

Photograph may show optional equipment.

IMO Tier II Compliant Mechanical Engine Control





Engine Specifications

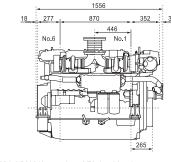
| Model | 6HYM-WET | | | | |
|------------------------------------|---|--|--|--|--|
| Туре | 4-cycle, Vertical, Turbo-charged with sea watercooled intercooler diesel engine | | | | |
| No. of cylinders, Bore × stroke mm | 6 in-line, 132.9×165 | | | | |
| Displacement lit. | 13.733 | | | | |
| Ratedoutput kW(hp)/rpm | 368 (500) / 1950 | | | | |
| Emission | IMO Tier II | | | | |
| Fuel consumption gr/kW · hr | 203 (at rated output) | | | | |
| Direction of rotation | Counterclockwise viewed from stern (crankshaft) | | | | |
| Combustion system | Direct injection | | | | |
| Cooling system | Constant high temperature cooling with Heat exchanger | | | | |
| Cooling fresh water capacity lit. | Engine:40 + Reserve tank:1.5 | | | | |
| Lubricating system | Forced lubrication with gear pump | | | | |
| Lubricating oil capacity lit. | 36 | | | | |
| Lubricating oil grade | SAE30, 40 or SAE15W-40 | | | | |
| Starting system | Electric starting motor (DC 24V) | | | | |
| Flywheel housing size inch | SAE #1, 14 | | | | |
| Dry weight kg | 1385 | | | | |

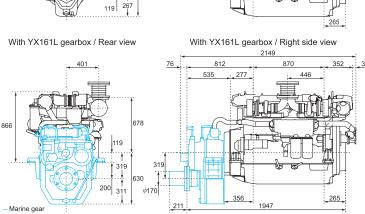
Marine Gear Specifications

| Engine Medel | 6HYM-WET | | | | | | | |
|---------------------------------------|-------------------------------|------|------|---------|------|------|--|--|
| Engine Model | ON Y IVI-VVE I | | | | | | | |
| 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 | | | | |

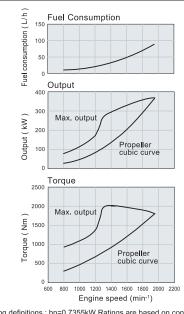
Dimensions (Unit:mm)

Engine only / Front view Engine only / Right side view





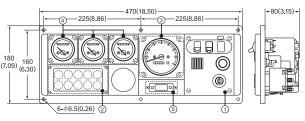




Rating definitions: hp=0.7355kW Ratings are based on conditions of 100kPa, 30% relative humidity at 25°C.
H=For applications where use of rated power is less than 24 hours continuous

and operation is less than 4000 hours per year.
Fuel rates: Specific gravity 0.835g/cc,
low calorific value 42700kj/kg(10200kcal/kg), Cetane No.45.

Detail of instrument panel D-type (Unit:mm)



- 1 Switch unit
- Key switch
- · Alarm buzzer · Alarm buzzer
- stop switch · Illumination
- Clutch oil pressure
- L.O. filter clogged · C.W.level

2 Alarm lamp unit with

· Battery not charging · C.W. high temp.

· L.O. low pressure

- ③ Tachometer unit Alarm monitor device
 - · Tachometer with hour meter

4 Sub meter unit

- · L.O. pressure meter · C.W. temp. meter
- · Boost meter (Turbo)

YANMAR CO., LTD.

Marine Operations Division.

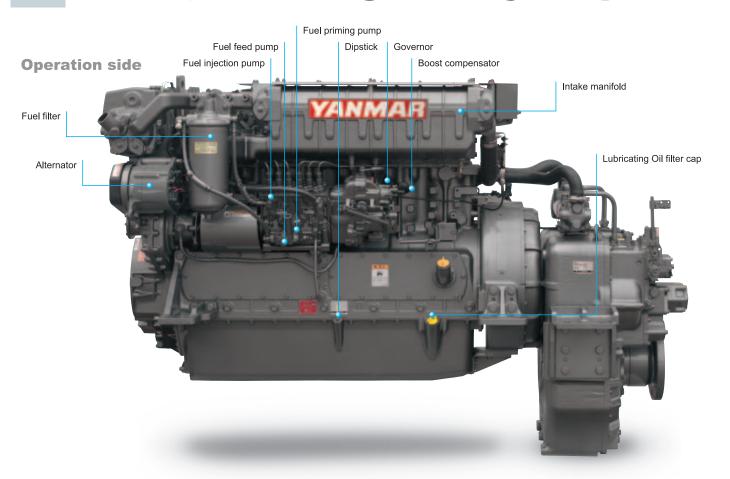
5-3-1,Tsukaguchi Honmachi Amagasaki, Hyogo, Japan Tel: +81-6-6428-3120 Fax: +81-6-6421-2202 www.yanmar.co.jp/en

