

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

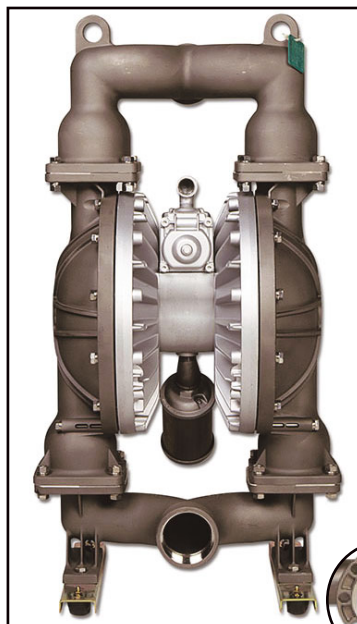
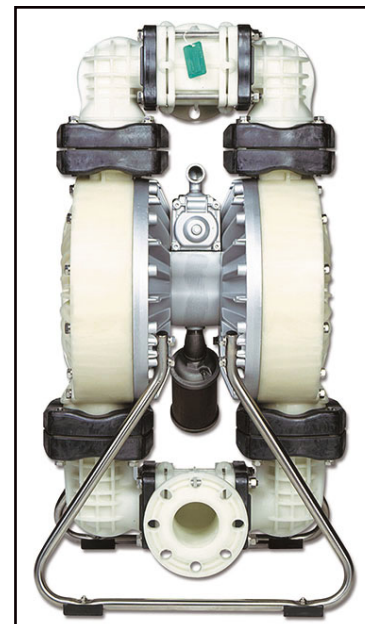
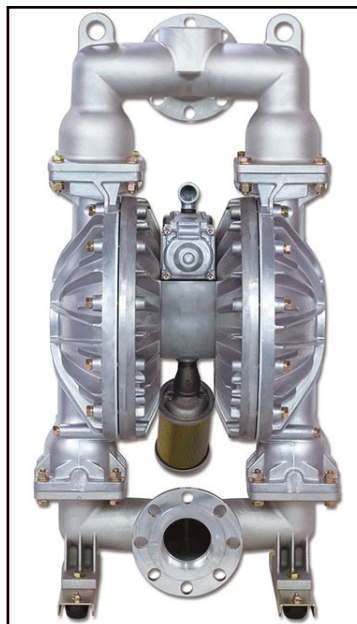
Air Motor

Aluminum Air Motor–Standard

Optional coating: PTFE grey coated (XP)

Notes: Hytrel® fitted pumps include Buna?N wetted o-rings. Santoprene® fitted pumps include EPDM wetted o-rings.

AutoCAD® drawings are available on CDROM or at yamadapump.com



Aluminum (top left)

Dimensions: 20.57" L x 16.38" W x 39.30" H

Net Wt.: 151 lbs. (68.5 kg)

Shipping Wt.: 165 lbs.

Polypropylene (top right)

Dimensions: 22.83" L x 19.02" W x 41.10" H

Net Wt.: 162 lbs. (73.5 kg)

Shipping Wt.: 177 lbs.

Cast Iron or Stainless Steel (left)

Dimensions: 20.51" L x 16.38" W x 38.73" 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

Series: NDP-80 B x x

Valve Type:

B = Ball

Body Material:

