

# DP Series Specifications

## DP-10 Port Dimensions (6 GPM Max.)

Intake & discharge connection:

|                       |                 |
|-----------------------|-----------------|
| Polypropylene (PPG)   | 3/8" Female NPT |
| Aluminum (ADC-12)     | 3/8" Female NPT |
| Stainless Steel (316) | 3/8" Female NPT |

## DP-15 Port Dimensions (7.4 GPM Max.)

Intake & discharge connection:

|                     |                 |
|---------------------|-----------------|
| Polypropylene (PPG) | 1/2" Female NPT |
| Groundable Acetal   | 1/2" Female NPT |

## Air Inlet / Exhaust

|                               |                 |
|-------------------------------|-----------------|
| Air inlet (incl. ball valve): | 1/4" Female NPT |
| Air exhaust (incl. silencer): | 3/8" 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)  |
| 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 and Groundable Acetal 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 kfg/cm)

## Discharge Volume Per Cycle

DP-10: 0.020 gallons (76 cc)

DP-15: 0.025 gallons (93 cc)

## Maximum Cycles Per Minute

All diaphragms: 300

## Maximum Size Solid

1/32" (1 mm)

## Maximum Dry Suction Lift

All diaphragms: 10-feet

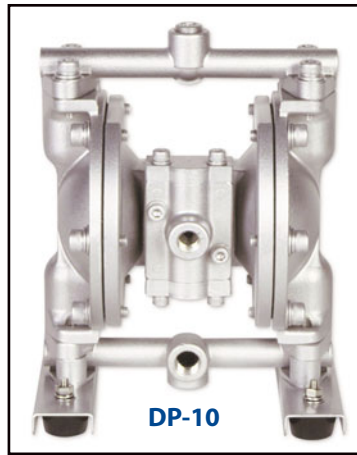
## Air Motor

Aluminum Air Motor–Standard

Optional coating: PTFE grey coated (XP)

## Optional Split Manifold—contact Yamada

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



DP-10

## Aluminum

Dimensions: 7.32"Lx5.59"Wx9.49"H

Net Wt.: 7.7 lbs.

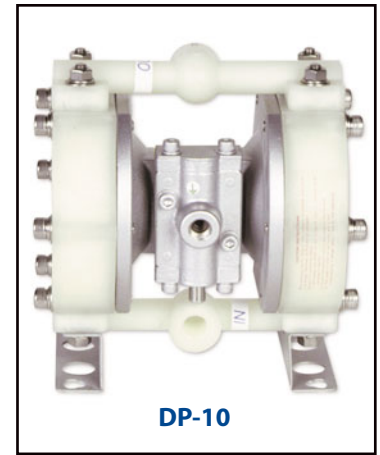
Shipping Wt.: 9.7 lbs.

## Stainless Steel

Dimensions: 7.31"Lx5.59"Wx9.37"H

Net Wt.: 11.5 lbs.

Shipping Wt.: 13.3 lbs.



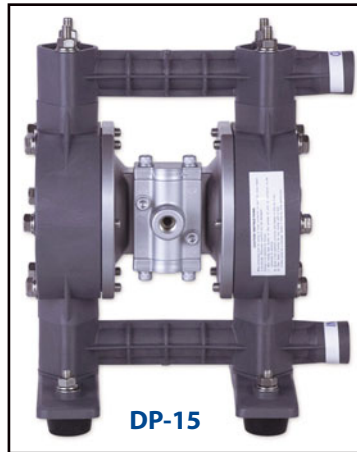
DP-10

## Polypropylene

Dimensions: 7.72" Lx4.41"Wx7.72"H

Net Wt.: 6.6 lbs.

Shipping Wt.: 8.4 lbs.



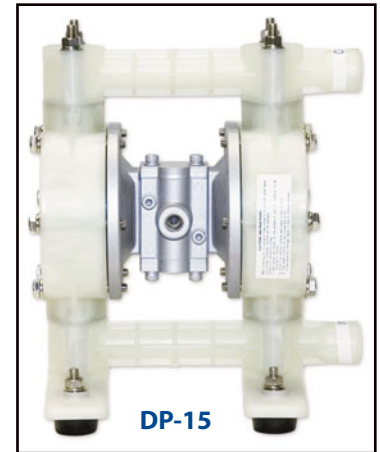
DP-15

## Groundable Acetal

Dimensions: 9.63"Lx7.09"Wx11.69" H

Net Wt.: 7 lbs.

