

DP-50 Specifications

Xtreme Duty Pro XDP® Heavy Duty

Port Dimensions (121.5 GPM Max.)

Intake & discharge connection:

Aluminum (ADC-12)	2" ANSI B16.5 #150 (with tapped 1-1/2" Female NPT)
Polypropylene (PPG)	2" ANSI B16.5 #150
Kynar®	2" ANSI B16.5 #150
Stainless Steel (316)	2" ANSI B16.5 #150 or 2" Female NPT
Cast Iron	2" Female NPT
Air inlet (incl. ball valve):	3/4" Female NPT
Air exhaust (incl. silencer):	3/4" 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 – 125 PSI (1.4 – 8.7 kgf/cm²)

Discharge Volume Per Cycle

Rubber diaphragm: 0.92 gallons

PTFE diaphragm: 0.34 gallons

Maximum Cycles Per Minute

Rubber diaphragm: 460

PTFE diaphragms: 340

Maximum Size Solid

5/16" (8 mm)

Maximum Dry Suction Lift

Rubber fitted pump capability: 16'

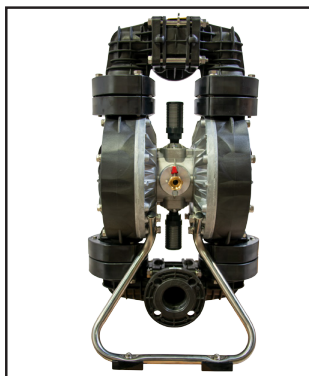
PTFE fitted pump capability: 9'

Air Motor

Aluminum air motor standard on all pumps.

Valve Type

Ball



Kynar®

Dimensions: 18.19"W x 32.24"H

Net Wt.: 83.8 lbs. (38 kg)

Shipping Wt.: 93 lbs.



Polypropylene

NPT Dimensions: 18.30"W x 32.30"H

Net Wt.: 75 lbs. (34 kg)

Shipping Wt.: 85 lbs.



Aluminum

Dimensions: 17.78"W x 30.7"H

Net Wt.: 77.6 lbs. (35.2 kg)

Shipping Wt.: 87 lbs.

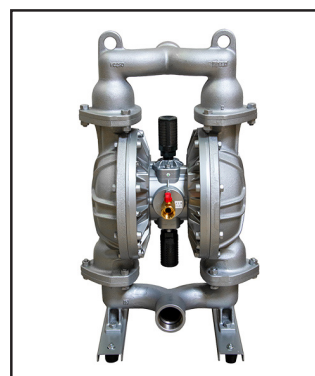
Stainless Steel

FLG & NPT Dimensions:

17.72"W x 30.76"H

Net Wt.: 126.8 lbs. (57.5 kg)

Shipping Wt.: 136 lbs.



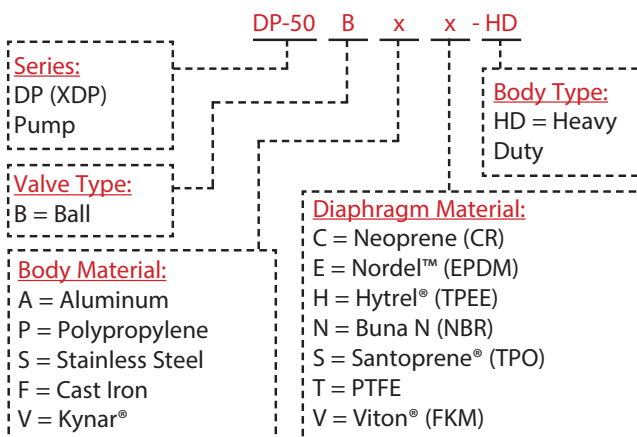
Cast Iron

Dimensions: 17.72"W x 30.56"H

Net Wt.: 136.7 lbs. (62 kg)

Shipping Wt.: 146 lbs.

Model Number Nomenclature



Notes: Santoprene® fitted pumps include EPDM wetted o-rings.

