

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
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 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 kgf/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

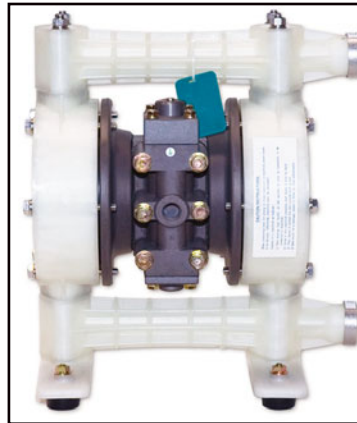
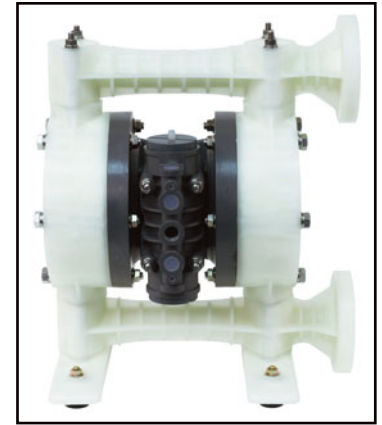
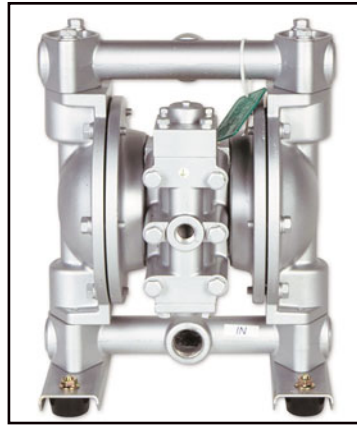
Air Motors

Aluminum air motor is standard on metal pumps. Polypropylene air motor is standard on polypropylene and Kynar® pumps.

Optional air motors: Polypropylene air motor for metal pumps; PTFE grey coating (XP) for aluminum motors.

Optional Split Manifold—contact Yamada

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

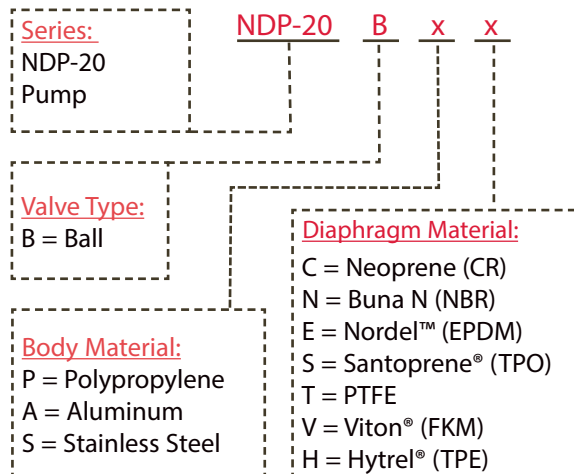
Stainless Steel (NPT)

Dimensions: 9.80" W × 12.60" H

Net Wt.: 30.8 lbs. (13.9 kg)

