



NDP-80 Series Specifications

Port Dimensions

Intake & discharge connection:

Polypropylene (PPG)	3"80 mm DIN DN 80 PN 10
Aluminum (ADC-12)	3"80 mm ANSI B16.5 # 150 (with tapped 3"80 mm Female BSPT)
Stainless Steel (316)	3"80 mm DIN DN 80 PN 10 or 3"80 mm Female BSPT
Cast Iron	3"80 mm Female BSPT
Air inlet (incl. ball valve):	3/4"20 mm Female BSPT
Air exhaust (incl. silencer):	1" 25 mm Female BSPT

Notes: Flange connections are also equivalent to JIS 10K 80A and ANSI 150 3

Maximum Liquid Temperature*

Diaphragm Material	Temperature
Neoprene	82° C (180° F)
Buna N	82° C (180° F)
EPDM	100° C (212° F)
Hytrel® (TPEE)	120° C (248° F)
Santoprene® (TPO)	100° C (212° F)
Viton® fluoroelastomer	120° C (248° F)
Teflon® (PTFE)	100° C (212° F)

*The maximum liquid temperature for metal and Kynar®-fitted pumps is determined by the Elastomer (diaphragm material). Polypropylene and Grounddable Acetal pumps have a maximum liquid temperature of 82° C (180° F) regardless of diaphragm material.

Air Supply Pressure (All Models)

1,4 - 7 BAR (20 - 100 PSI)

Discharge Volume Per Cycle

Rubber diaphragm: 8,57 liters (2,26 US gallons)
PTFE diaphragm: 3,8 liters (1 US gallons)

Maximum Cycles Per Minute:

Rubber diaphragm: 95
PTFE: diaphragm: 160

Maximum Size Solid

10 mm (13/32")

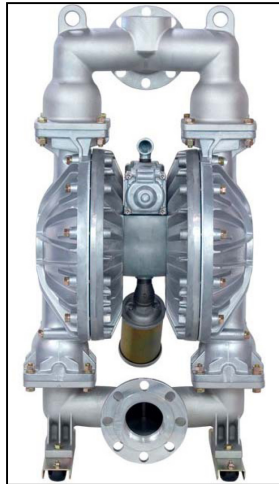
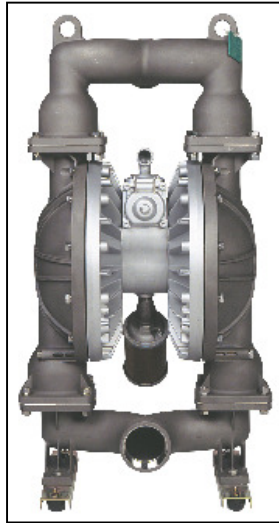
Maximum Dry Suction Lift

Rubber-fitted pump capability: 5,8 m (19 feet)

Aluminum Air Motor-Standard

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

Notes: Hytrel® - fitted pumps include PTFE check balls & wetted o-rings. Santoprene® - fitted pumps include EPDM check balls & wetted o-rings. AutoCAD® drawings are available on CDROM or at yamada-europe.com



Stainless Steel

Dimensions: 521 mm W x 984 mm H
Net Wt.: 104 kg (229 lbs.)
Shipping Wt.: 119 kg (262 lbs.)

Aluminum

Dimensions: 522 mm W x 998 mm H
Net Wt.: 62 kg (137 lbs.)
Shipping Wt.: 77 kg (170 lbs.)

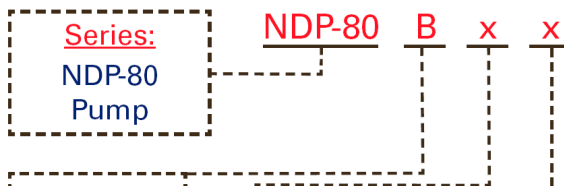
Cast Iron - NPT

Dimensions: 521 mm W x 984 mm H
Net Wt.: 110 kg (243 lbs.)
Shipping Wt.: 125 kg (276 lbs.)

Polypropylene

Dimensions: 580 mm W x 1044 mm H
Net Wt.: 70 kg (154 lbs.)
Shipping Wt.: 85 kg (187 lbs.)

