

# NDP-20 Specifications

## Port Dimensions (31.7 GPM Max.)

Intake & discharge connection:

Polypropylene (PPG)	3/4" Female NPT
Aluminum (ADC-12)	3/4" Female NPT
Stainless Steel (316)	3/4" Female NPT
Air inlet (incl. ball valve):	1/4" Female NPT
Air exhaust (incl. silencer):	3/4" Female NPT

**ANSI Flange** also available — consult Yamada.

## Maximum Liquid Temperature\*

Diaphragm Material	Temperature
Neoprene	180°F (82°C)
Buna N	180°F (82°C)
EPDM	212°F (100°C)
Hytre <sup>®</sup> (TPC-ET)	248°F (120°C)
Santoprene <sup>®</sup> (TPE)	212°F (100°C)
Viton <sup>®</sup> fluoroelastomer	248°F (120°C)
Teflon <sup>®</sup> (PTFE)	212°F (100°C)

\* The maximum liquid temperature for metal and Kynar<sup>®</sup>-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: 0.163 gallons (615 cc)  
PTFE diaphragm: 0.143 gallons (539 cc)

## Maximum Cycles Per Minute

Rubber diaphragm: 195  
PTFE diaphragm: 195

## Maximum Size Solid

1/16" (2.0 mm)

## Maximum Dry Suction Lift

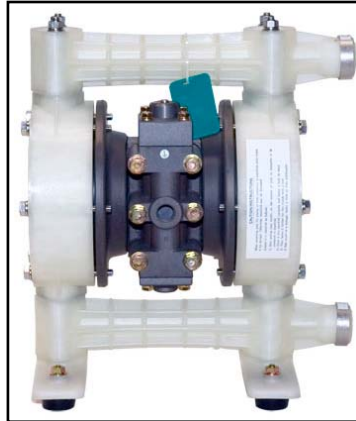
Rubber-fitted pump capability: 18-feet

## Air Motors

Aluminum air motors are standard on metal pumps; glass-filled polypropylene air motors are standard on plastic pumps.

**Optional air motors:** Epoxy-coated, Teflon<sup>®</sup>-coated, Electroless Nickel Plate, aluminum and glass-filled polypropylene.

Notes: Hytre<sup>®</sup>-fitted pumps include Buna N check balls & wetted o-rings. Santoprene<sup>®</sup>-fitted pumps include EPDM check balls & wetted o-rings.



## Aluminum (NPT)

**Dimensions:**  
9.80" W × 12.60" H  
**Net Wt.:** 19.8 lbs. (9.0 kg)  
**Shipping Wt.:** 23 lbs.

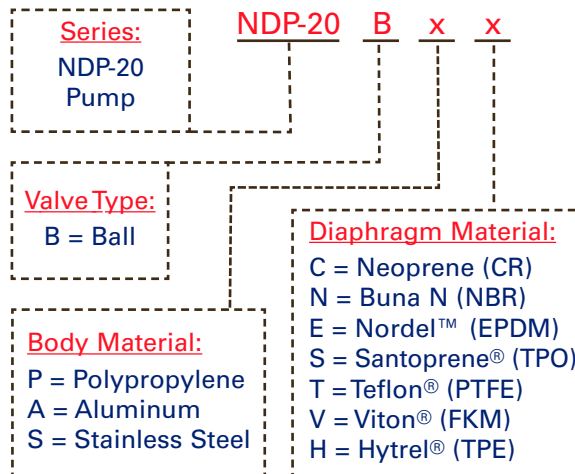
## Polypropylene

**ANSI Flange Dimensions:**  
12.44" W × 14.75" H  
**NPT Dimensions:**  
12.44" W × 14.50" H  
**Net Wt.:** 17.6 lbs. (8.2 kg)  
**Shipping Wt.:** 22.6 lbs.

