PUMP SELECTION

To select the right FLUIMAC pump for your application, the following factors should be considered to achieve economy of operation, long pump life, and minimal maintenance costs:

- The nature of the medium to be pumped, its viscosity, and the solids content
- Pumping capacity in relation to the desired output
- Suction and pressure conditions

Considering these parameters, an optimal pump size is selected when the intersection of the intended installation "pressure vs. flow rate" is near the middle section of the curves.

USING PERFORMANCE CURVES

To determine compressed air requirements and proper size for a FLUIMAC AODD pump, two elements of information are required:

1 Required Flow Rate

2 Total Delivery Head

As an example, consider a P170 pump performance curve, pumping about 135 lt/min at 25m.Point A on the performance curve is where the desired Flow Rate and Total Delivery Head points intersect. This point determines compressed air requirements for the particular pump. At performance point A, the pump will require approximately 7 bar air inlet pressure. To arrive at this figure, follow the solid blue curve to the left to read the air pressure rating in BAR.By looking at the nearest green curve, it is determined the pump will require approximately 900 nl/min (Normal Liter per minute) of air consumption.
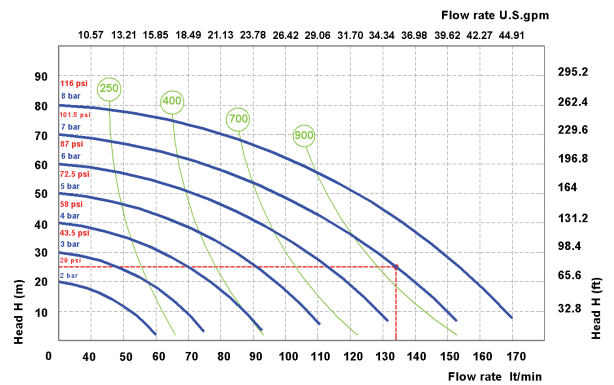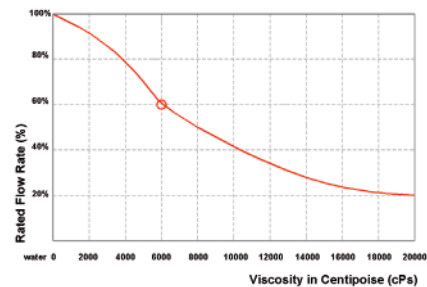

SPECIFIED SUCTION LIFT
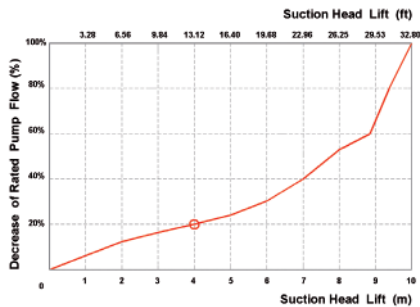
With a suction lift of 4 m, pump rate decreases by approximately 20%. Valid for pumps 3/4" and larger; data varies with pump configuration.

VISCOUS LIQUIDS PERFORMANCE DATA

During the conveyance of a fluid with a viscosity of 6000cPs, the pump rate decreases to 60% of its rated value (100% = water). Valid for 3/4" pumps & larger.

PUMP TYPE	AODD	CENTRIFUGAL	LOBE	GEAR	SCREW	PERISTALIC	PISTON
Variable Flow & Head Control	✔	✔	✔	✔	!	✔	✔
Deadhead Safely	✔	!	!	!	!	!	!
Dry-Running	✔	x	x	x	x	✔	x
Dry Self-Priming	✔	x	x	✔	x	✔	!
No Mechanical Alignment	✔	x	x	x	x	x	x
No Electrical Installation	✔	x	x	x	x	x	x
Portability	✔	✔	!	!	!	✔	!
Submersible	✔	!	x	x	x	x	!
Sealless	✔	!	!	!	!	!	!
Cavitation Tolerance	✔	x	!	!	✔	✔	!
Low Shear & Degradation	✔	x	✔	✔	!	✔	!

✔ = Suitable   ! = Limitations   **x** = Not Recommended