P = Polypropylene
A = Aluminum
S = Stainless Steel
F = Cast Iron

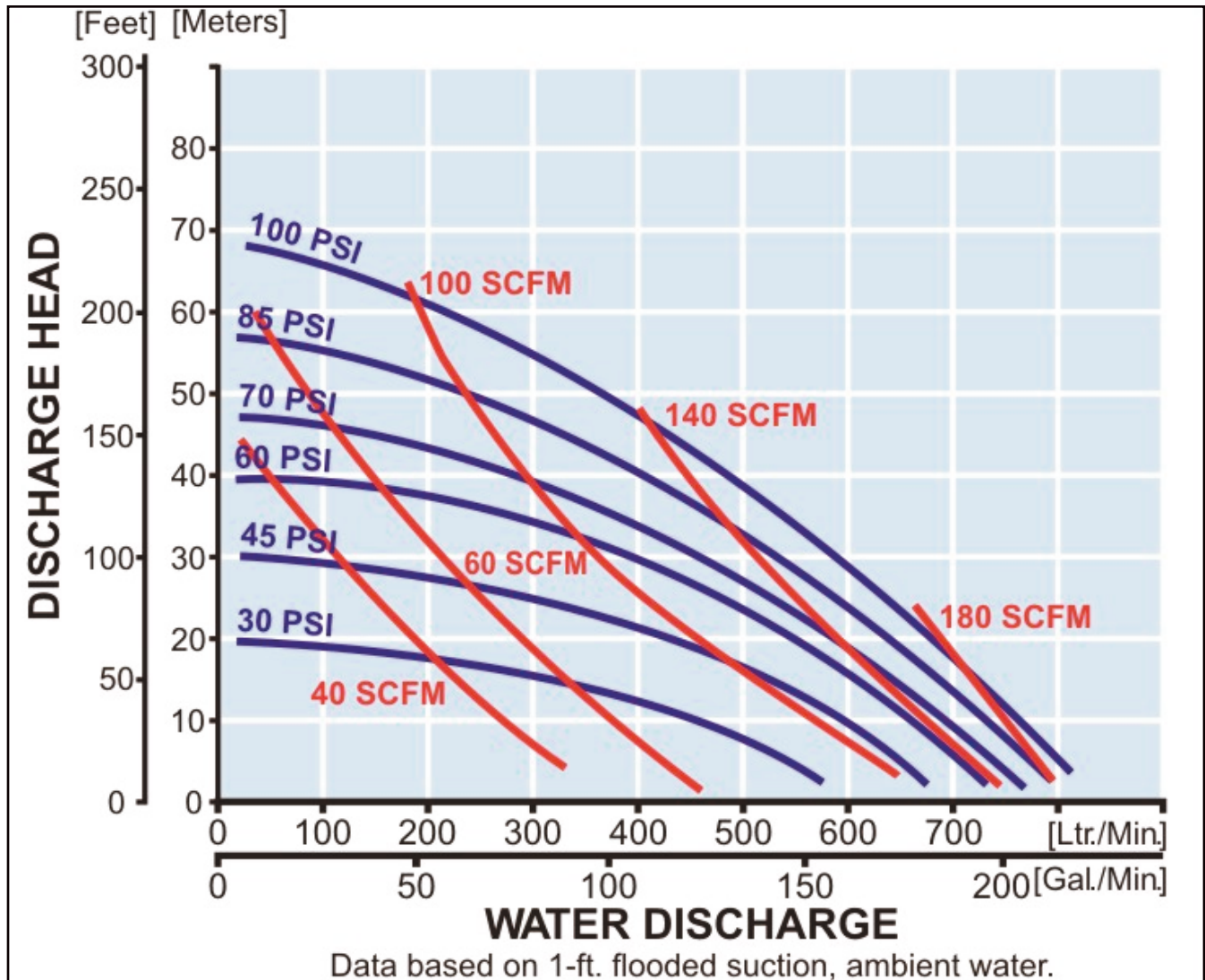
Diaphragm Material:

