

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)
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/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'

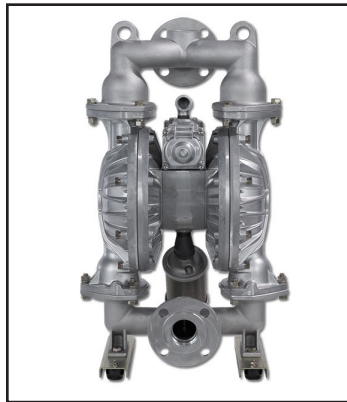
Air Motor

Aluminum or Polypropylene (PP)

Optional coating: PTFE grey coated (XP)

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

Santoprene® fitted pumps include EPDM wetted o-rings. Kynar® pumps fitted with Santoprene®, Hytrel® or PTFE include PTFE check balls and o-rings.



Aluminum

Dimensions:

17.78"L x 12.83"W x 30.70"H

Net Wt.: 88 lbs. (39.9 kg)

Shipping Wt.: 99 lbs.



Polypropylene or Kynar (metal center)

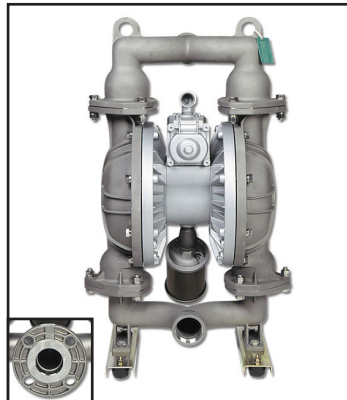
Dimensions:

Poly: 18.58"L x 18.21"W x 32.30"H

Kynar: 18.19"L x 18.54"W x 32.24"H

Net Wt.: 84 lbs. (38.1 kg)

Shipping Wt.: 108 lbs.



Cast Iron or Stainless Steel

Dimensions:

C. Iron: 17.72"L x 12.91"W x 30.56"H

SS: 17.72"L x 12.83"W x 30.78"H

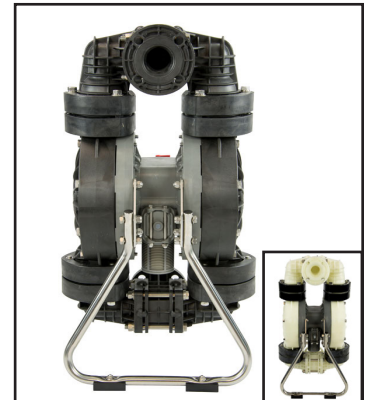
Net Wt.: C. Iron: 159 lbs. (72.1 kg)

SS: 162 lbs. (735. kg)

Shipping Wt.: C. Iron: 168 lbs.

SS: 173 lbs.

Note: ANSI Flange available for Cast Iron and Stainless Steel



Kynar or Polypropylene (plastic center)

Dimensions:

Poly: 18.30"L x 18.21"W x 32.32"H

Kynar: 18.30"L x 18.22"W x 32.32"H

Net Wt.:

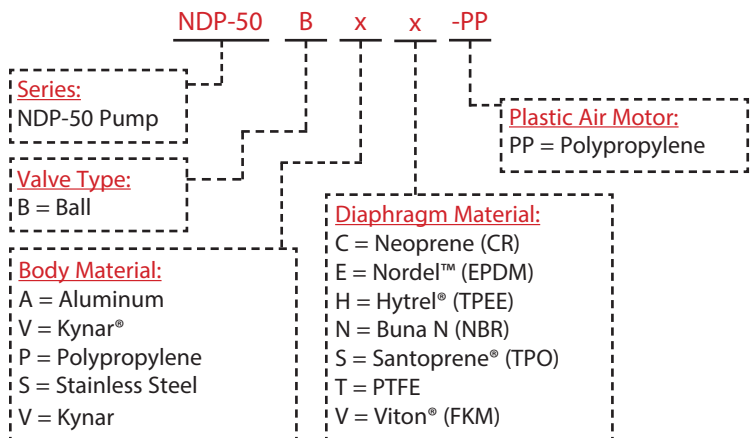
Poly: 81.6 lbs. (37 kg)

Kynar: 94.8 lbs. (43 kg)

Shipping Wt.: Poly: 91.6 lbs.