## Stainless Steel (NPT)

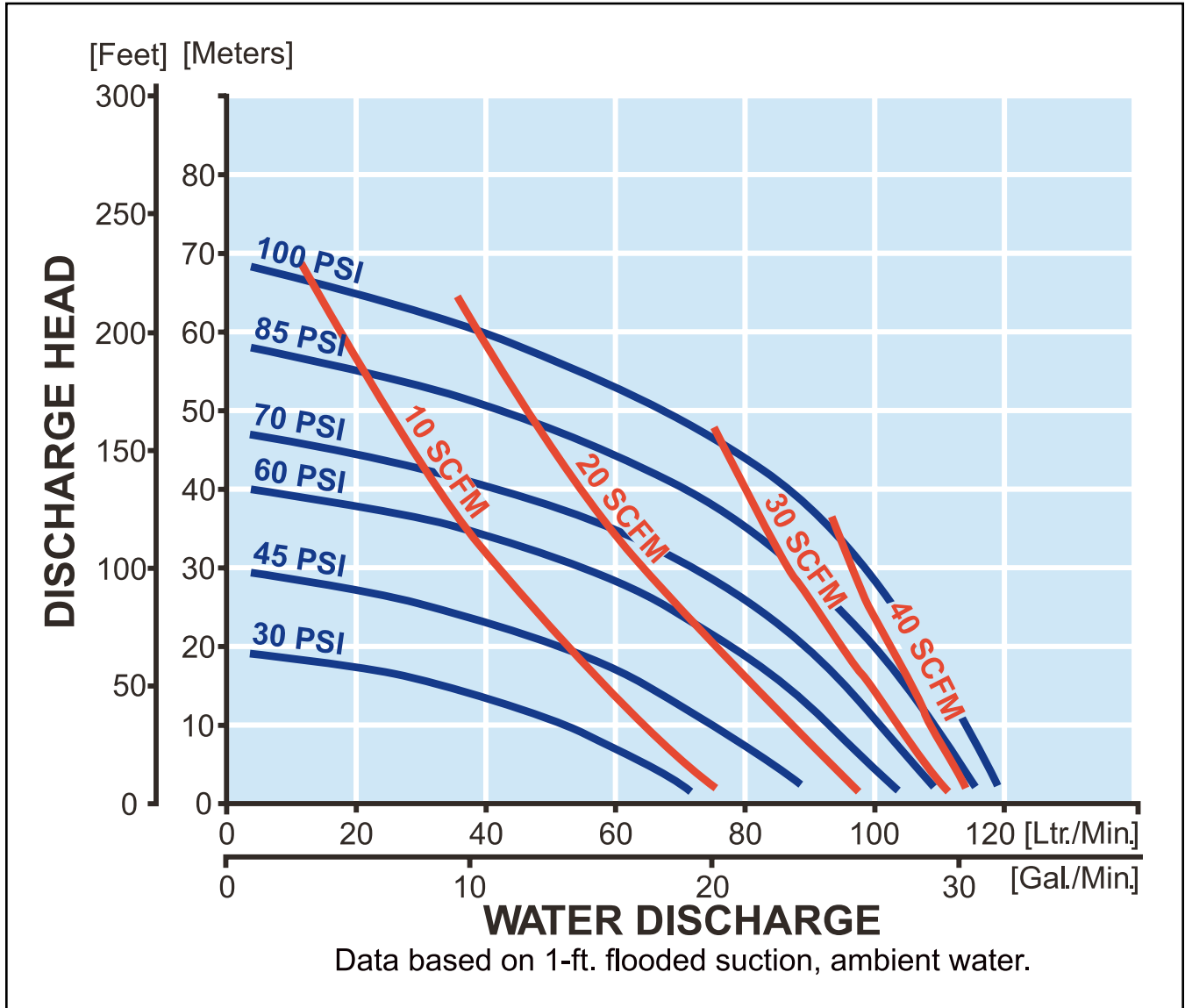
**Dimensions:**  
9.80" W × 12.60" H  
**Net Wt.:** 30.8 lbs. (13.9 kg)  
**Shipping Wt.:** 32 lbs.

