

LD400

Light Weight Portable Diesel Pump

The Angus LD400 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.

The unit is designed to be easily carried by two men and operated by one. Electric start (and a simple hand start with decompression facility) plus exhaust ejector priming mean the pump can be put into service quickly and easily in an emergency situation.

Typical flows range from 400* l/min at 5 bar delivery to over 1,400* l/min at 1 bar.

The LD400 uses the internationally renowned Rugggerini air-cooled diesel engine for reliability.

Angus fire pumps use robust, pressure-tested pump casings which allow substantial input pressures (10 bar on the LD400) from hydrants or relay pumping. This can be boosted to high output pressures (LD400 is tested to 21 bar) without damaging the pump or exceeding its pressure rating, a feature generally not available with lower specification pumps.

Angus Fire has over 25 years experience of manufacturing portable pumps for use world wide in fire and industrial applications.

Applications

Municipal Fire Brigades

600 l/min* at 5 bar provides a fire service with a single hand line for direct fire fighting.

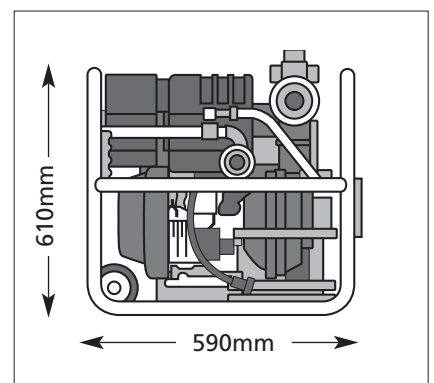
Flood Relief

In situations where flow rather than pressure is critical the LD400 will provide over 1,200 l/min*

Standard Features

- 5 litre fuel tank capacity (1½ hours at maximum speed).
- Fast and simple exhaust eject priming – 3m in under 30 seconds
- 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.

Technical Specification



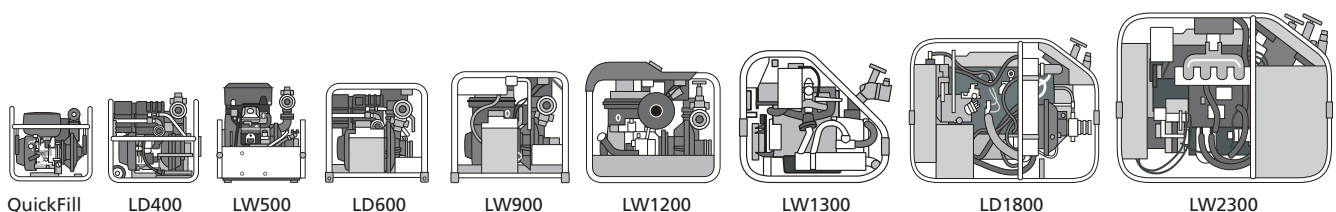
Dimensions

Length	590 mm (23½")
Width	530 mm (21")
Height	610 mm (24½")
Weight	107 kg with battery, fuel and oil (dry weight 88 kg - no battery)

Engine

Rugggerini RY121 diesel engine.
8.9 kW (12 hp) at 3,600 rpm (max speed).

Single cylinder, overhead valve, sintered iron cylinder liners, pressure lubricated.



* Based on 3m suction lift.

ref: 6335/2-12/05 page: 1 of 2

Speed Control

Factory set internal mechanical governor

Cooling

Forced ventilation, ducted path
Crankshaft driven fan

Electromagnetic Compatibility

Low voltage only – complies with EEC directive 89/336/EEC

Electrical

12V negative earth system with 16 amp engine driven alternator

Angle of Operation

15° from horizontal in any plane

Exhaust

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

DIN exhaust extension connection available on request

Starting

Electric start standard

Hand pull emergency start with manual decompression facility

Ambient Temperature Range

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

Security

Keyless starting – Pull stop facility

Emissions

Diesel engines below 19 kW for non-road applications are exempt from EEC emission regulations

CE Marking

The LD400 portable pump is CE marked for sale and use within the EEC

Sound Level

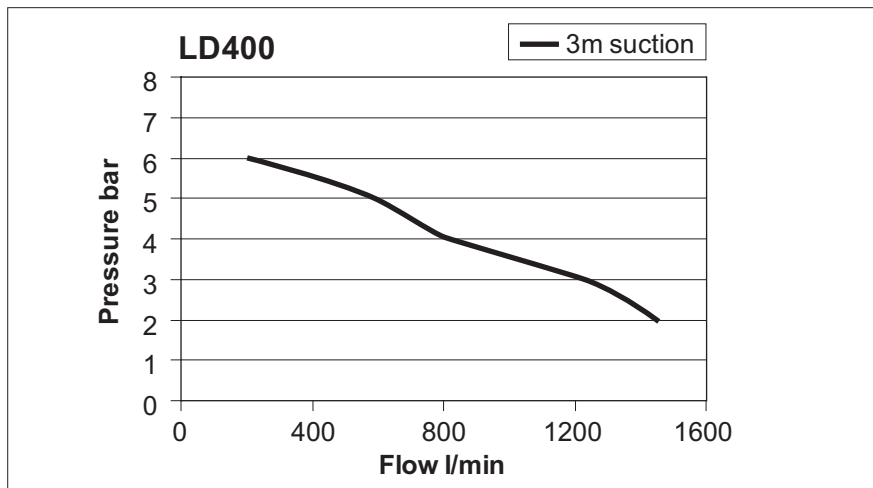
95 dB at 3 bar outlet pressure

Frame

Corrosion-resistant 304 grade stainless steel outer frame and fabricated components

4 x Stainless steel fold away carrying handles

Performance



Outlet pressure*	Flow
2 bar	1,450 l/min
3 bar	1,110 l/min
4 bar	800 l/min
5 bar	600 l/min
6 bar	220 l/min

Pump

Corrosion-resistant light alloy body and impeller, marine grade TT601, heat treated to T6

Maintenance-free, spring-loaded, carbon-faced/ceramic shaft seal

Drain point

Pump Pressure Rating

Pump housing tested to 21 bar

LD400 pump can accept input pressures up to 10 bar

All pump housings are pressure tested to 1½ x the nominal rated maximum output pressure to allow for high input pressures when operating in relay

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 12 mm

Priming

Manually actuated exhaust ejector system

Minimum 3m lift (9" Hg) in under 30 seconds

Fuel tank

5 litre (1.1 imperial gallon)

Industrial plastic tank with top filling cap and inspection point

Inlet

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

Outlet

50mm (2") ball valve

Standard 2½" instantaneous female coupling (other options available)

Instrumentation

Inlet - glycerine filled compound gauge, 50mm Ø, scale -1 to +9 bar

Outlet - glycerine filled pressure gauge, 50mm Ø, scale 0 to 25 bar

Engine hours run meter

Oil pressure light

Battery charge light

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 impeller

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

Detachable wheel set

Battery charging point

DIN exhaust extension connection

† Special oil may be required.

* Based on 3m suction lift.

© Angus Fire. Angus Fire reserves the right to modify any specification without prior notice.