



JOHN DEERE

PowerTech™ E

4024H Diesel Engine

Specifications



4024HF Engine shown

General Data

Model	4024HF285	Aspiration	Air-to-Air
Number of cylinders	4	Length-- mm (in)	662 (26.1)
Displacement-- L (cu in)	2.4 (146)	Width-- mm (in)	566 (22.3)
Bore and Stroke-- mm (in)	86 x 105 (3.39 x 4.13)	Height-- mm (in)	772 (30.4)
Compression Ratio	18.2:1	Weight, dry-- kg (lb)	251 (553)
Engine Type	In-line, 4-Cycle		

Rated BHP is the power rating for variable speed and load applications where full power is required intermittently.

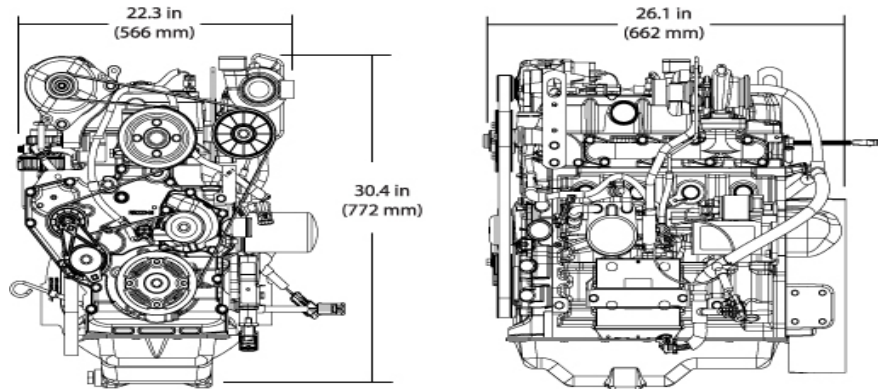
Continuous BHP is the power rating for applications operating under a constant load and speed for long periods of time.

Heavy duty - see application ratings/definitions, engine performance curves. Power output is within + or - 5% at standard SAE J 1995 and ISO 3046.

Certifications

- CARB
- EPA Tier 3
- EU Stage III A

Dimensions



Performance data

Rated Speed

Intermittent 60 kW (80 hp) @ 2800 rpm

Peak power

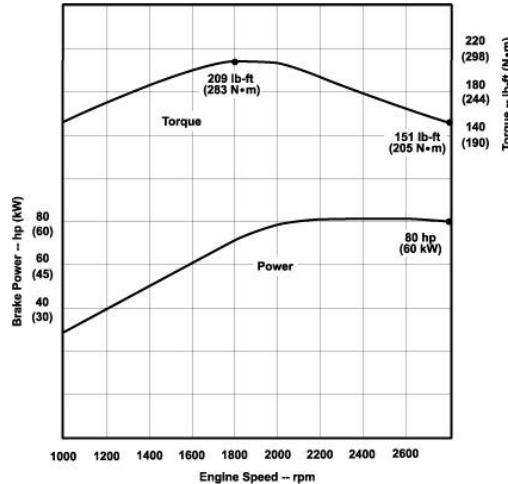
Power bulge % 61 kW (82 hp) @ 2600 rpm

Peak torque

Torque Rise % 283 N-m (209 ft-lb) @ 2000 rpm

38% @ 2000 rpm

Performance curve



Features and Benefits

2-Valve Cylinder Head

- Cross-flow head design provides excellent breathing from a lower-cost 2-valve cylinder head

Electronic Unit Pump (EUP) Fuel System

- Regulated rated speed flexibility and improved cold-start and warm-up control

Fixed Geometry Turbocharger

- Fixed geometry turbochargers are precisely matched to the power level and application

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

- Mounting points for Tier 3/ Stage III A engines are the same as Tier 2/Stage II engines

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

Engine Performance

- Increased low-speed torque
- New higher-peak torque ratings
- Faster torque rise
- Lower-rated speeds available for reduced noise and fuel economy

Additional Features

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



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