

# MARINE DIESEL ENGINES



## 6HYM-ETE 368kW(500mhp)

### 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.

#### Performance

##### 500hp(368kW) in high load 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.

#### Astonishing Accelerating

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

#### 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. 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 International Convention for the Prevention of pollution from Ships, due to become effective from 2005.

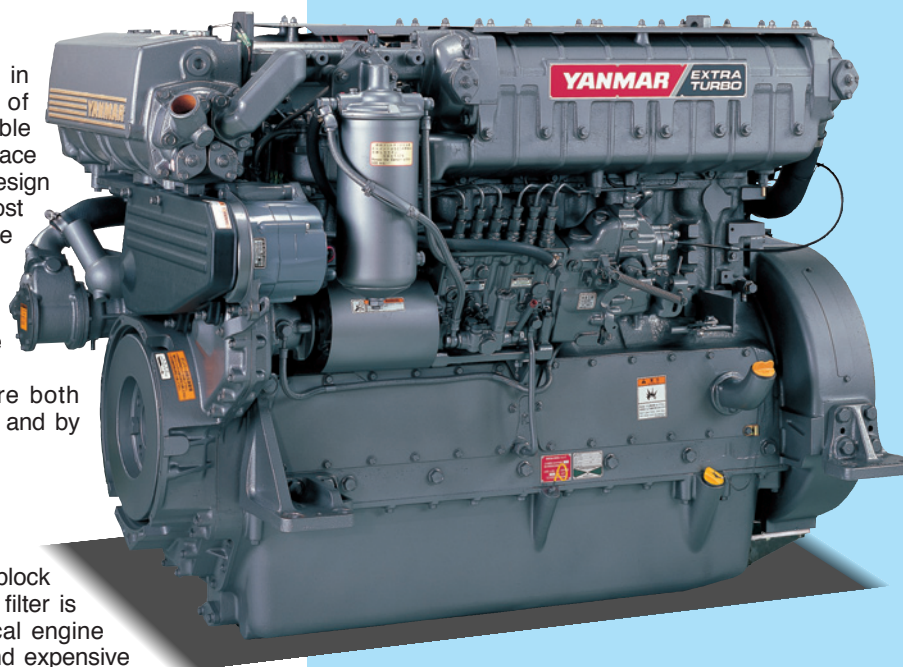
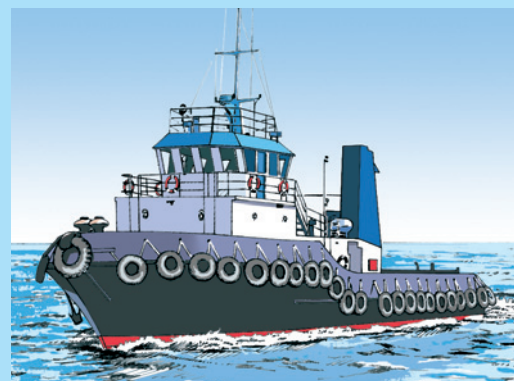
#### A Tough, Reliable Engine

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 special treated cylinder liners, and by the nitrided SUS rings.

#### Safety

##### Easier Routine Inspection, Easier Maintenance.

Large inspection windows on the side of the block allow in-situ 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.

