YANMAR
Solutioneering Together

MARINE DIESEL ENGINE

6CXBM-GT

M-rating 294kW [400mhp] / H-rating 265kW [360mhp]

IMO TierⅡ Compliant
Mechanical Engine Control
SOLAS Option

Photograph may show optional equipment.

360mhp
400mhp

MORE POWER LESS FUEL

Engine Specifications

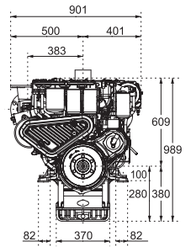
Model	6CXBM-GT	
Type	4-cycle, Vertical, Turbo-charged intercooled diesel engine	
No. of cylinders, Bore × stroke mm	6 in-line, 110×130	
Displacement lit.	7.413	
Ratedoutput kW(hp)/min⁻¹(rpm)	M: 294 (400) /2500	H: 265 (360) /2400
Emission	IMO Tier II	
Fuel consumption gr/kW · hr	M: 210 (at rated output)	H: 209 (at rated output)
Direction of rotation	Counterclockwise viewed from stern (crankshaft)	
Combustion system	Direct injection	
Cooling system	With Heat exchanger	
Cooling fresh water capacity lit.	40.5+3.4 (reservoir tank)	
Lubricating system	Forced lubrication with gear pump	
Lubricating oil capacity lit.	33 (standard sump) / 22 (shallow sump)	
Lubricating oil grade	SAE15W-40	
Starting system	Electric starting motor (DC 24V-5kW)	
Flywheel housing size inch	SAE #3 and 11-1/2	
Dry weight kg	856	

Marine Gear Specifications

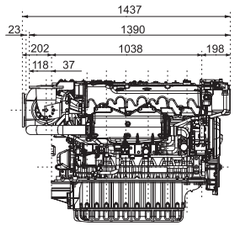
Engine Model	6CXBM-GT					
Marine gear model	YX-75			YXH2-130 (2 speed type)		
Type	Hydraulic multi-disc clutch, wet type					
Reduction ratio	2.07	2.58	2.91	2.03 / 2.62	2.57 / 3.35	3.04 / 4.00
Direction of rotation	Clockwise or Counter-clockwise viewed from stern			Counter-clockwise viewed from stern		
Dry weight kg	204			320		

Dimensions (Unit : mm)

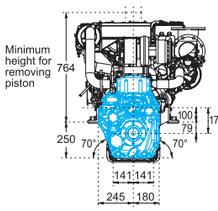
Engine only / Front view



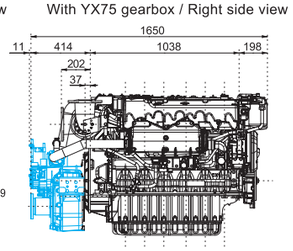
Engine only / Right side view



With YX75 gearbox / Rear view



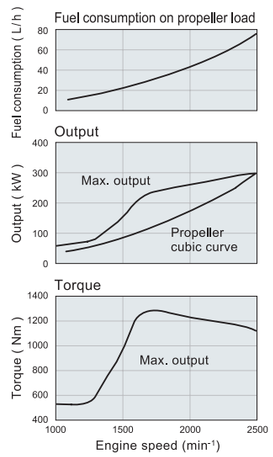
With YX75 gearbox / Right side view



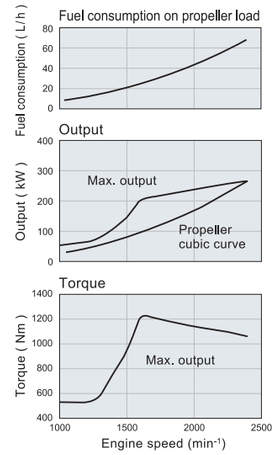
– Marine gear

Performance Curves

6CXBM-GT (M rating)

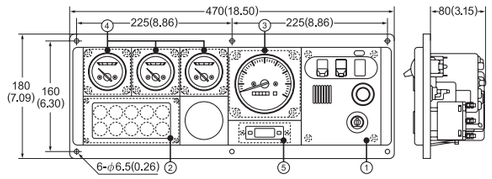


6CXBM-GT (H rating)



Rating definitions : hp=0.7355kW Ratings are based on conditions of 100kPa, 30% relative humidity at 25˚C.
M=For applications where use of rated power is less than 10 hours continuous out of every 16 hours and operation is less than 3000 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 100 rpm of the rated speed.
H=For applications where use of rated power is less than 24 hours continuous out of every 30 hours and operation is less than 4000 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 100 rpm of the rated speed.
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 switch

② Alarm lamp unit with Alarm monitor device
- Battery not charging
- C.W. high temp.
- L.O. low pressure
- Clutch oil pressure
- L.O. filter clogged
- C.W.level

③ Tachometer unit
- Tachometer with hour meter

④ Sub meter unit
- L.O. pressure meter
- C.W. temp. meter
- Boost meter (Turbo)

⑤ Clock unit
- Clock

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Note : All Data Subject to Change Without Notice.

