

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 (with tapped 2" Female NPT)
Cast Iron	2" Female NPT
Air inlet (includes ball valve):	3/4" Female NPT
Air exhaust (includes silencer):	1" Female NPT

Maximum Liquid Temperature*

Diaphragm Material	Temperature
Buna N	158°F (70°C)
Neoprene	180°F (82°C)
Santoprene® (TPO)	212°F (100°C)
EPDM	212°F (100°C)
PTFE	212°F (100°C)
Hytrell® (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/cm²)

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'

Air Motor

Aluminum or Polypropylene (PP)

Optional coating: PTFE grey coated (XP)

Notes: Hytrell® fitted pumps include Buna N wetted o-rings. Santoprene® fitted pumps include EPDM wetted o-rings. Kynar® pumps fitted with Santoprene®, Hytrell® or PTFE include PTFE check balls and o-rings.



Aluminum

Dimensions: 17.68"W x 30.67"H

Net Wt.: 88 lbs. (39.9 kg)

Shipping Wt.: 99 lbs.



Polypropylene or Kynar (metal center)

Dimensions: 18.63"W x 32.32"H

Net Wt.: 84 lbs. (38.1 kg)

Shipping Wt.: 108 lbs.



Cast Iron or Stainless Steel

Dimensions: 17.72"W x 30.55"H

Net Wt.:

Cast Iron 159 lbs. (72.1 kg)

Stainless Steel 162 lbs. (73.5 kg)

Shipping Wt.:

Cast Iron 168 lbs.

Stainless Steel S 173 lbs.

Note: ANSI Flange available for Cast Iron and Stainless Steel



Kynar or Polypropylene (plastic center)

Dimensions: 18.31"W x 32.30"H

Net Wt.:

Polypropylene 81.6 lbs. (37 kg)

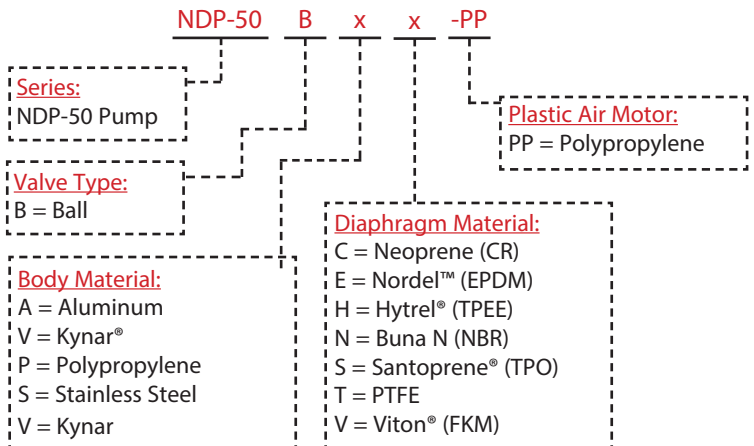
Kynar 94.8 lbs. (43 kg)

Shipping Wt.:

Polypropylene 91.6 lbs.

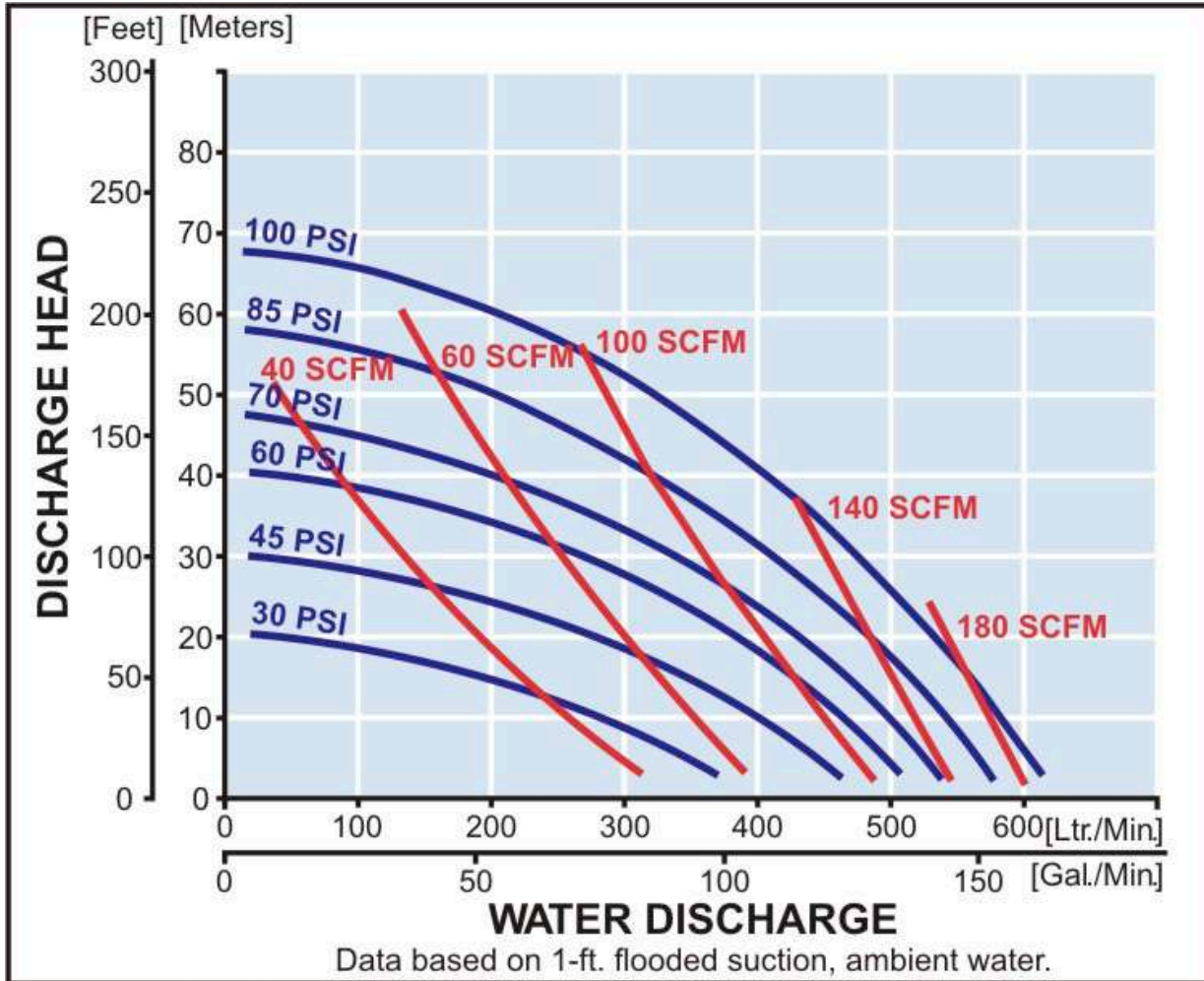
Kynar 104.8 lbs.

