

NDP-50 Specifications

Port Dimensions (164 GPM Max.)

Intake & discharge connection:

Polypropylene (PPG)	2" ANSI B16.5 #150
Kynar® (PVDF)	2" ANSI B16.5 #150
Aluminum (ADC-12)	2" ANSI B16.5 #150 (with tapped 2" Female NPT)
Stainless Steel (316)	2" ANSI B16.5 #150 or 2" Female NPT
Cast Iron	2" 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)
Hytrell® (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 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: 1.12 gallons (4.25 liters)

PTFE diaphragm: 0.69 gallons (2.61 liters)

Maximum Cycles Per Minute

Rubber diaphragm: 146

PTFE diaphragm: 220

Maximum Size Solid

5/16" (8 mm)

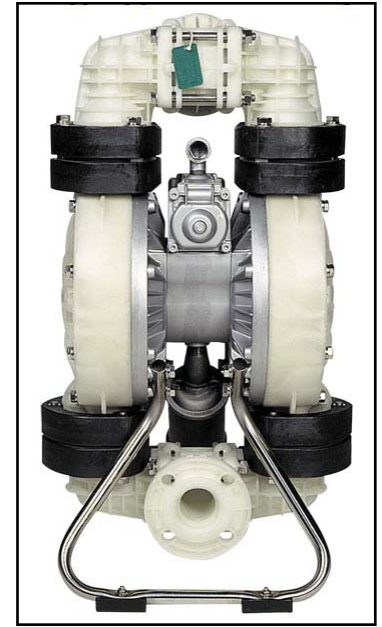
Maximum Dry Suction Lift

Rubber-fitted pump capability: 19-feet

Aluminum Air Motor—Standard

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

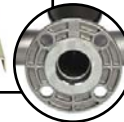
All Polypropylene, Aluminum, Cast Iron, and Stainless Steel Hytrell® fitted pumps include Buna N check balls & o-rings and Santoprene® fitted pumps include EPDM check balls & wetted o-rings. Kynar® (PVDF) pumps fitted with Santoprene®, Hytrell®, or Teflon® include Teflon® check balls & o-rings. Kynar®/EPDM fitted pumps include EPDM check balls & o-rings and Viton® fitted include Viton® balls & o-rings.



Aluminum (top left)
Dimensions: 17.68" W x 30.67" H
Net Wt.: 88 lbs. (39.9 kg)
Shipping Wt.: 99 lbs.

Polypropylene or Kynar® (top right)
Dimensions: 18.63" W x 32.32" H
Net Wt.: 84 lbs. (38.1 kg)
Shipping Wt.: 108 lbs.

Cast Iron or Stainless Steel (left)
Dimensions: 17.72" W x 30.55" H
Net Wt.: Cast Iron—159 lbs. (72.1 kg)
 SS—162 lbs. (73.5 kg)
Shipping Wt.: Cast Iron—168 lbs.
 SS—173 lbs.



Note: ANSI Flange available for Cast Iron and Stainless Steel

Model Number Nomenclature

Series: NDP-50 B x x

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 = Hytrell® (TPE)

