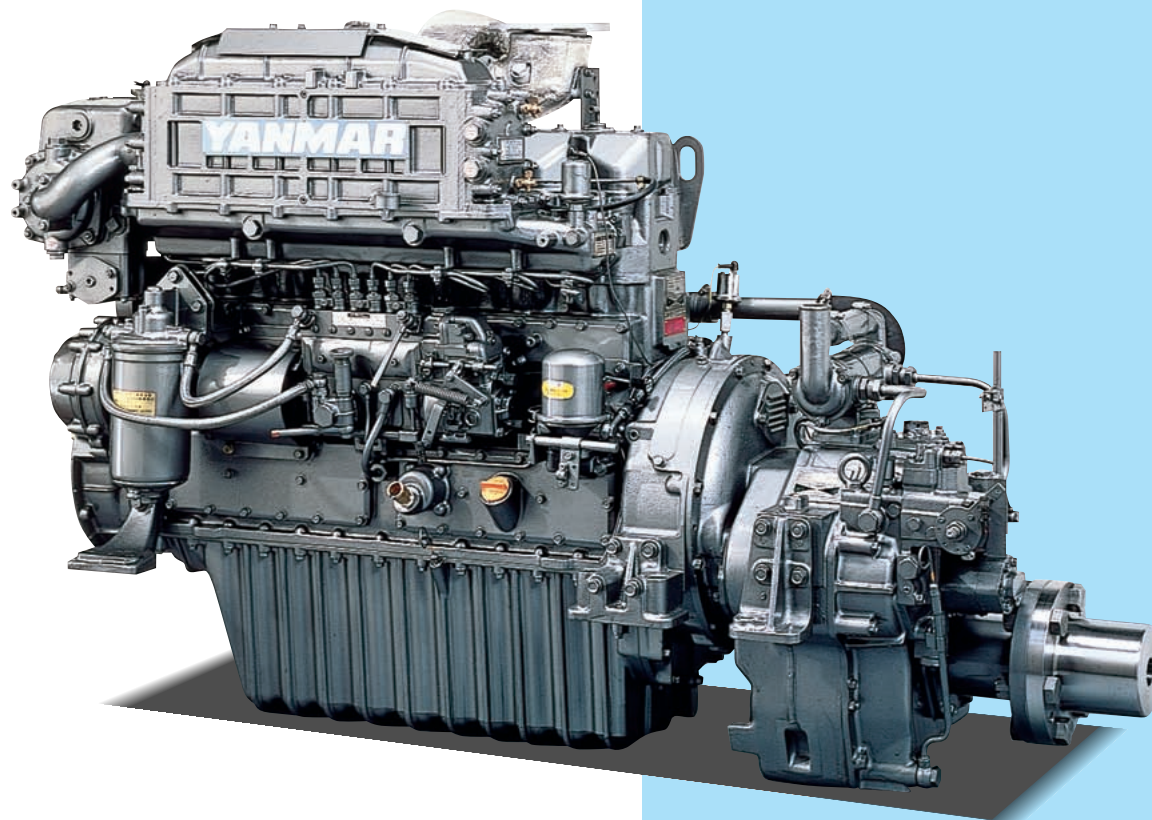


MARINE DIESEL ENGINES



CHE(3) series
57.4~206kW(78~280mhp)

You Get More Performance and Pace from the Professional in the CHE(3) Series



Photograph may show optional equipment.

