

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)

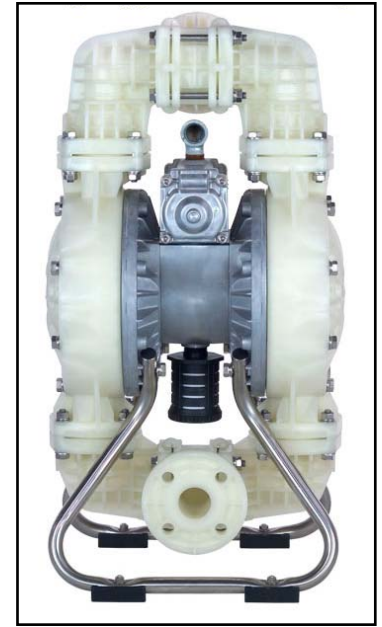
Maximum Dry Suction Lift

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 × 27.91" H

Net Wt.: 68 lbs. (28.9 kg)

Shipping Wt.: 75 lbs.

Polypropylene or Kynar® (top right)

Dimensions: 15.75" W × 29.61" H

Net Wt.: 70 lbs. (29.9 kg)

Shipping Wt.: 78 lbs.

Cast Iron or Stainless Steel (left)

Dimensions: 16.18" W × 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.



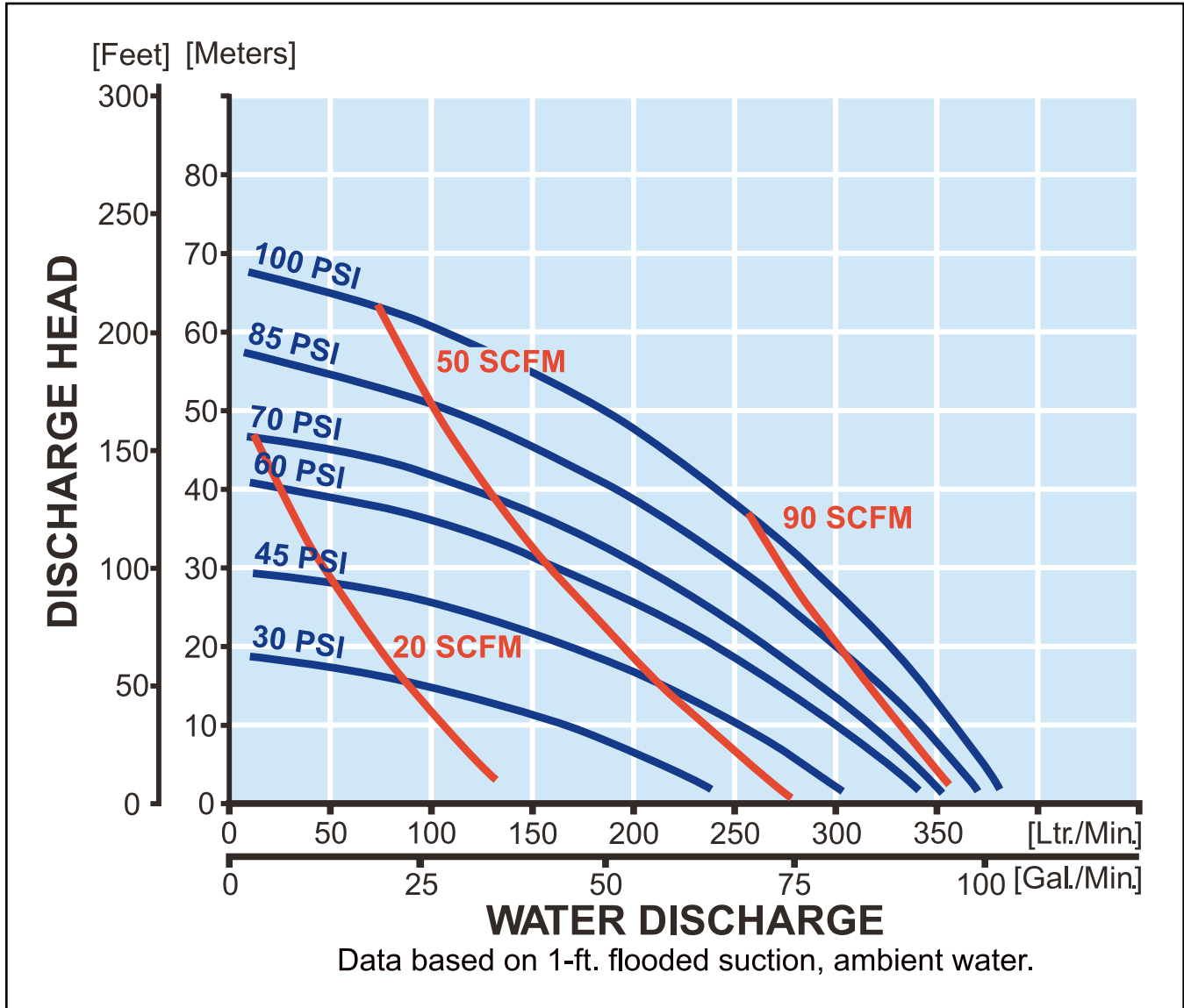
Yamada America, Inc. 955 E. Algonquin Road, Arlington Heights, IL 60005