Model Number Nomenclature

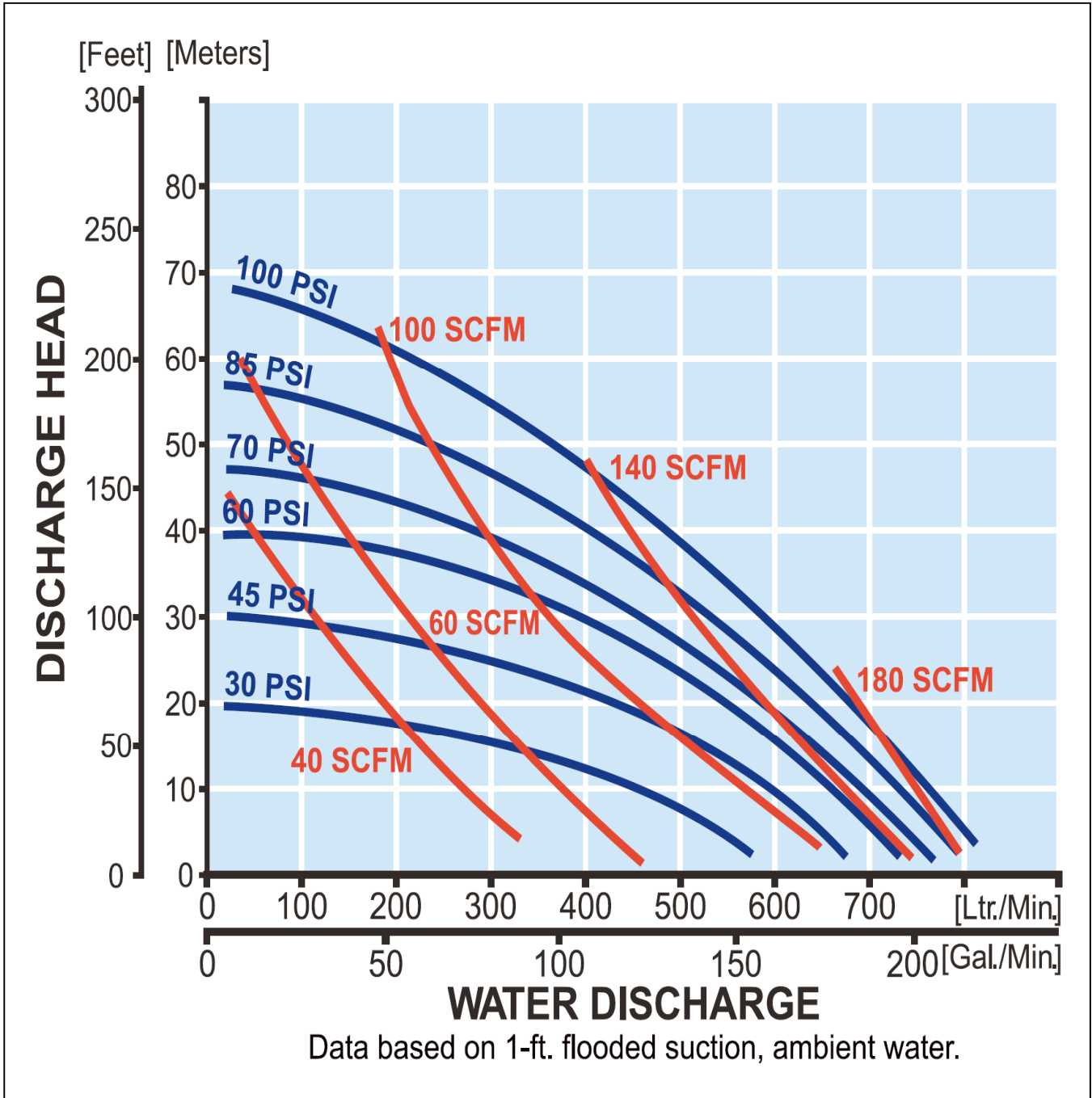


Note: For NPT-fitted Stainless Steel, add "NPT" at end of model number nomenclature.



