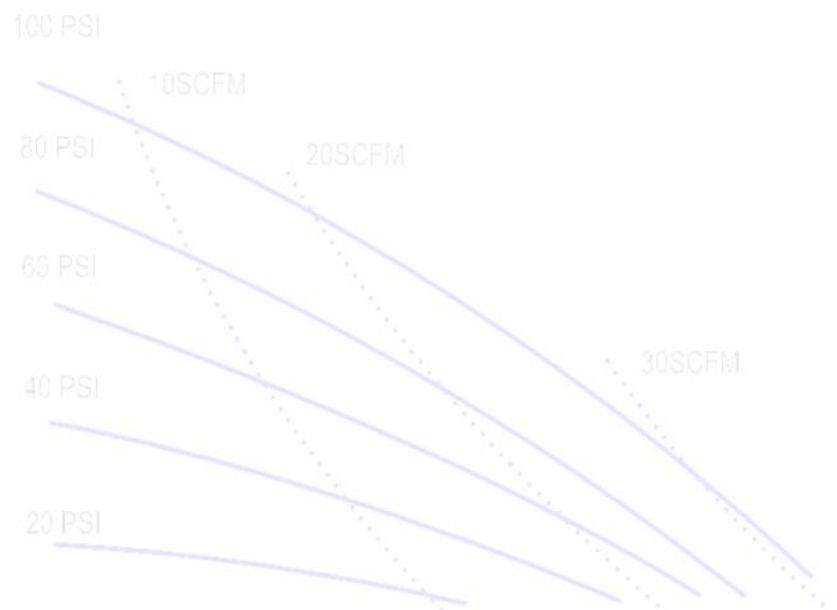




Industrial Pump Performance Curves

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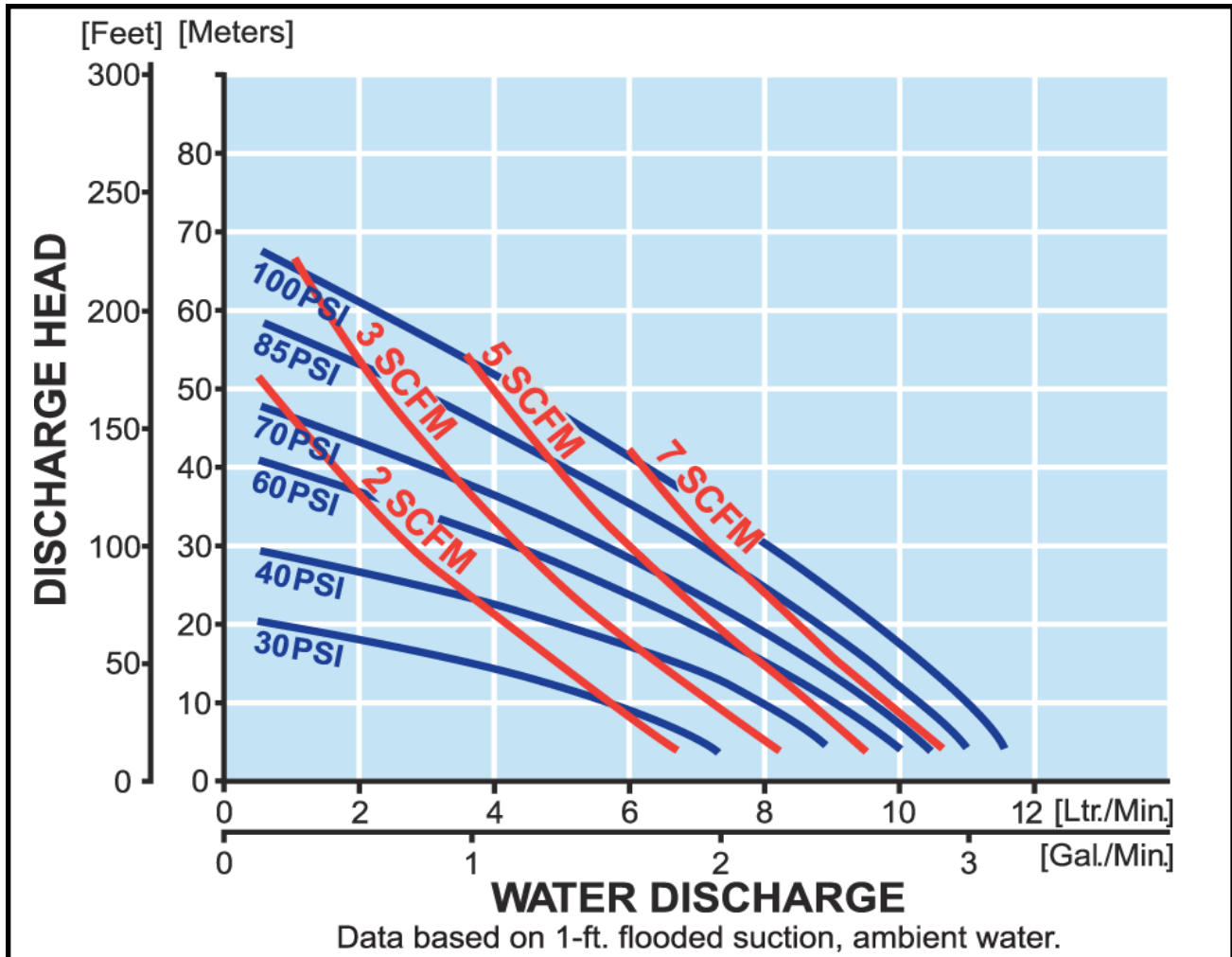


NDP-5 Performance Curve

Only in PTFE

How to use these charts:

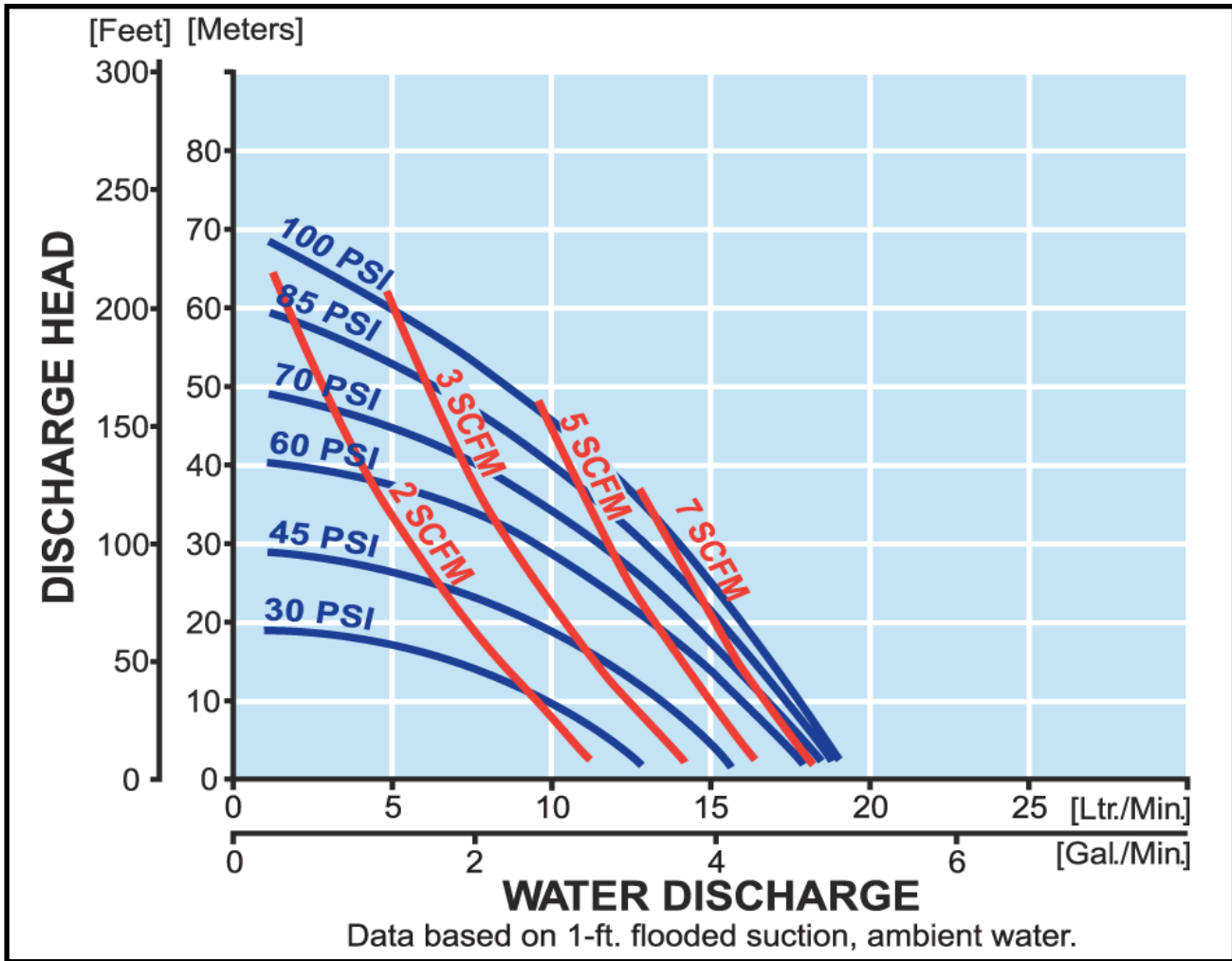
- Step 1:** Locate the required fluid flow rate along bottom axis of chart.
- Step 2:** Follow vertical line to the intersecting blue solid curve (based on your air inlet pressure).
- Step 3:** Follow to the left axis to read fluid outlet pressure.
- Step 4:** From Step 2, follow vertical line up or down to the intersection with the red curve (A, B or C based on your air inlet pressure) then follow to the right axis to read air consumption.