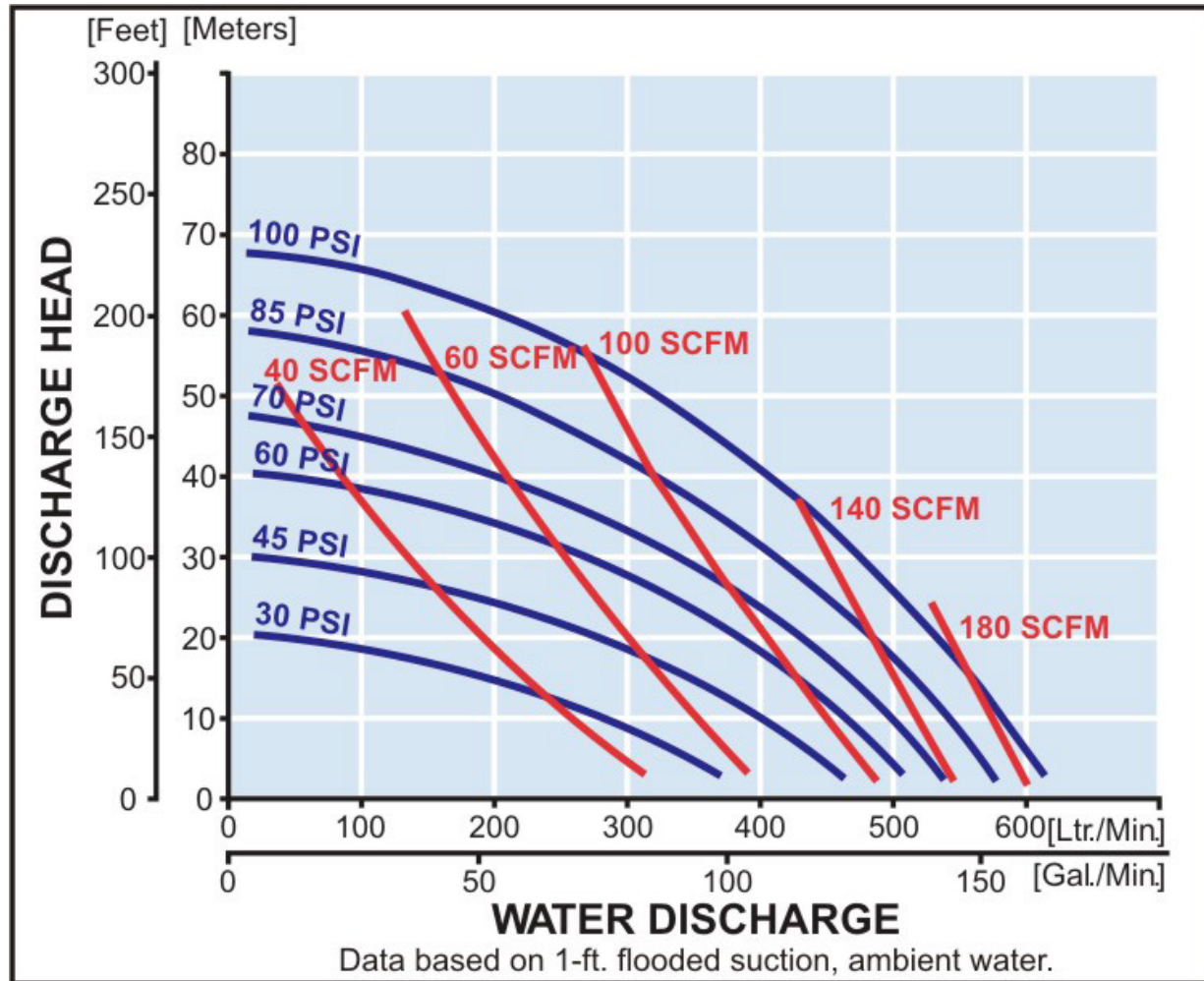
Kynar: 104.8 lbs.

