

# PowerTech™ Plus

## 6090HF485 Diesel Engine

Industrial Auxiliary Engine with US EPA Marine Tier 3 Emissions Certification for US Waterways



**JOHN DEERE**

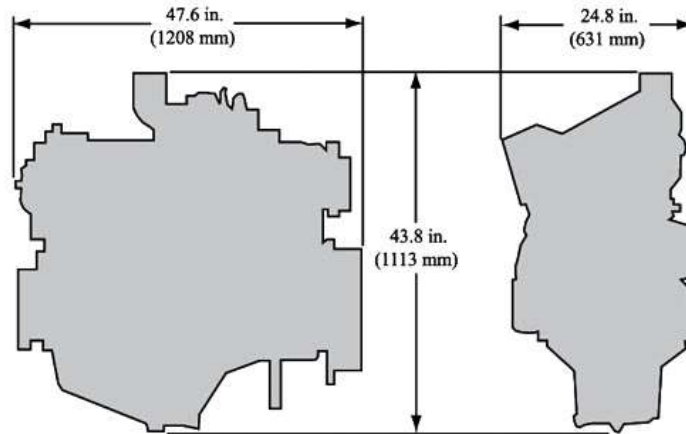


6090H shown

### Certifications

EPA Marine Tier 3

### Engine dimensions



Dimensions may vary according to options selected. Contact your distributor for more information.

### General data

Model	6090HF485	Length – mm (in) to rear of block	1208 (47.6)
Number of cylinders	6	Width – mm (in)	630 (24.8)
Displacement – L (cu in)	9 (549)	Height – mm (in)	1113 (43.8)
Bore and Stroke – mm (in)	118.4 x 136.0 (4.66 x 5.35)	Weight, dry – kg (lb)	901 (1986)
Engine Type	In-line, 4-cycle		
Aspiration	Turbocharged and air-to-air aftercooled		

See your John Deere marine dealer or engine distributor for complete specifications on our full line of auxiliary drive engines.

### Performance Data

Application Ratings	Variable Speed
Rated Power	280 kW (375 hp) @ 2200 rpm
Peak Power	280 kW (375 hp) @ 2200 rpm
Power Bulge	0% @ NA rpm
Peak Torque	1589 Nm (1172 ft-lb) @ 1600 rpm
Torque Rise	31% @ 1600 rpm

## Features and benefits

### 4-Valve Cylinder Head

- The 4-valve cylinder head provides excellent airflow resulting in greater lowspeed torque and better transient response. New 4-valve U-flow head design

### High-Pressure Common-Rail (HPCR) and Engine Control Unit (ECU)

- The HPCR fuel system provides variable common-rail pressure, multiple injections, and higher injection pressures, up to 1600 bar (23,000 psi). It also controls fuel injection timing and provides precise control for the start, duration, and end of the injection

### Cooled Exhaust Gas Recirculation (EGR)

- EGR cools and mixes measured amounts of cooled exhaust gas with incoming fresh air to lower peak combustion temperatures, thereby reducing NOx

### Variable Geometry Turbocharger (VGT)

- Varies exhaust pressure based on load and speed to insure proper EGR flow; greater low-speed torque, quicker transient response, higher peak torque, and best-in-class fuel economy.

### Air-to-Air Aftercooled

- This is the most efficient method of cooling intake air to help reduce engine emissions while maintaining low-speed torque, transient response time, and peak torque. It enables an engine to meet emissions regulations with better fuel economy and the lowest installed costs

### Compact Size

- Horsepower/displacement ratio is best-in-class
- Lower installed cost
- Mounting points are the same as Tier 2/Stage II engine models

### John Deere Electronic Engine Controls

- Electronic engine controls monitor critical engine functions, providing warning and/or shutdown to prevent costly engine repairs and eliminate the need for add-on governing components all lowering total installed costs. Snapshot diagnostic data that can be retrieved using commonly available diagnostic service tools
- Controls utilize new common wiring interface connector for vehicles or available OEM instrumentation packages; new solid conduit and “T” connectors to reduce wiring stress and provide greater durability and improved appearance
- Factory-installed, engine mounted ECU or remote-mounted ECU comes with wiring harness and associated components. Industry- standard SAE J1939 interface communicates with other vehicle systems, eliminating redundant sensors and reducing vehicle installed cost

### Additional Features

- Gear-driven auxiliary drives; 500-hour oil change; self-adjusting poly-vee fan drive; single-piece low friction piston; optional rear PTO; low-pressure fuel system with “auto-prime” feature; directed top-liner cooling