

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)	212°F (100°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

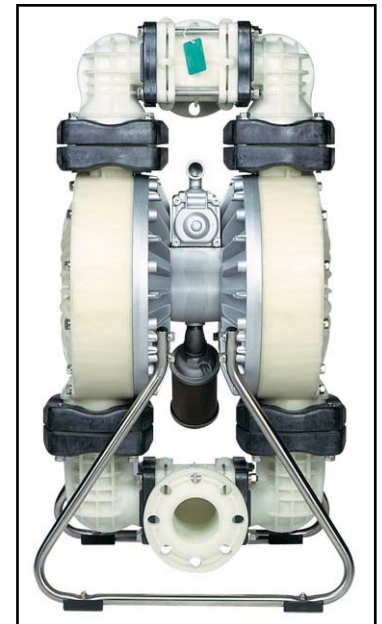
Rubber-fitted pump capability: 19-feet

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)

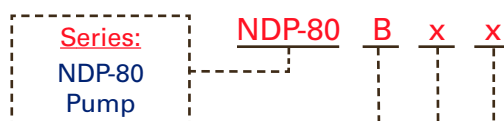
Shipping Wt.: Cast Iron–277 lbs.

SS –263 lbs.



Note: ANSI Flange available for Stainless Steel

Model Number Nomenclature



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.



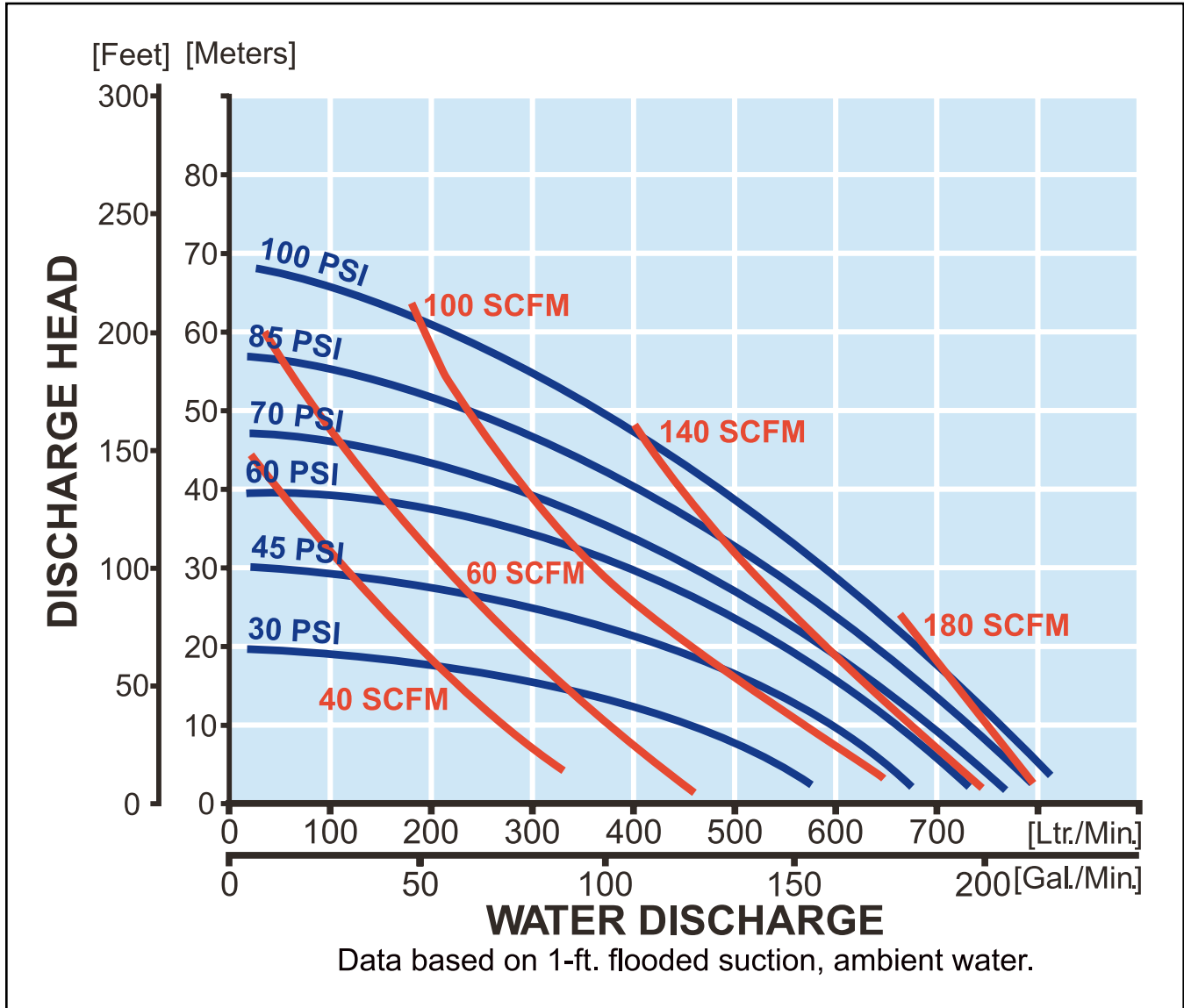
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E-mail: sales@yamadapump.com Web: yamadapump.com

