

NDP-10 / NDP-15 Series Specifications

NDP-10 Port Dimensions

Intake & discharge connection:

Polypropylene (PPG) 3/8" 10 mm Female BSPT

NDP-15 Port Dimensions

Intake & discharge connection:

Polypropylene (PPG) 1/2" 15 mm Female BSPT

Kynar® (PVDF) 1/2" 15 mm Female BSPT

Groundable Acetal 1/2" 15 mm Female BSPT

Aluminum (ADC-12) 1/2" 15 mm Female BSPT

Stainless Steel (316) 1/2" 15 mm Female BSPT



NDP-10

Air Inlet/Exhaust

Air inlet (incl. ball valve): 1/4" 5 mm Female BSPT

Air exhaust (incl. silencer): 3/8" 10 mm Female BSPT

Maximum Liquid Temperature*

Fitted with Teflon® (PTFE) diaphragm

Pump Material	Temperature
Neoprene	82° C (180° F)
Buna N	82° C (180° F)
Hytrel® (TPEE)	120° C (248° F)
Santoprene® (TPO)	100° C (212° F)
Viton® fluorocastomer	120° C (248° F)
Teflon® (PTFE)	100° C (212° F)

*The maximum liquid temperature for metal and Kynar®-fitted pumps is determined by the Elastomer (diaphragm material). Polypropylene and Groundable Acetal pumps have a maximum liquid temperature of 82° C (180° F) regardless of diaphragm material.

Air Supply Pressure (All Models)

1,4 - 7 BAR (20—100 PSI)

Discharge Volume Per Cycle

NDP-10: 50 cc (0.013 US gallons)

NDP-15: 128 cc (0.034 US gallons)

Maximum Cycles Per Minute:

All diaphragms: 400

Maximum Size Solid

1 mm (1/32")

Maximum Size Solid

NDP-10: All diaphragms: 1,5 m (5 feet)

NDP-15: Flat-type check valve: 2,4 m (8-feet)

Ball-type check valve: 1,5 m (5-feet)

Pump Air Motor

Ryton air motor standard

Notes: Hytrel®-fitted pumps include PTFE check Balls & wetted o-rings. Santoprene®-fitted pumps Include EPDM check balls & wetted o-rings.



NDP-15



NDP-15

NDP-10 Polypropylene

Dimensions: 185 mm W x 190 mm H

Net Wt.: 2,,74 (6.1 lbs.)

Shipping Wt.: 3,5 kg (7.7 lbs.)

Groundable Acetal

Dimensions: 220 mm W x 298 mm H

Net Wt.: 4 kg (9 lbs.)

Shipping Wt.: 5 kg (11 lbs.)

Aluminum

Dimensions: 220 mm W x 272 mm H

Net Wt.: 4 kg (9 lbs.)

Shipping Wt.: 5 kg (11 lbs.)

Polypropylene

Dimensions: 220 mm W x 298 mm H

Net Wt.: 3,5 kg (7.7 lbs.)

Shipping Wt.: 4,3 kg (9.5 lbs.)

Kynar® (PVDF)

Dimensions: 220 mm W x 298 mm H

Net Wt.: 4,3 kg (9.4 lbs.)

Shipping Wt.: 5 kg (11 lbs.)

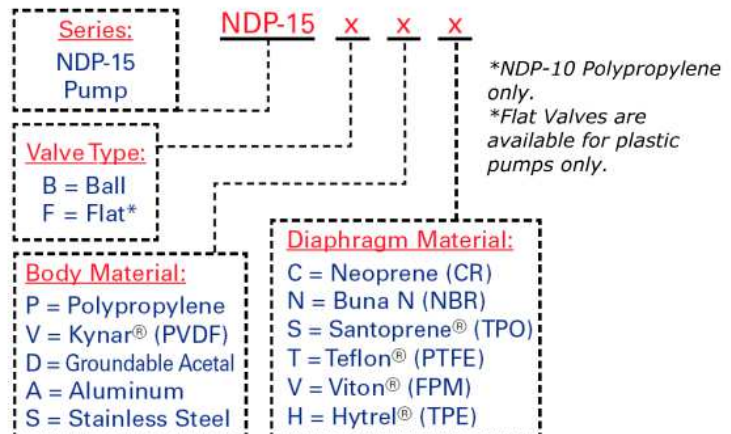
Stainless Steel

Dimensions: 212 mm W x 246,4 mm H

Net Wt.: 6,2 (13.6 lbs.)