NDP-80 Performance Curve - Rubber

All Diaphragm Materials

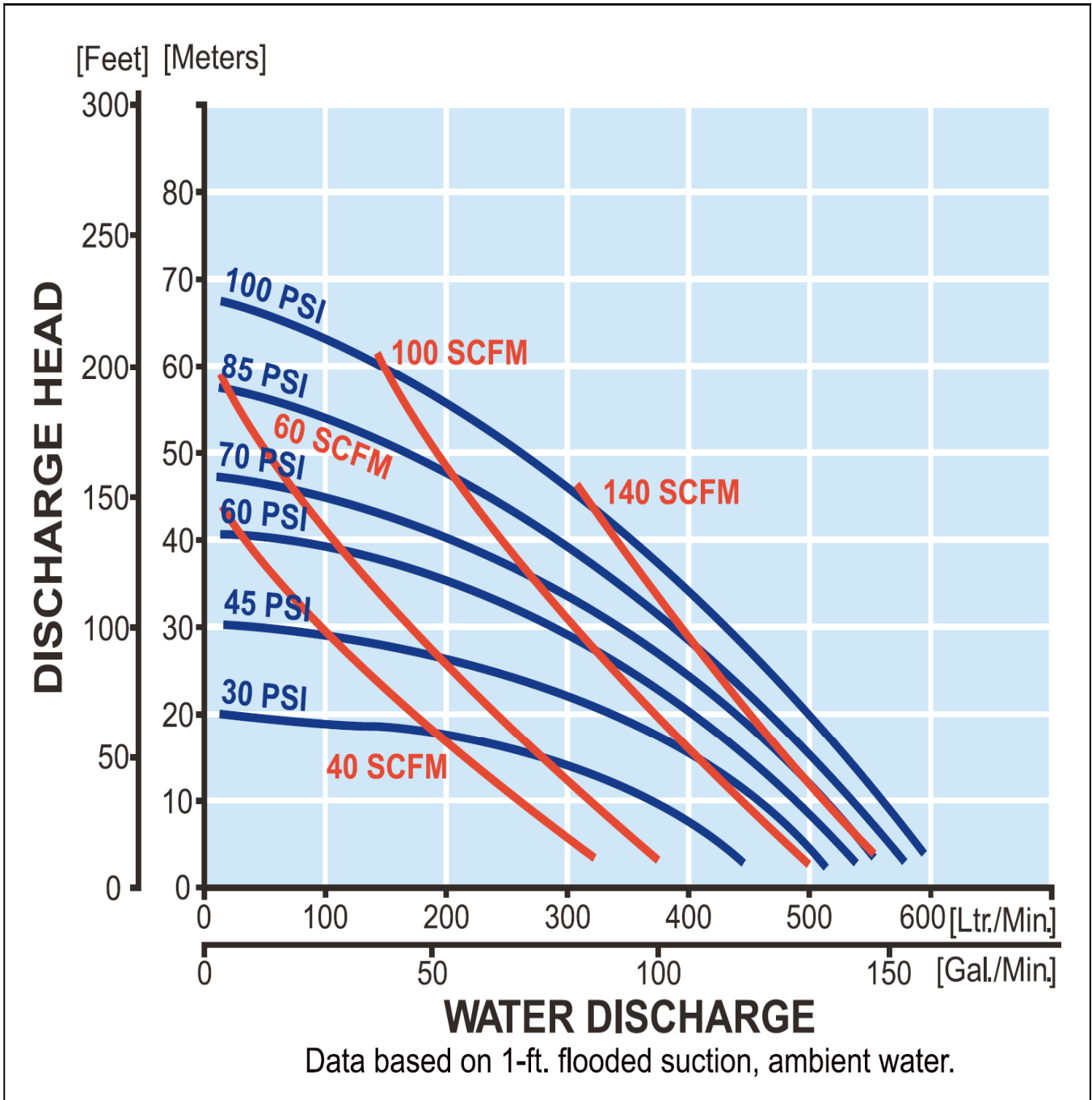


To calculate performance for Santoprene® and Hytrel®-fitted pumps, use Rubber Diaphragm Curve.