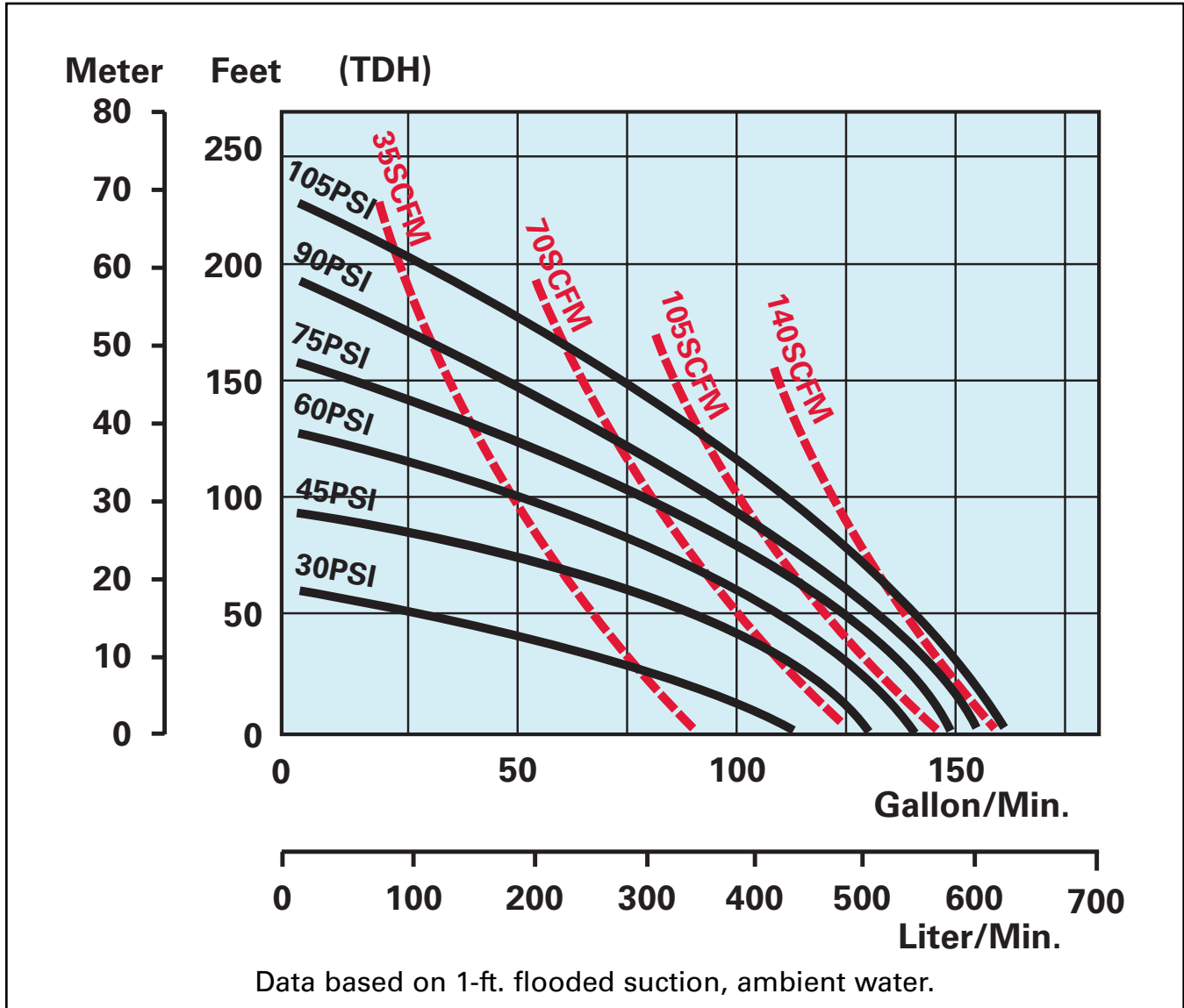
Note: For NPT-fitted Stainless Steel, add "NPT" at end of model number nomenclature.



Yamada America, Inc. 955 E. Algonquin Road, Arlington Heights, IL 60005
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NDP-50 Performance Curve — Rubber

