

LWA800

Light Weight Portable Pump

The Angus LWA800 pump is a light weight (89kg) 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 mean the pump can be put into service quickly and easily in an emergency situation.

Typical flows range from 800* l/min at 7 bar delivery to over 1,950* l/min at 1 bar.

The LWA800 uses the internationally renowned Briggs and Stratton Vanguard air cooled petrol engine for lightness and reliability. The "V" twin, overhead valve configuration, reduces vibration and provides excellent economy. All Briggs and 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

800 l/min at 7 bar provides a fire service with two hand lines with pressure to spare.

Rural Fire Fighters

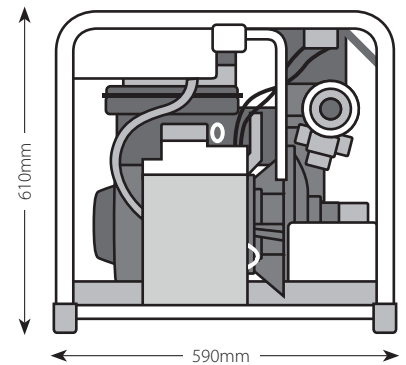
The Briggs and Stratton "V" twin engine will pump over 1/2km and still provide over 3 bar pressure at the branch pipe.

Flood Relief

In situations where flow rather than pressure is critical the LWA800 will provide up to 1,900 l/min*

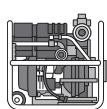
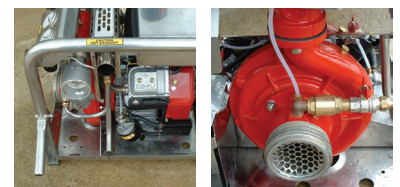
Standard Features

- Light weight "V" twin, low vibration, air cooled "Briggs and Stratton" petrol engine
- Sound treatment package
- 12v electric start
- Emergency hand start
- 9 litre fuel tank with gauge (1.4 hours at maximum capacity)
- Fast and simple exhaust eject priming – 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
- Electrical power output point
- Battery state indicator (Voltmeter)
- Oil pressure gauge with electronic sender

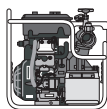


Dimensions

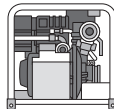
Length	590 mm (21¼")
Width	495 mm (19¾")
Height	610 mm (23½")
Weight	89 kg (with oil and battery)



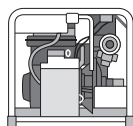
LDA 400



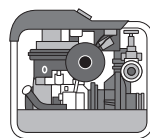
LWA 500



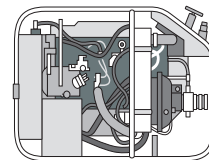
LDA 600



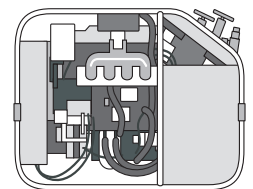
LWA 800



LWA 1200



LD 1800



LW 2250



ANGUS FIRE

Engine

Briggs and Stratton "VANGUARD" 90° (low vibration) "V" twin industrial quality, overhead valve petrol engine, industrial ball race bearing on power side of crankshaft, 627 cc with 8.5:1 compression ratio.
16.7 kw (22 hp) at 3,600 rpm
32.7 ft lbs torque (45.8 Nm) at 2,600 rpm.
Overhead valve, sintered iron cylinder liners, pressure lubricated.

Speed Control

Factory set internal mechanical governor

Cooling

Heavy duty, forced ventilation, ducted path crankshaft driven fan with phased fins

Ignition

Contact free high voltage ignition
Splash protected

Electromagnetic Compatibility

Resistor installed spark plugs fitted as standard – complies with EEC directive 89/336/EEC

Electrical

12v negative earth system with 16 amp engine driven alternator
Dual power outlet sockets (2 pin and 3 pin) for auxiliaries (max current – 16 amps continuous) and battery charging

Battery

18 amp hour, 12V valve regulated lead acid maintenance free battery

Starting

12v electrical permanently engaged starter
Hand pull emergency start facility

Angle of Operation

15° from horizontal in any plane

Exhaust

Stainless steel silencer arranged to direct exhaust gas away from the operators position
Spark arrestor

Ambient Temperature Range

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

Security

Protected ignition cut off switch with starter button disable

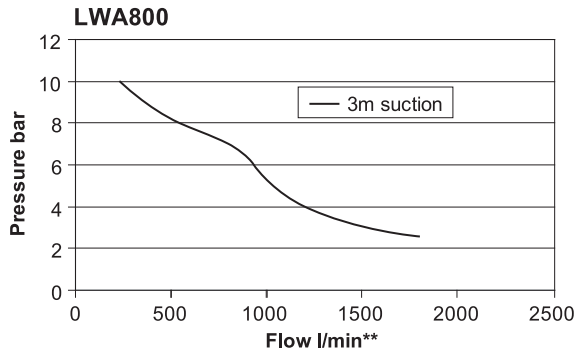
Emissions

Complies fully with:

- CARB standard (California Air Resources Board) 2006
- 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 Levels

87 dB at 6 bar outlet pressure††



Performance

Outlet Pressure*	Flow**
Salvage flow	1,950 l/min
2.5 bar	1,800 l/min
4 bar	1,200 l/min
6 bar	920 l/min
7 bar	800 l/min
8 bar	550 l/min
10 bar	230 l/min

Sound Treatment Package

Laminated poly-core blower housing, phase modulated flywheel fin spacing, acoustically contoured crankcase

Standards and Approvals

The LWA800 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 LWA800 portable pump is CE marked for sale and use within the EEC

Frame

Corrosion resistant 304 grade stainless steel outer frame and fabricated components
4 x Stainless steel fold away carrying handles

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 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 9 mm
Impeller clearance 10 mm

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

Fuel Tank

9 litre (2 imperial gallons)
Stainless steel tank with top filling cap and contents gauge

Inlet

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

Outlet

Twin outlets with manual ball valves
Standard - 2½" BS366 instantaneous female couplings

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
Voltmeter – to indicate battery and charging state
Oil pressure gauge (with electronic sender)
Engine hour run meter
Flexible halogen night light

Options

Marine grade Gunmetal impeller and pump body
Alternative inlet/outlet, storz, US fire thread, BSP
Foam proportioner - 0.1% to 6% variable
Wheel set
Lighting mast
Inlet/outlet plugs and chains
Suction and discharge hoses, suction strainers and accessories

† Special oil may be required.

†† Readings taken at position 1m horizontally from the controls and 1.7m vertically to represent the typical position of the operators head.

* Based on 3m suction lift.

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

Angus Fire has over 30 years experience of manufacturing portable pumps for use world wide in fire and industrial applications.

Angus Fire

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