NDP-80 Performance Curve — Rubber

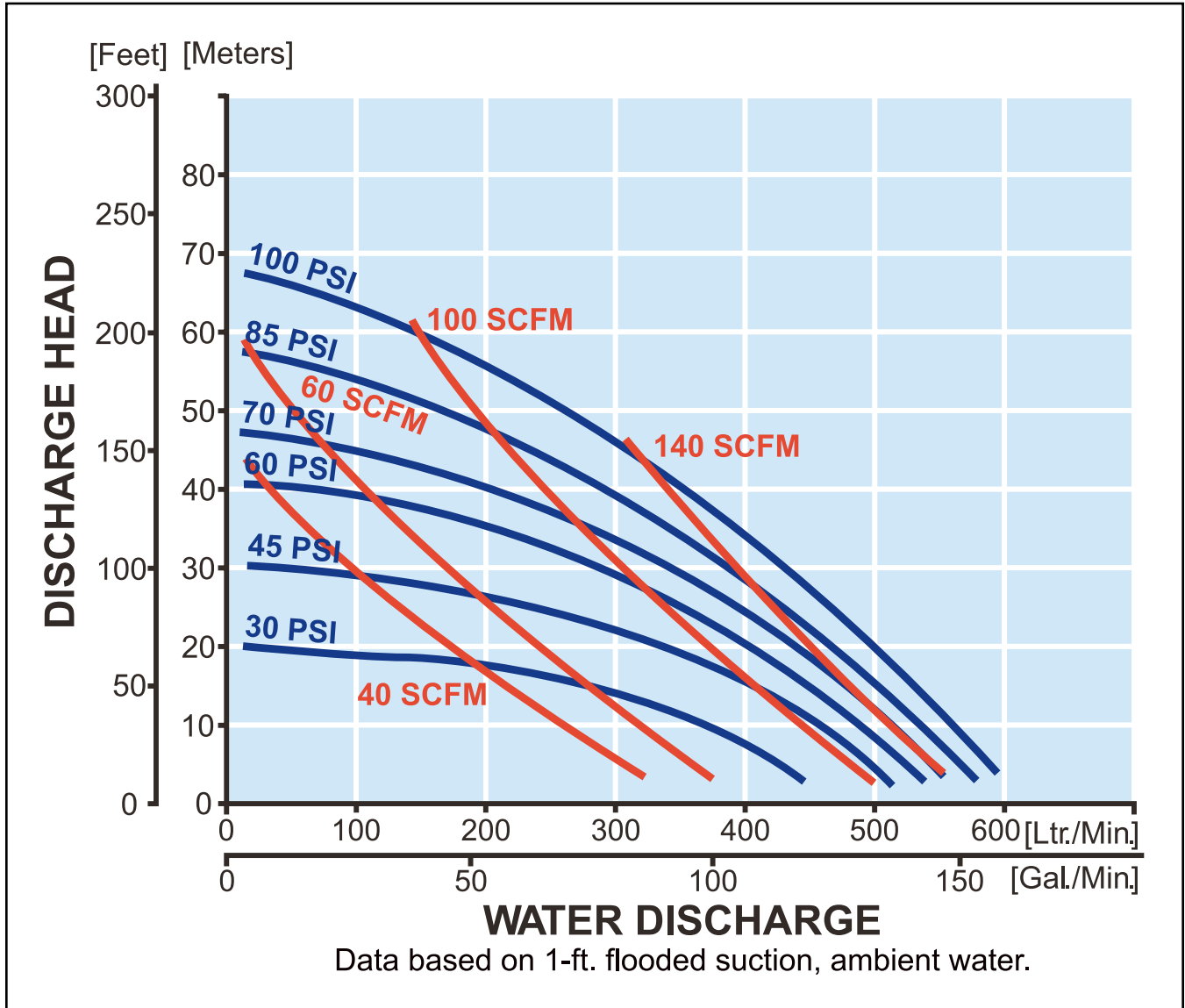
Rubber Diaphragm Performance Curve



