

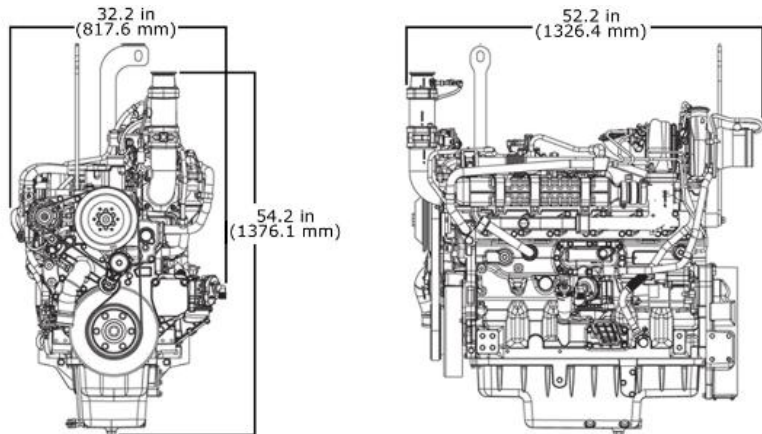
PowerTech™ PVX 6090HFC94 Diesel Engine

Industrial Engine Specifications



6090HFC94 shown

Engine dimensions



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

Emissions

CARB
EPA Interim Tier 4
EU Stage III B

General data

Model	6090HFC94	Length - mm (in)	1326.4 (52.2)
Number of cylinders	6	Width - mm (in)	817.6 (32.2)
Displacement - L (cu in)	9.0 (549)	Height-- mm (in)	1376.1 (54.2)
Bore and Stroke-- mm (in)	118.4 x 136 (4.66 x 5.35)	Weight, dry - kg (lb)	1095.5 (2415)
Compression Ratio	16.0 : 1		
Engine Type	In-line, 4-cycle		
Aspiration	Turbocharged and air-to-air aftercooled		

Performance data range

Application ratings	Continuous
Rated power/Rated speed	186-224 kW(250-300 hp) @2000-2200rpm
Peak power	207-235 kW (278-315 hp) @1700-2000rpm
Power bulge	5-10% @ 1800-2000rpm
Peak torque	1232-1305 N.m (909-963ft-lb) @1500-1600rpm
Torque rise	34-38%

The Industrial Continuous engine power rating is for applications that operate with constant load and speed, except for short periods during startup or shutdown.

Power output is within + or - 5% at standard SAE J 1995 and ISO 3046.

DOC/DPF Dimensions

Size	5
Diameter - mm (in)	320.5 (12.6)
Length - mm (in)	891.9 (35.1)
Weight - kg (lb)	NA

See your John Deere Power Systems engine distributor for more information on available filter size options.

Features and Benefits

Engine Performance

- Multiple rated speeds to further reduce noise and improve fuel economy
- Higher level of peak torque
- Optional bower bulge

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

- Varies exhaust pressure based on load and speed to ensure proper EGR flow. The combination of the cooled EGR and VGT provide low-speed torque, quicker transient response, higher-peak torque, and world-class fuel economy.

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 1,975 bar (29,000 psi). One ECU controls the exhaust filter, as well as fuel system and provides precise control for the start, duration, and end of injection.

4-valve cylinder head

- The 4-valve cylinder head provides excellent airflow resulting in greater low-speed torque and better transient response time by utilizing a U-flow design.

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.

Exhaust Filters

- These engines utilize a catalyzed exhaust filter that contains a diesel oxidation catalyst (DOC) and a diesel particulate filter (DPF). The DOC reacts with exhaust gases to reduce carbon monoxide, hydrocarbons, and some particulate matter (PM). The downstream DPF traps and holds the remaining PM. Trapped particles are oxidized within the DPF through a continuous cleaning process called passive regeneration.
- Passive regeneration occurs during normal operating conditions when heat from the exhaust stream and catalysts within the exhaust filter trigger the oxidation of the trapped PM. If passive regeneration cannot be achieved due to low temperature, load, or speed, then PM is removed using active regeneration - an automatic cleaning process controlled by the exhaust temperature management system.

Compact size

- Lower installed cost
- Mounting points are the same as previous engine models

Additional features

- JDLink™ lets you monitor, protect, and maintain your equipment 24/7
- Premium software option integrates with equipment or vehicles to reduce engineering and installation costs
- 500-hour oil change
- Optional factory installed variable-speed fan drive improves fuel economy and reduces noise levels
- Low-pressure fuel system with electrical transfer pump and "auto prime" feature