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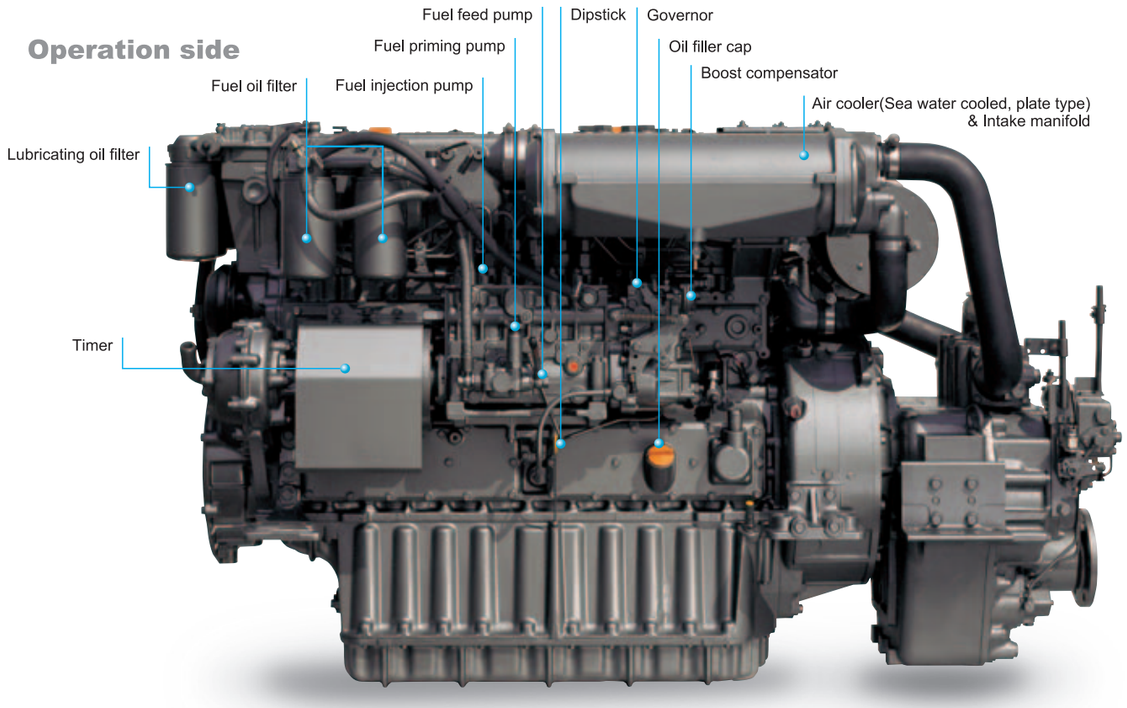
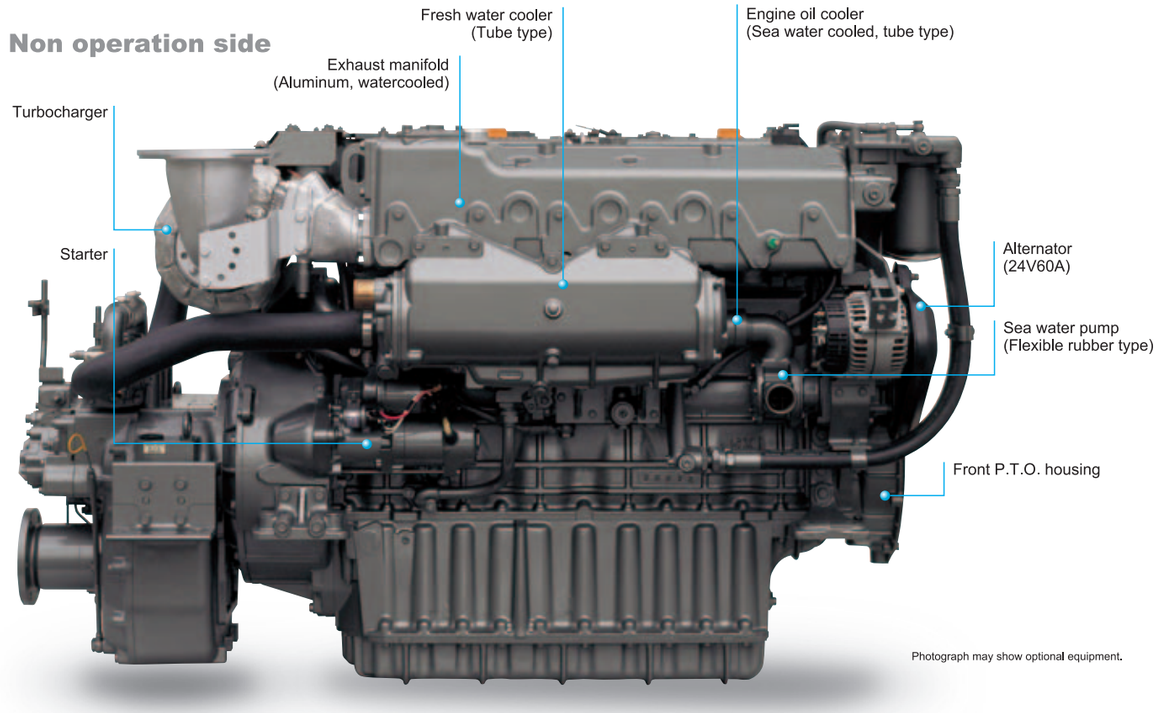
YANMAR, Providing Quality Propulsion Engine Packages for Over 60 Years.