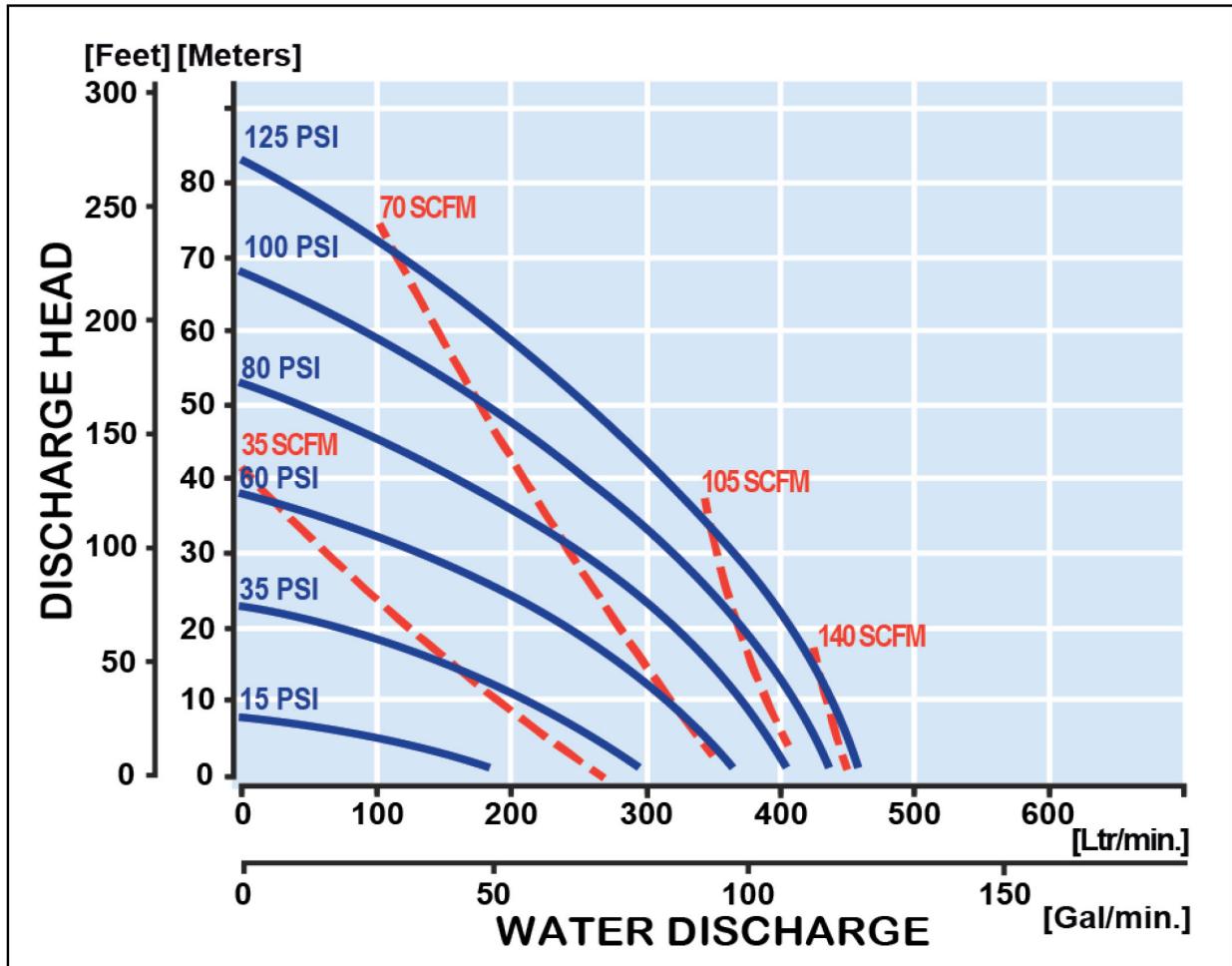


Yamada America, Inc. 955 E. Algonquin Rd., Arlington Heights, IL 60005
 USA Toll-Free: 800-990-7867 | Phone: 847-631-9200 | Fax: 847-631-9273
 Email: sales@yamadapump.com | Web: yamadapump.com

© 2022 Yamada America, Inc.