## Model Number Nomenclature



# NDP-20 Performance Curve — Rubber

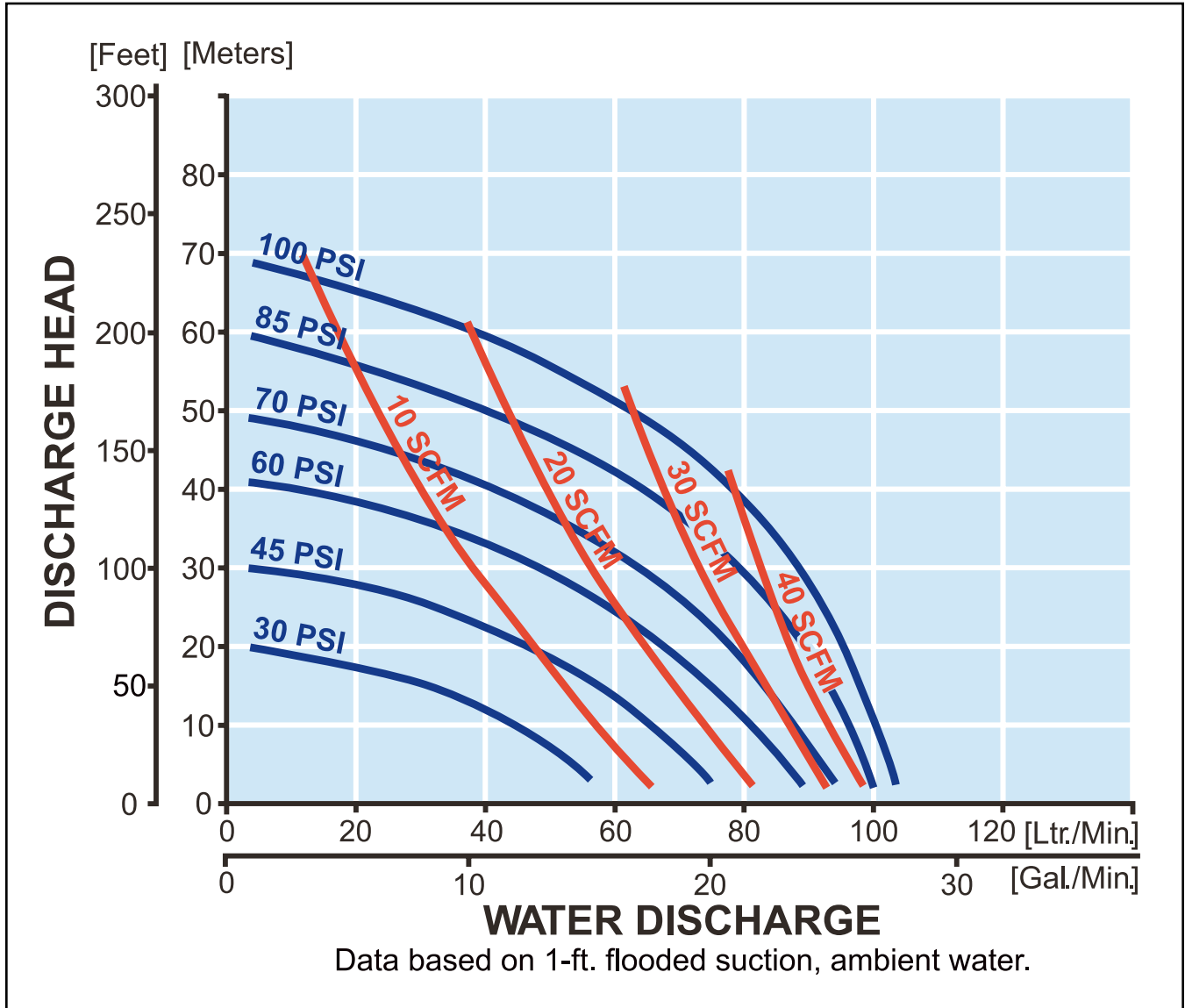
## Rubber Diaphragm Performance Curve



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

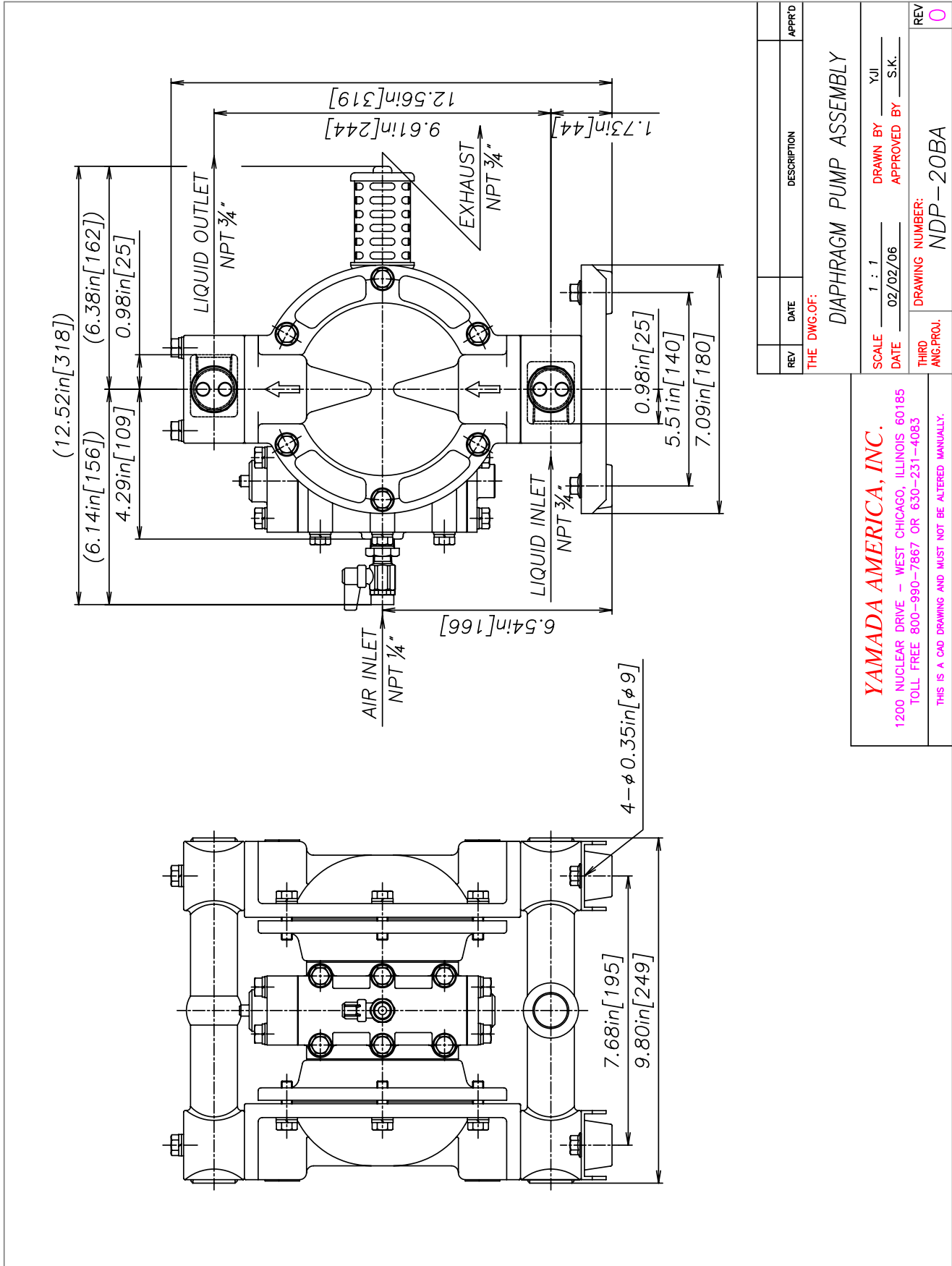
