

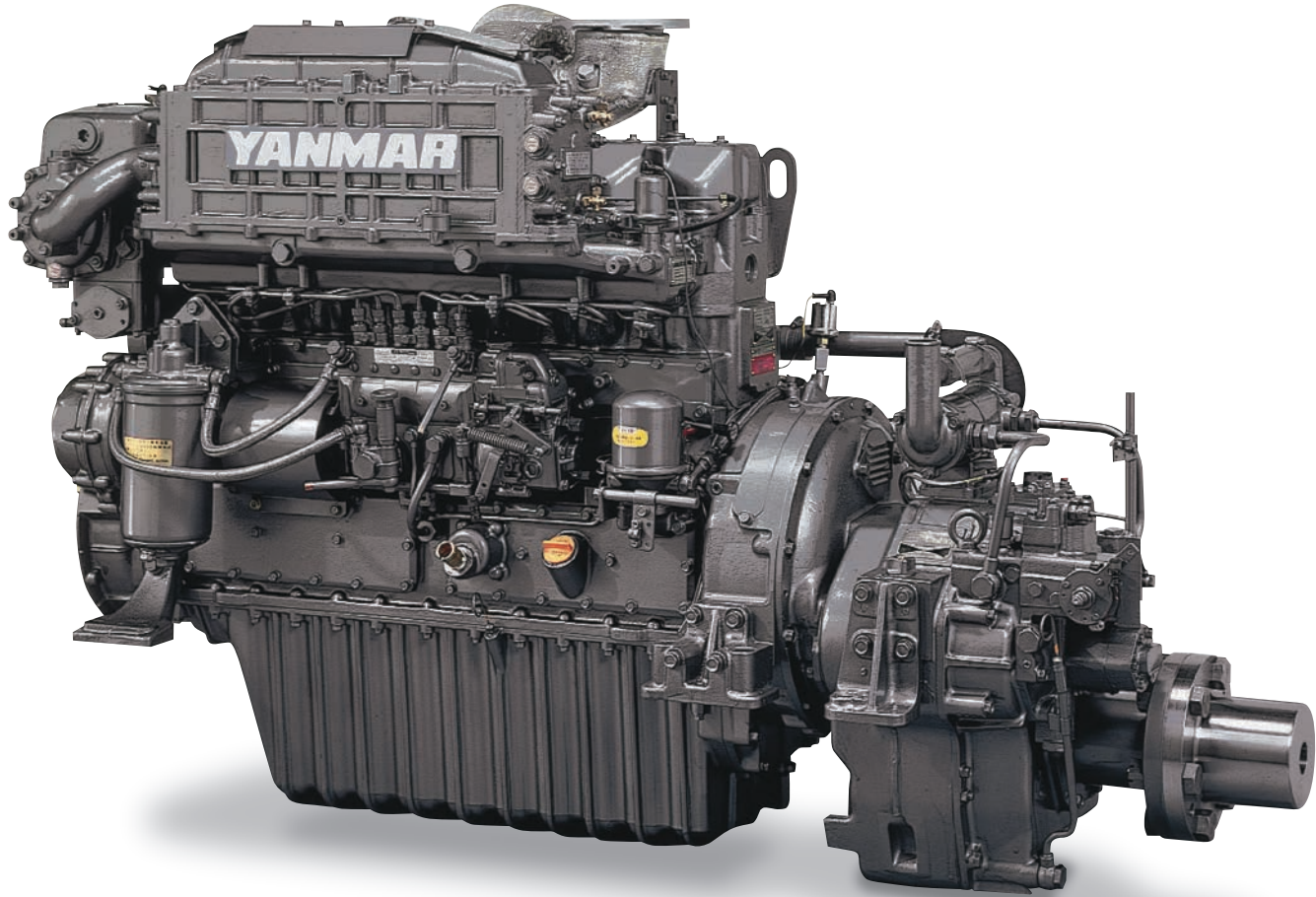


YANMAR

MARINE DIESEL ENGINE

# CHE Series

L•M-rating 57.4~206kW [ 78~280mhp ]



Photograph may show optional equipment.

