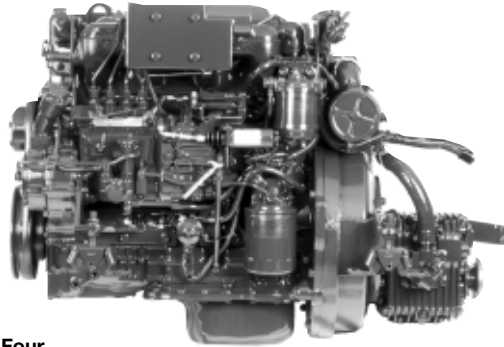
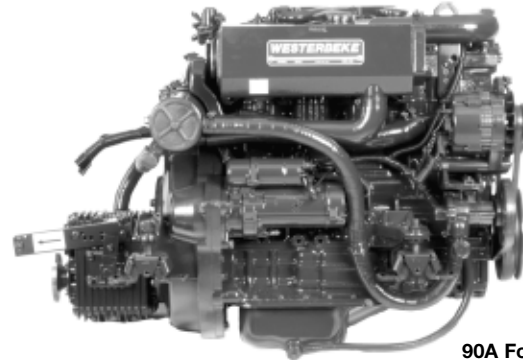




Smooth performance in a low, narrow profile...



90A Four
Diesel Engine



90A Four
Diesel Engine

Smooth, Lightweight and Compact

The 90A Four, rated 90 horsepower at 3600-rpm, has a low and narrow profile for ease of installation. The unit is extremely compact with dimensions of 39.4 inches length, 25.3 inches width and an overall height of 28.5 inches. The total weight of the unit is only 790 pounds, a low 8.8 pounds per horsepower. The 90A Four provides 4-cylinder, four cycle smoothness and is equipped with fail-safe isolators 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.

Powerful and Reliable

The 90A Four is a state of the art, naturally aspirated, 3.5 liter engine. The naturally aspirated design of the 90A Four provides immediate power without the delay associated with turbo charged engines as well as the benefit of simplicity and reliability. For added dependability, the fresh water cooling system and captive, fail-safe mounts are all oversized and an air intake heater is incorporated to assist with cold weather starting.

Easy Operation and Maintenance

In order to minimize engine maintenance, a fresh water cooling system, fresh water lube oil cooler as well as transmission oil cooler are designed to maintain optimum engine operating temperatures. Easy access to servicing points also provides easy, routine maintenance.

Many Optional Accessories

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 Name You Can Trust

The presence of Westerbeke in over 65 countries around the world provides customers with easy access to parts, service and technical support worldwide. Established in 1937, Westerbeke is committed to providing its customers with quality products and unequaled after sales support.

Standard Features

- Engine pre-wired to plug-in connector
- Circuit breaker protected electrical system
- Belt-driven, raw water pump
- Fresh water cooled engine
- Fresh water lube oil cooler
- Transmission oil cooler
- 12 volt, 50 amp alternator
- Domestic hot water connection
- Coolant recovery tank
- Throttle, stop, and shift control brackets
- Low oil pressure and high water temperature alarms
- Marine transmission with 2.7:1 reduction
- Air intake heater
- Engine matched four-point, fail-safe, adjustable mounts
- Lube oil drain hose
- Tuned air intake silencer
- Operators' manual and parts list
- "CE" mark
- Large list of factory engineered options



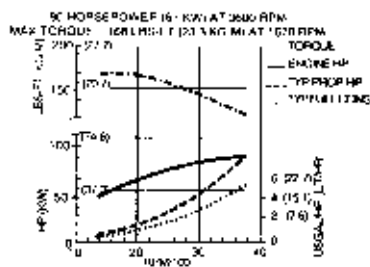
Optional Admiral Panel

Admiral Panel Dimensions

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

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	767.7 lbs (348.2 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 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 bleed, hand primer
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

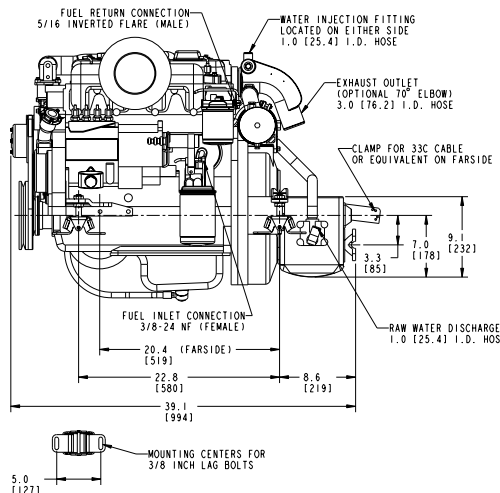
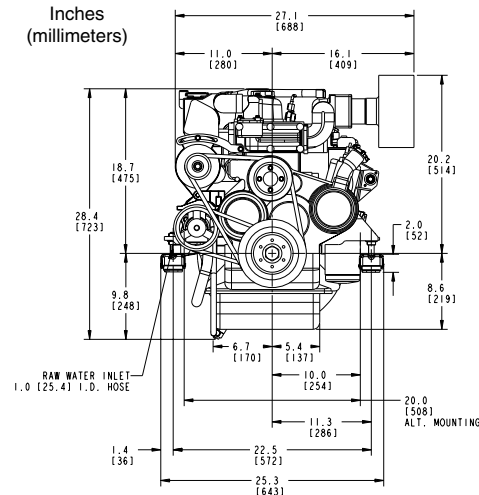
Standard Equipment

Standard gear ratio	2.74:1
Mounting centers	20.0" and 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 aide	
Control brackets	Throttle and shift
Prewired Engine	
Belt-driven raw 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	
Operators' 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



Authorized Dealer