USA Toll-Free: 800 990-7867 Phone: 847 631-9200 Fax: 847 631-9273

E-mail: sales@yamadapump.com Web: yamadapump.com

NDP-40 Performance Curve — Rubber

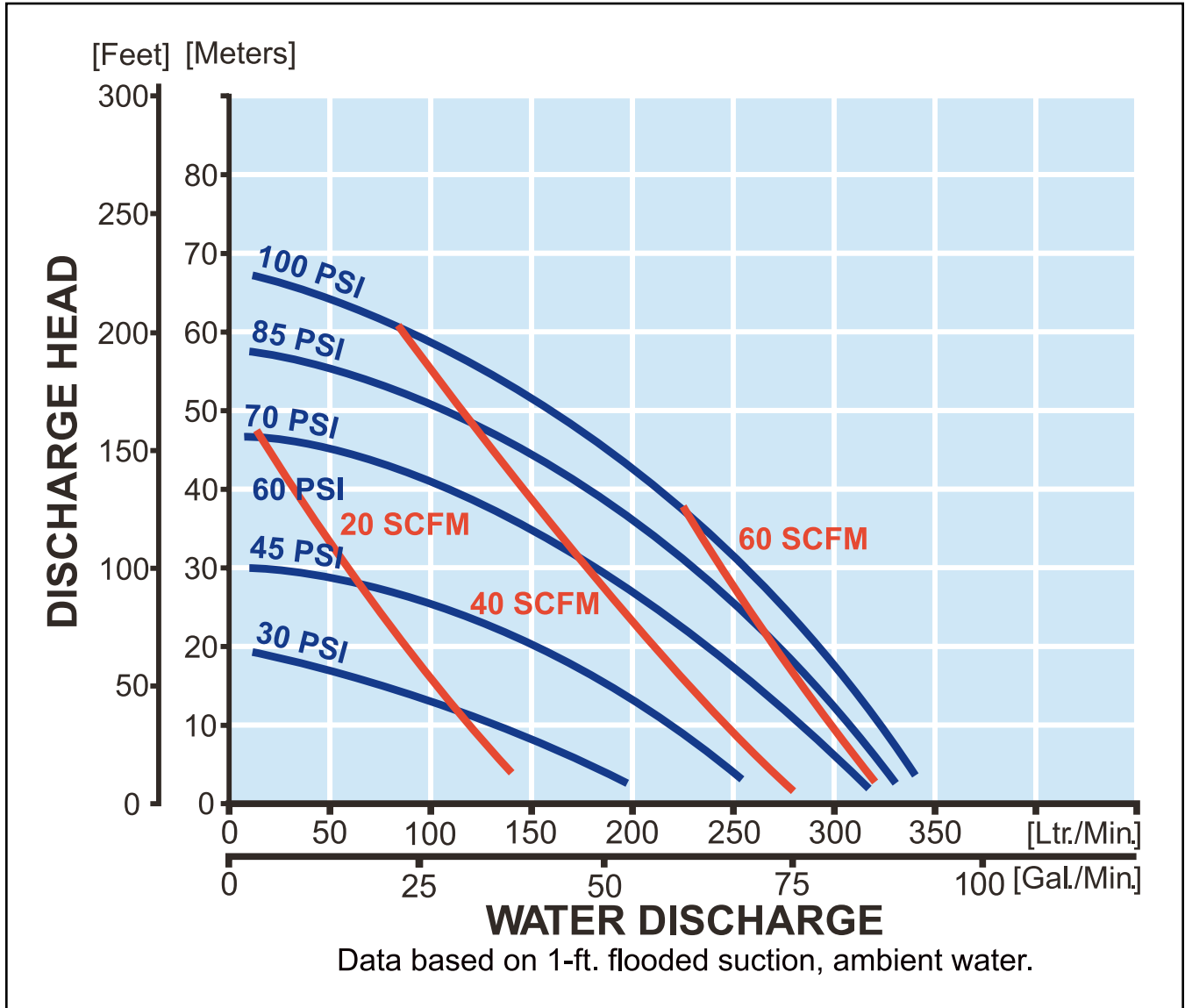