Model Number Nomenclature



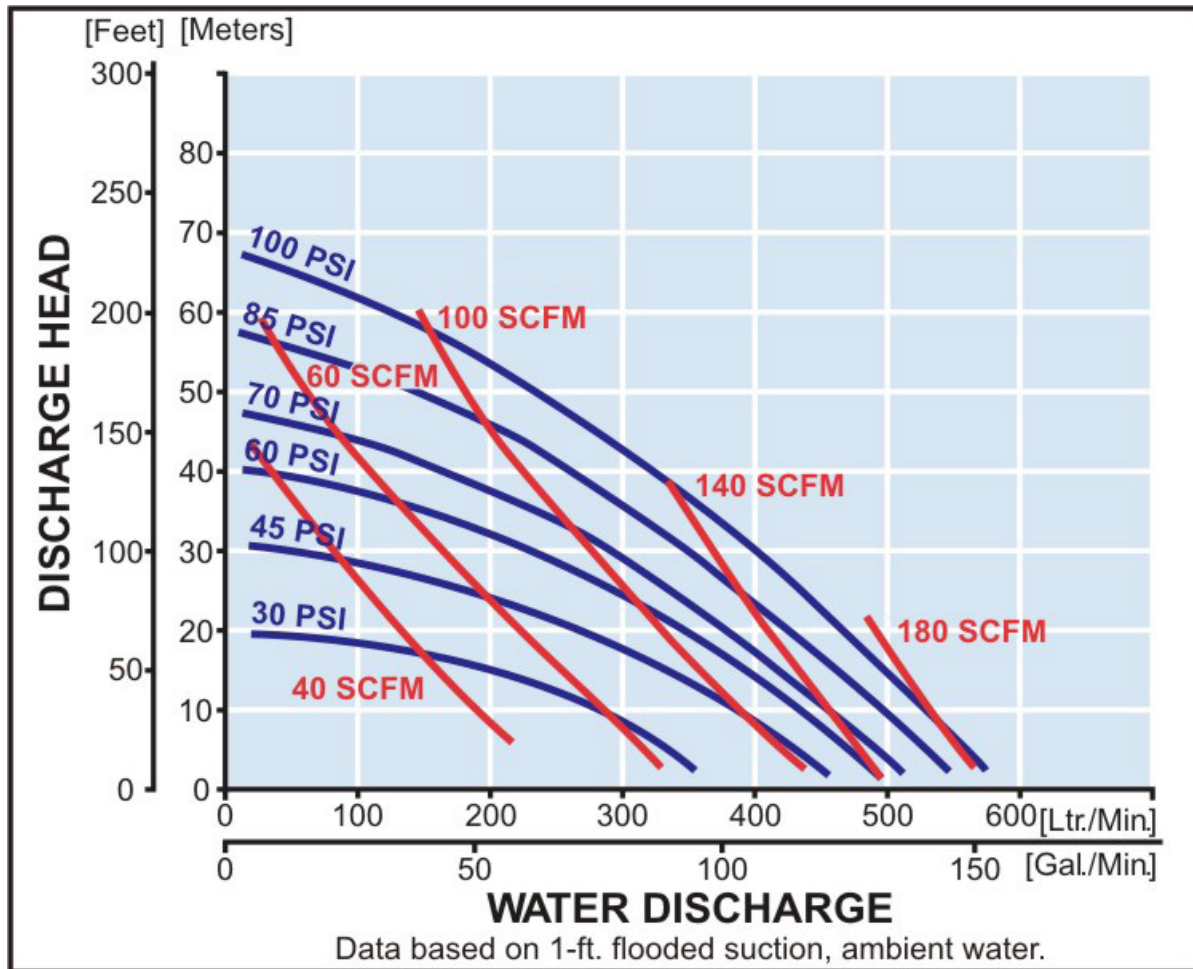
NDP-50 Performance Curve

Rubber Diaphragm Performance Curve

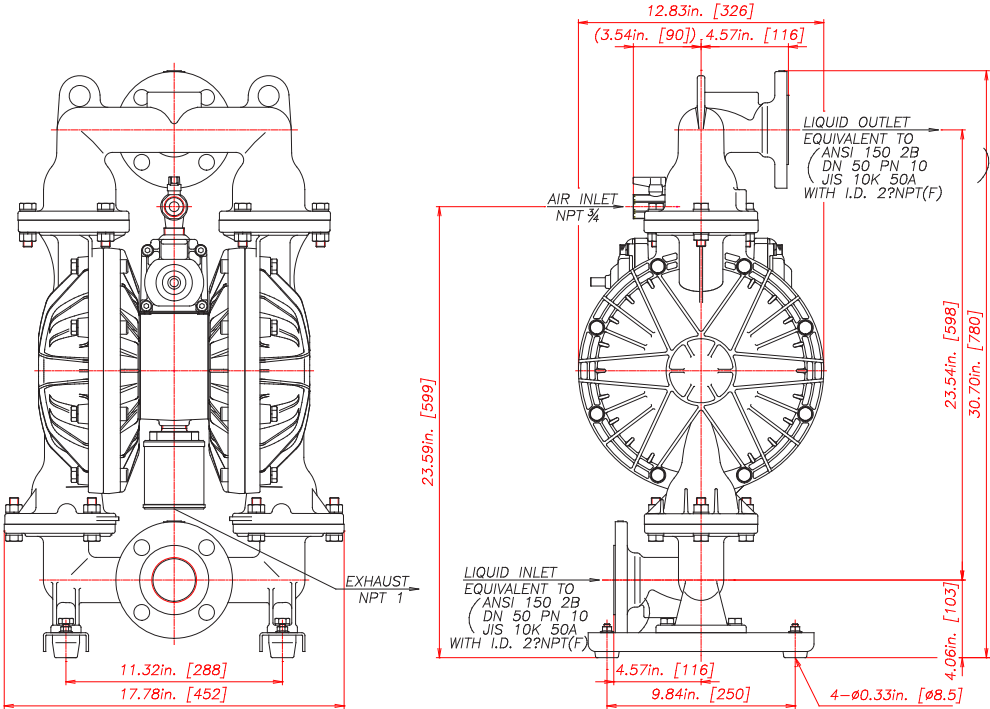


NDP-50 Performance Curve

PTFE Diaphragm Performance Curve



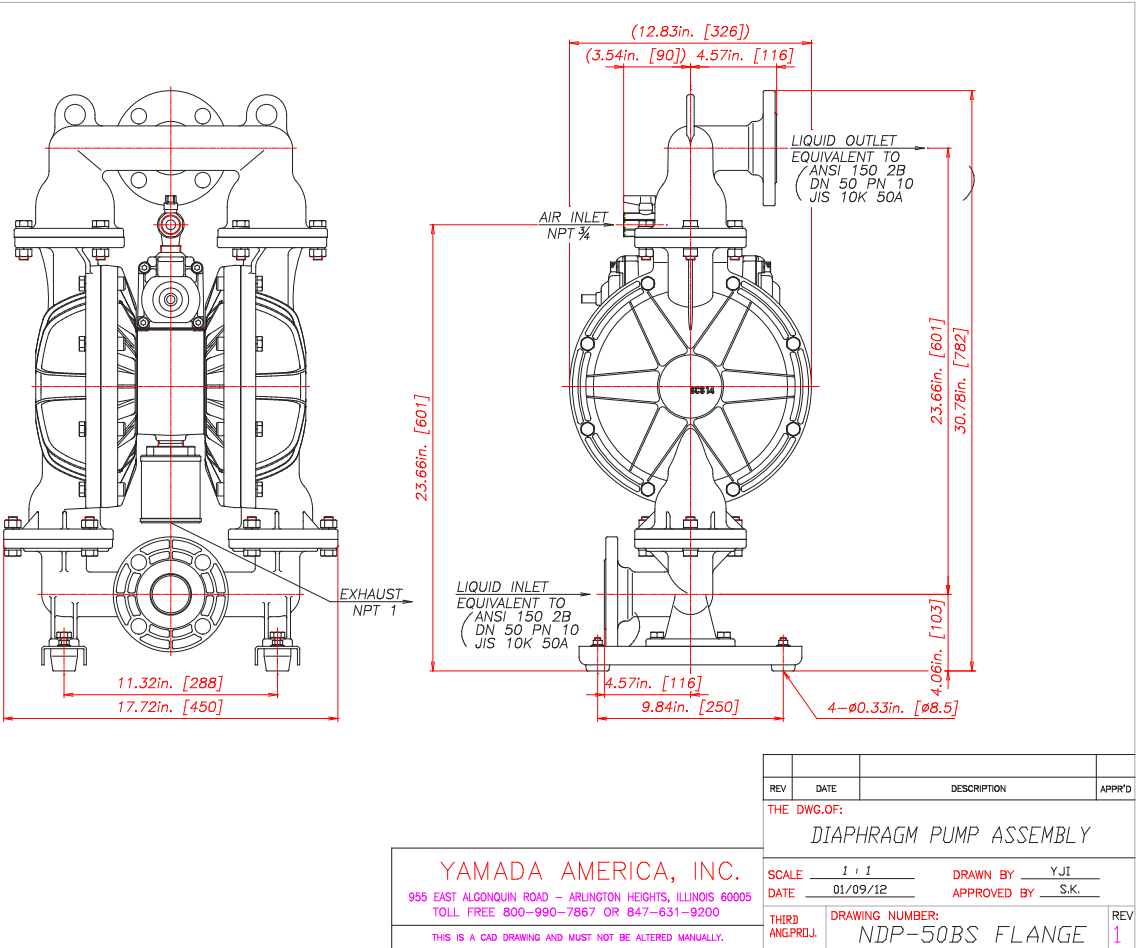