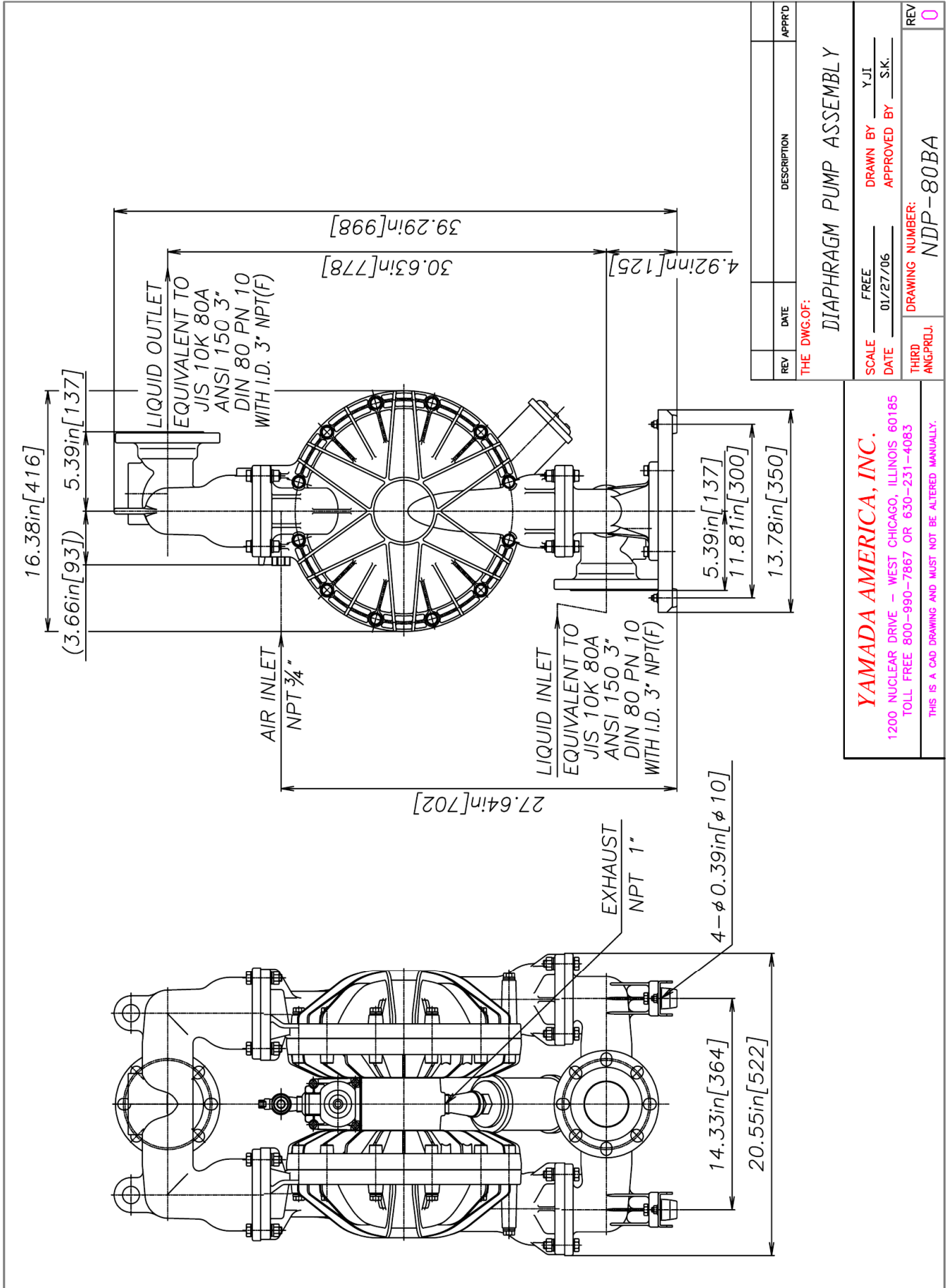


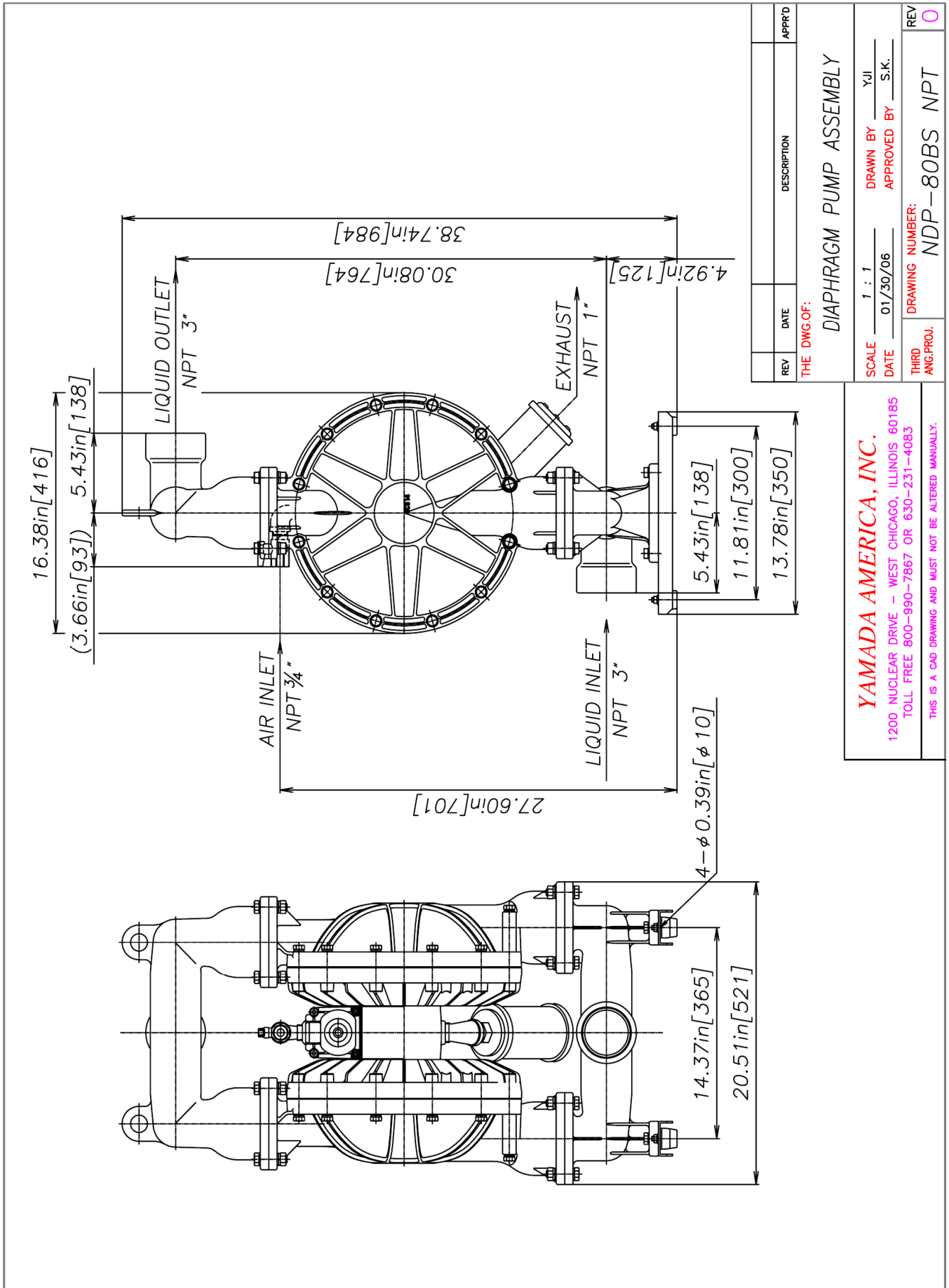
