

NDP-80 Specifications

Port Dimensions (215 GPM Max.)

Intake & discharge connection:

Polypropylene (PPG)	3" ANSI B16.5 #150
Aluminum (ADC-12)	3" ANSI B16.5 #150 (with tapped 3" Female NPT)
Stainless Steel (316)	3" ANSI B16.5 #150 or 3" Female NPT
Cast Iron	3" Female NPT
Air inlet (incl. ball valve):	3/4" 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)
Hytre [®] (TPC-ET)	248°F (120°C)
Santoprene [®] (TPE)	225°F (107°C)
Viton [®] fluoroelastomer	248°F (120°C)
Teflon [®] (PTFE)	212°F (100°C)

*The maximum liquid temperature for metal 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: 2.26 gallons (8.57 liters)

PTFE diaphragm: 1.0 gallons (3.8 liters)

Maximum Cycles Per Minute

Rubber diaphragm: 95

PTFE diaphragm: 160

Maximum Size Solid

13/32" (10 mm)

Maximum Dry Suction Lift

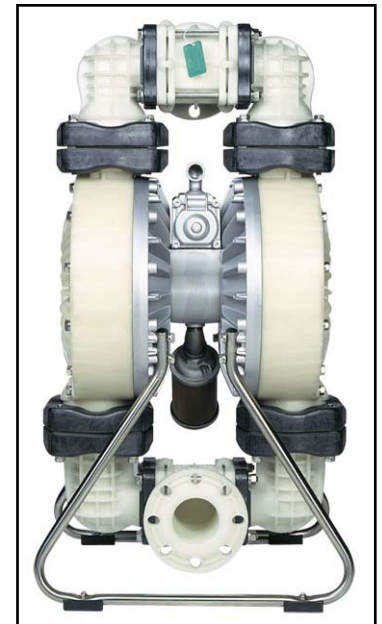
Rubber-fitted pump capability: 19-feet

Aluminum Air Motor – Standard

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

Notes: Hytre[®]-fitted pumps include Buna N check balls & wetted o-rings. Santoprene[®]-fitted pumps include EPDM check balls & wetted o-rings.

AutoCAD[®] drawings are available on CDROM or at yamadapump.com



Aluminum (top left)
Dimensions: 20.43" W x 40.75" H
Net Wt.: 151 lbs. (68.5 kg)
Shipping Wt.: 165 lbs.

Polypropylene (top right)
Dimensions: 22.83" W x 41.10" H
Net Wt.: 162 lbs. (73.5 kg)
Shipping Wt.: 177 lbs.

Cast Iron or Stainless Steel (left)
Dimensions: 20.54" W x 38.74" H
Net Wt.: Cast Iron–271 lbs. (122.9 kg)
 SS –244 lbs. (110.7 kg)
Shipping Wt.: Cast Iron–277 lbs.
 SS –263 lbs.



Note: ANSI Flange available for Stainless Steel

Model Number Nomenclature

Series: NDP-80 B x x

Valve Type:
B = Ball

Body Material:
P = Polypropylene
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 = Hytre[®] (TPE)