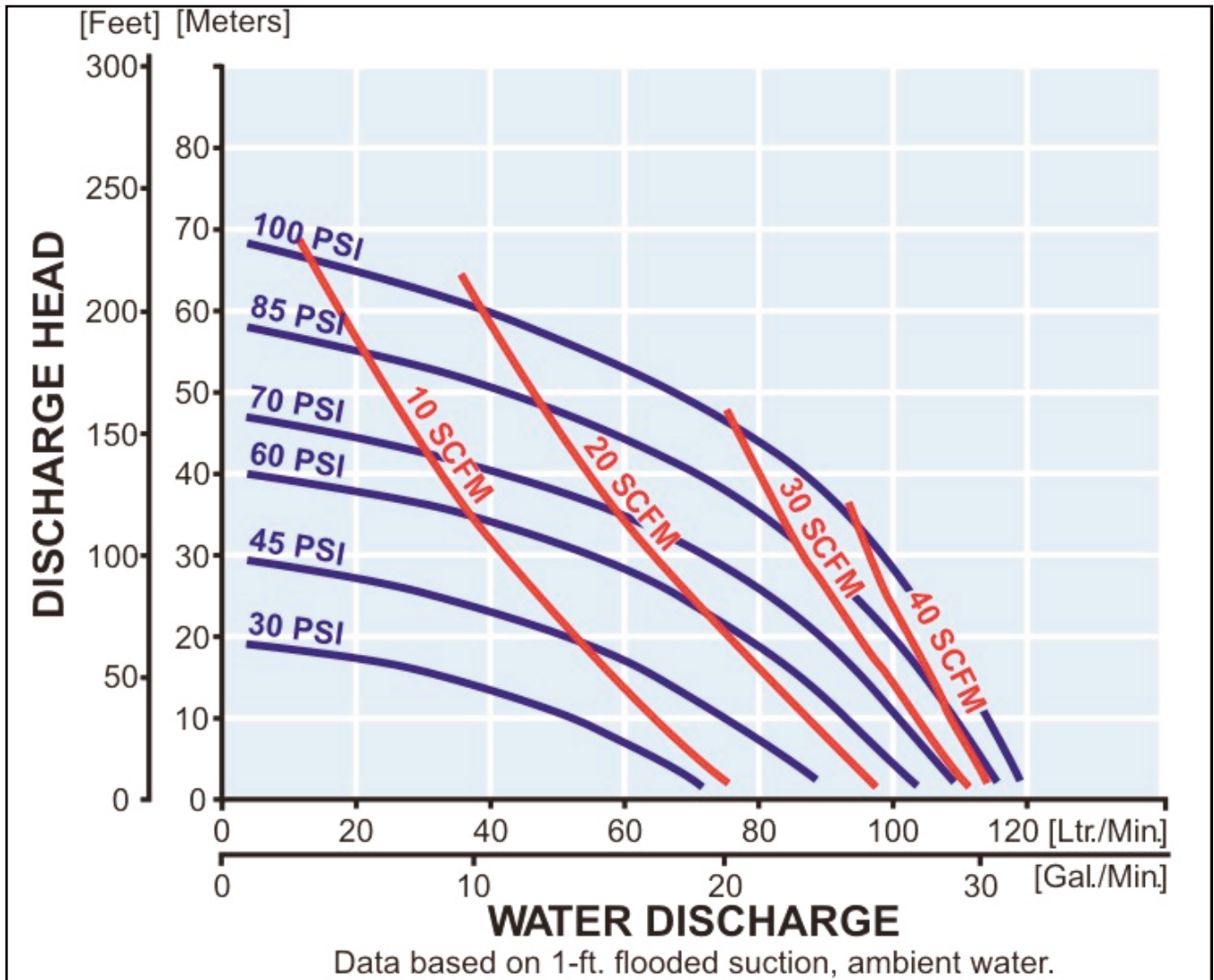
Shipping Wt.: 32 lbs.

