



NDP-50 Series Specifications

Port Dimensions

Intake & discharge connection:

Polypropylene (PPG)	2"50mm DIN DN80 PN10
Kynar®(PVDF)	2"50mm DIN DN80 PN10
Aluminum (ADC-12)	2"50mm DIN DN80 PN10 (with tapped 2"50mm Female BSPT)
Stainless Steel (316)	2"50mm DIN DN80 PN10 or 2"50mm Female BSPT
Cast Iron	2"40mm Female BSPT
Air inlet (incl. ball valve):	3/4"20mm Female BSPT
Air exhaust (incl. silencer):	1" 25mm Female BSPT

Notes: Flange connections are also equivalent to JIS 10K 50A and ANSI 150 2

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: 4,25 liters (1,12 US gallons)
PTFE diaphragm: 2,61 liters (0,69US gallons)

Maximum Cycles Per Minute:

Rubber diaphragm: 146
PTFE: diaphragm: 220

Maximum Size Solid

8 mm (5/16")

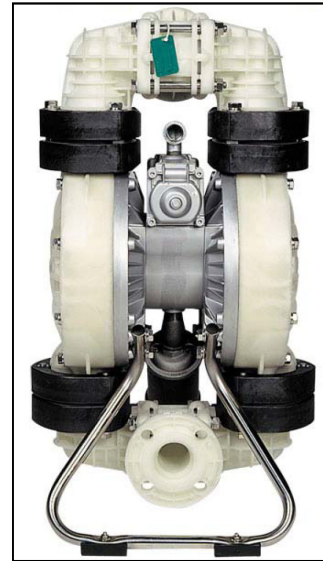
Maximum Dry Suction Lift

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

Aluminum Air Motor-Standard

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

All Polypropylene, Aluminum, Cast Iron, and SS Hytrel® fitted pumps include PTFE check balls & wetted o-rings and Santoprene® fitted pumps include EPDM check balls & wetted o-rings. Kynar® (PVDF) pumps fitted with Santoprene®, Hytrel®, 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.



Cast Iron

Dimensions: 450 mm W x 776 mm H
Net Wt.: 64 kg (141 lbs.)
Shipping Wt.: 76 kg (168 lbs.)

Aluminum

Dimensions: 452 mm W x 779 mm H
Net Wt.: 36 kg (79 lbs.)
Shipping Wt.: 48 kg (106 lbs.)

Stainless Steel

Dimensions: 450 mm W x 782 mm H
Net Wt.: 63 kg (139 lbs.)
Shipping Wt.: 75 kg (165 lbs.)

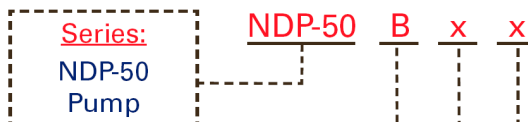
Polypropylene

Dimensions: 472 mm W x 821 mm H
Net Wt.: 37 kg (82 lbs.)
Shipping Wt.: 49 kg (108 lbs.)

Kynar® (PVDF)

Dimensions: 472 mm W x 821 mm H
Net Wt.: 42 kg (93 lbs.)
Shipping Wt.: 54 kg (119 lbs.)

Model Number Nomenclature



Valve Type:

B = Ball

Body Material:

P = Polypropylene
V = Kynar® (PVDF)
A = Aluminum
S = Stainless Steel
F = Cast Iron

Diaphragm Material:

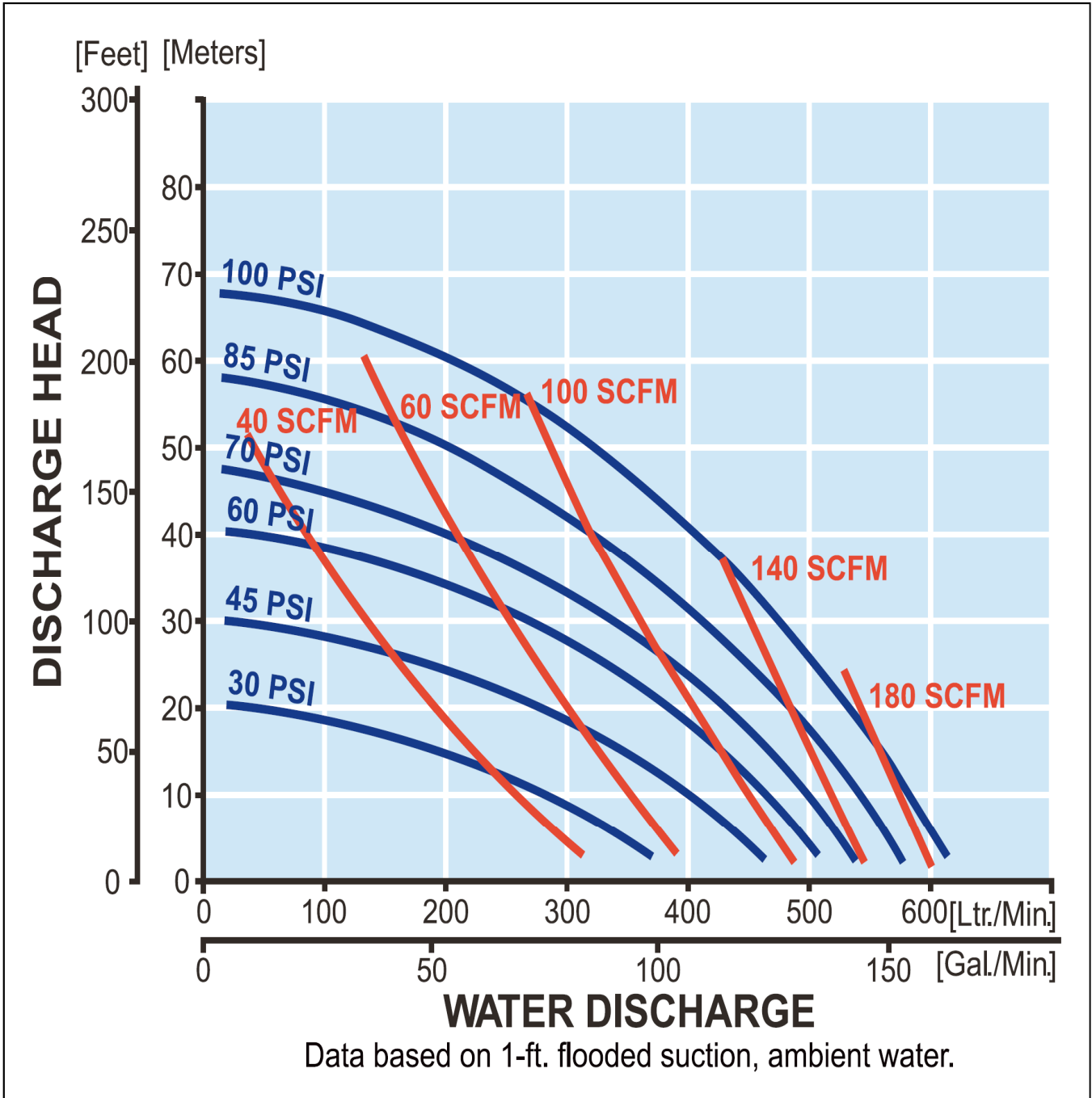
C = Neoprene (CR)
N = Buna N (NBR)
E = Nordel™ (EPDM)
S = Santoprene® (TPO)
T = Teflon® (PTFE)
V = Viton® (FKM)
H = Hytrel® (TPE)