ACCESSORIES

Remarks: ● Standard △ Optional — Not available

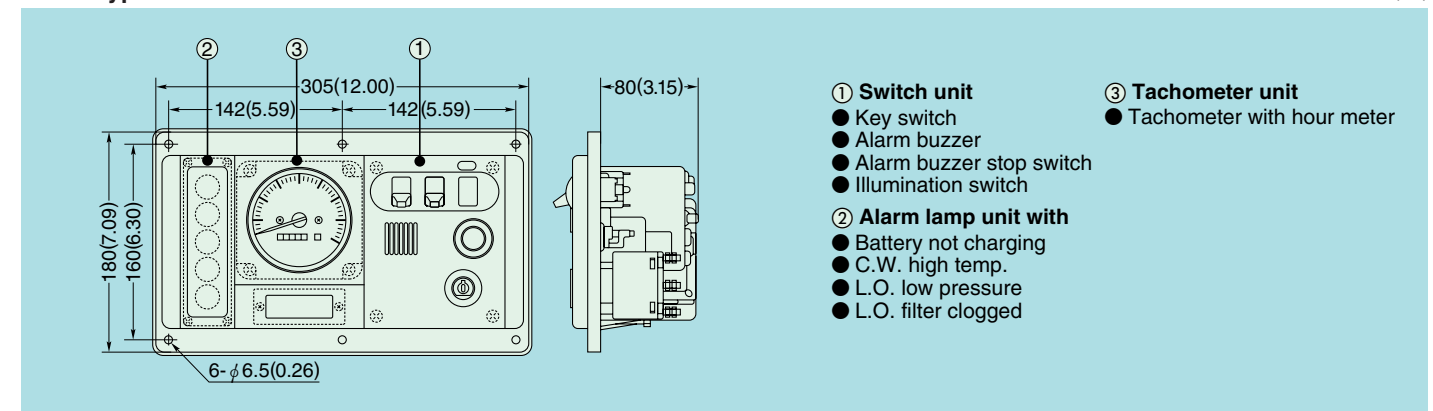
Item	Name of accessories	Q'ty	4CHE3	6CHE3	6CH-HTE3	6CH-DTE3	6CH-UTE
Installation	Installation plate for wooden boat	2	△	△	△	△	△
	Adjusting shim for engine	1 set	△	△	△	△	△
	Adjusting shim for marine gear	1 set	△	△	△	△	△
	Installation bolt kit	1 set	△4	△8	△12	△12	△12
	Jack bolt	1 set	△4	△4	△6	△6	△6
Air	Chock liner, bolt & nut for steel boat	1 set	△	△	△	△	△
	Exhaust gas pipe	1	△65A	△80A	△90A	△90A	△100A
	Breather hose with fittings	1 set	●	●	●	●	●
	Exh. flexible joint (T/C out)	1	△	△	●	●	●
	Intake air filter	1	—	—	●	●	●
	Exh. gas silencer	1	△	△	△	△	△
Fuel oil	Engine room ventilator	1 set	△	△	△	△	△
	Drain separator	1	●	●	●	●	●
	Simplex type fuel filter (mounted on eng.)	1	●	●	●	●	●
	Fuel sedimentary filter	1	△	△	△	△	△
Lubrication oil	Fuel oil pipe	1	△	△	△	△	△
	Evacuation hand pump	1	●	●	●	●	●
Cooling system	Simplex type oil filter (mounted on eng.)	1	●	●	●	●	●
	Kingston cock (for wooden boat)	1	△	△	△	△	△
	Kingston valve (for steel boat)	1	△	△	△	△	△
	Raw water filter (simplex)	1	△	△	△	△	△
	Bilge pump (electric type)	1	△	△	△	△	△
	Fresh water sub-tank	1	●	●	●	●	●
Others	Raw water pipe	1	△	△	△	△	△
	Raw water pipe	1	△	△	△	△	△

