

Introduction



Flexible Impeller

Good Pumping Practice:

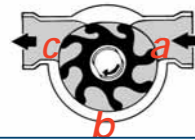
Pipe runs should always be kept as short and straight as possible. Plumbing should always be reinforced, non-collapsible hose of the recommended size. Electric pumps should always be installed in a dry, well ventilated position as close to the liquid to be pumped as possible.

Flexible impeller pumps must not be run dry. Bilge pumps and water pumps in particular should always be fitted with a filter or strainer on the inlet plumbing to protect them from debris. These should be fastened to the boat structure to ensure their permanent location. Mount flexible impeller pumps so that some water is left in the pump body when the pump is shut off. This will prolong impeller life and speed priming. Pumps must be installed with the overboard discharge well above the waterline (both static and heeled) to avoid water siphoning back into the vessel.

Features:

- **Versatile:** The flexible impeller pump combines the priming features of positive displacement type pumps with the general transfer ability of centrifugals. It will pump either thin or viscous liquids and can handle more solids in suspension than other types of rotary pumps. The pump can be mounted at any angle and will pump in either direction with equal efficiency.
- **Self-Priming:** Pumps instantly with dry suction lifts up to 10ft (3m) and up to 25ft (8m) when wetted.
- **Simplicity:** One moving part - a tough, long-life, wear-resistant flexible impeller.
- **Flexibility:** The flexible impeller pump offers both high flow and high pressure according to motor and impeller design.

How it works:



- a.** Flexible impeller blades create a nearly perfect vacuum for instant self-priming.
- b.** As the impeller rotates, each successive blade draws in liquid and carries it from intake to outlet port.
- c.** As the flexible impeller blades contact the offset cam they bend with a squeezing action that provides a continuous, uniform flow.



Centrifugal

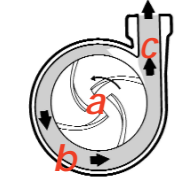
Good Pumping Practice:

Pipe runs should be kept as short and straight as possible, avoiding rising and dipping over obstructions as this can cause air-locks. Always use hose of the recommended size. Submersible bilge pumps must be installed with the overboard discharge well above the waterline (both static and heeled) to avoid water siphoning back into the vessel.

Features:

- **High Volume Flow:** Centrifugal pumps handle high volumes with a smooth, non-pulsating flow. The flow rate can be regulated from maximum output to no flow with no damage to the pump. An excellent pump for general transfer applications.
- **Low Maintenance:** Few moving parts mean that wear due to operation is minimal.
- **Easy Installation:** Compact size for flow rate. Option of port positions simplifies pipe runs.
- **Versatility:** Centrifugal pumps can be built in submersible form making excellent bilge pumps.
- **Low Power Consumption:** Electric centrifugal pumps consume less power than most other bilge pumps.

How it works:



- a.** Centrifugal pumps must be either initially primed or mounted in such a way that liquid is permanently available at the inlet port (eg. submersible pumps).
- b.** The rotating impeller gives velocity energy to the liquid moving it to the periphery of the volute casing and towards the discharge port.
- c.** The volute casing discharge arrangement converts velocity energy into static pressure or available pump head.



WARNING

No pump manufactured by Jabsco should be used for gasoline, petroleum products or any fluid with a flash point below 100°F (38°C).

Introduction



Sliding Vane

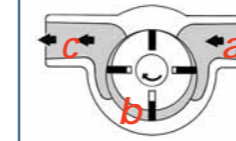
Good Pumping Practice:

Pipe runs should be kept as short and straight as possible, avoiding rising and dipping over obstructions as this can cause air-locks. Always use hose of the recommended size and of a rigid or reinforced type that will not collapse under suction conditions. Electric pumps should always be installed in a dry, well ventilated, position as close as possible to the liquid to be pumped.

Features:

- **Durable:** Heavy duty construction in quality materials gives long life. The body is designed to resist environmental damage. The vanes and rotor are constructed of a wear resistant long life material.
- **Self-priming:** Self-priming up to 13ft (4m).
- **Simplicity:** There are few moving parts to replace. The rotor, vanes and seal are lubricated by the liquid being pumped.
- **Versatile:** An excellent compact unit for pumping diesel fuel or hydraulic oil. Can run in either direction.

How it works:



- a.** The vanes create a partial vacuum for priming.
- b.** As the rotor rotates, each successive vane draws and carries liquid from the intake to the discharge port.
- c.** When the vanes contact the eccentric portion of the pump body, they force liquid out the discharge port.



Diaphragm

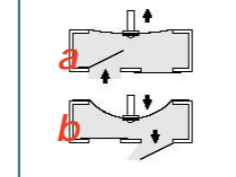
Good Pumping Practice:

Electric pumps should always be installed in a dry, well ventilated position as close as possible to the liquid to be pumped. Plumbing should always be reinforced, non collapsible hose of the recommended size. Bilge pumps and water pumps in particular should always be fitted with a filter and strainer on the inlet plumbing to protect them from debris. These should be fastened to the boat structure to ensure their permanent location. Pumps must be installed with the overboard discharge well above the waterline (both static and heeled) to avoid water siphoning back into the vessel. Electric diaphragm pumps can be run dry for up to 2 hours.

Features:

- **Self-priming:** Vertical lift up to 16ft (5m) for manual pumps and 6-10ft (2-3m) for electric pumps.
- **Dry Running:** Diaphragm pumps can be run dry for extended periods with no damage, therefore requiring less attention in use.
- **Versatility:** Self-priming and dry running capabilities mean few limitations on use. Larger manual diaphragm pumps have the ability to handle some solids in suspension. Electric diaphragm pumps make excellent bilge pumps for boats with shallow bilges, or bilges with restricted areas.
- **Quiet Running:** Electric pumps feature smooth flow and low noise levels.

How it works:



- a.** The diaphragm, pulled upwards by the movements of a piston or a handle causes a partial vacuum, opening the inlet port and closing the outlet, drawing in liquid.
- b.** Downward movement of the diaphragm pressurizes the liquid, closing the inlet valve and opening the outlet valve through which liquid is expelled by pressure.