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



NDP-50 Performance Curve - Rubber

All Diaphragm Materials

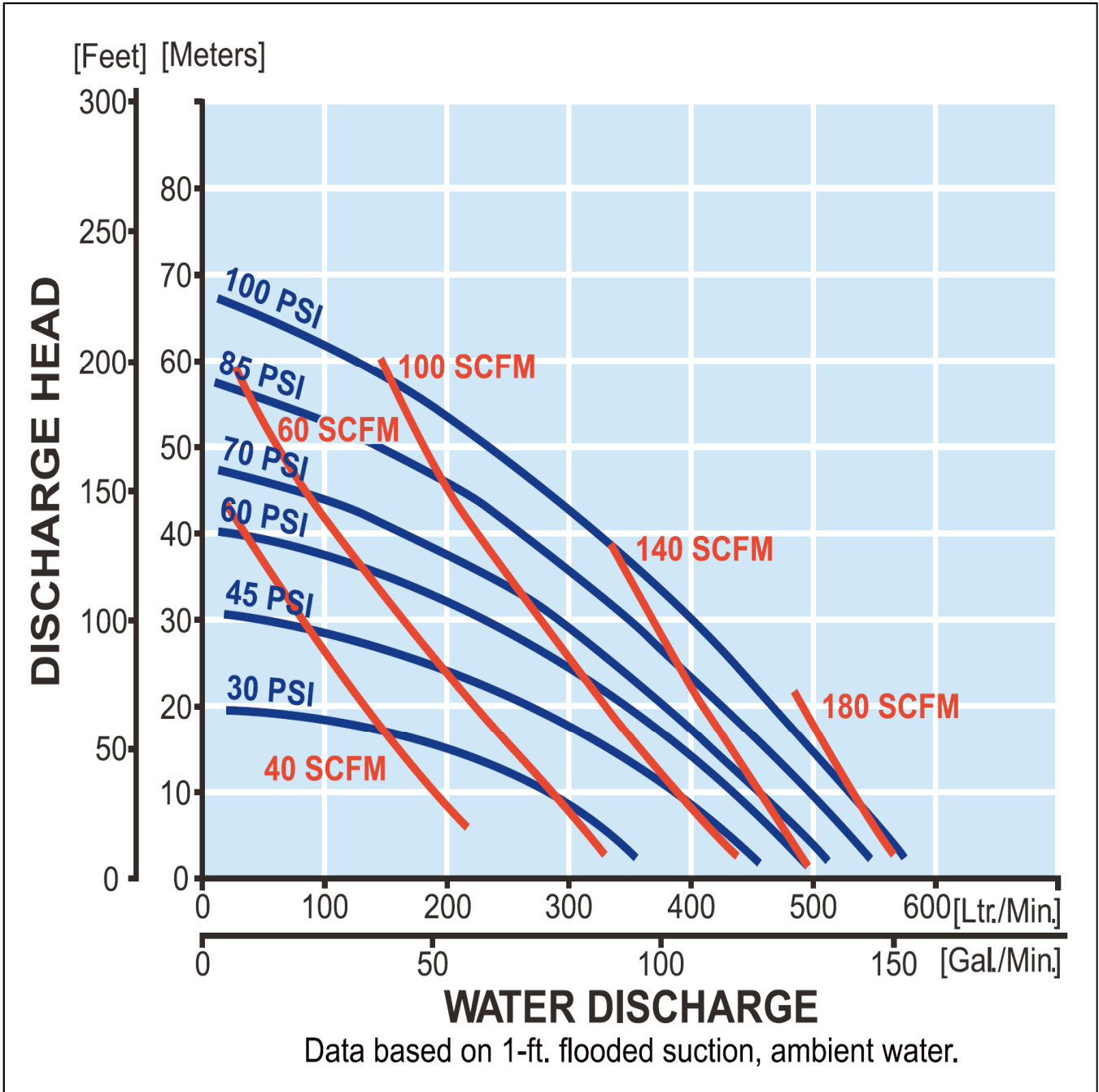


To calculate performance for Santoprene® and Hytrel®-fitted pumps, use Rubber Diaphragm Curve.

