

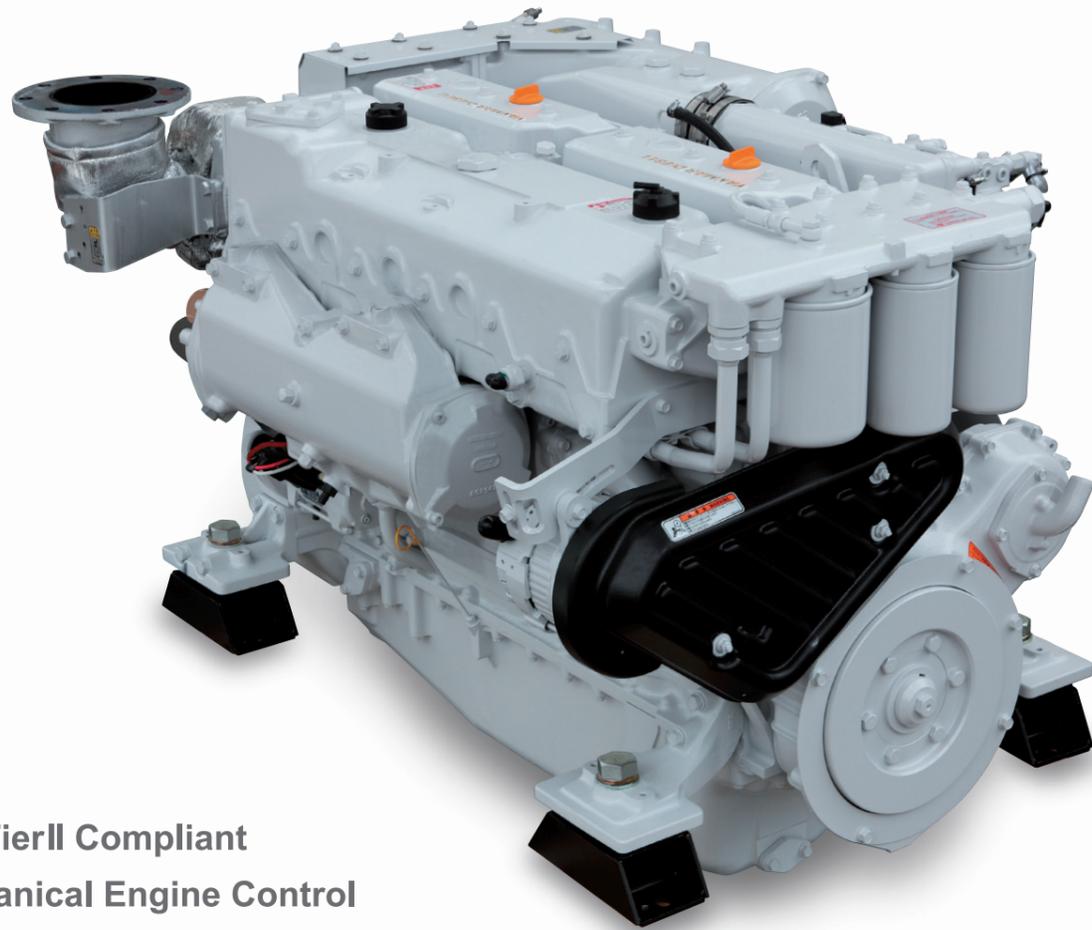


YANMAR

MARINE DIESEL ENGINE

6CXBM-GT

S-rating 374kW [509mhp] (Planing craft Application)
L-rating 341kW [464mhp]



IMO TierII Compliant
Mechanical Engine Control
SOLAS Option

464mhp

509mhp

**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		
Rated output kW(hp) / min ⁻¹ (rpm)	S: 374 (509) / 2700	L: 341 (464) / 2700	
Emission	IMO Tier II		
Fuel consumption gr/kW · hr	S: 212 (at rated output)	L: 211 (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		

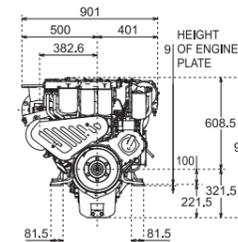
Marine Gear Specifications

Engine Model		6CXBM-GT	
Marine gear model	YX-75		
Type	Hydraulic multi-disc clutch		
Reduction ratio	2.07	2.58	2.91
Direction of rotation	Clockwise or Counter-clockwise viewed from stern		
Dry weight kg	204		