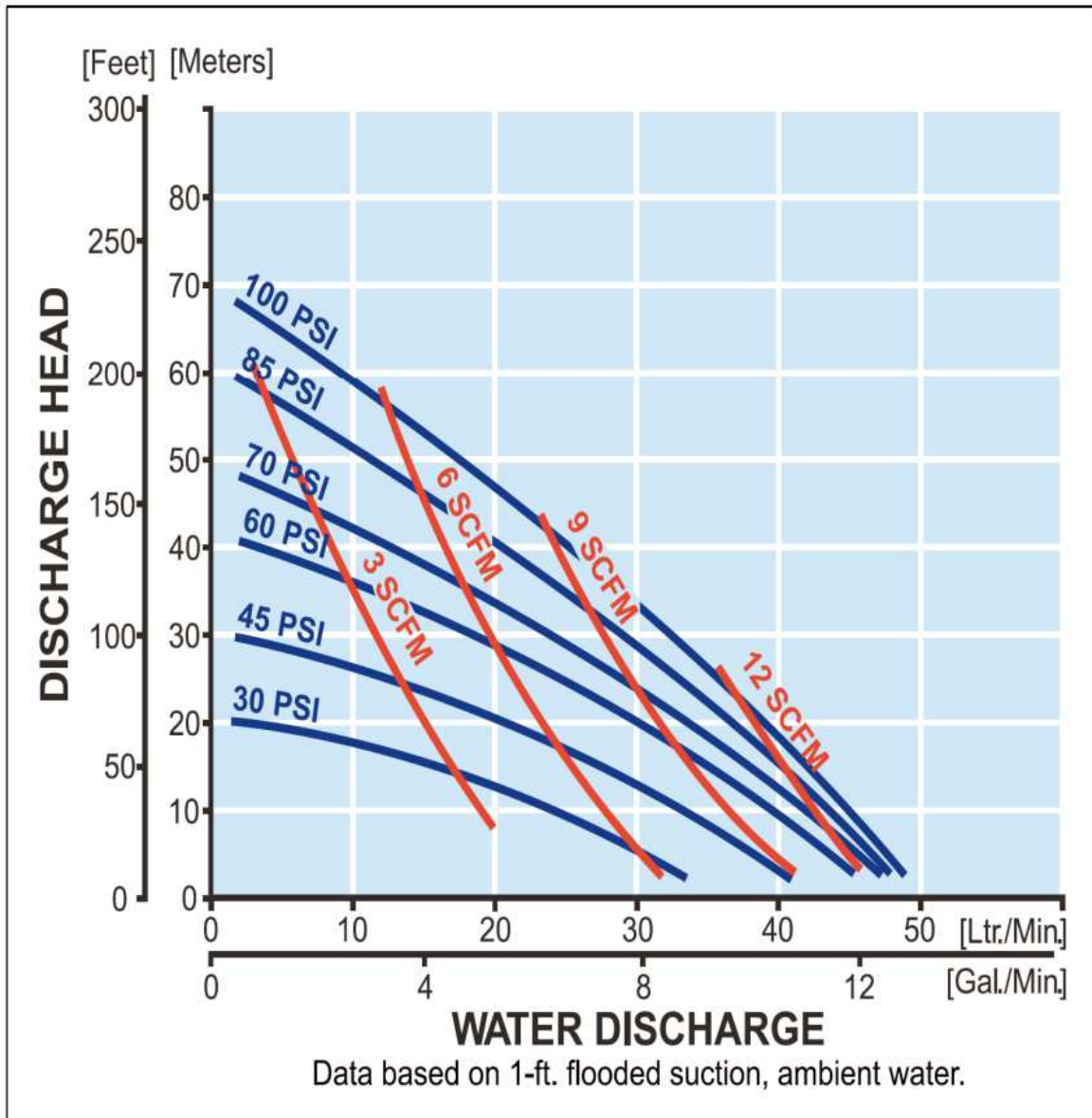
Shipping Wt.: 7 kg (15.5 lbs.)

