

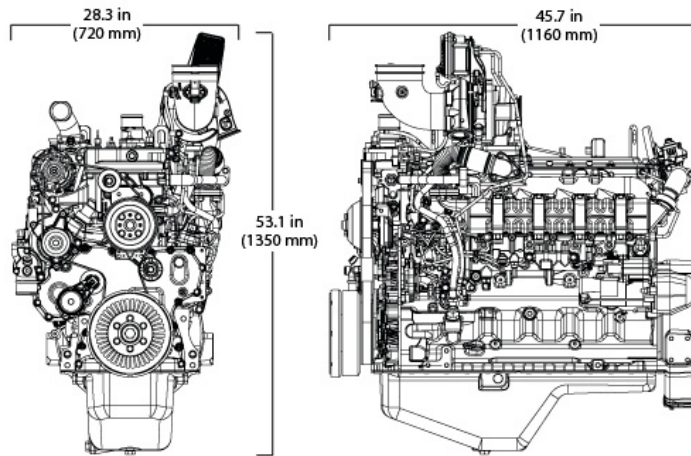
# PowerTech™ PVS 6068HFC08 Diesel Engine

Industrial Engine Specifications



6068HFC08 shown

## Engine dimensions



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

## Certifications

CARB  
EPA Tier 4  
EU Stage IV

## General data

Model	6068HFC08	Length – mm (in)	1160 (45.7)
Number of cylinders	6	Width – mm (in)	720 (28.3)
Displacement – L (cu in)	6.8 (415)	Height – mm (in)	1350 (53.1)
Bore and stroke – mm (in)	106 x 127 (4.2 x 5.0)	Weight, dry – kg (lb)	770 (1698)
Engine type	In-line, 4-cycle		
Aspiration	Turbocharged and air-to-air aftercooled		

## Performance data range

Application ratings	Intermittent	Heavy Duty	Continuous
Rated power/Rated speed	168 – 187 kW (225 – 250 hp) @ 2000-2400 rpm	149 – 168 kW (200 – 225 hp) @ 2000-2400 rpm	138 – 149 kW (185 – 200 hp) @ 2000-2400 rpm
Peak power	178 – 190 kW (239 – 255 hp) @ 1700-2200 rpm	164 – 168 kW (220 – 225 hp) @ 1800-2400 rpm	138 – 152 kW (185 – 204 hp) @ 1800-2400 rpm
Power bulge	0-10% @ 1800-2200 rpm	0 – 10% @ 1800 – 2200 rpm	0 – 10% @ 1800 – 2200 rpm
Peak torque	900 – 1000 N.m (664 – 738 ft-lb) @ 1600 rpm	800 – 963 N.m (590 – 710 ft-lb) @ 1600 rpm	741 – 890 N.m (547 – 656 ft-lb) @ 1600 rpm
Torque rise	12-35%	35%	35%

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 definition.

Some applications require Industrial Heavy-Duty 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.

## Exhaust filter dimensions

Size	4	5
Diameter – mm (in)	320.04 (12.6)	304.8 (12)
Length – mm (in)	635 (25)	906.78 (35.7)
Weight – kg (lb)	30.84 (68)	30.84 (68)

## SCR catalyst dimensions

Size	4	5
Diameter – mm (in)	322.58 (12.7)	360.68 (14.2)
Length – mm (in)	774.7 (30.5)	784.86 (30.9)
Weight – kg (lb)	39.01 (86)	47.17 (104)

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

## Features and benefits

### Variable geometry turbocharger (VGT)

- 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.

### 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.

### 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.

### Selective catalytic reduction (SCR)

- John Deere engines feature an SCR system that utilizes a urea-based additive, sometimes referred to as diesel exhaust fluid (DEF). The ammonia in the urea mixes with engine exhaust gases in the SCR catalyst to reduce NOx — converting it to nitrogen and water vapor.

### High-pressure common-rail (HPCR) and engine control unit (ECU)

- The HPCR fuel system provides variable common-rail pressure and higher injection pressures up to 2,500 bar (36,000 psi). It also controls fuel injection timing 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 cross-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.

### Compact size

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

### Engine performance

- Multiple rated speeds to reduce noise and improve fuel economy, low-speed (1000 rpm) torque similar to Interim Tier 4/Stage III B; optional power bulge equal to or better than Interim Tier 4/Stage III B.

### John Deere electronic engine controls

- Faster engine control unit (ECU) manages both the engine and the aftertreatment system; four times the memory, twice the RAM and double the processing speed; the input/output capability has increased 40%; premium software option integrates with equipment or vehicles to reduce engineering and installation costs.

### Additional features

- Glow plugs; gear-driven auxiliary drives; 500-hour oil change; self-adjusting poly-vee fan drive; optional factory installed variable-speed fan drive improves fuel economy and reduces noise levels; R.H. and L.H. engine-mounted final fuel filters; aluminum piston with integrated oil cooled gallery; low-pressure fuel system with electrical transfer pump and “auto-prime” feature.

**John Deere Power Systems**  
3801 W. Ridgeway Ave.  
PO Box 5100  
Waterloo, IA 50704-5100  
Phone: 800.553.6446  
Fax: 319.292.5075

**John Deere Power Systems**  
**Usine de Saran**  
La Foulonnerie - B.P. 11.13  
45401 Fleury les Aubrais Cedex  
France  
Phone: 33.2.38.82.61.19  
Fax: 33.2.38.82.60.00

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