NDP-80 Performance Curve - PTFE

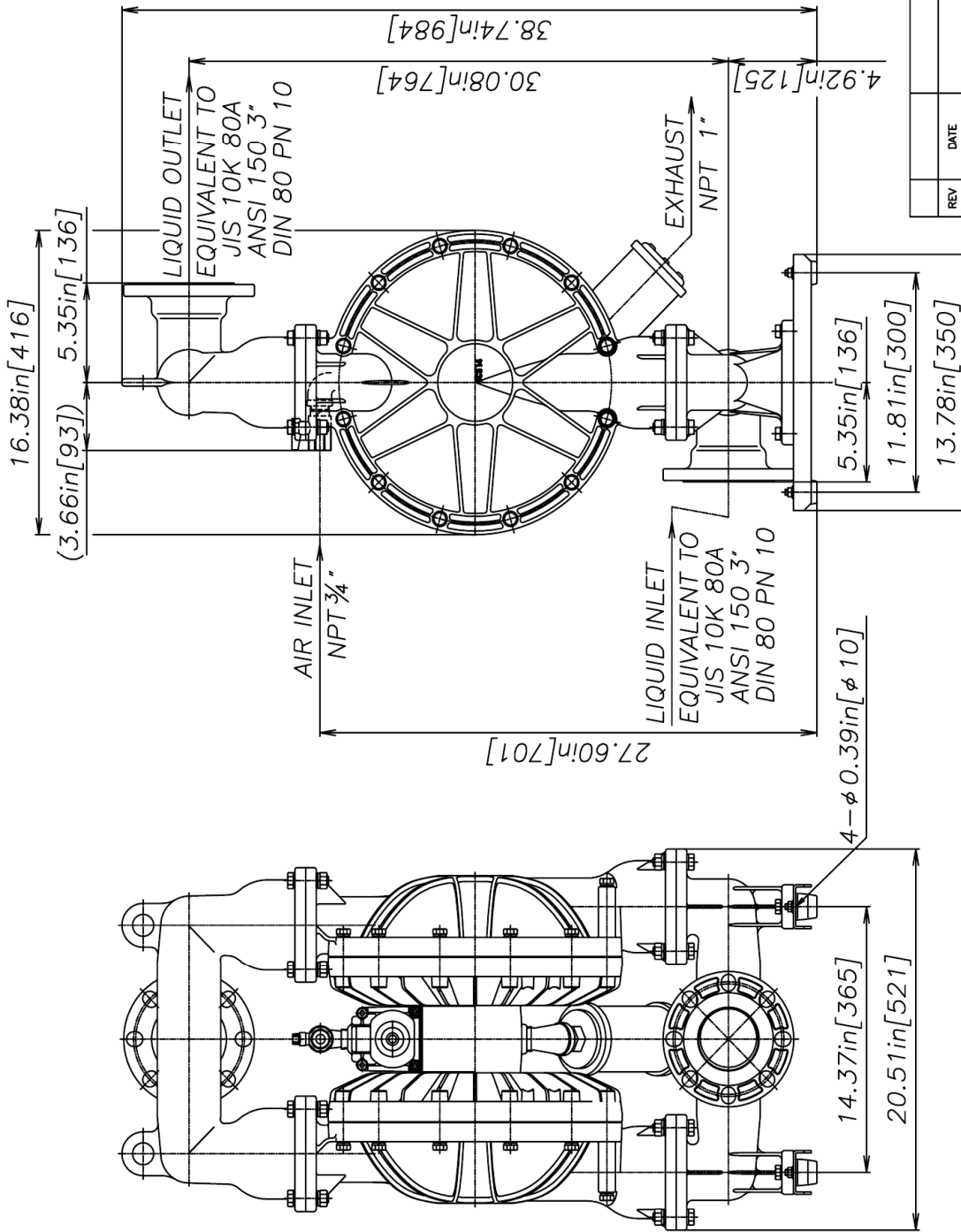
All Diaphragm Materials