Shipping Wt.: 9.7 lbs.



DP-15

## Polypropylene

Dimensions: 9.63"Lx7.09"Wx11.69" H

Net Wt.: 7 lbs.

Shipping Wt.: 9.7 lbs.

## Model Number Nomenclature

|                                                                                                            |              |          |          |          |
|------------------------------------------------------------------------------------------------------------|--------------|----------|----------|----------|
| <b>Series:</b><br>DP-10 pump or<br>DP-15 pump                                                              | <b>DP-1x</b> | <b>x</b> | <b>x</b> | <b>x</b> |
| <b>Valve Type:</b><br>B = Ball<br>F = Flat*                                                                |              |          |          |          |
| <b>Body Material:</b><br>P = Polypropylene<br>D = Groundable Acetal<br>A = Aluminum<br>S = Stainless Steel |              |          |          |          |
|                                                                                                            |              |          |          |          |

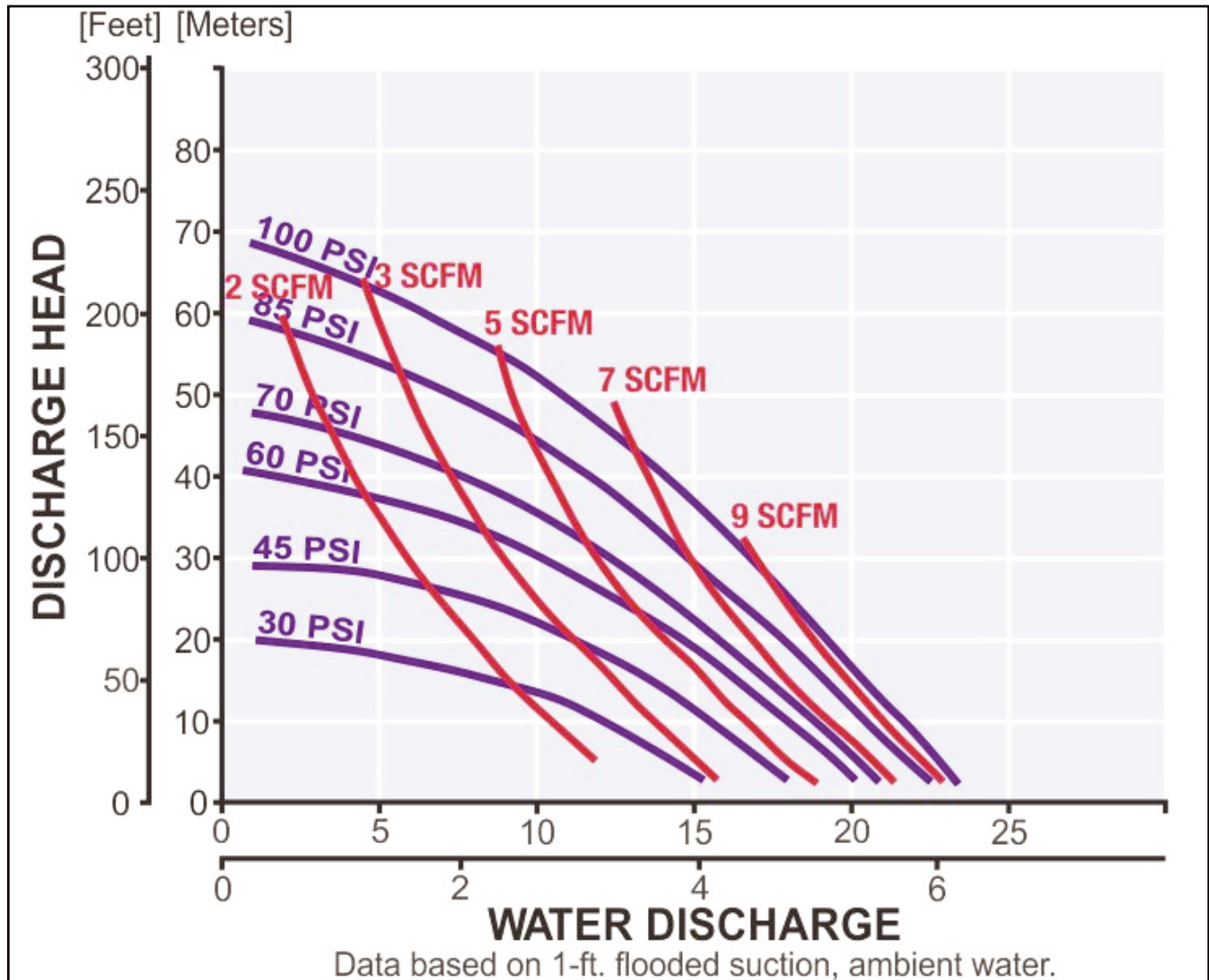
## Diaphragm Material:

C = Neoprene (CR)  
N = Buna N (NBR)  
S = Santoprene® (TPO)  
T = PTFE  
V = Viton® (FPM)  
H = Hytrel® (TPE)

\* Flat valves available for DP-15 pumps only.

# DP-10 Performance Curve

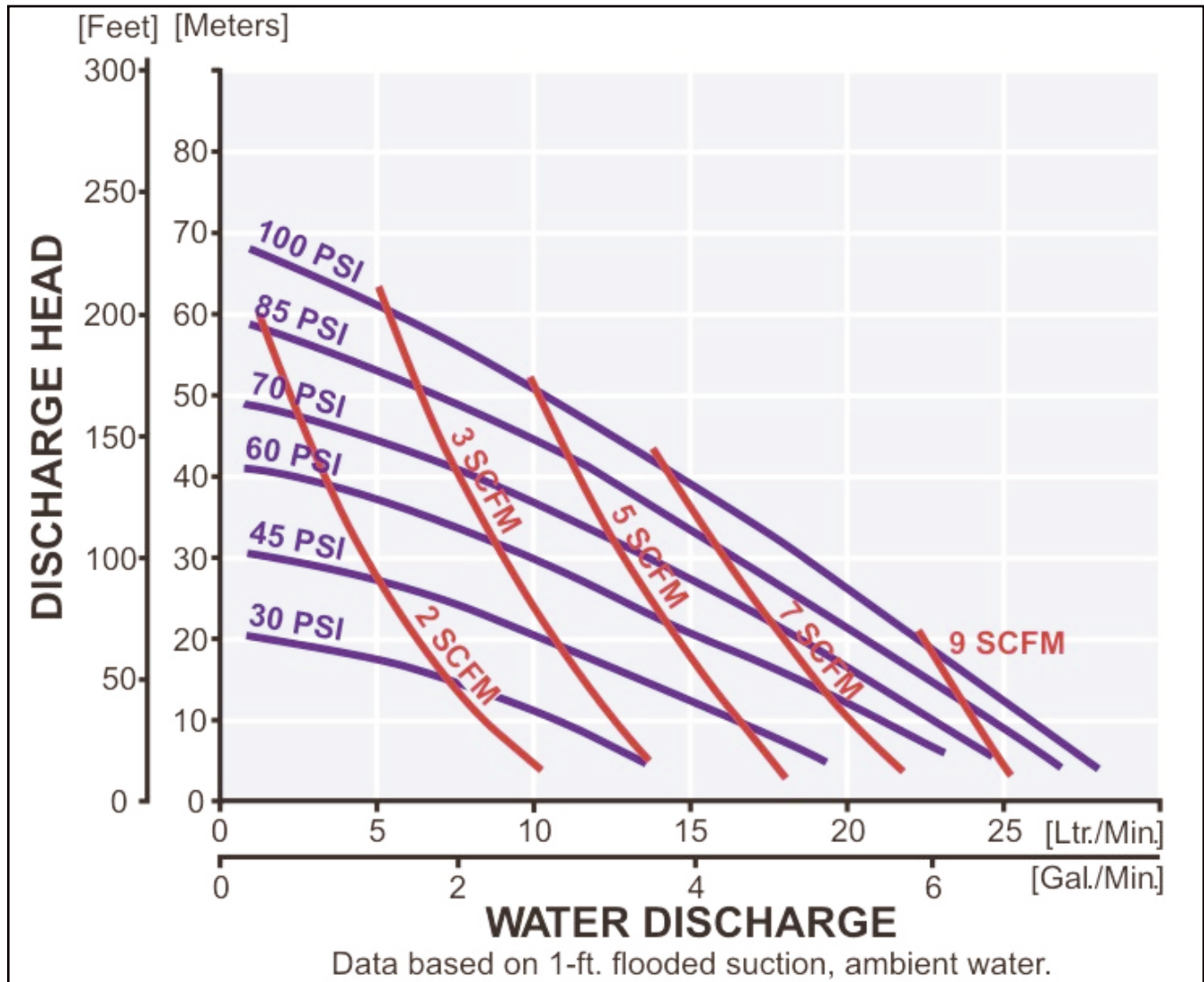
## All Diaphragm Materials



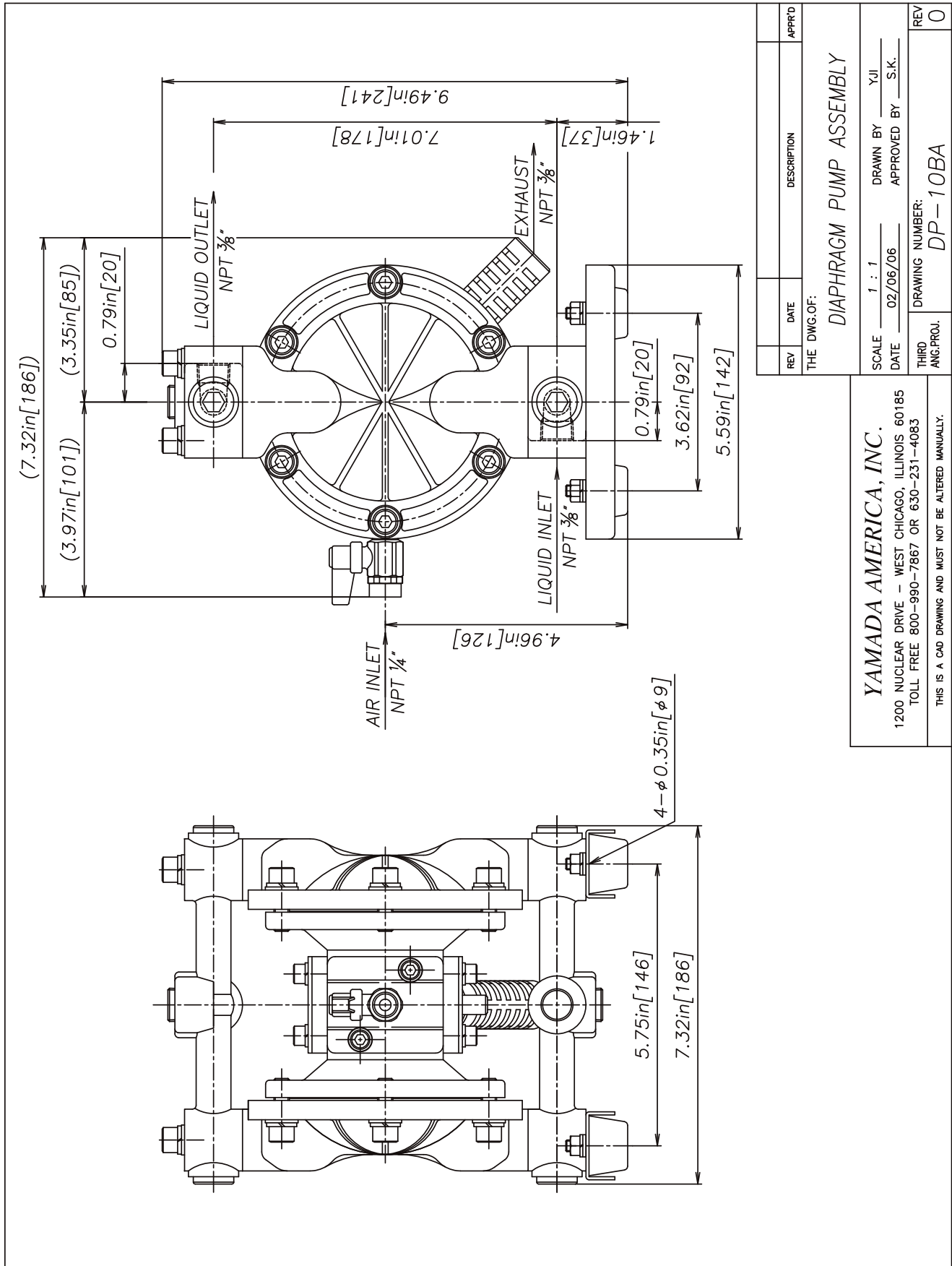
To calculate performance for Santoprene® and Hytrel®-fitted pumps, use Rubber Diaphragm Curve.