# NDP-20 Performance Curve — PTFE

## PTFE Diaphragm Performance Curve



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

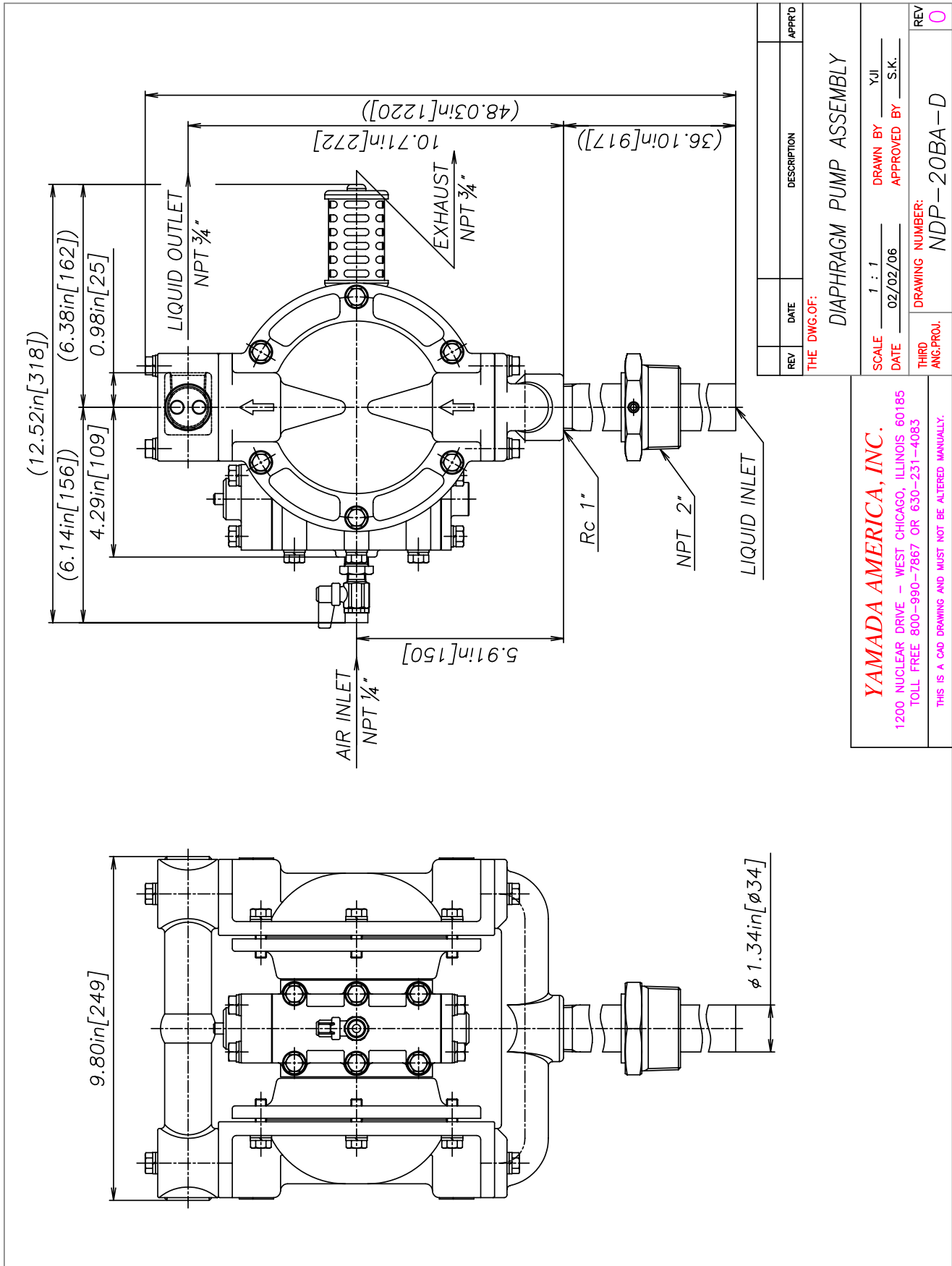




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DIAPHRAGM PUMP ASSEMBLY			