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DP-10 Performance Curve

All Diaphragm Materials

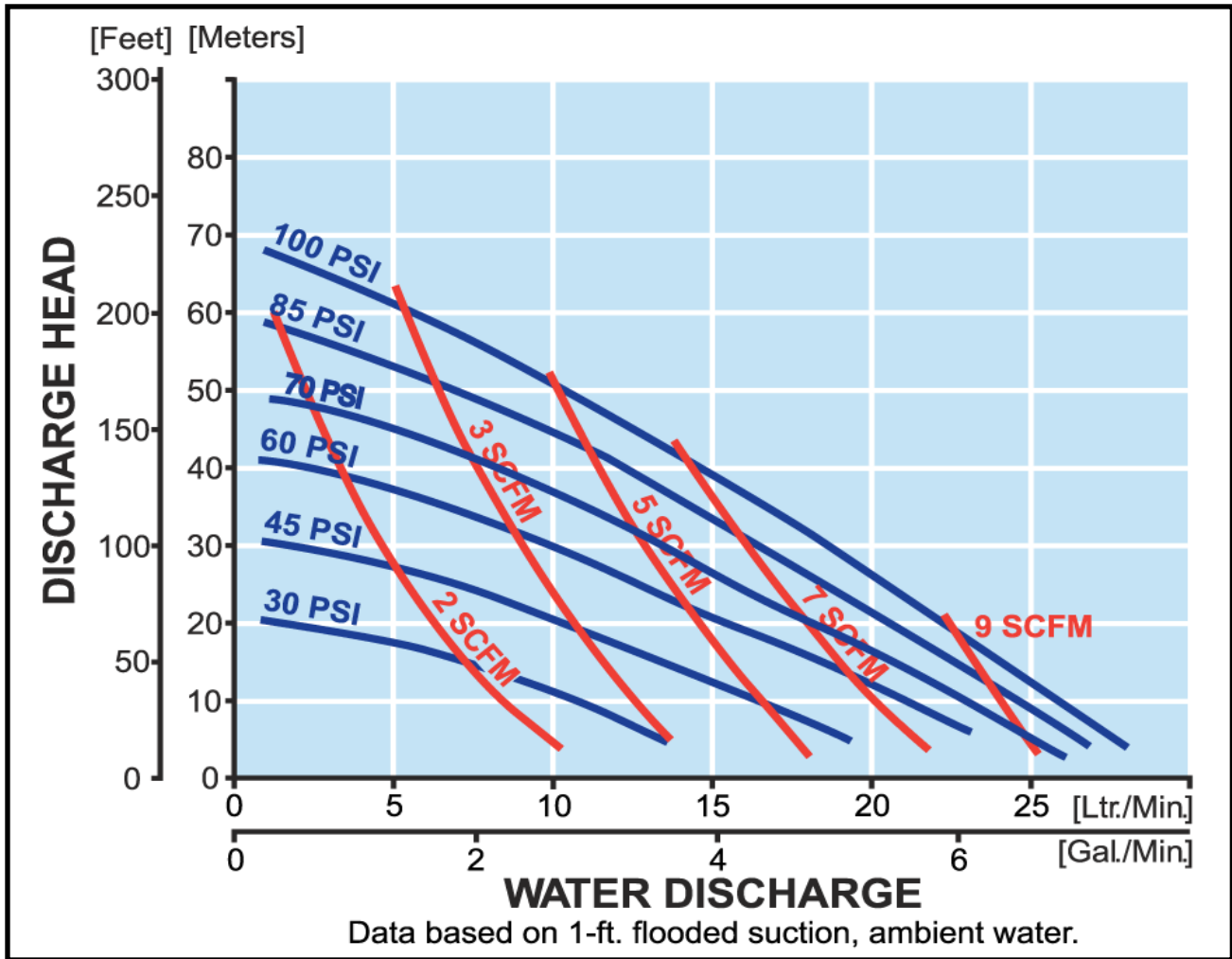


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DP-15 Performance Curve

Flat and Ball Check Valves

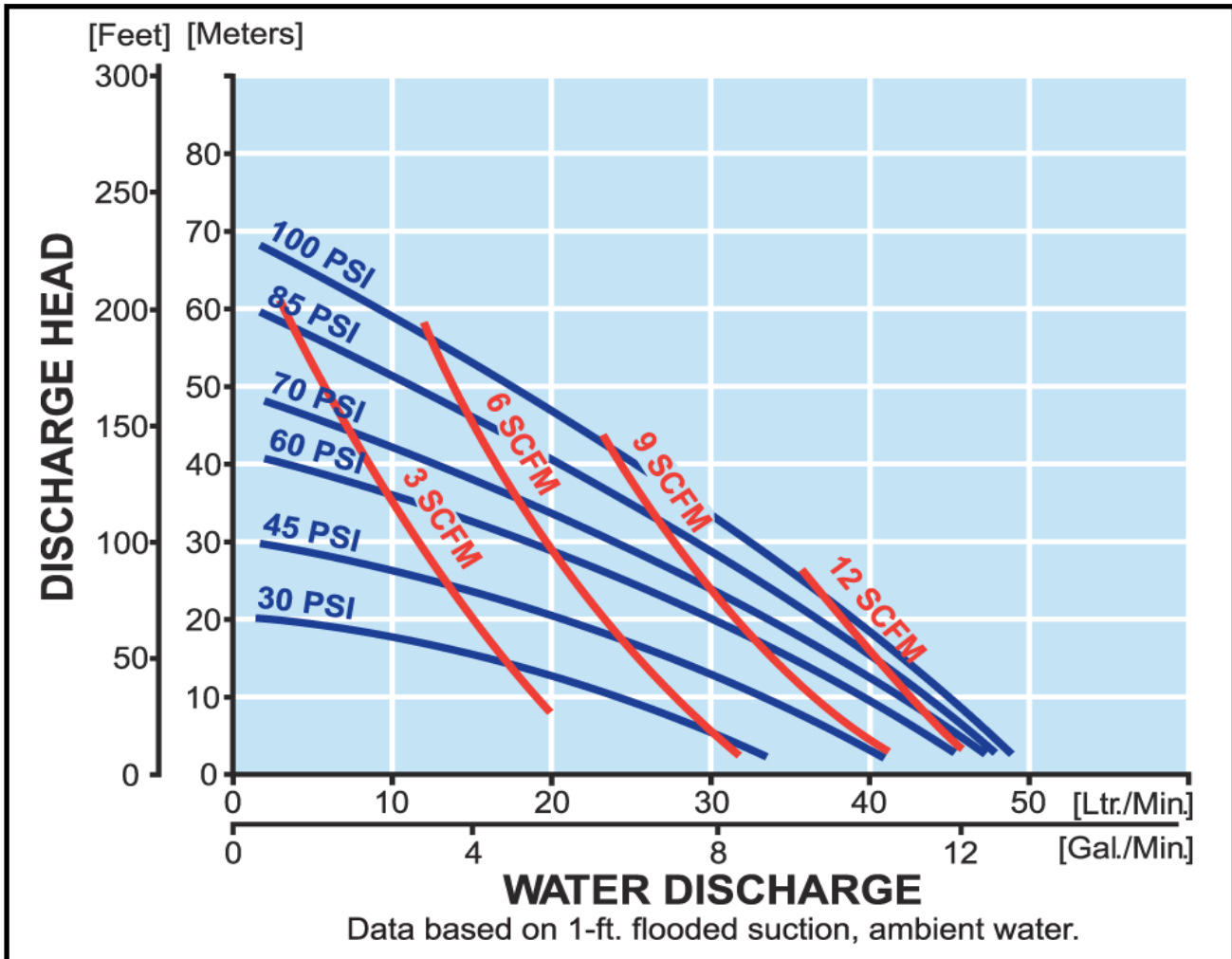
All Diaphragm Materials



NDP-15 Performance Curve

Flat and Ball Check Valves

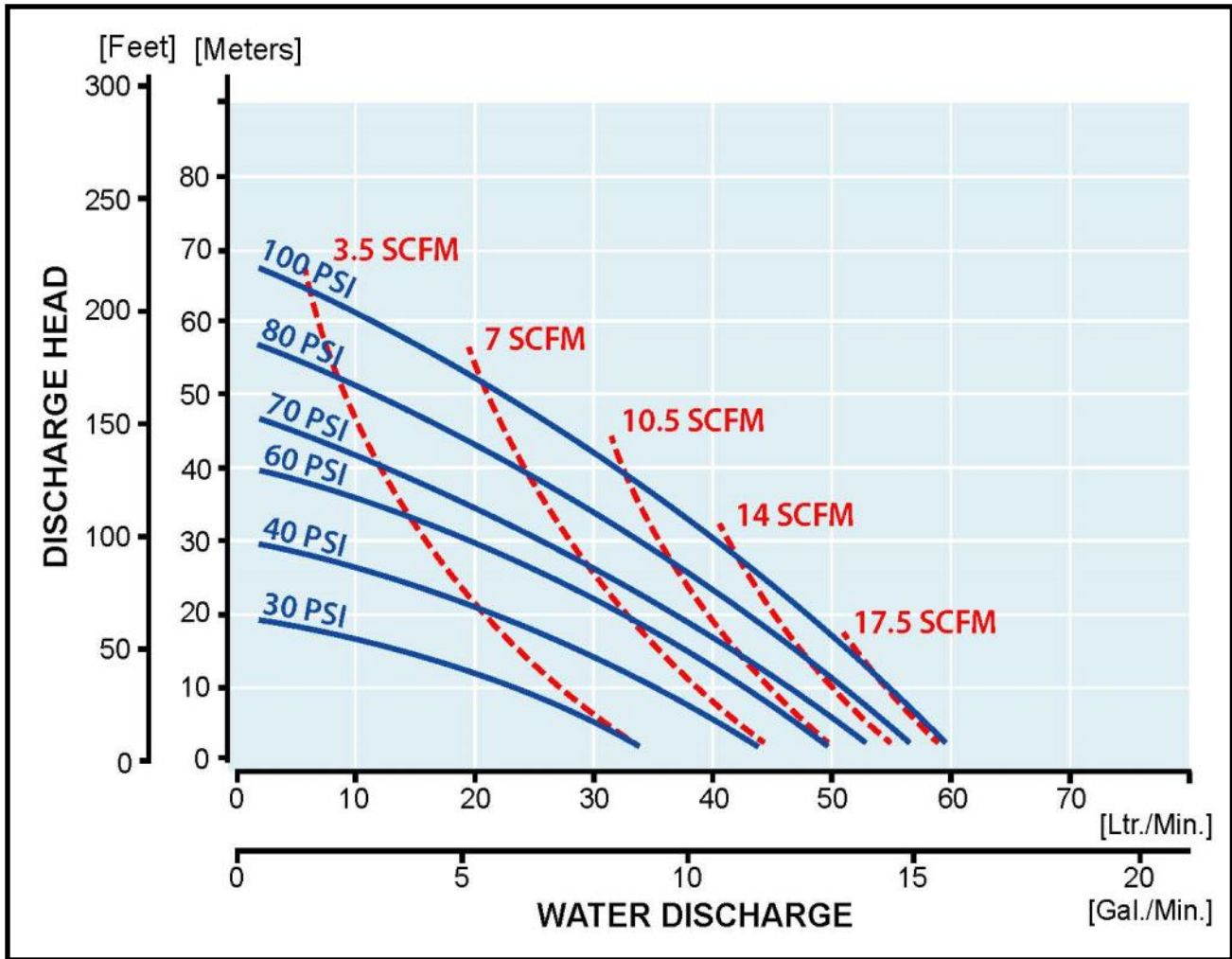
All Diaphragm Materials



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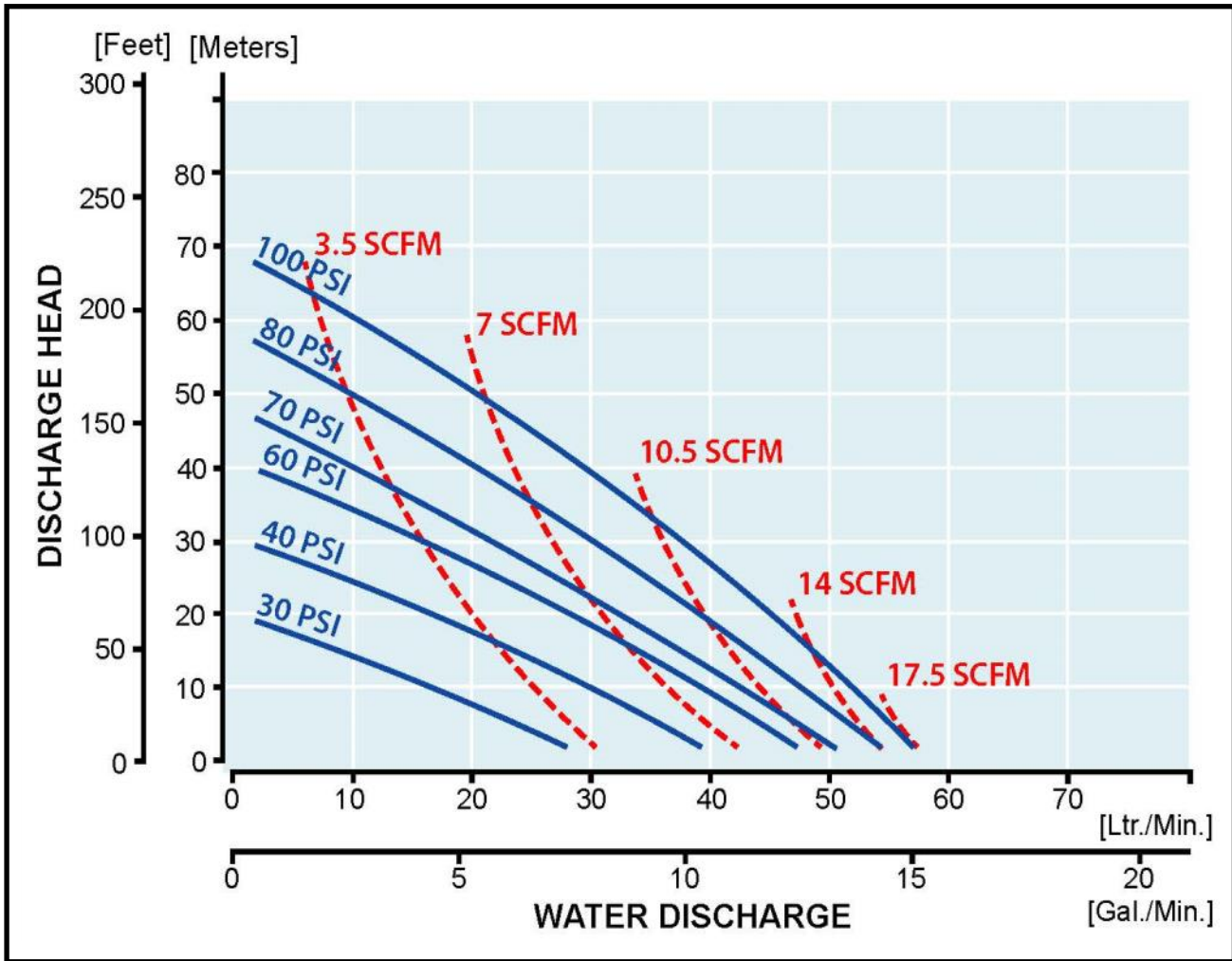
G15 Aluminum Performance Curve

Rubber



G15 Aluminum Performance Curve

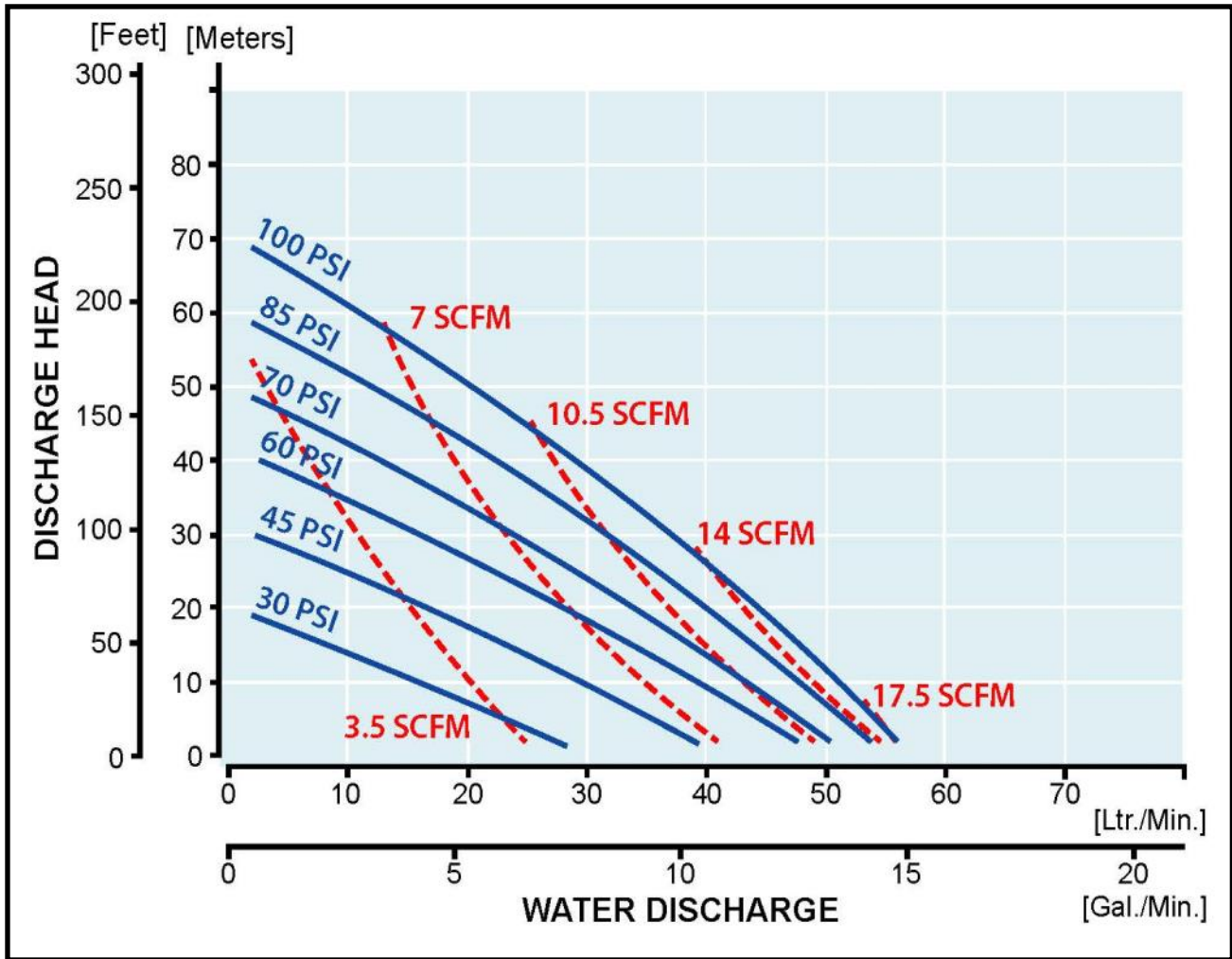
PTFE



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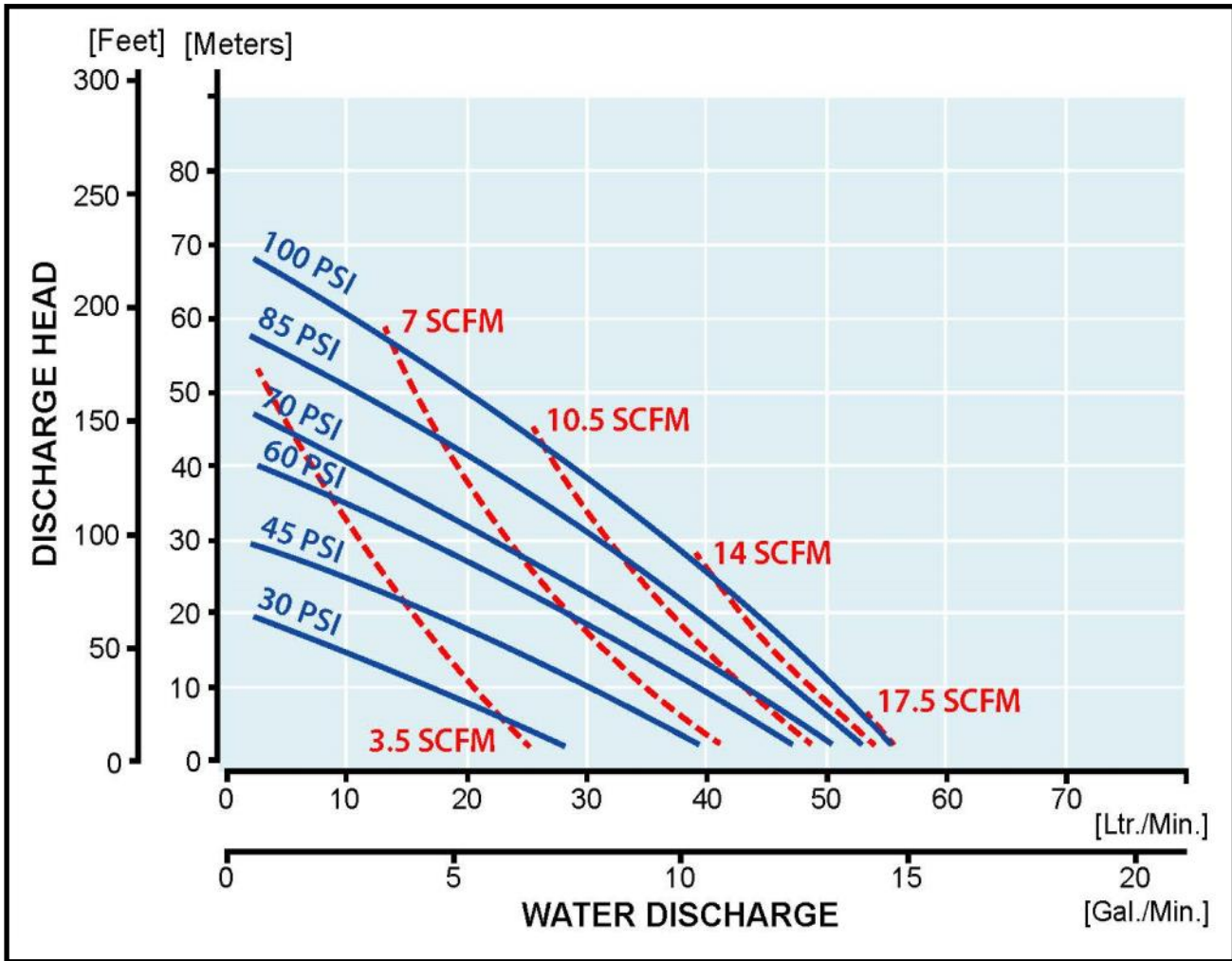
G15 Stainless Steel Performance Curve

