

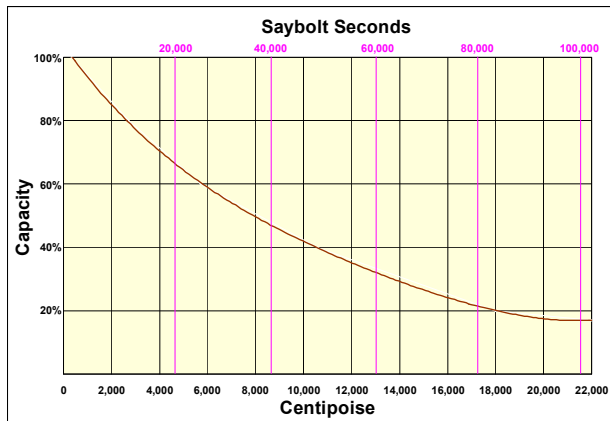
All-Flo Pump Company - Pump Selection Guide

To make an accurate pump selection, follow the steps below:

1. If the fluid is at ambient temperature, go to step 2. If the fluid is above or below ambient temperature, review the material temperature limitations below, then proceed to step 2.
 - a. Polypropylene pumps have a temperature range of 32° to 150° F (0°C to 66°C)
 - b. Nylon pumps have a temperature range of 0° to 150° F (-18°C to 66°C)
 - c. PVDF, Aluminum or 316 Stainless Steel: 0° to 200° F (-18°C to 93°C)
2. Select the correct **pump materials** of construction from the Chemical Compatibility Chart*. Locate the chemical you are pumping in the far left column of the chart. Select an 'A' rated material for either the 'Plastics' or 'Metals' housing material and then select an elastomer that is 'A' rated. Only 'A' rated material to fluid combinations should be selected.

If the chemical has a trade name which is not listed in the chart, consult with the manufacturer of the chemical for a material recommendation. Do not call All-Flo.

3. If the fluid is viscous, use the viscosity conversion chart shown below to calculate a percent reduction in flow rate. Multiply the maximum flow rate of the pump by the percentage of the flow rate derived from where the viscosity of the fluid intersects the reduction curve. If the fluid is not a viscous fluid, such as water or a solvent, then review pump flow rates below and determine the correct **pump size**.



The maximum flow rates for non-viscous fluids based on pump size are as follows:

- 1/4" pump – 4.3 GPM (16,3 l/m)
- 3/8" pump – 9 GPM (34 l/m)
- 1/2" pump – 17 GPM (64,6 l/m)
- 1" pump – 42 GPM (155,8 l/m)
- 1-1/2" pump – 95 GPM (360 l/m)
- 2" pump – 150 GPM (569 l/m)
- 3" pump – 255 GPM (965 l/m)

For optimal efficiency, the pump should operate at 50% to 60% of the maximum flow rate.

**Visit www.all-flo.com for the Chemical Compatibility Chart.*

Notes on Suction Lift:

- Viscosity and specific gravity reduce suction lift – position pump close to fluid source.
- Max-Pass™ valves found in Specialty Performance and Performance Plus increase suction lift.

You now know the materials of construction and size of the pump. The next step is to select the pump style based on features and specifications. See your All-Flo brochure.

Specialty Performance 3/8" models:

- Max-Pass™ valves standard on all pumps except PT, KT and CT models (check balls)
- Built for low flow applications with fluids containing solids, abrasives, and coagulants
- Process Controls Optional – Solenoid or Cycle Counting

Performance Plus 1/2", 1" models:

- Bolted construction
- Increased flow rates
- Increased air efficiency
- Increased maximum air pressure ratings
- Max-Pass™ valves optional
- Process Controls Optional – Solenoid or Cycle Counting

Classic Performance:

- Clamped construction – deep groove, stainless steel clamps
- Low maintenance and reliable performance for many years
- Dual manifolds optional