Model Number Nomenclature



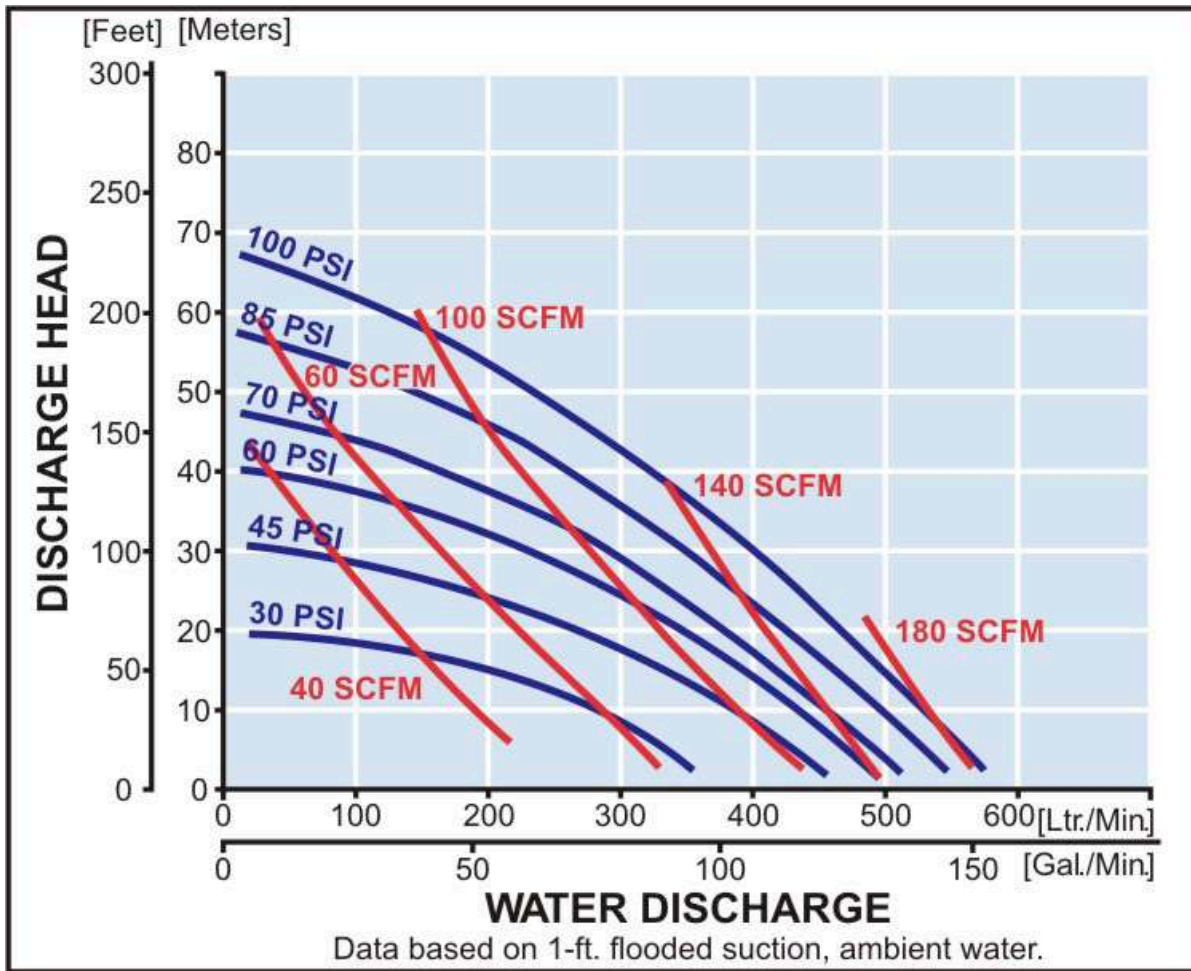
NDP-50 Performance Curve

Rubber Diaphragm Performance Curve

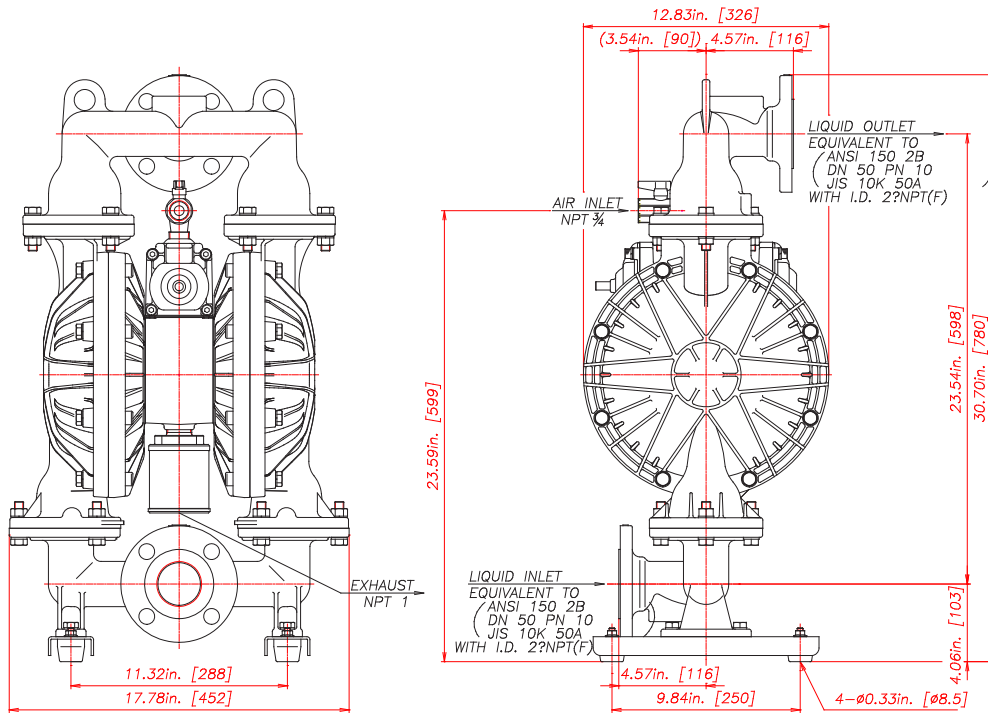


NDP-50 Performance Curve

PTFE Diaphragm Performance Curve