Model Number Nomenclature



NDP-15 Performance Curve - All Valves

All Diaphragm Materials



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

NDP-20 Series Specifications

Port Dimensions

Intake & discharge connection:

Polypropylene (PPG) 3/4" 20 mm Female BSPT

Aluminum (ADC-12) 3/4" 20 mm Female BSPT

Stainless Steel (316) 3/4" 20 mm Female BSPT

Air inlet (incl. ball valve): 1/4" 20 mm Female BSPT

Air exhaust (incl. silencer): 3/4" 20 mm Female BSPT

DIN & ANSI Flange also available - consult Yamada.

Maximum Liquid Temperature*

Diaphragm Material	Temperature
Neoprene	82° C (180° F)
Buna N	82° C (180° F)
EPDM	100° C (212° F)
Hytrel® (TPEE)	120° C (248° F)
Santoprene® (TPO)	100° C (212° F)
Viton® fluoroelastomer	120° C (248° F)
Teflon® (PTFE)	100° C (212° F)

*The maximum liquid temperature for metal and Kynar®-fitted pumps is determined by the Elastomer (diaphragm material). Polypropylene and Grounddable Acetal pumps have a maximum liquid temperature of 82° C (180° F) regardless of diaphragm material.

Air Supply Pressure (All Models)

1,4 - 7 BAR (20 - 100 PSI)

Discharge Volume Per Cycle

Rubber diaphragm: 615 cc (0.163 US gallons)

PTFE diaphragm : 539 cc (0.143 US gallons)

Maximum Cycles Per Minute:

Rubber diaphragm: 195

PTFE: diaphragm: 195

Maximum Size Solid

2.0 mm (1/16")

Maximum Dry Suction Lift

Rubber-fitted pump capability: 5.5 m (18 feet)

Air Motors

Aluminum air motors are standard on metal pumps; glass-filled polypropylene air motors are standard on plastic pumps.

Optional air motors: Epoxy - coated, Teflon® - coated, Electroless Nickel Plate, aluminum and glass-filled polypropylene.

Notes: Hytrel®-fitted pumps include PTFE check

Balls & wetted o-rings. Santoprene®-fitted pumps

include EPDM check balls & wetted o-rings.



Aluminum

Dimensions: 249mm W x 320mm H

Net Wt.: 9 kg (19,8 lbs.)

Shipping Wt.: 10,4 kg (23 lbs.)

Stainless Steel

Dimensions: 249 mm W x 320 mm H

Net Wt.: 13,9 kg (30,8 lbs.)

Shipping Wt.: 14,5 kg (32 lbs.)

Polypropylene (BSPT)

Dimensions: 316mm W x 368mm H

Net Wt.: 8,2 kg (17,6 lbs.)

Shipping Wt.: 10,2 kg (22,6 lbs.)

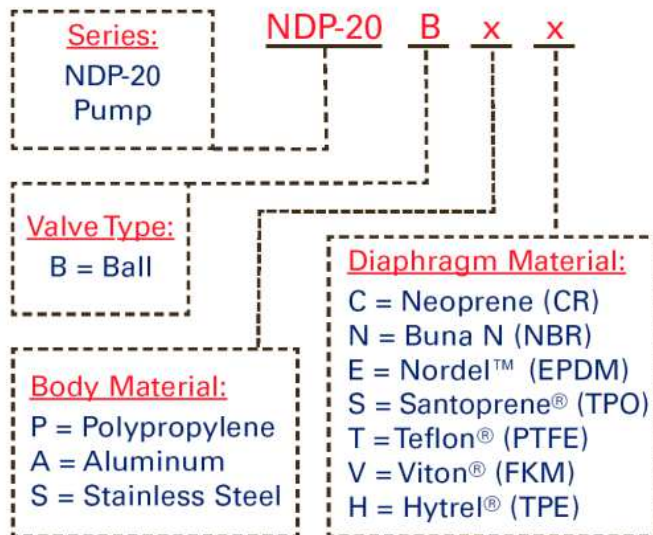
Polypropylene - DIN Flange

Dimensions: 316mm W x 375mm H

Net Wt.: 8,2 kg (17,6 lbs.)