Model Number Nomenclature



NDP-20 Performance Curve – Rubber

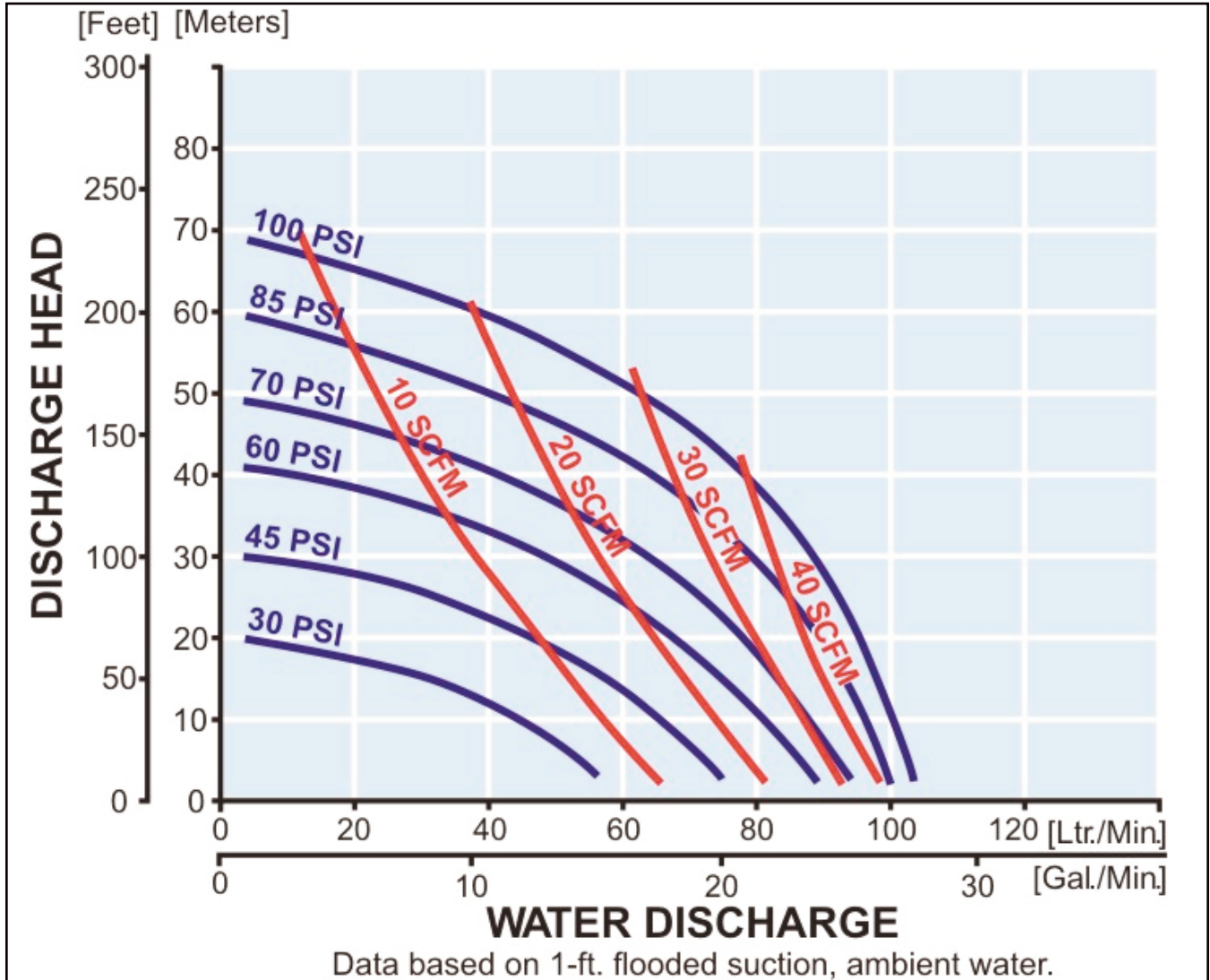
Rubber Diaphragm Performance Curve



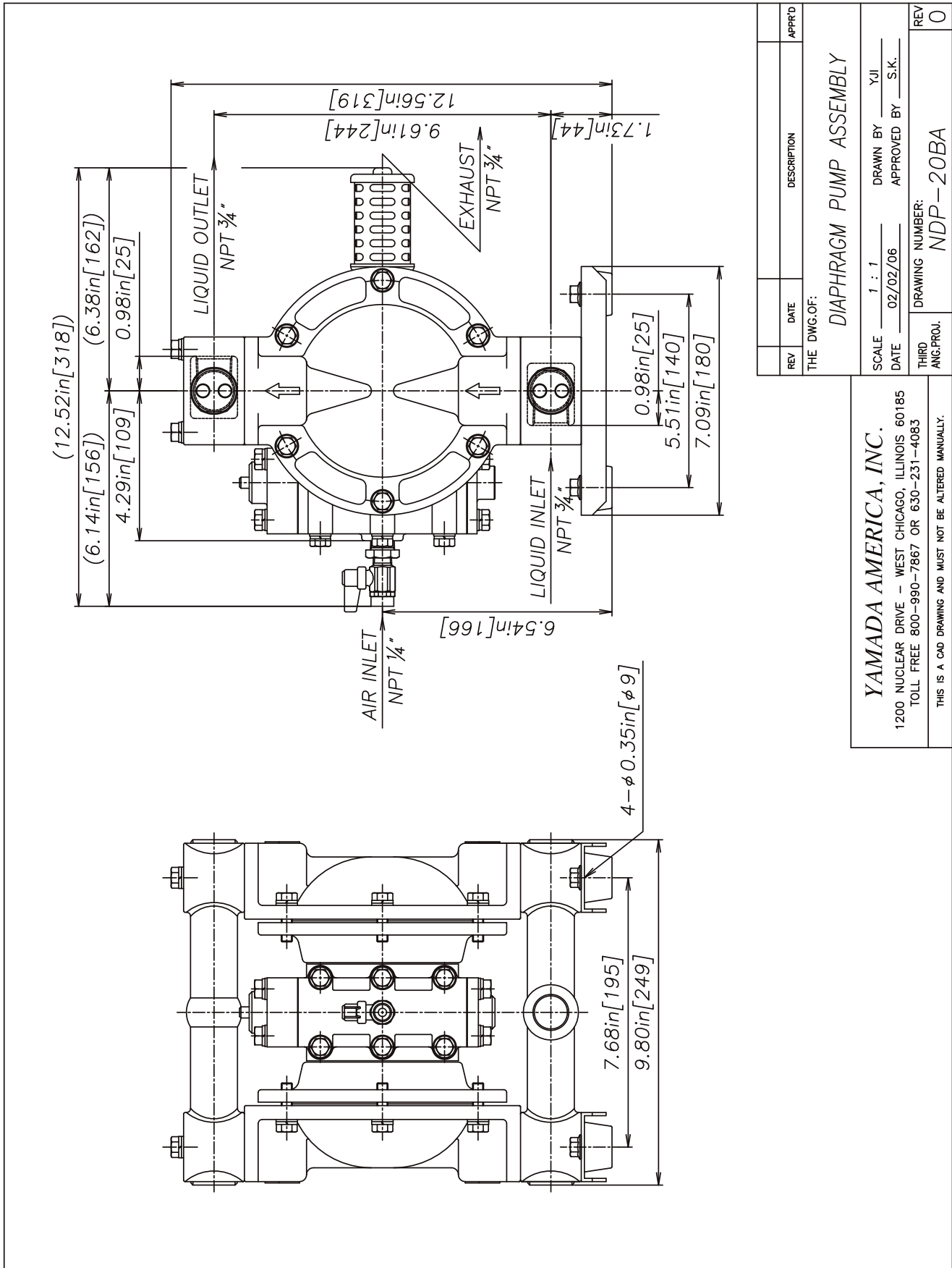
To calculate performance for Santoprene® and Hytrel®-fitted pumps, use Rubber Diaphragm Curve.