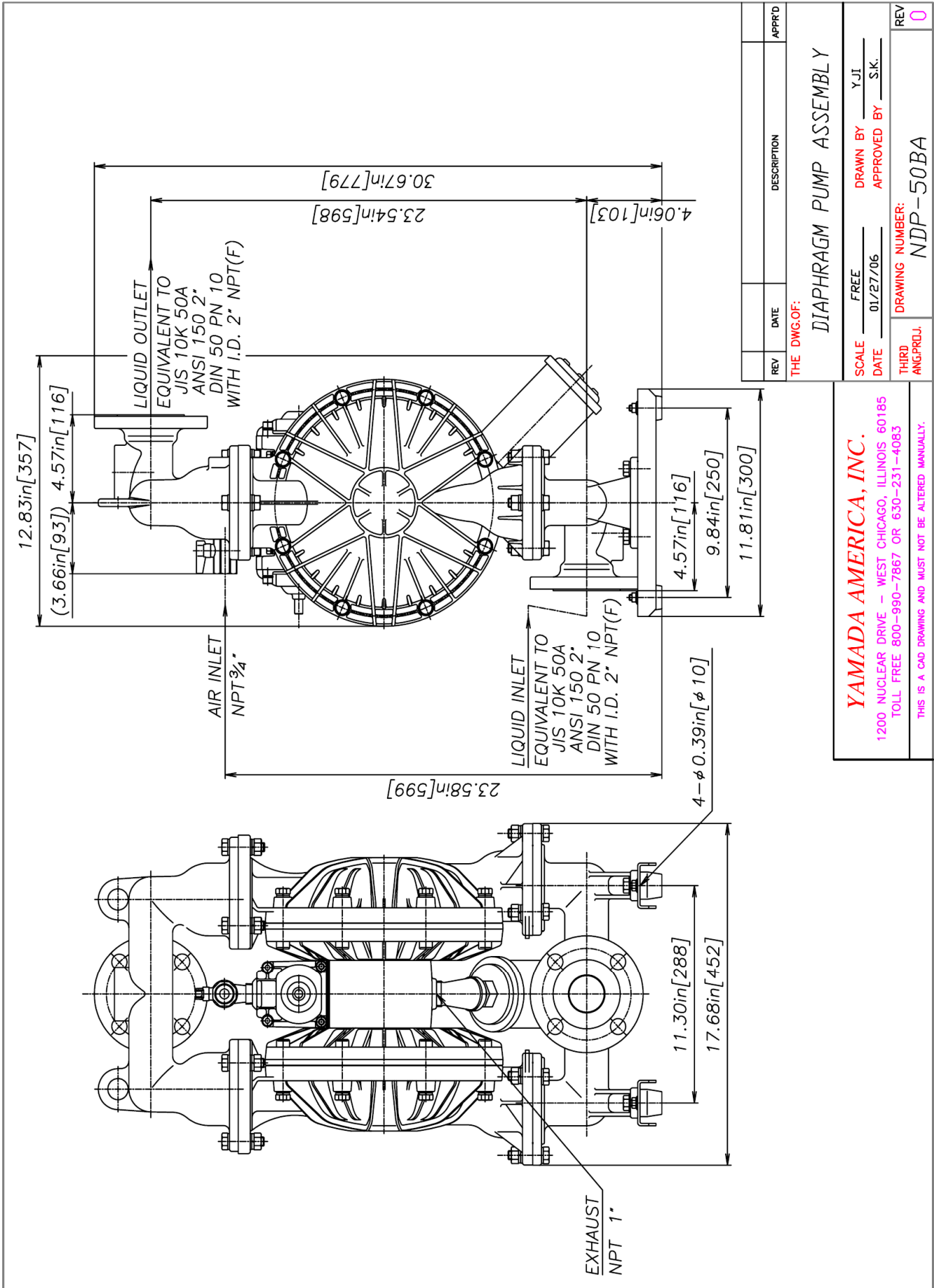


NDP-50 Performance Curve - PTFE

All Diaphragm Materials



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

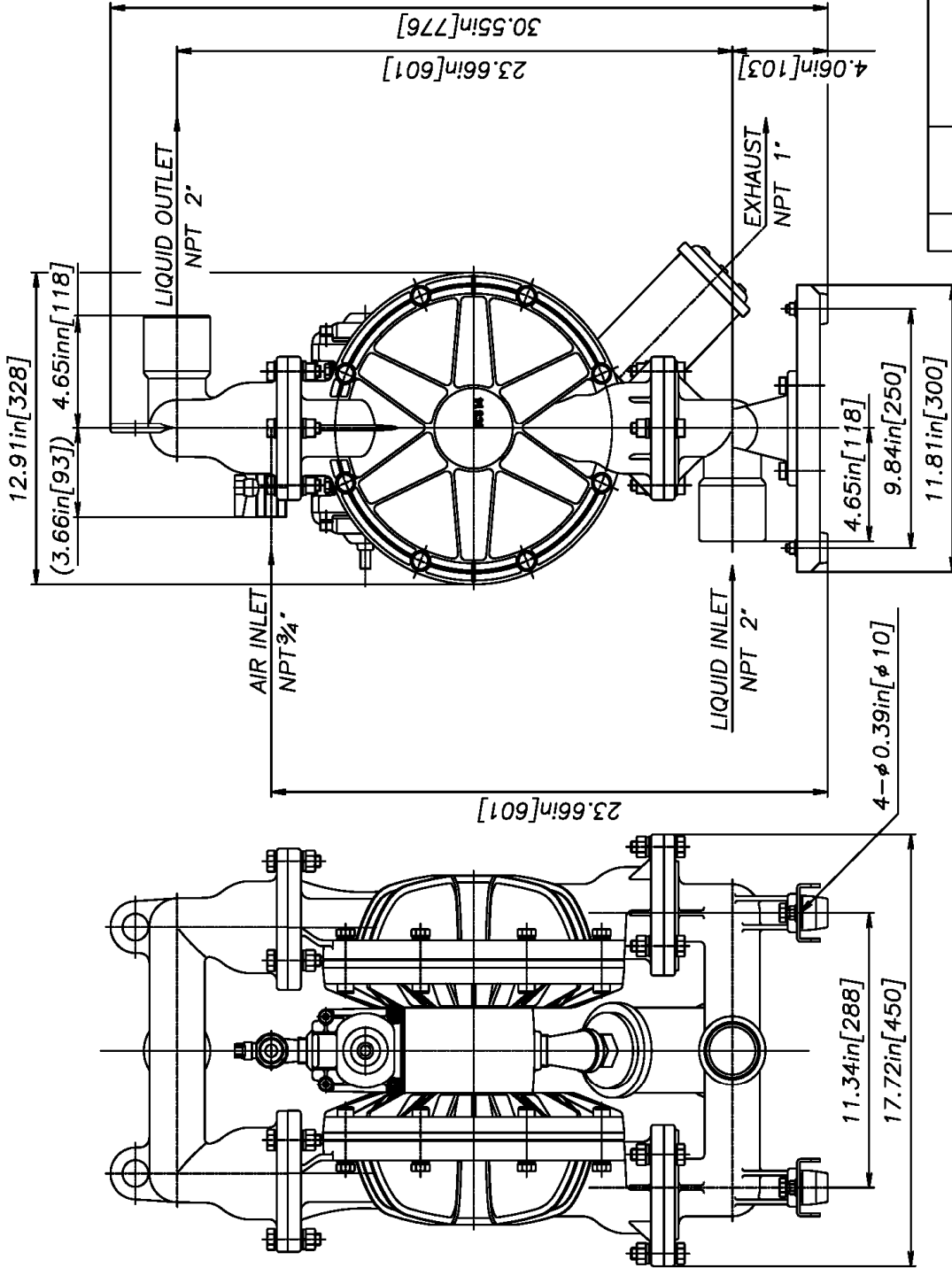


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 DATE: 01/27/06 APPROVED BY: S.K.
 THRD: DRAWING NUMBER: NDP-50BA
 ANG.PROJ. REV: 0