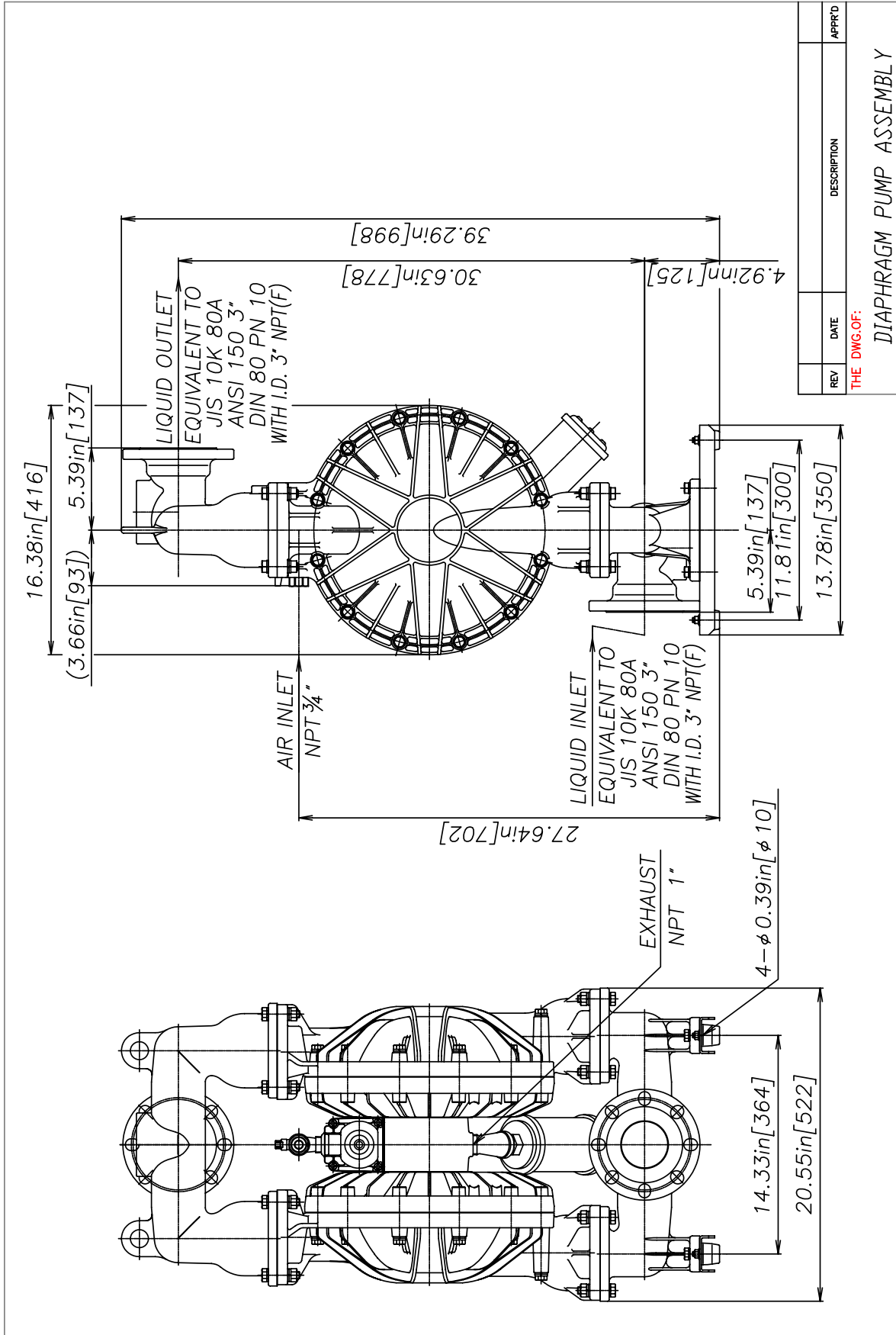
To calculate performance for Santoprene® and Hytrel®-fitted pumps, use Rubber Diaphragm Curve.