NDP-20 Performance Curve – PTFE

PTFE Diaphragm Performance Curve

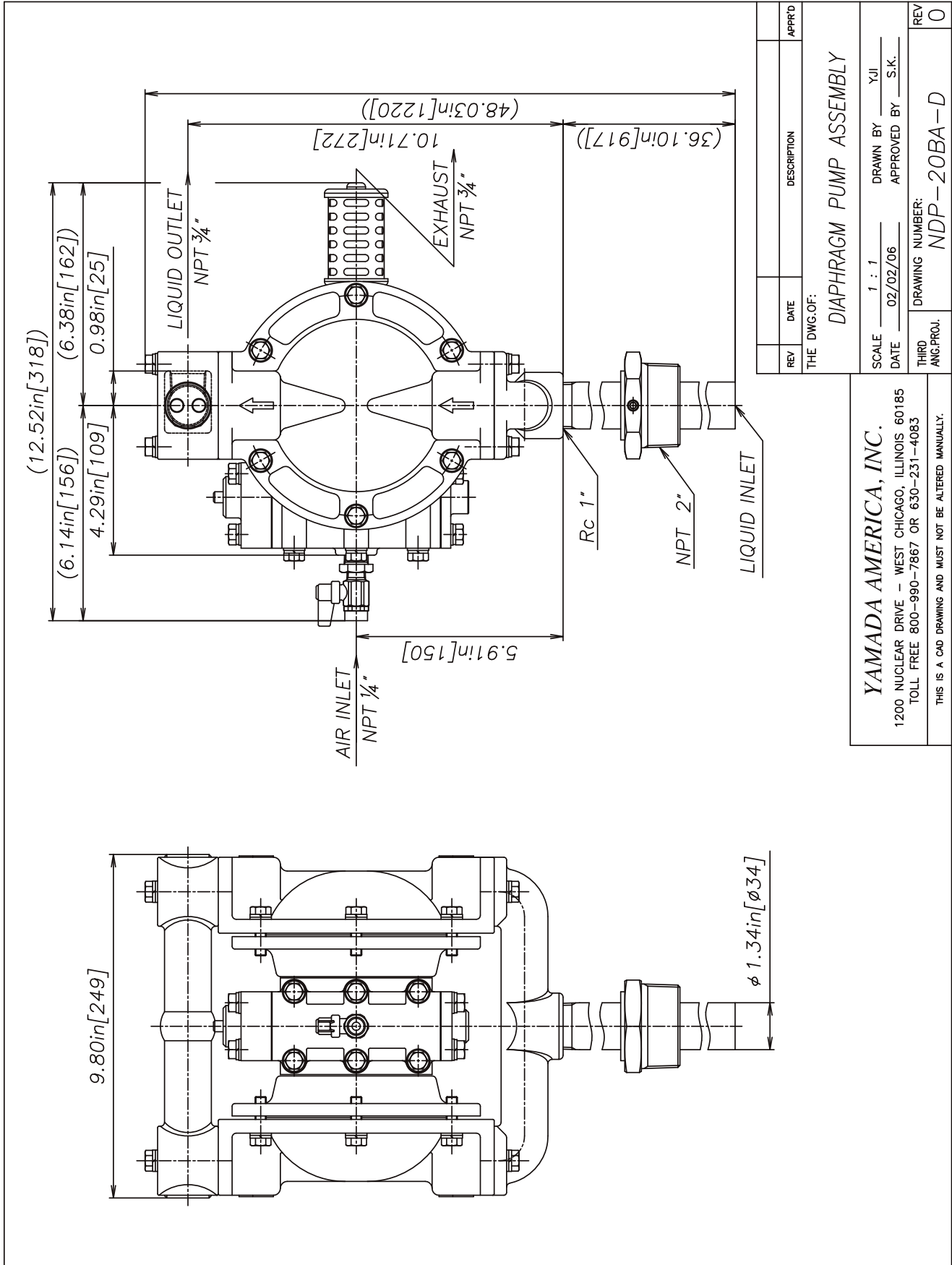


To calculate performance for Santoprene® and Hytrel®-fitted pumps, use Rubber Diaphragm Curve.