DP-50 Metal Performance Curve - Rubber

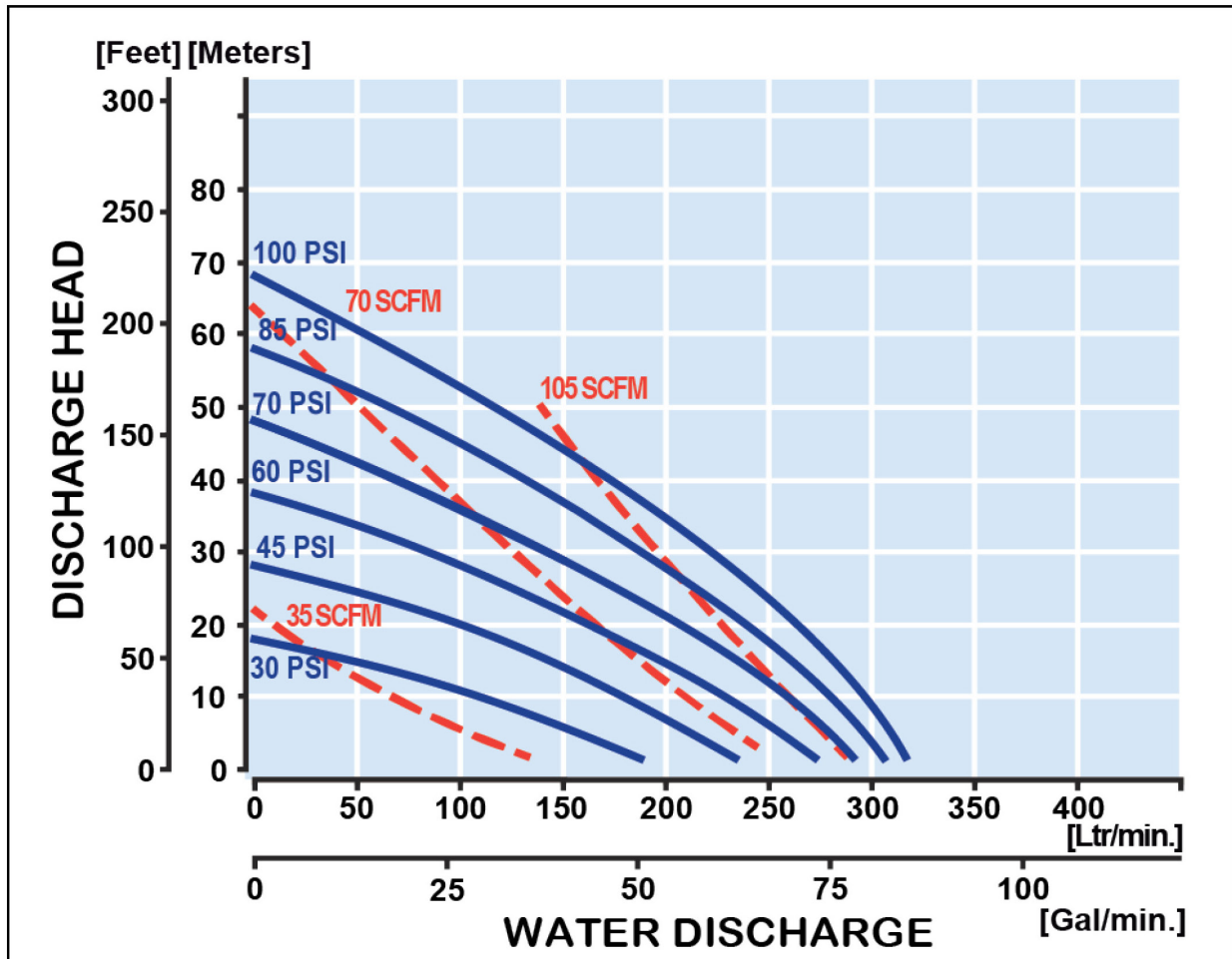
Rubber Diaphragm Performance Curve



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

DP-50 Metal Performance Curve - PTFE

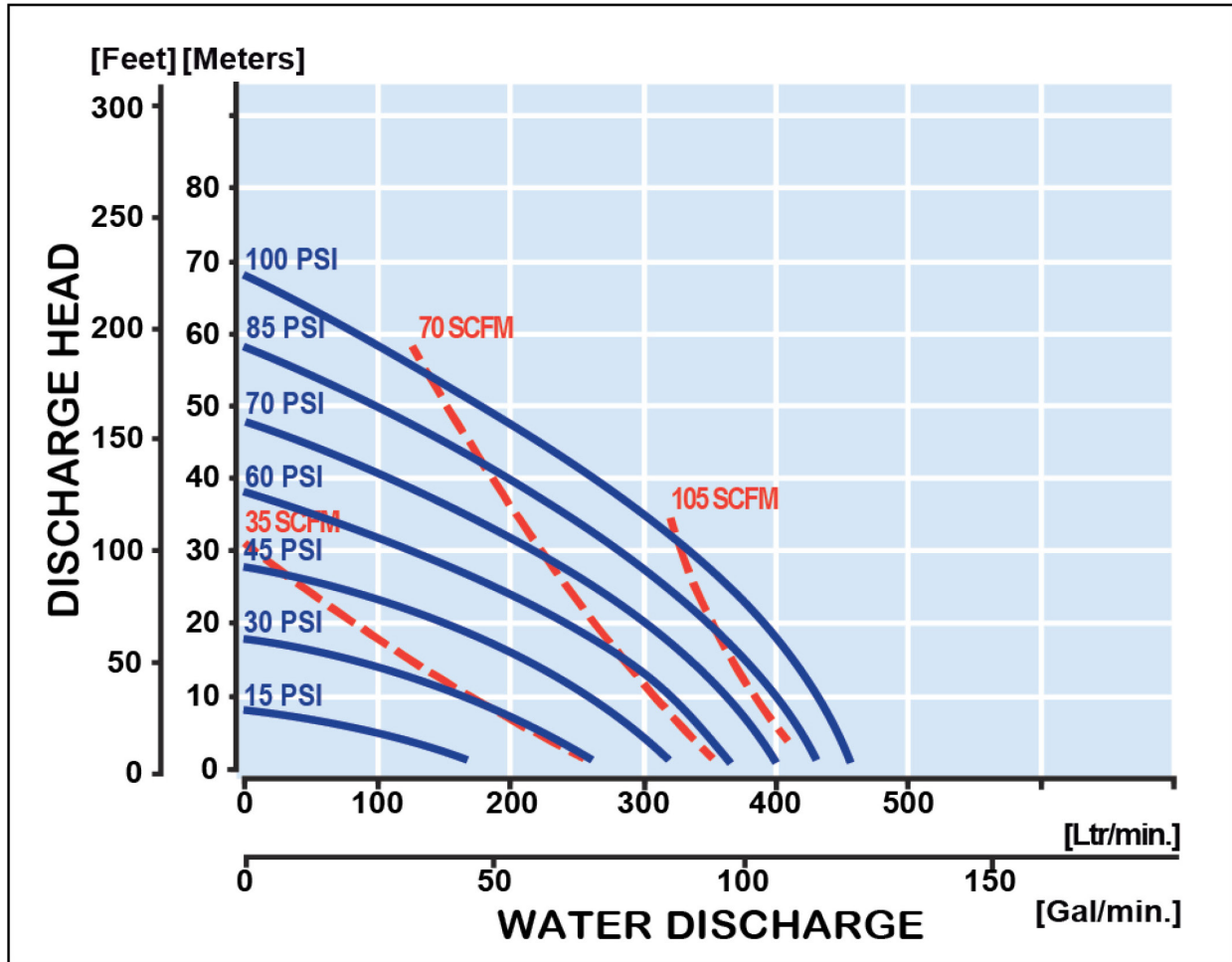