Rubber Diaphragm Performance Curve



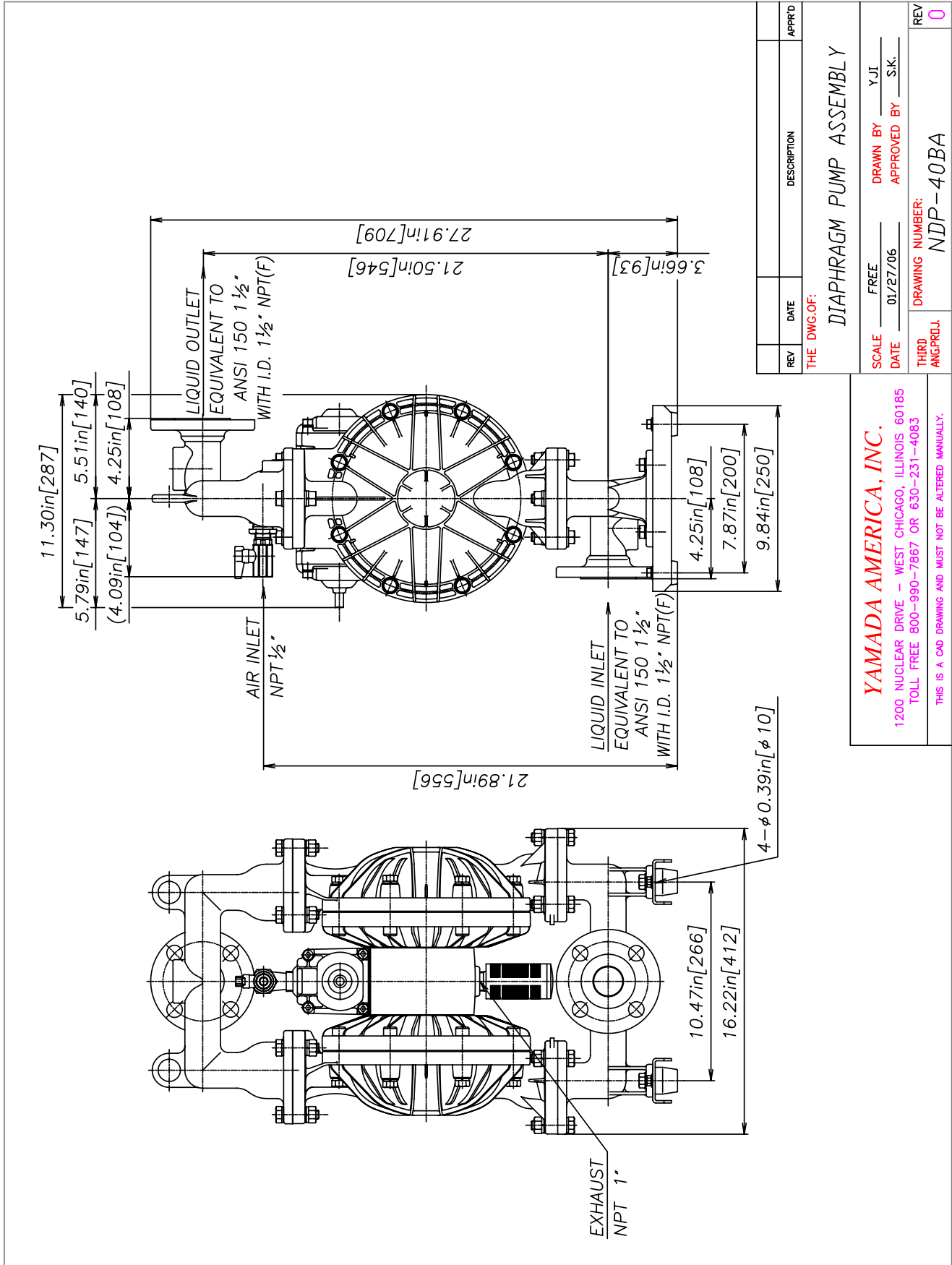
To calculate performance for Santoprene and Hytrel-fitted pumps, use Rubber Diaphragm Curve.