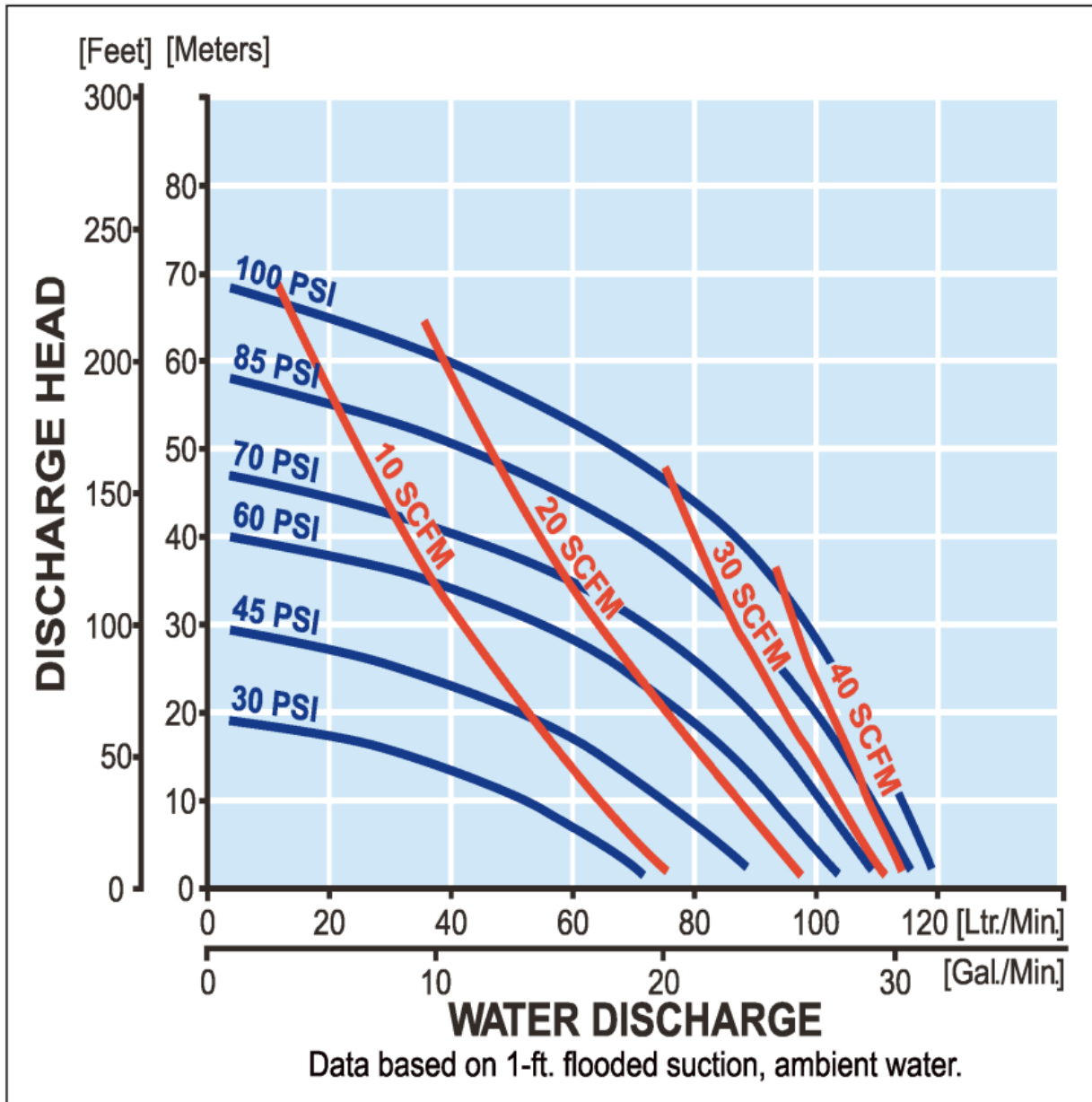
Shipping Wt.: 10,2 kg (22,6 lbs.)

