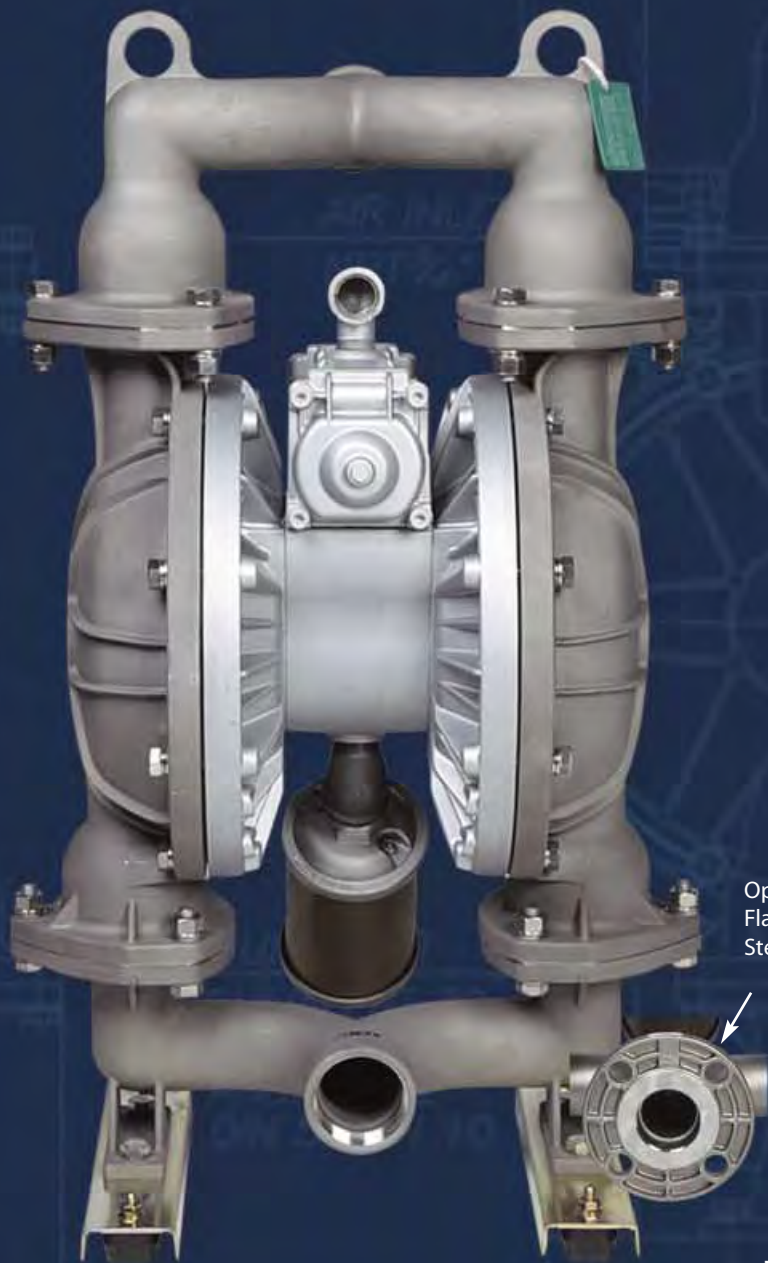


NDP-50 Series

**164 GPM Maximum Capacity
2-Inch Port Size**



Cast Iron or Stainless Steel
Dimensions: 17.72" W × 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 – 173 lbs.

AutoCAD® drawings are available on CD ROM or
 at yamadapump.com

Aluminum
Dimensions:

17.68" W × 30.67" H
Net Wt.: 88 lbs. (39.9 kg)
Shipping Wt.: 99 lbs.
*Tapped with 2" NPT
 ANSI flange*



Polypropylene
Dimensions:

18.63" W × 32.32" H
Net Wt.: 84 lbs. (38.1 kg)
Shipping Wt.: 108 lbs.



Optional ANSI
 Flange for Stainless
 Steel models.

