



Four cylinder, four cycle smoothness in a lightweight, compact engine

A new generation of marine diesel engines

The Westerbeke 90A Four is rated at 90 Horsepower (67 KW) at 3600 RPM. It is specifically designed for auxiliary sailboats and smaller commercial vessels.

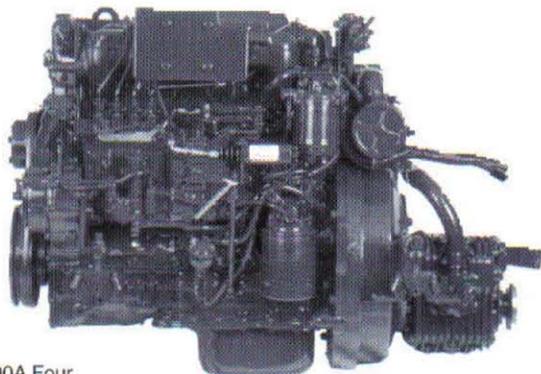
The Westerbeke 90A Four is a state of the art four cylinder, four cycle, naturally aspirated, 3.5 liter engine. A 50 ampere battery charging alternator, domestic hot water heater connections, oil change hose and air intake heater are just a few of the many desirable features that are standard on this engine.

For installation, it is equipped with Westerbeke's new fail safe isolators which have been matched to the engine for optimum vibration control and noise reduction. The mounts are adjustable and have a slotted mounting base for easy alignment of the engine to the propeller shaft.

Many optional accessories are available including large single and dual output battery charging alternators and refrigeration compressor mounts. Factory engineered and factory installed, an owner or builder benefits from these complete and properly designed systems.

The Westerbeke 90A Four is extremely compact with dimensions of 39.4 inches long, 25.3 inches wide and an overall height of 28.5 inches. The total weight of the unit is only 767.7 pounds, a low 8.5 pounds per horsepower.

Parts and service are available worldwide. Westerbeke 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 50 countries worldwide.

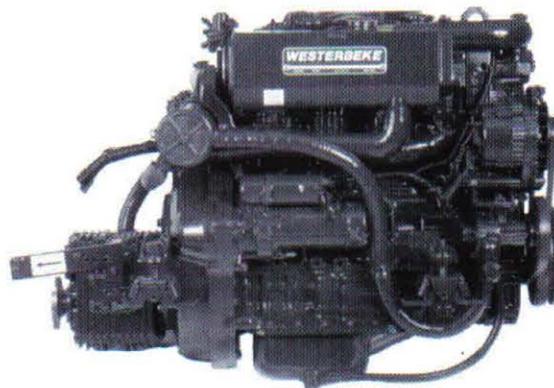


90A Four
Diesel Engine

Dimensions

Length	39.4" (1000.8 mm)
Width	25.3" (642.6 mm)
Height	28.5" (723.9 mm)
Weight	767.7 lbs. (348.2 kilos)

See other side for more dimension information



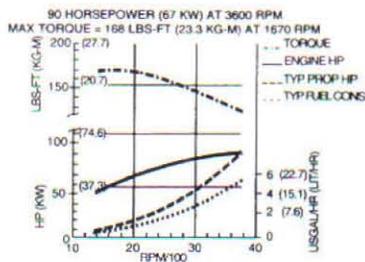
90A Four
Diesel Engine

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- Fresh water cooling
- Engine prewired to plug-in connector
- 12 volt, 50 ampere alternator
- Domestic hot water connection
- Coolant recovery tank
- Throttle and shift control brackets
- Low oil pressure and high water temperature alarms
- Belt-driven sea water pump
- Marine transmission with 2.74:1 reduction
- Transmission oil cooler
- Air intake heater
- Engine matched four point adjustable mounts
- Lube oil drain hose
- Fresh water lube oil cooler
- Circuit breaker protected electrical system
- Operator's Manual and Parts List
- Large list of factory engineered options
- "CE" Mark

Performance Data

Horsepower and rpm
90 hp @
3600 rpm



Westerbeke recommends a propeller that will allow the engine to turn 3500-3600 rpm underway at full throttle.