REV	DATE	DESCRIPTION	APPR'D
THE DWG.OF:			
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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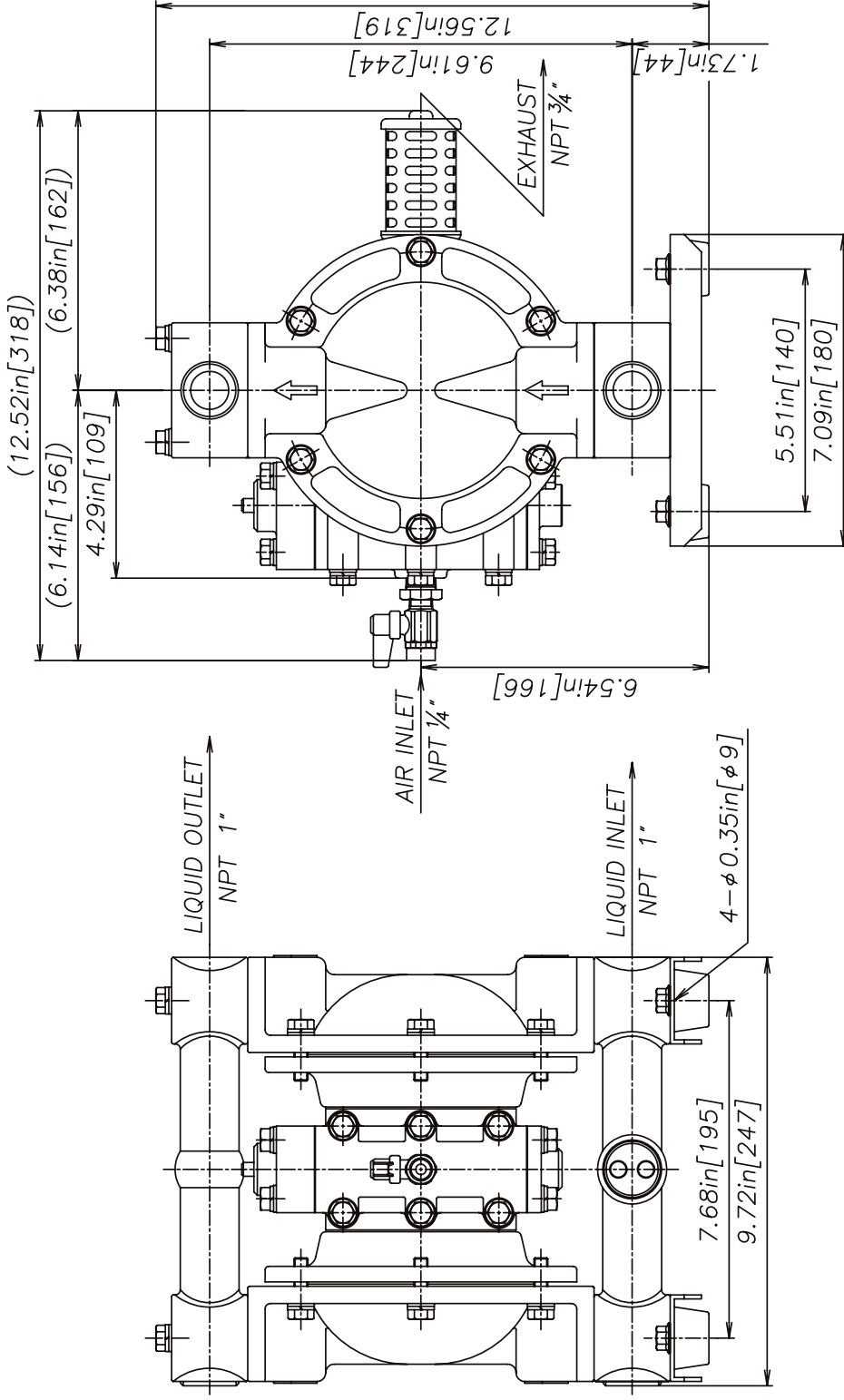


