NDP-80 Specifications

Port Dimensions

Intake & discharge connection:	
Polypropylene (PPG)	3" ANSI Flange B16.5 #150
Aluminum (ADC-12)	3" ANSI Flange B16.5 #150 (with tapped 3" Female NPT)
Stainless Steel (316) or Hastelloy	3" ANSI Flange 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)
Hytrel	248°F (120°C)
Santoprene	225°F (107°C)
Viton	248°F (120°C)
Teflon (PTFE)	212°F (100°C)

*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: 2.25 gallons (8.5 liters)
PTFE diaphragm: 1.0 gallons (3.8 liters)

Maximum Cycles Per Minute
Rubber diaphragm: 95
PTFE diaphragm: 160

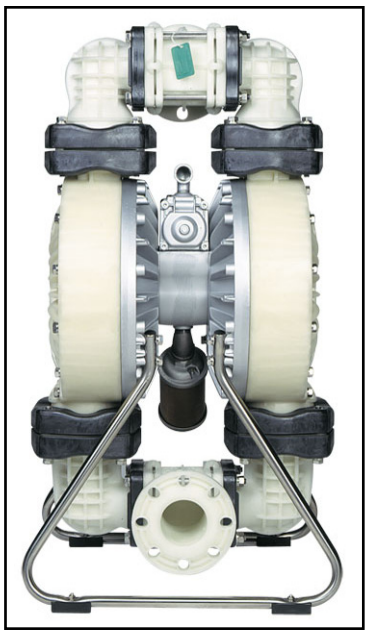
Maximum Size Solid
13/32" (10 mm)

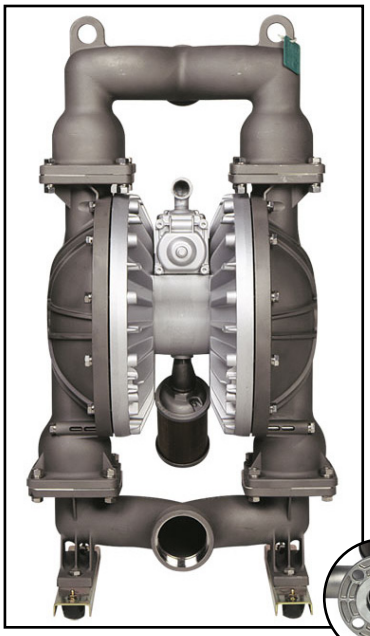
Maximum Dry Suction Lift
Rubber-fitted pump capability: 19-feet

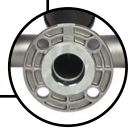
Aluminum Air Motor – Standard
Optional: Epoxy-coated, Teflon-coated, or Electroless Nickel Plate

Notes: Hytrel-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 CD ROM 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, Hastelloy, or Stainless Steel (left)
Dimensions: 20.54" W x 38.74" H
Net Wt.: Cast Iron – 271 lbs. (122.9 kg)
SS and Hastelloy – 244 lbs. (110.7 kg)
Shipping Wt.: Cast Iron – 277 lbs.
SS and Hastelloy – 263 lbs.

Note: ANSI Flange available for Hastelloy and Stainless Steel

Model Number Nomenclature

NDP-80 B x x

Series:
NDP-80 Pump

Valve Type:
B = Ball

Body Material:
P = Polypropylene
A = Aluminum
S = Stainless Steel
F = Cast Iron
H = Hastelloy

Diaphragm Material:
C = Neoprene (CR)
N = Buna N (NBR)
E = Nordel (EPDM)
S = Santoprene (TPO)
T = Teflon (PTFE)
V = Viton (FPM)
H = Hytrel (TPE)

Note: For NPT-fitted SS or Hastelloy, add "NPT" at end of model number nomenclature.

