PIESEL Universal M3-20E

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.

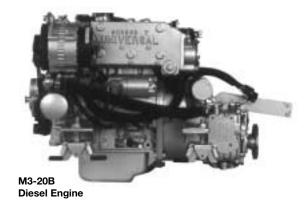
If you're looking to replace that aging Atomic-4, the Universal B-Series is still the boaters choice for Atomic-4 replacements**. The M3-20B, M-25XPB and M-35B offermany similar dimensional characteristics to the Atomic-4, making for a much easier installation.

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.

** Universal Atomic-4 replacements are not direct drop-ins in all cases. Some engine compartment reconfiguration may be required.

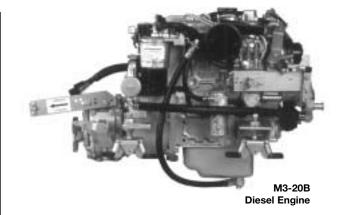


Unit Dimensions

Length 26.4" (670.6 mm)
Width 18.8" (477.5 mm)
Height 20.1" (510.6 mm)
Weight 241 lbs. (110.0 kg)

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





Standard Features

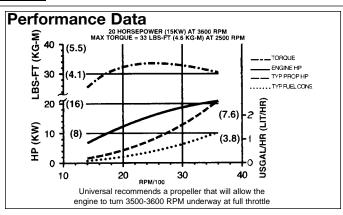
- Fresh water cooling
- Engine prewired to plug-in connector
- E-Z bleed fuel system
- 12 volt, 51 ampere alternator
- Coolant recovery tank
- Throttle and shift control brackets
- Low oil pressure and high water temperature alarms
- Gear-driven sea water pump
- Transmission with 2.05:1 reduction
- Glow plug cold starting aid
- Engine matched four point adjustable mounts
- Lube oil drain hose
- Circuit breaker protected electrical system
- Operator's Manual and Parts List
- Large list of factory engineered options



Optional Admiral Panel

Admiral Panel Dimensions

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



Specifications	
Number of cylinders	3 Cylinder vertical in-line
Cycles	4 Cycle
Displacement	43.8 cu. in. (.7177 liters)
Bore and stroke	2.64" x 2.68" (67 mm x 68 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	241 lbs. (110 kg)
Combustion system	Spherical type
Aspiration	Naturally aspirated
Lubrication system	Forced lubrication by gear pump
Coolant capacity	3.75 qts. (3.5 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	4.0 qts. (3.8 liters)
Fuel transfer pump	Electrical
Fuel supply and return piping	1/8" ID (3.18 mm) minimum 3/8" ID (9.52 mm) maximum
Starting motor	12 volt, solenoid, actuated shift
Battery charging alternator	51 ampere (12 volts)
Cold cranking amps	190 amps
Electrical system	12 volts DC, negative ground
Standard transmission offset	2.44" (62.0 mm)

Construction	-Engine Components
Cylinder head	Cast iron
Cylinder block	Cast iron
Crankshaft	Forged crankshaft, four main bearings
Valves	Overhead, rotating type
Fuel System	E-Z bleed fuel system
Intake system	Tuned intake silencer for maximum noise reduction
Cooling system	Fresh water-cooled with heat exchanger
Exhaust manifold	Cast aluminum

Standard Equipment	
Standard gear ratio	2.05:1
Mounting centers	11.5", 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 aide	
Control brackets	Throttle and shift
Prewired Engine	
Gear-driven sea water pump	
Lube oil drain hose	
Oil fill	Тор
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		