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

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

NDP-80 Performance Curve – Rubber

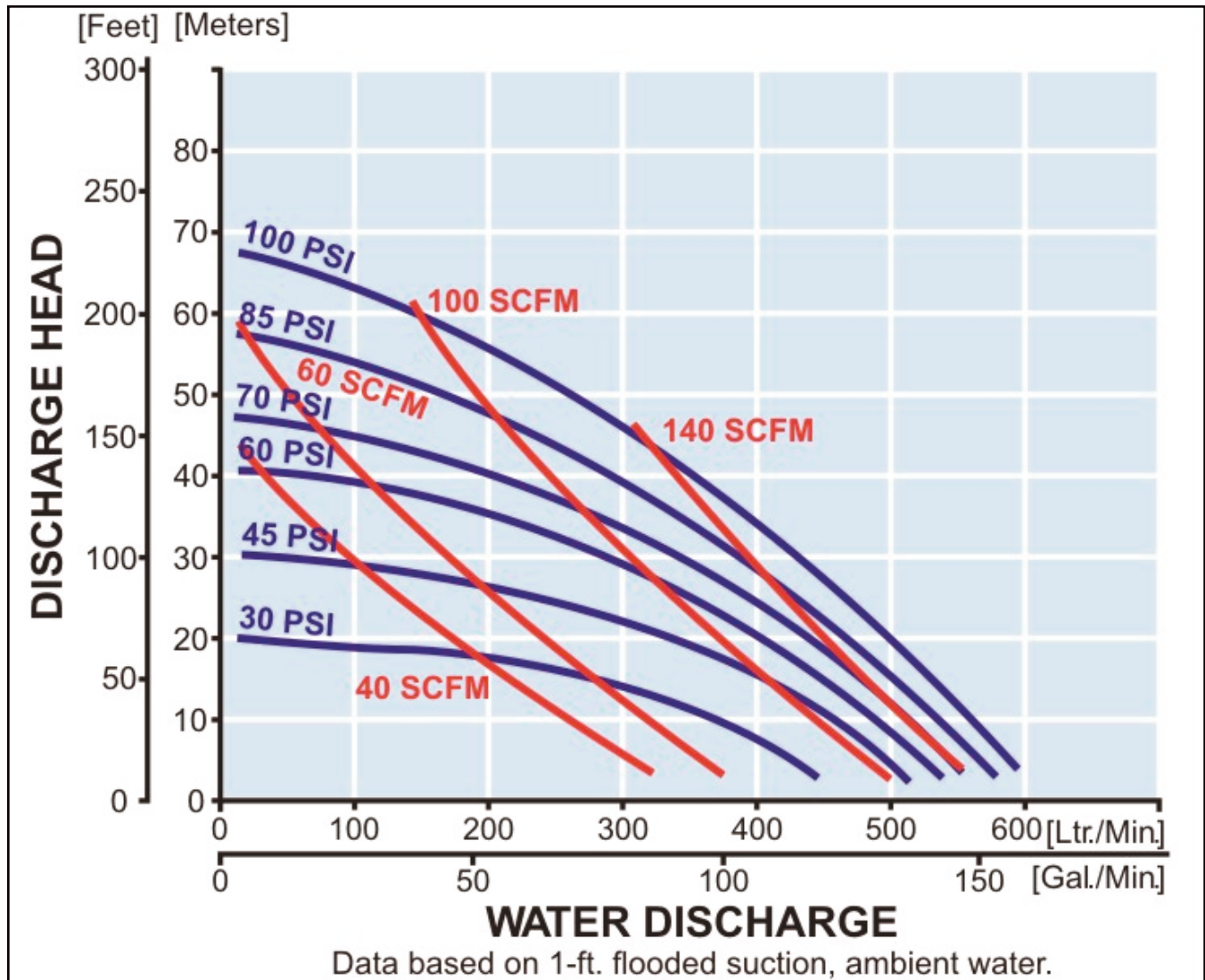