SCALE 1 : 1		DRAWN BY YJI	
DATE 02/02/06		APPROVED BY S.K.	
THIRD ANG.PROJ.	DRAWING NUMBER: NDP-20BA		REV 0

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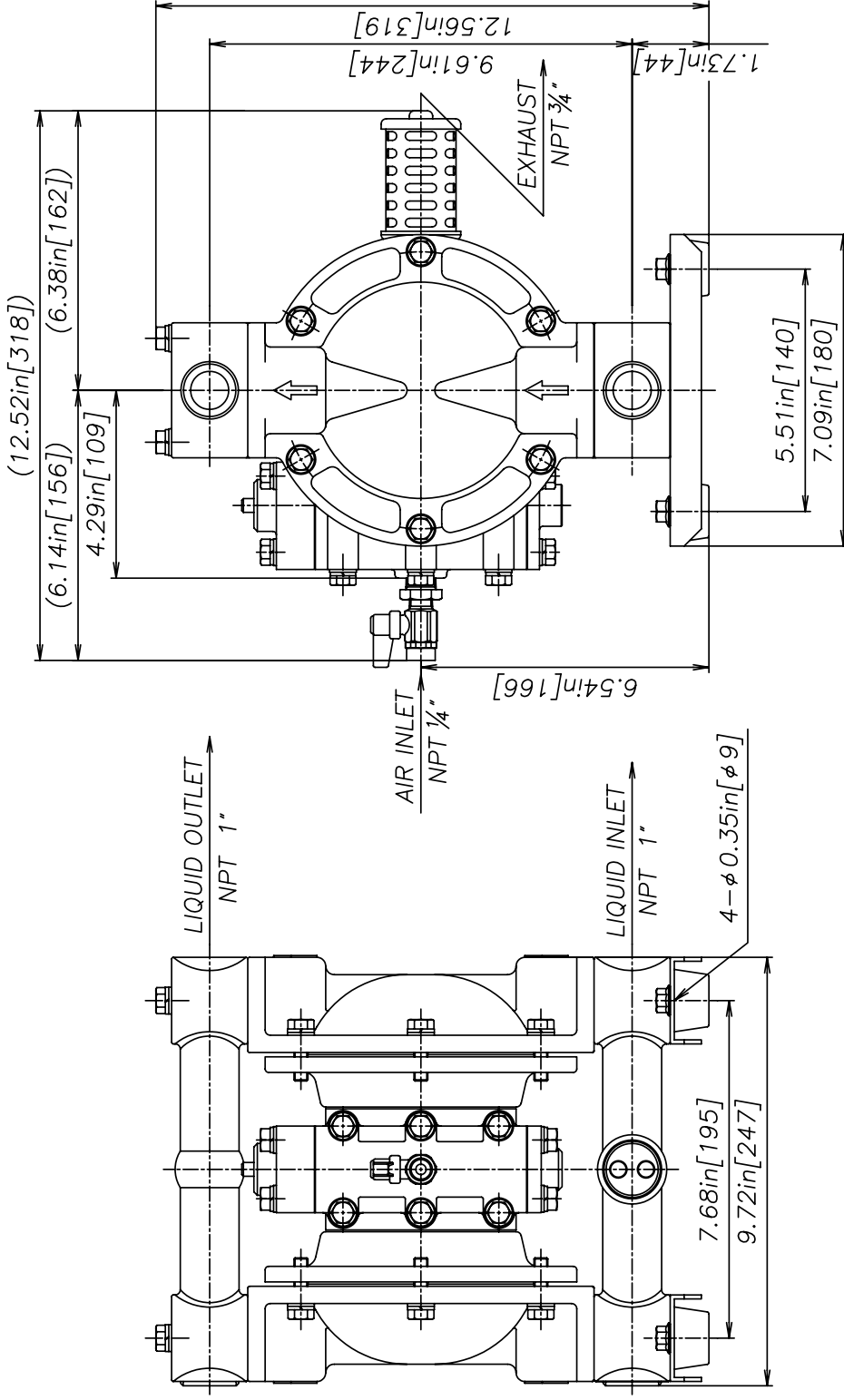