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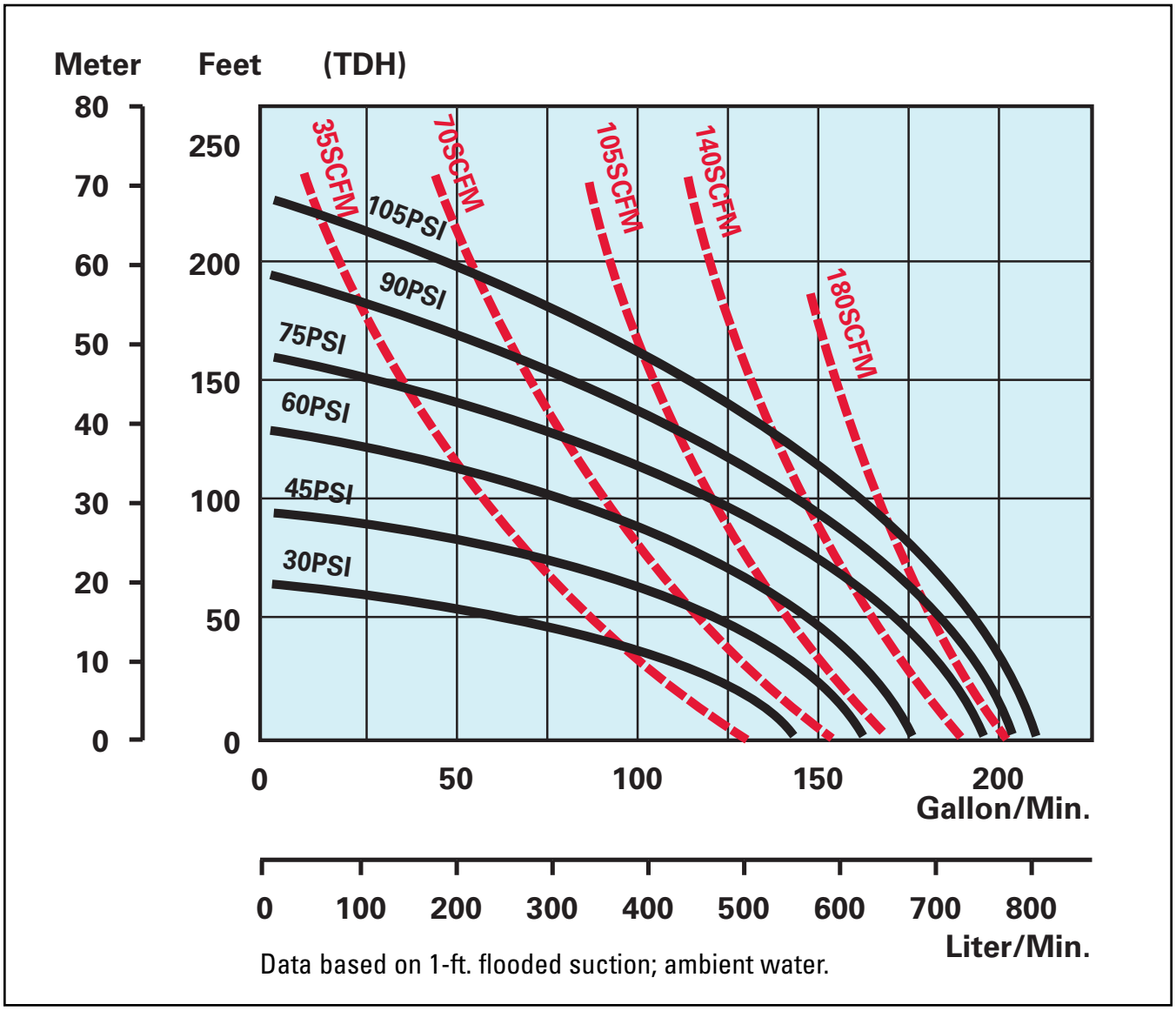
NDP-80 Performance Curve — Rubber

Rubber Diaphragm Performance Curve



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

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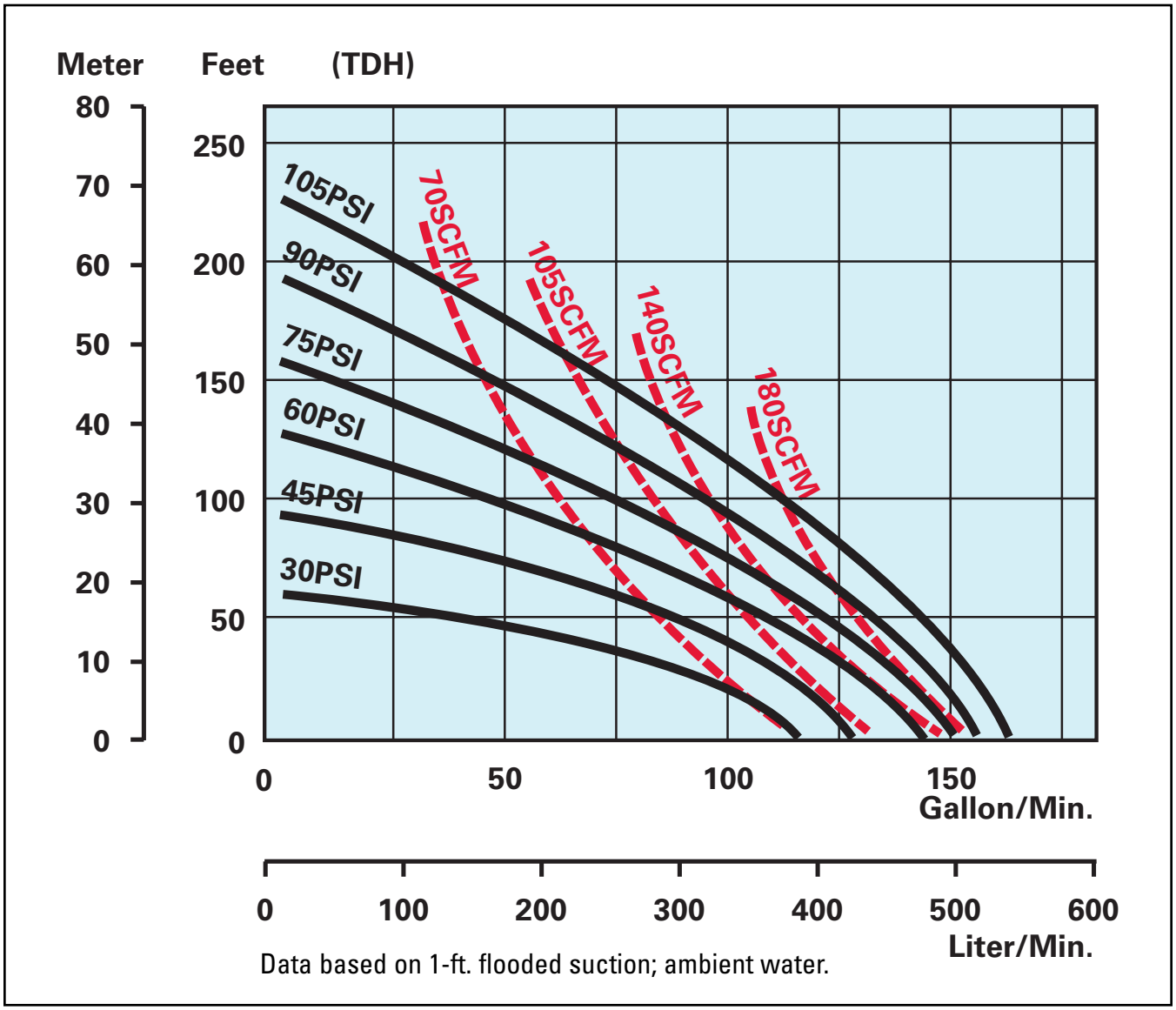
NDP-80 Performance Curve — PTFE