Rubber Diaphragm Performance Curve



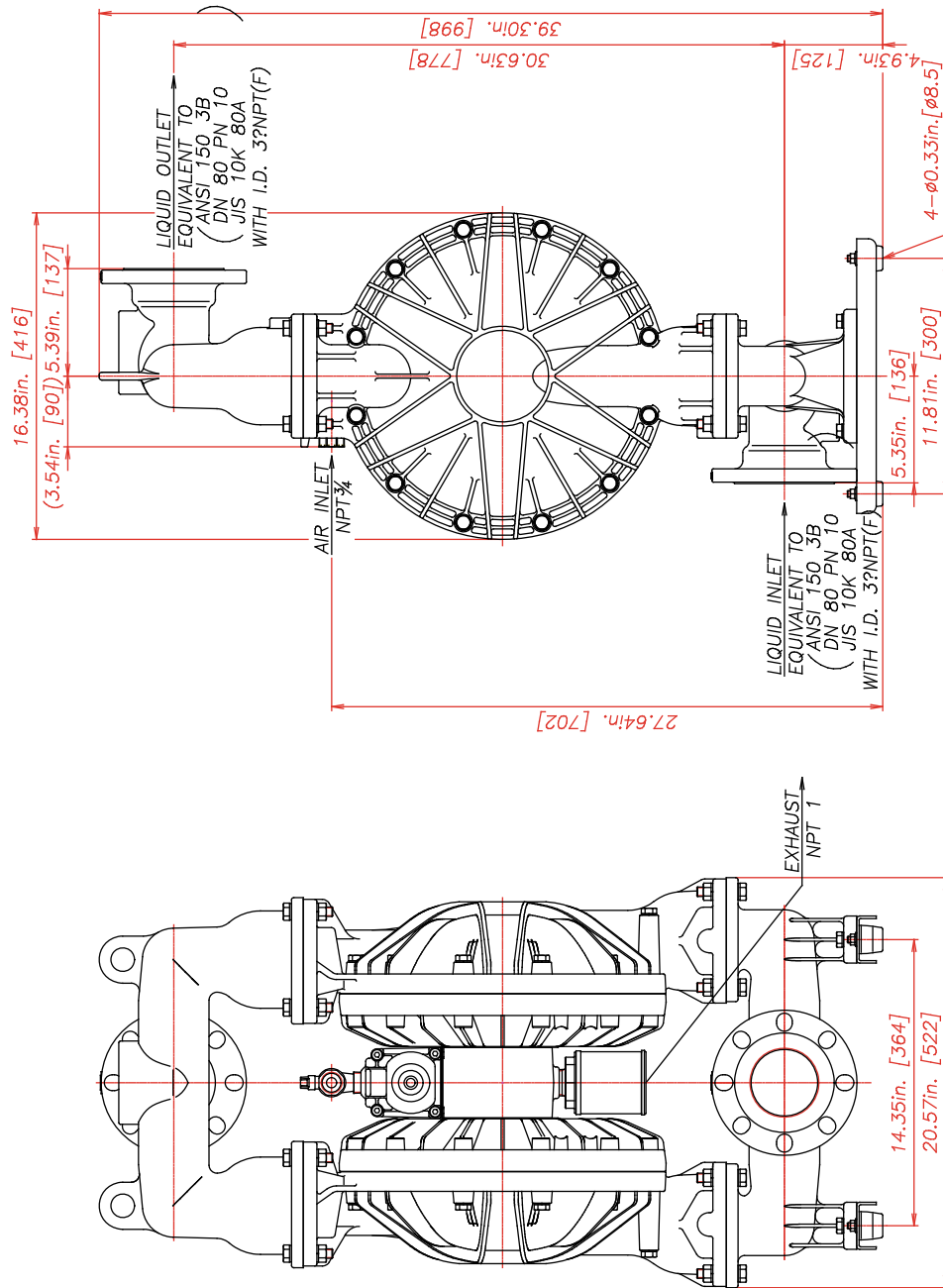
To calculate performance for Santoprene® and Hytrel®-fitted pumps, use Rubber Diaphragm Curve.