NDP-40 Performance Curve — PTFE

PTFE Diaphragm Performance Curve



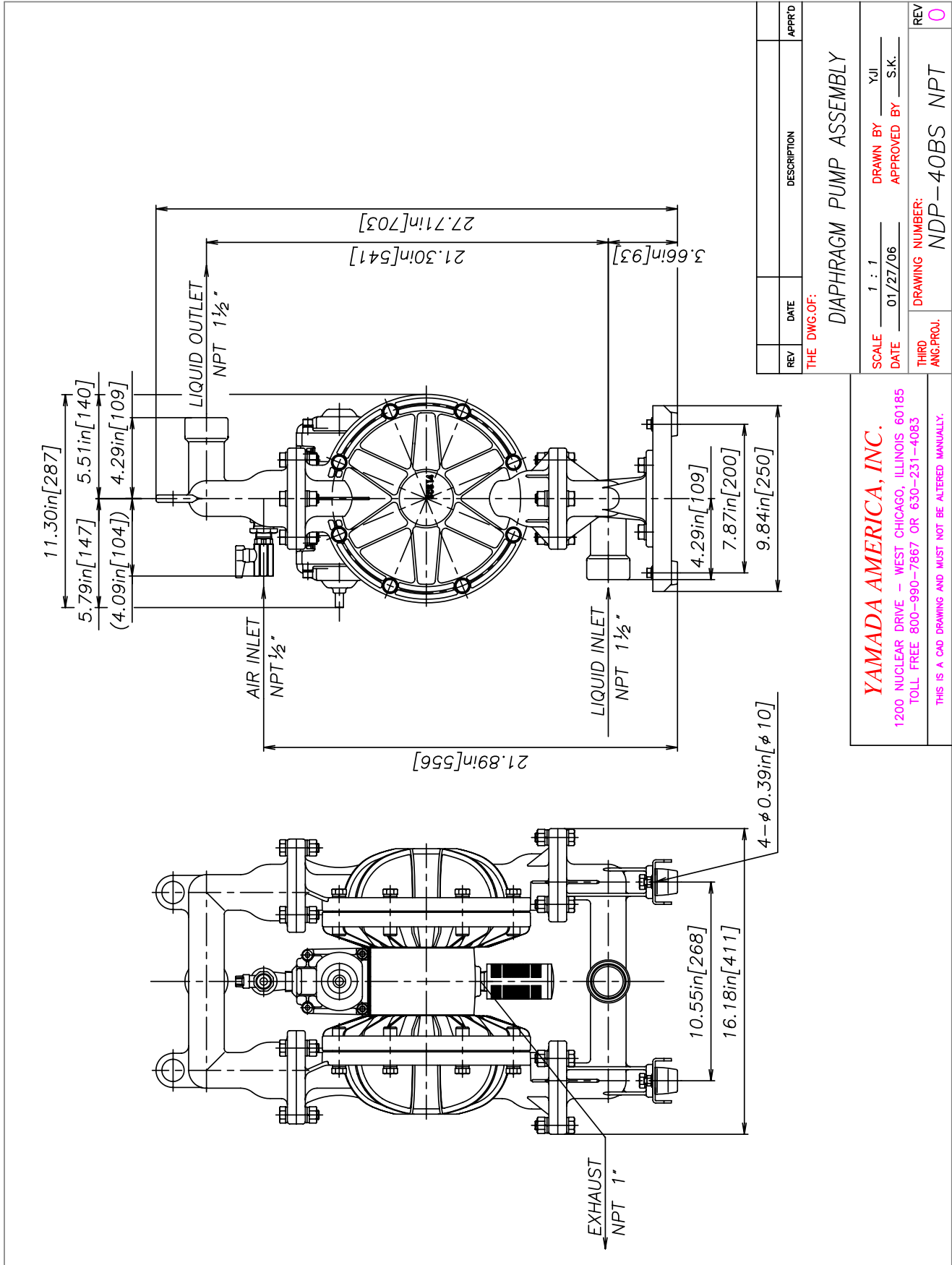
To calculate performance for Santoprene and Hytrel-fitted pumps, use Rubber Diaphragm Curve.