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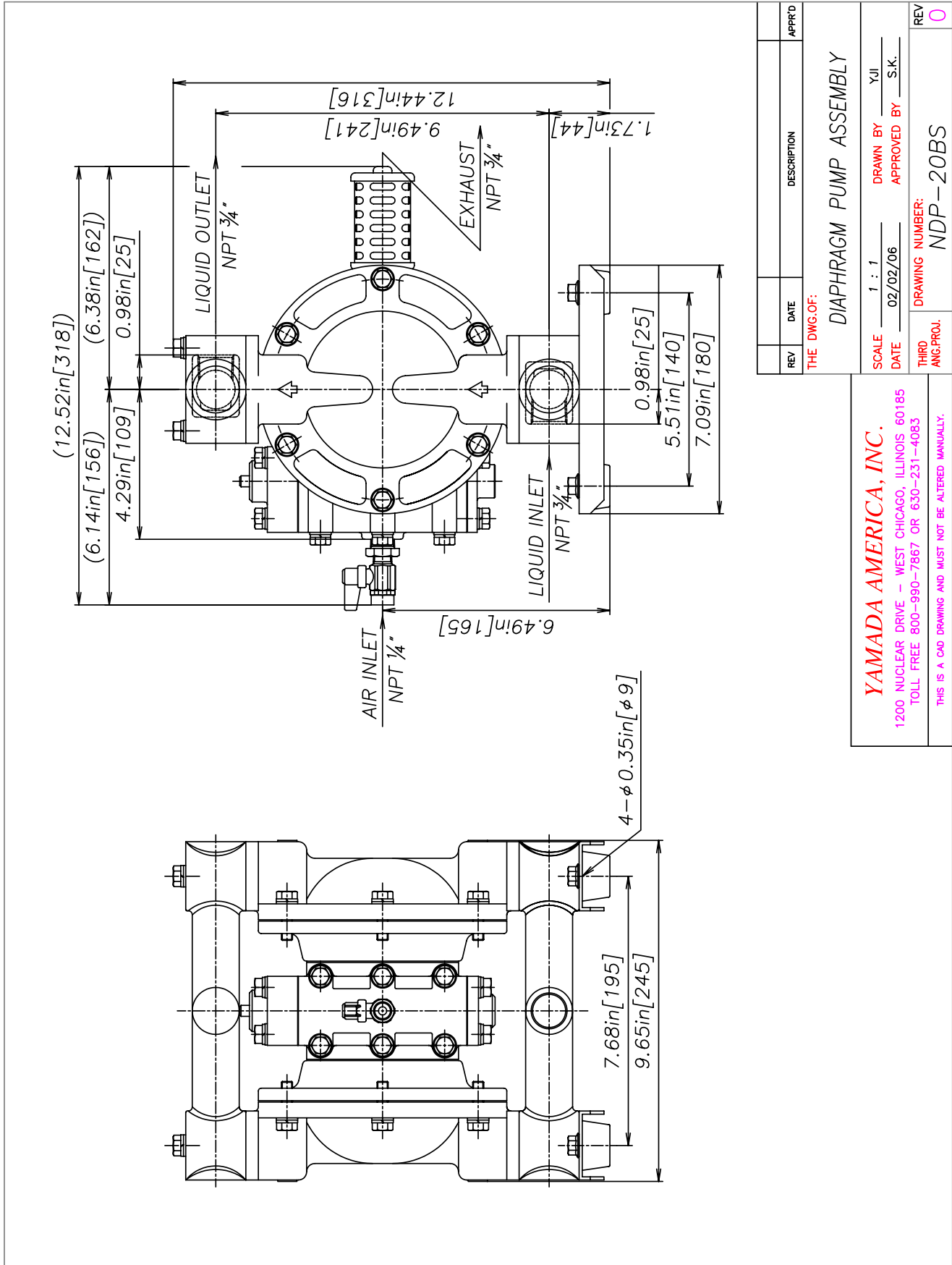
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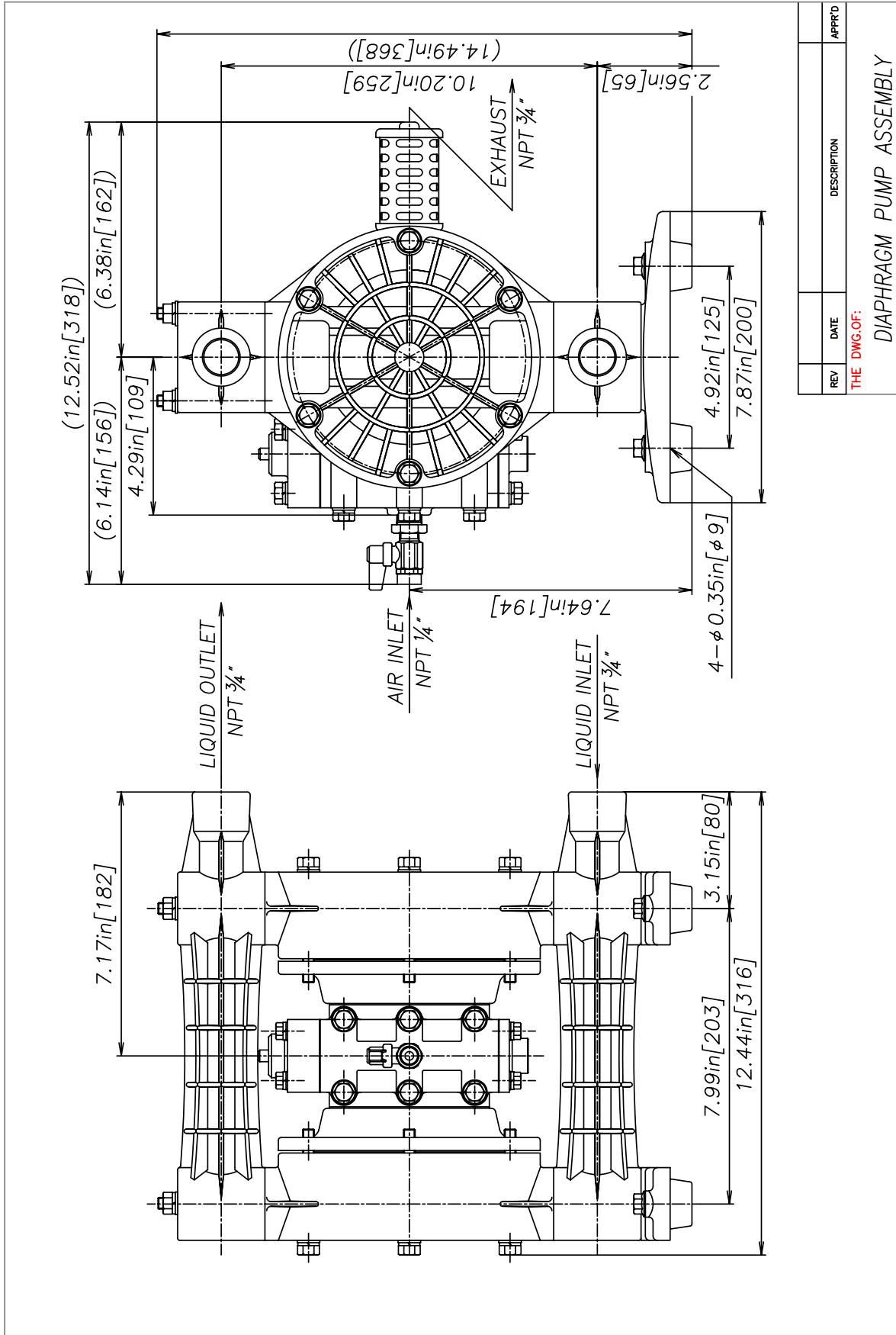