PTFE Diaphragm Performance Curve



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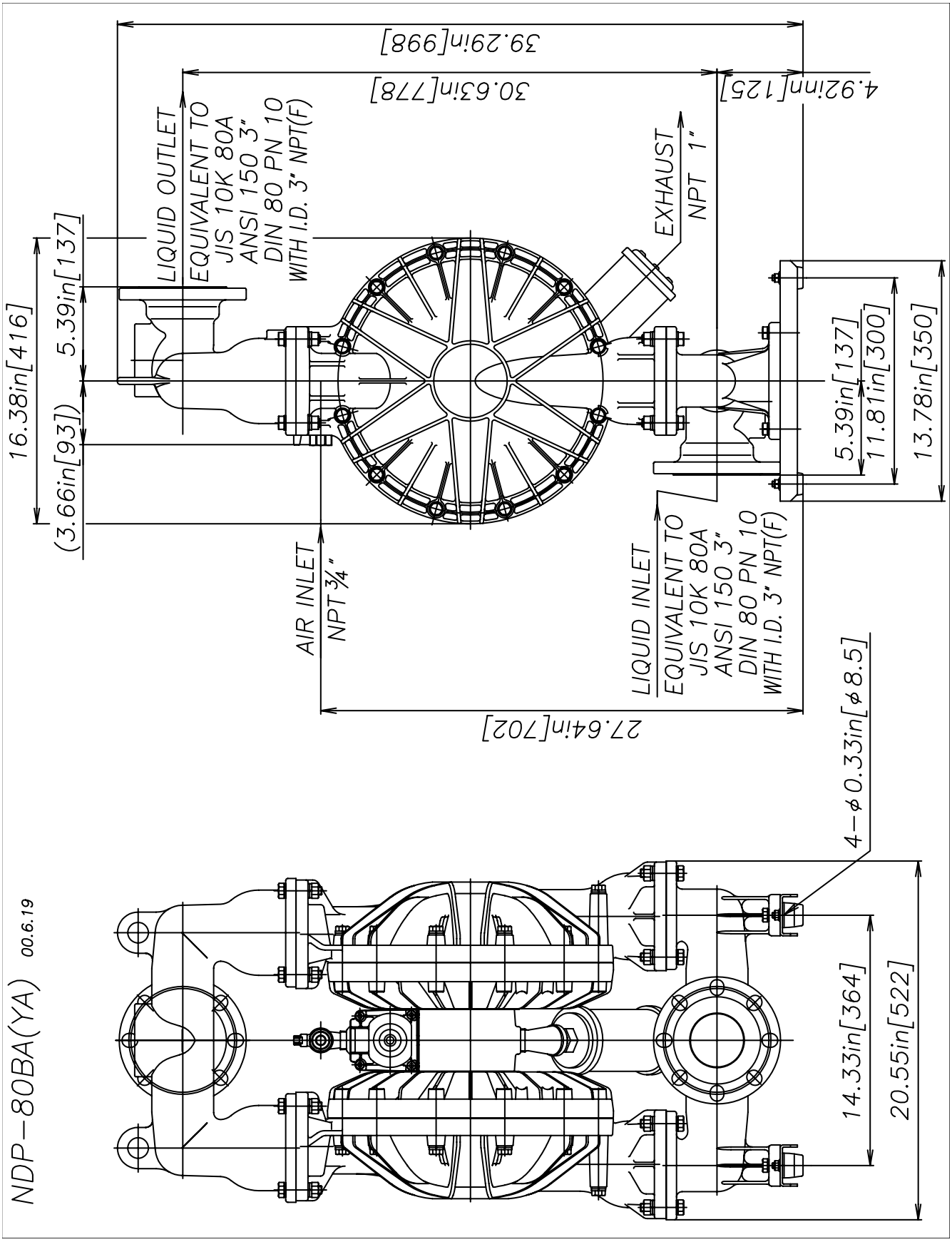