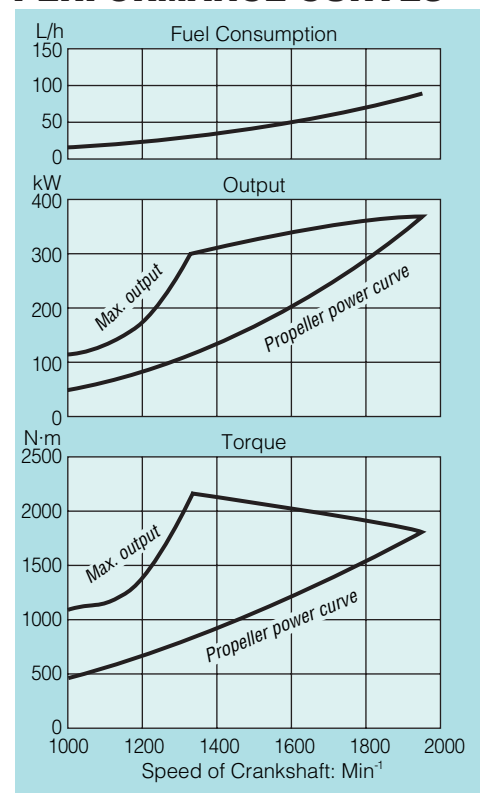


## ENGINE SPECIFICATIONS

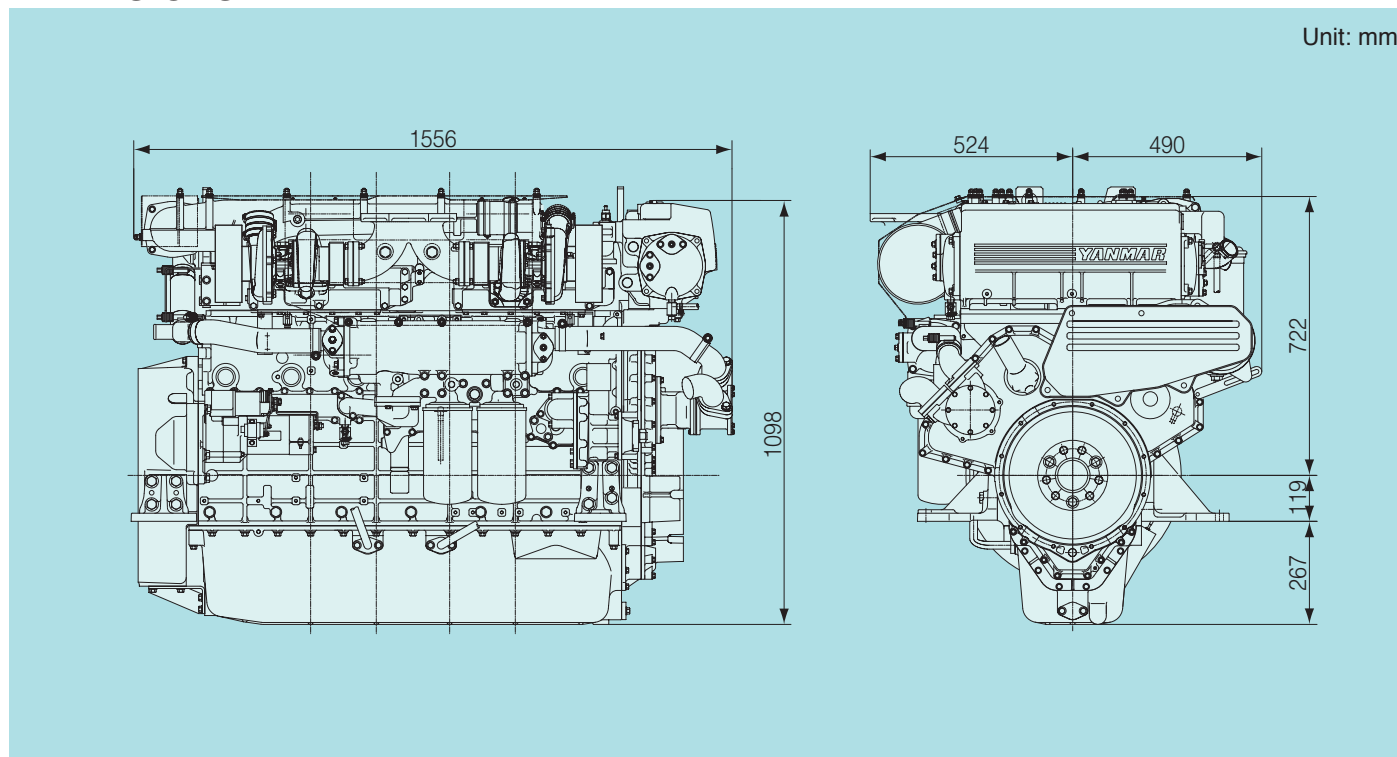
Model	<b>6HYM-ETE</b>	
Type	4-cycle, vertical, turbo-charged diesel engine	
Number of cylinders	6 in-line	
Bore x stroke	mm	132.9 x 165
Displacement	lit.	13.733
Rated output	kW(hp)/min <sup>-1</sup>	368 (500)/1950 at flywheel
Fuel consumption	g/kW-h	201 (at rated output)
Direction of rotation	Counter-clockwise 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

1hp≐0.7355kW Rating are based on condition of 100 kPa, 30% relative humidity at 25°. Fuel rates: Specific gravity 0.835g/cc, Low calorific value 42700kj/kg (10200 kcal/kg), Centane No.45, Fuel consumption has a tolerance of +5%

## PERFORMANCE CURVES



## DIMENSIONS



Note: All data subject to alteration without notice.

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