Item	Name of accessories	Q'ty	4CHE3	6CHE3	6CH-HTE3	6CH-DTE3	6CH-UTE
Electric device	Battery switch	1	△	△	△	△	△
	Charging Alternator 600W	1	●	●	●	●	●
	Starting motor (1-pole type, 24V 4.0kW)	1 set	●	●	●	●	●
	Starting motor w/harness (2-pole type)	1 set	△	△	△	△	△
	Battery (12V×2)	1 set	△	△	△	△	△
	Control head (1-handle type)	1	△	△	△	△	△
Remote control	2-handle head with push-pull calbe	Cable length: 5m	1 set	△	△	△	△
		ditto: 7m	1 set	△	△	△	△
		ditto: 10m	1 set	△	△	△	△
		ditto: 12m	1 set	△	△	△	△
	Wireharness	length: 6m	1	△	△	△	△
		ditto: 7m	1	△	△	△	△
		ditto: 10m	1	△	△	△	△
		ditto: 12m	1	△	△	△	△
	Instrument panel for wheel house	1	●	●	●	●	●
	Dual type instrument panel	1	△	△	△	△	△
Connection wireharness for dual panel	1	△	△	△	△	△	
Stop motor solenoid	1	△	△	△	△	△	
Others	Half coupling	1	●	●	●	●	●
	Standard spare parts kit	1	●	●	●	●	●
	Standard tool kit	1	●	●	●	●	●
	Operation manual	1	●	●	●	●	●
	Parts book for engine	1	△	△	△	△	△
Service manual	1	△	△	△	△	△	

INSTRUMENT PANEL CONTAINS FOLLOWING ITEMS (STANDARD)

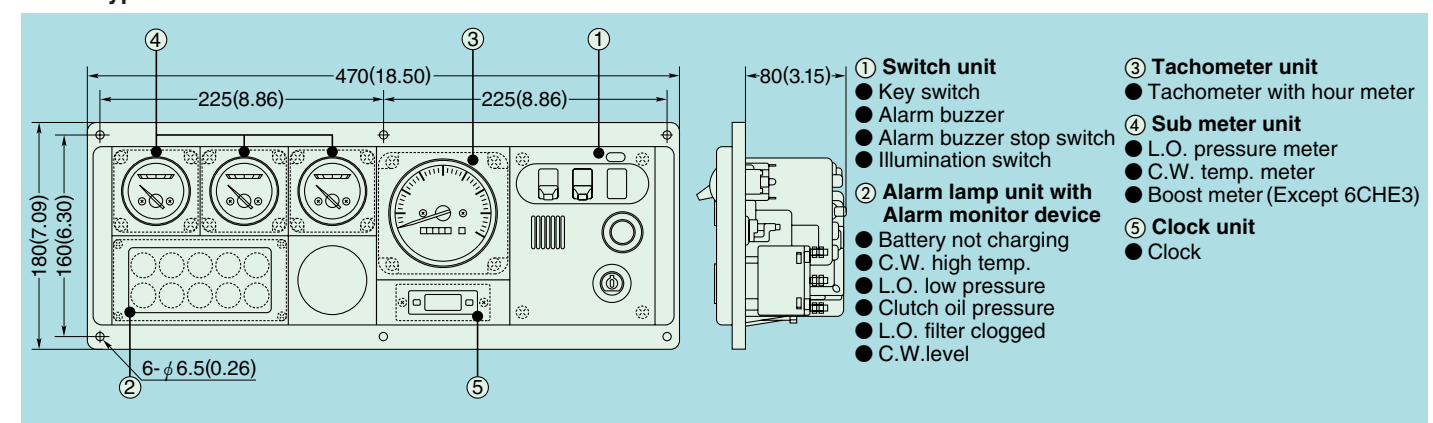
New B-type For 4CHE3

Unit: mm(in.)



The engine stop button is effective when a stop motor solenoid is equipped with the engine. A stop solenoid is one of the optional parts.

New D-type For 6CHE3/6CH-HTE3/6CH-DTE3/6CH-UTE



The engine stop button is effective when a stop motor solenoid is equipped with the engine. A stop solenoid is one of the optional parts.

Note: All data subject to alteration without notice.

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You Get More Performance and Pace from the Professional in the CHE(3) Series

The work engines with top popularity ratings.

When it comes to selecting a high performance work engine you can't do better than look at the wide CH range of Yanmar diesel. Running from 57.4kW to 206kW in a selection of 5 models there's an engine here to match most workboat jobs. They are remarkable for their stable, high speed output and for the refinements that have developed these veteran units into today's highly sophisticated performers.