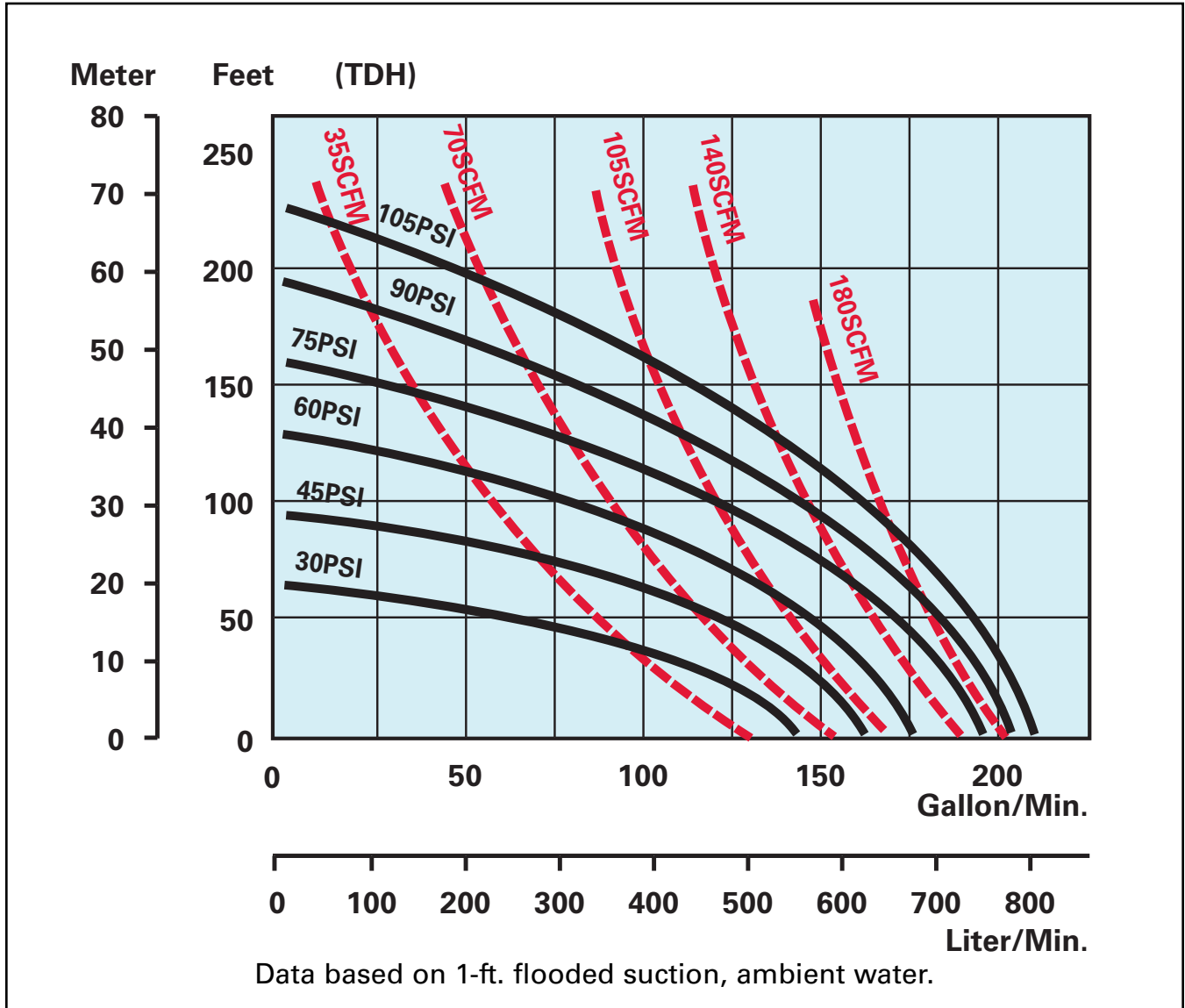
Note: For NPT-fitted Stainless Steel, add "NPT" at end of model number nomenclature.



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NDP-80 Performance Curve — Rubber