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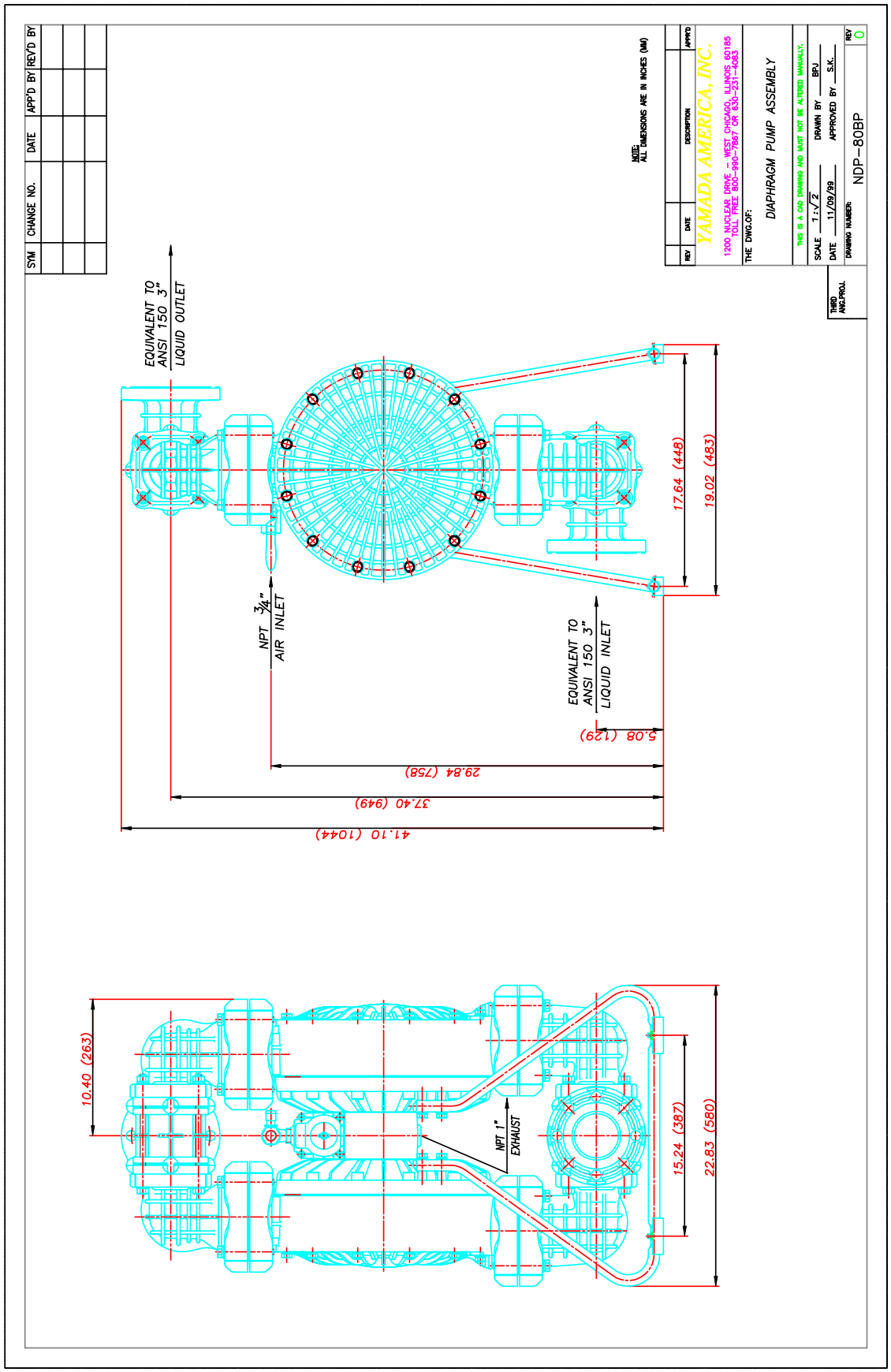
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YAMADA AMERICA, INC.
1200 NUCLEAR DRIVE – WEST CHICAGO, ILLINOIS 60185
TOLL FREE 800-990-7867 OR 630-231-4083
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DIAPHRAGM PUMP ASSEMBLY
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SCALE 1:1√2
DRAWN BY BPJ
DATE 11/09/99
APPROVED BY S.K.
THIRD ANG.PROJ.
DRAWING NUMBER:
NDP-80BP
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EQUIVALENT TO ANSI 150 3" LIQUID OUTLET
NPT 3/4" AIR INLET
EQUIVALENT TO ANSI 150 3" LIQUID INLET
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19.02 (483)
5.08 (129)
29.84 (758)
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41.10 (1044)
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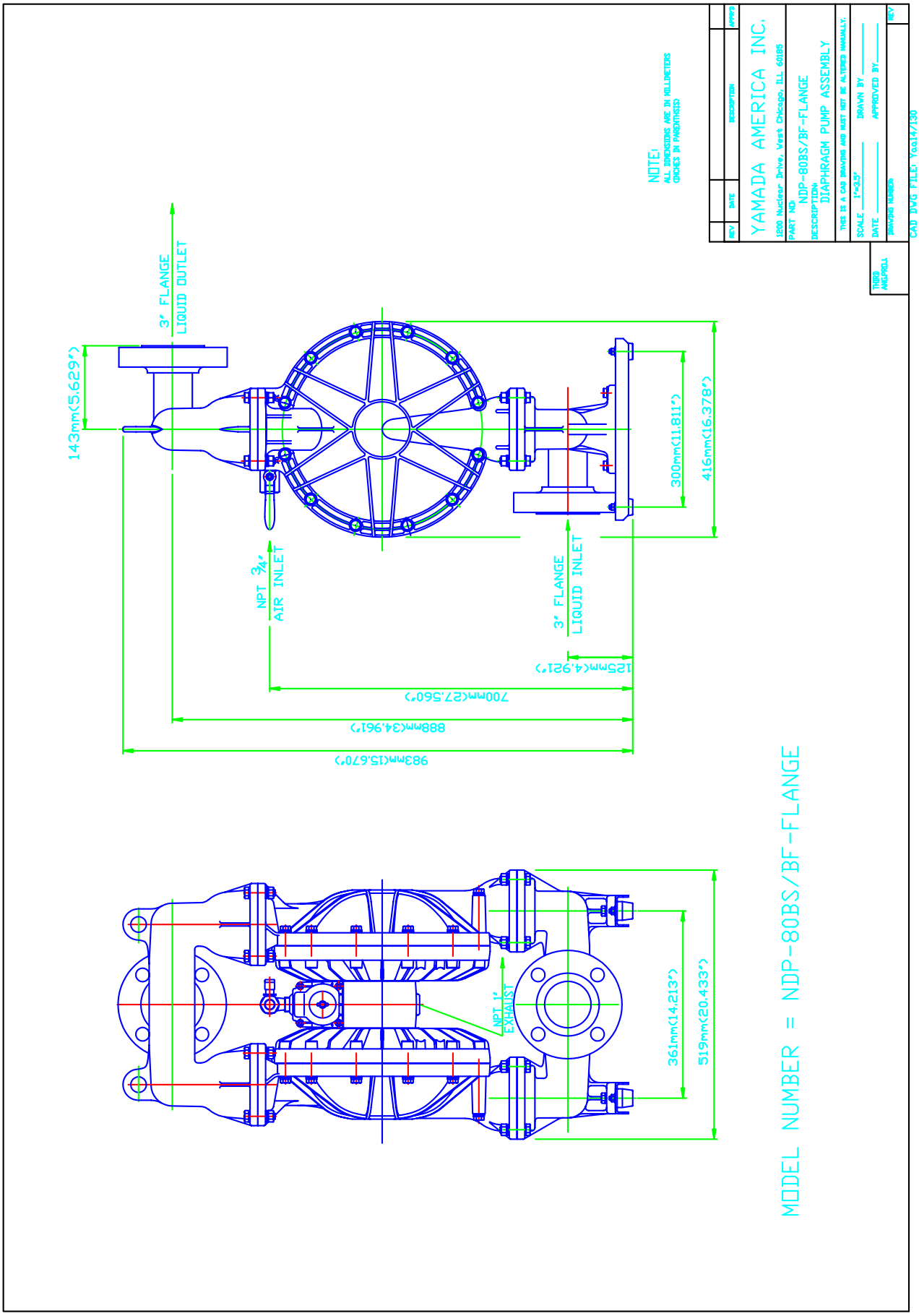

