

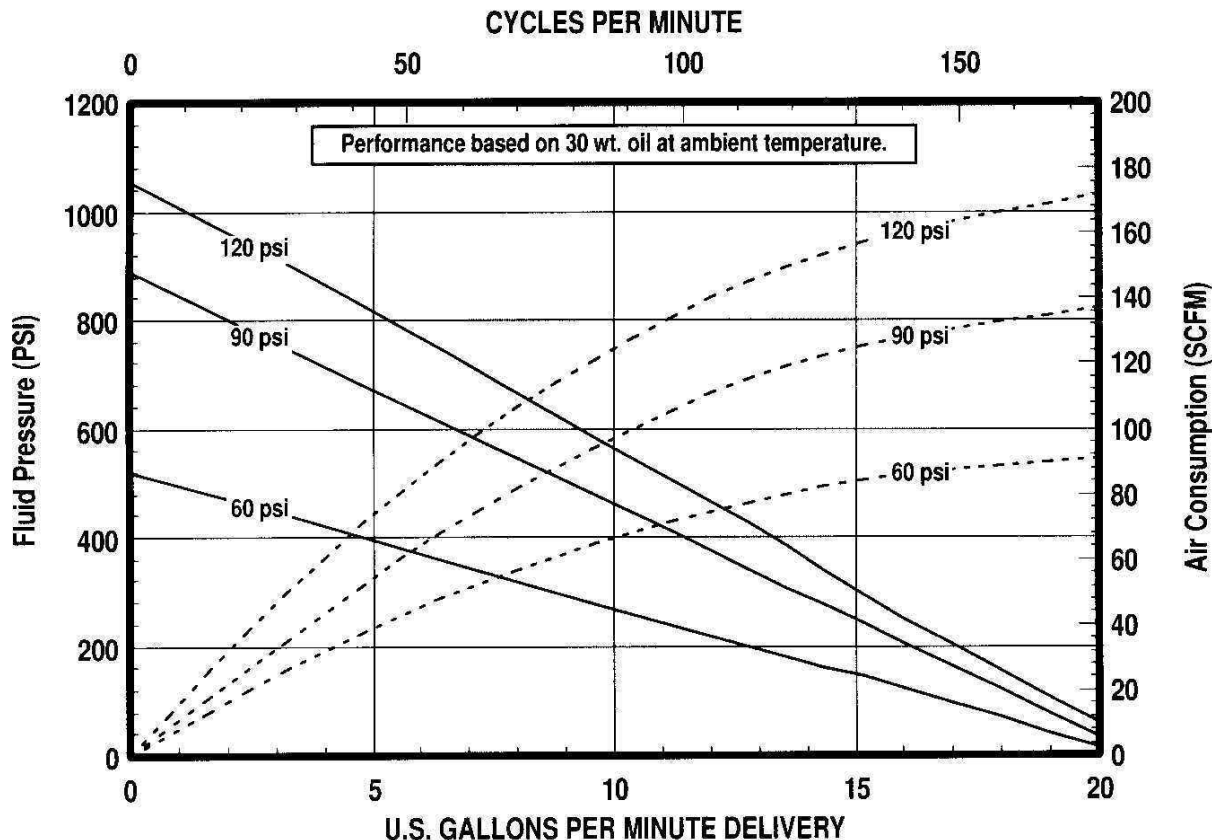
ARO[®]



