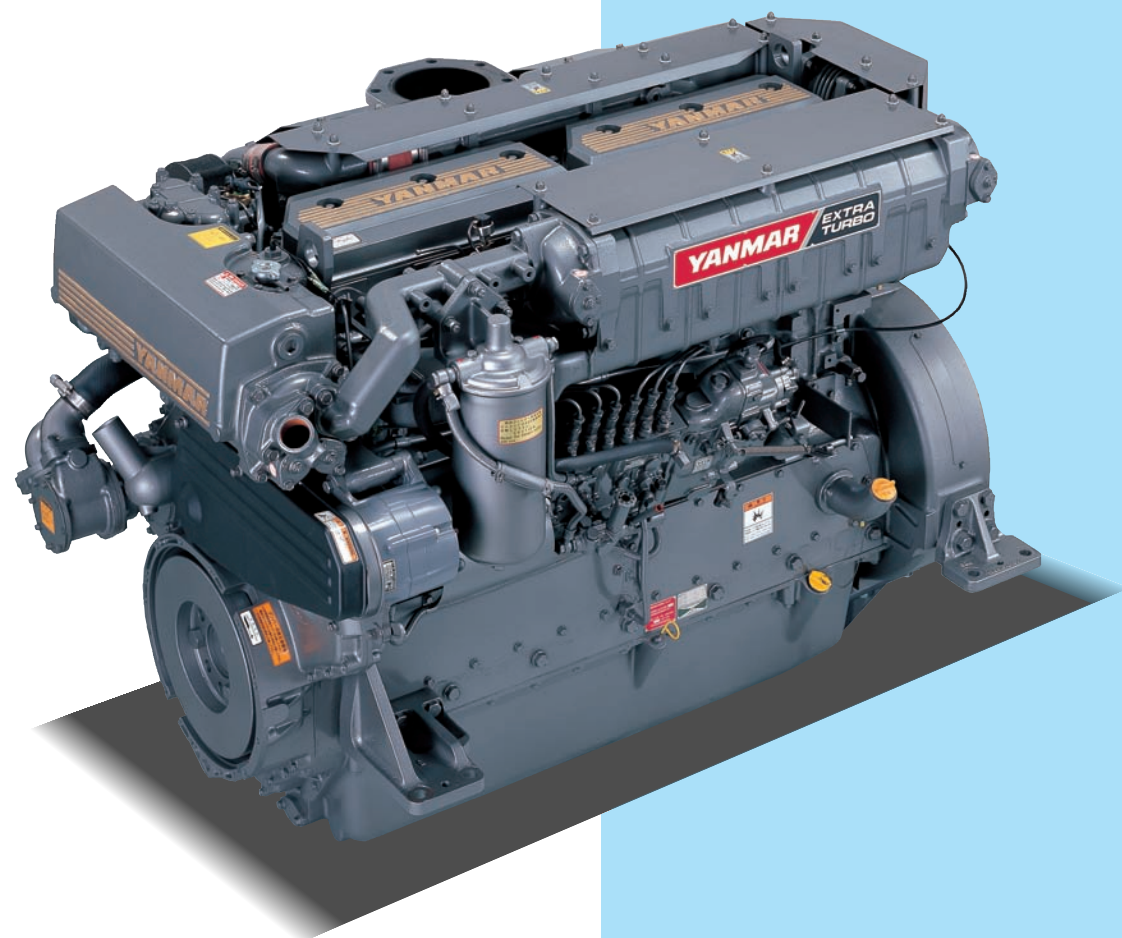


MARINE DIESEL ENGINES



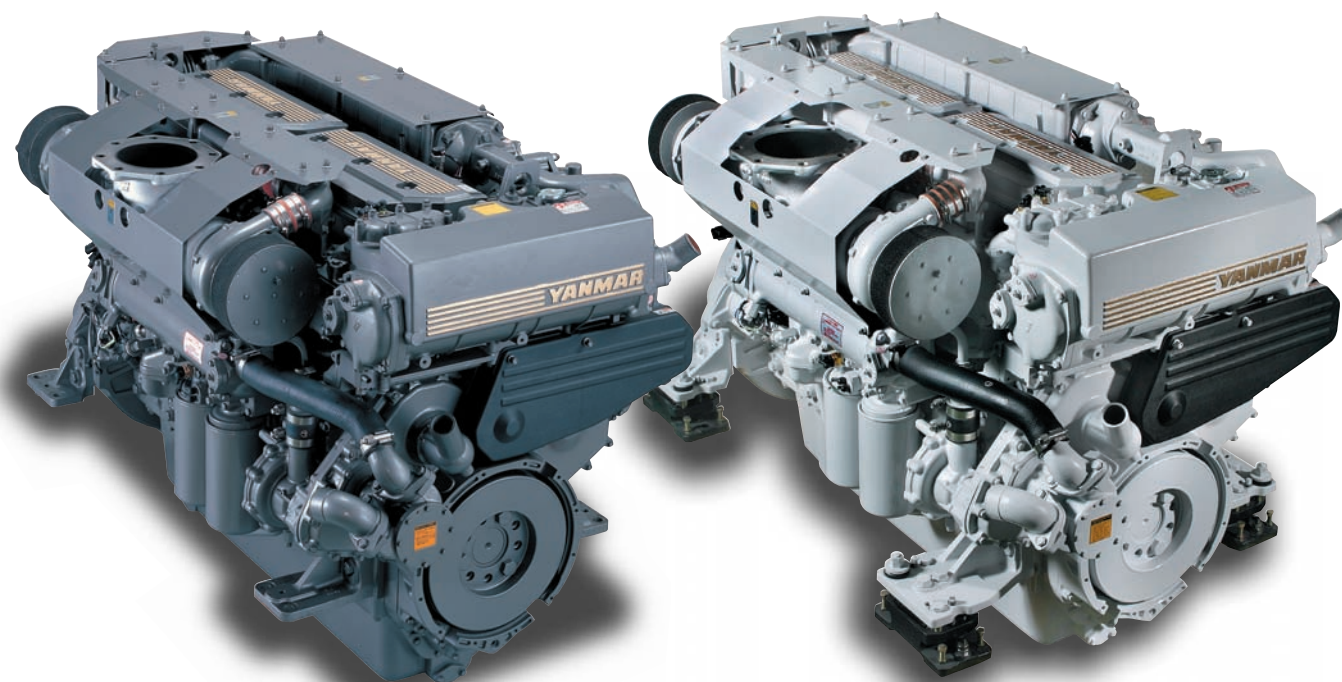
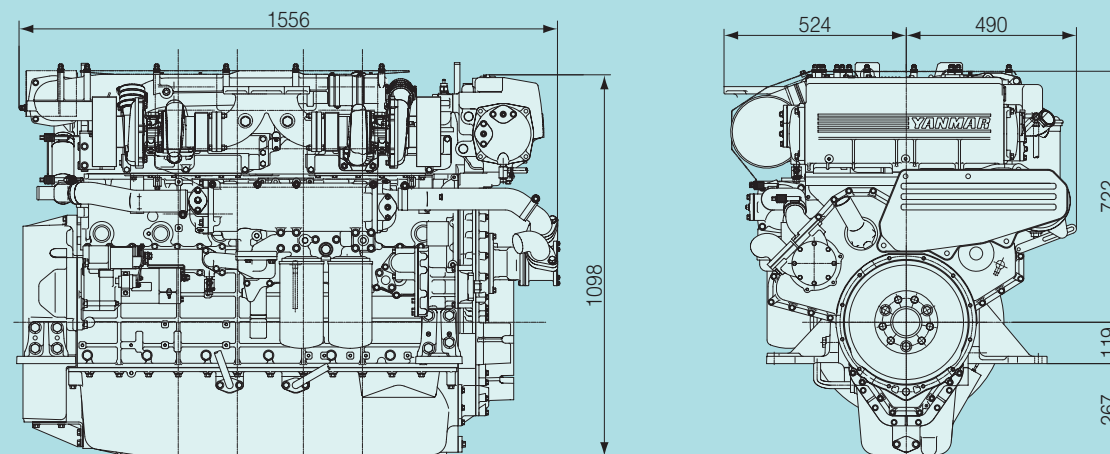
6HYM-ETE
515kW(700mhp)

First Class Power - The Yanmar 6HY



DIMENSIONS

Unit: mm



● Standard

● Optional
(White painting, Flexible mounting)

Note: All data subject to alteration without notice.

YANMAR CO.,LTD.

1-32, Chayamachi, Kita-ku, Osaka 530-8311 JAPAN
<http://www.yanmar.co.jp>

Photograph may show optional equipment.

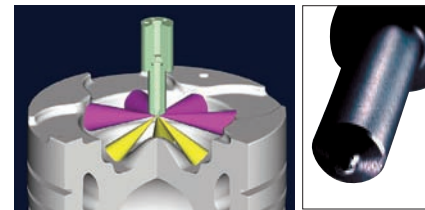
000060A1207 200803 © Printed in JAPAN

First Class Power – The Yanmar 6HY

A Marine Diesel featuring Massive Power.

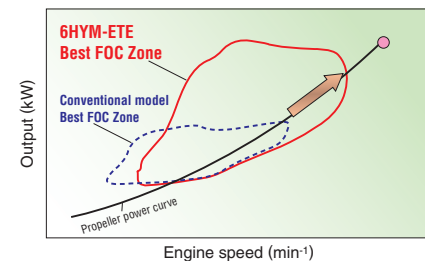
- High thru-put twin turbos, make possible the supply of the ultimate volumes of fuel and air.
- Aiming to achieve the highest levels of fuel economy together with easiest maintenance requirements, this engine seeks to be easier on the environment and easier on the operator.
- A brilliant new high power engine to fill a wide range of needs, from fast fishing boats, to patrol boats, fast ferries etc.