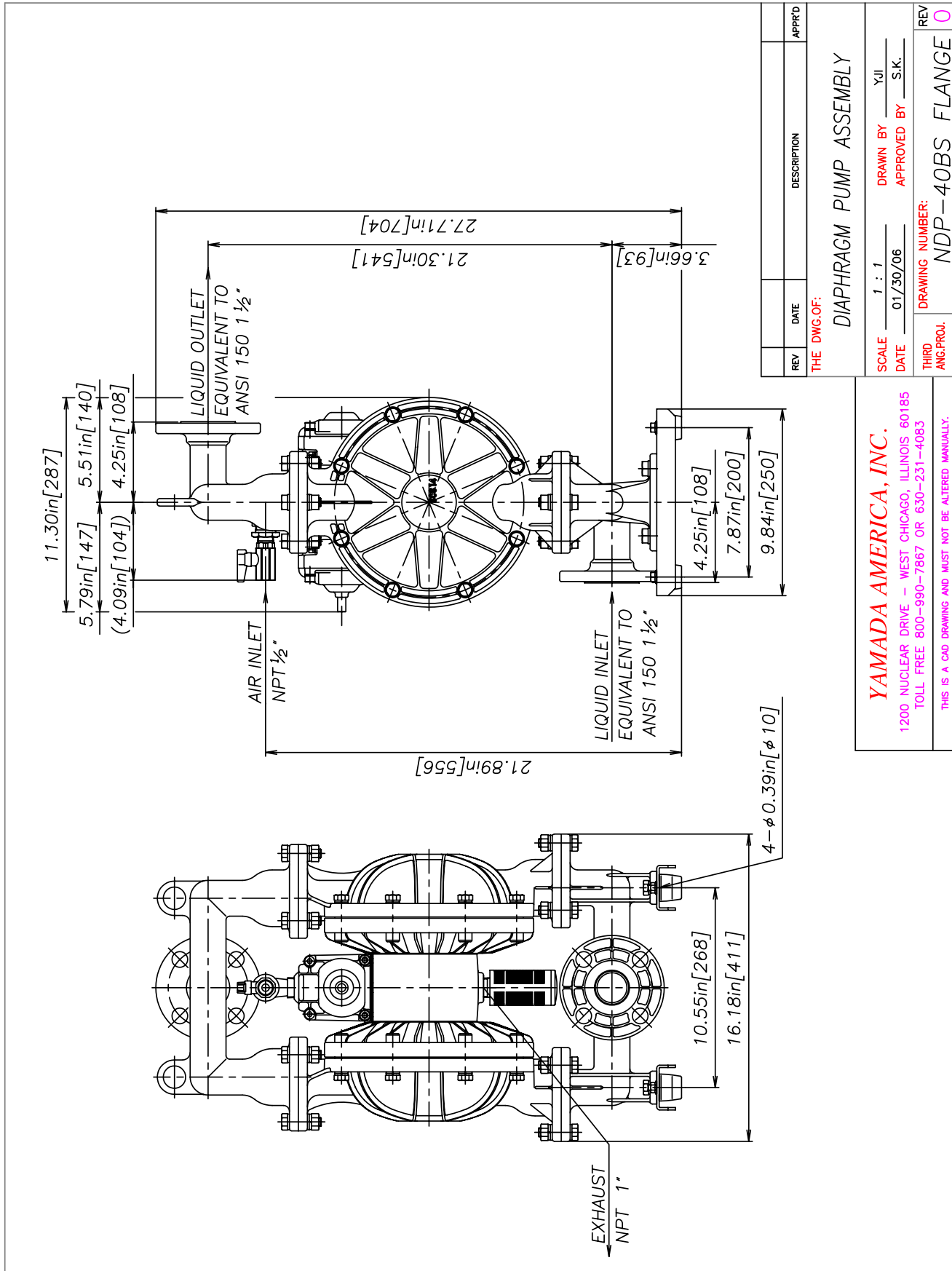


REV	DATE	DESCRIPTION	APPR'D
THE DWG. OF:			
DIAPHRAGM PUMP ASSEMBLY			
SCALE	FREE	DRAWN BY	Y.JI
DATE	01/27/06	APPROVED BY	S.K.
THIRD ANG. PROJ.	DRAWING NUMBER:	NDP-40BA	
REV			0

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.