PTFE Diaphragm Performance Curve



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

DP-50 Plastic Performance Curve - Rubber

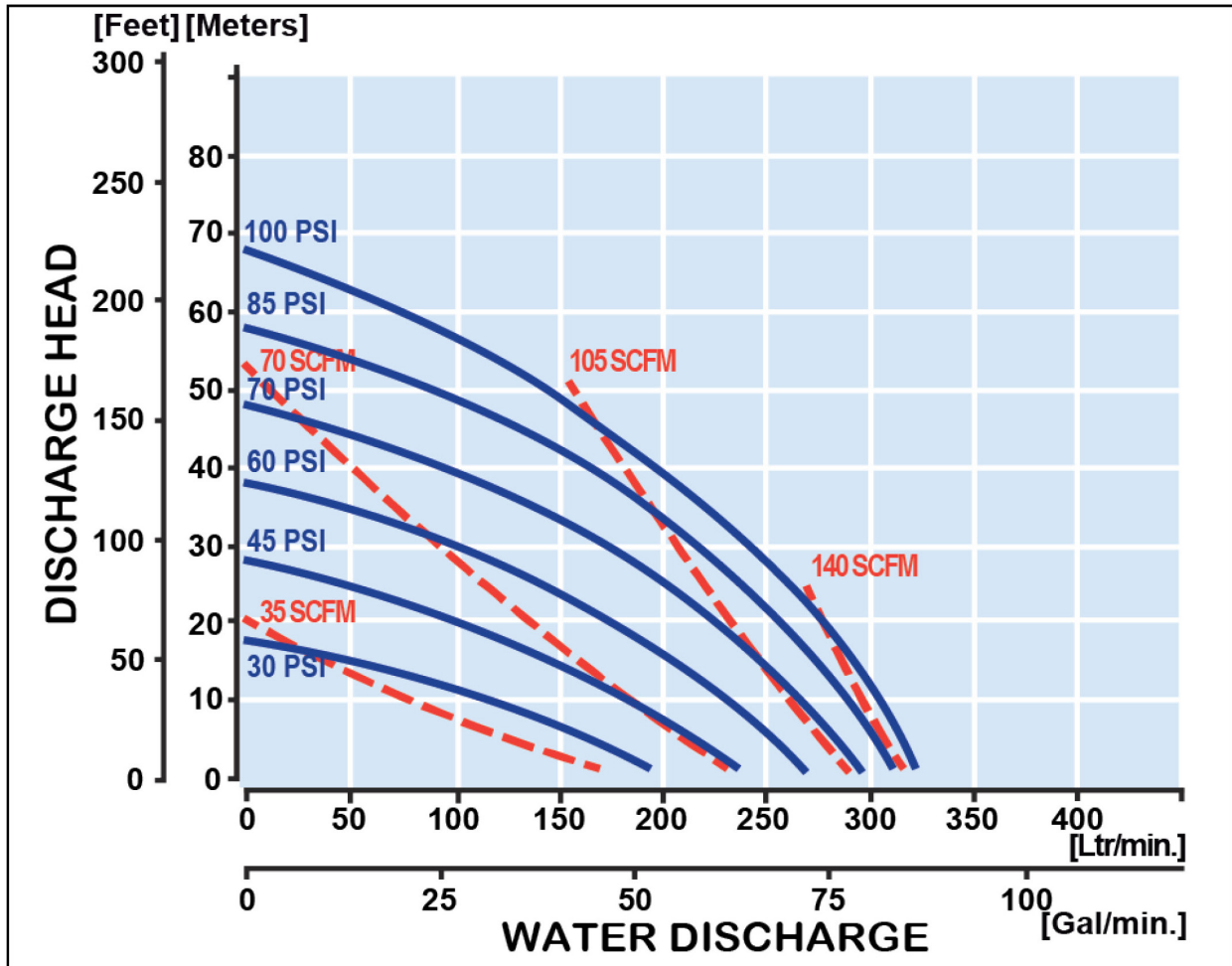
Rubber Diaphragm Performance Curve