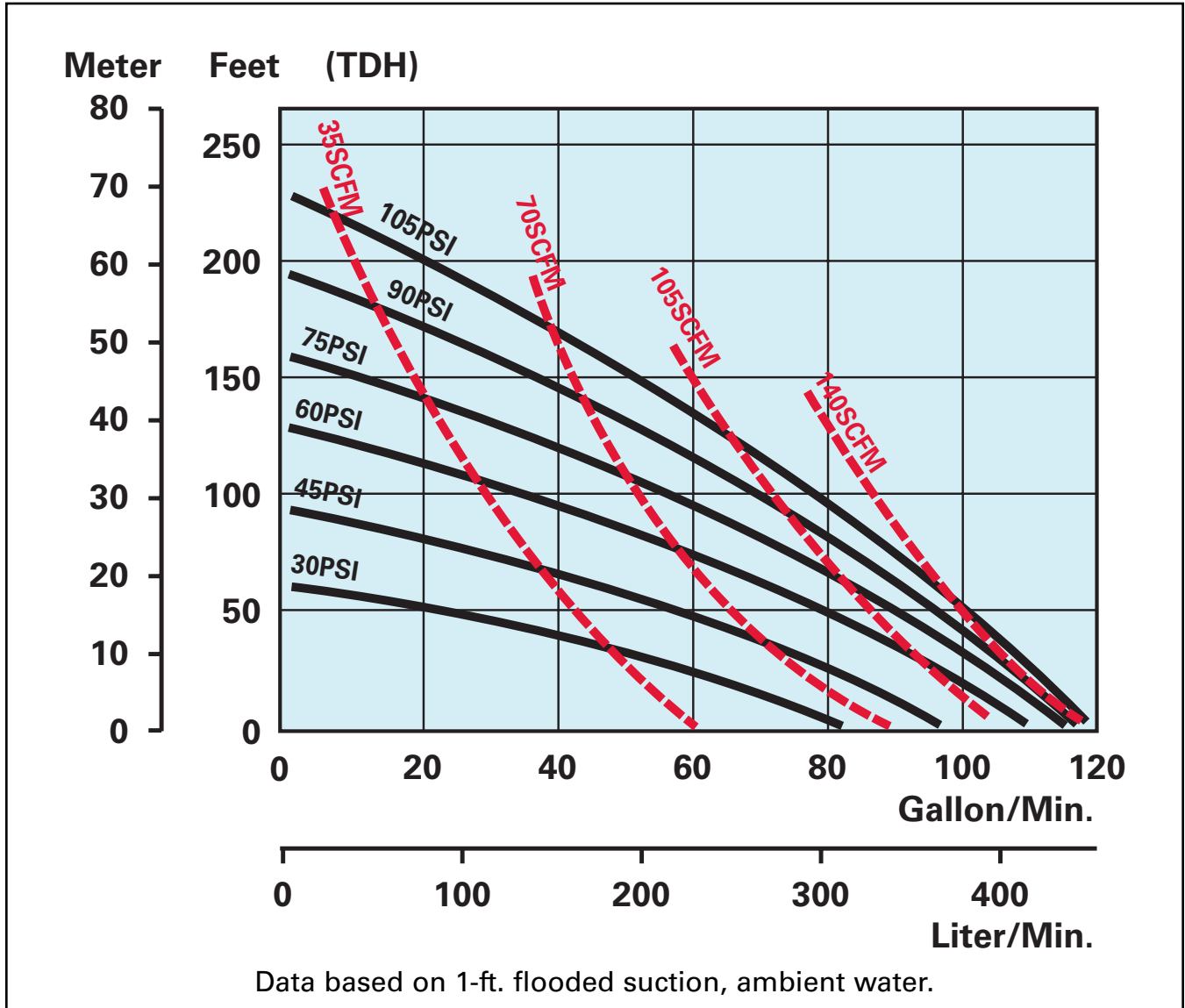
Rubber Diaphragm Performance Curve



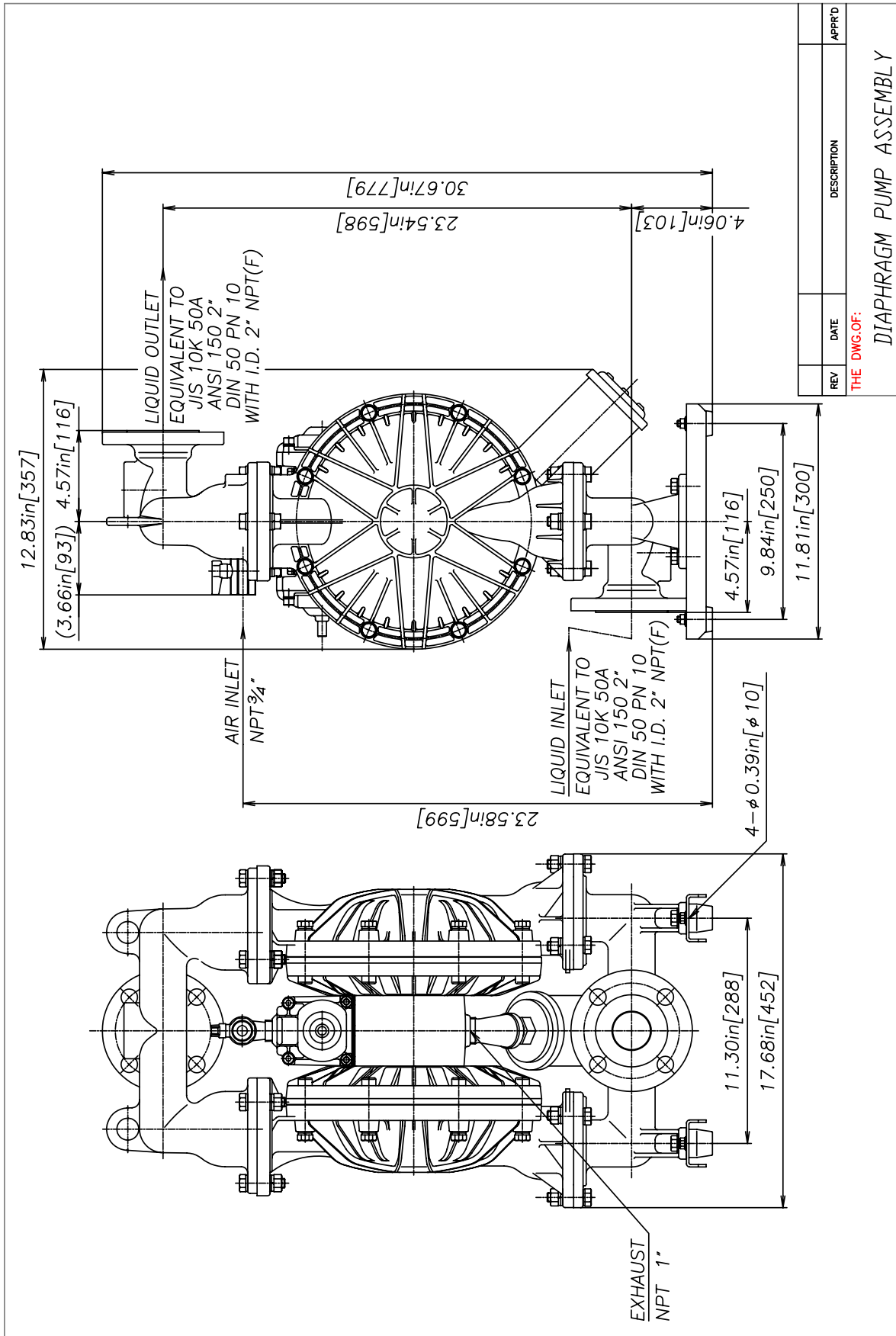
To calculate performance for Santoprene® and Hytrel®-fitted pumps, use Rubber Diaphragm Curve.