NDP-50 Aluminum

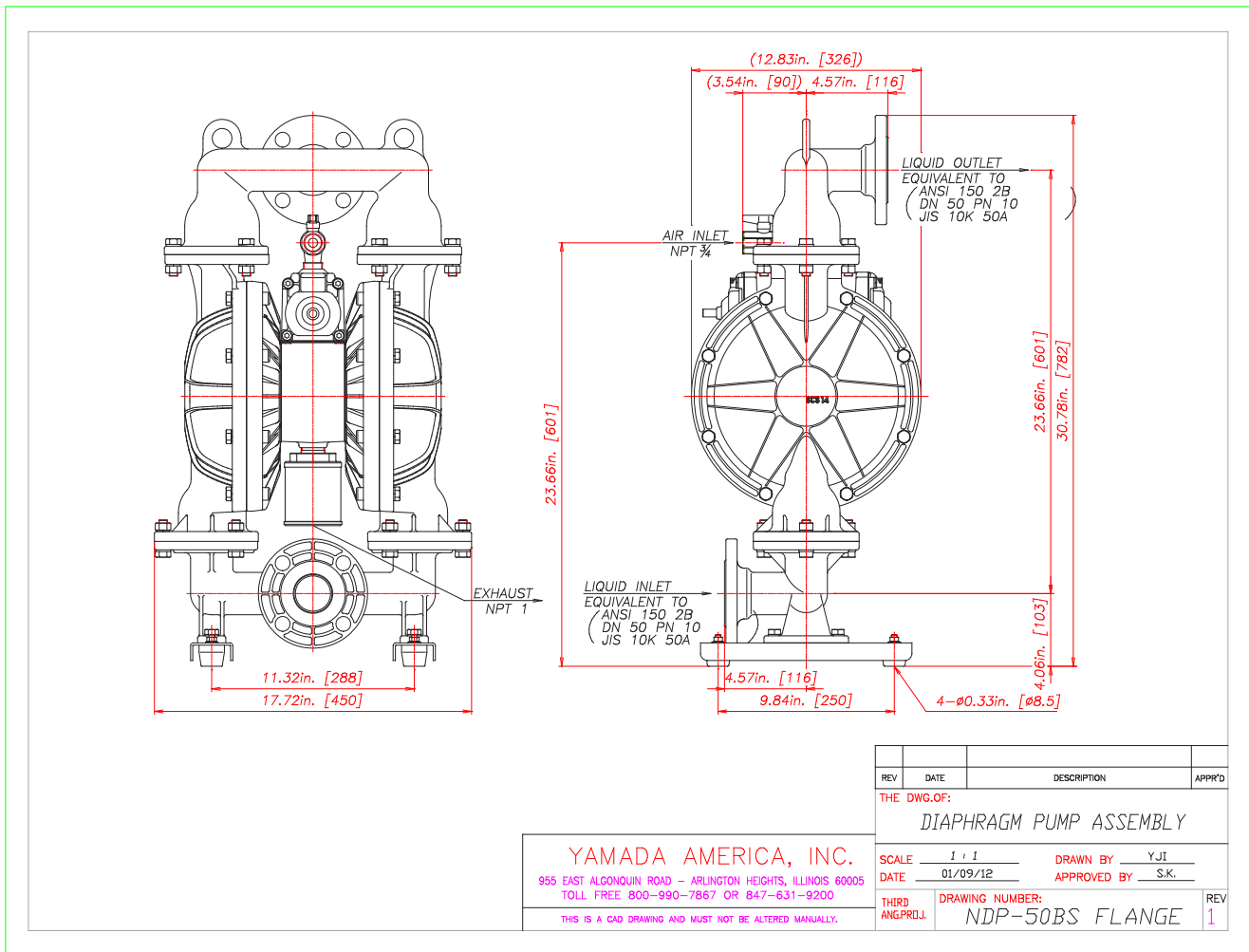


REV	DATE	DESCRIPTION	APPR'D
THE DWG. OF:			
DIAPHRAGM PUMP ASSEMBLY			
SCALE: 1 : 1		DRAWN BY: Y.JI	
DATE: 01/09/12		APPROVED BY: S.K.	
THIRD ANGP. PROJ.	DRAWING NUMBER: NDP-50BA		REV: 1

