

# LWA500 Mk3

## Light Weight Portable Pump

- Lightweight
- Compact design
- Portable
- Robust cast pump casing
- Rotary Vane Priming option



The Angus LWA500 Mk3 pump is a light weight portable fire or industrial pump that combines the benefits of high pressure fire fighting performance with an extremely compact design that will fit most fire tender lockers and leave room for a second pump or a Positive Pressure Fan.

The unit is designed to be easily carried by two people and operated by one. Electric start and exhaust ejector priming<sup>†</sup> mean the pump can be put into service quickly and easily in an emergency situation.

Typical flows range from 400\* l/min at 8 bar delivery to over 1,200\*\* l/min at 1 bar (100mm suction hose).

The LWA500 Mk3 uses the internationally renowned Briggs & Stratton "VANGUARD" 13.4 kW (18 hp) air-cooled petrol engine for lightness and reliability. The "V" twin, overhead valve configuration, reduces vibration and provides excellent economy. All Briggs & Stratton engines meet all major emission standards world wide.

Angus fire pumps use robust cast pump casings which allow the use of substantial input pressures from hydrants or relay pumps without damaging the pump; a feature generally not available with lower specification pumps.

### Applications

#### Municipal Fire Brigades

500 l/min at 7 bar provides a fire service with a single 450 l/min\* or two 225 l/min\* hand lines.

#### Rural Fire Fighters

The 13.4 kW (18 hp) engine will pump over ½km and still provide over 4 bar pressure at the branchpipe.

#### Flood Relief

In situations where flow rather than pressure is critical the LWA500 Mk3 will provide up to 1,200 l/min of slavage flow.

### Standard Features

- Light weight "V" twin, low vibration, air-cooled 18 hp Briggs & Stratton petrol engine
- Sound treatment package
- 12v electric start
- Emergency hand start
- 9 litre fuel tank capacity (1½ hours at maximum power)
- Dual 2½" outlet valves
- Fast and simple exhaust eject priming<sup>†</sup> – 3m in under 30 seconds
- Grade 304 stainless steel frame and fabricated components
- Grade 6061 light alloy corrosion resistant pump body and impeller heat treated to T6.
- Glycerine filled compound and output pressure gauge
- 12v electrical power output point
- LED panel lighting

### Engine

Briggs & Stratton "VANGUARD" 90° (low vibration) "V" twin, overhead valve industrial quality petrol engine, industrial ball race bearing on power side of crankshaft, 570 cc with 8.5:1 compression ratio.

13.4 kW (18 hp) at 3,600 rpm (max speed), 39.3 Nm torque (29 ft lbs) at 2,400 rpm.

Overhead valve, sintered iron cylinder liners, pressure lubricated.

### Speed Control

Factory set internal mechanical governor

### Cooling

Forced ventilation, ducted path crankshaft driven fan with phased fins

### Ignition

Contact free high voltage ignition. Splash protected

### Electrical

12v negative earth system with 16 amp engine driven alternator.

2 pin power socket for auxiliaries (max current – 16 amps continuous) and battery charging.

### Battery

18 A/hr light weight lead acid sealed unit.

### Angle of Operation

15° maximum from horizontal in any plane.

### Exhaust

Steel silencer arranged to direct exhaust gas away from the operator's position.

<sup>†</sup> Rotary vane primer available as an option.

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### Starting

12v permanently engaged starter.  
Hand pull emergency start facility.

### Ambient Temperature Range

Full power continuous operation  
-30°C (-22°F) to +38°C (100°F).

### Security

Fixed key start plus ignition cut off switch.

### Emissions

Complies fully with:

- CARB standard (California Air Resources Board)
- EPA standard (Environmental Protection Agency - USA)
- EC VCA (UK Vehicle Certification Agency) Certificate of Conformity to European Directive 97/68/EC, amended by 2002/88/EC.

### Sound Level

89 dB at 6 bar outlet pressure.

### Standards

The LWA500 Mk3 portable pump is manufactured to comply with EN 14466 and the performance criteria of EN1028.

Angus Fire is assessed by BSI and operates ISO 9001 Quality Management Systems and ISO 14001 Environmental Management Systems.

### CE Marking

The LWA500 Mk3 portable pump is CE marked for sale and use within the EEC.

### Frame

Wrap around corrosion-resistant 304 grade stainless steel outer frame and fabricated components. 4 x Stainless steel fold away carrying handles lockable into position.

### Pump

Corrosion resistant light alloy body and impeller cast from 6061 grade aluminium heat treated to level T6. Maintenance free, spring loaded, carbon-faced/ceramic shaft seal. Drain point.

### Pump Pressure Rating

Pump housing designed to withstand 1½ maximum working pressure and to accept input pressures from hydrants or relay pumps.

### Priming

Manually actuated exhaust ejector system 3m lift (9" Hg) in under 30 seconds.

Maximum 6m lift.

Rotary Vane Priming is available as an option: Fitted with the dry sliding vane the unit will prime 7 metres within 30 seconds.

### Fuel Tank

9 litre (1.98 imperial gallon) industrial plastic tank with top filling cap and inspection point.

### Inlet

Standard 100mm (4") British Standard round thread - male connection.

### Outlet

Dual outlet.

Manual globe valves with built in check facility.

Standard 2½" BS336 instantaneous female coupling. Other coupling options are available.

### Instrumentation

Inlet - glycerine filled compound gauge, 64mm Ø, scale -1 to +9 bar.

Outlet - glycerine filled pressure gauge, 64mm Ø, scale 0 to 25 bar.

Engine hours run meter.

LED panel lighting.

### Options

Detachable lighting mast.

Tool kit.

Wheel set.

Alternative inlet/outlet, Storz, US fire thread, BSP.

Marine grade bronze (BS EN 1982 / LG2 gunmetal) pump body and impeller. Inlet/outlet plugs and chains.

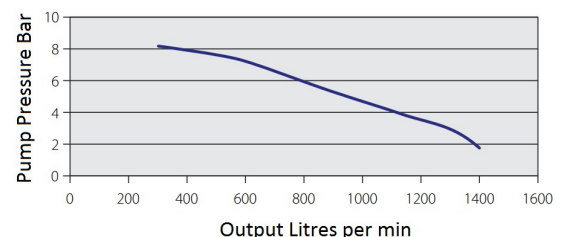
Suction and discharge hoses, suction strainers and accessories.

Dimensions	
Length	623 mm
Width	500 mm
Height	600 mm
Weight	74 kg (exhaust prime dry) 83kg (RVP dry)

Performance	Standard	RVP
Outlet Pressure*	Flow**	Flow**
2 bar	1,200+ l/min	1,200+ l/min
5 bar	900 l/min	900 l/min
7 bar	600 l/min	600 l/min
8 bar	400 l/min	400 l/min

\* Based on 3m suction lift.

\*\* All flow data is subject to a +/- 5% manufacturing and testing tolerance.



### SALES & MARKETING

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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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