NDP-50 Aluminum



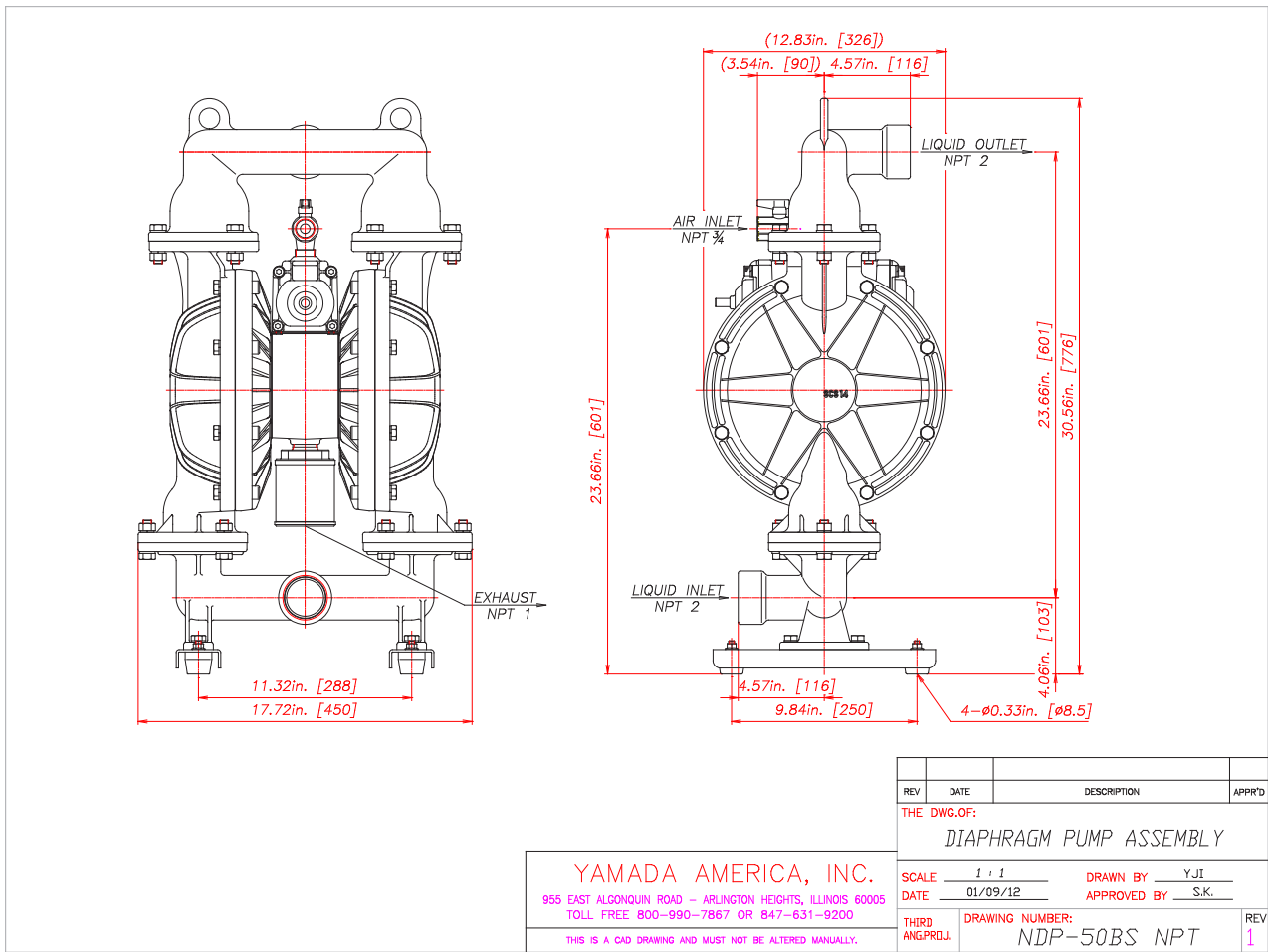
REV	DATE	DESCRIPTION	APPR'D
THE DWG. OF:			
DIAPHRAGM PUMP ASSEMBLY			
SCALE: 1 : 1		DRAWN BY: Y.JI	
DATE: 01/09/12		APPROVED BY: S.K.	
THIRD ANG. PROJ.	DRAWING NUMBER: NDP-50BA		REV 1