NDP-80 Performance Curve — PTFE

PTFE Diaphragm Performance Curve



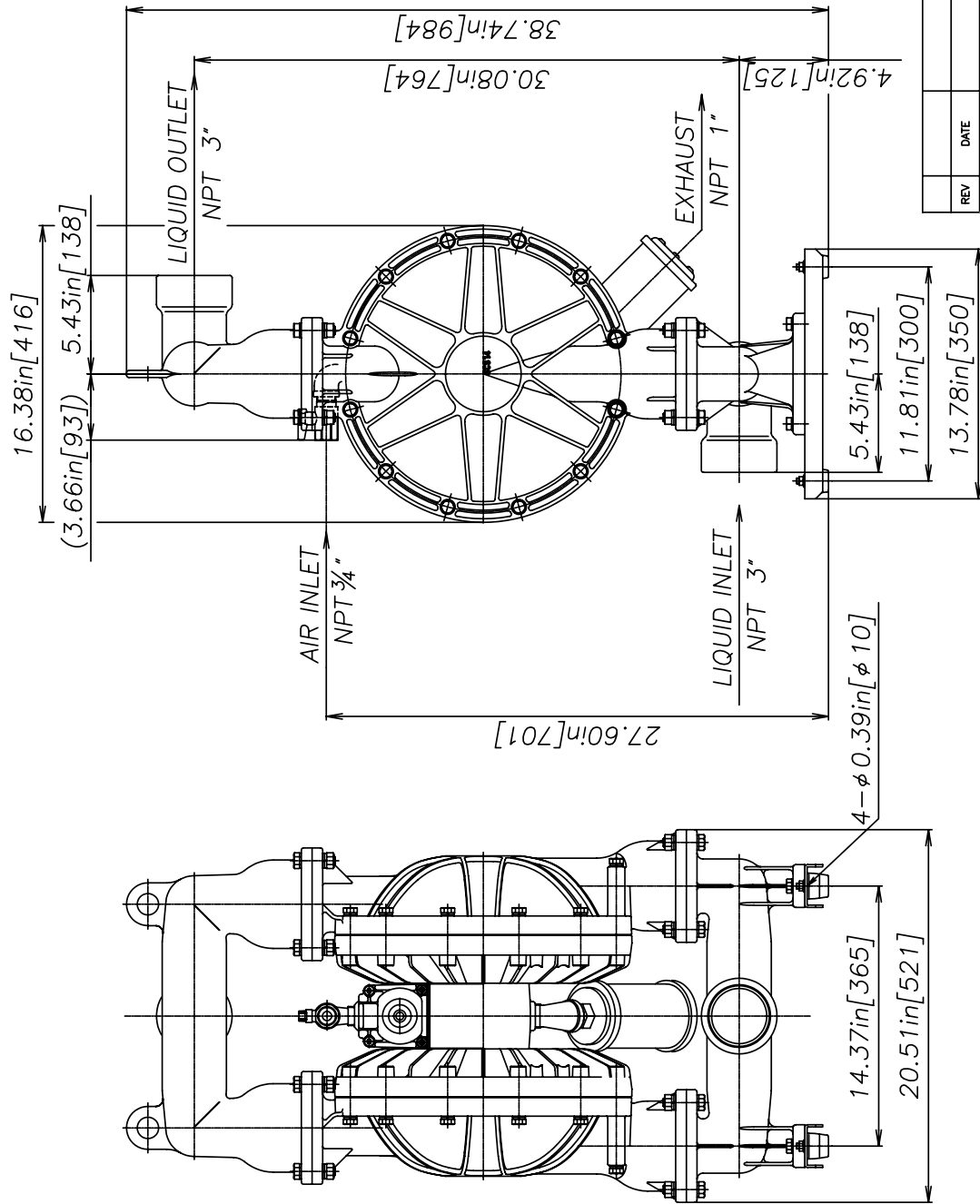
To calculate performance for Santoprene® and Hytrel®-fitted pumps, use Rubber Diaphragm Curve.