Rubber



G15 Stainless Steel Performance Curve

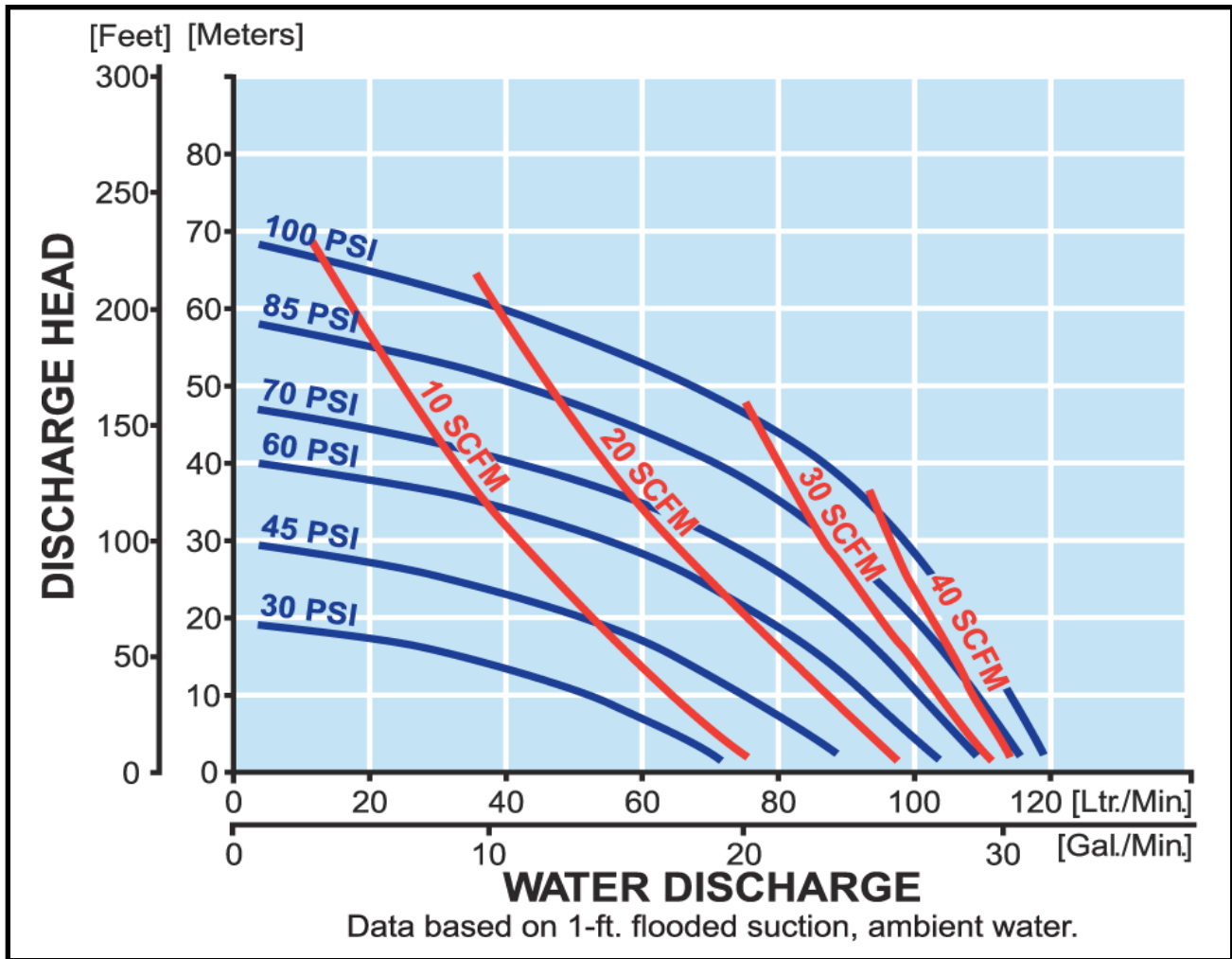
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NDP-20 Performance Curve

Rubber



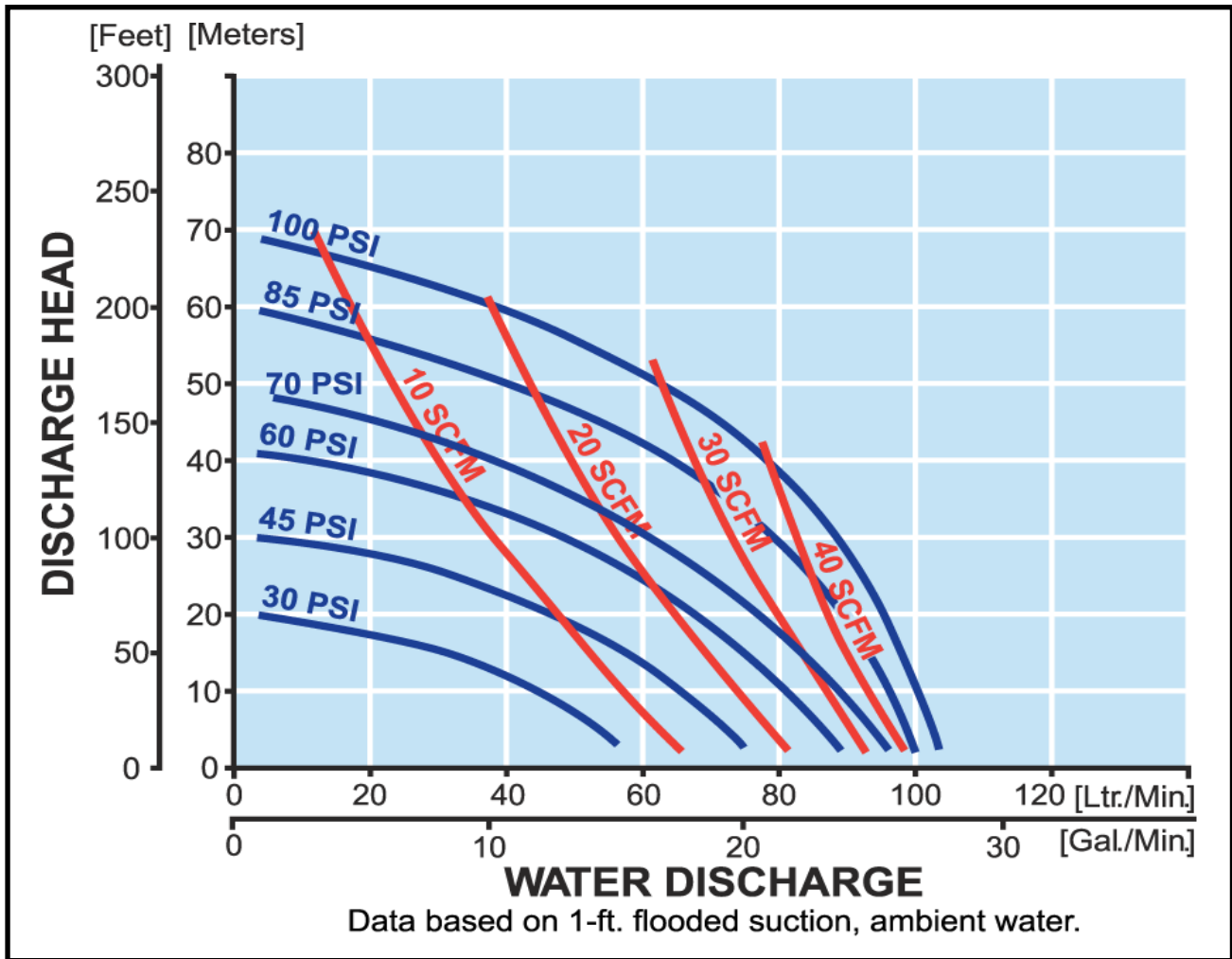
To calculate performance for Santoprene® and Hytrel® fitted pumps, use rubber diaphragm curve



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NDP-20 Performance Curve

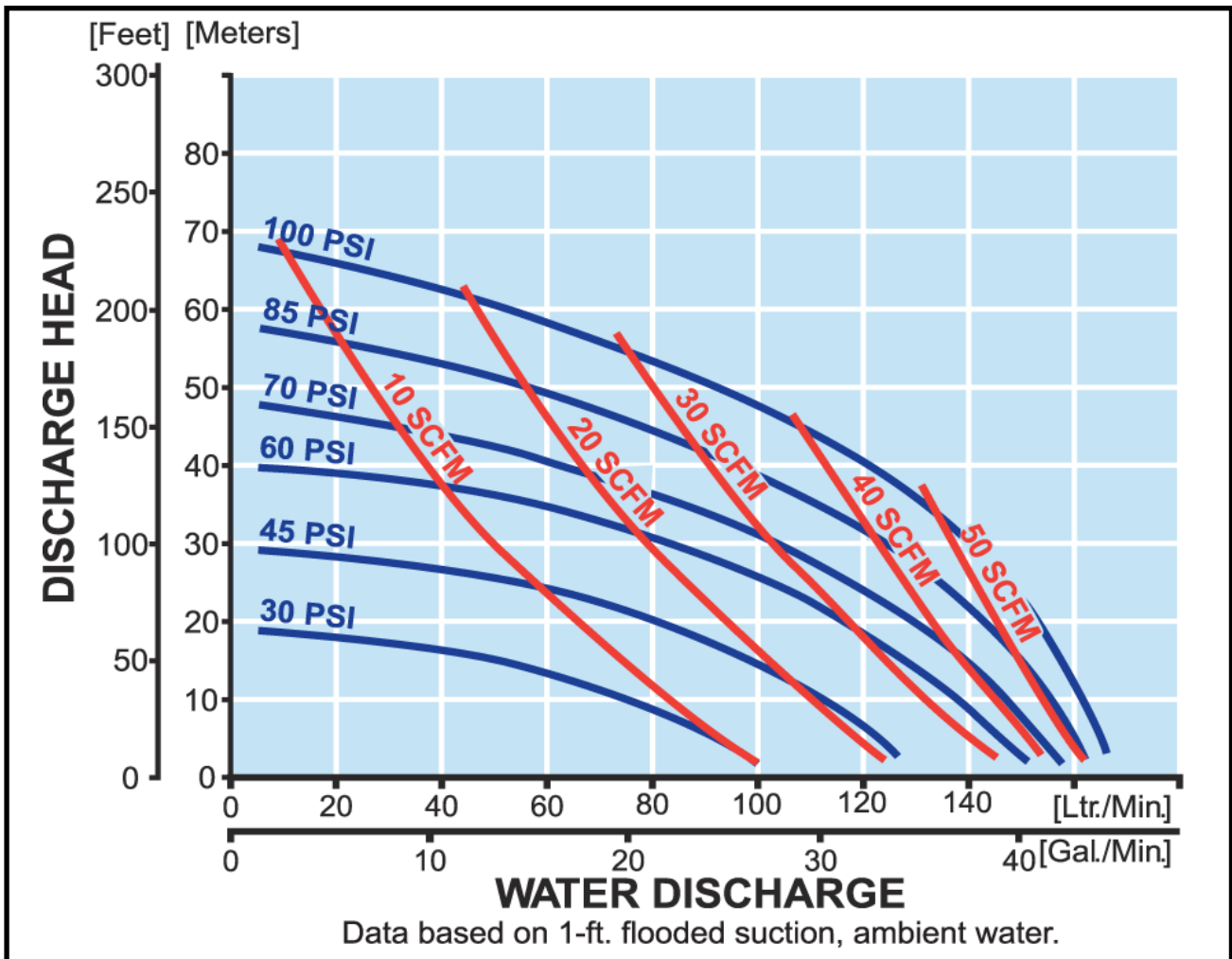
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NDP-25 Performance Curve