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

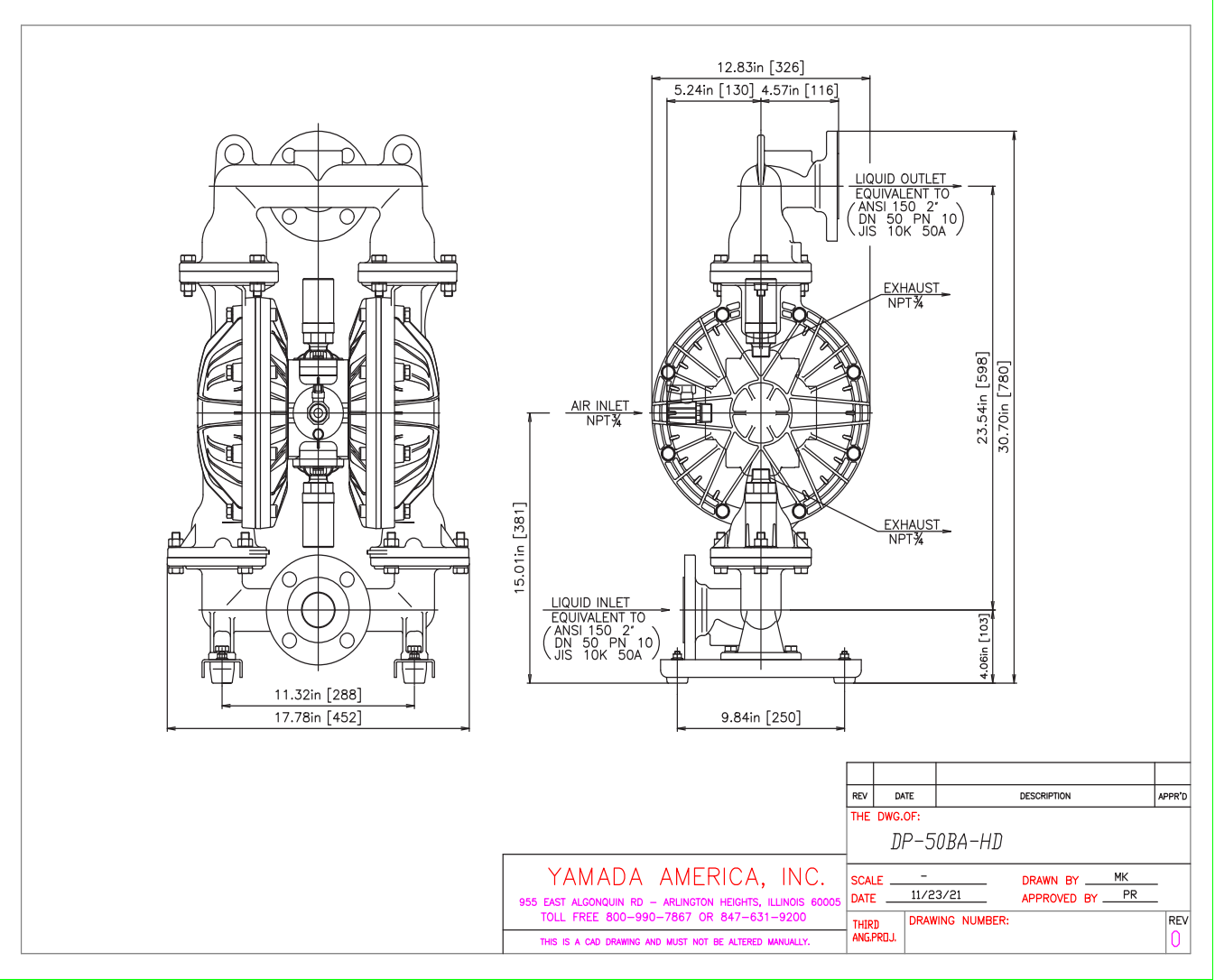
DP-50 Plastic Performance Curve - PTFE

PTFE Diaphragm Performance Curve



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

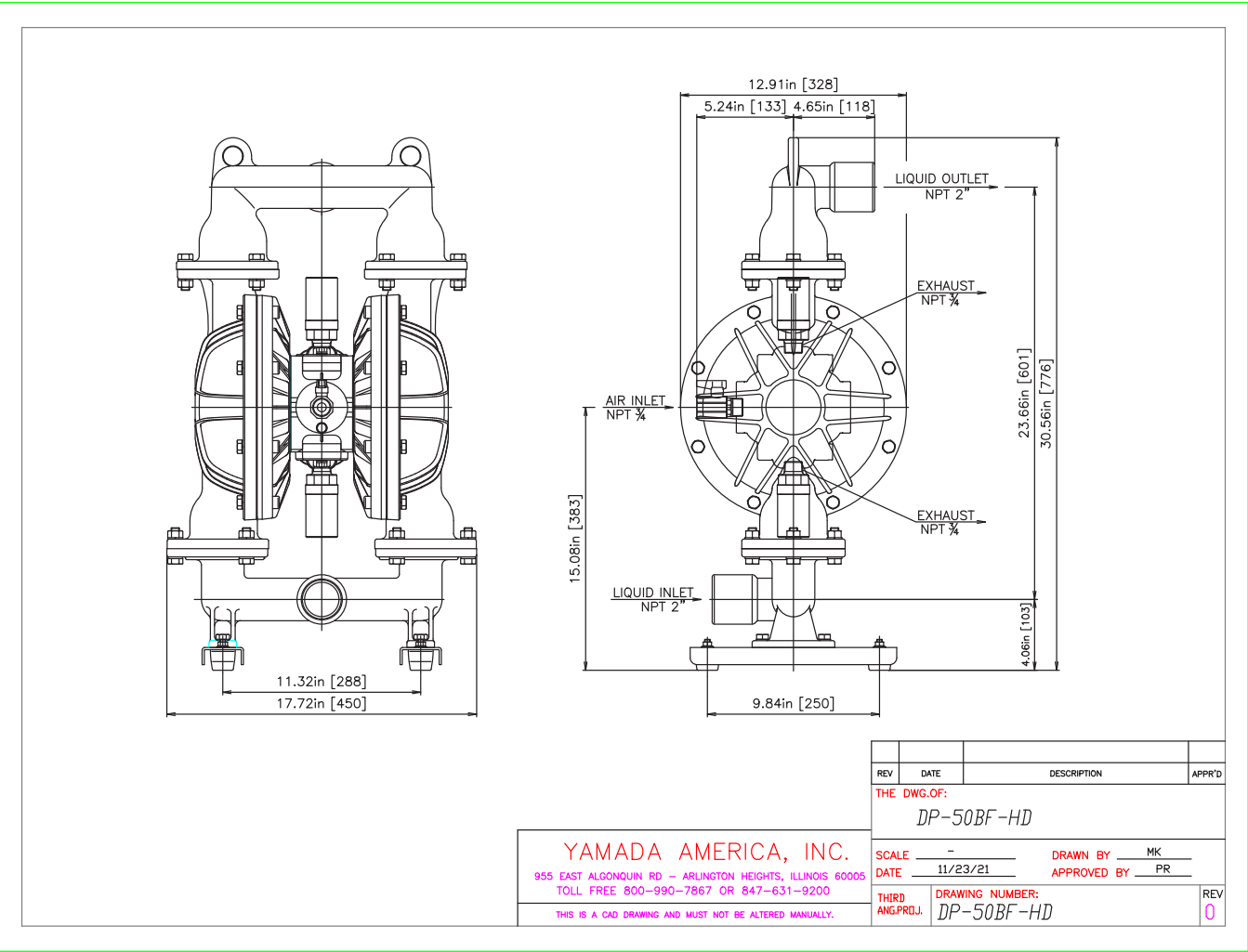
DP-50 Aluminum



Yamada America, Inc. 955 E. Algonquin Rd., Arlington Heights, IL 60005
USA Toll-Free: 800-990-7867 | Phone: 847-631-9200 | Fax: 847-631-9273
Email: sales@yamadapump.com | Web: yamadapump.com

© 2022 Yamada America, Inc.