NDP-80 Performance Curve – PTFE

PTFE Diaphragm Performance Curve



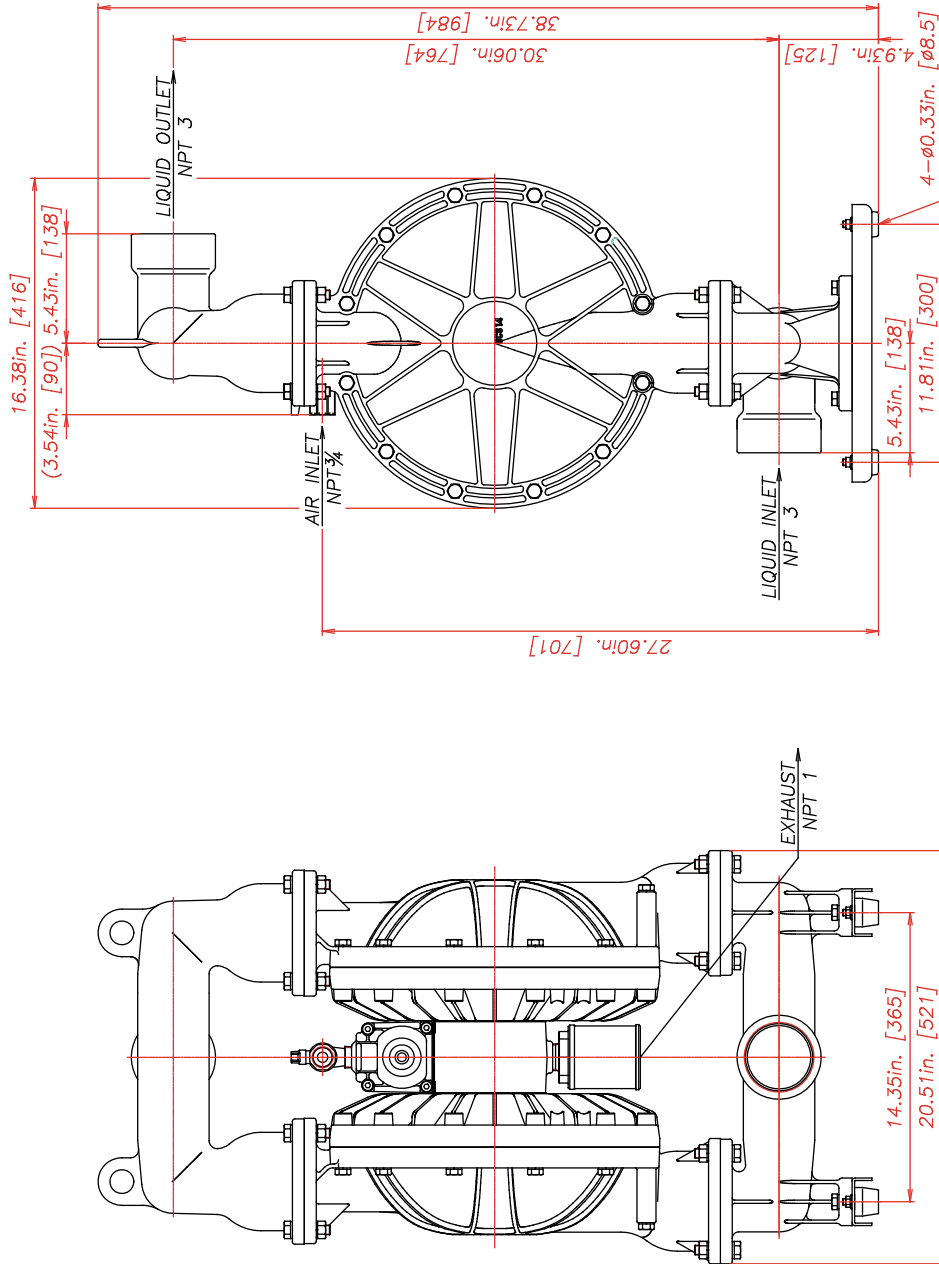
