The Angus AP2000 pump is a heavy duty portable fire or industrial pump that combines the benefits of high pressure firefighting performance with the ability to move large volumes of water continuously.

The AP2000's innovative design has been specifically developed to meet the needs of the emergency services and incorporates features to ensure easy and reliable operation in fire and rescue situations.

Electric start and exhaust ejector priming mean the pump can be put into service quickly and easily in an emergency situation by one person. Typical flows range from 700 l/min at 10 bar delivery to over 2,200 l/min at 4 bar.

Power is provided by a Peugeot Citroen DV6D 1.6l diesel engine developing 68kW of power.

Angus fire pumps use robust pump casings which allow substantial input pressures from hydrants or relay pumping. This can be boosted to high output pressures without damaging the pump or exceeding its pressure rating, a feature generally not available with lower specification pumps. The AP2000 pump casing is designed to withstand 10 bar (maximum working pressure 13.3 bar), 1½ x the maximum recommended output pressure.

**Applications**

**Municipal Fire Brigades**

2,000 l/min at 7 bar provides a fire service with more than four 450 l/min hand lines with pressure to spare.

**Rural Fire Fighters**

The 68 kW engine will pump 700 l/min over 1 km and still provide over 4 bar pressure at the branchpipes.

**Flood Relief**

In situations where flow rather than pressure is critical the AP2000 will provide over 2,200 l/min.

**Standard Features**

- 4 cylinder diesel combines reliability with fuel economy
- 12V electric start
- 32 litre fuel tank
- Fast and simple (one moving part) exhaust eject priming up to 7m lift
- Grade 304 stainless steel frame and fabricated components
- Light alloy, marine grade, corrosion-resistant pump body and impeller
- Glycerine filled compound and output pressure gauge
- Electrical power input/output point as standard

**Engine**

The engine is a Peugeot Citroen DV6D 1.6l diesel engine with 4 cylinders inline with a turbocharger with intercooler and common rail injectors. Maximum power of 68kW is achieved at 4000rpm. Maximum torque is 230Nm at 1750rpm.

**Cooling**

Indirect water cooling via heat exchanger utilising pumped water supply. Heat exchanger allows the use of anti-freeze in the engine jacket.

**Electromagnetic Compatibility**

Low voltage only – no high tension.

**Electrical**

12v -40 AH maintenance free, leak proof, flame and corrosion resistant battery.

**Starting**

12V permanently engaged starter.

**Angle of Operation**

15° from horizontal in any plane.

**Exhaust**

Stainless steel silencer arranged to direct exhaust gas away from the operator’s position.

**Safety**

- Engine limp mode will activate should overheat occur
- Diesel tank positioned for easy filling during operation
- All controls and gauges in one easy to use location
- Panel light for night-time operation

**CE marking**

The AP2000 portable pump is CE marked for sale and use within the EEC.

**Sound Level**

105db at 7 bar on 3m lift.

**Frame**

Corrosion-resistant 304 grade stainless steel outer frame and fabricated components. 4 x Stainless steel fold away carrying handles lockable into position.
Angus AP2000
Heavy Duty Portable Pump

Pump
Two bearing stainless steel shaft design. Corrosion-resistant light alloy body and impeller cast from LM25 to BS1490 with TF heat treatment. Maintenance-free, spring-loaded, carbon-faced/ceramic shaft seal drain point.

Pump Clearances
Centrifugal pumps will allow small solids to pass through the impeller and pump without causing damage. All Angus pumps are fitted with an inlet mesh filter which is smaller than the minimum clearance size of the impeller. Inlet filter screen size 8 mm Impeller clearance 16 mm.

Pump Pressure Rating
Pump housing tested to 20 bar. The AP2000 pump can accept input pressures up to 10 bar (provided output pressure does not exceed recommended maximum). All pump housings are pressure tested to 1 ½ x the nominal rated maximum output pressure (13.3 bar) to allow for high input pressures when operating in relay.

Priming
Manually actuated exhaust ejector system – single moving part design 7m lift.

Fuel Tank
32 litre (7 imperial gallon) – 2 hour run time at 7bar with a 3m lift.

Inlet
Standard – 101.6mm (4”) British Standard (to BS336) Round Thread male connection (with blank cap).

Outlet
Standard - twin manual globe valves, 2½” instantaneous female couplings to BS336.

Instrumentation
Glycerine filled compound and outlet pressure gauge.
Digital display shows revs, fuel level, coolant temperature, voltage and hours run.

Quality Control
Manufactured in compliance with BS EN ISO 9001:2000 quality management systems. 100% quality check on all pumps for build and performance.

Options
Marine grade Gunmetal pump and impeller
Alternative inlet/outlet; Storz, US fire thread, BSP
Detachable wheels
2 year spare parts kit.

Dimensions
<table>
<thead>
<tr>
<th>Length</th>
<th>1050 mm (41 1/3”)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>630 mm (25”)</td>
</tr>
<tr>
<td>Height</td>
<td>745 mm (29 1/3”)</td>
</tr>
<tr>
<td>Weight</td>
<td>230 kg (506 lb)</td>
</tr>
</tbody>
</table>

Performance

<table>
<thead>
<tr>
<th>Outlet Pressure*</th>
<th>Flow**</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 bar</td>
<td>2,200 l/min</td>
</tr>
<tr>
<td>6 bar</td>
<td>2,100 l/min</td>
</tr>
<tr>
<td>7 bar</td>
<td>2,000 l/min</td>
</tr>
<tr>
<td>10 bar</td>
<td>700 l/min</td>
</tr>
</tbody>
</table>

* Based on 3m suction lift.
** All flow data is subject to a +/- 5% manufacturing and testing tolerance.

Flow vs Pressure Graph - AP2000

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Angus Fire operates a continuous programme of product development. The right is therefore reserved to modify any specification without prior notice and Angus fire should be contacted to ensure that the current issues of all technical data sheets are used.

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