Kynar® (PVDF)
Dimensions:

18.63" W × 32.32" H
Net Wt.: 103 lbs. (46.7 kg)
Shipping Wt.: 121 lbs.



NDP-50 Series Specifications

Port Dimensions

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 or 2" Female NPT
Cast Iron	2" Female NPT
Air inlet (incl. ball valve):	3/4" 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)
Hydrel® (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: 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

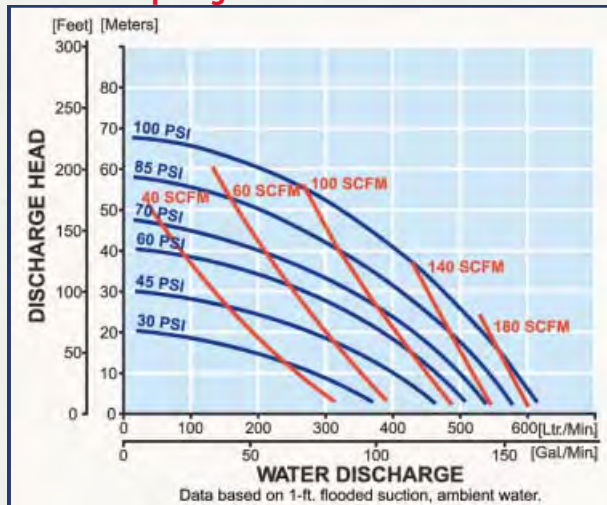
Rubber-fitted pump capability: 19-feet

Aluminum Air Motor – Standard

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

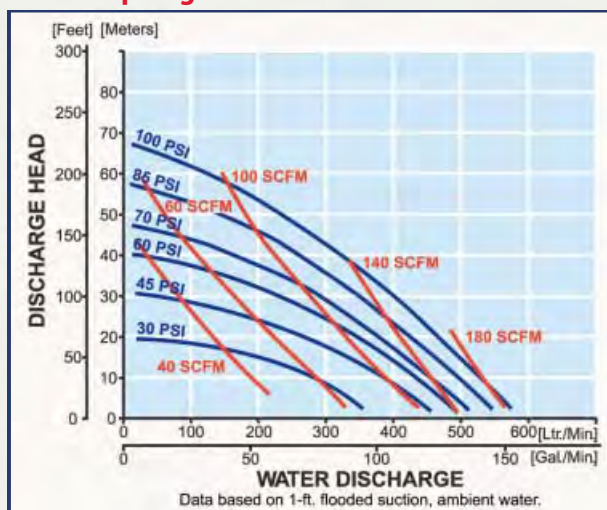
All Polypropylene, Aluminum, Cast Iron, and Stainless Steel Hydrel® fitted pumps include Buna N check balls & o-rings and Santoprene® fitted pumps include EPDM check balls & wetted o-rings. Kynar® (PVDF) pumps fitted with Santoprene®, Hydrel®, or Teflon® include Teflon® check balls & o-rings. Kynar®/EPDM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

Rubber Diaphragm Performance Curve

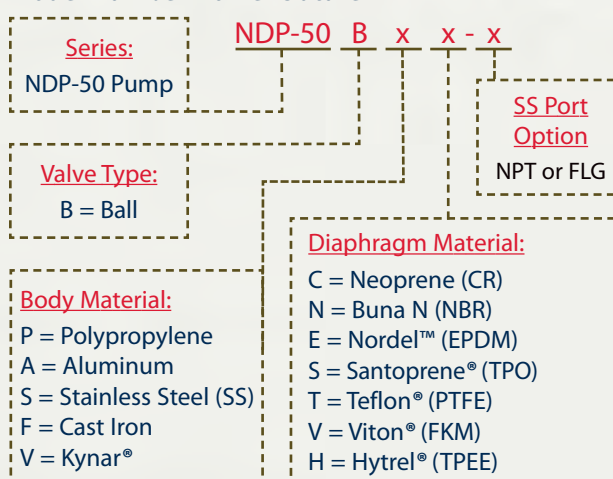


To calculate performance for Santoprene® and Hydrel®-fitted pumps, use Rubber Diaphragm Curve.

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.