Superior top-end technology

To equip the UTE models for the

special roles of high speed vessels they have such sophisticated features as a super-high pressure and incredibly precise injection pump, four valves per head and Yanmar's unique 'plum blossom' piston crowns.

Time-tested toughness

Yanmar's successful wave-ribbed 'monoblock' cylinder block, stamp-forged carbon steel crankshafts and connecting rods are part of the story of strength in all CH engines. They also have a special thermo-controlled, fresh water cooling system that keeps all vital parts at

optimum operating temperature, greatly saving wear and prolonging engine life. Another great advantage is the latest Yanmar marine gear, carefully matched by our own technicians to make the ideal combination of strength and smooth power drive.

Servicing simplified

Features such as inspection hatches in the block, for six cylinder models, easy access to maintenance points and simple replacement of piston rings all help the owner keep his engine at work longer hours.

ENGINE SPECIFICATIONS

Model (with marine gear)	4CHE3	6CHE3	6CH-HTE3	6CH-DTE3	6CH-UTE	
Type	4-cycle, vertical, natural aspirated, water cooled diesel engine		4-cycle, vertical, turbo-charged, water cooled diesel engine			
Number of cylinders	4 in-line		6 in-line			
Bore×stroke	mm(in.) 105×125(4.13×4.92)					
Displacement	lit.(cu.in.) 4.330 (264.2)		6.494 (396.3)			
Rated output kW(hp)/rpm	M	57.4(78)/2550	84.6(115)/2550	125(170)/2550	154(210)/2550	188(255)/2550
	L	62.5(85)/2600	95.6(130)/2600	140(190)/2600	169(230)/2600	206(280)/2600
Fuel consumption	gr/kW·h	252	242	232	225	223
Direction of rotation(crankshaft)	Counterclockwise viewed from stern					
Combustion system	Direct injection					
Cooling system	Fresh water cooling with seawater & fresh water pumps					
Lubricating system	Forced lubrication with gear pump					
Starting system	Electric starting motor (DC 24V)					
Dry weight (without marine gear)	kg(lbs)	500(1102)	630(1389)	655(1444)	690(1521)	730(1609)

MARINE GEAR SPECIFICATIONS

Engine model: 4CHE3

Model	YX-20-1			
Type	Hydraulic multi-disc clutch, wet type			
Reduction ratio (Ahead)	2.03	2.55	2.96	3.48
Propeller shaft speed (at rated output) rpm	1257	999	861	733
Direction of rotation (propeller shaft)	Clockwise or counter-clockwise viewed from stern			
Dry weight	kg(lbs) 68(150)			

Engine model: 6CHE3

Model	YX-30-2			
Type	Hydraulic multi-disc clutch, wet type			
Reduction ratio (Ahead)	2.03	2.55	2.96	3.48
Propeller shaft speed (at rated output) rpm	1257	999	861	733
Direction of rotation (propeller shaft)	Clockwise or counter-clockwise viewed from stern			
Dry weight	kg(lbs) 70(154)			