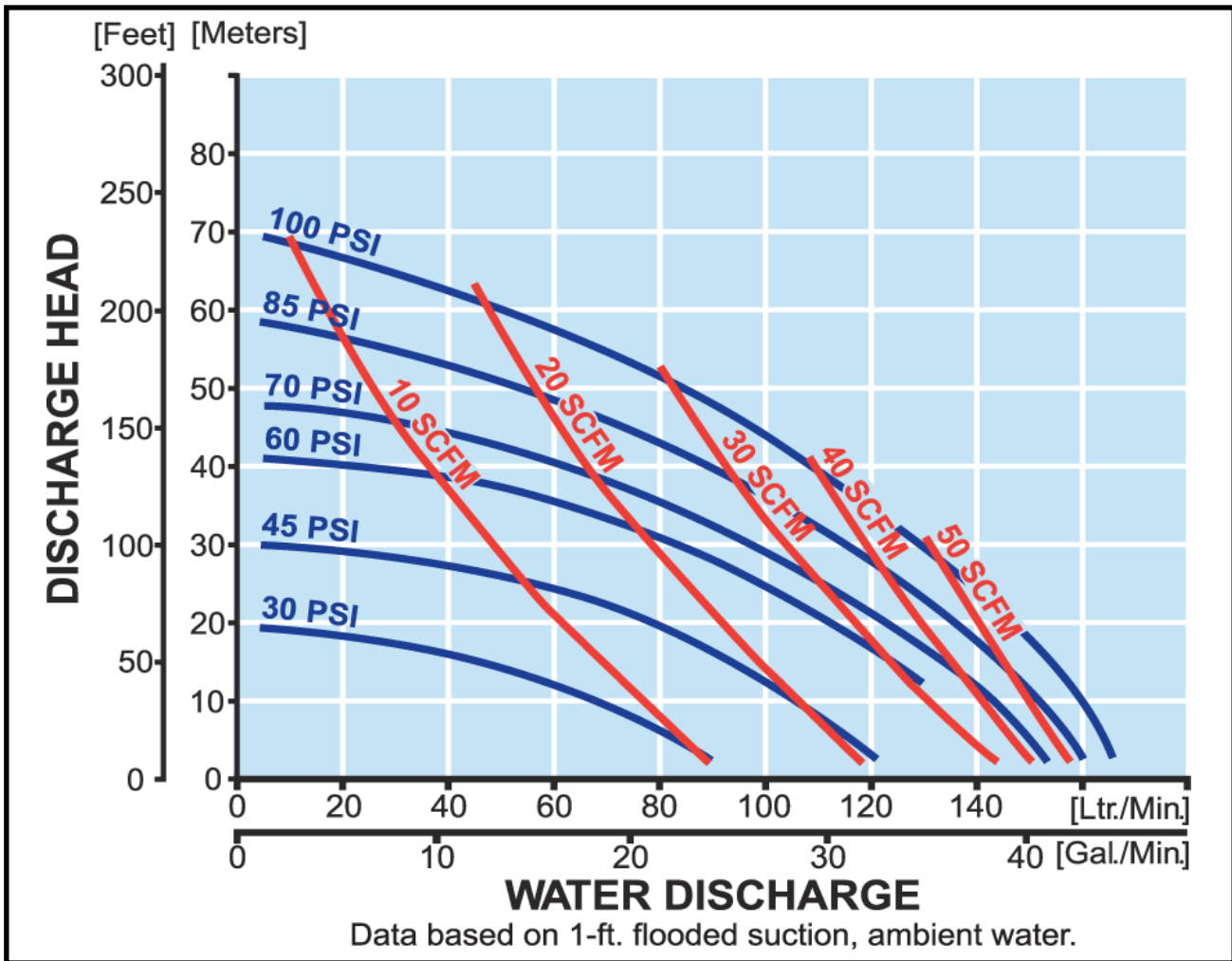
Rubber



To calculate performance for Santoprene® and Hytrel® fitted pumps, use rubber diaphragm curve

NDP-25 Performance Curve

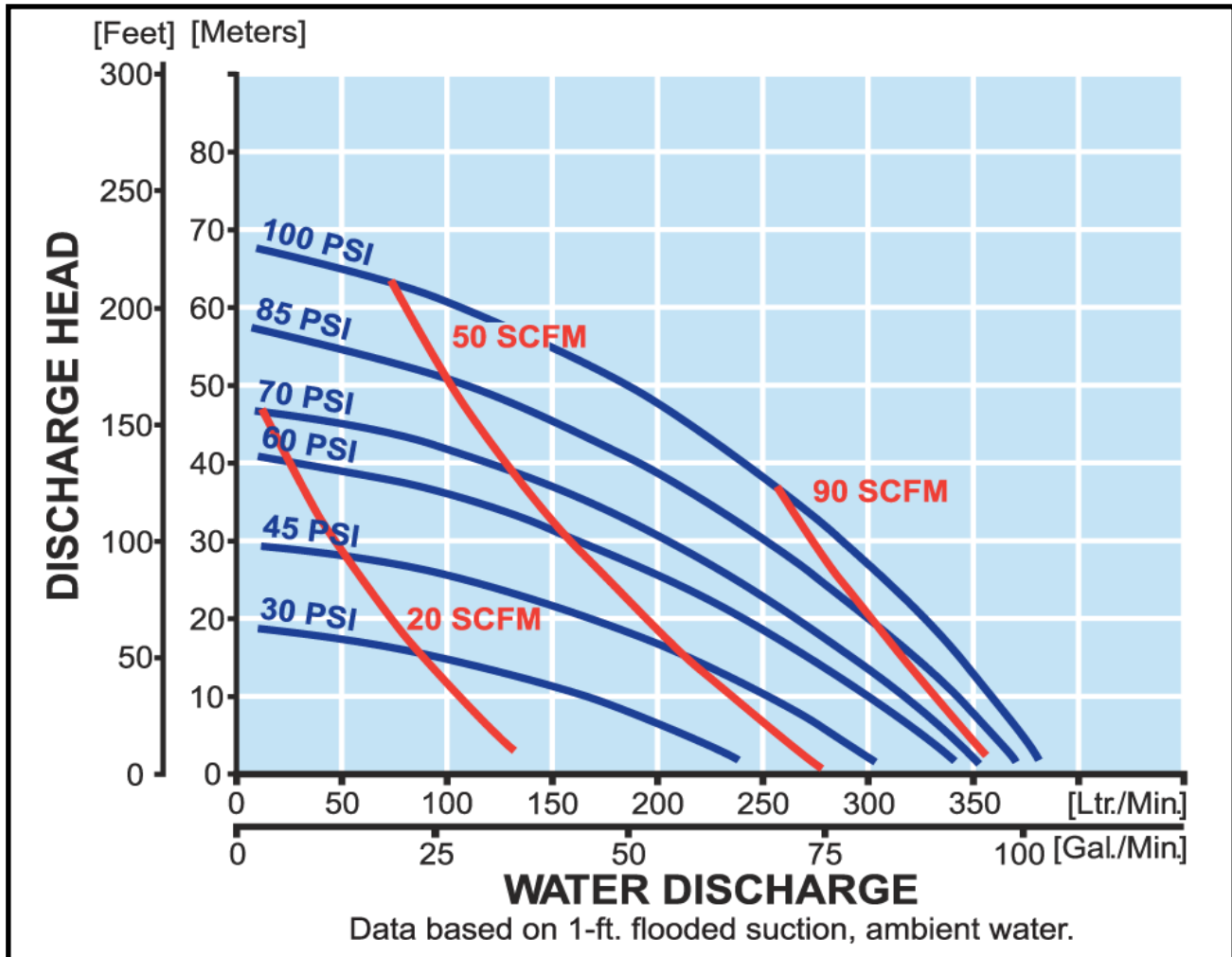
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NDP-40 Performance Curve

Rubber



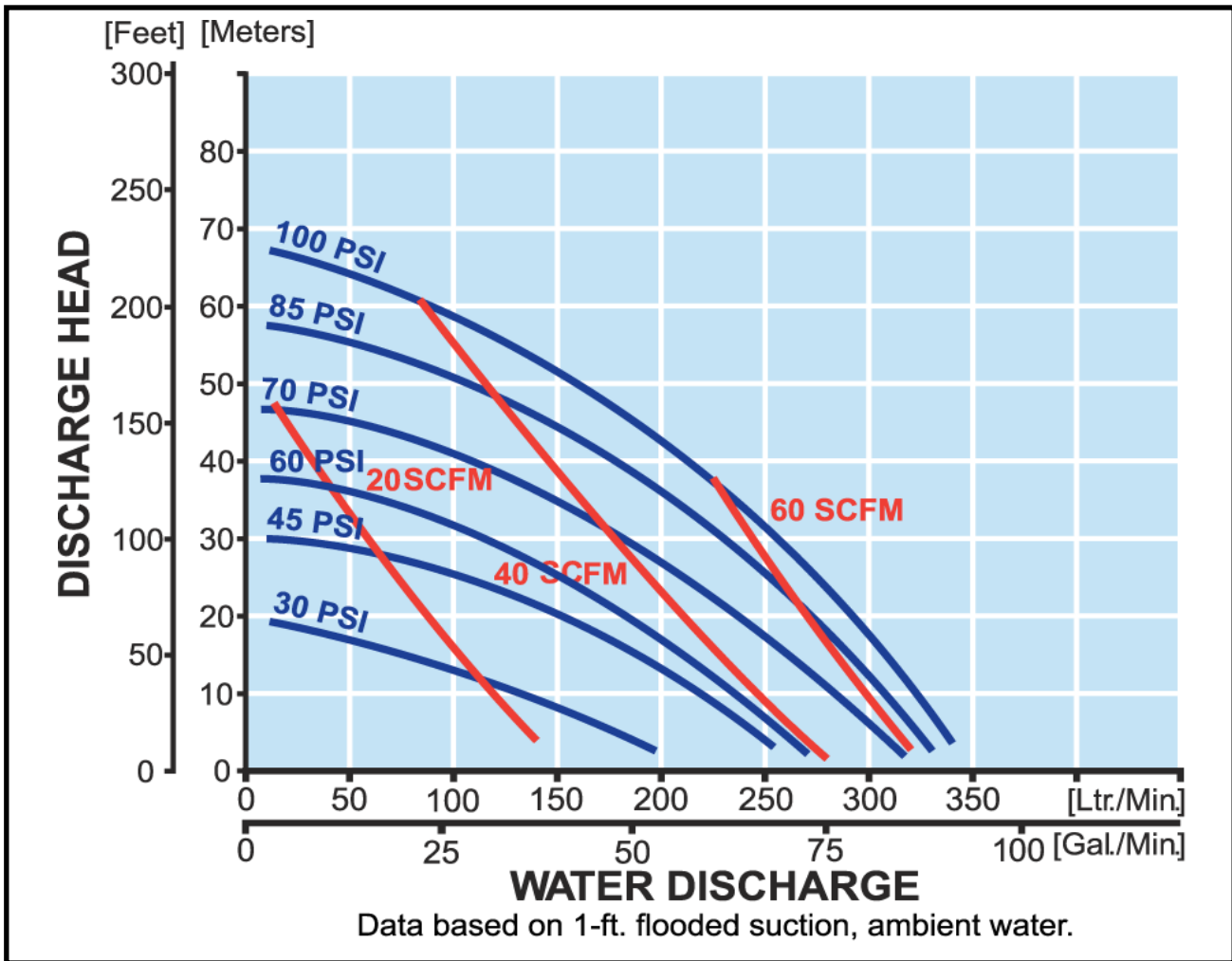
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NDP-40 Performance Curve

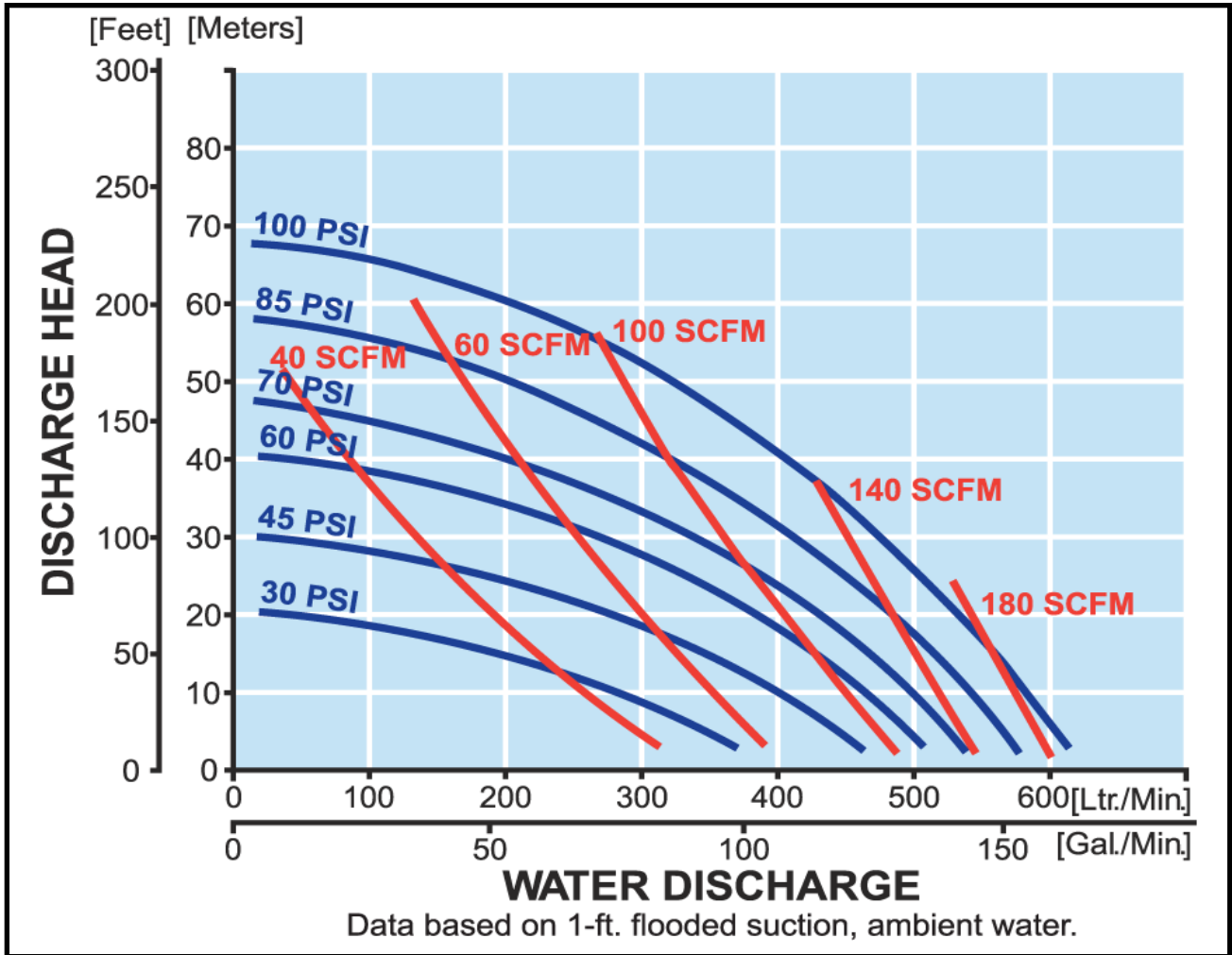
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NDP-50 Performance Curve