YAMADA AMERICA, INC.
955 EAST ALGONQUIN ROAD - ARLINGTON HEIGHTS, ILLINOIS 60005
TOLL FREE 800-990-7867 OR 847-631-9200
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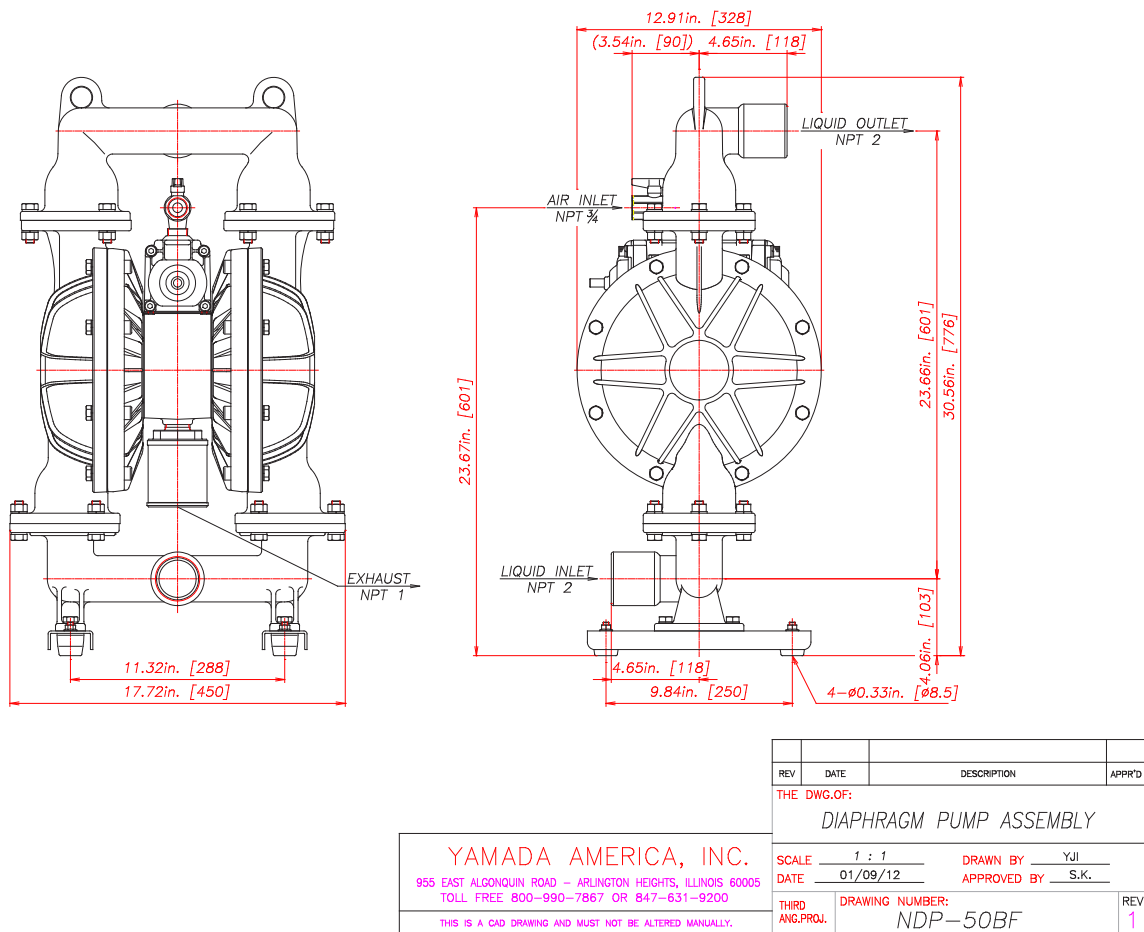
NDP-50 Stainless Steel - Flange



