



The Universal B-Series Continuous Quality Power

The Legend Continues

Makers of the world famous Atomic-4 and pioneers in premium marine diesel propulsion, Universal has struck again with its latest release, the Universal B-Series.

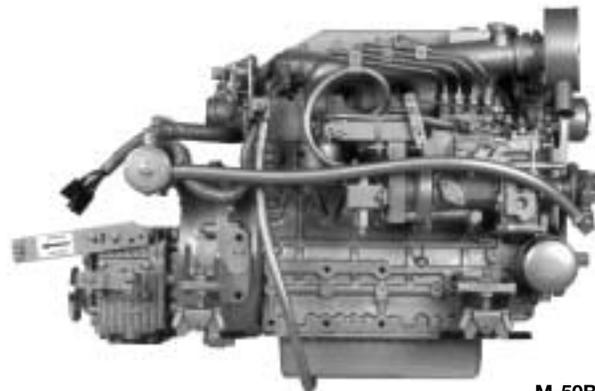
The B-Series is powered by the latest advancements in diesel engine design. Some of the benefits from these advancements include cleaner emissions, reduced noise levels, and increased horsepower at lower RPMs. All B-Series engines are naturally aspirated and deliver high low-end torque. All of which produce some of the most quiet and durable marine engines currently available.

The new M-50B is a suggested replacement for the aging Westerbeke Four-99; Four-107, Four-108, W-40, W-46, and W-50 engines now in service.

Universal holds a large inventory of spare parts for your engine including easy-to-buy spare parts kits and gasket sets tailored to your particular engine.

Parts and service are available worldwide. Universal engines can be serviced by over 600 authorized dealers strategically located in major navigable waterways in the United States and Canada, as well as in over 65 countries worldwide.

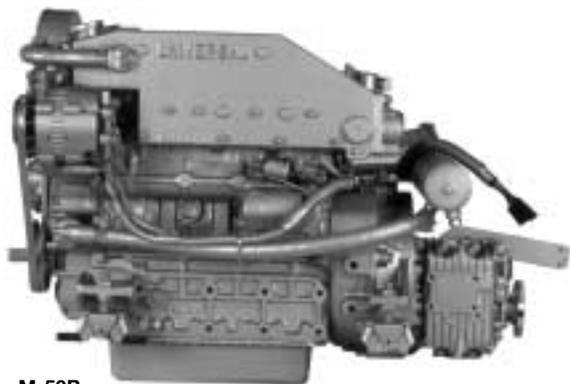
It's easy to see why Universal is as popular today as it was 100 years ago. Stop by your local Universal Distributor or Dealer today to learn more about the latest in Universal Marine Power.



**M-50B
Diesel Engine**

Standard Features

- Fresh water cooling
- Gear driven raw water pump
- Engine pre-wired to plug-in connector
- E-Z bleed fuel system
- 12 volt, 51 ampere alternator
- Circuit breaker protected electrical system
- Domestic hot water connection
- Coolant recovery tank
- Throttle, stop, and shift control brackets
- Low oil pressure and high water temperature alarms
- Short profile marine gear with 1.79:1 reduction
- Glow plug cold starting aid
- Engine matched four point, fail safe, adjustable mounts
- Lube oil drain hose
- Air intake silencer with air filter
- Operator's Manual and Parts List
- EPA certified



**M-50B
Diesel Engine**

Unit Dimensions

| | |
|--------|---------------------|
| Length | 36.0" (914.4 mm) |
| Width | 21.8" (553.7 mm) |
| Height | 26.8" (680.7 mm) |
| Weight | 529 lbs. (240.0 kg) |

*See other side for more dimension information
Photographs may show optional equipment.*