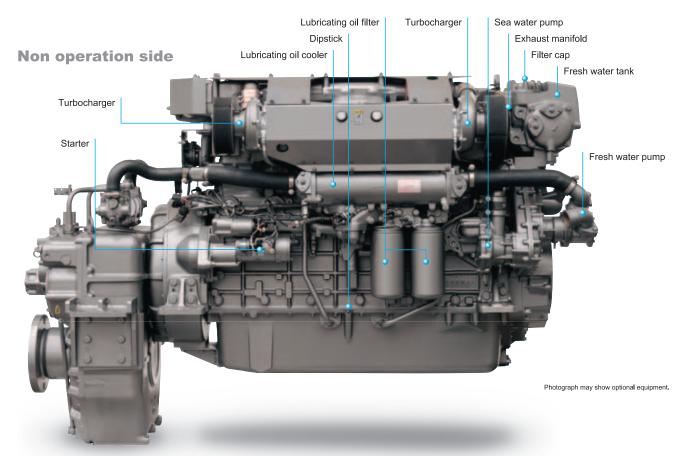
Note: All Data Subject to Change Without Notice.

(5) Clock unit

Clock

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





For Harmonious Living with Global Environment

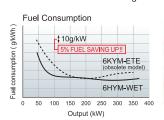
Normally, when NOx emissions are reduced, the fuel consumption and smoke generation will increase, adversely affecting both the environment and management. As a solution to this, YANMAR has developed "Eco Diesel", which is designed so as to comply with marine environmental protection. It improves the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

ECODIESE

Lower fuel consumption

Performance

500hp (368kW) at 1950rpm in the H operating modeThis 165 mm long stroker 14 liter class diesel, with 24 valves, the high performance small twin turbo, less turbo lag, and better mixing at low revs and the all-new high efficiency intercooler for cooler.





Staggered Layout Injection System

Good Fuel Economy together with Lower Emissions

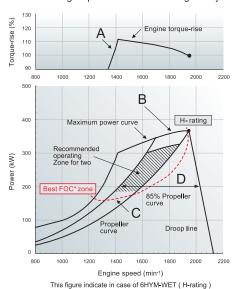
The micro-sized multiple holes in the all-new injectors produce an even finer fuel-oil mist and, combined with new perfectly matched combustion chambers and new cylinder head shapes, produce even more power. It is power delivered smoothly, due to optimum combustion conditions being maintained across 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.
- 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) Best FOC* zone
 →Economical with wide min. fuel consumption range both during cruising or performing job duties. *FOC: Fuel Oil Consumption
- 4. Wide Medium Load Range, (Line D)
- →Produces stable engine performance even doing other job duties.



Toughness

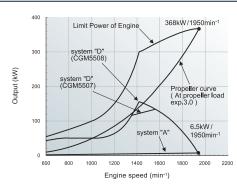
- Low, stable LOC (Lubricating Oil Consumption) and long overhaul interval, thanks to sillicard treatment cylinder liner and nitrided stainless steel rings and the finely judged clearance between piston and liner. No cylinder kit replacement concept in YANMAR overhaul program.
- Purpose built marine engine with long stroke, optimized flywheel weight, water cooled exhaust manifold and special treatment injection nozzle.
- 3. Type Approved by Class Societies.

Lower Down Time

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. 500 hours service interval.

High capacity front PTO



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



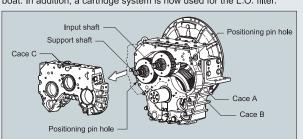
YANMAR provides our original gearbox, which enables us to supply total marine engineering & servicing to customers!

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.



Applied to YXH160 only

Accessories

Optional Trolling Device.

Propeller shaft half coupling (counter frange) supplied as standard.