PLASTIC CENTRIFUGAL PUMP

PIPE SIZE: 3/8 HOSE CONNECTION IN
3/8 HOSE CONNECTION OUT
1/8 AIR VENT HOSE CONNECTION

PUMP & MOTOR FEATURES

- Chemical resistant construction
  - Body and Adapter made of non-metallic glass reinforced Nylon 6/6
  - Impeller made of non-metallic glass reinforced PPS
- Mechanical Seal - Type 6A carbon/ceramic faces, viton elastomers
- Barbed -Hose Connections
- Static Buna O-Ring body/adapter seal
- Integrated Air Vent - prevents loss of prime
- Compact and Lightweight
- Installation/Mounting Versatility - port orientation
- Universal - Open Drip Proof Motors with internal fan cooling, UL, CSA
  - No 18 Wire leads - 25° long
  - Low amperage
  - 120VAC, 240VAC (Optional: double insulation) and 12VDC versions.

GENERAL

These compact high speed centrifugal pumps are suited for a variety of industrial and commercial applications. They are particularly well suited for portable liquid cleaning machinery, laboratory use and spray installations. The design’s symmetry provides a wide range of configuration possibilities allowing ready customization of discharge port position and optional air vent orientation relative to the motor base. (see below)

INSTALLATION

Maximum fluid temperature is 200°F. Fluids must be compatible with viton seal elastomer. To promote long product life, assure that ambient air can circulate around the unit to prevent over-heating.

Ground metal frame motors. There is a #6-32 tapped hole ground connection provided on the end of metal framed motors.

Prevent air trapping in plumbing lines by avoiding loops. Use air vent fitting connection to purge air. Though capable of pulling slight vacuum, the pump performs best under flooded suction conditions when located for gravity feed.

(10,000 RPM)

<table>
<thead>
<tr>
<th>HEAD</th>
<th>PSI</th>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
<th>35</th>
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</thead>
<tbody>
<tr>
<td>FT.HD.</td>
<td>Plugged Vent</td>
<td>0</td>
<td>11.5</td>
<td>23</td>
<td>34.6</td>
<td>46.2</td>
<td>57.7</td>
<td>69.3</td>
<td>80.8</td>
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<tr>
<td>FLOW (GPM)</td>
<td>With Bypass thru Vent</td>
<td>2.2</td>
<td>2.2</td>
<td>2.1</td>
<td>1.9</td>
<td>1.6</td>
<td>1.2</td>
<td>0.7</td>
<td>0.3</td>
</tr>
<tr>
<td>CURRENT (AMPS)</td>
<td>@ 120V</td>
<td>1.45</td>
<td>1.45</td>
<td>1.45</td>
<td>1.40</td>
<td>1.35</td>
<td>1.30</td>
<td>1.25</td>
<td>1.20</td>
</tr>
<tr>
<td></td>
<td>@ 240V</td>
<td>0.80</td>
<td>0.77</td>
<td>0.75</td>
<td>0.73</td>
<td>0.70</td>
<td>0.68</td>
<td>0.63</td>
<td>0.60</td>
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</table>

Optimum Efficiency Range

12 VDC Motor (7,000 RPM)

<table>
<thead>
<tr>
<th>HEAD</th>
<th>PSI</th>
<th>0</th>
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<th>10</th>
<th>15</th>
<th>20</th>
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<td>FT.HD.</td>
<td></td>
<td>0</td>
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<td>23</td>
<td>34.6</td>
<td>46.2</td>
</tr>
<tr>
<td>FLOW (GPM)</td>
<td>Plugged Vent</td>
<td>1.9</td>
<td>1.7</td>
<td>1.4</td>
<td>1.1</td>
<td>0.5</td>
</tr>
<tr>
<td>CURRENT (AMPS)</td>
<td>@ 12V</td>
<td>1.35</td>
<td>1.34</td>
<td>1.33</td>
<td>1.31</td>
<td>1.29</td>
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</table>
PLASTIC CENTRIFUGAL PUMP
EXPLODED VIEW AND PARTS LIST

1 2 3 4 5 6* 7 8 9 10 11 12 13 14 15 16 17 18
VENT SEAL SEAL VENT FITTING
HEAD SEAT CAP

6 Req'd 1 Req'd 1 Req'd 1 Req'd 1 Req'd 1 Req'd 1 Req'd 1 Req'd 2 Req'd 1 Req'd 1 Req'd 1 Req'd 4 Req'd 2 Req'd 1 Req'd

142- 7819 7752 7835 -- 9407 8174 807901 7818 8255 6651 8367 --
142- 01 7819 7752 -- 7799 9407 8174 807901 7818 8255 6651 8367 7879
142- 08
142- 12
142- 56

Notes:
*adhesive used to mount seal head to adapter

Pump
142- 01 7819 7752 -- 7799 9407 8174 807901 7818 8255 6651 8367 --
142- 08
142- 12
142- 56

Motor
A44 7823 7821 8370 -- -- --
A46 -- -- -- 8516 8450 9200
A47 -- -- -- 8517 8450 9200
A91 -- -- -- 2057 8450 9200

Notes:
*adhesive used to mount seal head to adapter

Repair Kits:
Complete Pump Repair Kit (less motor) * 11227 includes items 1,2,3,4,5,6,7,8,9,10,11,17,18
Body Kit 11337 includes items 1,2,3,4,8,18
Adapter Kit * 11228 includes items 1,6,8,9,10,11,17
Impeller Kit 11178 includes items 5,7,8

*adhesive used to mount seal head to adapter
**AIR VENT FITTING**

The optional air vent fitting prevents loss of prime that can occur due to entrapped air. It is factory installed with a disposable vent cap. Entrapped air can be encountered in applications where the liquid in the supply tank is completely exhausted. Air can be introduced to the system before the next tank filling. For best results, configure and install pump with air vent near the top.

<table>
<thead>
<tr>
<th>Pump No</th>
<th>Wet End Features</th>
<th>Motor Features</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Vent Turret or Plug Position</td>
<td>Body Orientation to Motor or Motor Base</td>
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<tr>
<td>142-01 A44</td>
<td>I</td>
<td>A</td>
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<tr>
<td>142-02 A44</td>
<td>I</td>
<td>G</td>
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<td>142-08 A44</td>
<td>I</td>
<td>C</td>
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<td>J</td>
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<td>G</td>
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<td>142-56 A44</td>
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<td>A</td>
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<tr>
<td>142-02 A47</td>
<td>I</td>
<td>G</td>
</tr>
<tr>
<td>142- A91</td>
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<td>A</td>
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</table>

VITON is a trademark of DuPont Dow Elastomers, an equivalent fluoroelastomer may be used.