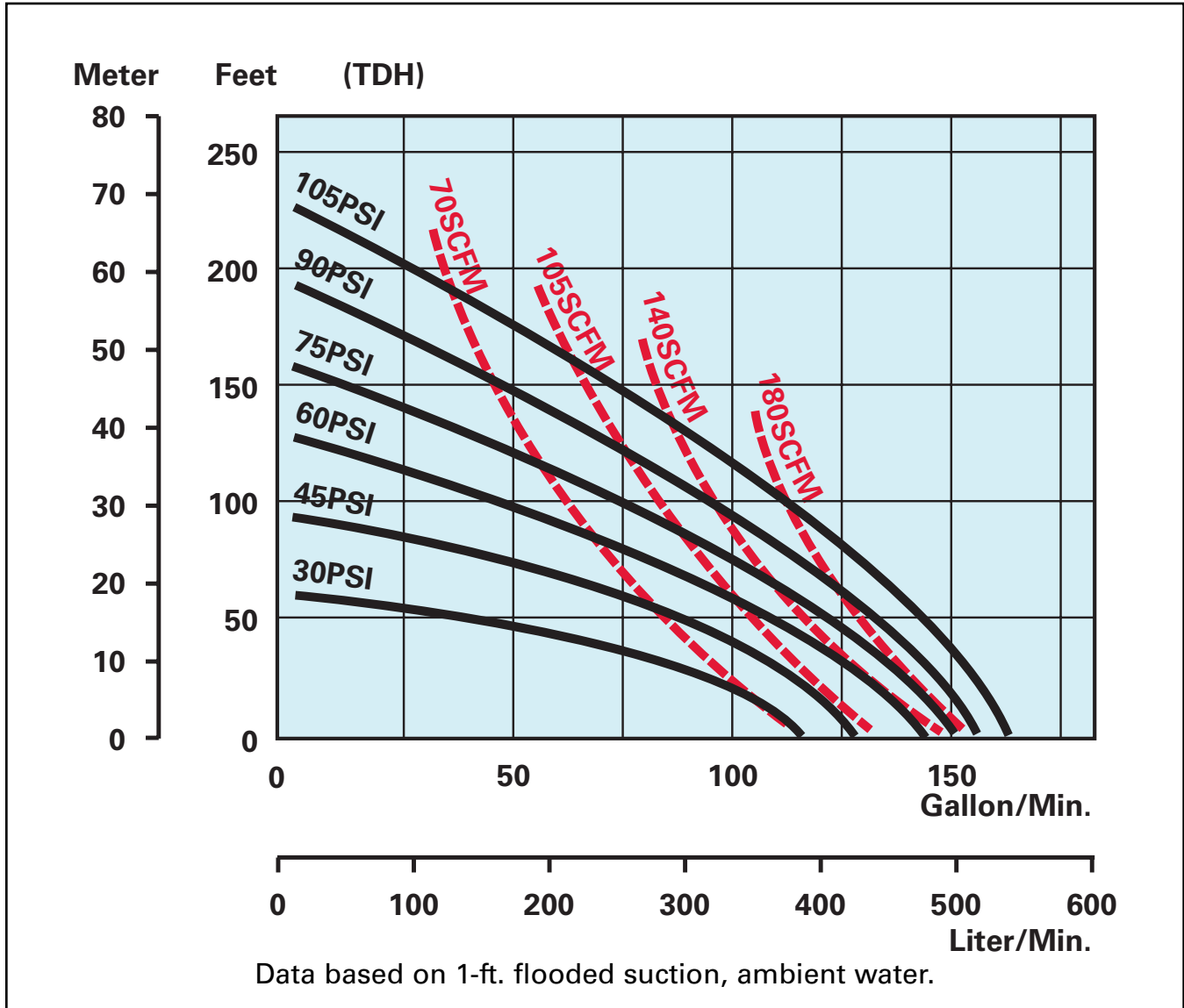
Rubber Diaphragm Performance Curve



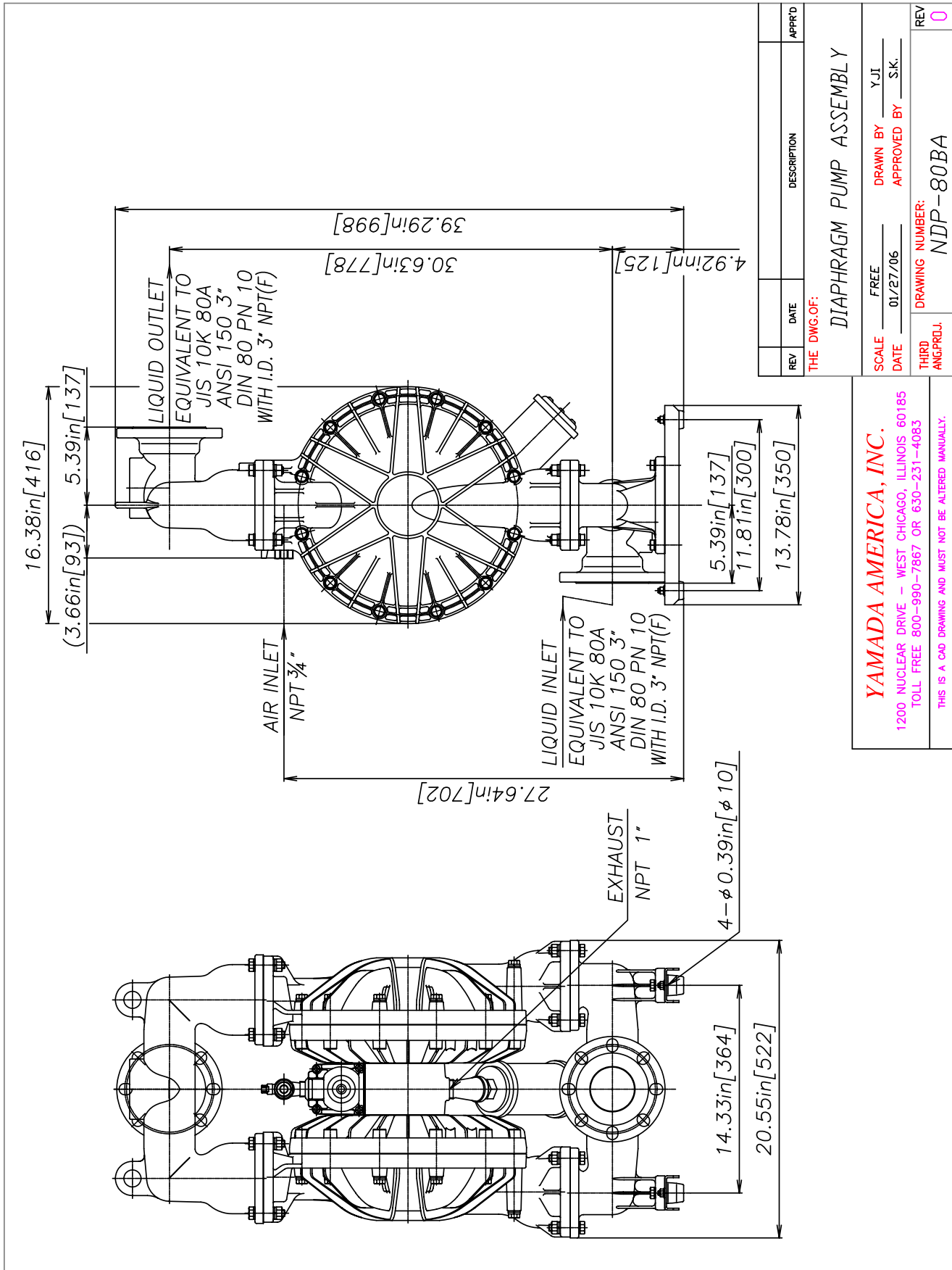
To calculate performance for Santoprene® and Hytrel®-fitted pumps, use Rubber Diaphragm Curve.

