

DIAPHRAGM PUMP SELECTION

Ports Connection

To select the right MECLUBE 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.

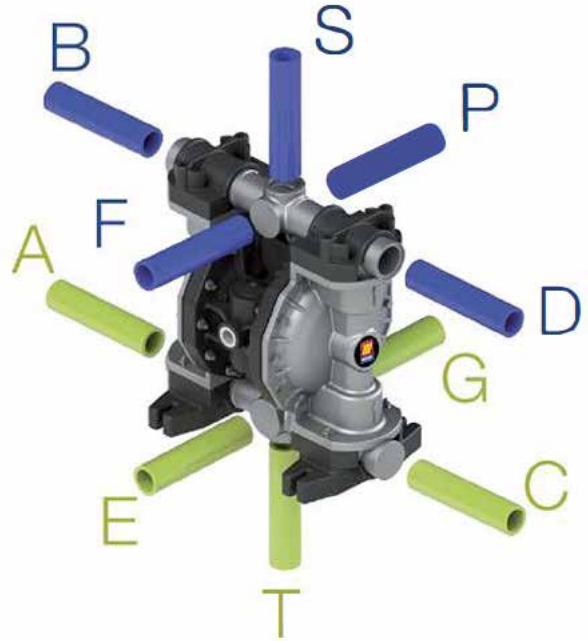
Considering these parameters, an optimal pump size is selected when the intersection of the intended installation “pressure vs. flow rate” is near the middle section of the curves.

Feasible Connection

Standard = **A B**

Inlet = **A E T C G**

Outlet = **B S D F P**



CASING	DIAPHRAGM	BALLS	SEATS	GASKET	CONNECTIONS	ATEX	PORTS
Polypropylene	Hytrel + PTFE	PTFE	PP	EPDM	BSP	ZONE 2	A B Standard
PVDF	Santoprene + PTFE	SS	PVDF	VITON	FLANGED	ZONE 1	
Aluminium	Hytrel	EPDM	ALU	NBR	NPT		
Stainless Steel	Santoprene	NBR	SS	PTFE			
	EPDM		PE-UHMWE				
	NBR						

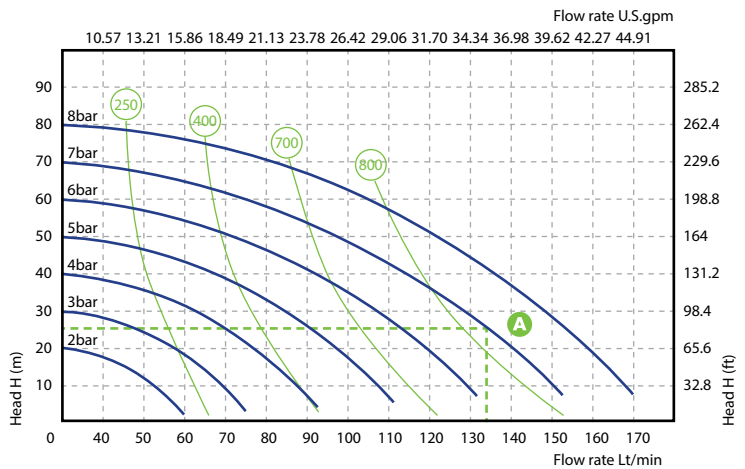
Using Performance Curves

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

- 1 Required Flow Rate
- 2 Total Delivery Head

As an example, consider a P160 pump performance curve, pumping about 135 l/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.



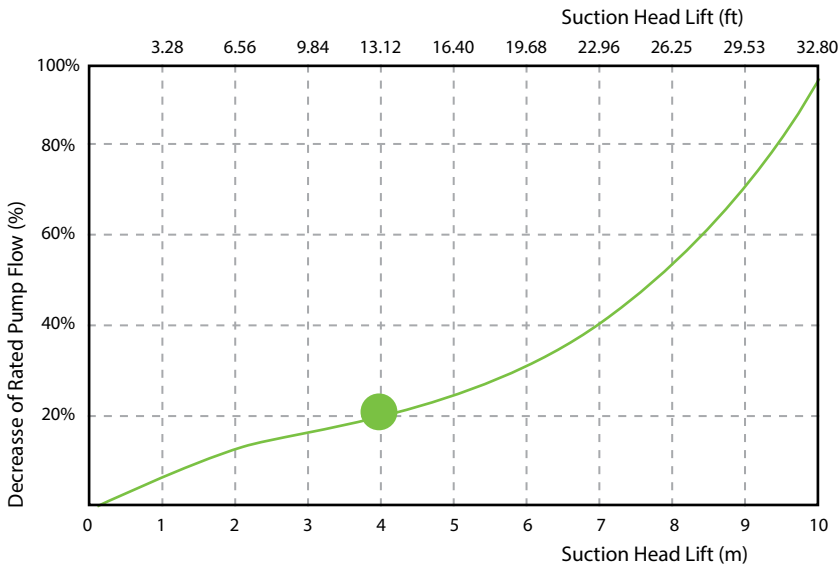
At performance point **A**, the pump will require approximately 7 bar air inlet pressure.

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.

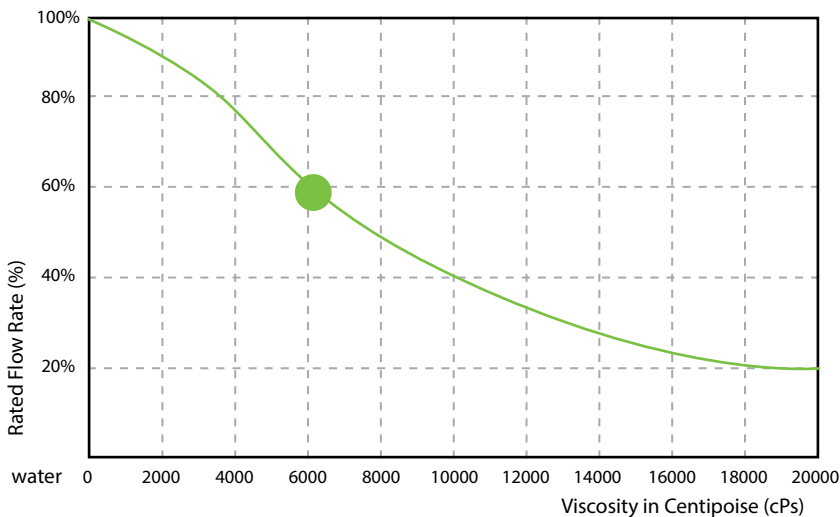
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Specified Suction Lift



With a suction lift of 4m, 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.