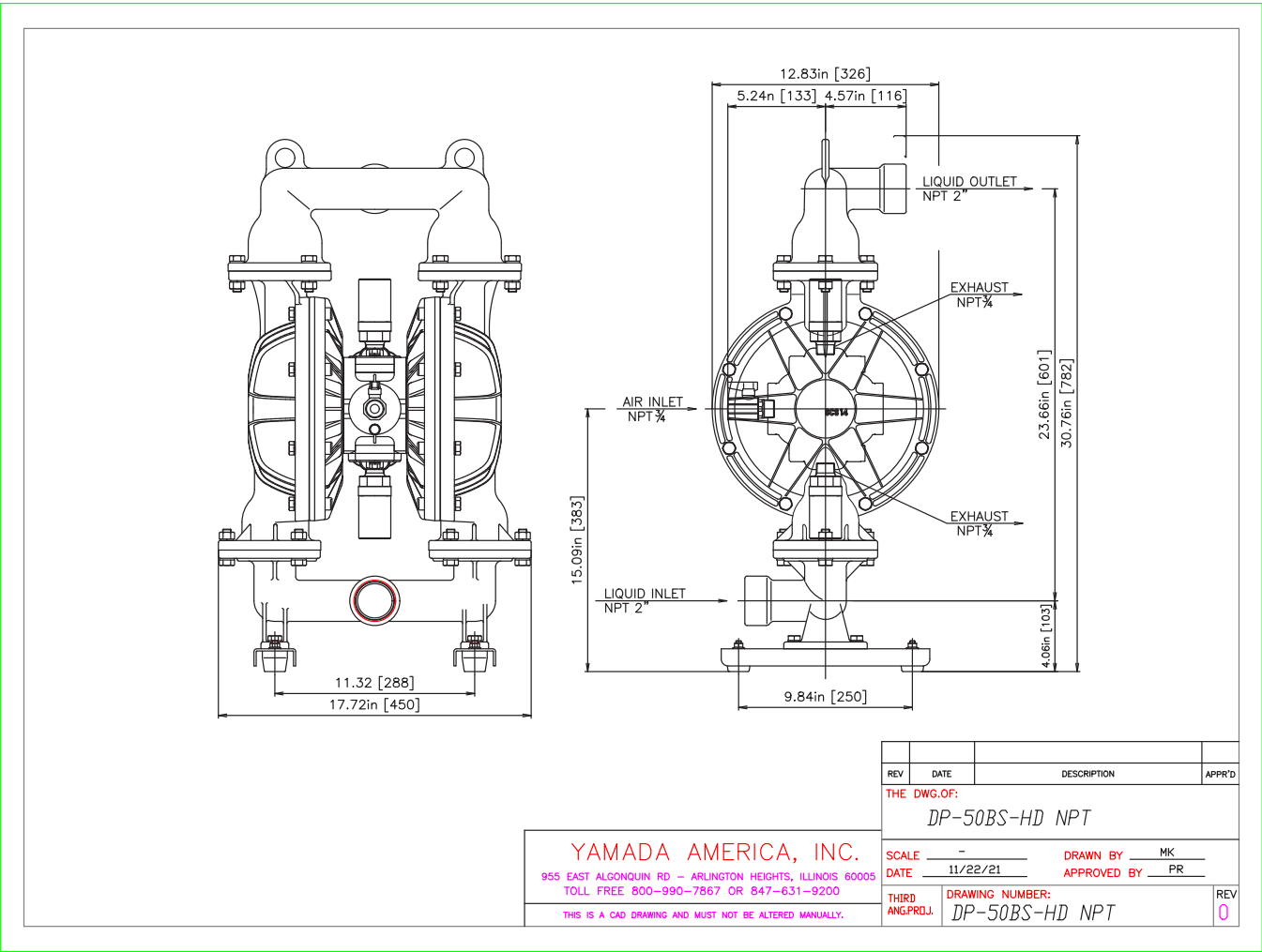
DP-50 Cast Iron



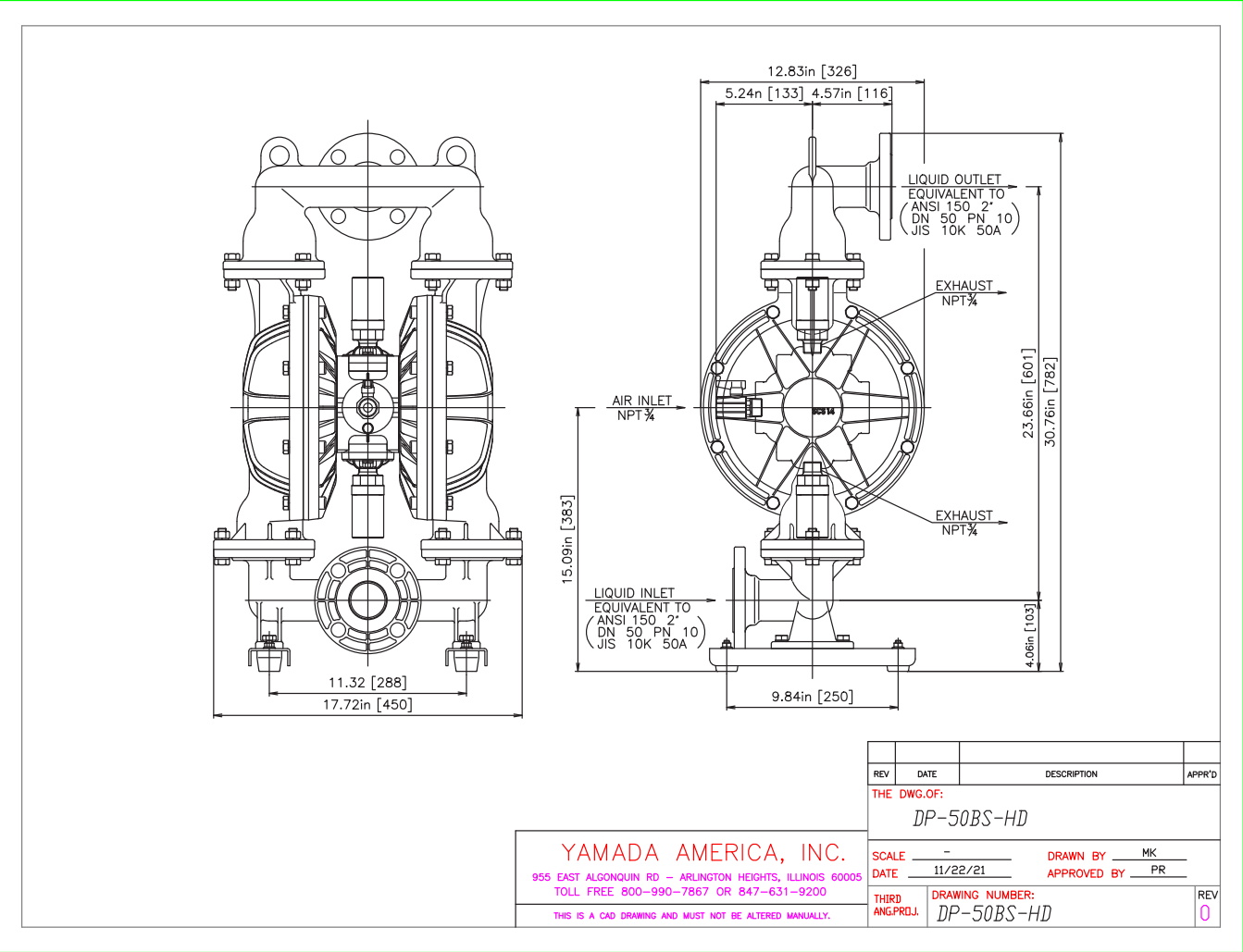
Yamada America, Inc. 955 E. Algonquin Rd., Arlington Heights, IL 60005
USA Toll-Free: 800-990-7867 | Phone: 847-631-9200 | Fax: 847-631-9273
Email: sales@yamadapump.com | Web: yamadapump.com

© 2022 Yamada America, Inc.