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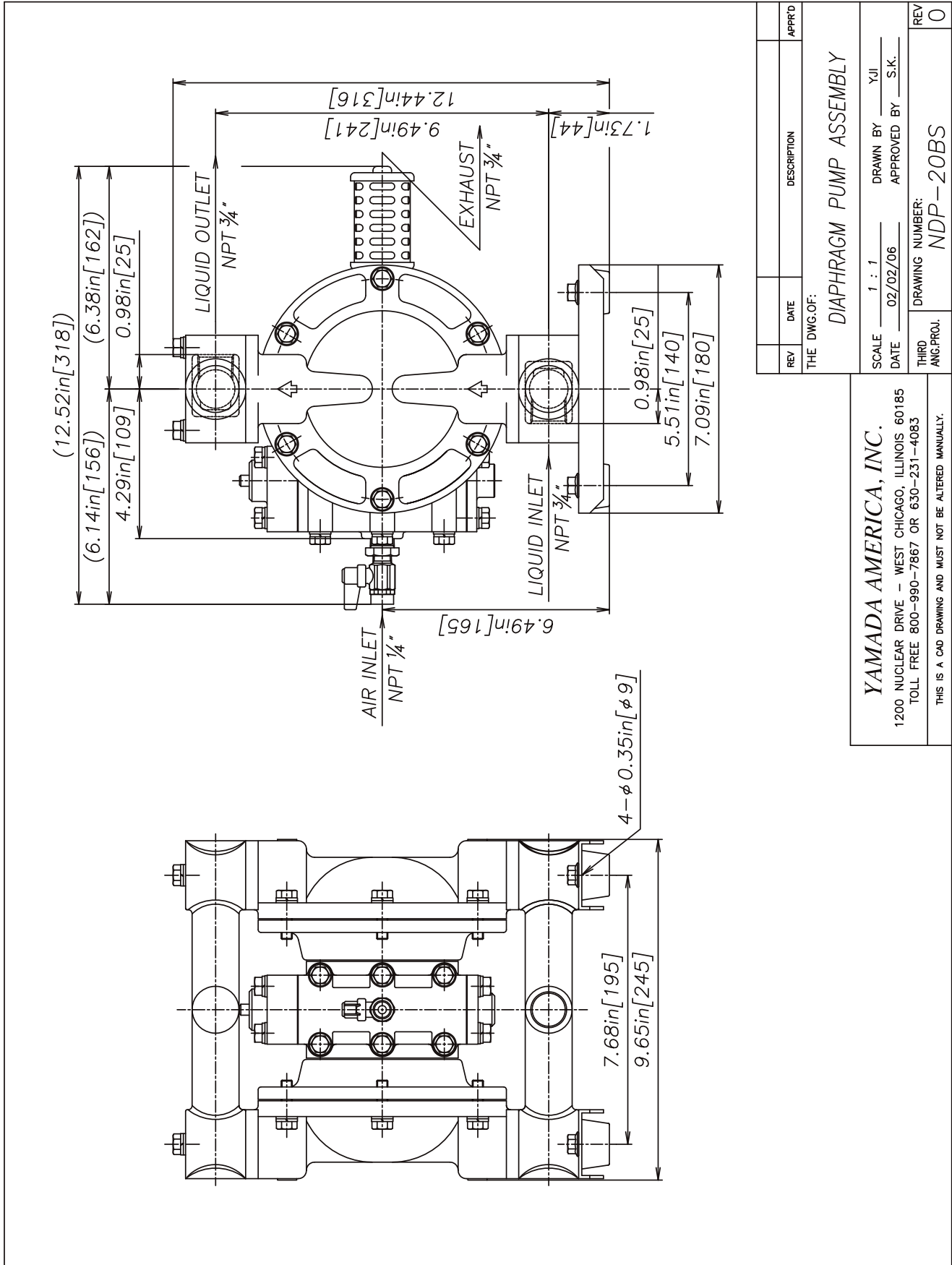
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DATE	02/02/06	APPROVED BY	S.K.
THIRD ANG. PROJ.	DRAWING NUMBER:		REV
	NDP-20BA-1S		0