NDP-50 Stainless Steel - NPT

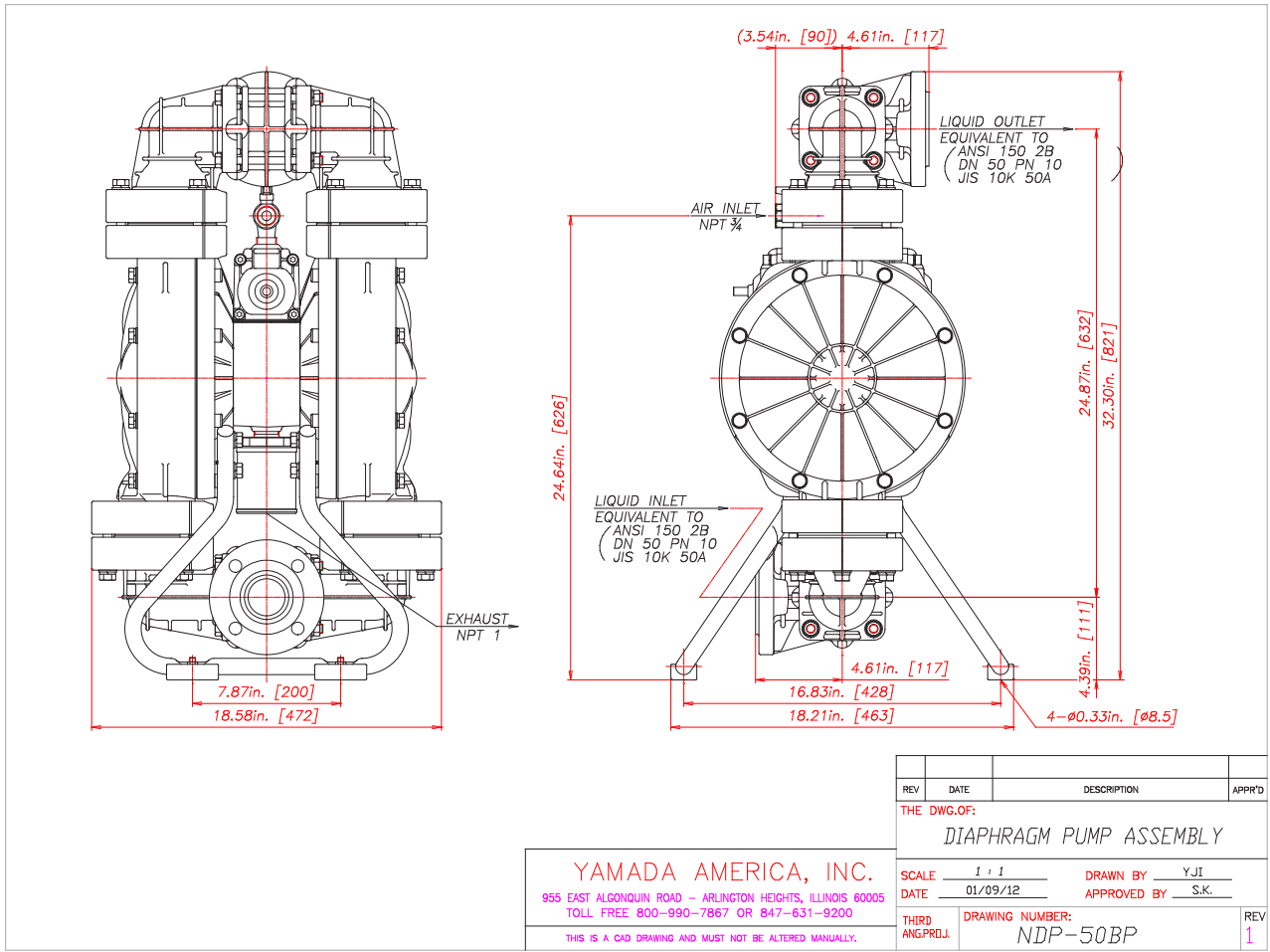


NDP-50 Cast Iron



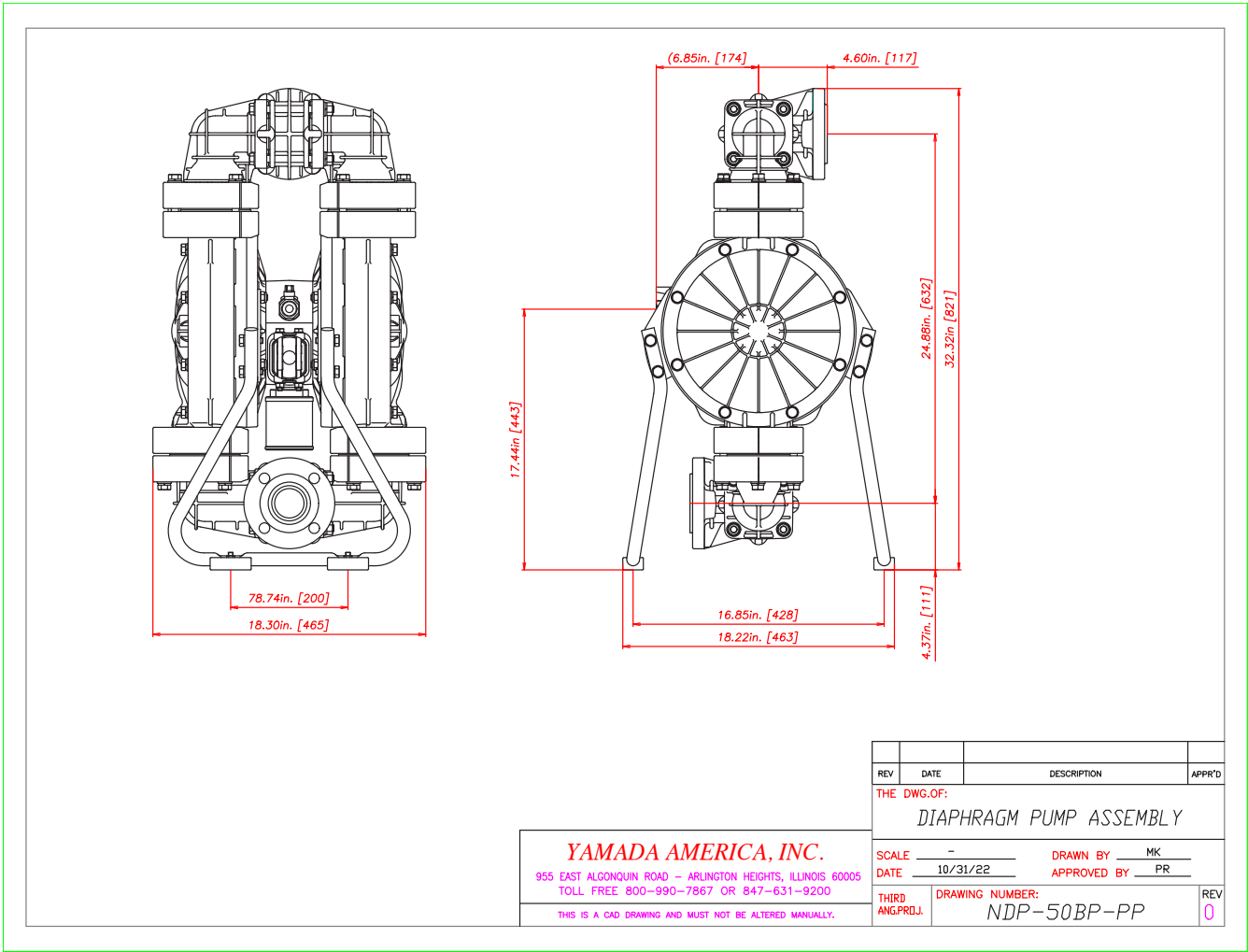
NDP-50 Polypropylene

Metal Center Body

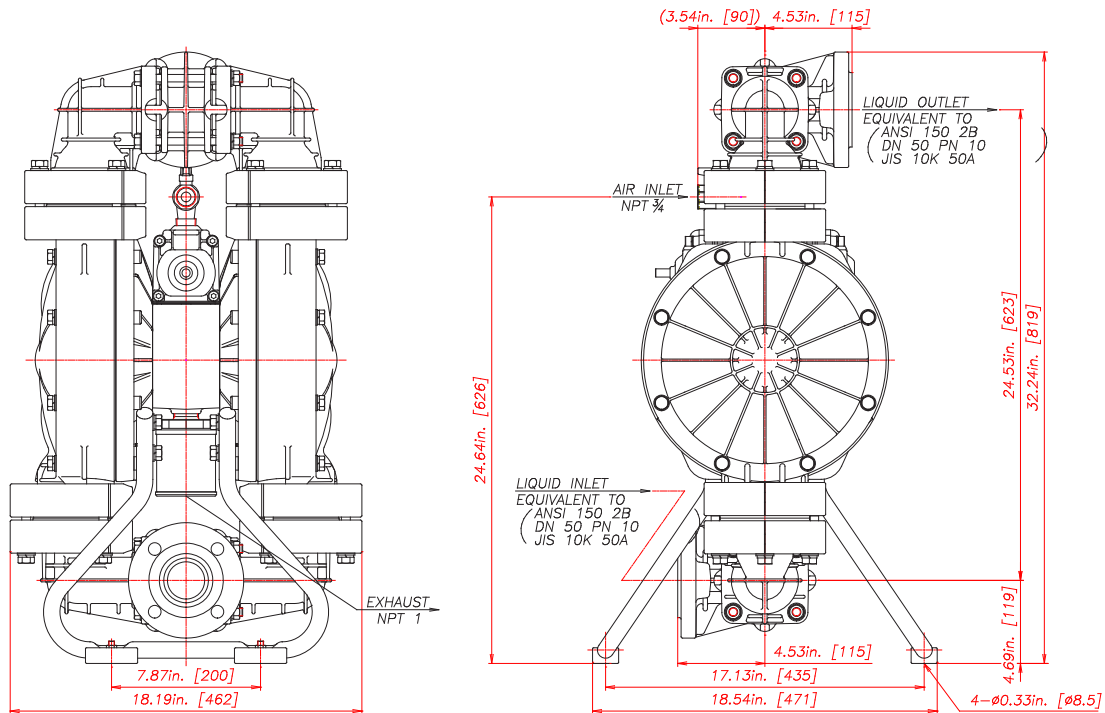