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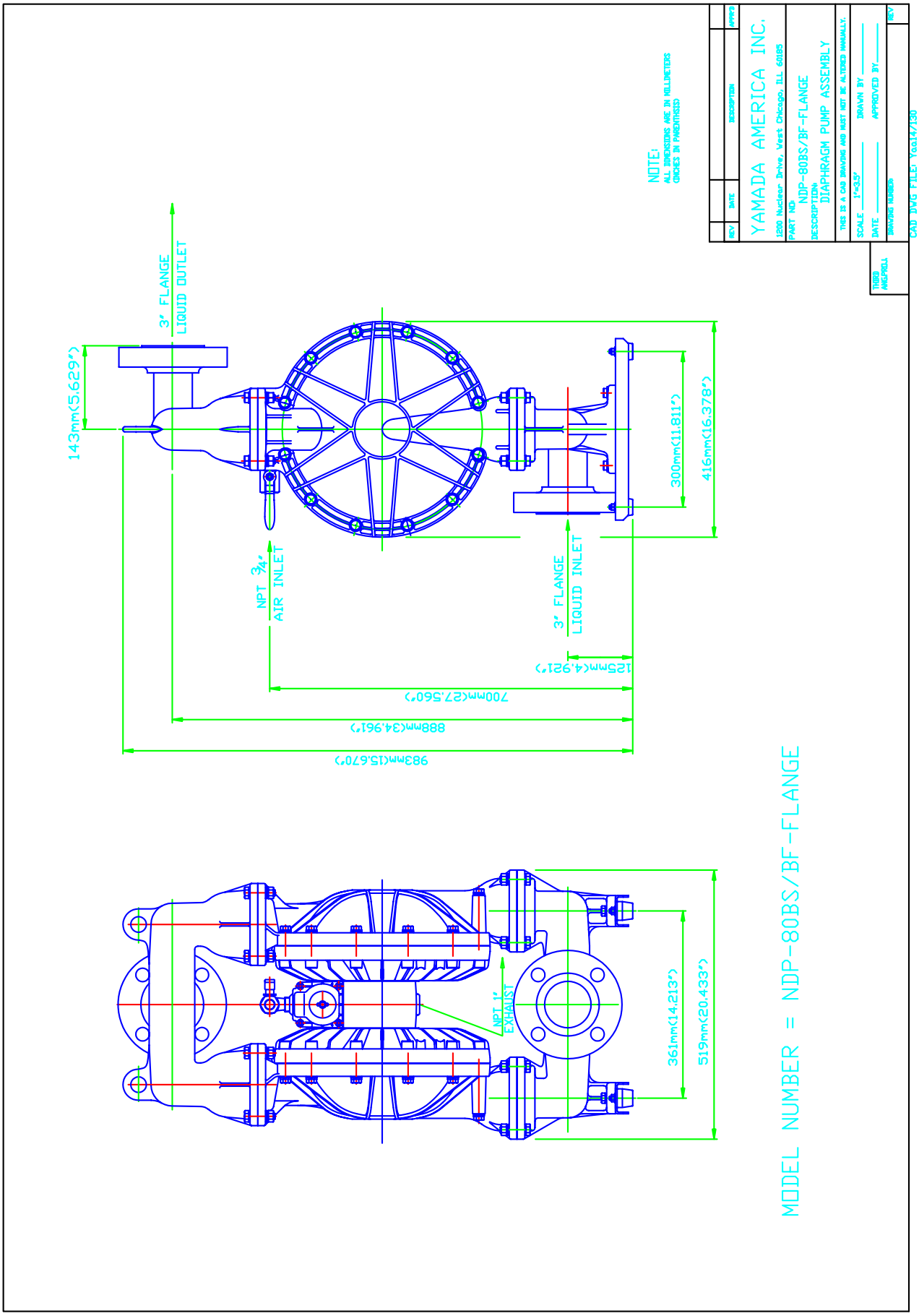