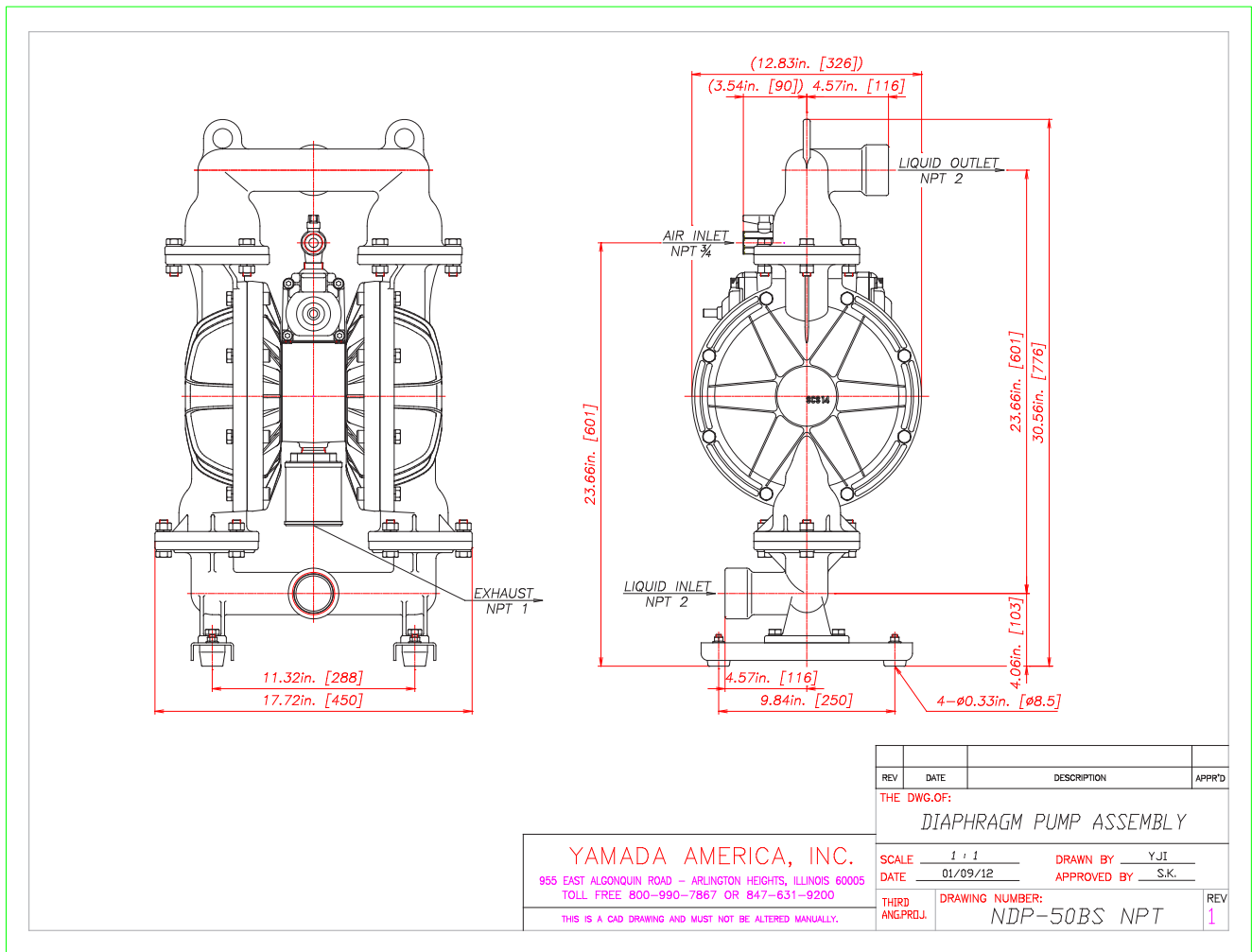
YAMADA AMERICA, INC.
 955 EAST ALGONQUIN ROAD - ARLINGTON HEIGHTS, ILLINOIS 60005
 TOLL FREE 800-990-7867 OR 847-631-9200

THIS IS A CAD DRAWING AND MUST NOT BE ALTERED MANUALLY.