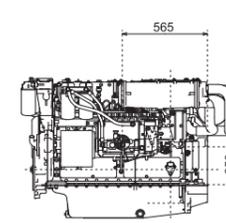
Dimensions (Unit : mm)

with optional shallow oil sump

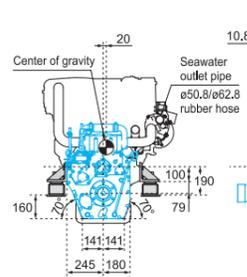
Engine only / Front view



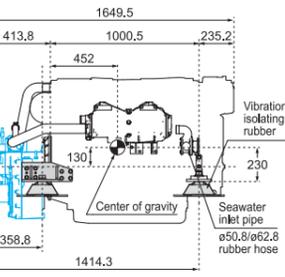
Engine only / Left side view



With YX75 gearbox / Rear view

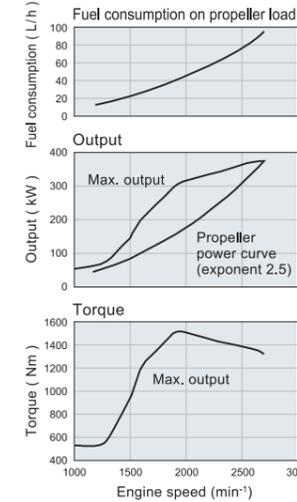


With YX75 gearbox / Right side view

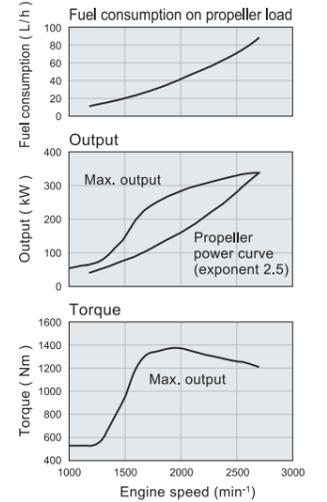


Performance Curves

6CXBM-GT (S rating)

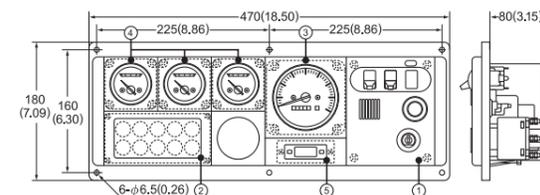


6CXBM-GT (L rating)



Rating definitions : hp=0.7355kW Ratings are based on conditions of 100kPa, 30% relative humidity at 25°C.
S=For applications where use of rated power is less than 30 minutes continuous out of every 90 minutes and operation is less than 1000 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.
L=For applications where use of rated power is less than 2 hours continuous out of every 5 hours and operation is less than 2000 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)