REV	DATE	DESCRIPTION	APPRD
THE DWG.OF:			
DIAPHRAGM PUMP ASSEMBLY			

SCALE	FREE	DRAWN BY	YJI
DATE	01/27/06	APPROVED BY	S.K.
THIRD ANG.PROJ.		DRAWING NUMBER:	NDP-80BA
REV			0

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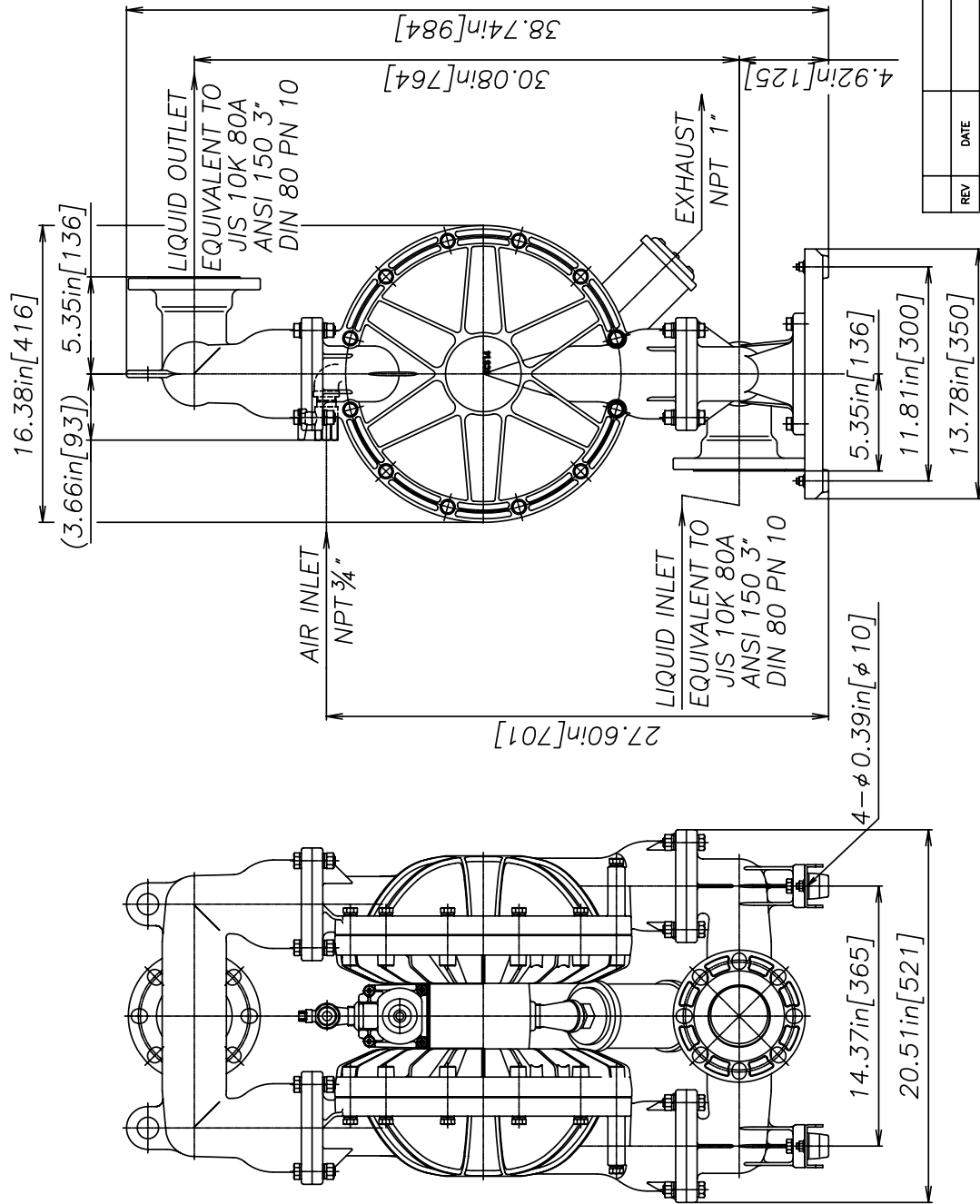