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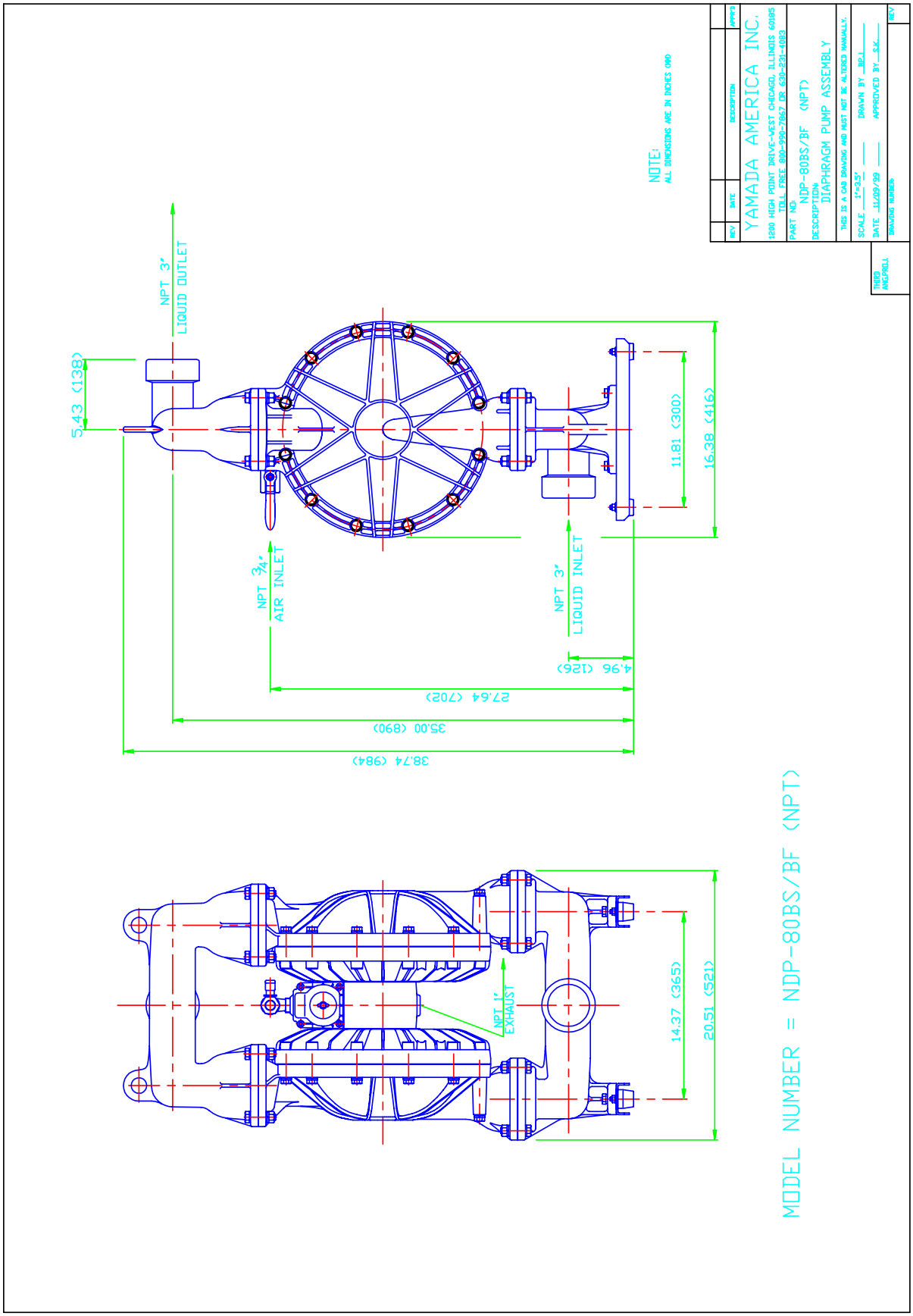

