



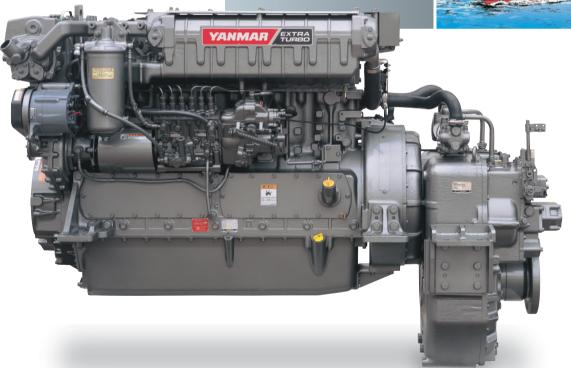
# 6HYM-WET H-rating 368kW [ 500mhp ]





Reliability,
Efficiency, Innovation
for Customers
Dedicated to
Maritime Activities





Photograph may show optional equipment.

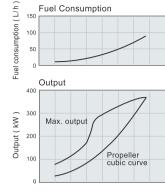
#### **Engine Specifications**

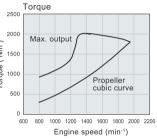
| Model                 |            | 6HYM-WET   |
|-----------------------|------------|--|
| Туре                  |            | 4-cycle, Vertical, Turbo-charged diesel engine         |
| No. of cylinders      |            | 6 in-line  |
| Bore × stroke         | mm         | 132.9 ×165   |
| Displacement          | lit.       | 13.733   |
| Ratedoutput           | kW(hp)/rpm | 368 (500) / 1950                                       |
| Fuel consumption      | gr/kW·hr   | 203 ( at rated output )                                |
| Direction of rotation |            | Counterclockwise viewed from stern ( crankshaft )      |
| Combustion system     |            | Direct injection                                       |
| Cooling system        |            | Fresh water cooling with sea water & Fresh water pumps |
| Lubricating system    |            | Forced lubrication with gear pump                      |
| Starting system       |            | Electric starting motor ( DC 24V )                     |
| Dry weight            | kg         | 1385   |

## Marine Gear Specifications

| Engine Model                          | 6HYM-WET                      |      |      |         |      |      |  |
|---------------------------------------|-------------------------------|------|------|---------|------|------|--|
| Marine gear model                     | YXH-160                       |      |      | YX-161L |      |      |  |
| Туре                                  | Hydraulic multi-disc clutch   |      |      |         |      |      |  |
| Reduction ratio                       | 1.97                          | 2.46 | 3.05 | 3.65    | 4.08 | 4.55 |  |
| Prop. shaft speed at rated output rpm | 990                           | 793  | 639  | 534     | 480  | 429  |  |
| Direction of rotation                 | Clockwise or Counterclockwise |      |      |         |      |      |  |
| Dry weight kg                         | 390                           |      |      | 620     |      |      |  |

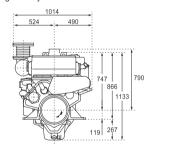
#### Performance Curves

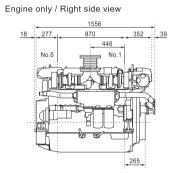


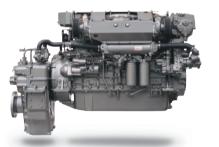


## Dimensions (Unit:mm)

## Engine only / Front view

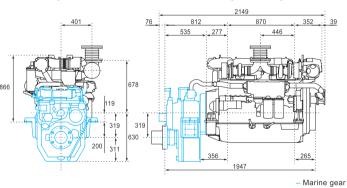






With YX161L gearbox / Rear view

With YX161L gearbox / Right side view





Photograph may show optional equipment.

## YANMAR CO., LTD.

## Marine Operations Division.

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# For Harmonious Living with Global Environment



## **IMO Tier II Compliant**

Lower fuel consumption Lower NOx emissios

Doing Our Bit for the World!



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 environmental protection. It improves the fuel consumption and smoke generation in addition to reducing NOx emissions.



## Powerful and Friendly to People and Environment!

## Performance

#### 500hp (368kW) at 1950rpm in the H operating mode

This 165 mm long stroker 13.7 liter class diesel, with big breathing valves for better airflow, the high performance small twin turbo 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.

#### 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.

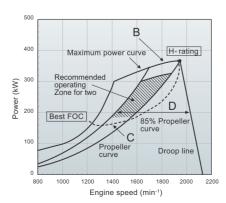
## ■ High Torque

Excellent Torque-Rise Characteristics in High Speed and High Load Range Enable Stable Performance of Job Duties even at High Load

#### The Engine Performance Gives Following Advantages:

- The engine torque-rise characteristics having much in reserve, ( Line A )
   →Stable cruising with least speed reduction against sudden load changes.
- 2. Wide Max. Power Range, (Line B)
- → A wide range propeller matching, from the passenger ship (light/medium duty) to tug boat (heavy duty), is possible
- 3. Min. Fuel Consumption Range is Wide, (Line C)
- → Economical with wide min. fuel consumption range both during cruising or performing job duties.
- 4. Wide Medium Load Range, (Line D)
- → Produces stable engine performance even doing other job duties.





This figure indicate in case of 6HYM-WET ( H-rating )

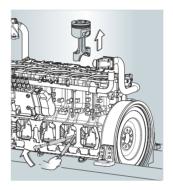
## Toughness

- 1. Designed for marine use
- 2. Type Approved by Class Societies
- 3. Low, stable LOC (Lubricating Oil Consumption) and long overhaul interval.
- 4. Tufftride treatment cylinder liner and nitrided stainless steel rings and the finely judged clearance between piston and liner.
- Special treatment injection nozzle.

## Safety

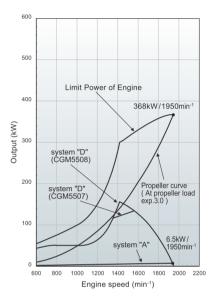
#### Easier Routine Inspection, Easier Maintenance.

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.



## **■** High capacity front PTO

If makes various applications possible, for your professional activities on the sea.



## YANMAR original marine gear that can be adapted to a wide range of applications

YANMAR provides our original gearbox, which enables us to supply total marine engineering & servicing to customers!

#### High-Performance Marine Gear

YANMAR's original marine gear is designed to draw out best performance of YANMAR engines

## **Easier Maintenance**

The 3-part structure of the case enables the forward shaft and reverse shaft to be disassembled and reassembled while still installed on the boat. In addition, a cartridge system is now used for the L.O. filter.

## Large Capacity & Long Service Life

A fiber friction plate delivers improved trolling performance and increased clutch capacity. In addition, a finer LO filter extends the service life of the bearings and moving parts.

## Damping of Fluctuating Torque

High-performance coupling reduces the fluctuating torque that is input to the marine gear. They reduce rattling and prevent torsional vibration to protect the power transmission parts

