For Harmonious Living with Global Environment

Yanmar, when NOx emissions are reduced, the fuel consumption and smoke generation will decrease, extending the life of the environment and the system. As a solution to this, YANMAR has developed the YANMAR 12AYM-WST engine, which is characterized by super-quality marine propulsion performance. It improves the fuel consumption and smoke generation in addition to reducing NOx emissions.

Reborn V12 power you can rely on, developed from years of experience with the latest technology.

Since the 12A and 16A series engines were made in 1986, Yanmar has been engaged in the development of the world’s largest marine propulsion engines. The 12AYM-WST engine, which is equipped with a new control system and a new engine design, provides outstanding performance in various fields, including the new 12AYM-WST series. The new engine features a new design with the latest technology, ensuring high performance and reliability.

Performance

Good Fuel Economy together with Lower Emissions

The new engine is designed to achieve the lowest possible CO2 emissions. It features a new intake manifold and exhaust system that reduces fuel consumption and emissions. The engine is also equipped with a new exhaust system that reduces fuel consumption, emissions, and noise levels.

Long Stroke

1200 mhp

1400 mhp

Both monotube and multi-tube lubrication oil can be used.

MARINE DIESEL ENGINE

12AYM-WST

Horsepower: 1000 mhp / 1400 mhp / 880 kVA / 1000 mhp

Engine Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>12AYM-WST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>4-stroke, vertical, 12-cylinder, V-type diesel engine</td>
</tr>
<tr>
<td>Number of cylinders</td>
<td>12</td>
</tr>
<tr>
<td>Bore &amp; Stroke</td>
<td>155 mm x 195 mm</td>
</tr>
<tr>
<td>Displacement</td>
<td>12,115 cc</td>
</tr>
<tr>
<td>Maximum power</td>
<td>1000 mhp / 880 kW (at 1500 rpm)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>Width: 2110 mm, Length: 2980 mm, Height: 2200 mm</td>
</tr>
<tr>
<td>Lubricating oil</td>
<td>SAE 30</td>
</tr>
<tr>
<td>Fuel Consumption</td>
<td>234 kg/mhp (41 lb/mhp)</td>
</tr>
<tr>
<td>Dimensions (mm)</td>
<td>Width: 2110, Length: 2980, Height: 2200</td>
</tr>
</tbody>
</table>

Performance Curves

<table>
<thead>
<tr>
<th>Horsepower</th>
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Marine Propulsion Engines

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Yanmar, 2019
YANMAR, Providing Quality Propulsion Engine Packages for Over 60 Years.

High Torque

- Excellent Torque/Speed Characteristics in High Speed and High Load Range Ensure Stable Performance of John Deere even at High Loads.

Wider Propeller (WPS) design margin with further fuel efficiency improvement, extra high power, longer life, etc.

The Engine Performance Gains Following Advantages:
1. The engine has been designed to deliver more torque in the lower RPM range, making it more efficient for various applications.
2. Wider load capacity range (WLR), extra high power, long life, etc.
3. The engine is designed to meet the latest emission standards, ensuring minimal environmental impact.
4. The engine is equipped with advanced features, such as a variable compression ratio system, to optimize performance under various conditions.

Toughness

- YANMAR Original Heavy Duty Fuel Injection Pump (Made by YANMAR Industrial Engine Co., Ltd.)
- Uses a servo pump as a standard option for improved reliability.

Lower Down Time

Easier Routine Inspection, Easier Maintenance,
1. Large machine access is easy on the side of the engine for inspection and maintenance.
2. 3 items of normal maintenance are accessible from the outside of the engine, making maintenance easier.
3. The engine is designed to withstand rough conditions, ensuring longer maintenance intervals.
4. The engine is equipped with a built-in diagnostic system for early detection of any issues.

Techniques for Compliance with IMO Tier II Emission Standards: Exhaust Gas Recirculation (EGR)

In the G47 engine, the standard EGR system is used. This design does not require any additional modifications or external systems, making it a cost-effective solution. The EGR system helps in reducingNOx emissions while maintaining the engine's performance and efficiency. Additionally, the engine is equipped with a standard exhaust gas recirculation system, which further improves emissions performance.

Rubber mounts (option)

- Provides enhanced vibration isolation and reduced noise levels.
- Ensures a smoother and more comfortable ride for operators.