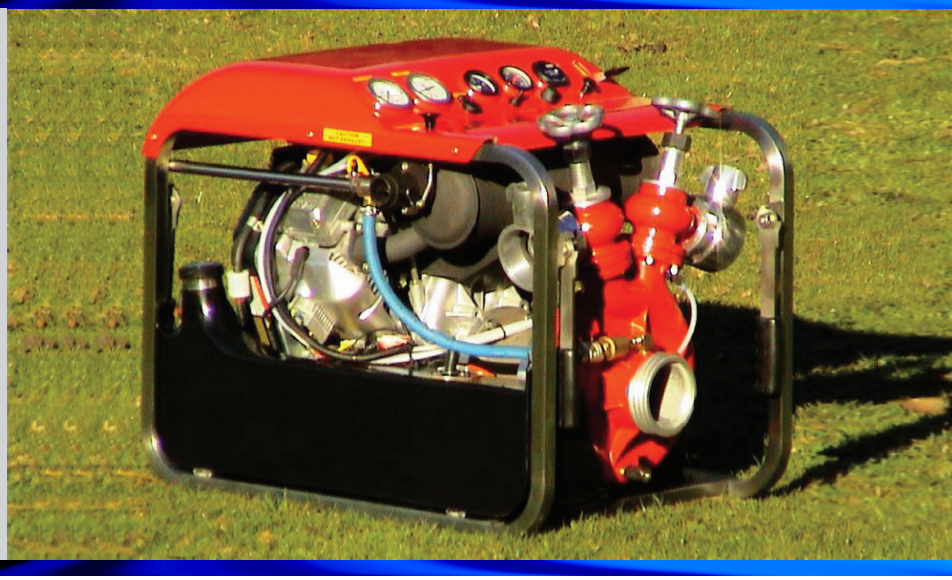
ANGUS FIRE

LWA1200

Light Weight Portable Pump

The Angus LWA1200 pump is a light weight (115kg) portable fire or industrial pump that combines the benefits of high pressure fire fighting performance with an extremely compact design.



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.

Flows range from 1,000* l/min at 8 bar delivery pressure to over 2,000* l/min at 1 bar.

The LWA1200 uses the internationally renowned Briggs and Stratton Vanguard 35hp (26 kW) 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

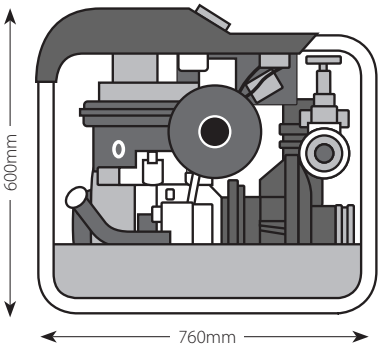
Municipal Fire Brigades
1,200 l/min provides a fire service with three 400 l/min* hand lines with pressure to spare

Rural Fire Fighters
The 35 hp (26 kW) engine will pump over ½ km and still provide over 4 bar pressure at the branch pipe.

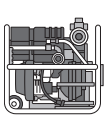
Flood Relief
In situations where flow rather than pressure is critical the LWA1200 will provide up to 2,000 l/min* of salvage flow.

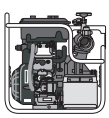
Standard Features

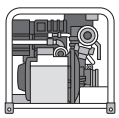
- Light weight "V" twin, low vibration, air cooled 35 hp "Briggs and Stratton" petrol engine
- Sound treatment package
- 12v electric start
- Emergency hand start
- 12 litre fuel tank capacity – fuel tank slides out from under the frame on stainless steel rails to enable filling during pumping operations
- Fast and simple exhaust eject priming – 3m in 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/input charging point

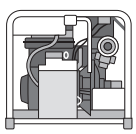


Dimensions	
Length	760 mm (30")
Width	530 mm (21")
Height	600 mm (23½")
Weight	115 kg (with fuel, oil and battery)
	106 kg dry (with battery)


LDA 400


LWA 500


LDA 600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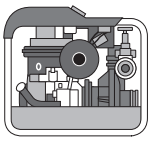
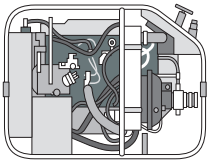

LWA 1200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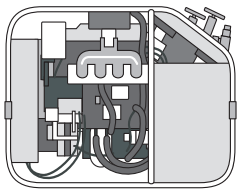

LW 2250

ANGUS FIRE

Engine

Briggs and Stratton "VANGUARD" 90º (low vibration) "V" twin industrial quality, overhead valve petrol engine, 993 cc with 8.2:1 compression ratio 35 hp (26 kW) at 3,600 rpm (max speed), 53 ft lbs torque (72 Nm) 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

Electromagnetic Compatibility

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

Electrical

12V negative earth system with internal 20 amp engine driven alternator
2 pin power outlet socket for auxiliaries (max current ~ 16 amps continuous, less engine ignition requirement)

Battery

30 amp/hour light weight lead acid sealed unit – vibration and tilt resistant

Starting

12v electrical permanently engaged starter
Hand pull emergency start facility

Angle of operation

15° from horizontal in any plane

Exhaust

Steel silencer arranged to direct exhaust gas away from the operators position

Ambient Temperature range

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

Security

Protected ignition cut off switch

Emissions

Complies fully with:

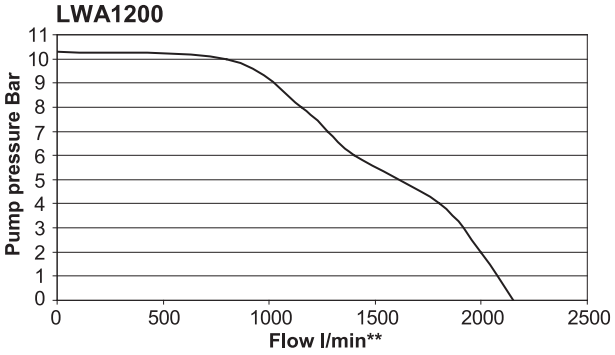
- CARB standard (California Air Resources Board)
- EPA standard (Environmental Protection Agency - USA)
- ECVCA (UK Vehicle Certification Agency) Certificate of Conformity to European Directive 97/68/EC, amended by 2002/88/EC

Sound levels

90 dB at 7 bar outlet pressure (provisional)††

Sound Treatment package

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



Performance

Outlet Pressure*	Flow**
Salvage flow	2,000 l/min
7 bar	1,200 l/min
10 bar	700 l/min

Standards and approvals

The LWA1200 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 LWA1200 portable pump is CE marked for sale and use within the EEC

Frame

Corrosion resistant 304 grade stainless steel outer frame and fabricated components graphite resin bonded frame base and fibre-glass cowl with integral instrument panel
4 x Stainless steel fold away carrying handles with rubber grips 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 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 13 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 30 seconds

Fuel tank

12 litre (2.64 imperial gallon) - 1½ hour duration at maximum power.
Carbon fibre tank with top filling cap on stainless steel rails to enable tank to be moved outside the pump frame for re-filling during pumping operations

Inlet

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

Outlet

Twin outlets with manual globe valves
Standard - 2½" BS366 instantaneous female couplings – optional Storz 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
Engine hour run meter
Fuel gauge
Oil pressure gauge
Volt meter
Flexible halogen night light
In/out 12V electrical point for charging/operating accessories (e.g. lighting mast)

Options

Marine grade bronze (BS EN 1982 / LG2 gunmetal) pump body and impeller
Lighting mast
Wheel set
Alternative inlet/outlet, Storz, US fire thread, BSP
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.

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