Rubber



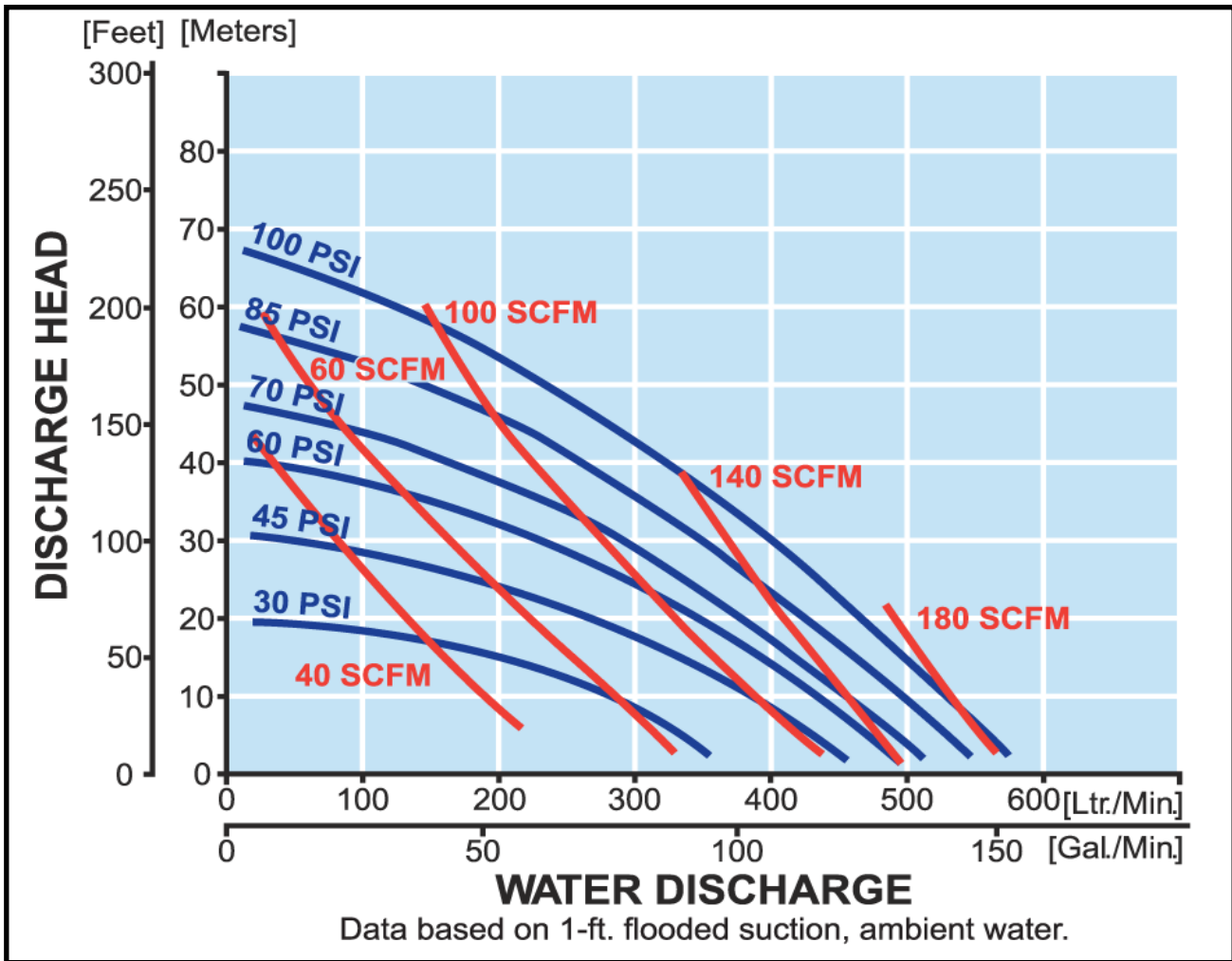
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NDP-50 Performance Curve

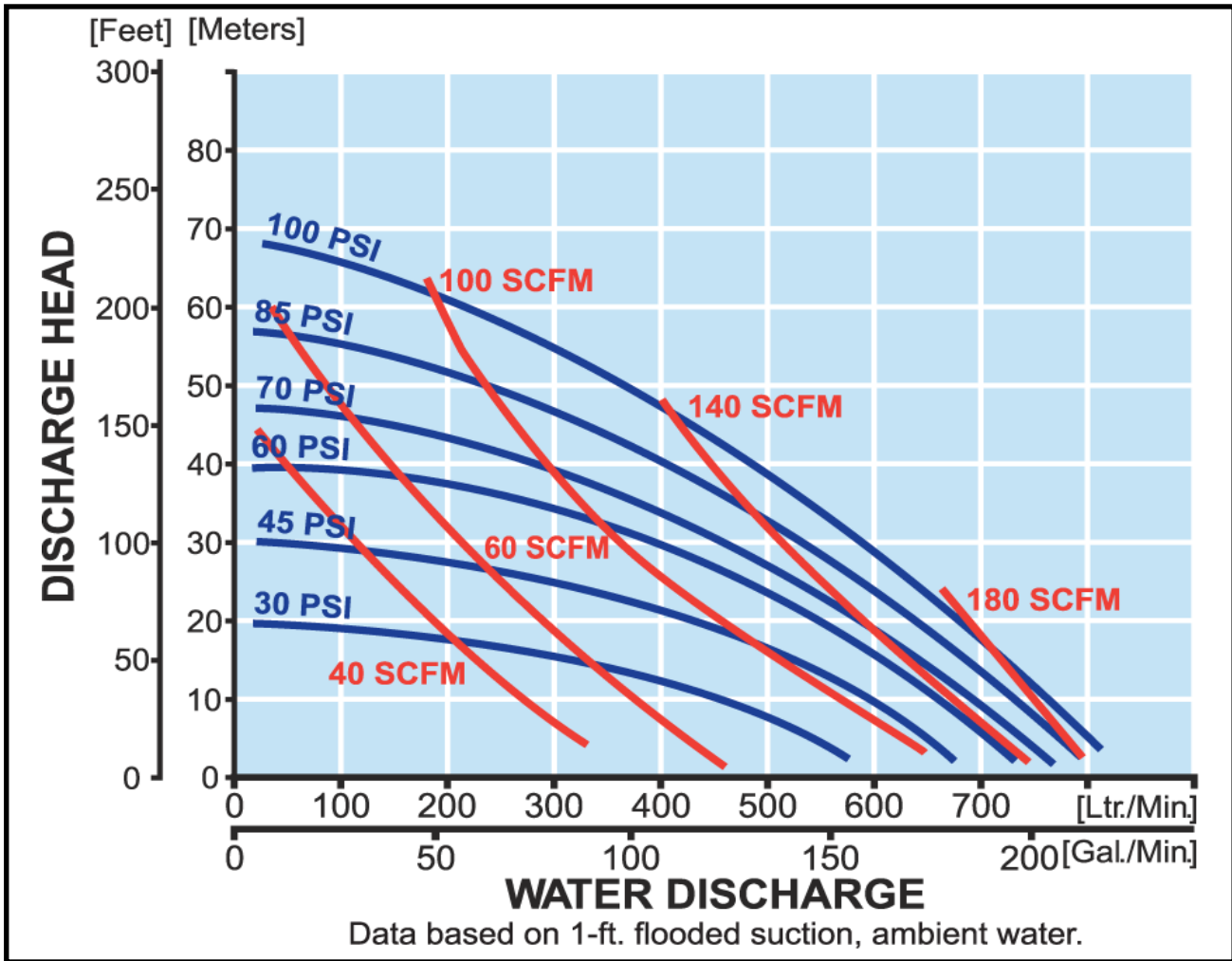
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NDP-80 Performance Curve

Rubber



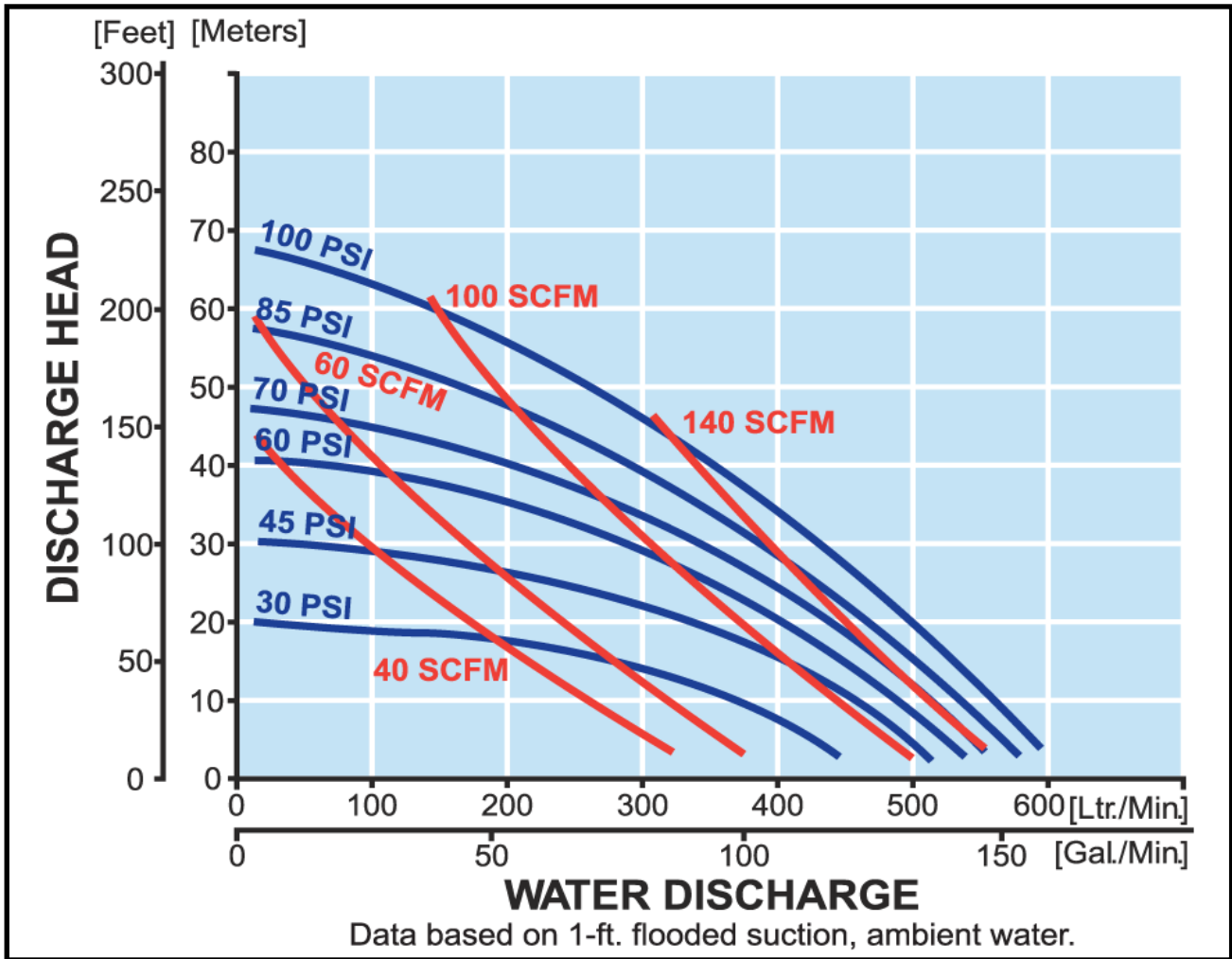
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NDP-80 Performance Curve

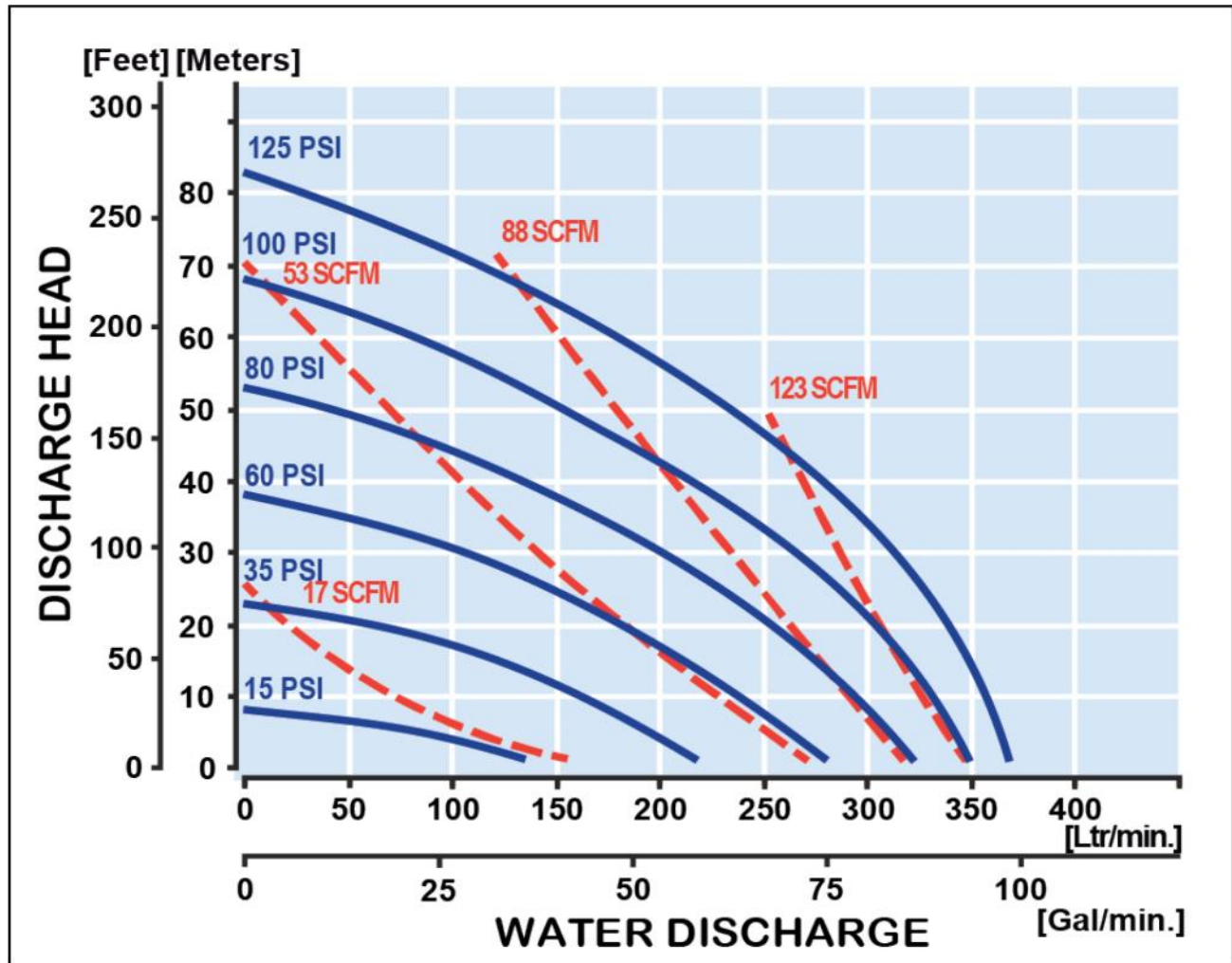
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XDP-40 Metal Performance Curve