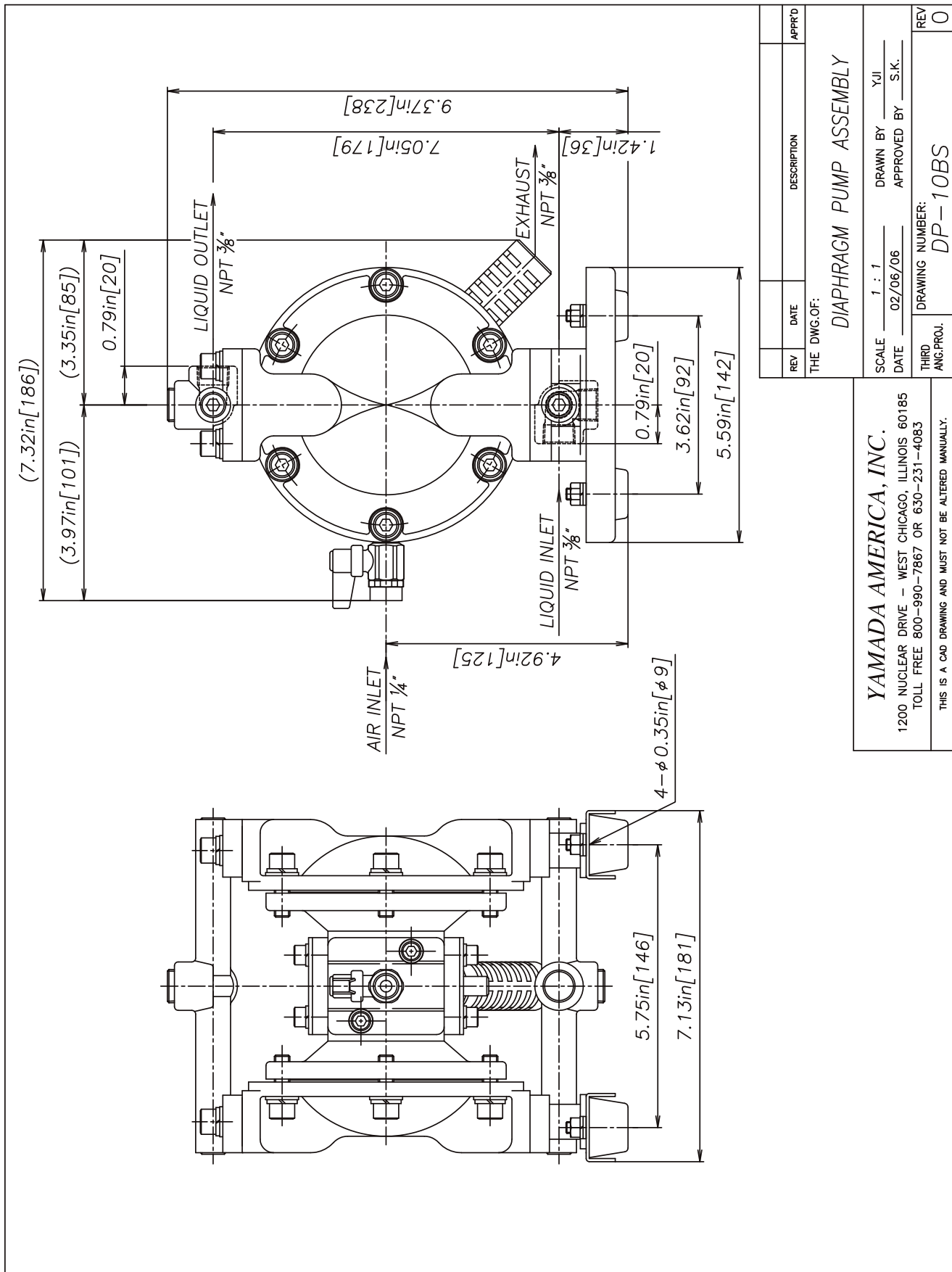
# DP-15 Performance Curve

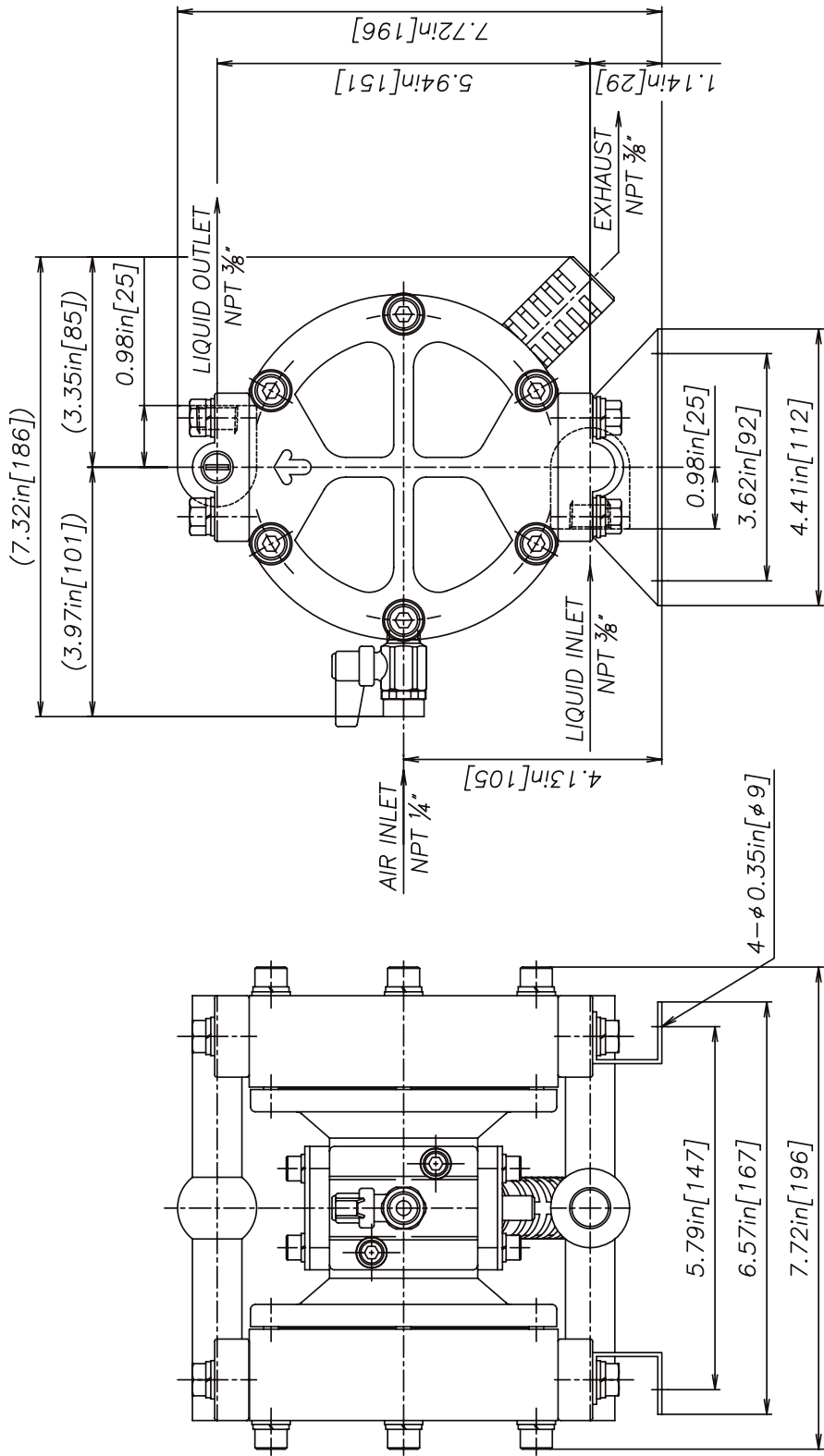
## All Diaphragm Materials



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



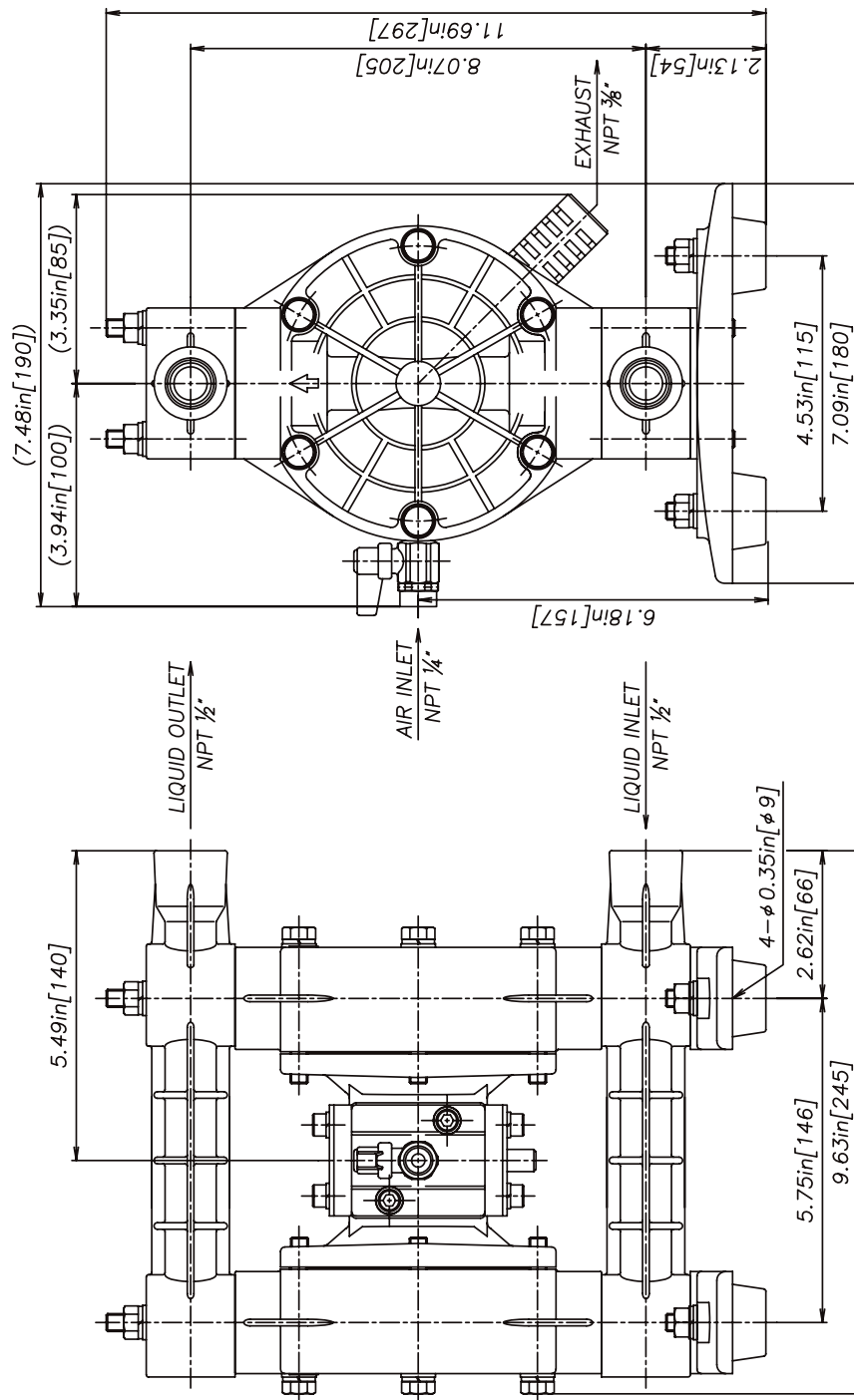




| REV                     | DATE  | DESCRIPTION | APPR'D |
|-------------------------|-------|-------------|--------|
| THE DWG.OF:             |       |             |        |
| DIAPHRAGM PUMP ASSEMBLY |       |             |        |
| SCALE 1 : 1             |       |             |        |
| DRAWN BY YJI            |       |             |        |
| DATE 02/06/06           |       |             |        |
| APPROVED BY S.K.        |       |             |        |
| DRAWING NUMBER: DP-10BP |       |             |        |
| REV                     | THIRD | ANG.PROJ.   | 0      |

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 TOLL FREE 800-990-7867 OR 630-231-4083  
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| REV                     | DATE       | DESCRIPTION | APPR'D |
|-------------------------|------------|-------------|--------|
| THE DWG. OF:            |            |             |        |
| DIAPHRAGM PUMP ASSEMBLY |            |             |        |
| SCALE 1 : 1             |            |             |        |
| DRAWN BY YJI            |            |             |        |
| DATE 02/10/06           |            |             |        |
| APPROVED BY S.K.        |            |             |        |
| DRAWING NUMBER:         |            |             |        |
| DP-15F/B PLASTIC        |            |             |        |
| THIRD                   | ANG. PROJ. | REV         | 0      |

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