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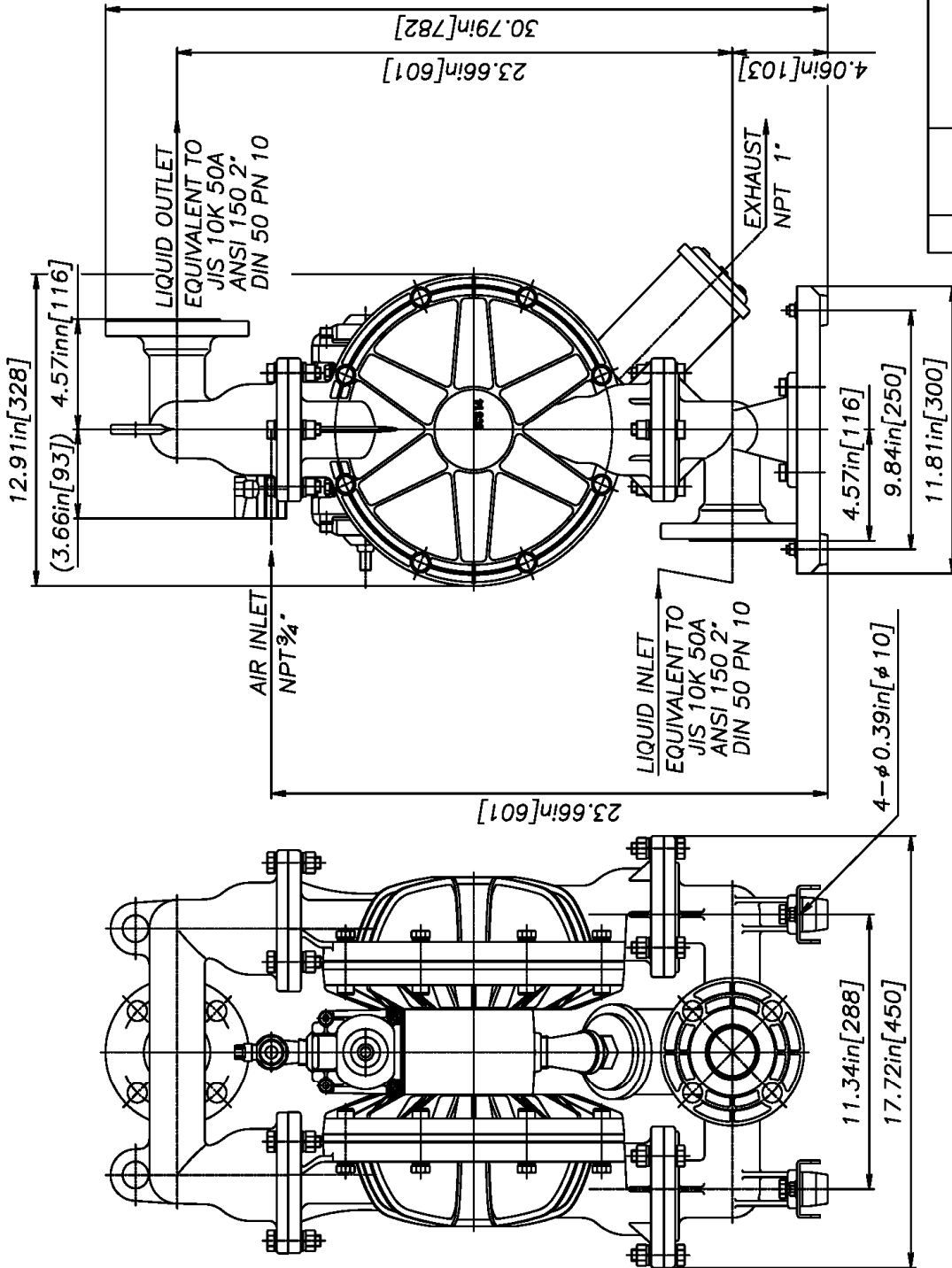
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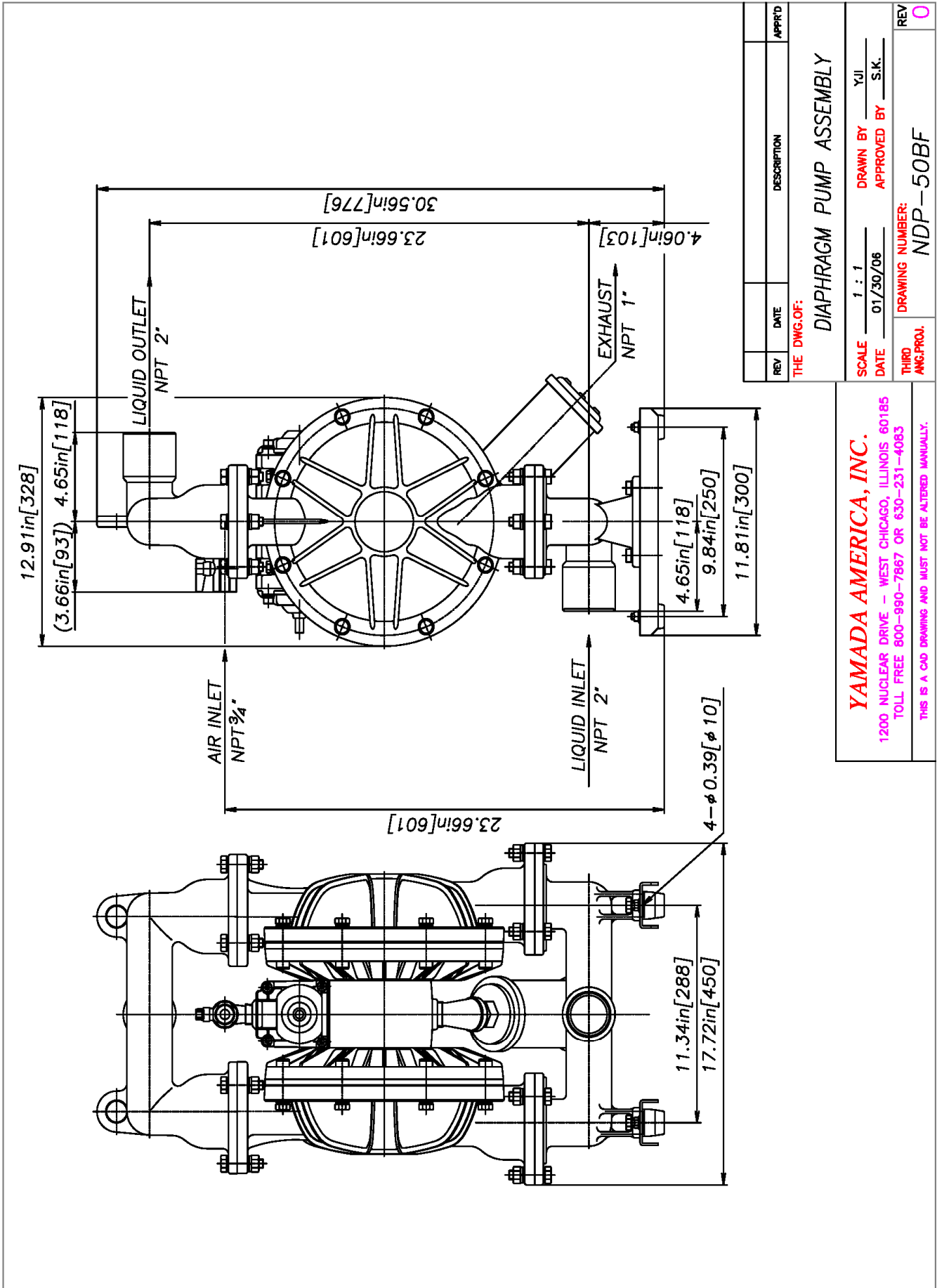
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DIAPHRAGM PUMP ASSEMBLY			
SCALE 1 : 1		DRAWN BY YJI	
DATE 01/30/06		APPROVED BY S.K.	
THIRD ANG. PROJ.	DRAWING NUMBER:	NDP-50BS FLANGE 0	