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THIRD ANG. PROJ.		DRAWING NUMBER:	NDP-80BS NPT
REV			0

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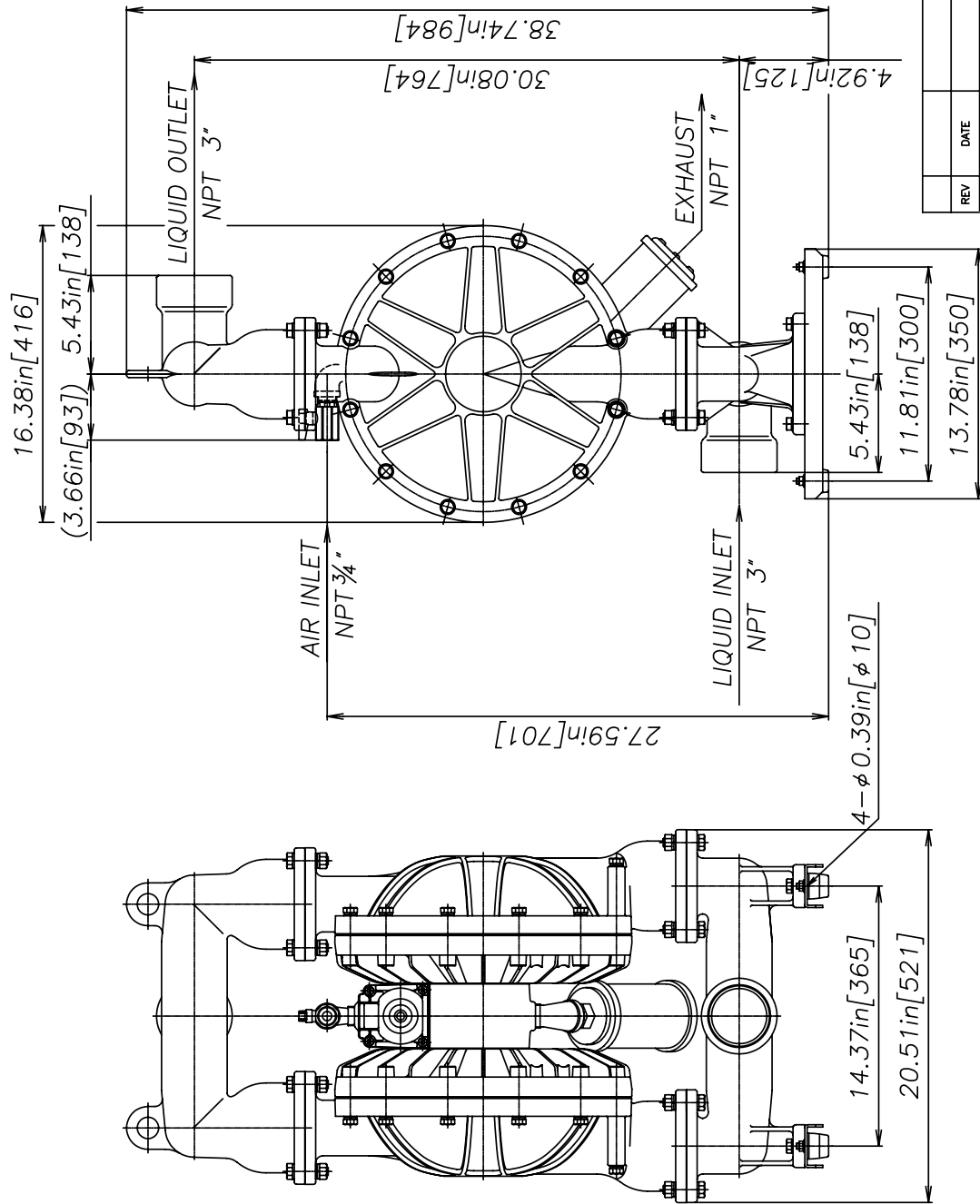