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 new perfectly matched 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.

Good Fuel economy across a wide revolution 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. This engine produces low NOx levels and has been designed with environmental issues in mind. It has cleared the emission regulations of Protocol VI of the International Convention for the Prevention of Pollution from Ships, due to become effective from 2005.

A Tough, Reliable Engine

Toughness and reliability have moved ahead in large steps thanks to the steady progress of technology. Modern technology makes possible the hi-tech iron block and head, the special surface treatment of the cylinder liners, the advanced design of the water cooled manifold—in fact a whole host of new features which add substantially to the overall toughness and reliability of this engine.

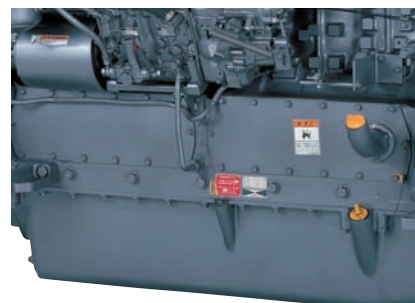
This engine features a stronger cylinder block and cylinder head, stronger head bolt bosses, stronger cylinder liner rack for uniform rack face pressure, stronger main bearing caps. Cylinder wear and lube oil consumption are both reduced by the specially treated cylinder liners, and by the nitrided SUS rings.

DESIGN

Light weight, compact with a flat top and a low profile, the installation of this large capacity, high power engine is now possible in smaller vessels.

SAFETY

Easier Routine Inspection, Easier Maintenance.



Large inspection windows on the side of the block allow in-site replacement of pistons. Lube Oil filter is easy-to-replace cartridge type. Full mechanical engine management avoids the chance of delicate and expensive electronics failing in hot, marine engine room conditions. Maintenance is simplified, inspection and replacement costs are lower. Reliability and durability are enhanced. Engine is user-friendly.

ENGINE SPECIFICATIONS

Model		6HYM-ETE	
Type		4-cycle, vertical, turbo-charged diesel engine	
Number of cylinders		6 in-line	
Bore x stroke		mm 132.9 x 165	
Displacement		lit. 13.733	
Rated output	S	kW(hp)/min-1	515 (700)/2200 at flywheel
	L	kW(hp)/min-1	478 (650)/2150 at flywheel
	M	kW(hp)/min-1	441 (600)/2100 at flywheel
Fuel consumption	S	g/kW-h	211 (at rated output)
	L	g/kW-h	209 (at rated output)
	M	g/kW-h	206 (at rated output)
Direction of rotation		Counter-clockwise viewed from stern	
Combustion system		Direct injection	
Governor		Mechanical	
Cooling system		Constant high temperature cooling system	
Volume of cooling fresh water		lit.	40 (cooler & jacket)
Lubricating system		Wet sump system, forced lubrication by gear pump	
Lubricating oil capacity		lit.	36 (oil pan) / 10 (engine piping)
Dry mass		kg	1385 (without marine gear)
Starting motor		DC24V-6.0kW	
Alternator		DC24V-35A	
Dimensions (L x W x H)		mm 1556 x 1014 x 1133	

S = For applications where use of rated power is less than 30 minutes continuous and operation in less than 1000 hours per year.

L = For applications where use of rated power is less than 2 hours continuous and operation in less than 2000 hours per year.

M = For applications where use of rated power is less than 10 hours continuous and operation in less than 3000 hours per year.

1hp=0.7355kW Rating are based on conditions of 100 kPa, 30% relative humidity at 25°.

Fuel rates: Specific gravity 0.835g/cc, Low calorific value 42700kJ/kg (10200 kcal/kg), Cetane No.45, Fuel consumption has a tolerance of +5%

PERFORMANCE

700hp(515kW) at 2200rpm in the S operating mode.

This 165mm long stroker 13.7 liter class diesel, with big breathing valves for better airflow, the hi performance small twin turbos for compactness, less turbo lag, and better mixing at low revs, the all-new high efficiency intercooler for cooler, more compact air charging, and the numerous other performance features deliver power in large amounts over a wide operating range, especially under high load conditions.

600hp(441kW) at 2100rpm in the M operating mode.

For users who require engines to run full throttle for up to 10 hours, this lower tune version will work hard in conditions demanding almost daily use (see performance chart).

Astonishing Accelerating

This large capacity engine will deliver smooth acceleration starting way down low and extending all the way up the rev range.

PERFORMANCE CURVES

