

NDP-40 Series

107 GPM Maximum Capacity
1-1/2 Inch Port Size

Polypropylene

Dimensions:
15.75" W × 29.61" H
Net Wt.: 70 lbs. (29.9 kg)
Shipping Wt.: 78 lbs.



Kynar® (PVDF)

Dimensions: 15.75" W × 29.61" H
Net Wt.: 70 lbs. (29.9 kg)
Shipping Wt.: 78 lbs.

Aluminum

Dimensions:
16.18" W × 27.91" H
Net Wt.: 68 lbs. (28.9 kg)
Shipping Wt.: 75 lbs.



Stainless Steel

Dimensions:
16.18" W × 27.75" H
Net Wt.: 98 lbs. (39.9 kg)
Shipping Wt.: 106 lbs.



Cast Iron - NPT

Dimensions:
16.18" W × 27.75" H
Net Wt.: 112 lbs. (59.8 kg)
Shipping Wt.: 120 lbs.

AutoCAD® drawings are available on
CDROM or at yamadapump.com

ANSI #150 Flange
available on Stainless
Steel pumps.



NDP-40 Series Specifications

Port Dimensions

Intake & discharge connection:

Polypropylene (PPG)	1-1/2" ANSI B16.5 #150
Kynar® (PVDF)	1-1/2" ANSI B16.5 #150
Aluminum (ADC-12)	1-1/2" ANSI B16.5 #150 (with tapped 1-1/2" Female NPT)
Stainless Steel (316)	1-1/2" ANSI B16.5 #150 or 1-1/2" Female NPT
Cast Iron	1-1/2" Female NPT
Air inlet (incl. ball valve):	1/2" Female NPT
Air exhaust (incl. silencer):	1" Female NPT

Maximum Liquid Temperature*

Diaphragm Material	Temperature
Neoprene	180°F (82°C)
Buna N	180°F (82°C)
EPDM	212°F (100°C)
Hytrel® (TPEE)	248°F (120°C)
Santoprene® (TPO)	212°F (100°C)
Viton® fluoroelastomer	248°F (120°C)
Teflon® (PTFE)	212°F (100°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: 0.73 gallons (2.74 liters)
 PTFE diaphragm: 0.37 gallons (1.40 liters)

Maximum Cycles Per Minute

Rubber diaphragm: 148
 PTFE diaphragm: 270

Maximum Size Solid

9/32" (7 mm)

Maximum Dry Suction Lift

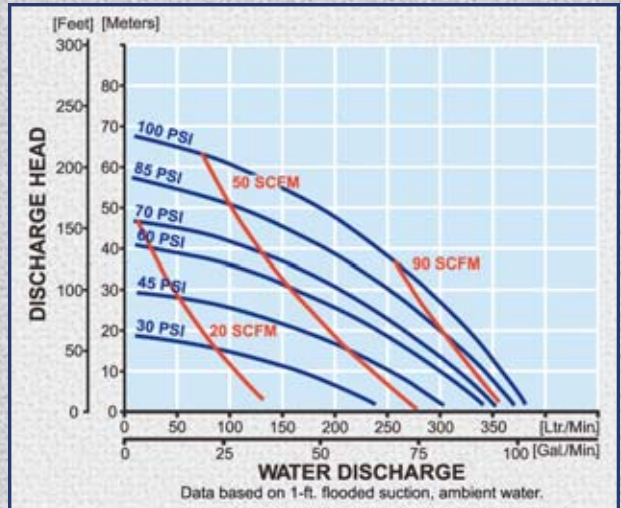
Rubber-fitted pump capability: 18-feet

Aluminum Air Motor – Standard

Optional: Epoxy-coated, Teflon®-coated, or Electroless Nickel Plate

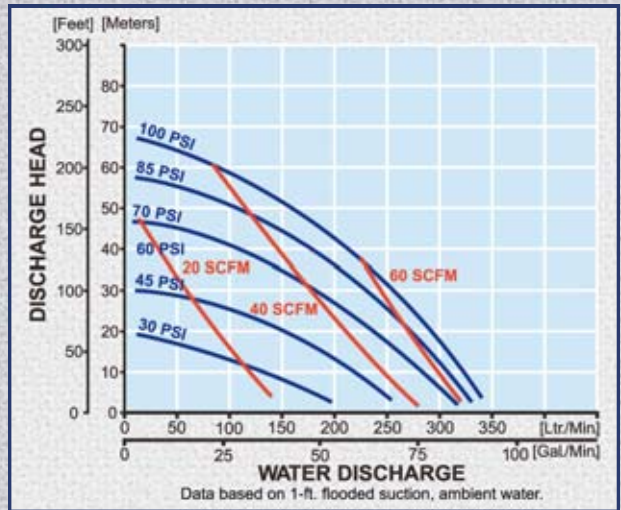
All Polypropylene, Aluminum, Cast Iron, and Stainless Steel Hytrel® fitted pumps include Buna N check balls & o-rings and Santoprene® fitted pumps include EPDM check balls & wetted o-rings. Kynar® (PVDF) pumps fitted with Santoprene®, Hytrel®, or Teflon® include Teflon® check balls & o-rings. Kynar®/EPDM fitted pumps include EPDM check balls & o-rings and Viton® fitted include Viton® balls & o-rings.

Rubber Diaphragm Performance Curve

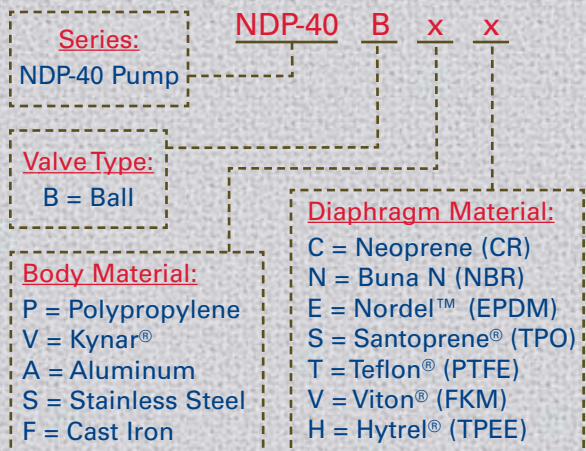


To calculate performance for Santoprene® and Hytrel®-fitted pumps, use Rubber Diaphragm Curve.

PTFE Diaphragm Performance Curve



Model Number Nomenclature



Note: For NPT-fitted SS, add "NPT" at end of model number nomenclature. Additional options listed on page 28.