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THIRD ANG. PROJ.		DRAWING NUMBER:	NDP-80BS FLANGE 0

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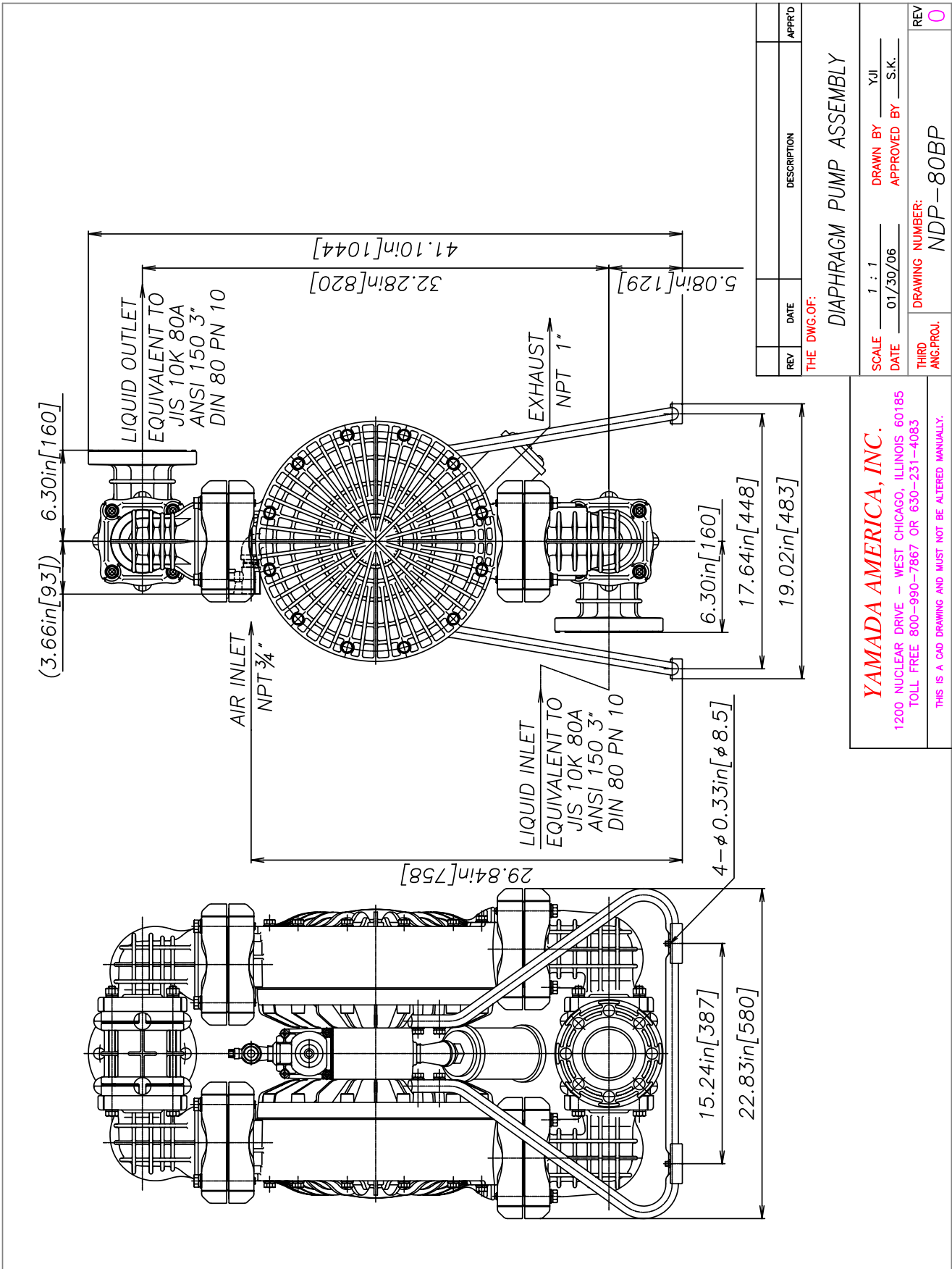
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SCALE 1 : 1
 DATE 01/30/06
 DRAWN BY YJJ
 APPROVED BY S.K.

THIRD ANGLE PROJ.
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