Mechanical Engine Control

78mhp -  
280mhp

Bestselling  
from  
1977

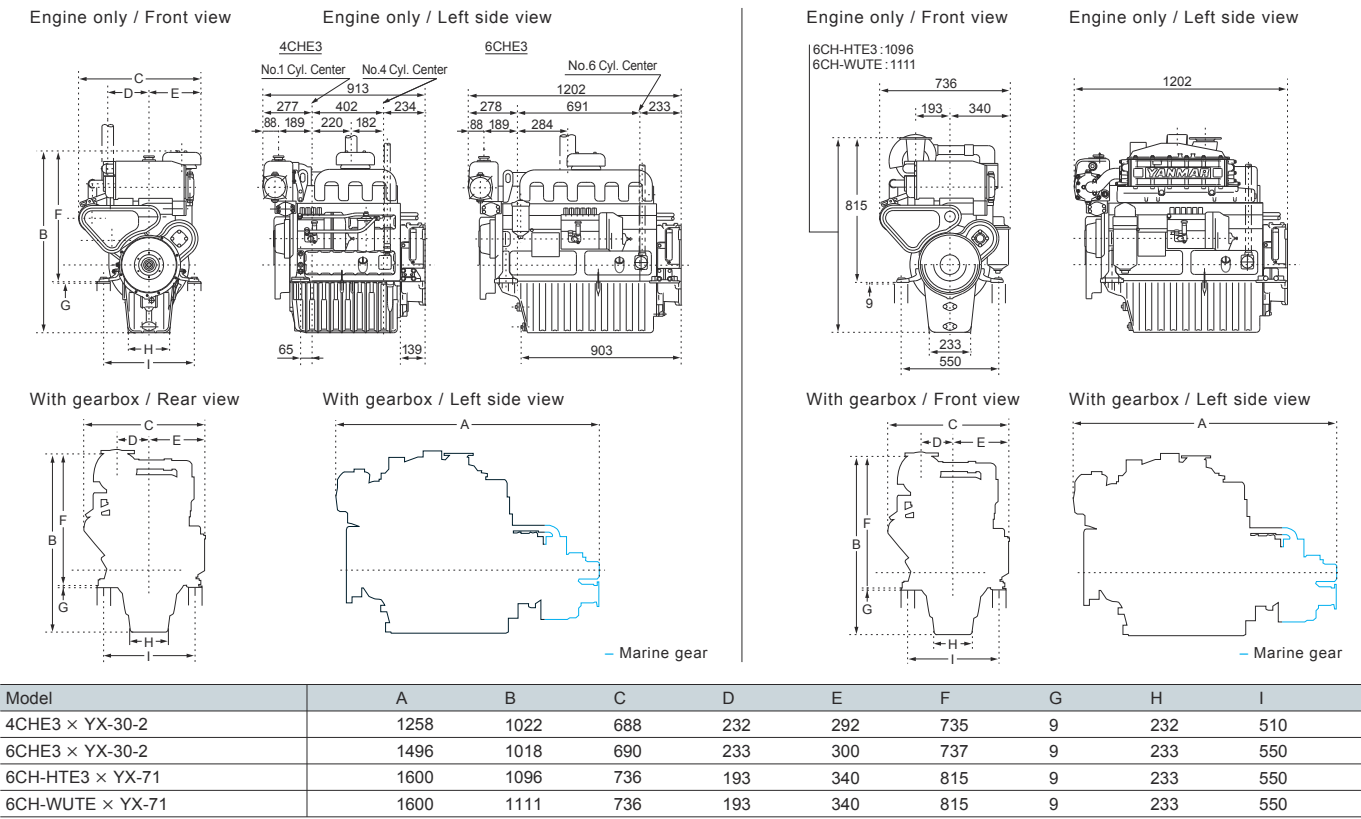
Engine Specifications

Model		4CHE3	6CHE3	6CH-HTE3	6CH-WUTE
Type		4-cycle, Vertical, natural aspirated, water cooled diesel engine		4-cycle, Vertical, Turbo-charged, water cooled diesel engine	
No. of cylinders, Bore × stroke	mm	4 in-line, 105 × 125	6 in-line, 105 × 125		
Displacement	lit.	4.330	6.494		
Ratedoutput	kW(hp) / rpm	M:57.4 (78) / 2550	M:84.6 (115) / 2550	M:125 (170) / 2550	M:188 (255) / 2550
		L:62.5 (85) / 2600	L:95.6 (130) / 2600	L:140 (190) / 2600	L:206 (280) / 2600
Emission		N/A	N/A	N/A	IMO Tier2
Fuel consumption (Rating M)	gr/kW-hr	252 at rated output	242 at rated output	232 at rated output	223 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.	16 +0.8L (Reservoir tank)	20 +0.8L (Reservoir tank)	24 +0.8L (Reservoir tank)	23 +0.8L (Reservoir tank)
Lubricating system		Forced lubrication with gear pump			
Lubricating oil capacity	lit.	15	18.5	18.5	23
Lubricating oil grade		SAE30 or SAE40 at ambient temperature above 30 or above			
Starting system		Electric starting motor ( DC 24V-4kW )			
Flywheel housing size		SAE #3 and 11-1/2 in.			
Dry weight (without marine gear)	kg	500	630	675	720