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







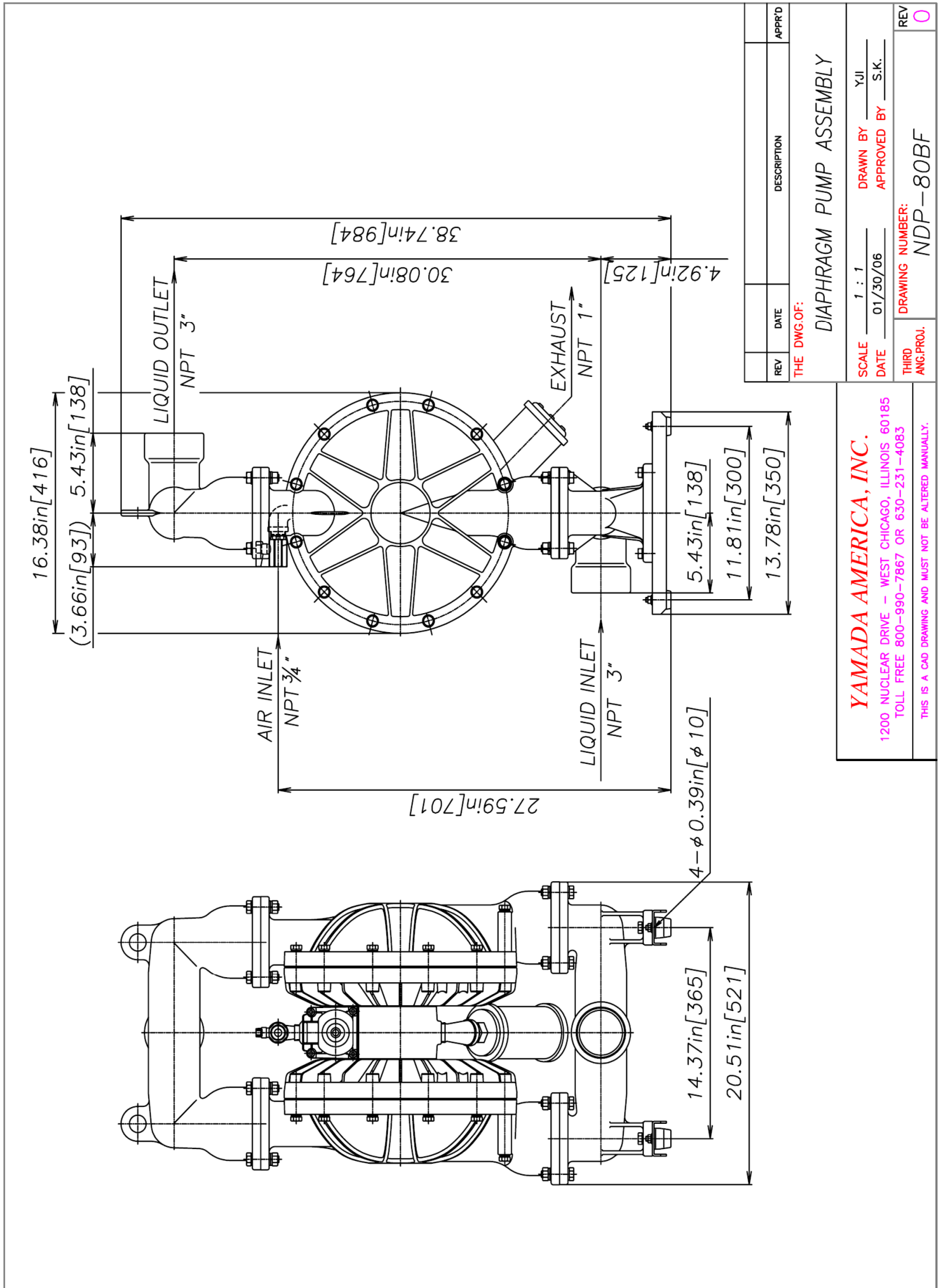
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THE DWG.OF: **DIAPHRAGM PUMP ASSEMBLY**