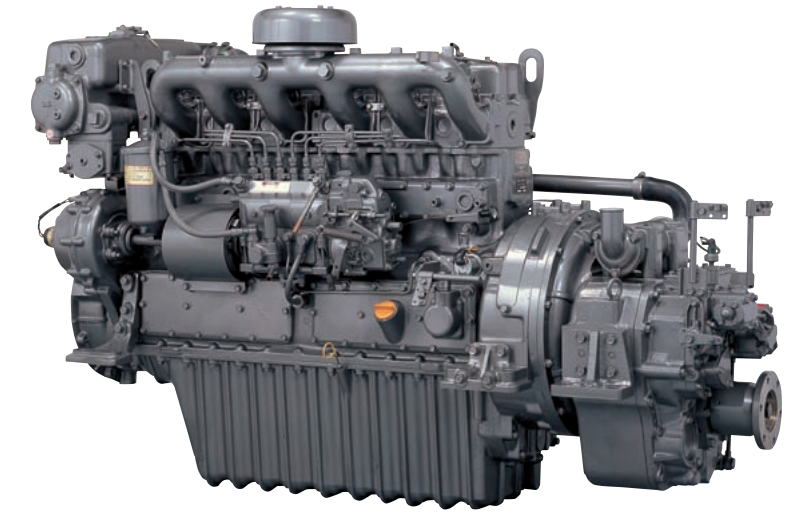
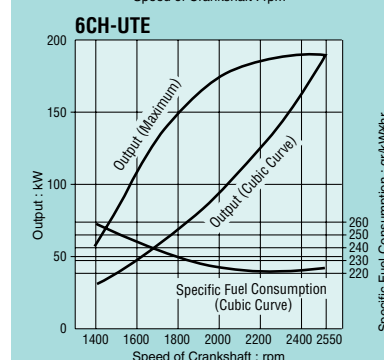
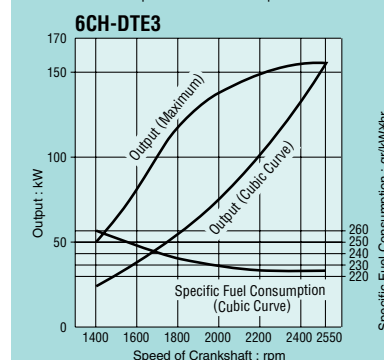
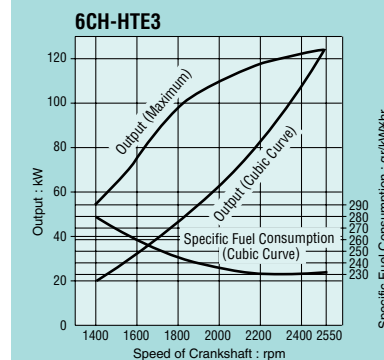
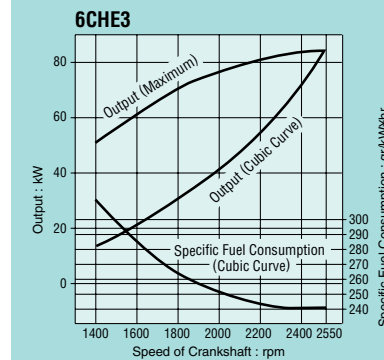
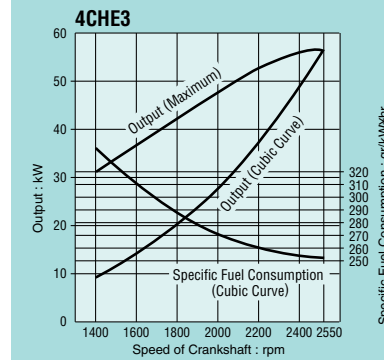
Engine model: 6CH-HTE3

Model	YX-50S		YX-71	
Type	Hydraulic multi-disc clutch, wet type			
Reduction ratio (Ahead)	2.02	2.48	2.88	3.53
Propeller shaft speed (at rated output) rpm	1263	1028	885	722
Direction of rotation (propeller shaft)	Clockwise or counter-clockwise viewed from stern			
Dry weight	kg(lbs) 117(258)		214(472)	

