PowerTech™

4045SFM85 Diesel Engine
Marine Propulsion Engine Specifications

Dimensions

Emissions

EPA Commercial Marine Tier 3
IMO MARPOL Annex VI Tier II
NRMM (97/68/EC) as amended
Recreational Craft Directive II (2013/53/EU)

General Data (Based on Standard Option Configuration)

<table>
<thead>
<tr>
<th>Model</th>
<th>4045SFM85</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cylinders</td>
<td>4</td>
</tr>
<tr>
<td>Displacement - L (cu in)</td>
<td>4.5 (275)</td>
</tr>
<tr>
<td>Bore and Stroke - mm (in)</td>
<td>107 x 127 (4.21 x 5.00)</td>
</tr>
<tr>
<td>Engine Type</td>
<td>In-line, 4-Cycle</td>
</tr>
<tr>
<td>Aspiration</td>
<td>Turbocharged and air-to-seawater aftercooled</td>
</tr>
</tbody>
</table>

Classification Societies

*SOLAS and other accessories available. Contact your distributor for details.

Dimensions shown in mm (in) may vary according to options selected. Contact your distributor for more information.

Engine Specifications

<table>
<thead>
<tr>
<th>Performance ratings</th>
<th>Power kW (bhp)</th>
<th>Rated Speed (rpm)</th>
<th>Rated fuel consumption L/hr (gal/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M4</td>
<td>205 (275)</td>
<td>2600</td>
<td>54 (14)</td>
</tr>
<tr>
<td>M5</td>
<td>235 (315)</td>
<td>2800</td>
<td>62 (16)</td>
</tr>
</tbody>
</table>
### Features and Benefits

**High Torque and Low Rated RPM**
- High torque provides excellent vessel control and maneuverability. Lower rated propulsion RPM reduces vibration and noise for improved crew comfort.

**Turbocharged with air-to-seawater aftercooling**
- Cooler turbocharger operation enables higher ratings and efficiencies or applications that require high power or speed

**Multiple Service Options**
- Standard front fuel service, optional left-hand or right-hand oil filter options for twinegine applications

**Water-cooled exhaust manifold**
- Integrated components eliminate external hoses and fitting
- Wet exhaust manifold creates a cooler and quieter environment for passengers and crew

**High-pressure Common-rail (HPCR)**
- The HPCR fuel system provides variable common-rail pressure, multiple injections, and higher injection pressures. It also controls fuel injection timing and provides precise control for the start, duration, and end of injection. Electronic transfer pump is self-priming for ease of maintenance. Provides high performance, excellent fuel economy, and low emissions.

**Electronic Engine Control Unit (ECU)**
- Advanced fault code diagnostics and customizable engine protections ensure reliability and uptime. Provides highly customizable features and trim to integrate your vessel.

**Replaceable Cylinder Liners**
- Replaceable wet-type cylinder liners are precision-machined and hardened for long life. Allows engine to be rebuilt to original specifications.

**4-Valve Cylinder Head**
- Excellent airflow through 4-valve cylinder head delivers greater low-speed torque and better transient response time.

**Integrated Heat Exchanger**
- Integrated expansion tank, heat exchanger, and exhaust manifold reduce the chance of leaks. High-capacity heat exchanger provides reliable operation in adverse conditions.

**Internal Balancers**
- Internal balancers reduce engine noise and vibration for crew comfort.

 注: John Deere 4045 engines only.

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