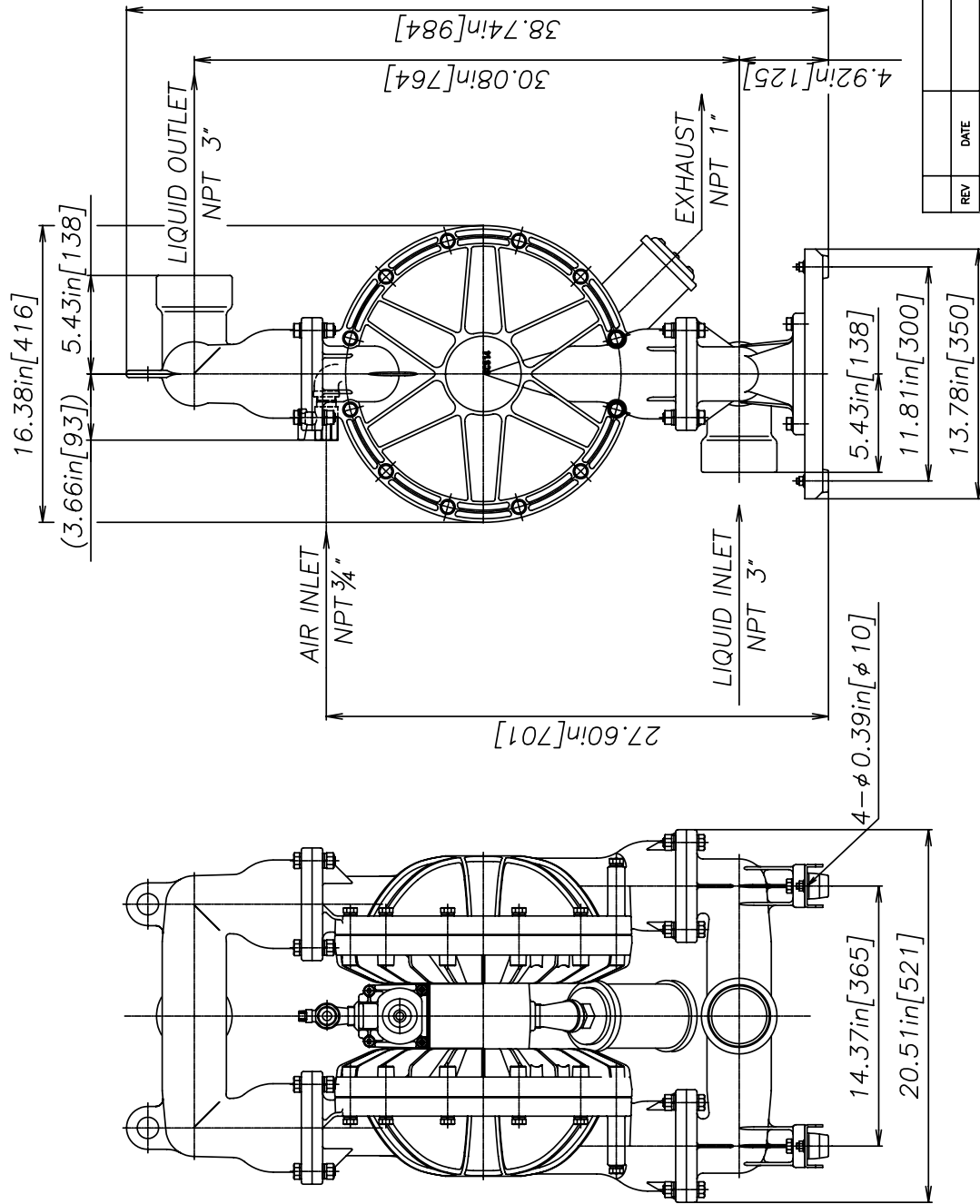
NDP-80 Performance Curve — PTFE

PTFE Diaphragm Performance Curve



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



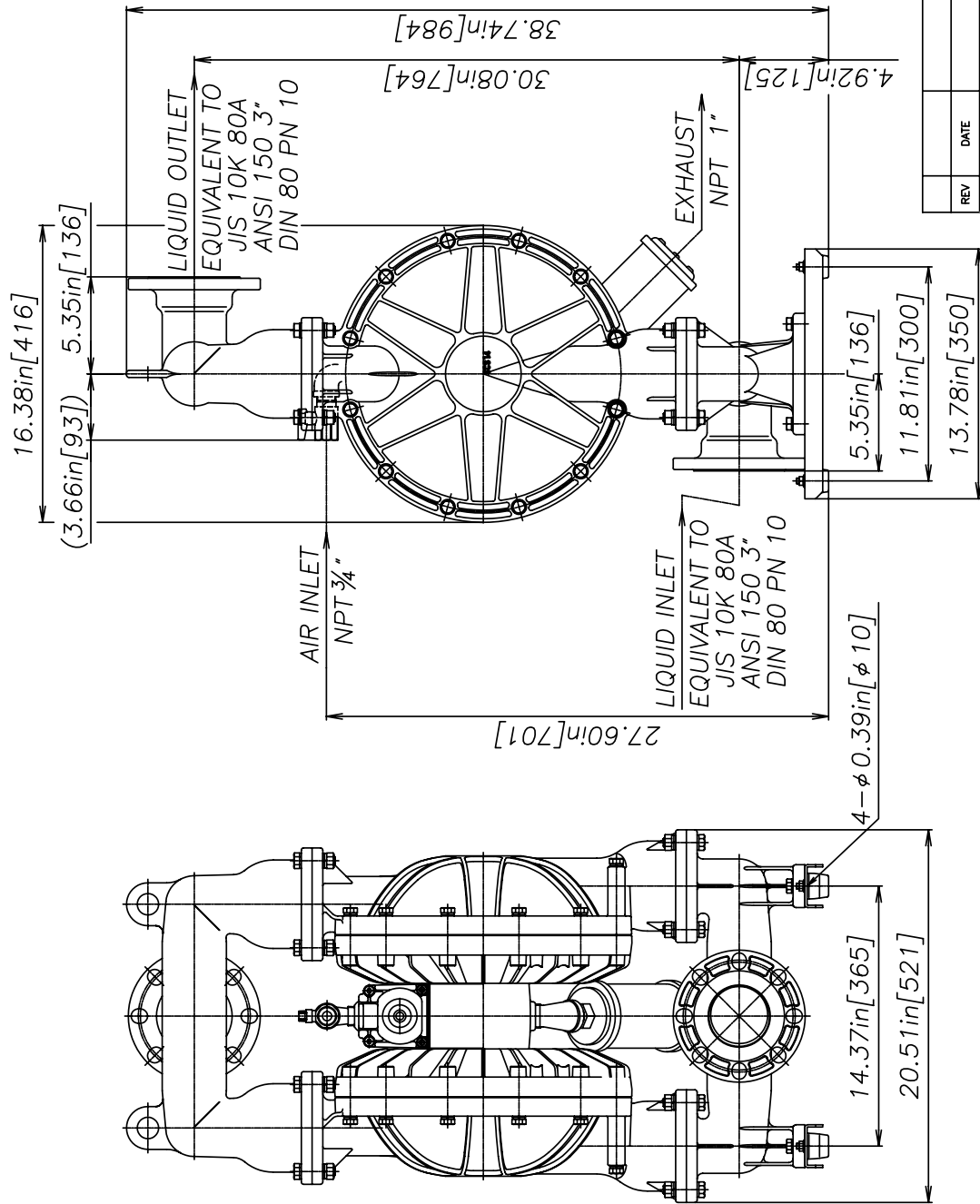


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THE DWG. OF:			
