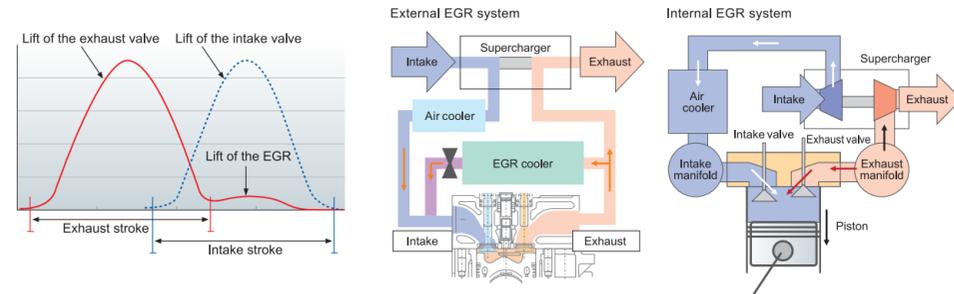


For Harmonious Living with Global Environment

Normally, when NOx emissions are reduced, the fuel consumption and smoke generation will increase, adversely affecting both the environment and management. As a solution to this, YANMAR has developed "Eco Diesel", which is designed so as to comply with marine emission protection. It improves the fuel consumption and smoke generation in addition to reducing NOx emissions.

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

In the 6AY engine, the internal EGR system is used. This design does not require any external control devices or any significant changes to the engine structure. In external EGR, the line of the engine and supercharger must be equipped with devices such as EGR solenoid valves and coolers, and control must be performed for them. But in internal EGR, these functions can be performed by controlling the lift of the intake and exhaust valve.

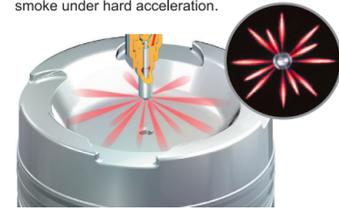


Performance

911hp (670kW) at 1938rpm in the L operating mode
Type Approval testing in the presence of the relevant Classification Societies was preceded, which involved 110% of maximum continuous rating (MCR). 6AYM-WGT was possible to demonstrate operation in the 110% MCR condition.

Good Fuel Economy together with Lower Emissions

The micro-sized multiple holes in the all-new injectors produce an even finer fuel-oil mist and, combined with deep combustion chambers and new cylinder head shapes, produce even more power. It is power delivered smoothly, due to optimum combustion conditions being maintained across a far wider operating range. And it leads directly to the bonus of lower exhaust emissions and lower fuel consumption. The boost compensator dramatically reduces black smoke under hard acceleration.



Staggered Layout Injection System

Both mono-grade and multi-grade lubrication oil can be used.



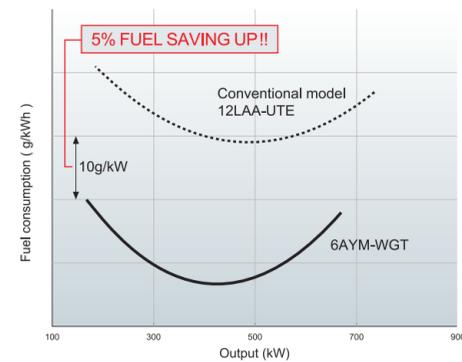
Cost of Saving (5%)
In the case of an engine that consumed 100 liters of fuel per hour.

Annual Operation hour - 3,000hrs

Saving 5 liters / 1hr



Annual saving=15,000 liters
200liters Drum×75

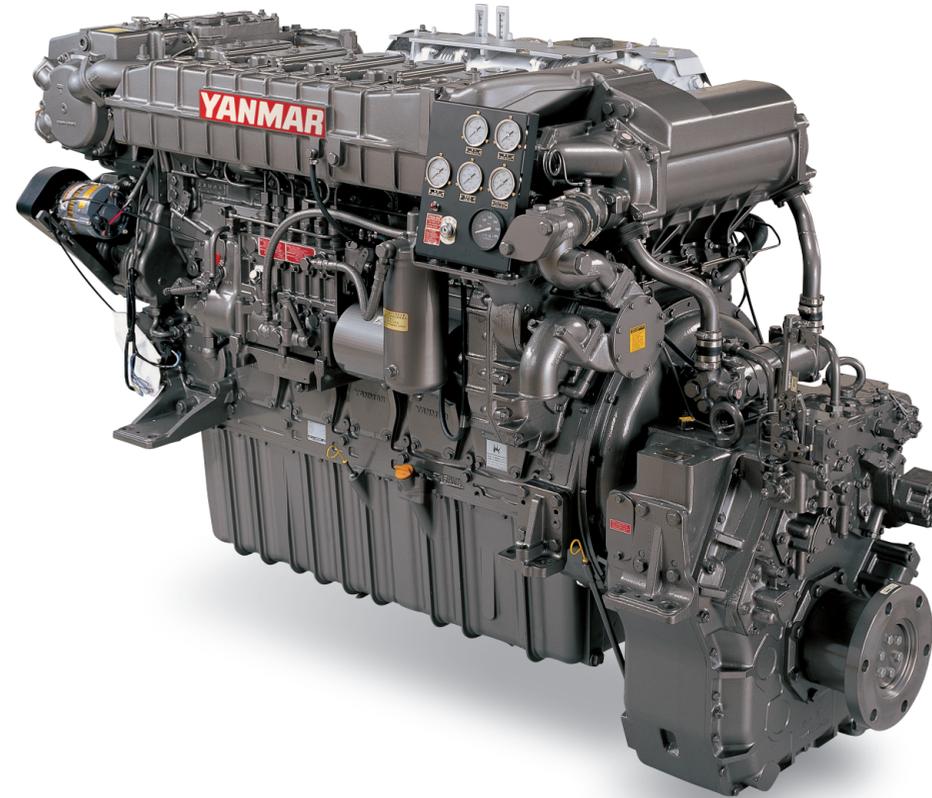


YANMAR

MARINE DIESEL ENGINE

6AYM-WGT

L-rating 670kW [911mhp]



Photograph may show optional equipment.