Marine Gear Specifications

Engine Model	4CHE3		6CHE3		6CH-HTE3		6CH-WUTE	
Marine gear model	YX-30-2				YX-71			
Type	Hydraulic multi-disc clutch							
Reduction ratio	2.03	2.55	2.96	3.48	2.07	2.58	2.91	3.53
Direction of rotation	Clockwise or counter-clockwise viewed from stern							
Dry weight	kg	70			220			

Dimensions (Unit : mm)



Rating definitions : hp=0.735kW Ratings are based on conditions of 100kPa, 30% relative humidity at 25°C.  
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 50 min<sup>-1</sup> of the rated speed.  
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 50 rpm of the rated speed.  
Fuel rates : Specific gravity 0.835g/cc, low calorific value 42700kj/kg(10200kcal/kg), Cetane No.45.

YANMAR POWER TECHNOLOGY CO., LTD.

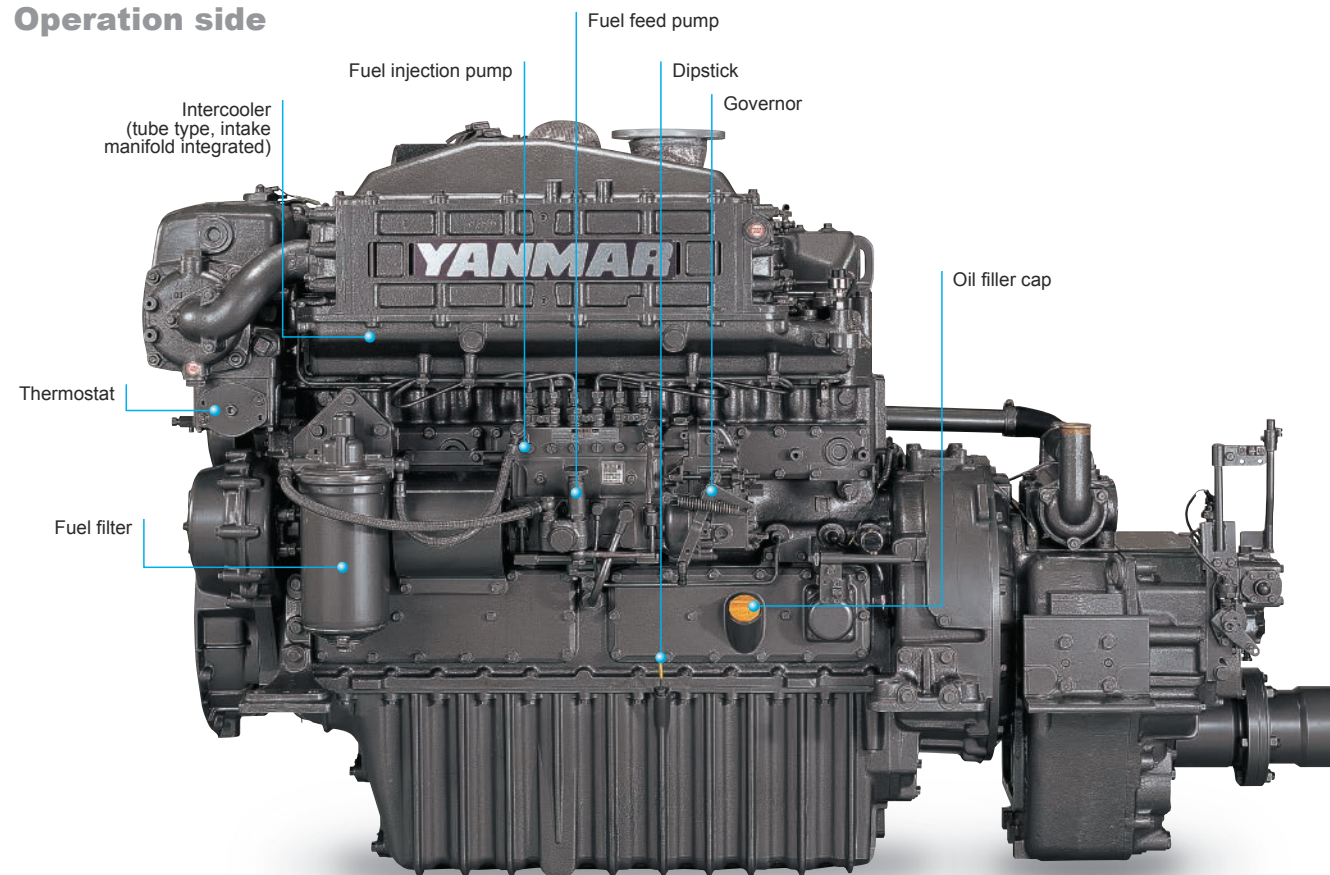
Large Power Products Business  
1-1-1,Nagasu-Higashidori,Amagasaki,Hyogo,Japan  
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yanmar.com