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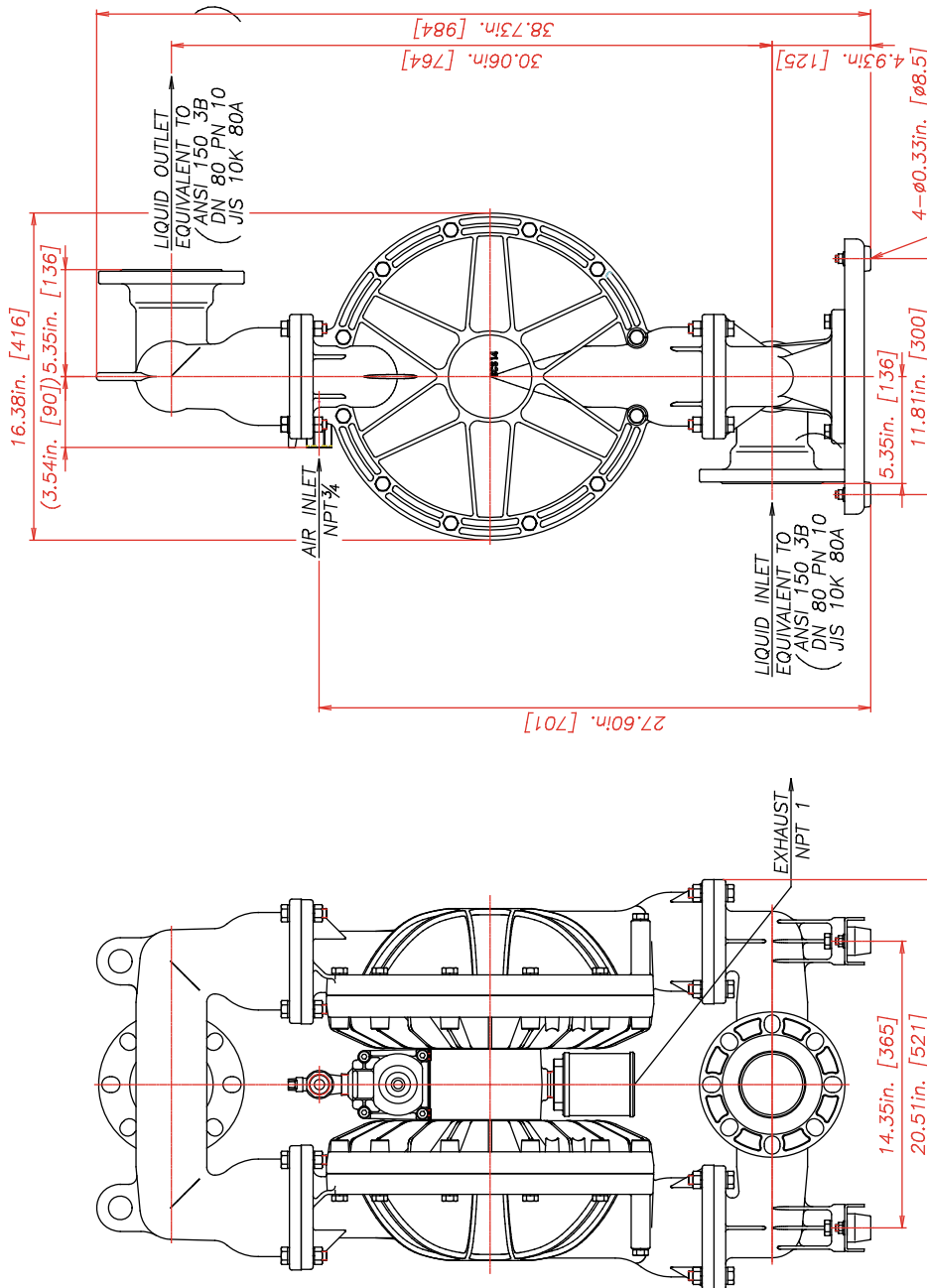
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