Photograph may show optional equipment.

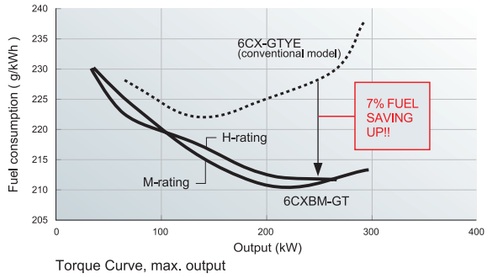
Performance

Good Fuel Economy together with Lower Emissions

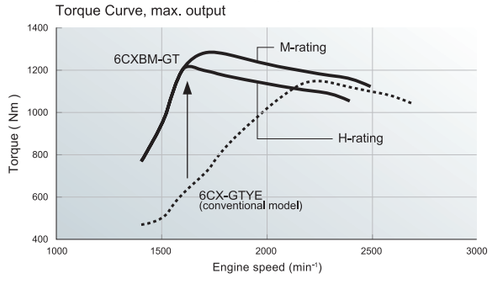
The micro-sized multiple holes in the all-new injectors produce an even finer fuel-oil mist and, combined with new perfectly matched combustion chambers and new cylinder head shapes, produce even more power. It is power delivered smoothly, due to optimum combustion conditions being maintained across 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.

400hp (294kW) at 2500rpm in the M operating mode /
360hp (265kW) at 2400rpm in the H operating mode

Fuel Consumption on propeller load



Torque Curve, max. output

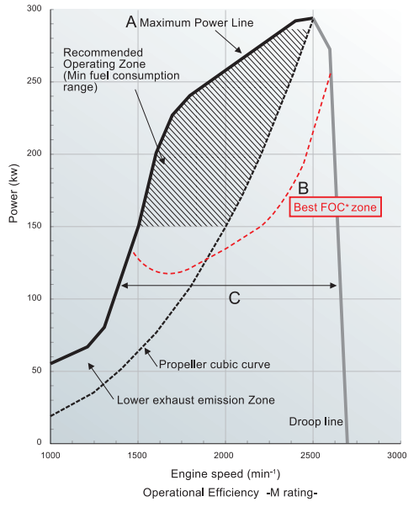


High Torque

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:

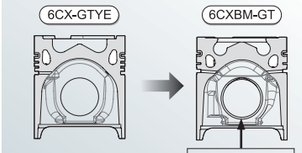
1. The engine torque-rise characteristics having much in reserve,
   →Stable cruising with least speed reduction against sudden load changes.
2. Wide Max. Power Range, (Line A)
   →A wide range propeller matching, from the passenger ship (light/medium duty) to tug boat (heavy duty), is possible.
3. Min.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



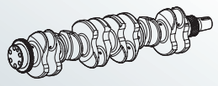
Operational Efficiency -M rating-

Toughness

Purpose built marine engine with replaceable cylinder liners, water cooled exhaust manifold and type approved.



The fatigue strength of piston-pin-boss is improved by using the bush.

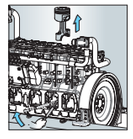


The fatigue strength against cylinder pressure & torsional vibration is improved by raising the pin diameter.

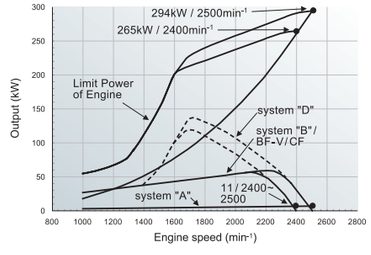
Lower Down Time

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



Take Off Method

A
Belt-driven without an outer bearing

B-1(Pulley-driven)
Front drive shaft equipment without a clutch

BF-V
V-pulley driven with a rubber coupling and outer shat bearing

CF
V-pulley driven with a rubber coupling, steadily rotating V-pulley, and electro-magnetic clutch

D
Shall have the support for bearing at both ends through the intermediary of flexible coupling (CG rubber coupling)

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!

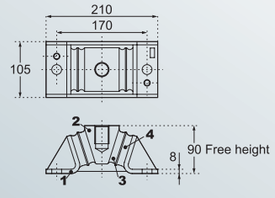
■ **High-Performance Marine Gear**
YANMAR's original marine gear is designed to draw out best performance of YANMAR engines.

■ **Cast iron Gear Case (Applied to YX75)**
For heavy duty applications.

■ **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.

■ **Accessories**
Optional Trolling Device.
Propeller shaft half coupling (counter frange) supplied as standard.

YANMAR original rubber mounts (option)



1- Outside metal fitting
2- Inside metal fitting
3- Rubber
4- Intermediate board

(Kg/cm)	Q'ty	Parts No.
K=900	4	127495-08340