Rubber



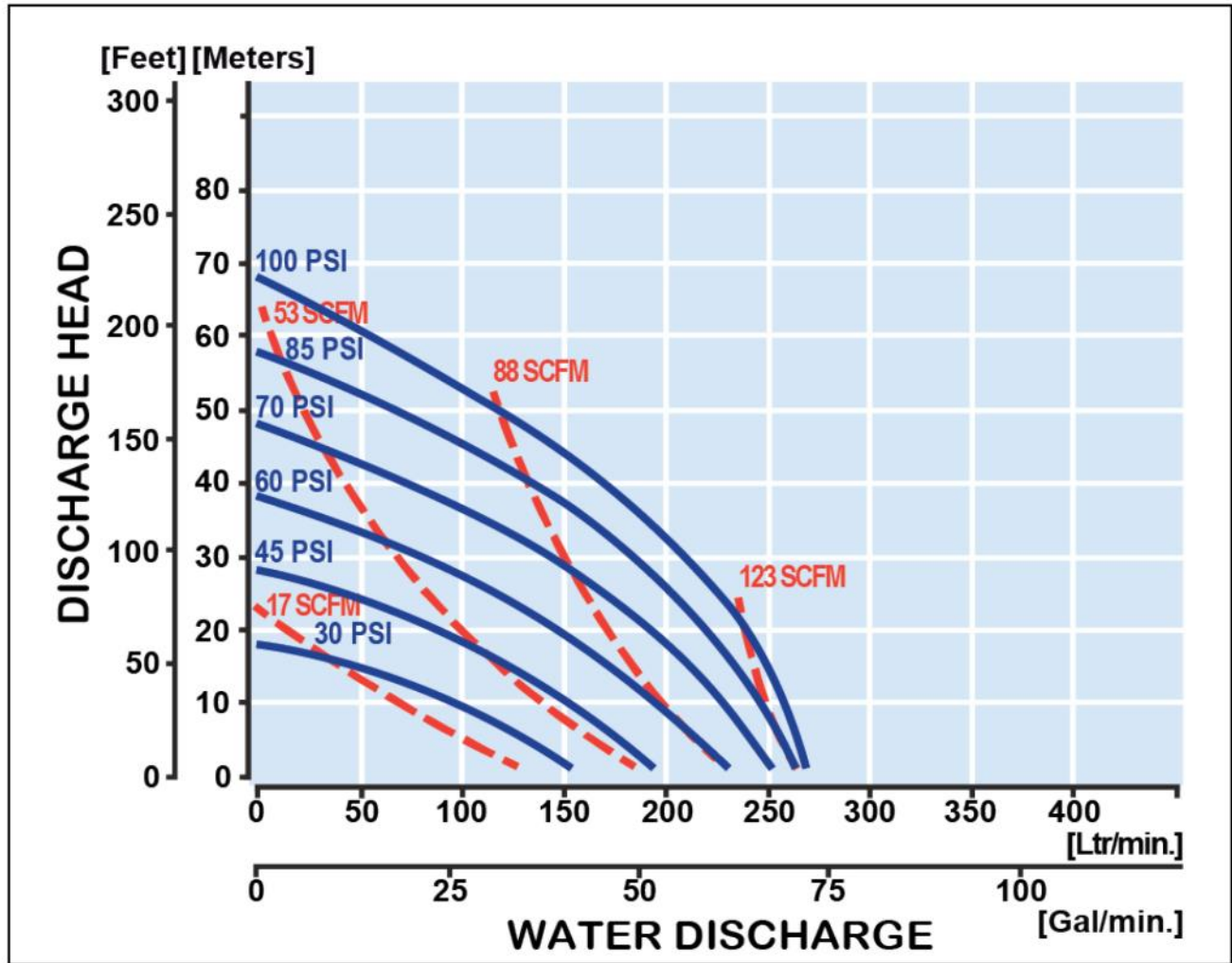
To calculate performance for Santoprene® and Hytrel® fitted pumps, use rubber diaphragm curve



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XDP-40 Metal Performance Curve

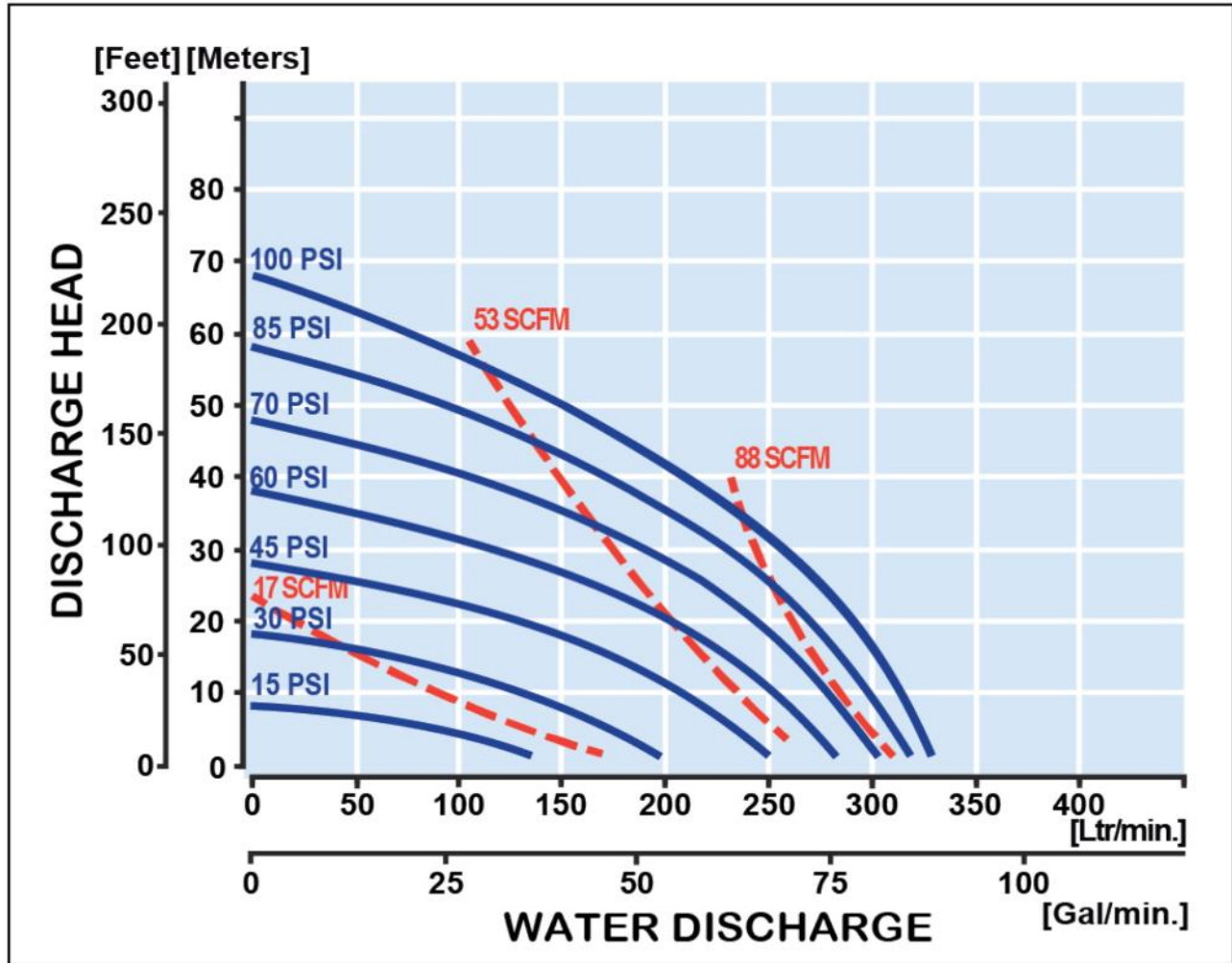
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XDP-40 Polypropylene Performance Curve

Rubber



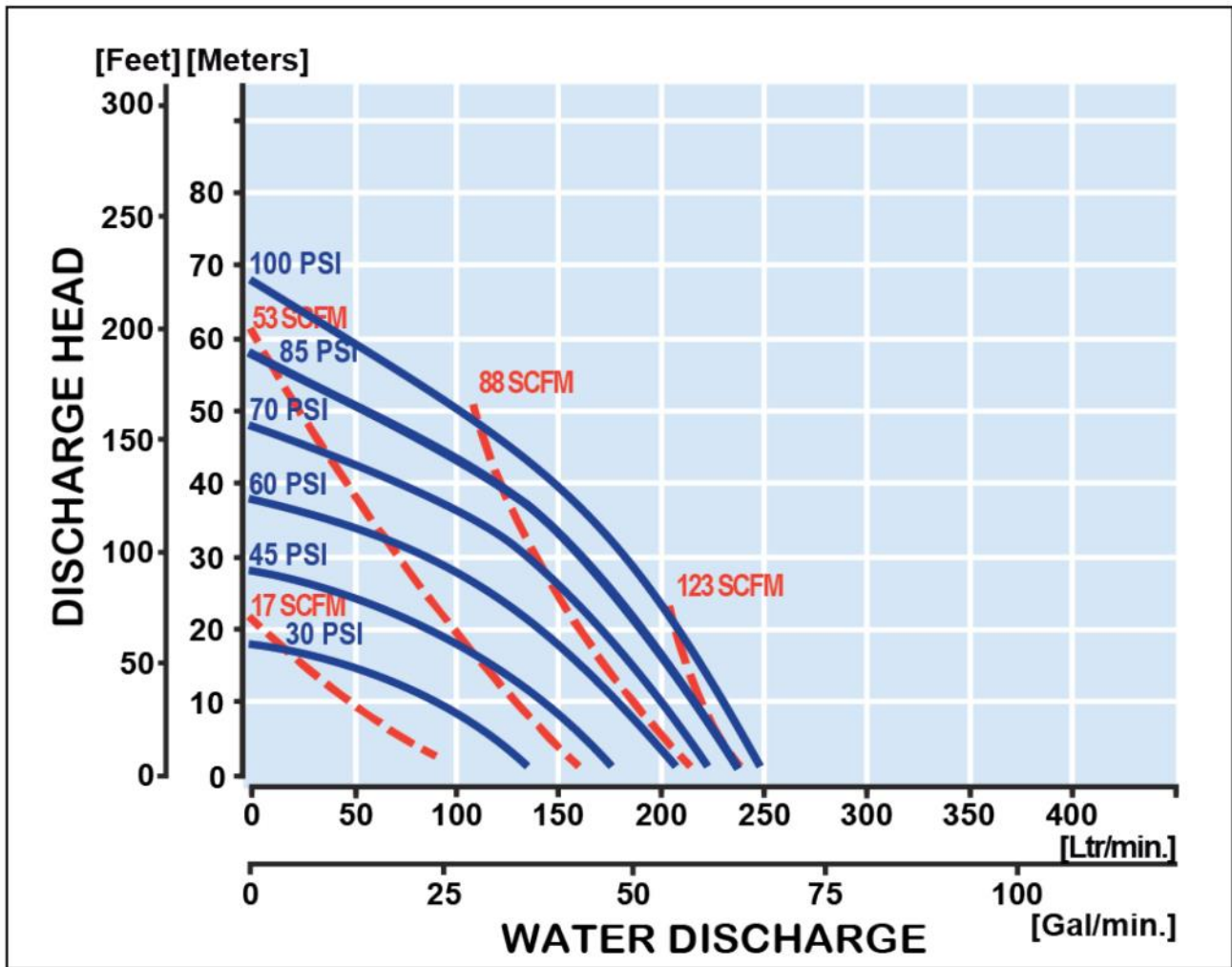
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XDP-40 Polypropylene Performance Curve

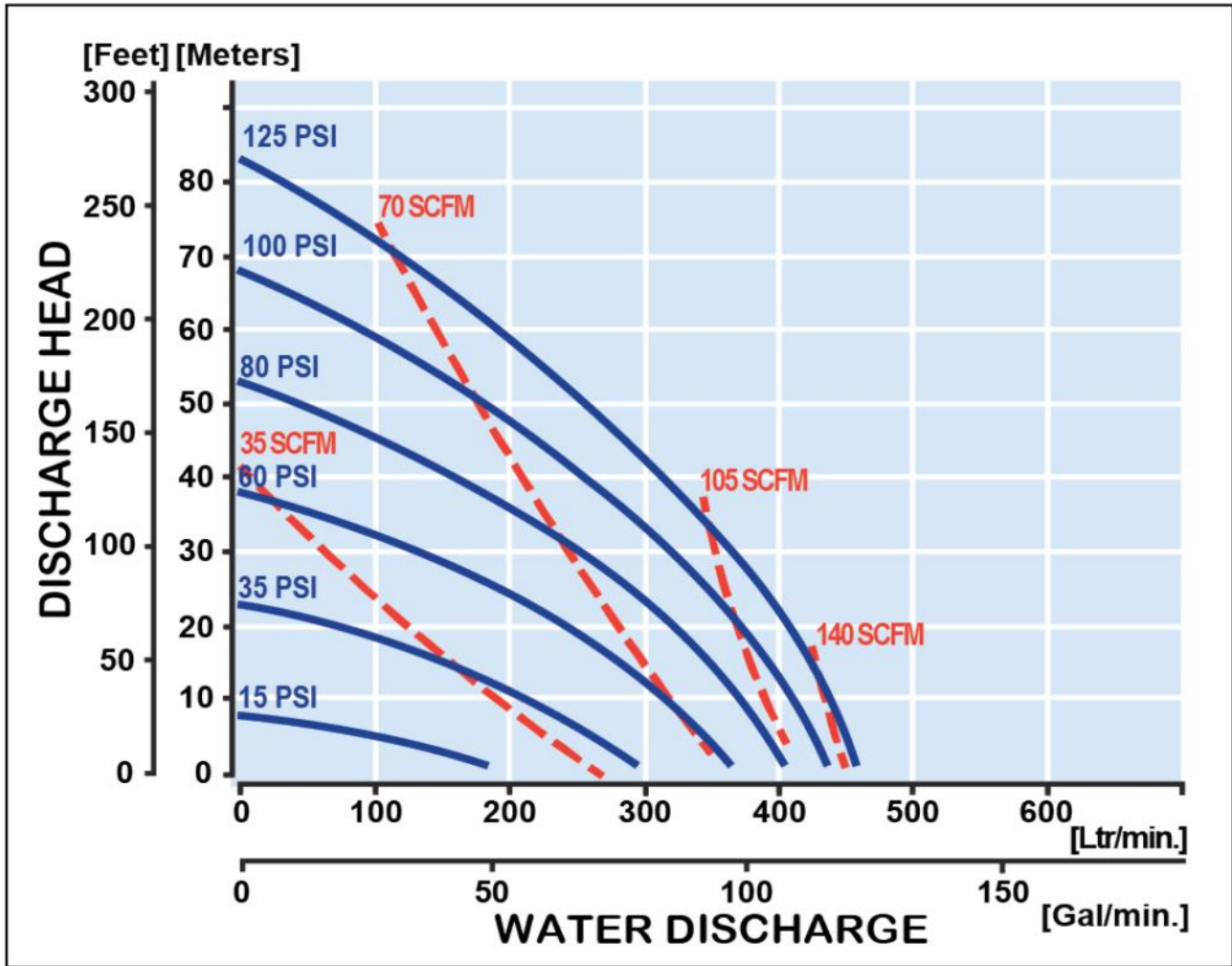
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XDP-50 Metal Performance Curve

