

# Model 18650-0121

## **SELF-PRIMING PUMP**

### **FEATURES**

**Motor:** Permanent magnet type, fully

enclosed, stainless steel shaft.

**Dimensions:** 3" (76mm) high, 6-3/8" (162mm)

long, 4-3/4" (120mm) wide

**Weight:** 4-1/2 lb (2 kg) (approx.)

Body: Bronze

Impeller: Jabsco Neoprene compound

Seal: Lip type

**Ports:** 3/8" Internal Pipe Threads

1" External Hose Barb

Adaptor for 3/4" External Garden

Hose Thread included

Motor meets USCG Electrical Standards 183.410 and ISO 8846 MARINE for IGNITION PROTECTION on gasoline powered vessels.



Explosion hazard. Do not operate with rivets removed from motor case. Explosion resulting in personal injury, death or property damage can occur. Case openings must be sealed to avoid explosion and maintain ignition protected rating.



Explosion hazard. Do not pump gasoline, solvents, thinners or other flammable liquids. To do so can cause an explosion resulting in injury or death.

## **APPLICATION**

Use for bilge pumping, livewell circulation, washdown and general pumping requirements. If bilge water contains significant amount of oil, the standard impeller should be replaced with impeller No. 9200-0003, which is an oil-resistant nitrile material.

Pump has a dry prime suction lift of about 4 feet (1.2m) and a lift to 20 feet (6m) when primed. BE SURE SUCTION LINES ARE AIRTIGHT.

## **INSTALLATION**

The pump must be mounted in a dry location – the motor is not waterproof and must not be submerged. **SELECTION OF A COOL, VENTILATED** location will generally extend pump motor life. The unit can be mounted in any desired position. It is best to mount so



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	Voltage	AMP	Fuse	
Model	DC	Draw	Size	
18650-0121	12	7*	15	

<sup>\*</sup> Nominal amp draw at 10 psi.

that water dripping from a loose port connection will not wet the motor. The pump head may be rotated 180° on the motor to change direction of flow.

## **OPERATION**

Flexible impeller pumps must *NOT* be run dry, as the pumped liquid is the lubricant for the impeller. Observe the outlet and shut off pump as soon as liquid stops flowing. An automatic level switch is convenient to control the pump.

The pump cannot run against a closed outlet such as encountered when using a garden hose type shut-off nozzle.

Pressure for normal operation should not exceed 20 feet of head (8.7 psi).

Temperature of pumped liquid may be in the range of 45° - 180°F (7° - 82°C).



Motor runs hot—about 180° is a normal temperature. Prolonged contact during operation may cause a burn.

### **PLUMBING CONNECTIONS**

Pump ports have external 1" hose barb and internal 3/8" pipe threads. Also provided are two male port adaptors to allow the attachment of 3/4" female garden hose fittings. Use hose that does not kink when bent and with sufficient wall thickness to prevent collapse when used on suction side of pump. Hoses should be routed so that some water will be retained in pump body to wet the impeller. Wetting the impeller aids in priming and extends impeller life. Use a strainer on the intake hose to stop trash and solids from going through the pump. All hoses must have air tight connections to enable faster priming.



Explosion hazard. If pump is operated in an area containing flammable vapors, wire leads must be joined by insulated mechanical locking connectors. Loose or inadequate wire connections can spark resulting in an explosion. Property damage, injury or death can occur.

### **ELECTRICAL CONNECTIONS**

Connect black wire to negative (-) terminal of battery. The orange wire should run to a fused overload protected switch or circuit breaker with a 15 amp rating, with a wire from switch or breaker to positive (+) terminal of battery. Electrical circuit must be independent of all other accessories. Failure to connect black wire to negative and orange wire to positive will result in backwards motor rotation and possible motor and pump damage. Correct motor rotation is clockwise looking at shaft end of motor. Use proper wire size as determined by wire table below. Should the fuse blow, replace with the same size fuse after determining reason for blown fuse.

## MINIMUM WIRE SIZES

Wire Length Between Battery and Motor	12V	
1-10 ft (3m)	#12	
11-20 ft (6m)	#10	
21-30 ft (9m)	#8	

#### **HEAD-FLOW CHART**

	Total	Total Head		Capacity	
P.S.I.	Feet	Meters	GPM	L/Min.	
2.1	5	1,5	3.0	11.4	
4.3	10	3,0	2.9	10.9	
6.5	15	4,6	2.8	10.6	
8.7	20	6,1	2.6	9.8	

Table shows approximate Head-Flow for new pump.