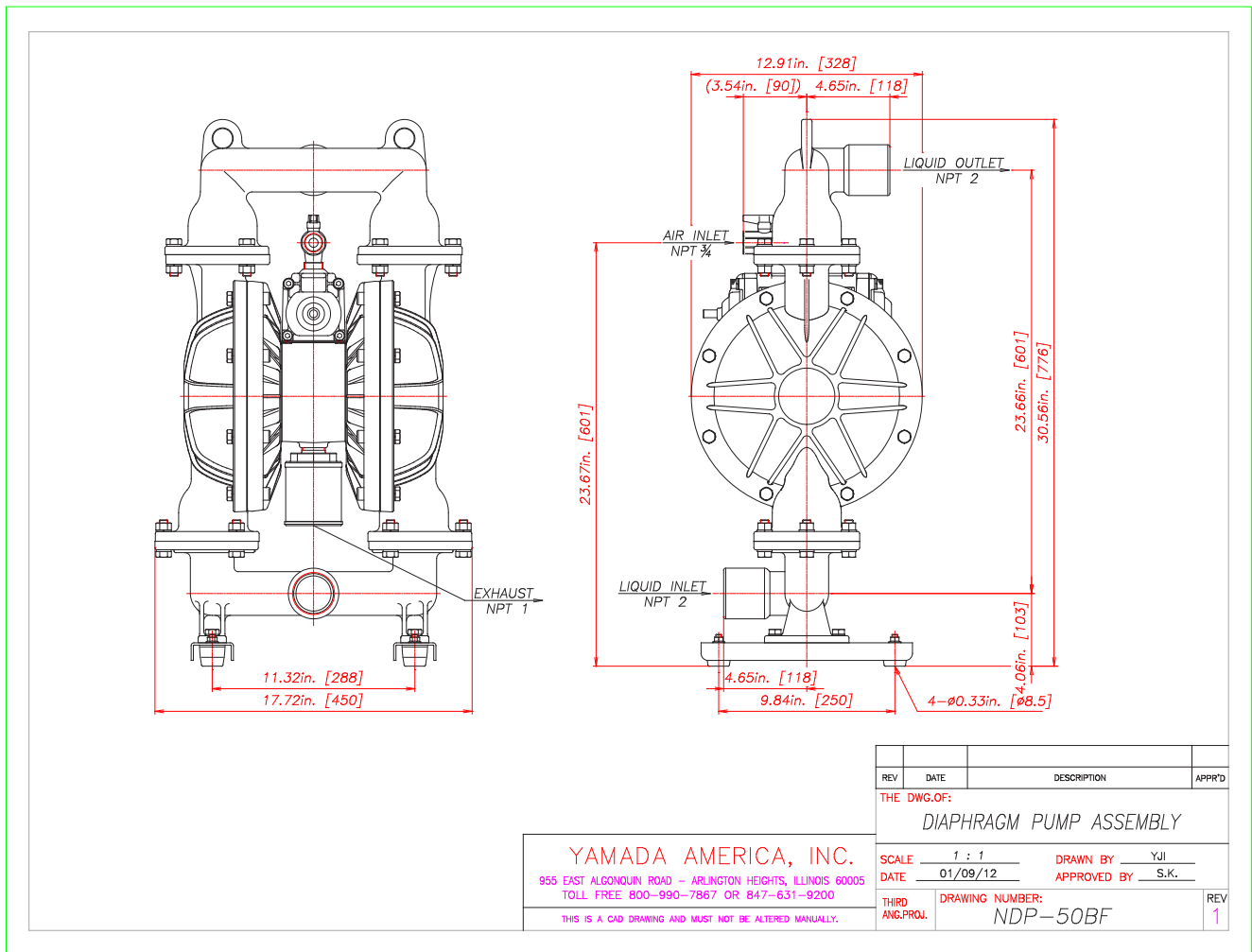
NDP-50 Stainless Steel - Flange



NDP-50 Stainless Steel - NPT