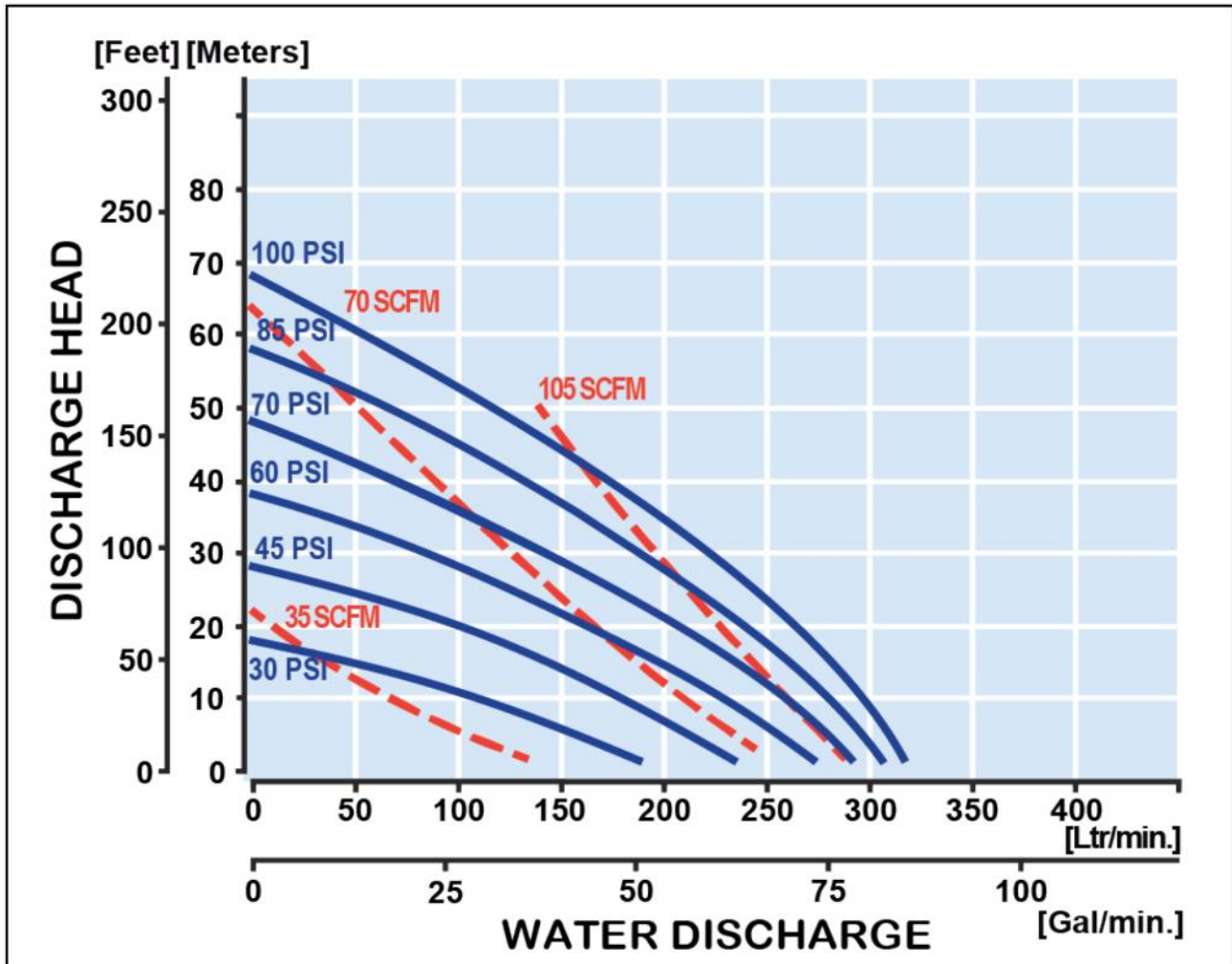
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To calculate performance for Santoprene® and Hytrel® fitted pumps, use rubber diaphragm curve

XDP-50 Metal Performance Curve

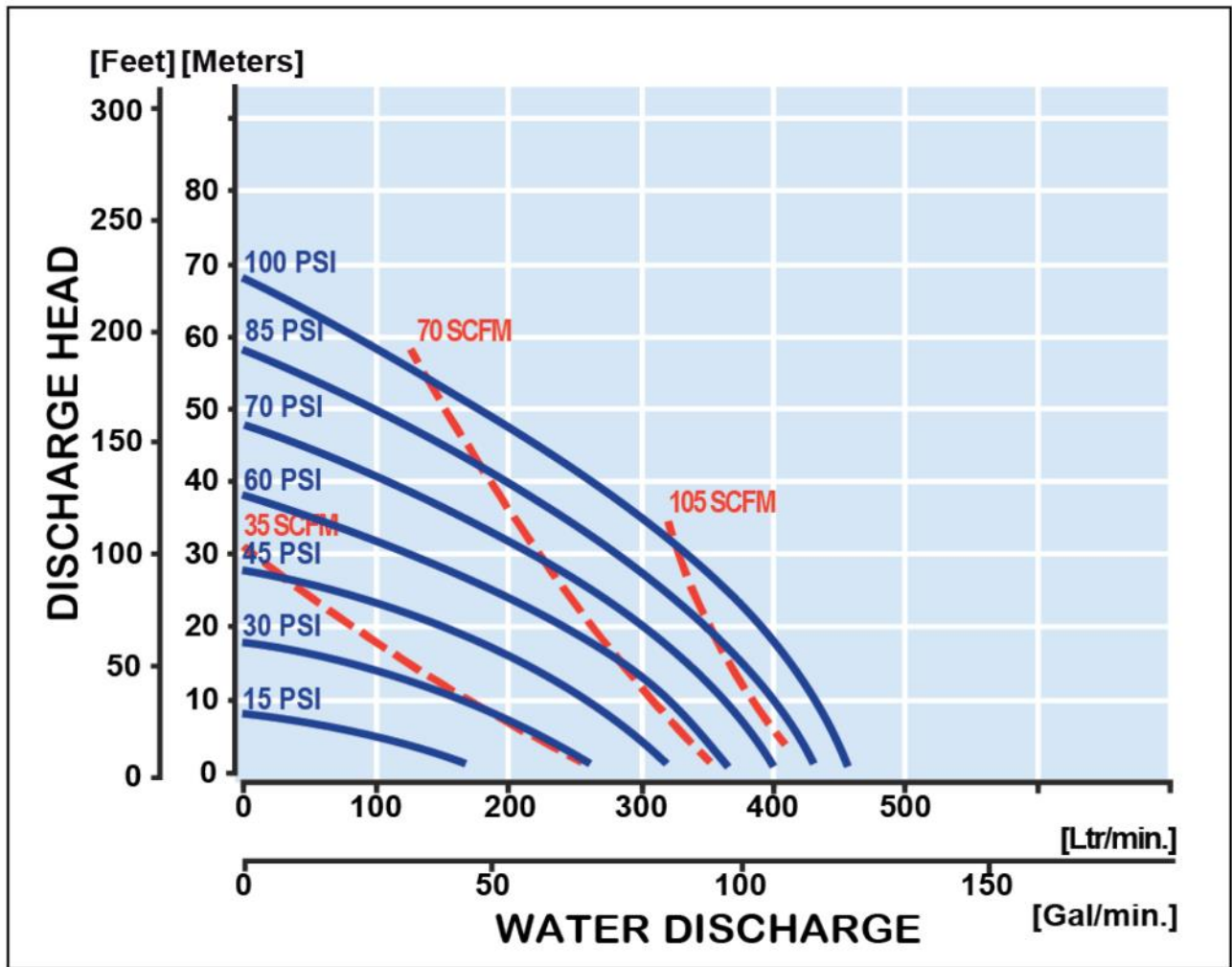
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XDP-50 Polypropylene Performance Curve

Rubber



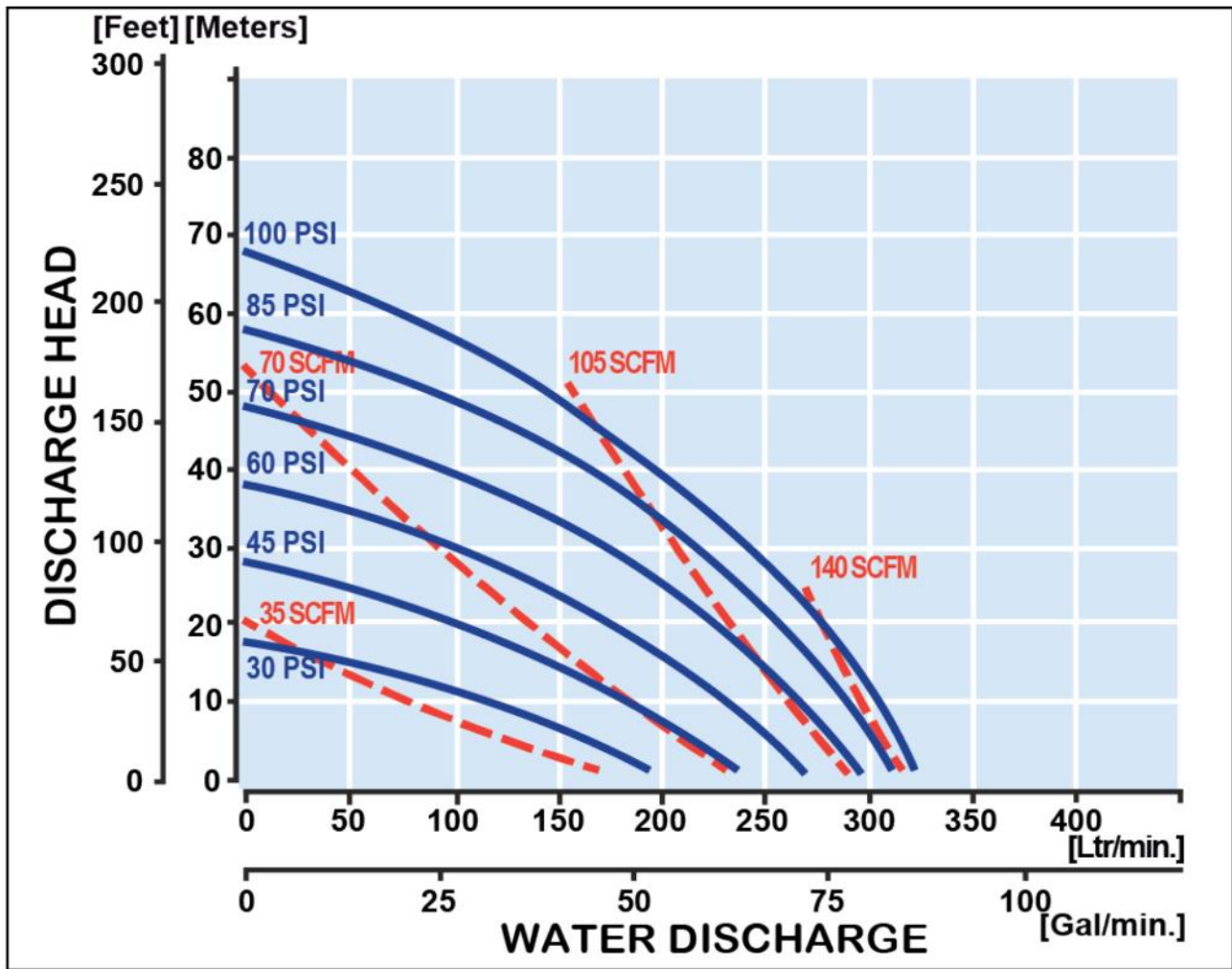
To calculate performance for Santoprene® and Hytrel® fitted pumps, use rubber diaphragm curve



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XDP-50 Polypropylene Performance Curve

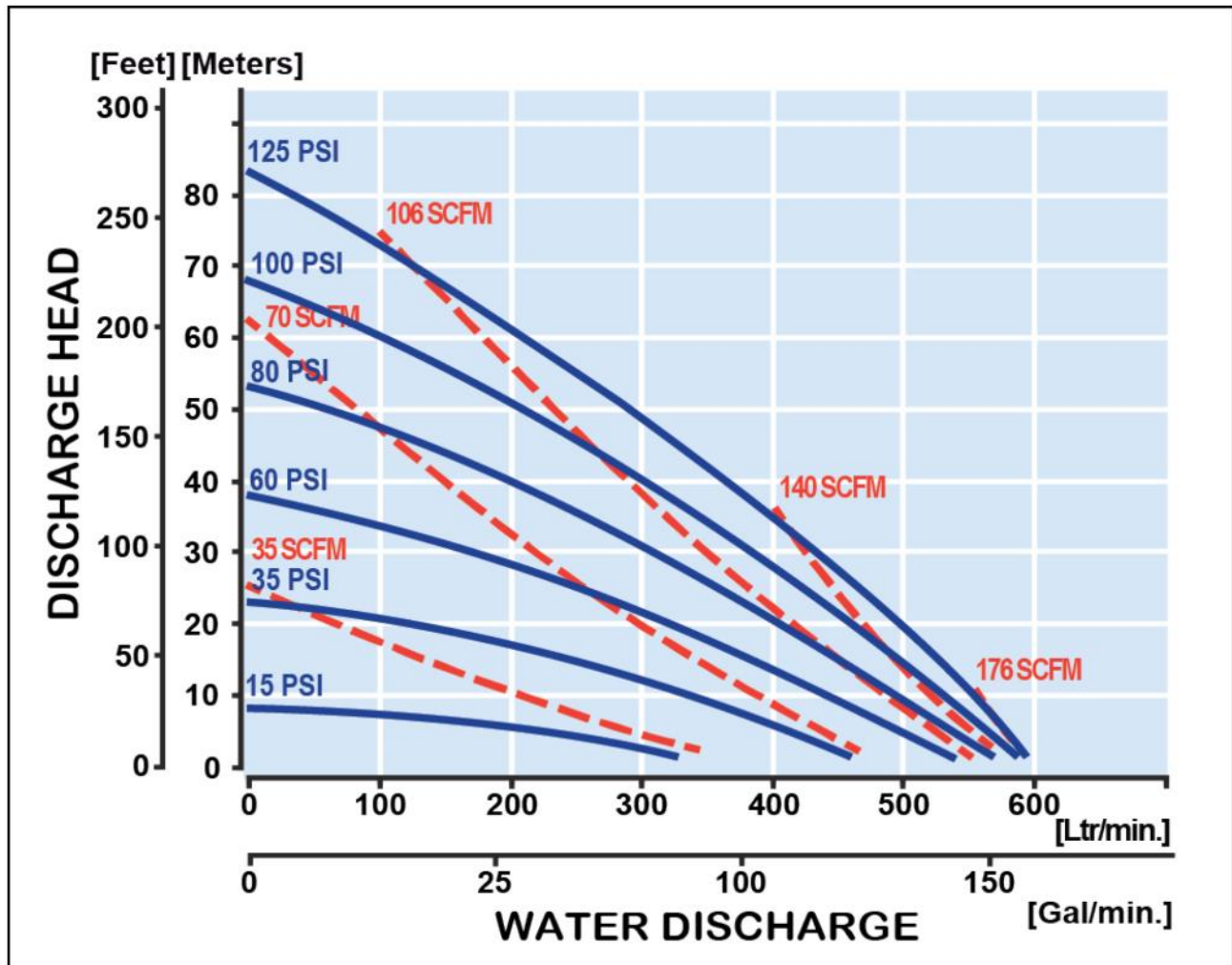
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XDP-80 Metal Performance Curve