DIAPHRAGM PUMP ASSEMBLY			

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DATE	01/30/06	APPROVED BY	S.K.
THIRD ANG. PROJ.		DRAWING NUMBER:	NDP-80BS NPT
REV			0

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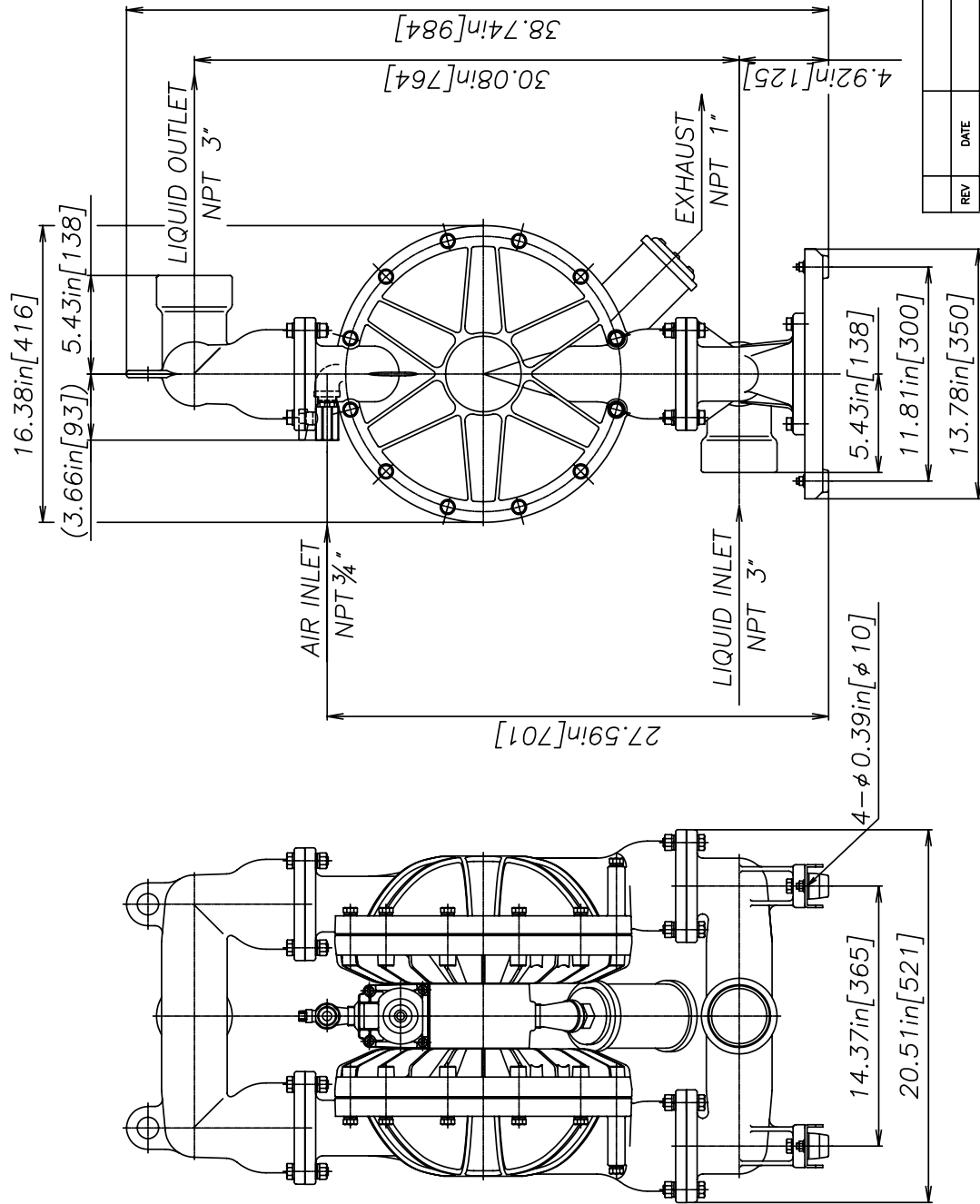