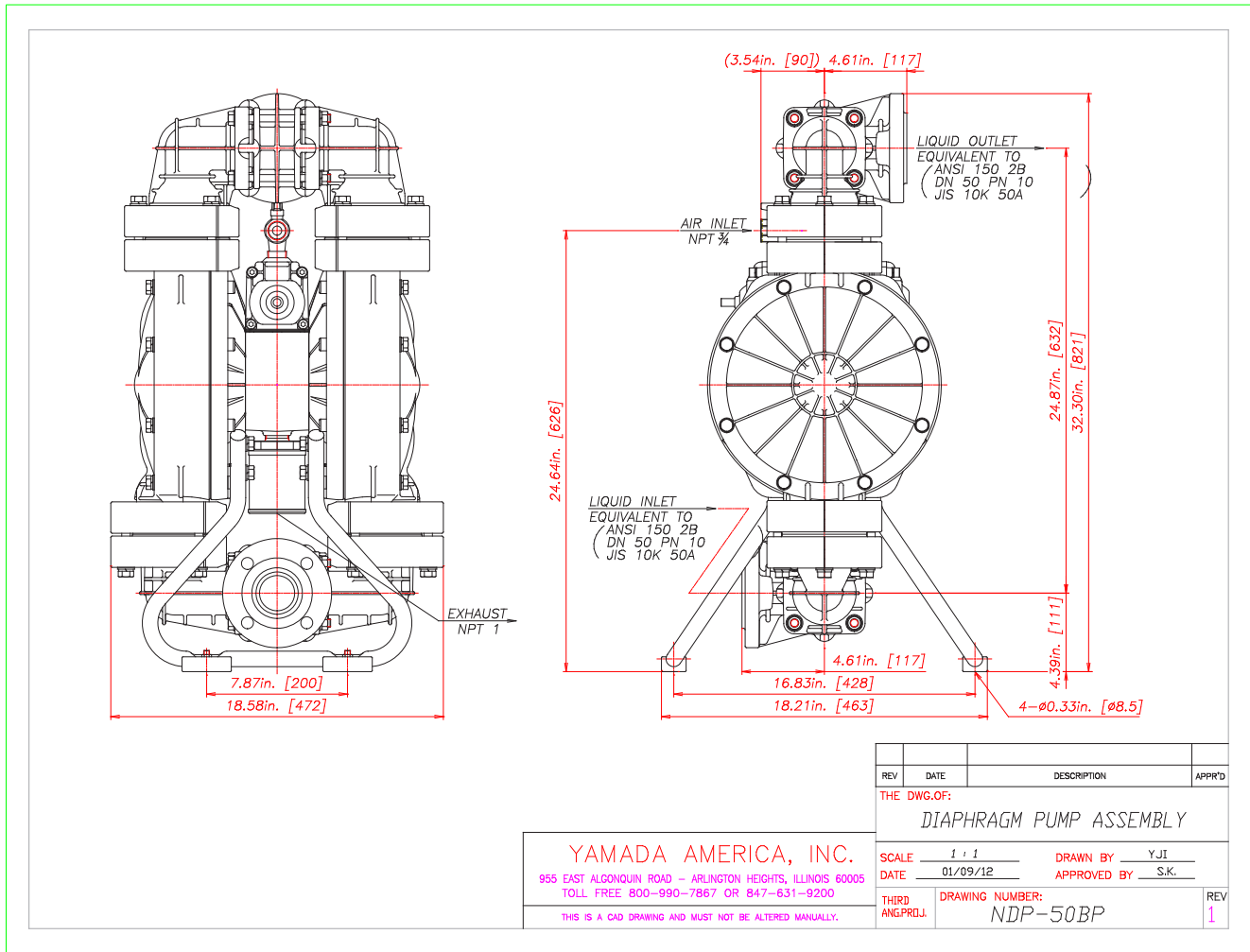


NDP-50 Cast Iron



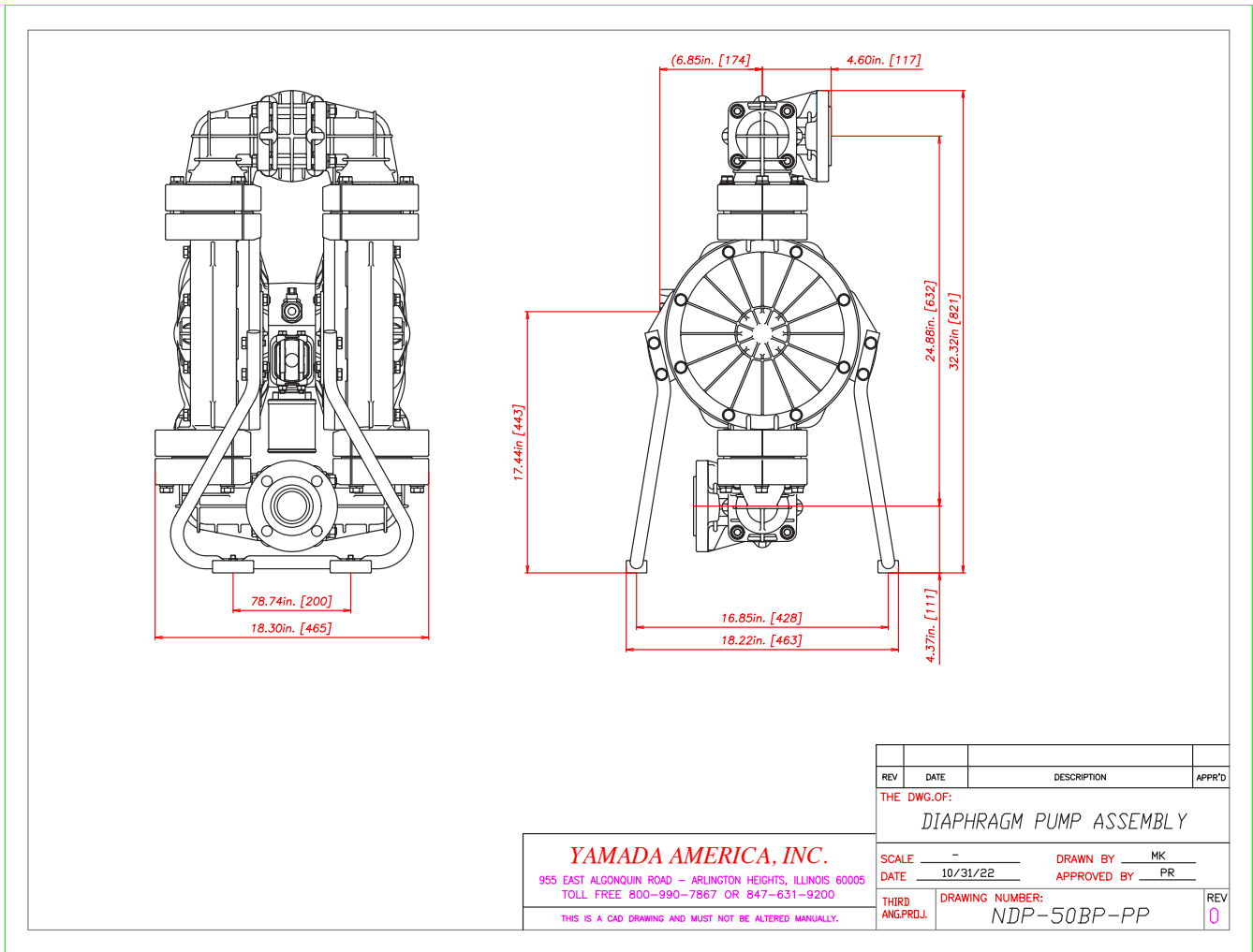