NDP-50 Polypropylene (PP)

Plastic Center Body



Metal Center Body



REV	DATE	DESCRIPTION	APPR'D
THE DWG.OF:			
DIAPHRAGM PUMP ASSEMBLY			
SCALE	$\frac{1}{1}$	DRAWN BY	Y.JI
DATE	01/09/12	APPROVED BY	S.K.
THIRD ANGPROJ.	DRAWING NUMBER: NDP-50BV		REV 1

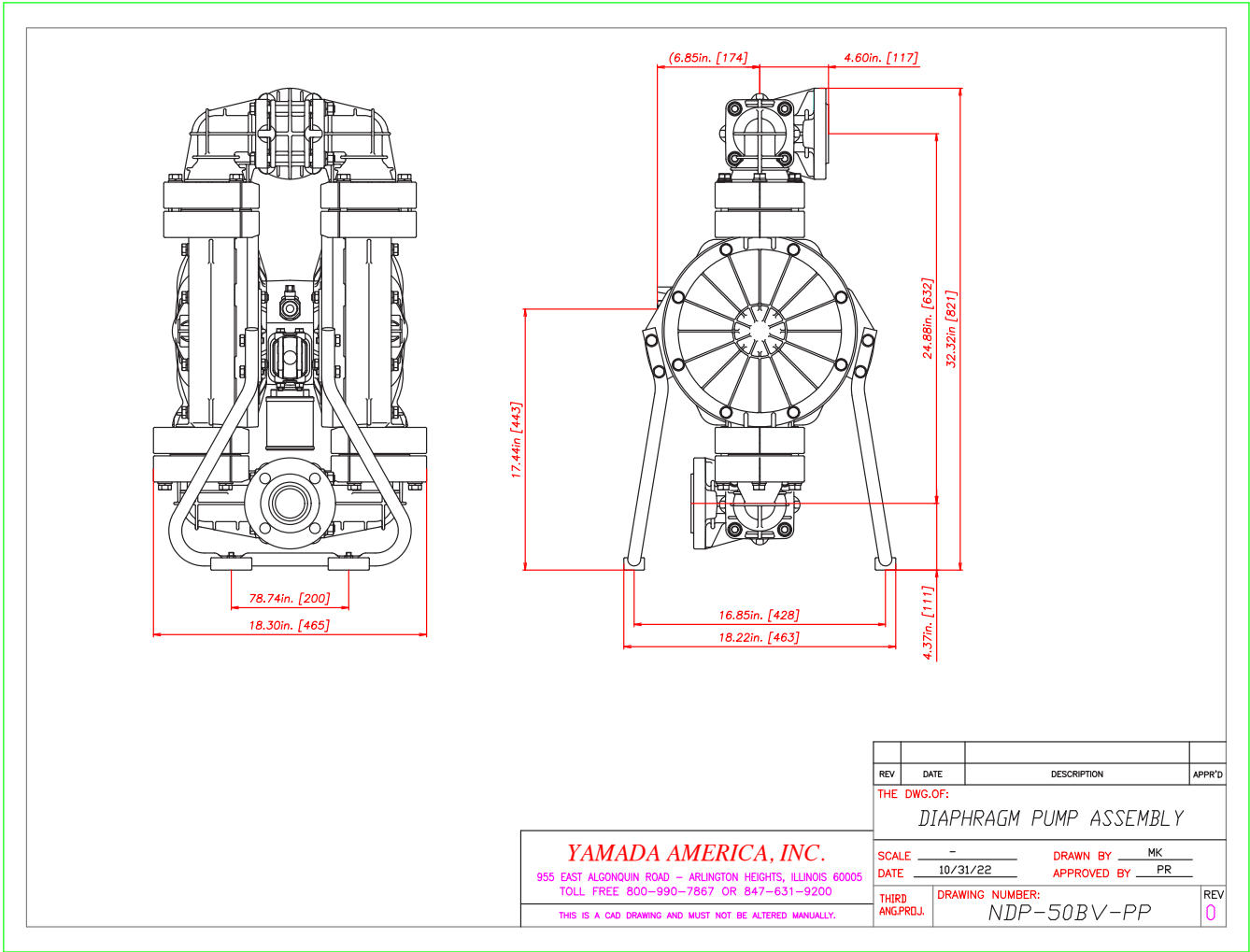
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NDP-50 Kynar (PP)

Plastic Center Body



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