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THIRD ANG. PROJ.		DRAWING NUMBER:	NDP-20BS
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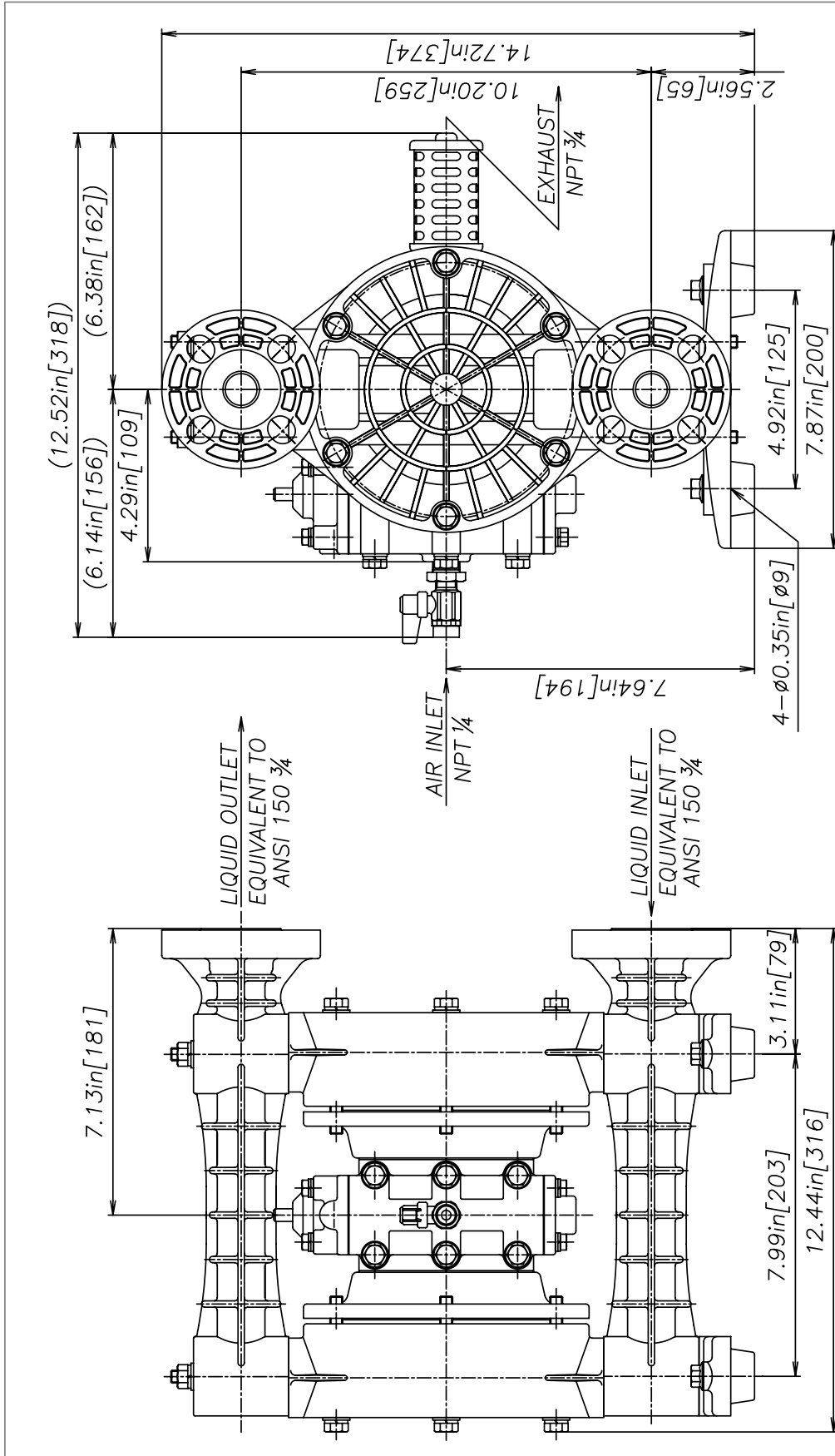


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THIRD ANG. PROJ.	DRAWING NUMBER: NDP-20BP FLANGE		REV 0

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