NDP-50 Performance Curve — PTFE

PTFE Diaphragm Performance Curve



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

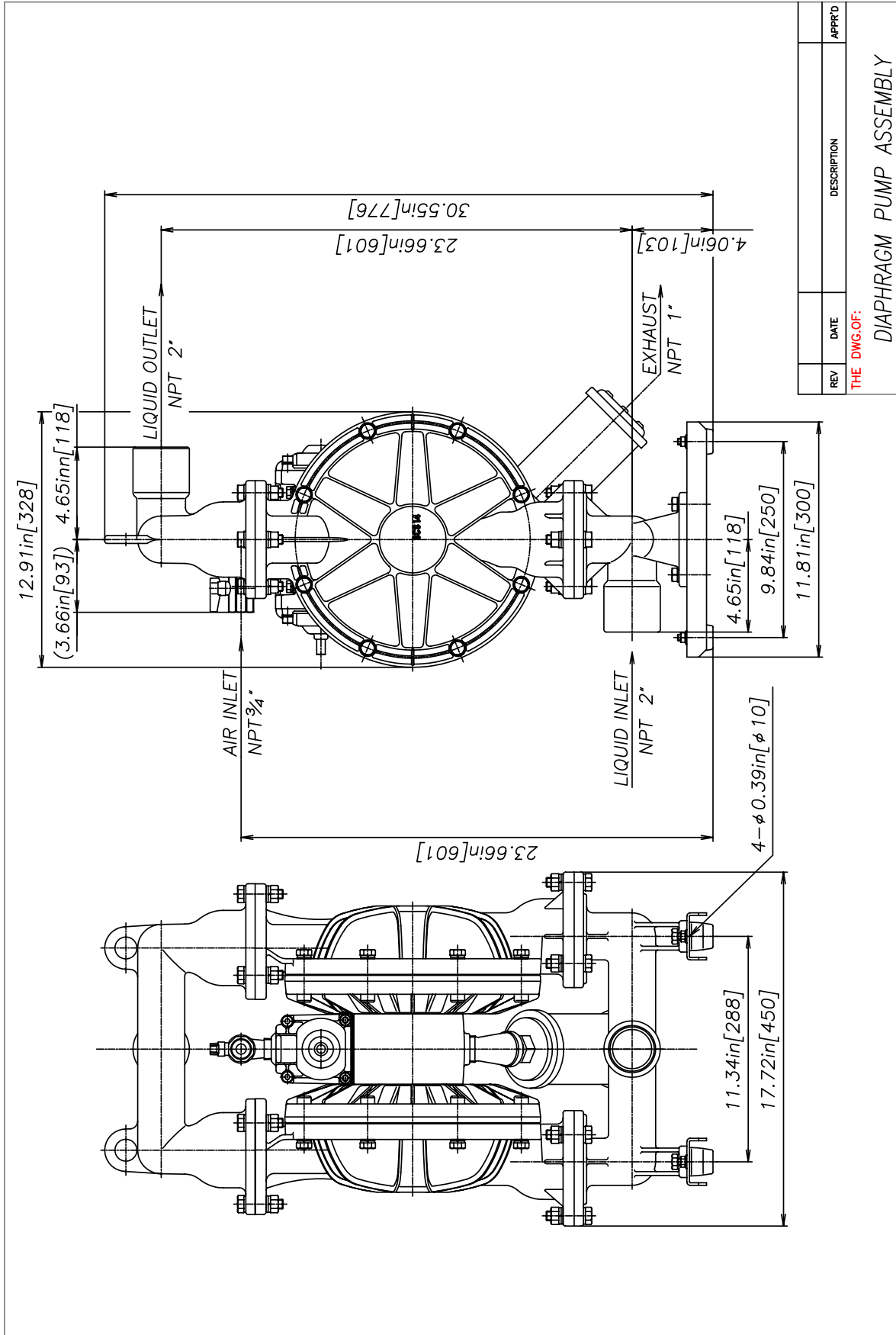


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THE DWG.OF:			