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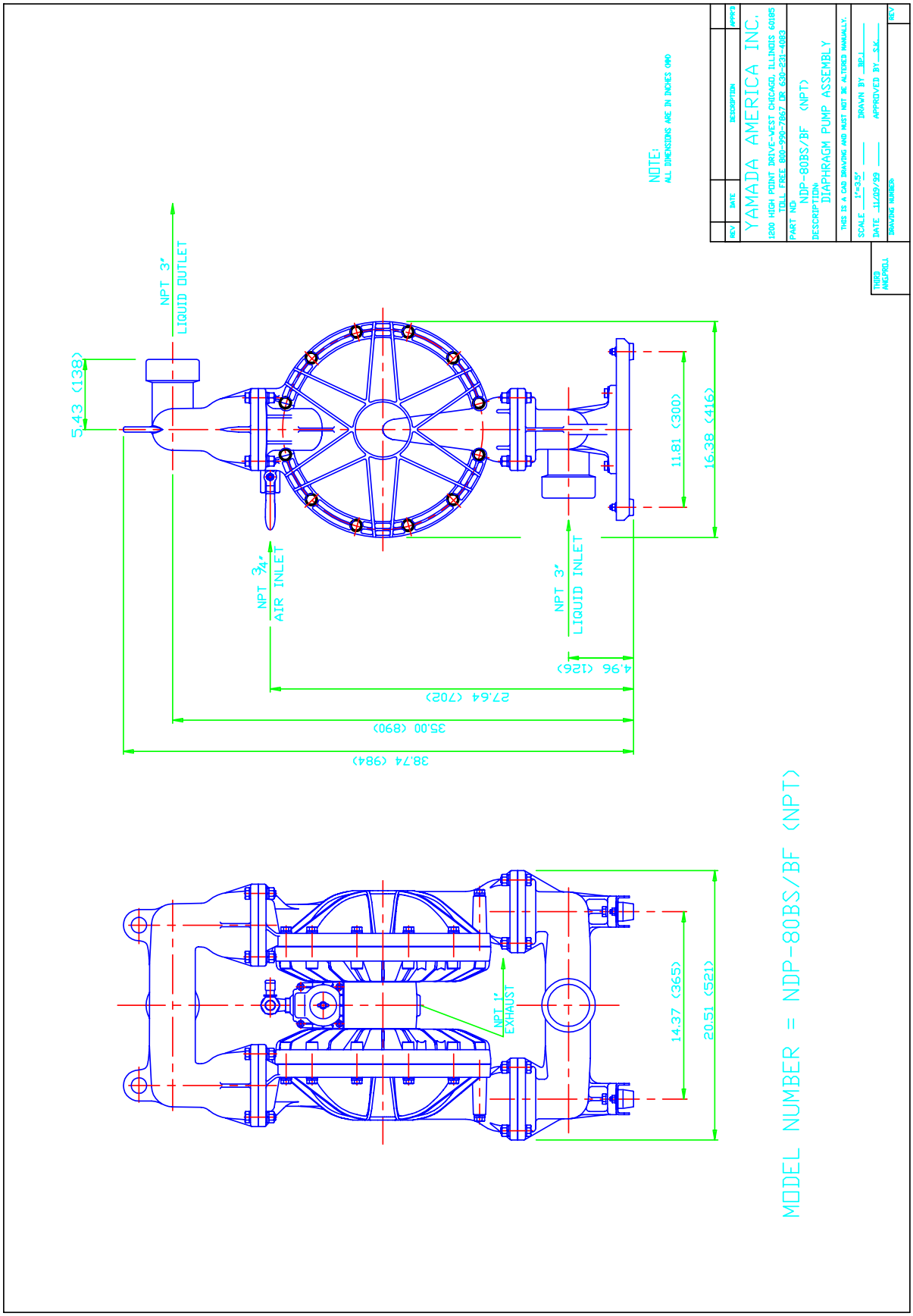