Model Number Nomenclature



NDP-20 Performance Curve - Rubber

All Diaphragm Materials



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

NDP-25 Series Specifications

Port Dimensions

Intake & discharge connection:

Polypropylene (PPG)	1" 25 mm Female BSPT
Kynar®(PVDF)	1" 25 mm Female BSPT
Aluminum (ADC-12)	1" 25 mm Female BSPT
Stainless Steel (316)	1" 25 mm Female BSPT
Cast Iron	1" 25 mm Female BSPT
Air inlet (incl. ball valve):	3/8" 10 mm Female BSPT
Air exhaust (incl. silencer):	3/4" 20 mm Female BSPT

DIN & ANSI Flange also available - consult Yamada.

Maximum Liquid Temperature*

Diaphragm Material	Temperature
Neoprene	82° C (180° F)
Buna N	82° C (180° F)
EPDM	100° C (212° F)
Hytrel® (TPEE)	120° C (248° F)
Santoprene® (TPO)	100° C (212° F)
Viton® fluoroelastomer	120° C (248° F)
Teflon® (PTFE)	100° C (212° F)

*The maximum liquid temperature for metal and Kynar®-fitted pumps is determined by the Elastomer (diaphragm material). Polypropylene and Grounddable Acetal pumps have a maximum liquid temperature of 82° C (180° F) regardless of diaphragm material.

Air Supply Pressure (All Models)

1,4 - 7 BAR (20 - 100 PSI)

Discharge Volume Per Cycle

Rubber diaphragm: 833 cc (0,22 US gallons)
PTFE diaphragm : 787 cc (0,21 US gallons)

Maximum Cycles Per Minute:

Rubber diaphragm: 210
PTFE: diaphragm: 210

Maximum Size Solid

4,8 mm (3/16")

Maximum Dry Suction Lift

Rubber-fitted pump capability: 5.5 m (18 feet)

Air Motors

Aluminum air motors are standard on metal pumps; glass-filled polypropylene air motors are standard on plastic pumps.

Optional air motors: Epoxy - coated, Teflon® - coated, Electroless Nickel Plate, aluminum and glass-filled polypropylene.

All Polypropylene, Aluminum, Cast Iron, and SS Hytrel® fitted pumps include PTFE check balls & wetted 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.



Polypropylene DIN - Flange

Dimensions: 366mm W x 422mm H
Net Wt.: 10,9 kg (29 lbs.)
Shipping Wt.: 12,9 kg (30 lbs.)

Polypropylene - BSPT

Dimensions: 366mm W x 429mm H
Net Wt.: 10,9 kg (29 lbs.)
Shipping Wt.: 12 kg (30 lbs.)

Kynar® BSPT

Dimensions: 366mm W x 429mm H
Net Wt.: 13,4 kg (29,7 lbs.)
Shipping Wt.: 15 kg (33 lbs.)

Kynar® DIN - Flange

Dimensions: 366mm W x 422mm H
Net Wt.: 13,4 kg (29,7 lbs.)
Shipping Wt.: 15 kg (33 lbs.)

Aluminum

Dimensions: 287mm W x 383mm H
Net Wt.: 13 kg (27 lbs.)
Shipping Wt.: 14 kg (31 lbs.)

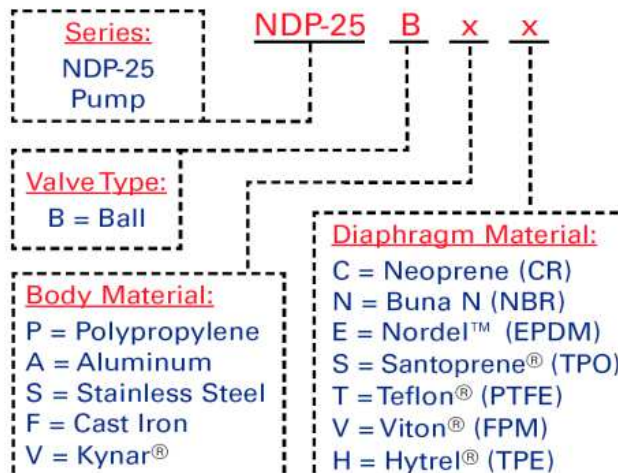
Stainless Steel

Dimensions: 287mm W x 383mm H
Net Wt.: 19,9 kg (42 lbs.)
Shipping Wt.: 21 kg (46 lbs.)