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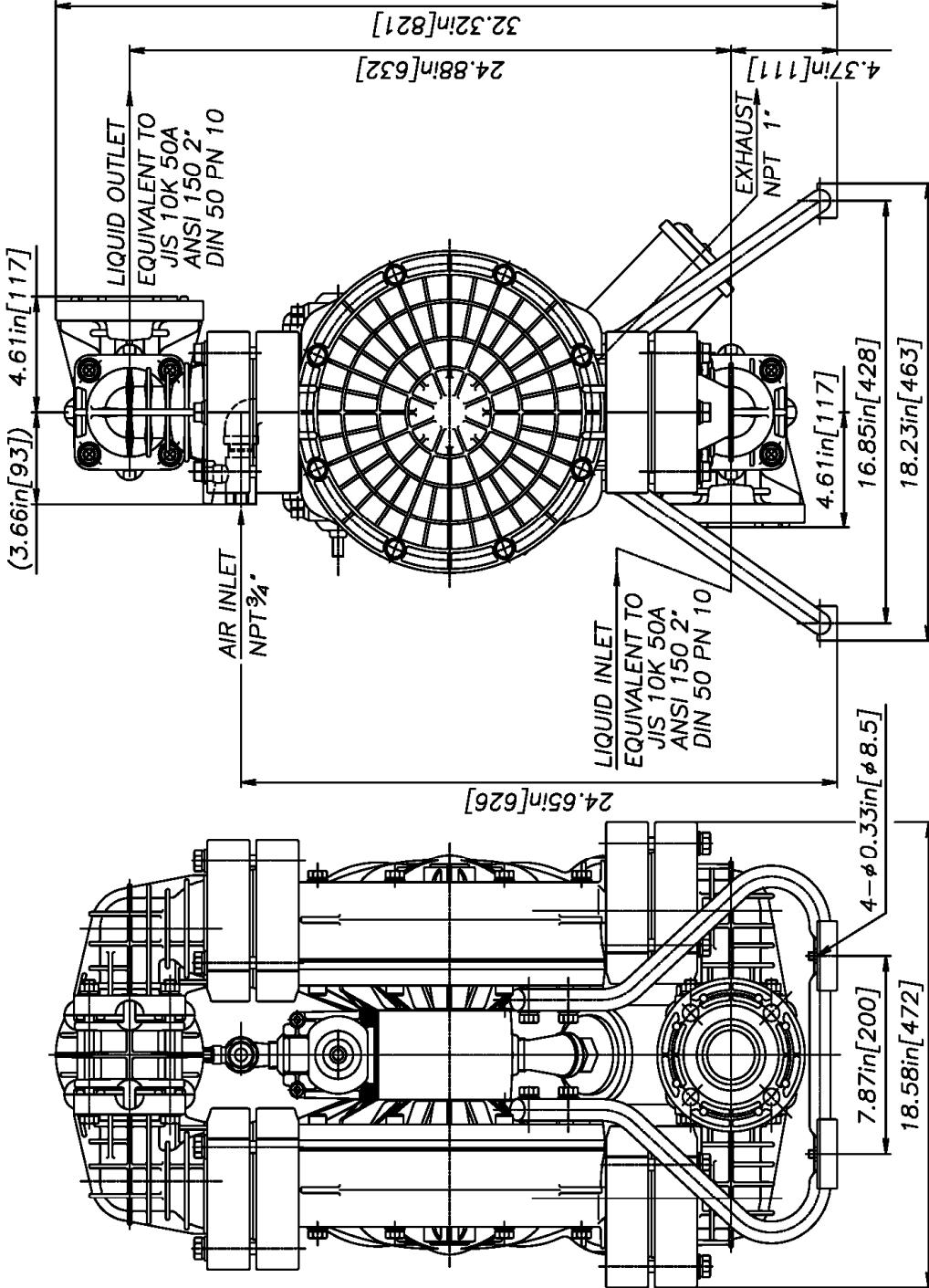
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THIRD ANG. PROJ. DRAWING NUMBER: **NDP-50BF**