DIAPHRAGM PUMP ASSEMBLY			

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

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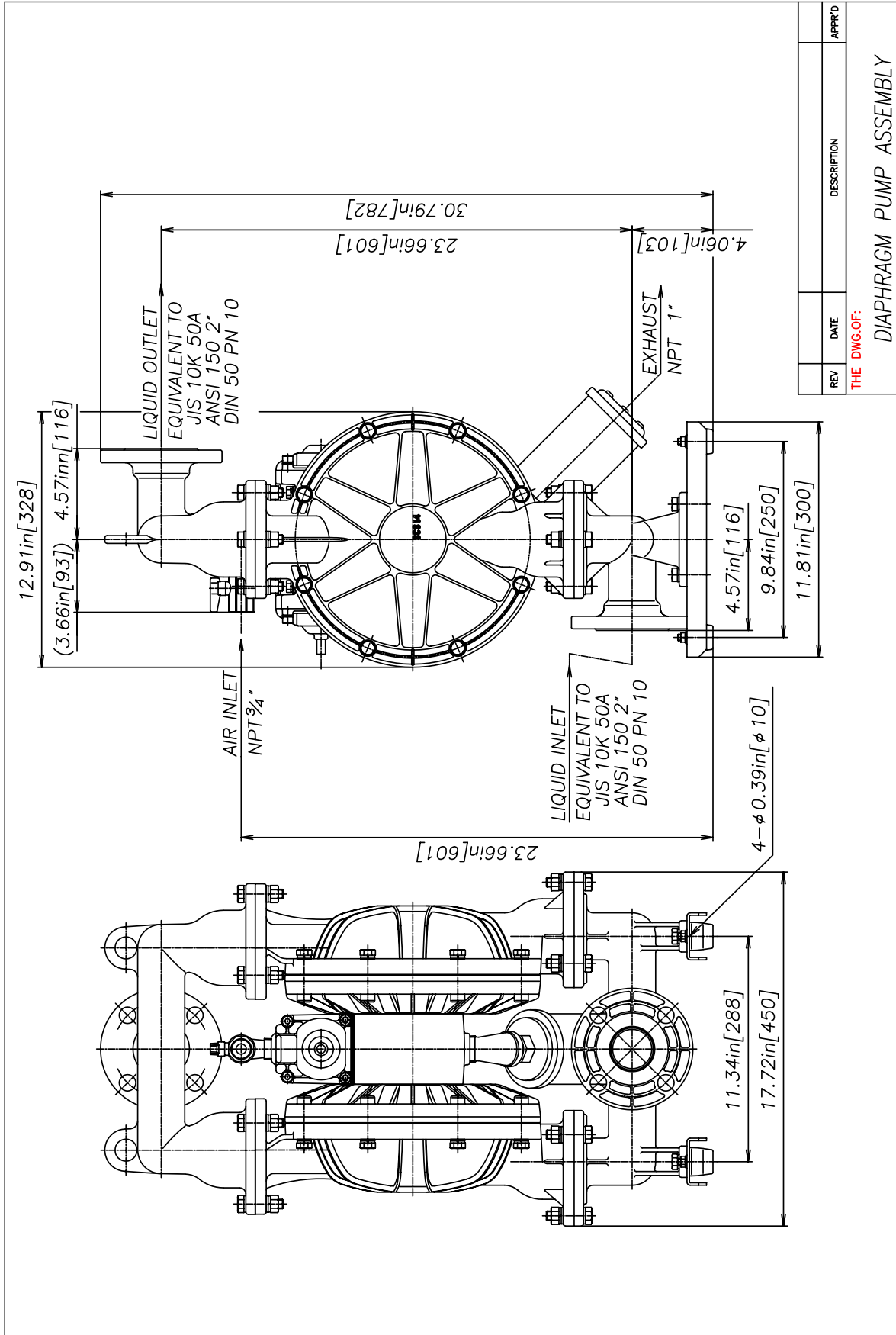