Note : All Data Subject to Change Without Notice.  
Please contact Yanmar or local distributor for the details of each model.

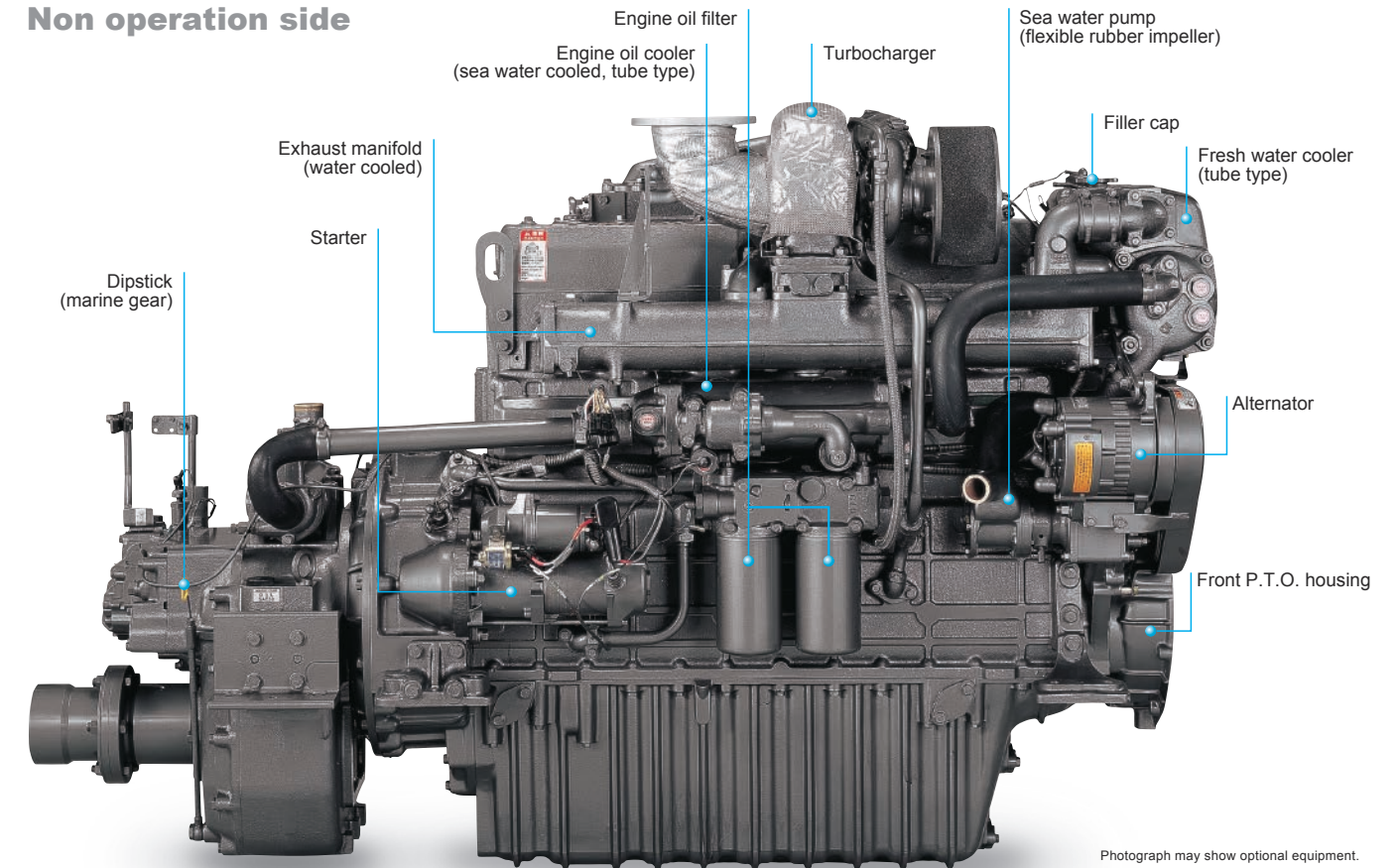


# YANMAR, Providing Quality Propulsion Engine Packages for Over 60 Years.

## Operation side



## Non operation side



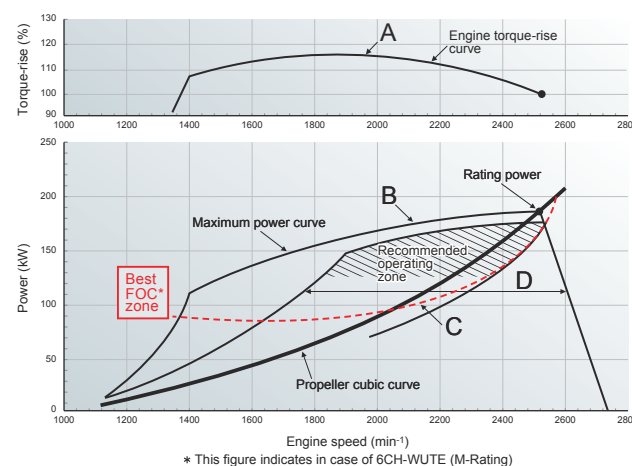
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## High Torque

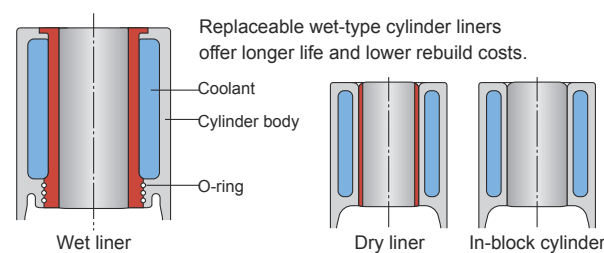
**Excellent Torque-Rise Characteristics in High Speed and High Load Range Enable Stable Performance of Job Duties even at High Load**

**The Engine Performance Gives Following Advantages:**

1. The engine torque-rise characteristics having much in reserve, ( 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 ) **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.



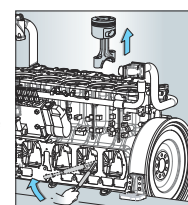