Engine model: 6CH-DTE3, 6CH-UTE

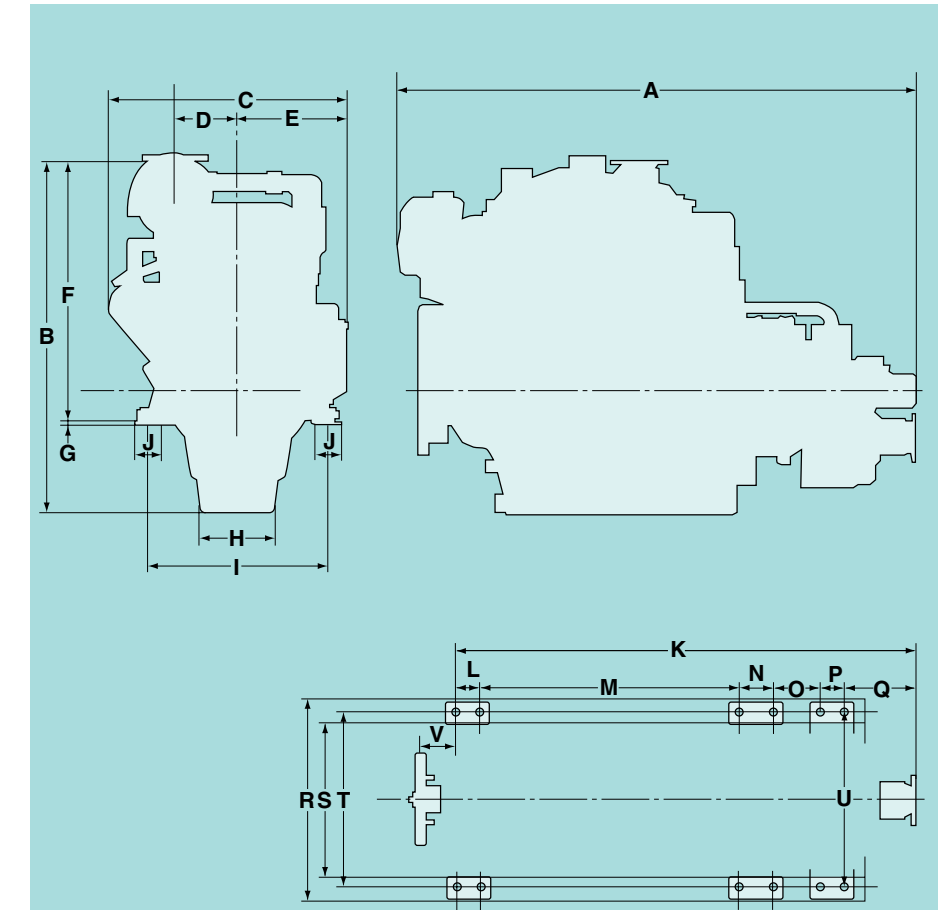
Model	YX-71					MGN46BL	
Type	Hydraulic multi-disc clutch, wet type						
Reduction ratio (Ahead)	2.07	2.58	2.91	3.53	3.90	4.42	
Propeller shaft speed (at rated output) rpm	1231	987	877	723	653	577	
Direction of rotation (propeller shaft)	Clockwise or counter-clockwise viewed from stern						
Dry weight	kg(lbs) 214(472)					260(573)	

PERFORMANCE CURVES



DIMENSIONS

Unit: mm



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
4CHE3	1183.5	1021	688	232	292	734	9	234	510	75	971	—	606.5	—	—	—	364.5	585	435	510	—	139*
6CHE3	1496.3	1018	690	232.5	300	737	9	233	550	75	1321.3	75	803.5	108	—	—	334.8	625	475	550	—	106.5
6CH-HTE3 × YX-50S	1575	1096	736	193	340	815	9	233	550	75	1399.5	75	803.5	108	95.5	70	247.5	625	475	550	550	106.5
6CH-HTE3 × YX-71	1599.5	1096	736	193	340	815	9	233	550	75	1424	75	803.5	108	108.5	122	207	625	475	550	550	106.5
6CH-DTE3 × YX-71	1599.5	1096	736	193	340	815	9	233	550	75	1424	75	803.5	108	108.5	122	207	625	475	550	550	106.5
6CH-DTE3 × MGN46BL	1578.5	1096	736	193	340	815	9	233	550	75	1403	75	803.5	108	127.5	90	199	720	470	550	650	106.5
6CH-UTE × YX-71	1599.5	1111	736	195	340	830	9	233	550	75	1424	75	803.5	108	108.5	122	207	625	475	550	550	106.5
6CH-UTE × MGN46BL	1578.5	1111	736	195	340	830	9	233	550	75	1403	75	803.5	108	127.5	90	199	720	470	550	650	106.5

*139("V" dimension of 4CHE3) shows the dimension without damper.