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

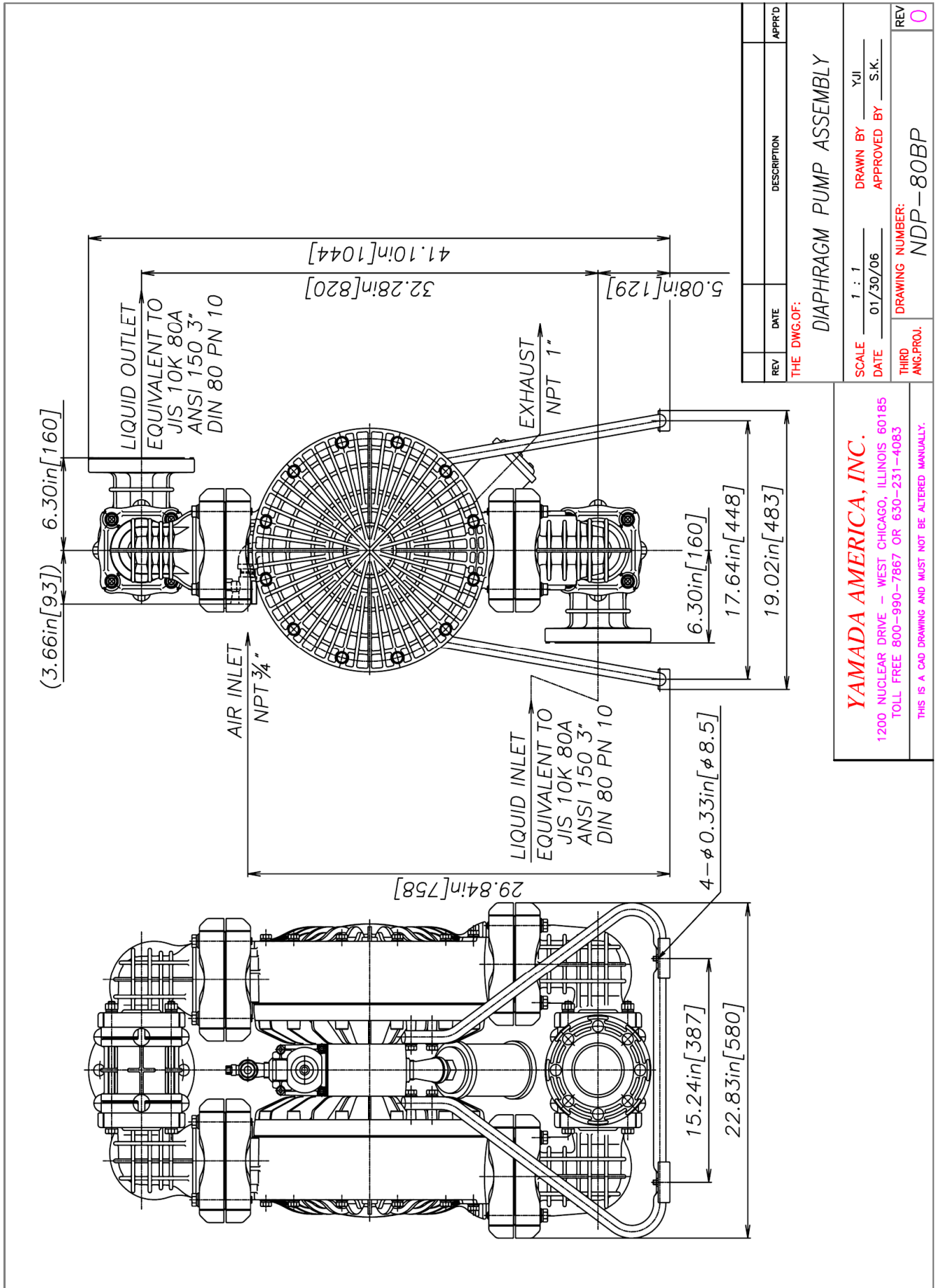
THIRD ANG.PROJ. DRAWING NUMBER: **NDP-80BS FLANGE** REV: **0**

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DIAPHRAGM PUMP ASSEMBLY			
SCALE	1 : 1	DRAWN BY	YJI
DATE	01/30/06	APPROVED BY	S.K.
THIRD ANG.PROJ.	DRAWING NUMBER:	NDP-80BF	
REV	0		

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SCALE: 1 : 1 DRAWN BY: YJI
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THIRD ANG.PROJ. DRAWING NUMBER: **NDP-80BP** REV: **0**

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