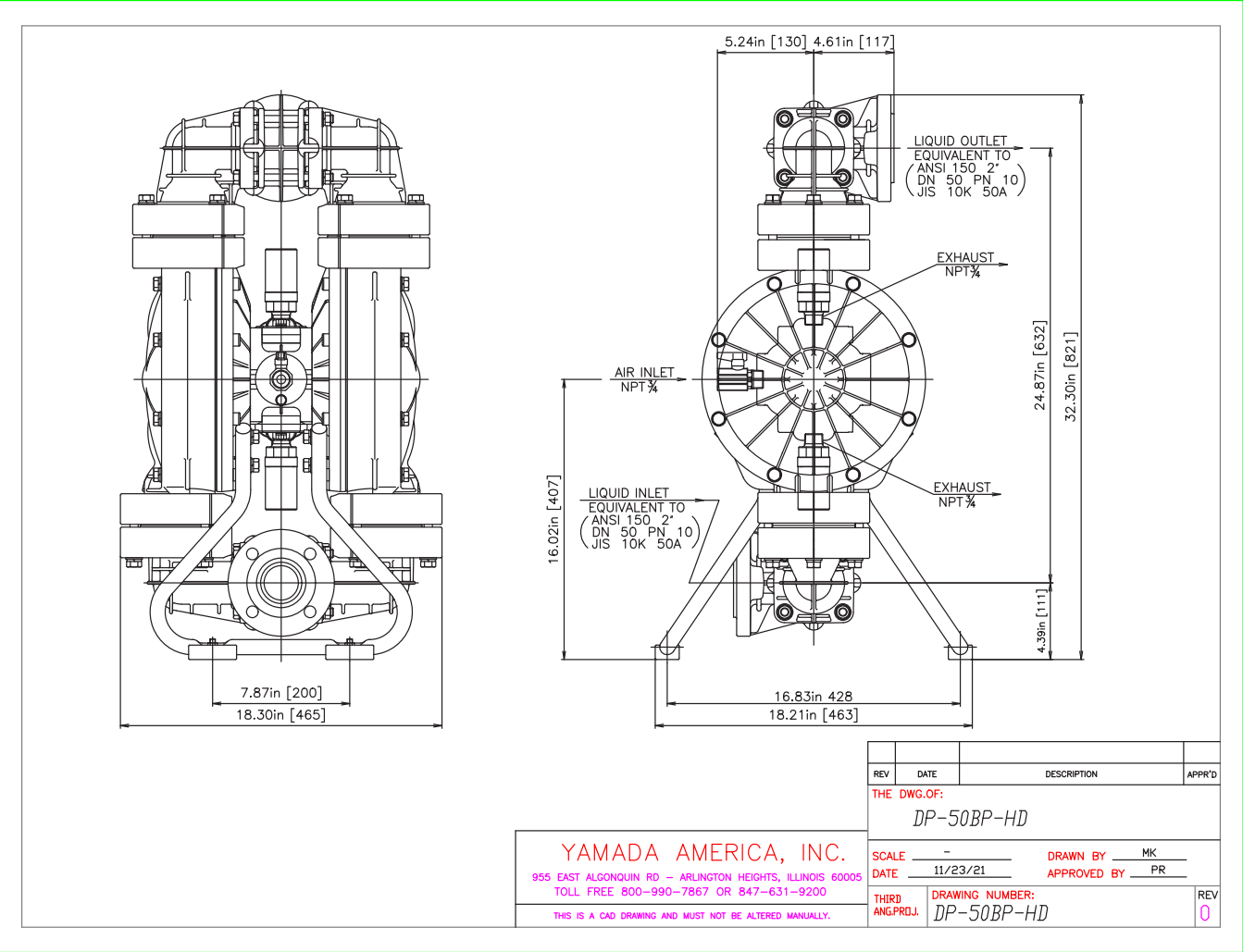
DP-50 Stainless Steel - NPT



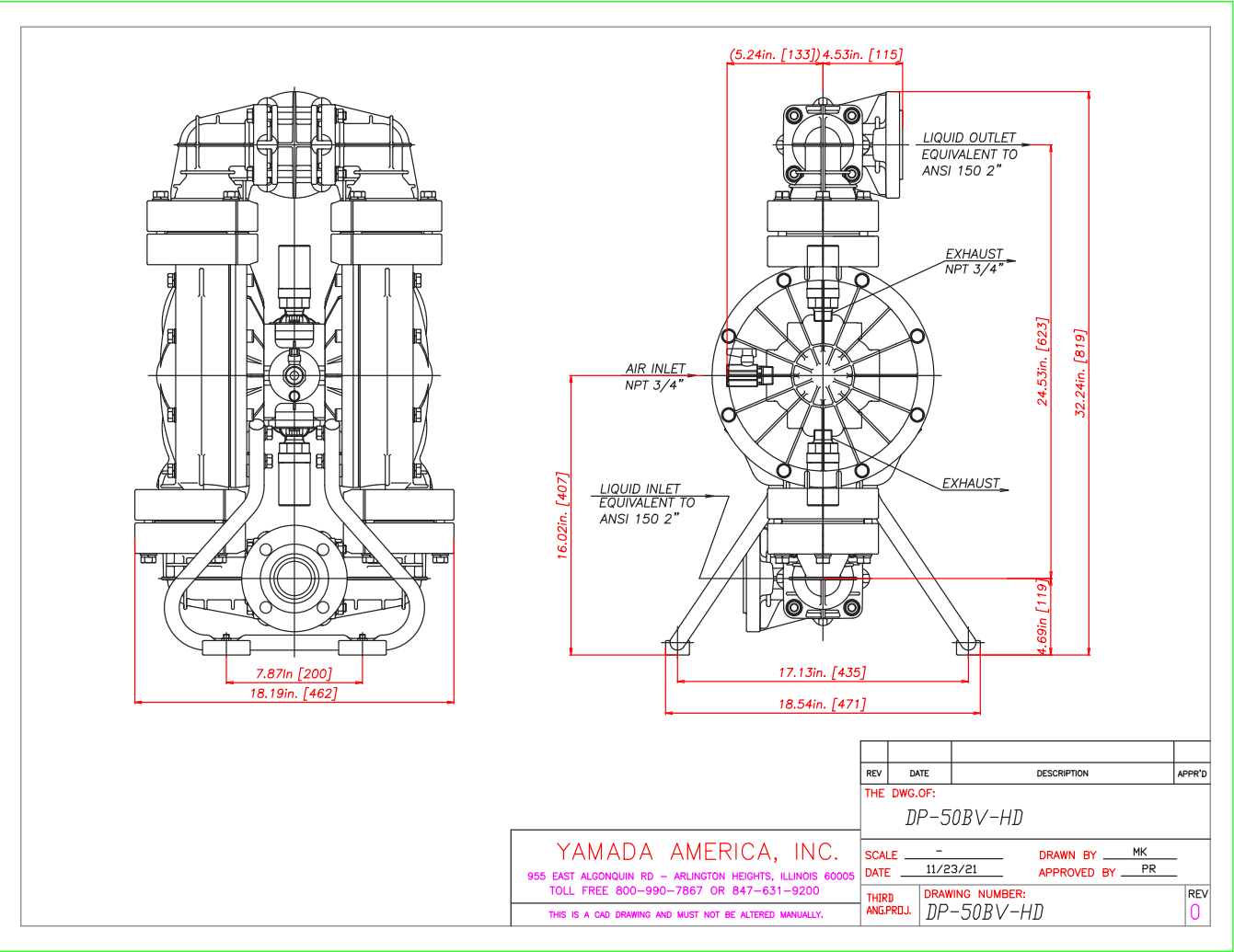
DP-50 Stainless Steel - FLG



DP-50 Polypropylene



DP-50 Kynar



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 trademark of Yamada America, Inc.

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



Yamada America, Inc. 955 E. Algonquin Rd., Arlington Heights, IL 60005
USA Toll-Free: 800-990-7867 | Phone: 847-631-9200 | Fax: 847-631-9273
Email: sales@yamadapump.com | Web: yamadapump.com

© 2022 Yamada America, Inc.