Cast Iron

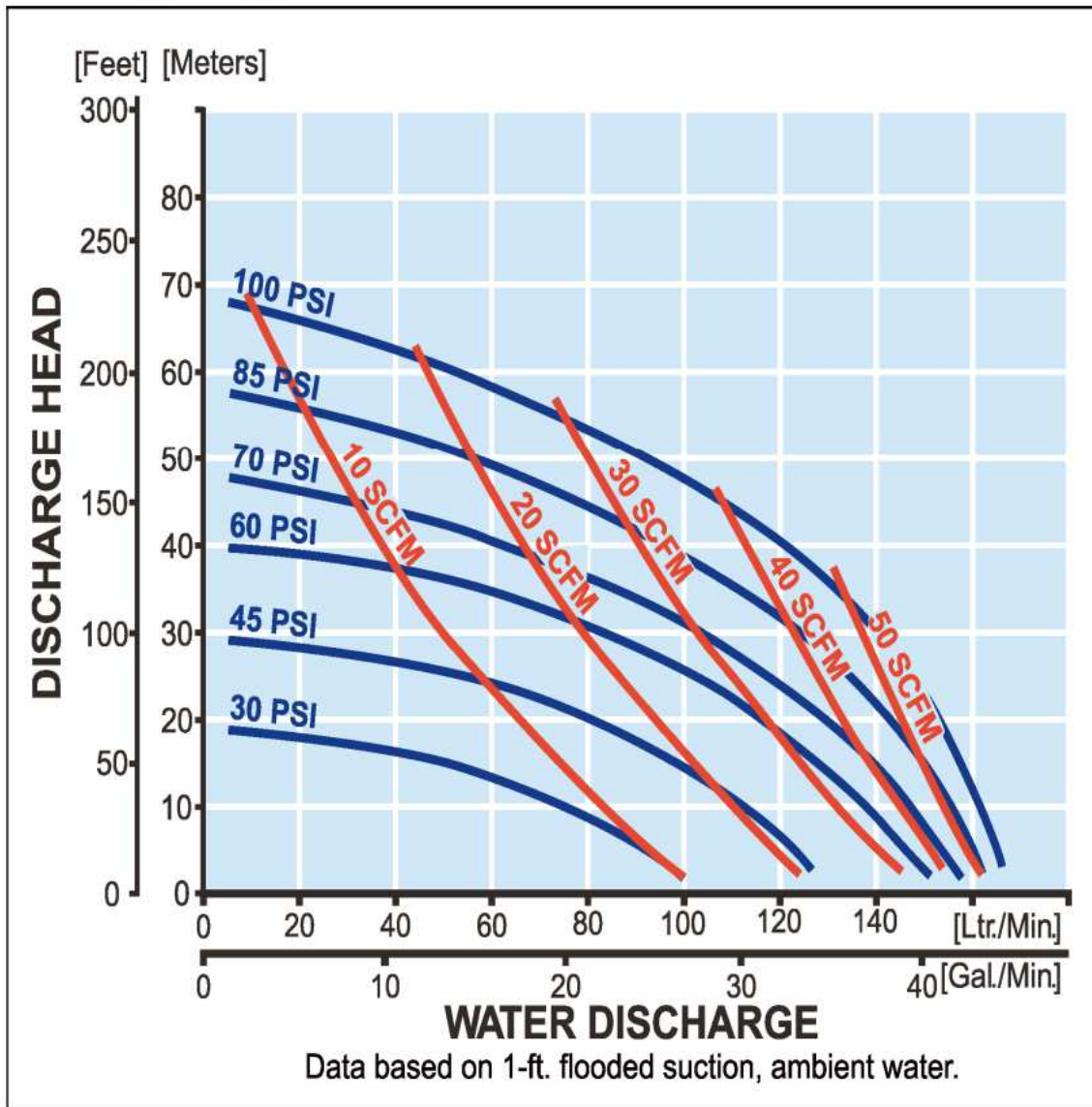
Dimensions: 287mm W x 383mm H
Net Wt.: 19,9 kg (43 lbs.)
Shipping Wt.: 21 kg (46 lbs.)

Model Number Nomenclature



NDP-25 Performance Curve - Rubber

All Diaphragm Materials



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