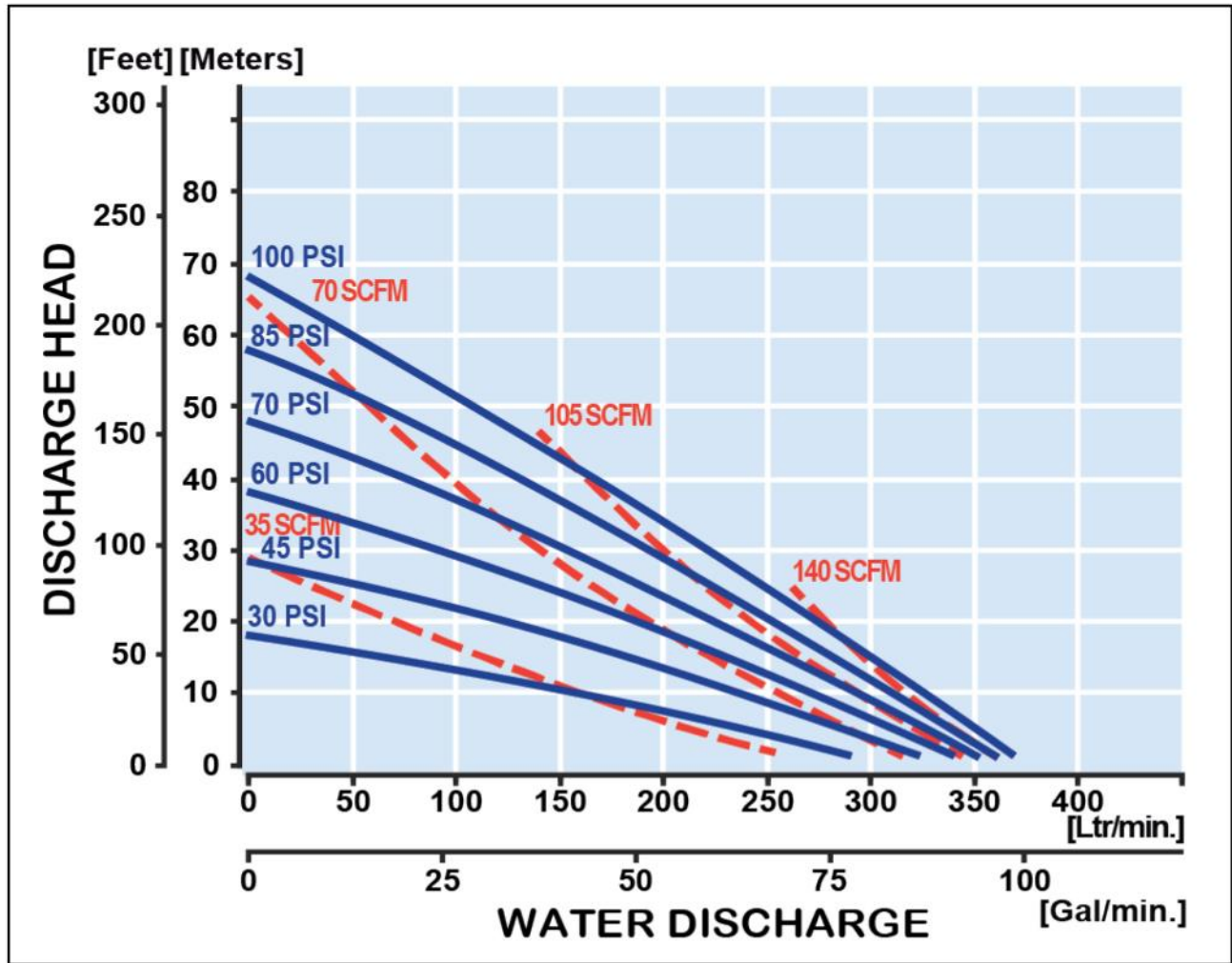
Rubber



To calculate performance for Santoprene® and Hytrel® fitted pumps, use rubber diaphragm curve

XDP-80 Metal Performance Curve

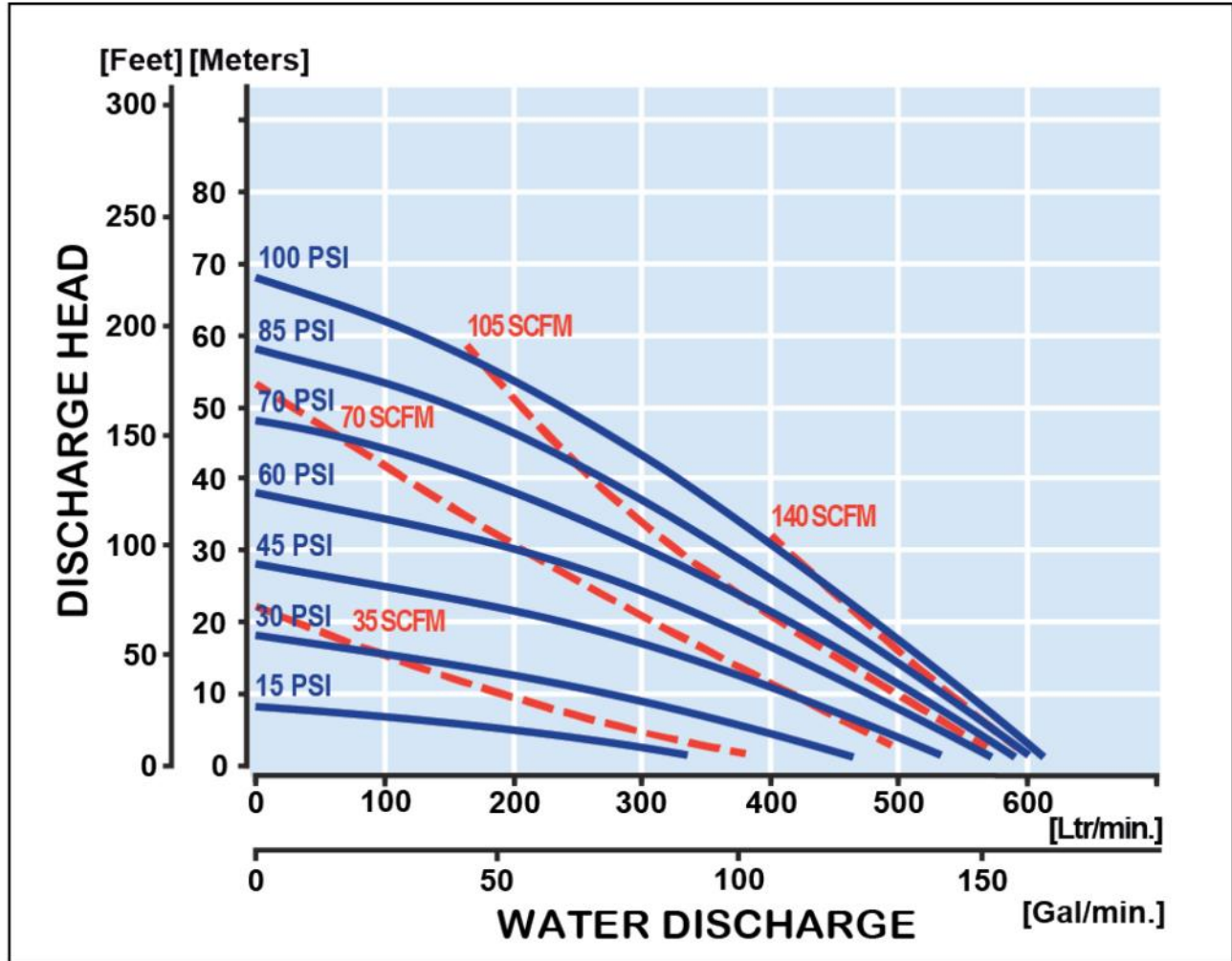
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XDP-80 Polypropylene Performance Curve

Rubber



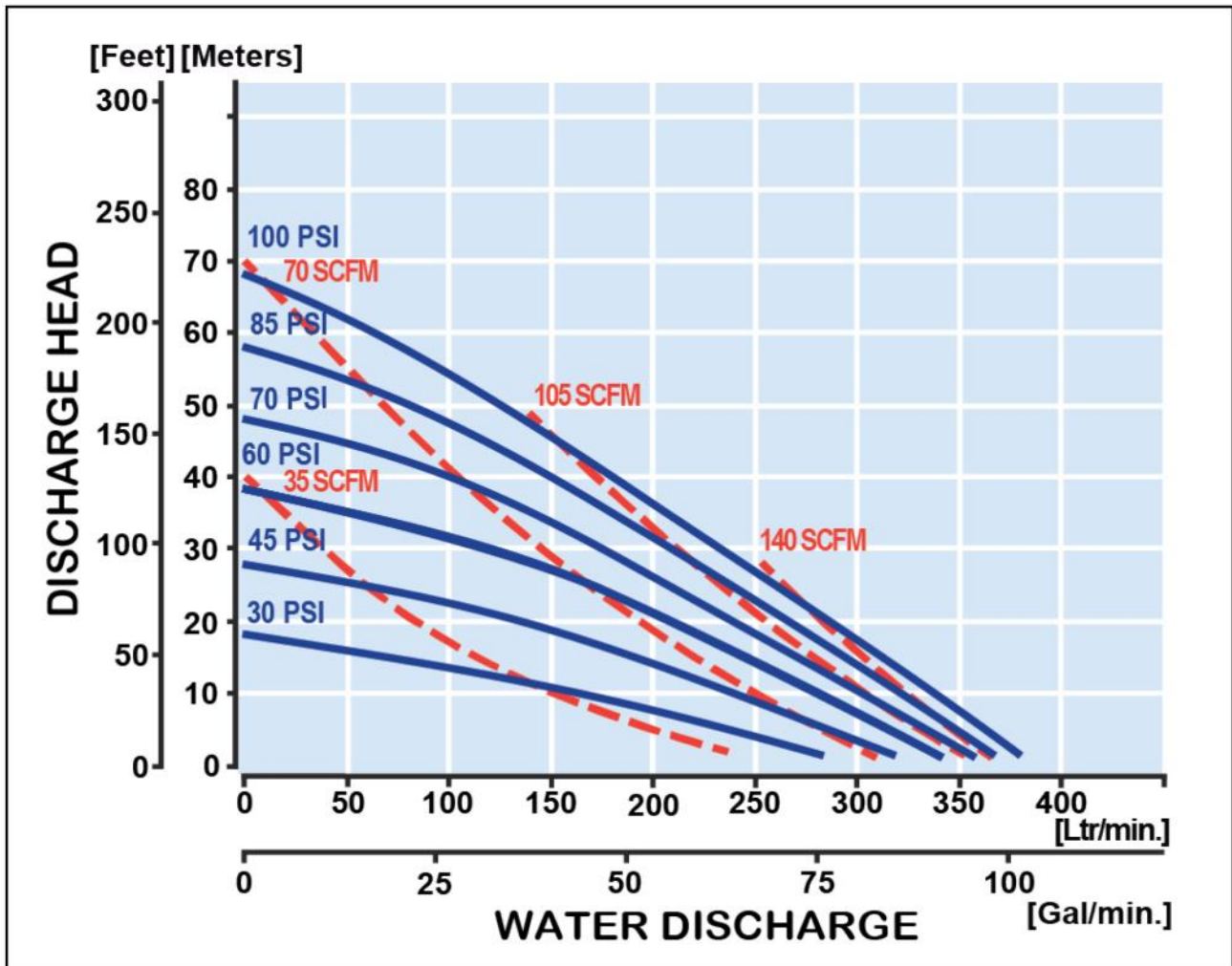
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XDP-80 Polypropylene Performance Curve

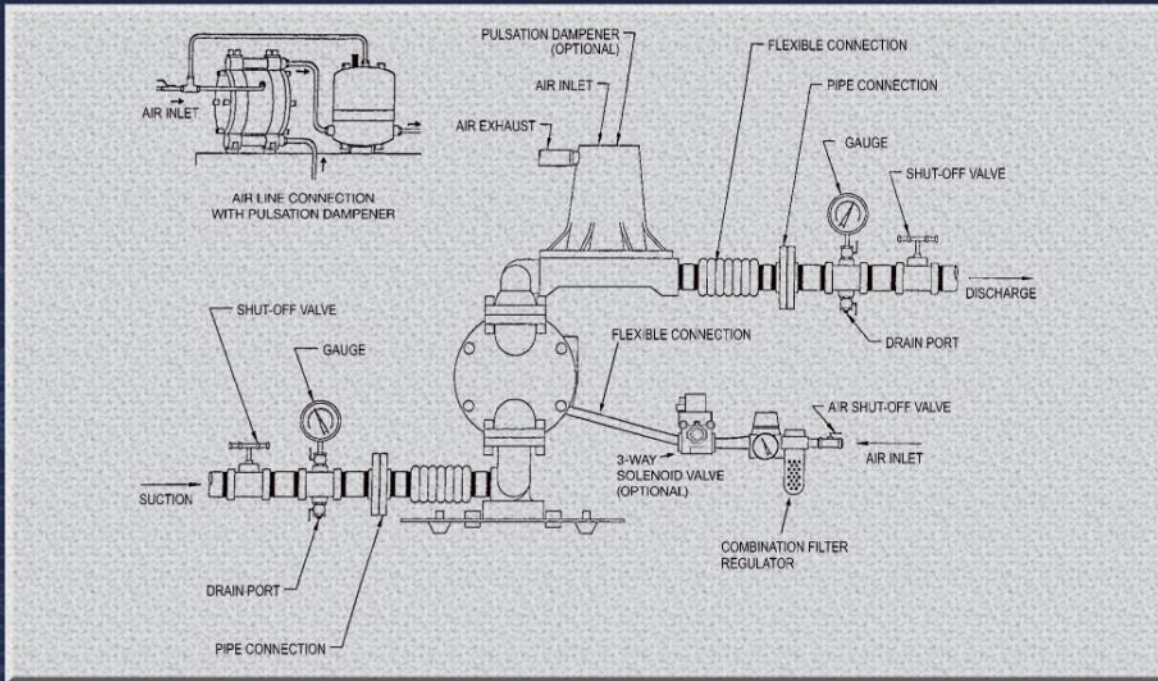
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Installation Diagram

Ideal Air-Powered Double Diaphragm Pump Installation



Understanding Performance Curves

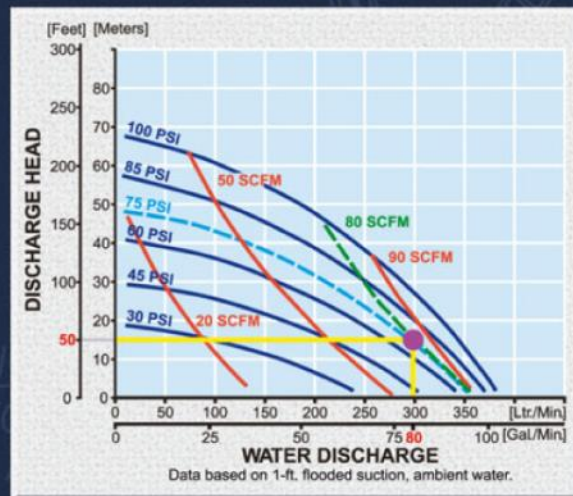
To determine compressed air requirements and proper size for a Yamada Air-Powered Double Diaphragm Pump, two elements of information are required:

1. Required Flow Rate (GPM)
2. Total Dynamic Head (TDH)

As an example, consider an NDP-40 Series Pump performance curve with rubber diaphragms, pumping at 80 GPM (↓) at 50' TDH (—).

Point "●" on the performance curve is where the desired Flow Rate (GPM) and Total Dynamic Head points intersect. This point determines compressed air requirements for the particular pump.

At performance point "●", the pump will require approximately 75 PSI air inlet pressure. To arrive at this figure, follow the solid curve (—) to the left to read the air pressure rating in PSI.



By looking at the nearest dashed line (—), it is determined the pump will require approximately 80 SCFM of air volume.

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Form #IC1219



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