**BRONZE OR ALUMINUM**

**CLOSE COUPLED HELICAL ROTOR PUMP**

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**ELECTRIC MOTOR MOUNTING**

This pump is supplied close coupled to electric motor or as a pump alone complete with attaching parts and instructions for mounting. Any 56 frame electric motor (or 56C frame) with 5/8 inch shaft diameter, 1725 R.P.M. and of horsepower rating as listed above can be used. The motor can be rigid or resilient mounted, sleeve or ball bearings, 50°C rise, capacitor start, counter-clockwise, rotation from shaft end. (For Gas Engine version, see models 111-UGY/111B-UGY)

**FEATURES**

- All Bronze or Corrosion Resistant Aluminum Construction
- Easily Mounted in Field to your own 56 Frame Motor & 56C for explosion-proof motors
- Carbon Face Mechanical Seal
- Quiet Running
- Can Handle Contaminated Liquids
- Buna Stator and Stainless Steel Rotor

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**CHARACTERISTICS**

The turning of the helical shaped rotor within the stationary stator creates a progressing cavity similar to a moving piston. Liquid is thus displaced generating a pumping action. Unlike piston pumping, extremely high pressure cannot be created because the stator is made of Buna N and is flexible. Because of this flexibility contaminated liquids can be handled.

Close fit of the rotor within the stator permits lifting of liquid on the suction side as high as 20 ft. High starting torque motors are recommended in order to overcome the high starting friction of the stator. The pump is relatively quiet.

**ROTATION**

This helical rotor design demands a single rotation - clockwise when facing the pump drive shaft. Pump rotation and “in” and “out” ports are indicated on the dimension diagrams on reverse side.

**MATERIALS OF CONSTRUCTION**

These pump housings and mounting brackets are made from cast aluminum or bronze alloy. The rotor is made from stainless steel with a hard chrome plate for improved wear properties. The stator is made from molded Buna N. The mechanical seal is a carbon and ceramic mechanical rotary face type for positive sealing.

**LIQUIDS**

The corrosion resistant alloys used are compatible with common liquids including water, water solutions, oils and many commercial chemicals. Severe solvents are not compatible with the Buna and should not be pumped.

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**CAPACITY - WATER 60°F 1725RPM**

<table>
<thead>
<tr>
<th>Pressure P.S.I.</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow G.P.M. (Water)</td>
<td>8 1/2</td>
<td>8</td>
<td>7 1/2</td>
<td>7</td>
<td>6 1/2</td>
<td>6</td>
<td>5 1/2</td>
<td>5</td>
<td>4 1/4</td>
<td>3 3/4</td>
</tr>
<tr>
<td>Electric Motor H.P.</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
<td>3/4</td>
<td>3/4</td>
</tr>
</tbody>
</table>

(FOR PERFORMANCE AT REDUCED MOTOR SPEEDS, SEE MODEL 121/121B)
## PARTS LIST

<table>
<thead>
<tr>
<th>Body Cover</th>
<th>Rotor Stator</th>
<th>Drive Shaft</th>
<th>Universal Joint</th>
<th>Seal Assm.</th>
<th>Ball Bearing</th>
<th>Foot Collar</th>
<th>Retaining Ring</th>
<th>Gasket Nut</th>
<th>Pin</th>
<th>Pin</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Reqd</td>
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* Repair Kit No. 10737 include these parts and compression plate tool for seal removal.

## DIMENSIONS

### ELECTRIC MOTOR MOUNTING

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#### Specifications are subject to change without notice.