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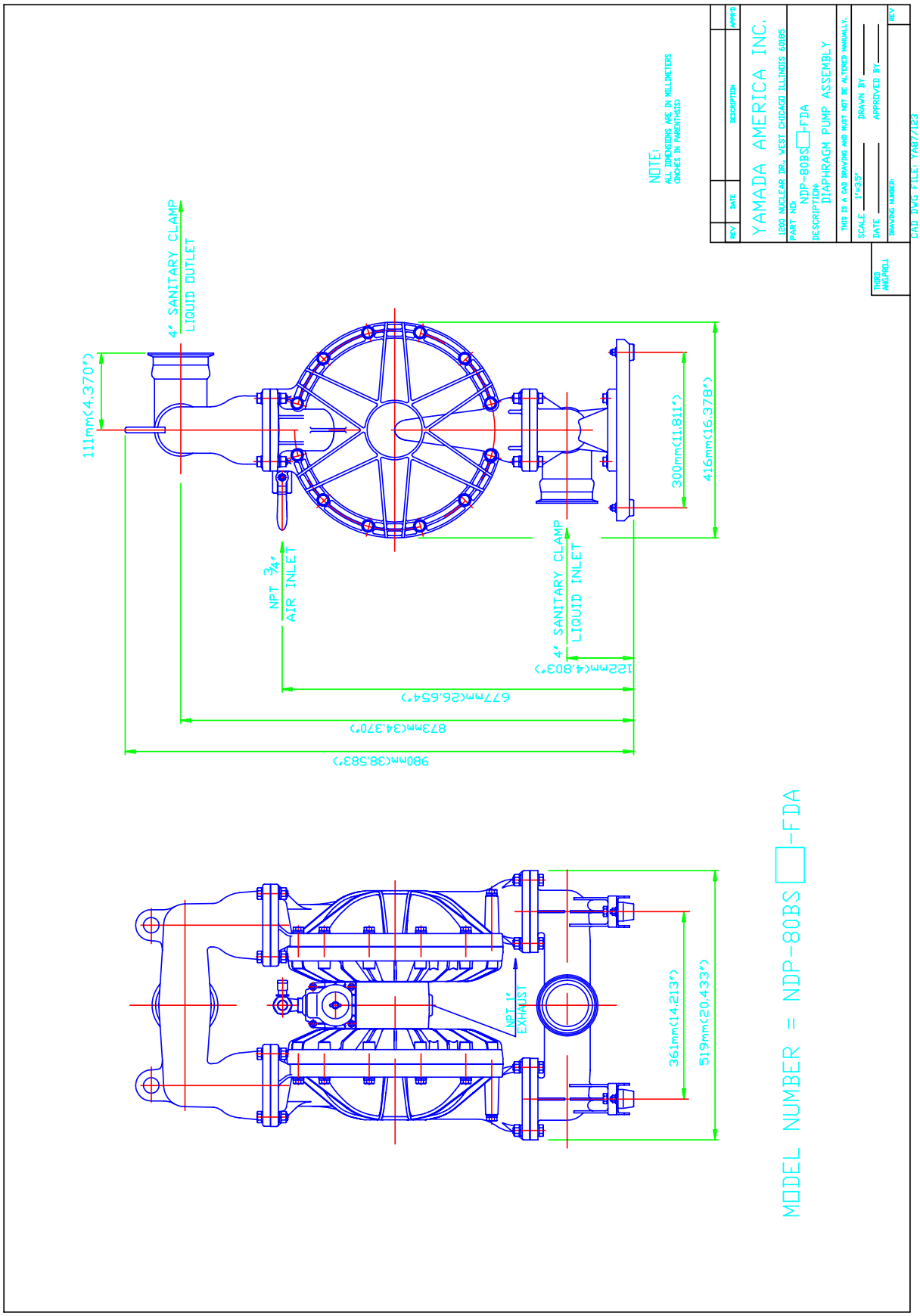

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