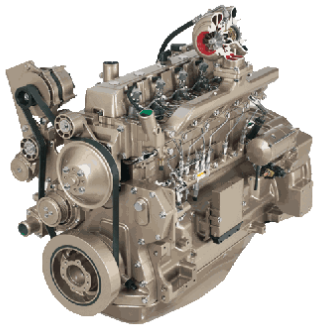
PowerTech ™ E
6068HF285 Diesel Engine

Industrial Engine Specifications

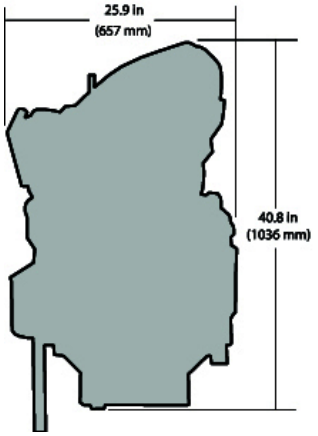


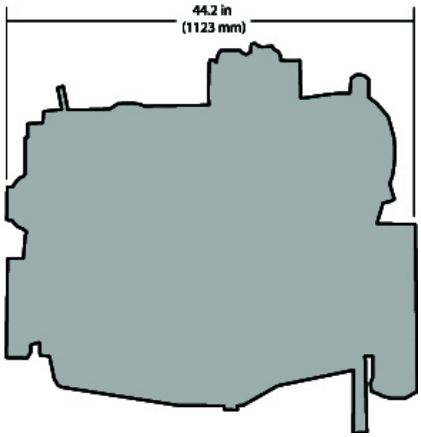
6068HF285 shown

Emissions

CARB
EPA Tier 3
EU Stage III A

Engine dimensions





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

General data

Model	6068HF285
Number of cylinders	6
Displacement - L (cu in)	6.8 (415)
Bore and Stroke-- mm (in)	106 x 127 (4.17 x 5.00)
Compression Ratio	19.0:1
Engine Type	In-line, 4-Cycle
Aspiration	Turbocharged and air-to-air aftercooled

Length - mm (in)	1123 (44.2)
Width - mm (in)	657 (25.9)
Height-- mm (in)	1036 (40.8)
Weight, dry - kg (lb)	608 (1340)

Performance data range

Application ratings	Intermittent	Heavy Duty	Continuous
Rated power/Rated speed	129-149 kW (173-200 hp) @2200-2400rpm	116-129 kW (156-173 hp) @2200-2400rpm	104-116 kW (139-156 hp) @2200-2400rpm
Peak power	132-149 kW (177-200 hp) @2000-2400rpm	124-129 kW (166-173 hp) @2000-2400rpm	111-116 kW (149-156 hp) @2000-2400rpm
Power bulge	0-3% @ 2000rpm	0-7% @ 2000rpm	0-7% @ 2000rpm
Peak torque	714-785 N.m (527-579ft-lb) @1500rpm	667 N.m (492ft-lb) @1500rpm	598 N.m (441ft-lb) @1500rpm
Torque rise	28-32%	30-32%	30-32%

The Industrial Intermittent engine power rating is for applications that operate at varying loads and speeds, and do not fit the Industrial Heavy-Duty rating information.

Some applications require Industrial Heavy-D uty engine power ratings. Please contact your John Deere Power Systems engine distributor for more information.

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.

Features and Benefits

2-Valve Cylinder Head

- Cross flow head design that provides excellent breathing from a lower cost two-valve cylinder head

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

Fixed Geometry Turbocharger

- Fixed geometry turbochargers are sized for a specific power range and optimized to provide excellent performance across the entire torque curve. They are also designed to maximize fuel economy between the engine's rated speed and peak torque.

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

Multiple Injection Strategy

- The new HPCR fuel system and engine control unit (ECU) allow for multiple fuel injections. The number of fuel injections, based on speed and load, help contribute to lower combustion temperatures, which reduce the formation of NOx and particulates. The multiple injection strategy also provides an added benefit of noise reduction

Compact Size

- Mounting points are the same as Tier 2/Stage II engine models

John Deere Electronic Engine Controls

- PowerTech E engines offer electronically controlled fuel systems with improved cold-start performance, precise engine speed control, torque curve shaping and more. Because these systems have less need for redundant sensors, add on electronic governors, and shutdown devices they result in a lower total installed cost.

Additional Features

- Self-adjusting poly-vee fan drive
- Forged-steel connecting rods
- Replaceable wet-type cylinder liners
- Either-side service
- 500-hour oil change
- Gear-driven auxiliary drive

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All values at rated speed and power with standard options unless otherwise noted. Specifications and design subject to change without notice.