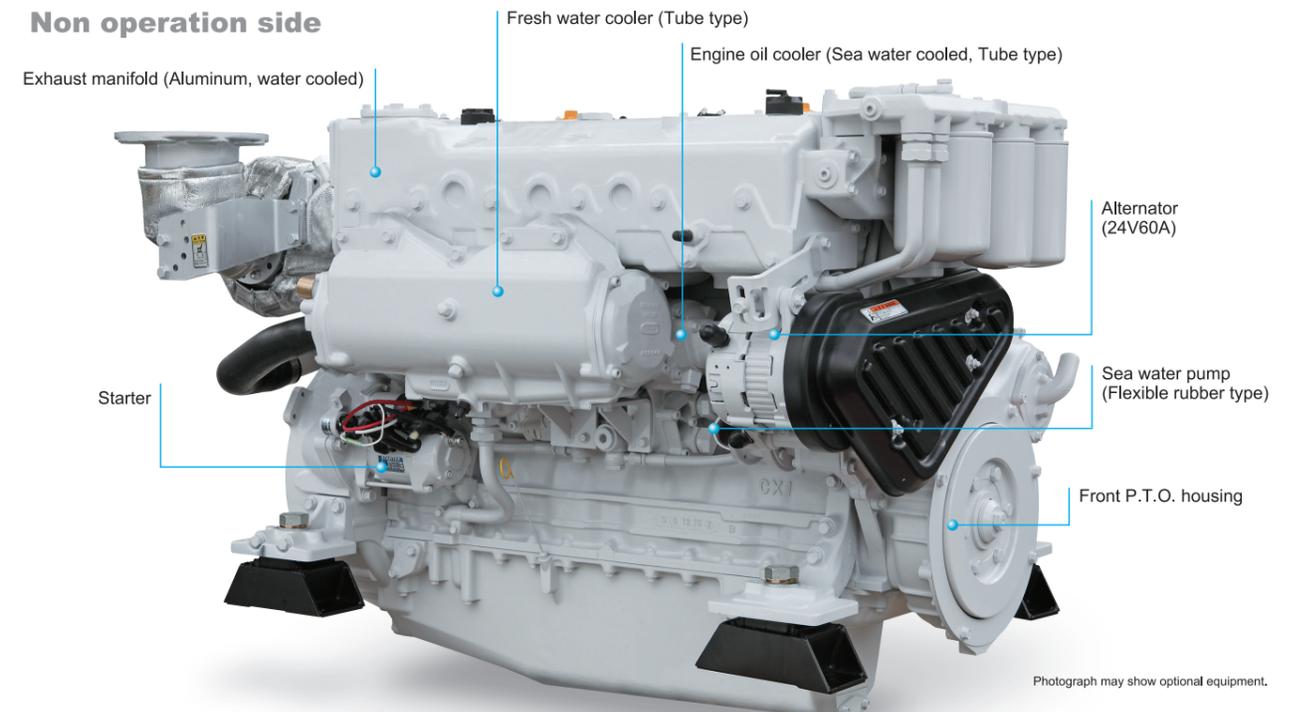
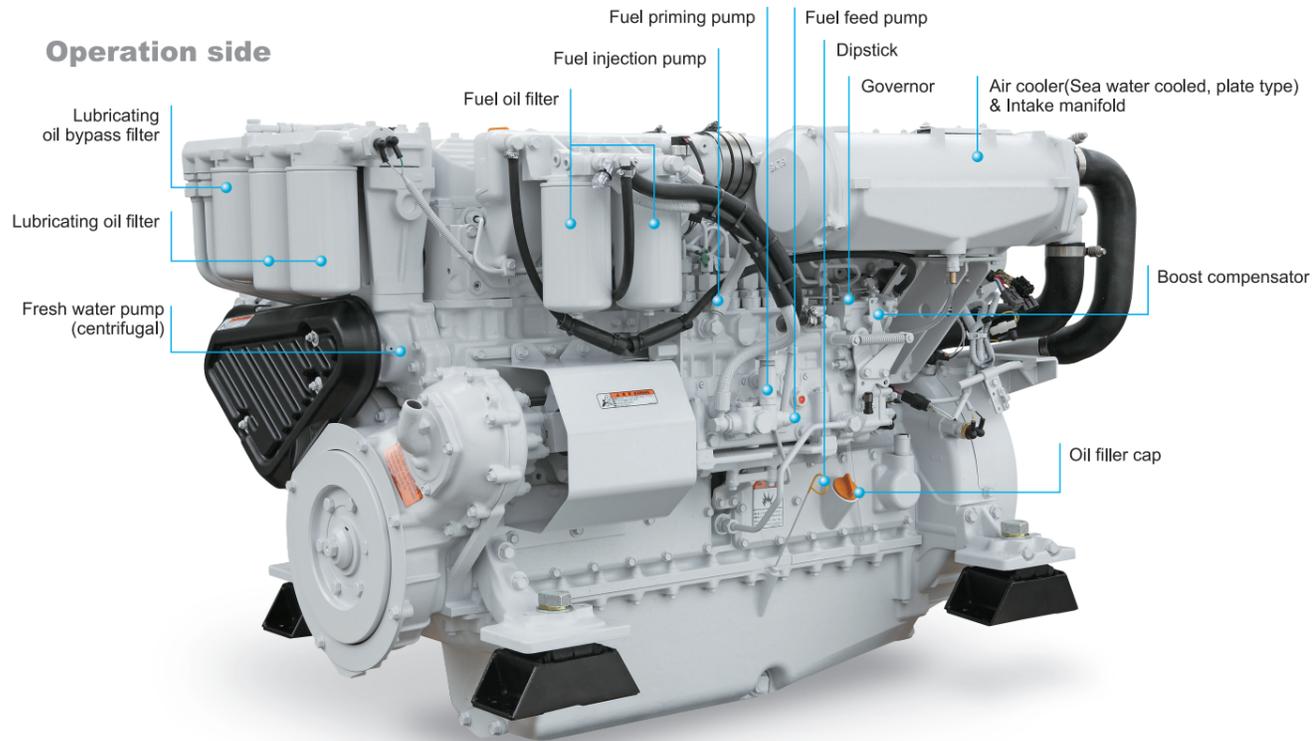
- ① **Switch unit**
 - Key switch
 - Alarm buzzer
 - Alarm buzzer stop switch
 - Illumination switch
- ② **Alarm lamp unit with Alarm monitor device**
 - Battery not charging
 - C.W. high temp.
 - L.O. low pressure
 - Clutch oil pressure
 - L.O. filter clogged
 - C.W.level
- ③ **Tachometer unit**
 - Tachometer with hour meter
- ④ **Sub meter unit**
 - L.O. pressure meter
 - C.W. temp. meter
 - Boost meter (Turbo)
- ⑤ **Clock unit**
 - Clock

Yanmar Power Solutions Co., Ltd.