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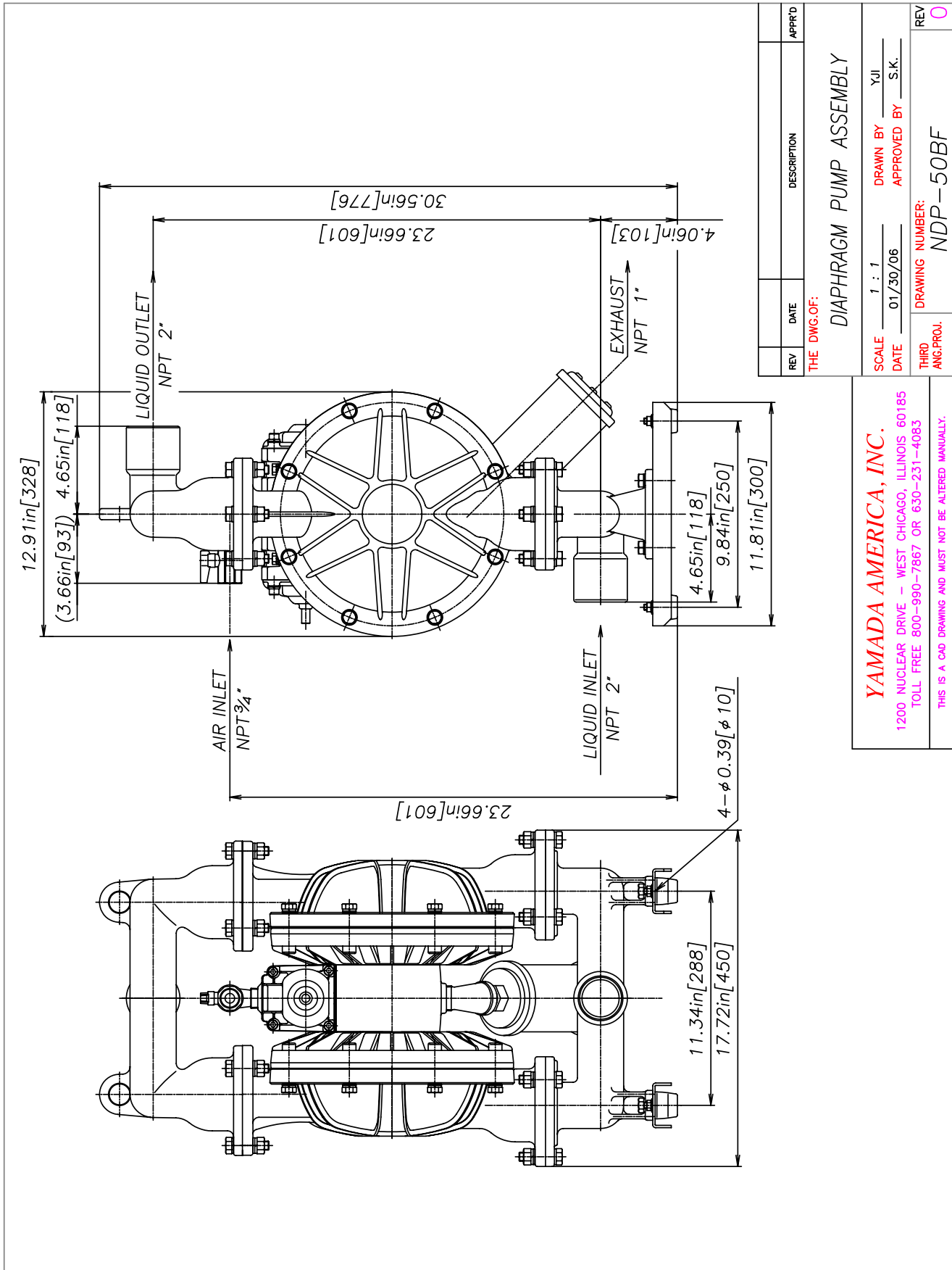


