

Vane Pump 620

Technical Specifications

Flow Rate	10 GPM / 37.9 LPM	
Voltage	110V or 220V	
Ports	1" Female NPT	
Max. Suction Lift	11.5 ft / 3.5m with foot valve above liquid level	
Pressure	29 psi / 2 bar / 220V	
HP	1/2	
RPM	3450 / 110V 2850 / 220V	
Watts	520 / 110V 350 / 220V	
Amperage	4A / 110V 2.5A / 220V	
Pump Type	Vane	
Body	Cast-iron	
Seal	Mechanical	
Motor	Induction	
Self-Priming	6.5 ft / 2 m (wet)	
Rated	IP55	
Dimensions	A	8.6" / 218 mm
	B	5.9" / 150 mm
	C	6.8" / 173 mm



*On/off
switch and
AC plug
included*

Fluids

Compatible for diesel fuel. This pump is not designed to pump gasoline nor water.

Viscosity range 2 - 5.35 cSt

Temperature up to 100°F / 37.8°C

Minimum flash point (PM) 131°F / 55°C

Ambient Conditions

Indicated temperature ranges are applicable to all components of the pump and these limits must be adhered to in order to avoid any possible damage or malfunctioning.

Temperature Min. -4°F / -20°C

Temperature Max. 140°F / 60°C

Relative Humidity Max. 90%

Installation

The pump can be mounted in any position, except with the pump head above the pump motor. Always mount pump with the anti-vibration rubber fittings supplied with the pump. Recommended internal diameter of piping is 1" and nominal recommended pressure 145 psi / 10 bar. Before connecting the delivery tube, partially fill the pump body with diesel fuel to facilitate priming.

Electrical Connection

The electrical installation of this product must be executed by a qualified marine electrician and following the ABYC requirements. Be sure that the power source available matches the power requirements on the specification sheet for this product model.

Considerations Regarding Delivery and Suction Lines

Delivery: If back pressure exceeds the expected maximum, and causes the (partial) opening of the pump bypass with noticeable reduction in flow rate, then it is necessary to reduce system resistance by shortening the piping and/or use a larger diameter and line accessories.

Suction: During startup, with the piping empty and the pump wetted with diesel, the pump can self-prime with a maximum height difference of 6.5 ft / 2m but it is recommended to keep suction length as short as possible. If height difference is greater, then a foot valve must be installed. Priming time may be up to 1 minute.

Operating Cycle

The pump has been designed for continuous use under conditions of maximum back pressure. Do not run dry.

Maintenance

- Every week, check piping connections and ensure they are tight.
- Every month, check the pump and keep clean of any foreign matter.
- Every month, check the pump filter and other filters installed.
- Every month, check electrical wiring is in good condition.

Troubleshooting

Problem	Possible Cause	Corrective Action
The motor is not turning	Lack of power.	Check electrical connections and safety systems.
	Rotor is jammed.	Check for possible damage or obstruction of the rotating components.
	Motor problems.	Contact service department at customerservice@reversopumps.com
The motor turns slowly when starting	Low voltage.	Change the voltage back within the anticipated limits.
Low or no flow rate	Low level in the tank.	Refill the tank.
	Foot valve blocked.	Clean and/or replace the valve.
	Filter clogged.	Clean the filter.
	Excessive suction pressure.	Lower the pump with respect to the level of the tank or increase the pipe diameter.
	High loss of head in the circuit (working with bypass open).	Use shorter piping or increase diameter.
	Bypass valve blocked.	Clean and/or replace the valve.
	Air is entering the pump or the suction line.	Check the seals of the connections.
	Narrowing in the suction line.	Use piping suitable for working under suction pressure.
	Low rotation speed.	Check voltage of the pump. Adjust the voltage and/or use higher gauge wire.
The suction line is resting on the bottom of the tank.	Raise the line.	
Increased pump noise	Cavitation occurring.	Reduce suction pressure.
	Irregular functioning of the bypass	Dispense until the air is purged from the circuit.
	Air present in the diesel fuel.	Check the suction connections.
Leak	Seal damaged.	Check and replace the seal.