1-1-1, Nagasu-Higashidori, Amagasaki, Hyogo, Japan
Tel : +81-6489-8069 Fax : +81-6489-1082
yanmar.com

Note : All Data Subject to Change Without Notice.

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

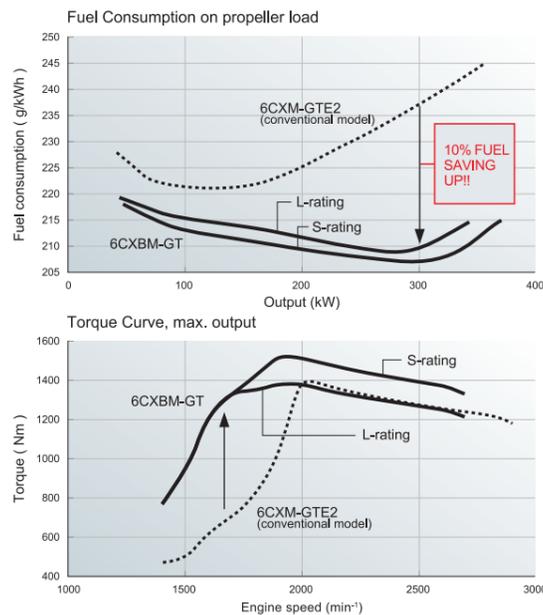


Performance

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.

509hp (374kW) at 2700rpm in the S operating mode / 464hp (341kW) at 2700rpm in the L operating mode

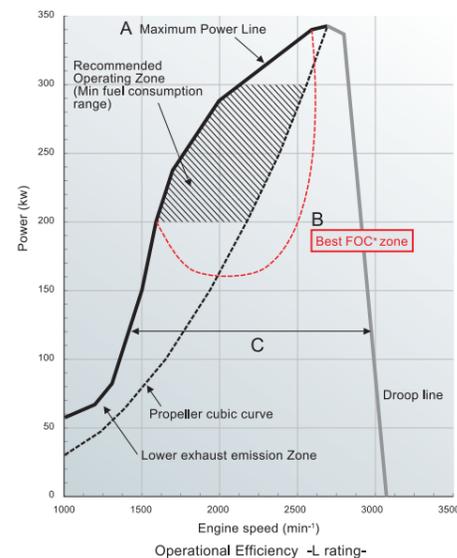


High Torque

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

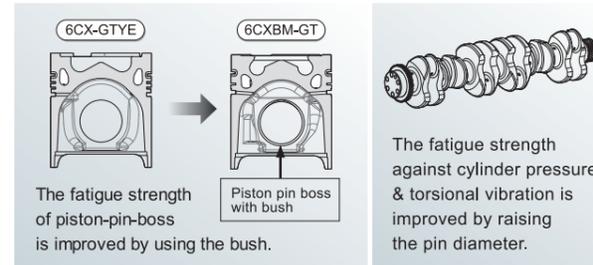
The Engine Performance Gives Following Advantages:

- The engine torque-rise characteristics having much in reserve, → Stable cruising with least speed reduction against sudden load changes.
- 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.
- 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
- Wide Medium Load Range, (Line C) → Produces stable engine performance even doing other job duties.



Toughness

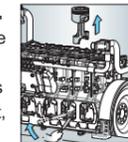
Purpose built marine engine with replaceable cylinder liners, water cooled exhaust manifold and type approved.



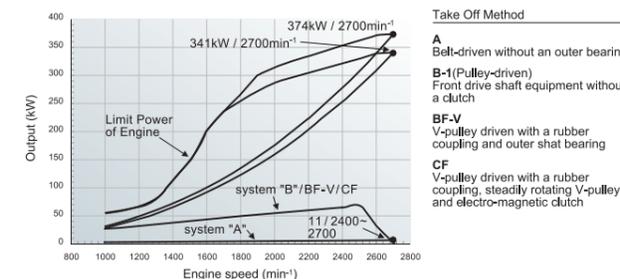
Lower Down Time

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.
- 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 fringe) supplied as standard.

YANMAR original rubber mounts (option)