NDP-50 Polypropylene

Metal Center Body



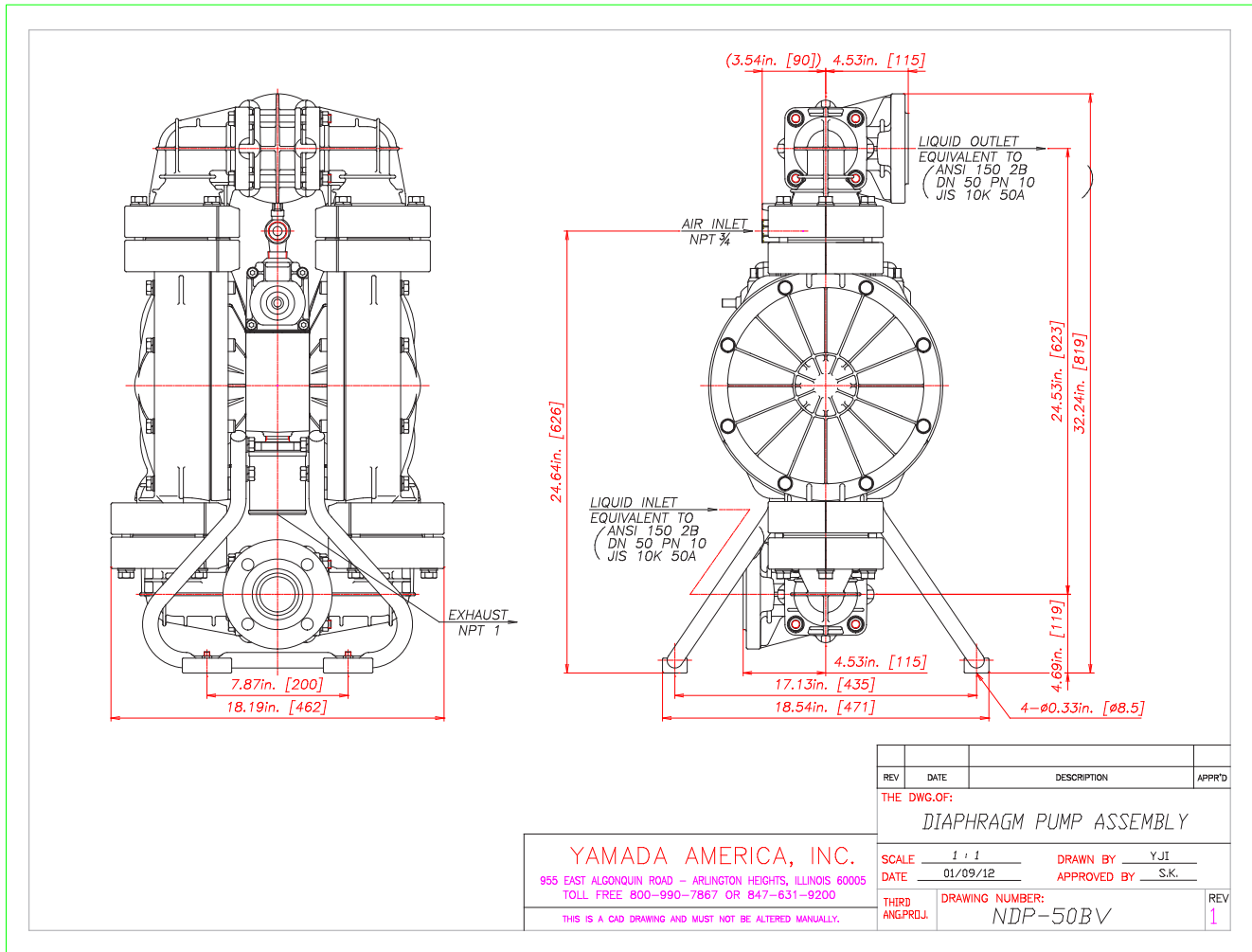
NDP-50 Polypropylene (PP)