IMO TierII Compliant
Mechanical Engine Control

911 mhp

**LONG
STROKE**

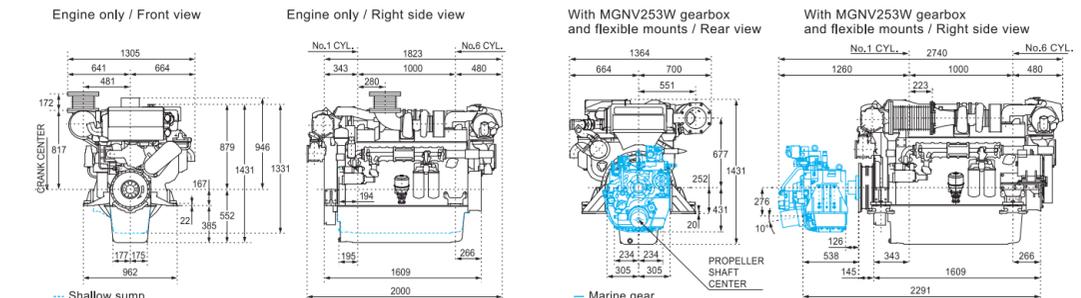
Engine Specifications

Model	6AYM-WGT			
Type	4-cycle, Vertical, Turbo-charged with sea watercooled intercooler diesel engine			
No. of cylinders, Bore × stroke mm	6 in-line, 155 × 180			
Displacement lit.	20.379			
Rated output kW(hp) / min ⁻¹ (rpm)	670 (911) / 1938			
Emission	IMO Tier II			
Fuel consumption gr/kW · hr	208 (at rated output)			
Direction of rotation	Counterclockwise viewed from stern (crankshaft)			
Combustion system	Direct injection			
Cooling system	With Heat exchanger [optional keel cooling]			
Cooling fresh water capacity lit.	60			
Lubricating system	Forced lubrication with gear pump			
Lubricating oil capacity lit.	91			
Lubricating oil grade	SAE40 or SAE15W-40			
Starting system	Electric starting motor (DC 24V-8kW) [optional astarting]			
Flywheel housing size inch	SAE #0 and 18			
Dry weight kg	2365			

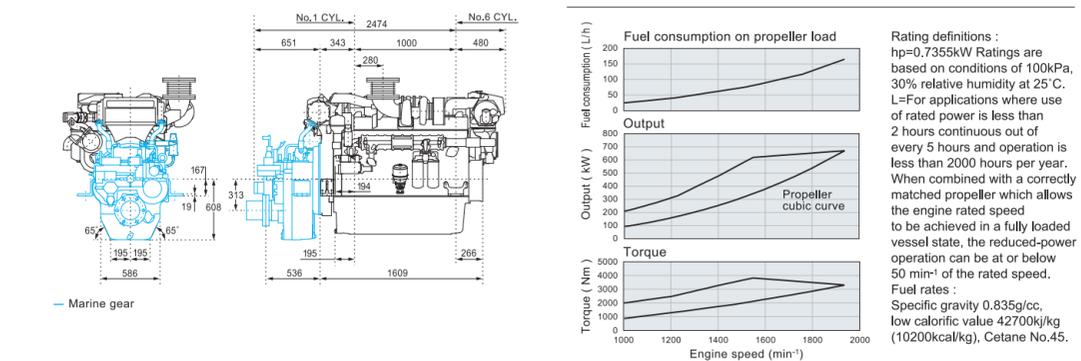
Marine Gear Specifications

Engine Model	6AYM-WGT				
Marine gear model	YXH-240				
Type	Hydraulic multi-disc clutch				
Reduction ratio	1.95	2.27	2.56	3.03	3.48
Direction of rotation	Clockwise or Counterclockwise				
Dry weight kg	645				

Dimensions (Unit : mm)



Performance Curves



Rating definitions :
hp=0.7355kW Ratings are based on conditions of 100kPa, 30% relative humidity at 25 °C.
L=For applications where use of rated power is less than 2 hours continuous out of every 5 hours and operation is less than 2000 hours per year.
When combined with a correctly matched propeller which allows the engine rated speed to be achieved in a fully loaded vessel state, the reduced-power operation can be at or below 50 min⁻¹ of the rated speed.
Fuel rates :
Specific gravity 0.835g/cc, low calorific value 42700kJ/kg (10200kcal/kg), Cetane No.45.

Yanmar Power Solutions Co., Ltd.

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Note : All Data Subject to Change Without Notice.
Please contact Yanmar or local distributor for the details of each model.