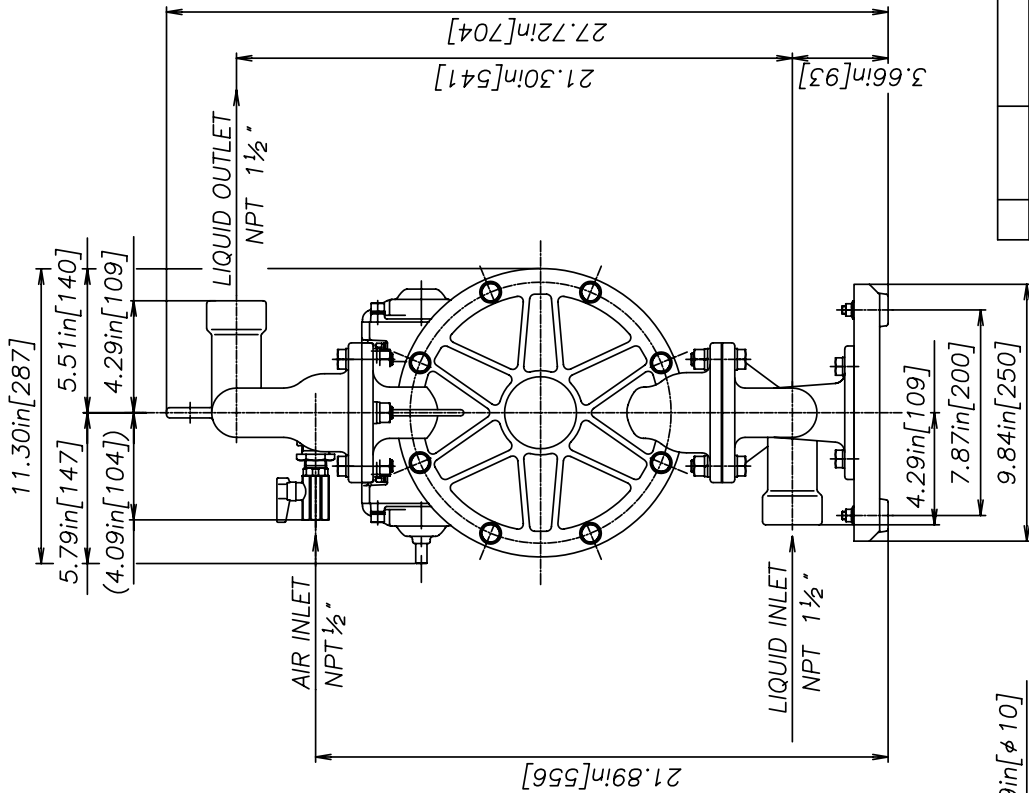




REV	DATE	DESCRIPTION	APPR'D
THE DWG.OF:			
DIAPHRAGM PUMP ASSEMBLY			
SCALE 1 : 1		DRAWN BY YJI	
DATE 01/30/06		APPROVED BY S.K.	
THIRD ANG.PROJ.		DRAWING NUMBER: NDP--40BS FLANGE 0	

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.