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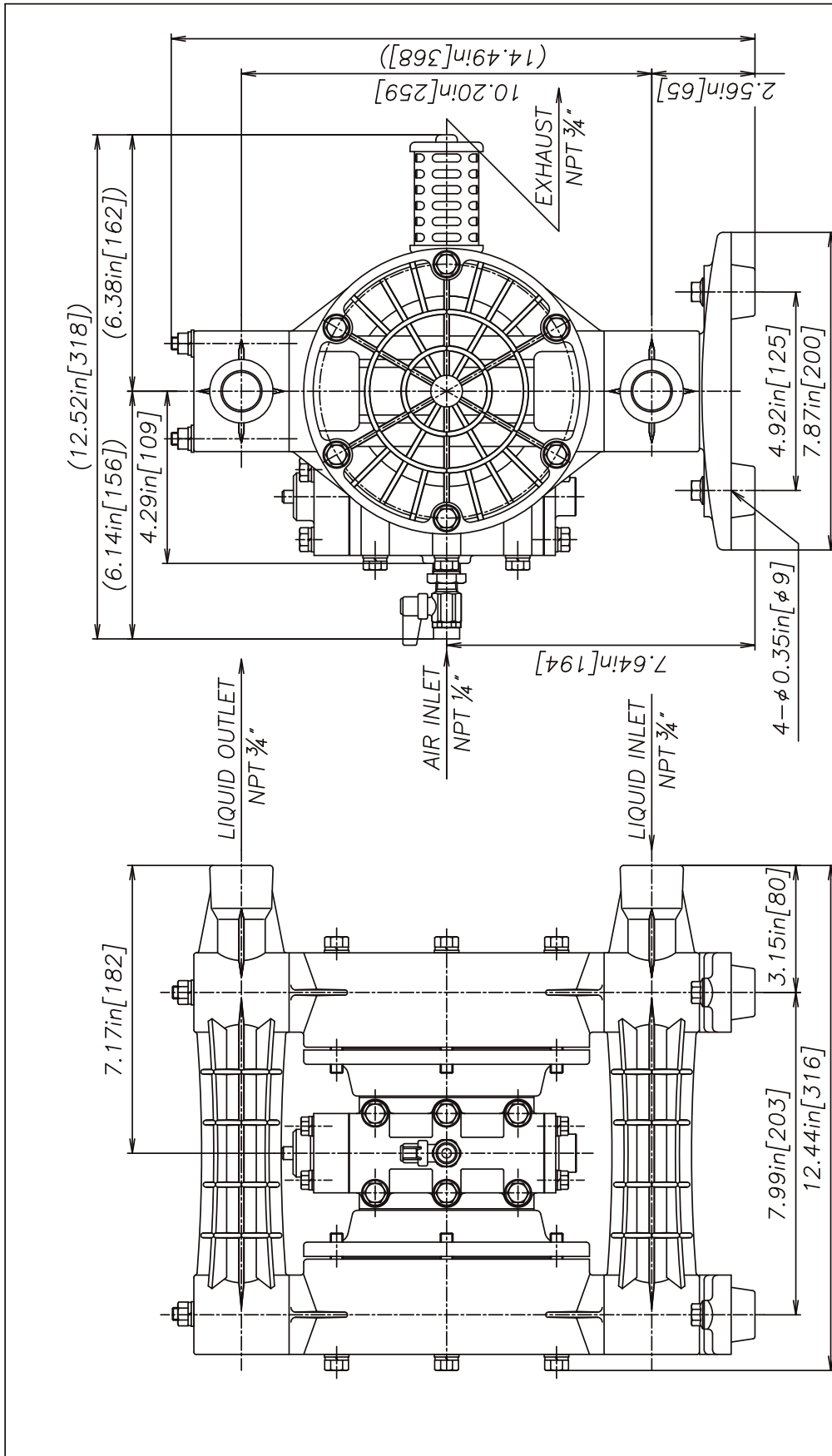
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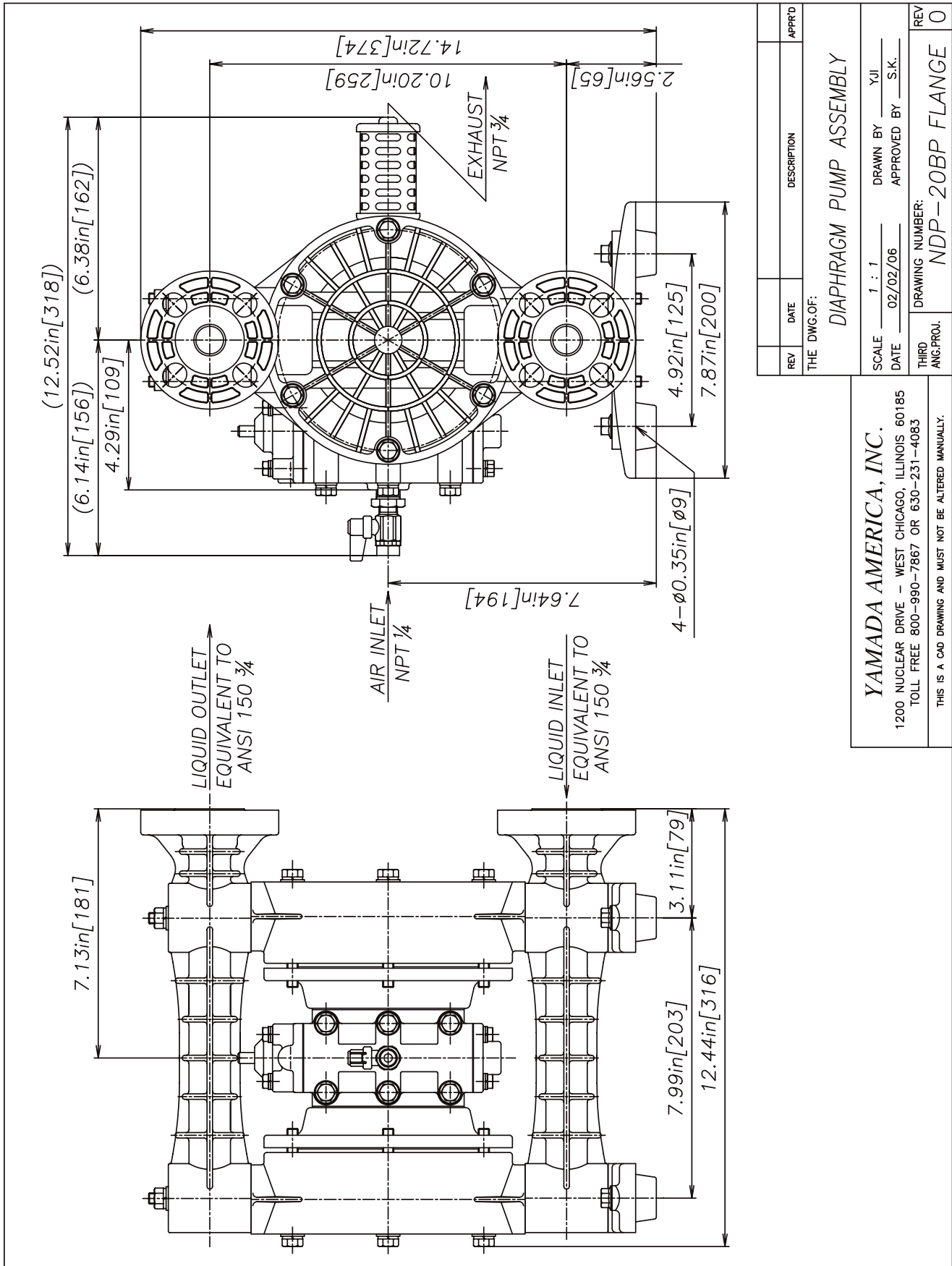
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SCALE 1 : 1 DRAWN BY YJI
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DATE 02/02/06		APPROVED BY S.K.	
THIRD ANG. PROJ.	DRAWING NUMBER:		REV
	NDP-20BP FLANGE		0

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