ARO Piston Pumps Selection Guide

Reading Performance Curves

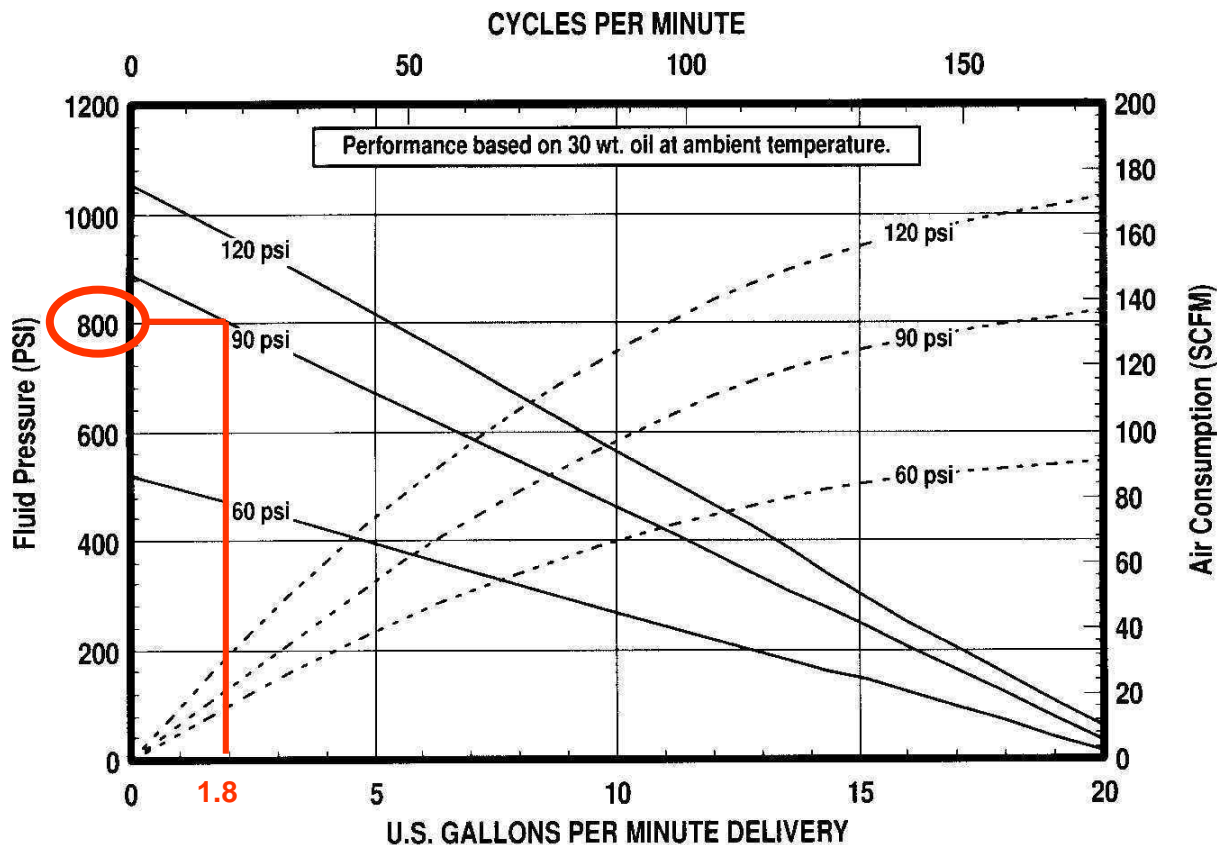
Performance Curves 9:1 Ratio Piston Pump



- Use curves to determine if a pump can meet the application requirements
- The X-Axis indicates flow
- The Y-Axis indicates fluid pressure

Determine Fluid Flow

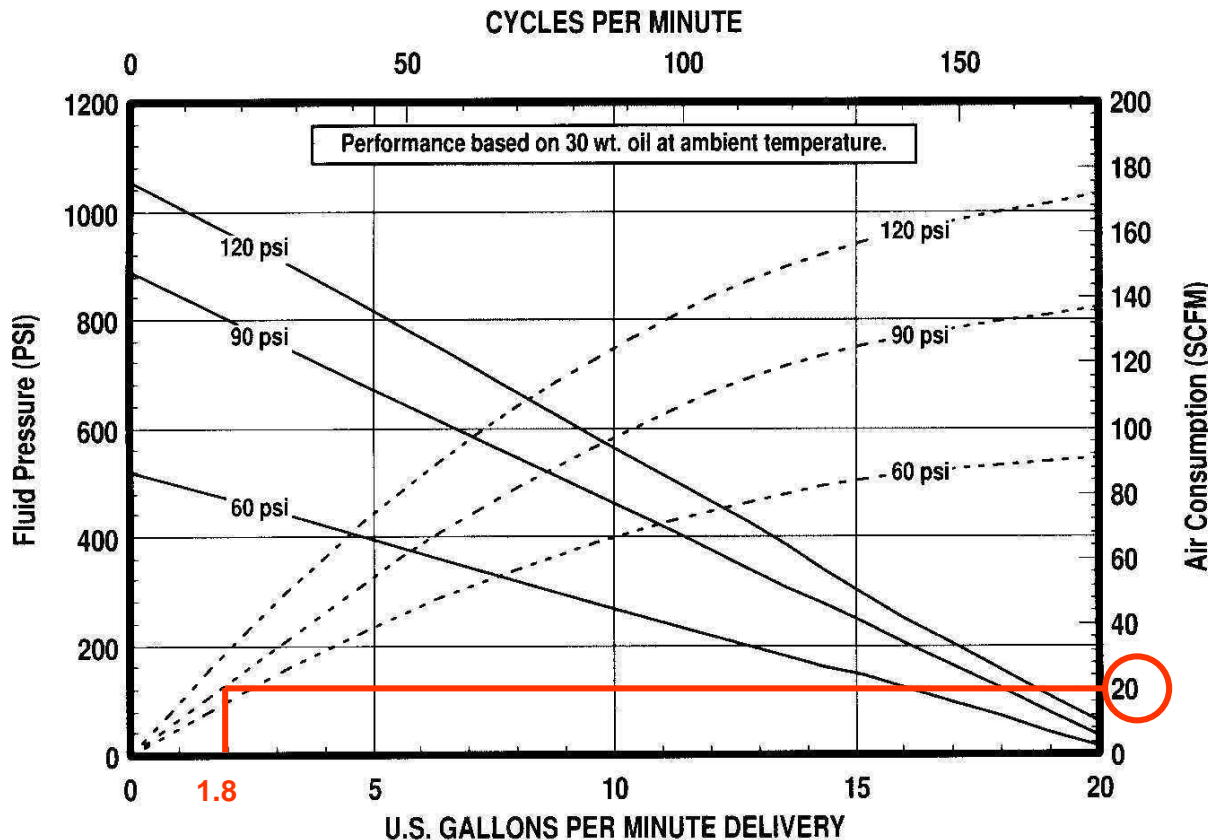
Performance Curves 9:1 Ratio Piston Pump



