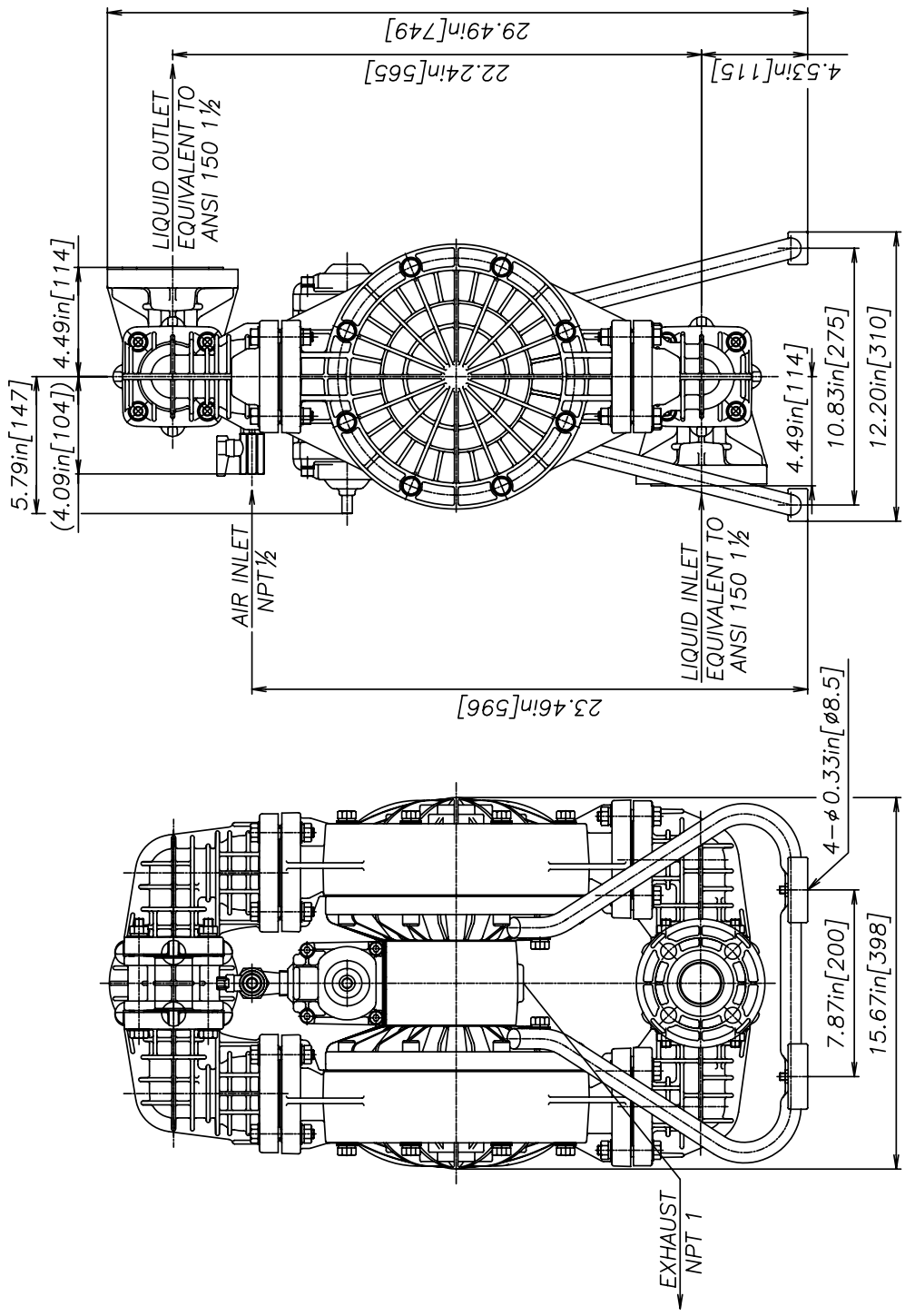
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