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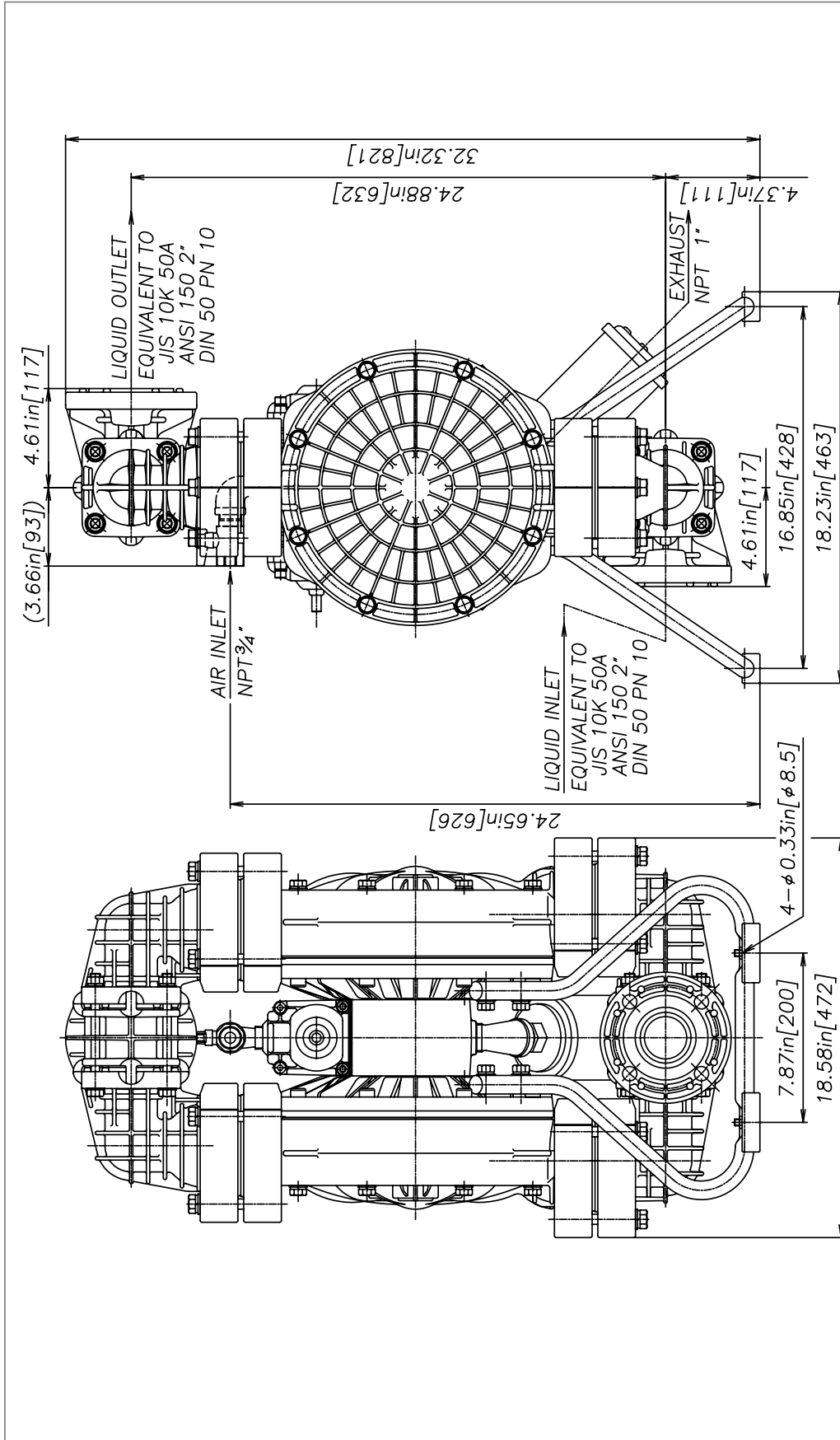
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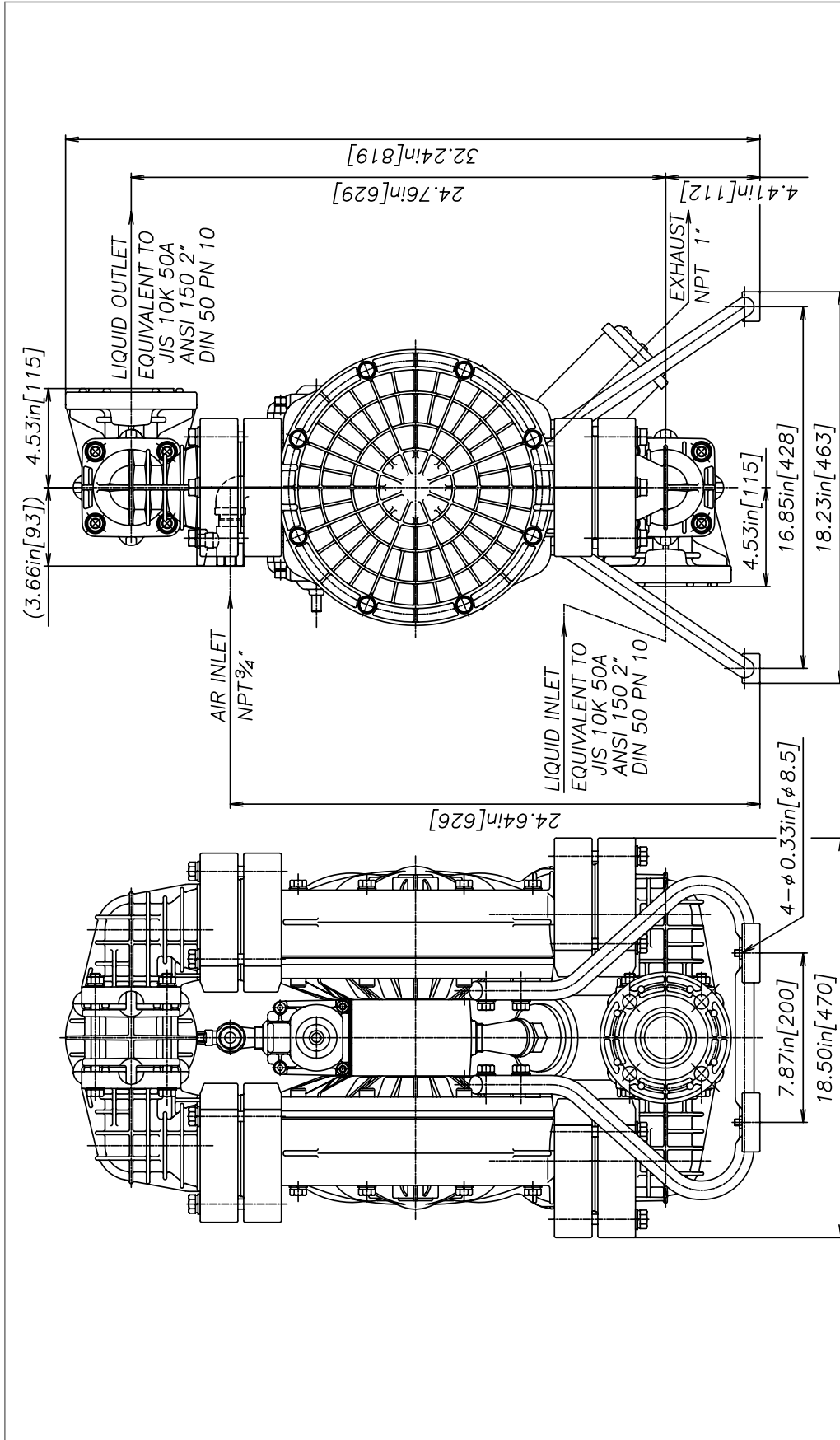
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