



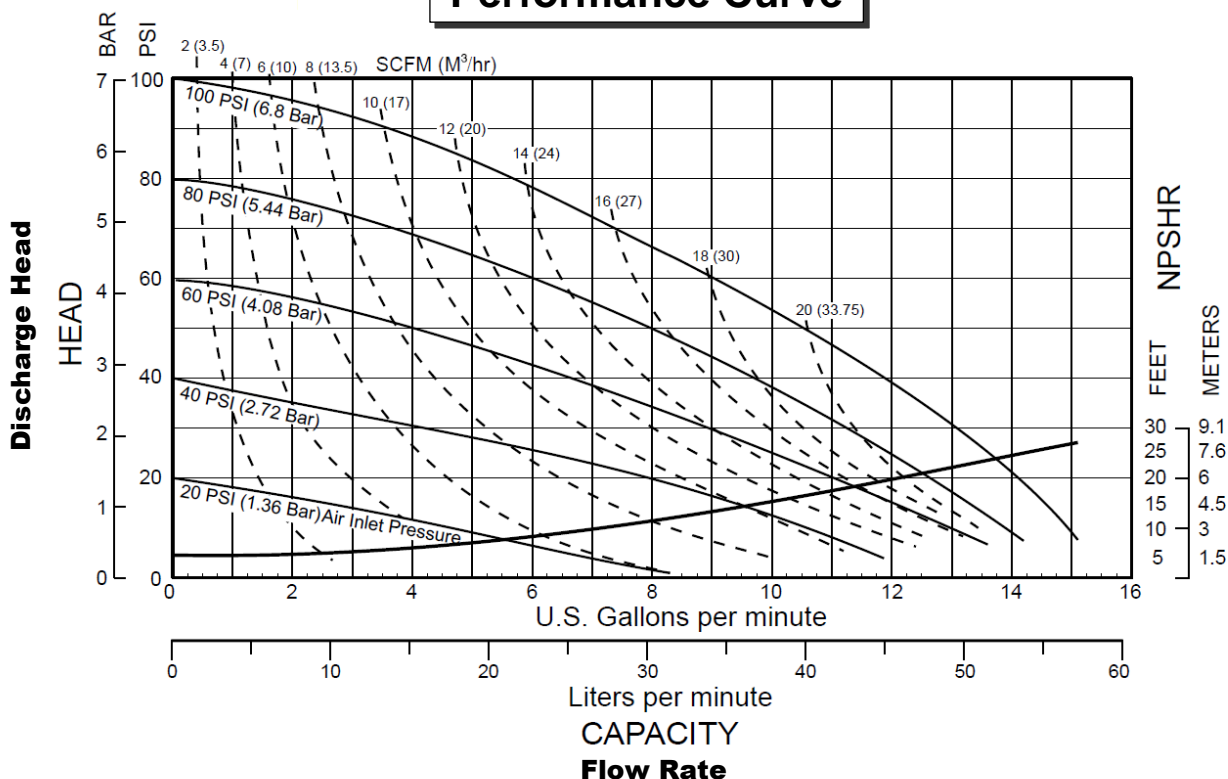
Warren Rupp Sandpiper

Air Operated Double Diaphragm (AODD) Standard Duty Pumps

How to Read a Performance Curve

1. Determine the Flow Rate and the Discharge Head that your application requires.
2. Plot the intersection of the Flow Rate on the horizontal axis to the Discharge Head on the vertical axis.
3. **Air Supply Pressure**, locate the closest curved solid black line to this intersection and follow it left to the vertical axis. This is the supply pressure required to provide the flow rate required at the given discharge head.
4. **Air Supply Volume**, locate the dotted line closest to the intersection and follow it up to where the numbers are provided. These numbers indicate the air supply volume required to provide the flow rate at the given discharge head.
5. **Net Positive Suction Head Required**, locate the desired flow rate on the horizontal axis and follow it up to the solid black line that curves upward, follow the point on the line to the right vertical axis to find required net positive suction head required.

Performance Curve



Example: Model S05 Metallic Performance Curve

To pump 7 US gallons per minute against a discharge pressure head of 1.6 Bar (23 psi) requires 2.72 Bar (40 psi) and approximately 9 SCFM (15.3 m³/hr) air consumption. The Net Positive Suction Head Required (NPSHR) would be approximately 12 ft.