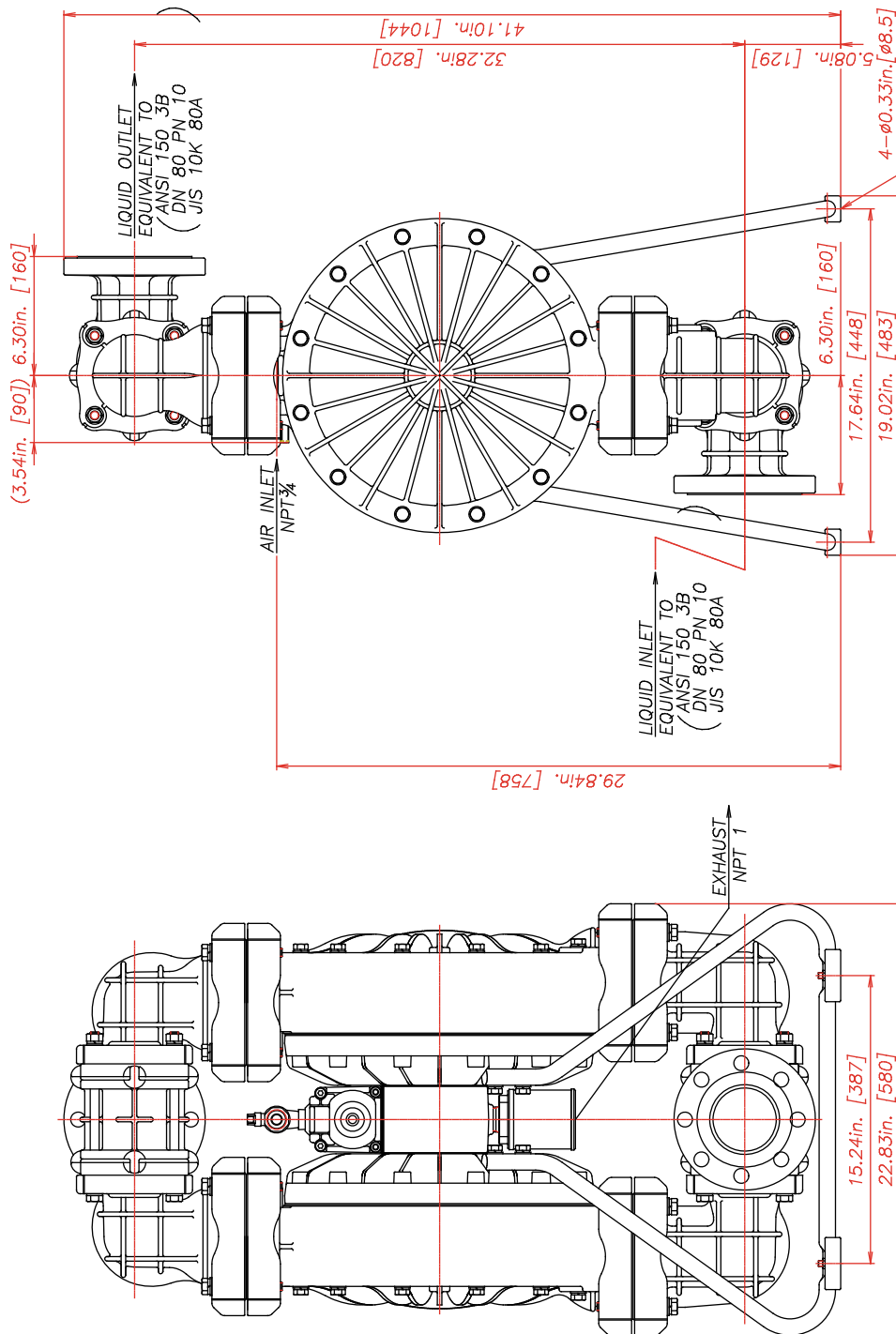
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