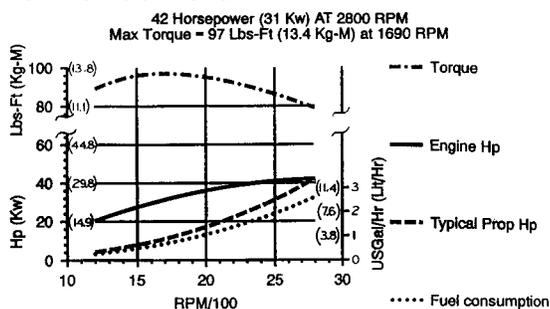


Optional Admiral Panel

Admiral Panel Dimensions

| | |
|--------|------------------|
| Length | 9.75" (247.7 mm) |
| Depth | 4.0" (101.6 mm) |
| Height | 6.0" (152.4 mm) |

Performance Data



Specifications

| | |
|--|---|
| Number of cylinders | 4 Cylinder vertical in-line |
| Cycles | 4 Cycle |
| Displacement | 113.32 cu. in. (1.857 liters) |
| Bore and stroke | 3.15" x 3.64" (80 mm x 92.4 mm) |
| Compression ratio | 23:1 |
| Maximum angle of installation | Not to exceed 14 deg. |
| Maximum angle of rotation | Not to exceed 25 deg. |
| Crankshaft, direction of rotation | Counterclockwise as viewed from flywheel end |
| Propeller shaft, direction of rotation | Right hand-Std. Trans.. |
| Dry weight | 529 lbs. (240 kg) |
| Combustion system | Spherical type |
| Aspiration | Naturally aspirated |
| Lubrication system | Forced lubrication by gear pump |
| Coolant capacity | 12 qts. (11.4 liters) |
| Starting aid | 12 Volt sheathed type glow plug |
| Engine stop | Manual |
| Fuel injection pump | Bosch type |
| Governor | Centrifugal type |
| Injectors | Throttle type |
| Fuel filter | Full flow, spin-on element |
| Lube oil filter | Full flow, spin-on element |
| Lubricant capacity | 10.5 qts. (9.9 liters) |
| Fuel transfer pump | Electrical |
| Fuel supply and return piping | 1/8" ID (3.18 mm) minimum 3/8" ID (9.52mm) maximum |
| Starting motor | 12 volt, solenoid, actuated shift |
| Battery charging alternator | 51 ampere (12 volts) |
| Cold cranking amps | 152 amps at 68°F (20°C) |
| Electrical system | 12 volts DC, negative ground |

Construction-Engine Components

| | |
|------------------|---|
| Cylinder head | Cast iron |
| Cylinder block | Cast iron |
| Crankshaft | Forged crankshaft, five main bearings |
| Valves | Overhead, rotating type |
| Fuel System | Self bleeding fuel system |
| Intake system | Filtered air intake for noise reduction |
| Cooling system | Fresh water-cooled with heat exchanger |
| Exhaust manifold | Cast iron |

Standard Equipment

| | |
|---|---|
| Standard gear ratio | 1.9:1 |
| Mounting centers | 16.0" |
| Flexible mounts | Engine matched adjustable fail safe neoprene type |
| Domestic hot water connection | |
| Coolant recovery tank | |
| Battery charging alternator | 51 amp, 12 volt |
| Starting aid | Glow Plugs |
| Control brackets | Throttle and shift |
| Prewired Engine | |
| Gear-driven sea water pump | |
| Lube oil drain hose | |
| Oil fill | Top |
| Circuit breaker protected electrical system | |
| Operator's Manual and Parts List | |

Optional Equipment

| | |
|---|---------------------------|
| Captain panel with alarm (tachometer with lights) | |
| Admiral panel with alarms (tachometer with gauges) | |
| Dual station senders | |
| Other gear ratios | Consult local Distributor |
| Hydraulic transmissions | Consult local Distributor |
| Remote expansion tank | |
| Muffler and fittings | |
| "A" and "B" on board spare parts kits | |
| Alternator, 72 amp single output | |
| Anti-siphon valve for overboard cooling discharge water | |
| Technical Manual | |
| Exhaust connection (45 deg., 90 deg., elbows, risers) | |
| Propeller shaft couplings (rigid/flexible)-available standard sizes | |

Basic Dimensions

inches
(millimeters)