Specifications

Number of cylinders	4 in-line
Cycles	4
Displacement	210.8 cu. in. (3.5 liter)
Bore and stroke	3.94" x 4.33" (100.1 mm x 110 mm)
Compression ratio	18:1
Maximum angle of installation	Not to exceed 14°
Maximum angle of operation	Not to exceed 25°
Crankshaft, direction of rotation	Counterclockwise as viewed from flywheel end
Propeller shaft, direction of rotation	Right hand – std. trans.
Dry weight	790 lbs (358.3 kilos)
Combustion system	Direct injected
Aspiration	Naturally aspirated
Lubrication system	Forced lubrication by gear pump
Cooling system	8.5 quarts (8.04 liters)
Starting aid	Air intake heater
Engine stop	Electric
Fuel system	Manual bleed, hand primer
Fuel transfer pump	Mechanical
Fuel injection pump	Cam inline with solenoid shut-off
Governor	Centrifugal type
Injectors	Orifice type
Fuel filter	Full flow, spin-on element
Lube oil filter	Full flow, replaceable cartridge
Lubricant capacity	1.85 U.S. gallons (7 liters)
Lube oil cooler	Fresh water cooled
Fuel supply and return piping	1/4" ID (6.35 mm) minimum 3/8" ID (9.53 mm) maximum
Starting motor	12 volt, solenoid, actuated shift
Battery charging alternator	50 ampere (12 volts)
Cold cranking amps	400-600 with intake heater
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 valves
Fuel System	Manual bleeding
Intake system	Tuned intake silencer for maximum noise reduction
Cooling system	Fresh water-cooled with oversized tube and shell type heat exchanger
Exhaust manifold	Cast aluminum, fresh water-cooled with built-in expansion tank

Standard Equipment

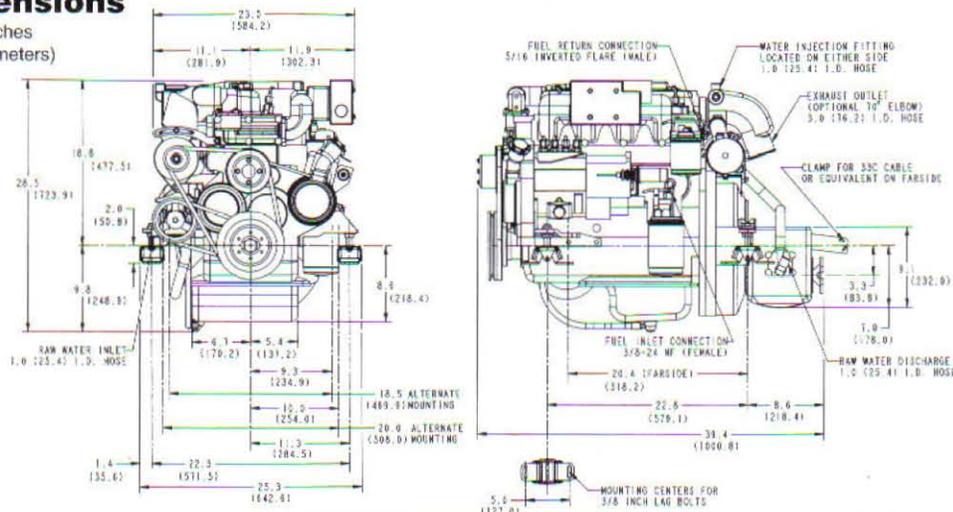
Standard gear ratio	2.74:1
Mounting centers	18.5", 20.0", & 22.5"
Flexible mounts	Engine matched adjustable fail safe neoprene type
Domestic hot water connection	
Coolant recovery tank	
Battery charging alternator	50 amp, 12 volt
Starting aid	
Control brackets	Throttle and shift
Prewired Engine	
Belt-driven sea water pump	
Lube oil cooler in fresh water system	
Lube oil drain hose	
Transmission oil cooler	
Oil fill	Top and side
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/Transmissions	Consult local Distributor
Hydraulic transmissions	Consult local Distributor
Remote expansion tank	
Provisions for refrigeration compressor	
Muffler and fittings	
"A" and "B" on board spare parts kits	
Alternator, 90 amp single output; 135, 160, 190 dual output	
Anti-siphon valve for overboard cooling discharge water	
Technical Manual	
Exhaust connection (water injected 70° elbow)	
Propeller shaft couplings (rigid/flexible) – available standard sizes	

Dimensions

Inches
(millimeters)



Authorized Dealer