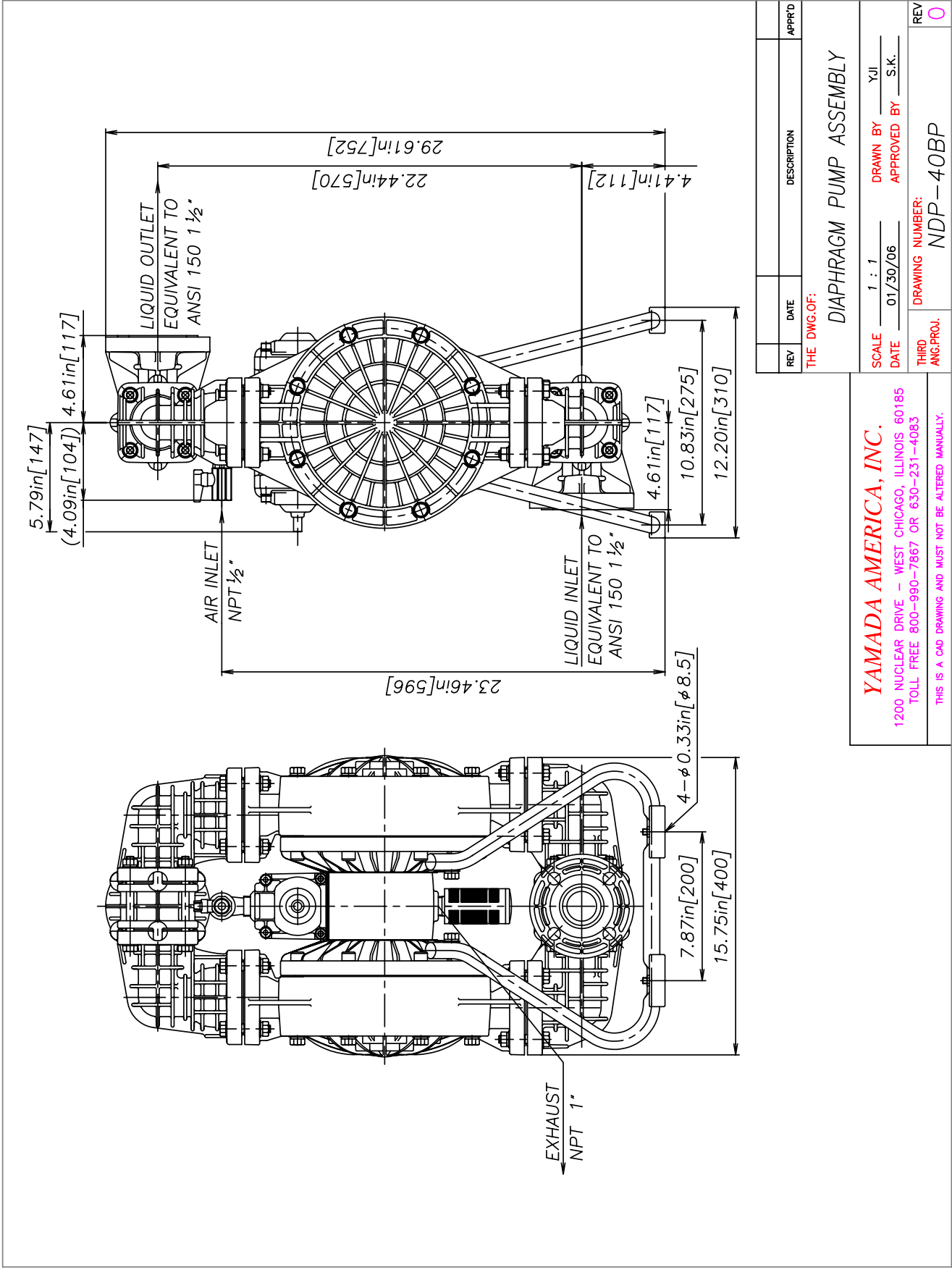


REV	DATE	DESCRIPTION	APPR'D
THE DWG.OF:			
DIAPHRAGM PUMP ASSEMBLY			

SCALE	1 : 1	DRAWN BY	YJL
DATE	01/27/06	APPROVED BY	S.K.
THIRD ANG.PROJ.		DRAWING NUMBER:	NDP-40BF
REV	0		

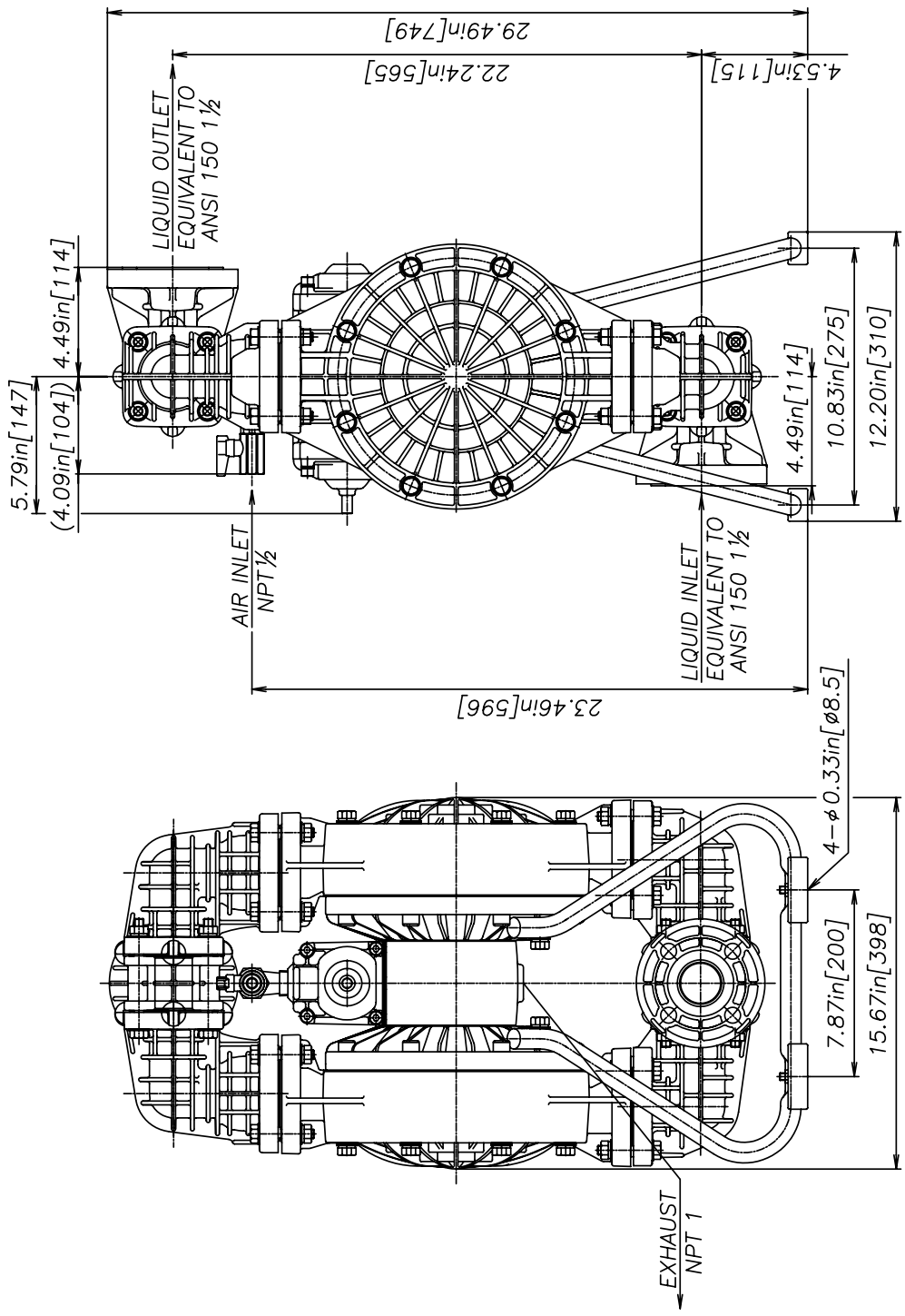
YAMADA AMERICA, INC.
 1200 NUCLEAR DRIVE - WEST CHICAGO, ILLINOIS 60185
 TOLL FREE 800-990-7867 OR 630-231-4083
 THIS IS A CAD DRAWING AND MUST NOT BE ALTERED MANUALLY.





REV	DATE	DESCRIPTION	APPRD
THE DWG. OF:			
DIAPHRAGM PUMP ASSEMBLY			
SCALE 1 : 1		DRAWN BY YJI	
DATE 01/30/06		APPROVED BY S.K.	
THIRD ANG. PROJ.	DRAWING NUMBER: NDP-40BP		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:			
DIAPHRAGM PUMP ASSEMBLY			
SCALE 1 : 1		DRAWN BY YJL	
DATE 01/30/06		APPROVED BY S.K.	
THIRD ANG.PROJ.	DRAWING NUMBER: NDP-40BV		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.

Hytre® 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.

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

Viton® is a registered trademark of DuPont Performance Elastomers.

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