## Toughness



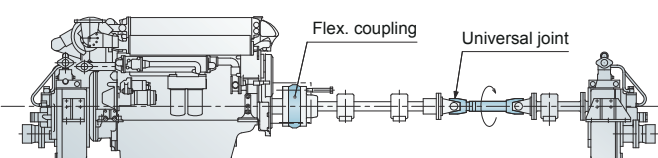
## Lower Down Time

**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.



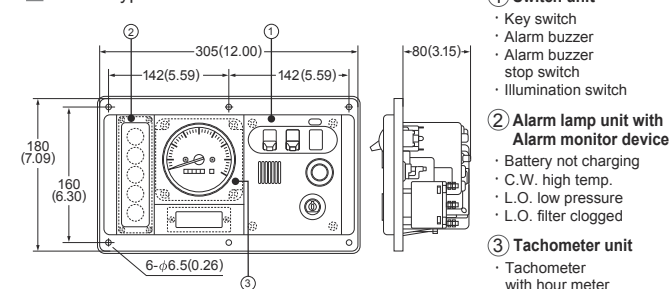
## High capacity front PTO



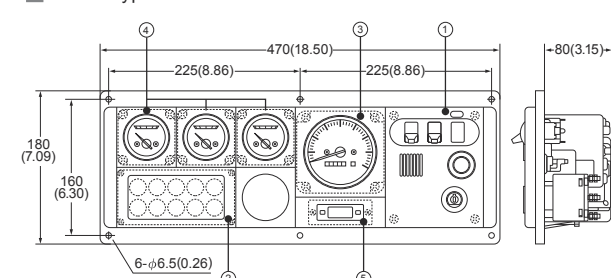
Contact your local Yanmar distributor for further information.

Instrument panel contains following items [standard] (Unit : mm)

□ New B-type For 4CHE3



□ New D-type For 6CHE3/6CH-HTE3/6CH-WUTE



**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**

For heavy duty applications.

**Damping of Fluctuating Torque**

Proven, time tested, rubber block reduces the fluctuating torque that is input to the marine gear. It reduces rattling and prevents torsional vibration to protect the power transmission parts.

**Accessories**

Optional Trolling Device.

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