Plastic Center Body



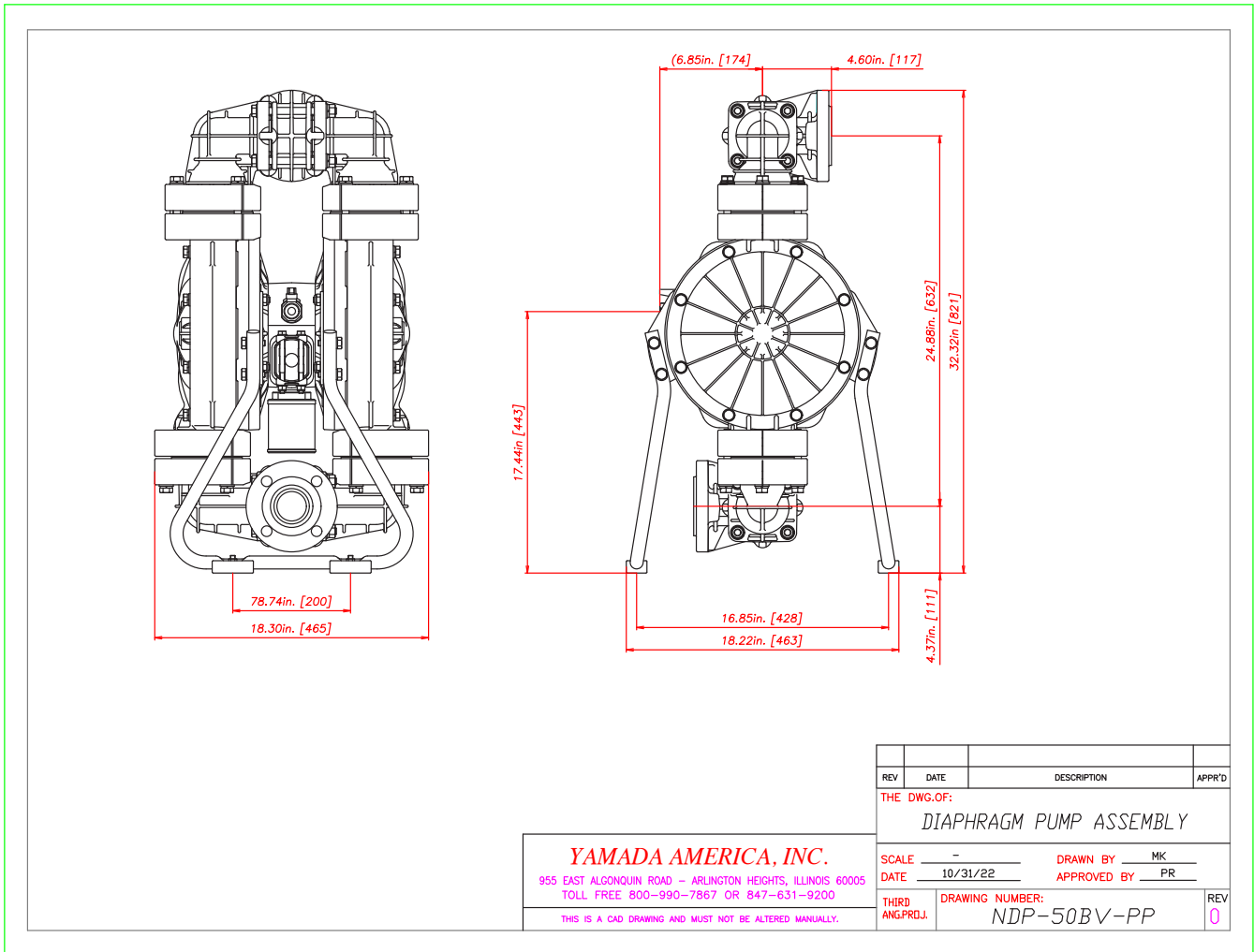
NDP-50 Kynar

Metal Center Body



NDP-50 Kynar (PP)

Plastic Center Body



AutoCAD® is a registered trademark of Autodesk, Inc.

Hytrel® is a registered trademark of E.I. du Pont de Nemours and Company.

Kynar® is a registered trademark of Arkema.

Nordel™ is a trademark of DuPont Dow Elastomers.

Ryton® is a registered trademark of Chevron Phillips Chemical Company.

Santoprene® is a registered trademark of Advanced Elastomer Systems.

Viton® is a registered trademark of DuPont Performance Elastomers.

Swagelok™ & VCR™ are trademarks of the Swagelok Companies.

Flaretek® is a registered trademark of Entegris.

Garlock ONE-UP® is a registered trademark of W.L. Gore & Associates.

Yamada® is a registered trademark of Yamada America, Inc.

SolidPRO Designed to Pump Fluids Containing Solids® is a registered trademark of Yamada America, Inc.

Xtreme Duty Pro XDP® is a registered trademark of Yamada America, Inc.

The Proof's in the Pump® is a registered trademark of Yamada America, Inc.

The Proof is in the Pump® is a registered trademark of Yamada America, Inc.

Engineered to Perform. Designed to Outlast.® is a registered trademark of Yamada America, Inc.

Due to Yamada's continued commitment to product improvement, specifications may change without notice.