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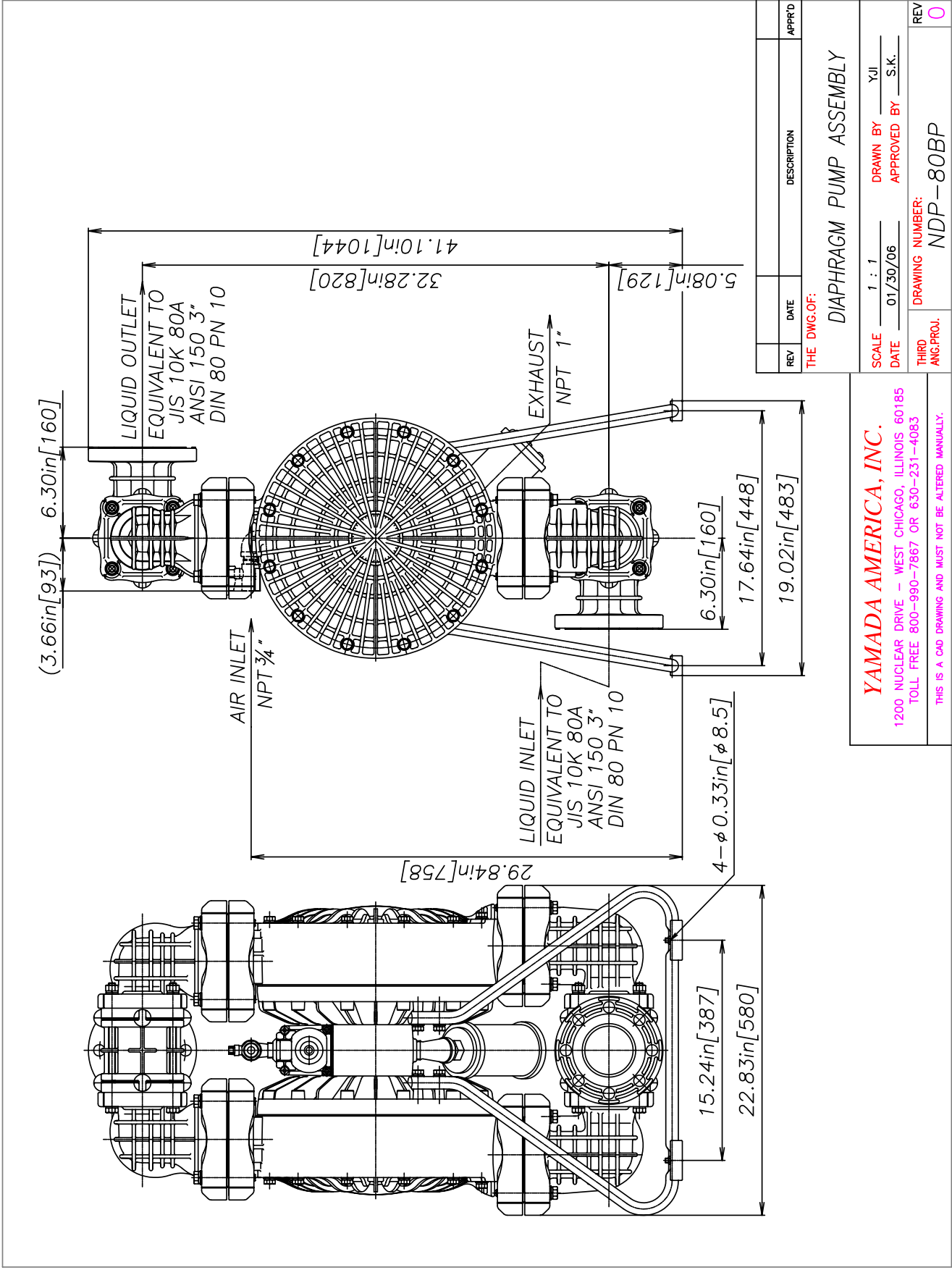


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