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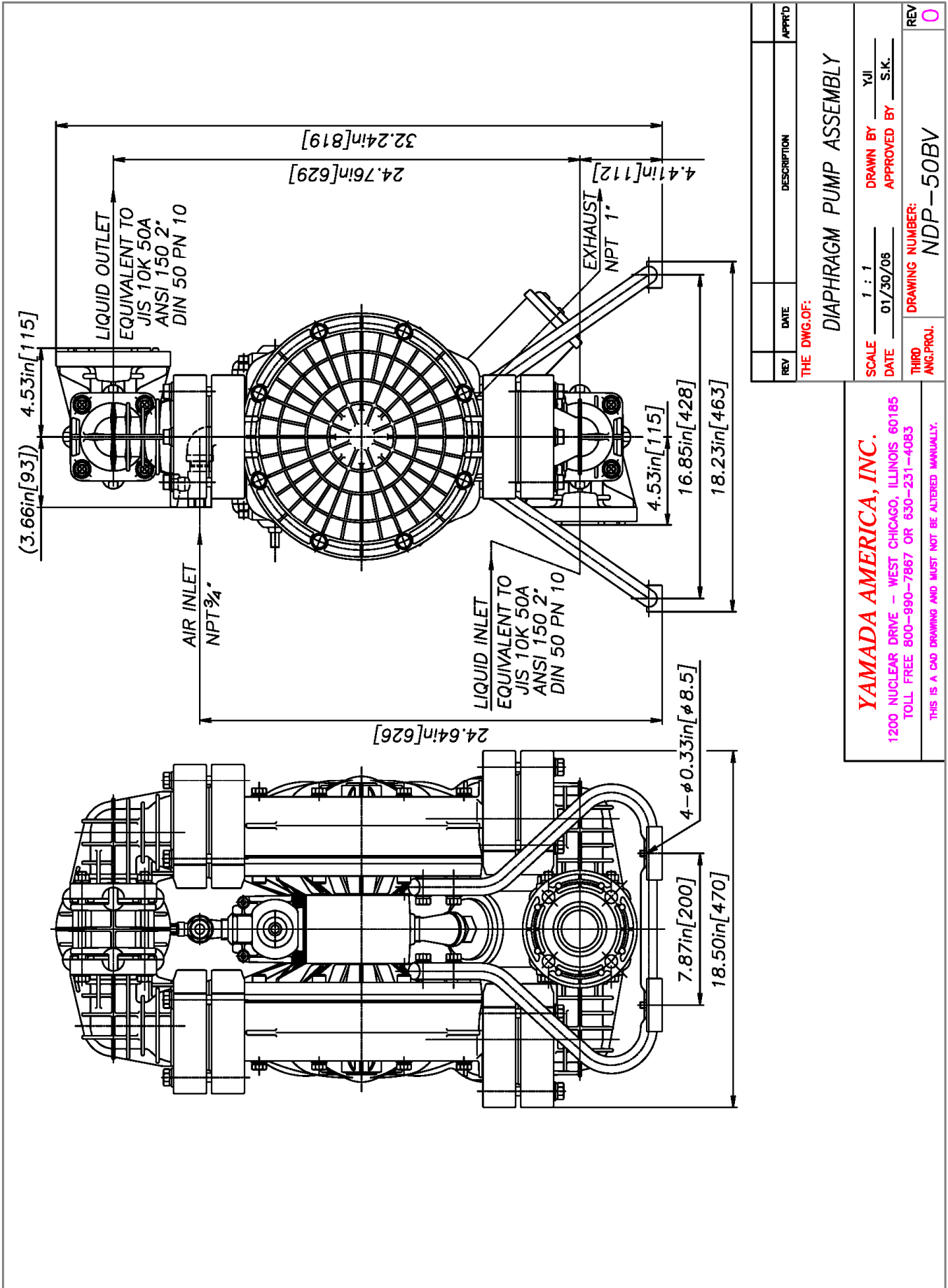
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THIRD ANG. PROJ. DRAWING NUMBER: **NDP-50BP** REV: **0**

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