- Example Calculation:
Back Pressure = 800 psi
Air = 90 psi
Flow = 1.8 gpm
- Plot 800 psi on Y-Axis until it meets the 90 psi line. Plot down to the X-Axis (flow)
- In this example the pump is capable of delivering around 1.8 gpm

Determine Air Consumption

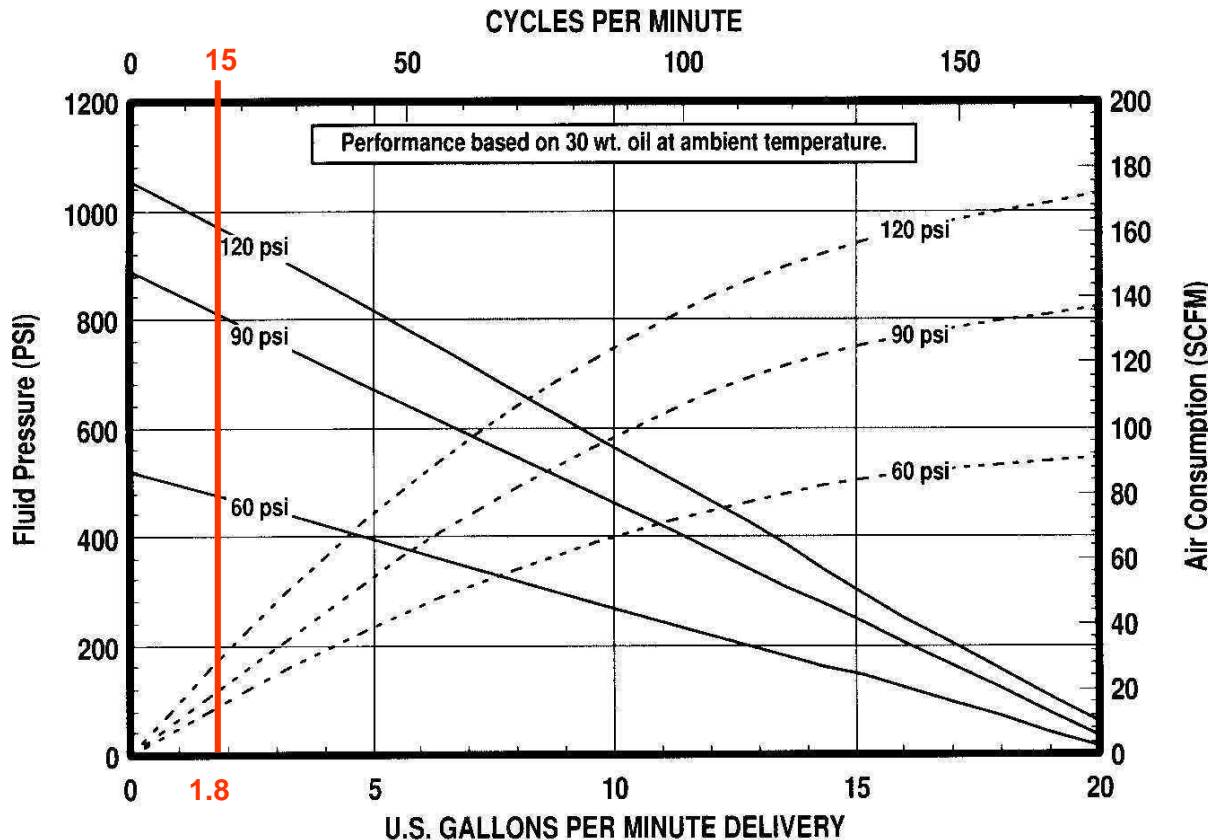
Performance Curves 9:1 Ratio Piston Pump



- Example Calculation:
Back Pressure = 800 psi
Air = 90 psi
Flow = 1.8 gpm
- Plot 1.8 gpm on the X-Axis. Move up until you intersect the 90 psi curve, then plot over to the SCFM axis
- The pump will use about 20 scfm of air in this application

Determine Cycle Rate

Performance Curves 9:1 Ratio Piston Pump



- Example Calculation:
Back Pressure = 800 psi
Air = 90 psi
Flow = 1.8 gpm
- Plot 1.8 gpm on the X-Axis. Move up until you intersect the top line of the chart
- To deliver 1.8 gpm, the pump will cycle roughly 15 times per minute