



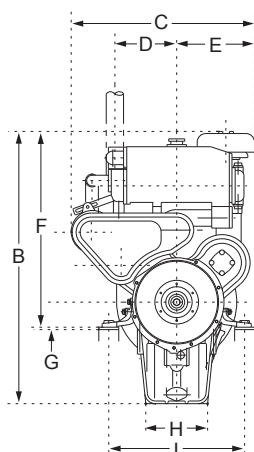
# 4CHE3 Series

**BESTSELLING FROM 1977 | Mechanical Engine Control**

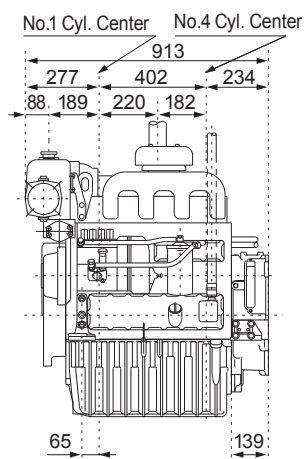
Configuration	4-cycle, Vertical, natural aspirated, water cooled diesel engine	
Maximum output at crankshaft	L: 62.5 kW@2600 rpm	[85 mhp@2600 rpm]
	M: 57.4 kW@2550 rpm	[78 mhp@2550 rpm]
Displacement	4.330 ltr	
Bore x stroke	105 mm x 125 mm	
Cylinders	4 in-line	
Combustion system	Direct injection	
Starting system	Electric starting motor [DC 24V - 4 kW]	
Flywheel housing size	SAE #3 and 11 - 1/2 inch	
Cooling system	With Heat exchanger	
Cooling fresh water capacity	16 ltr + 0.8 ltr [Reservoir tank]	
Lubrication system	Forced lubrication with gear pump	
Lubricating oil capacity	15 ltr	
Lubricating oil grade	SAE30 or SAE40 at ambient temperature above 30 or above	
Direction of rotation [crankshaft]	Counterclockwise viewed from stern	
Dry weight without gear	500 kg	
Fuel consumption [at rated output]	M: 252 gr/kW hr	

**DIMENSIONS [UNIT: MM]**

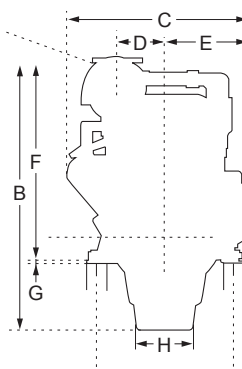
Front view, engine only



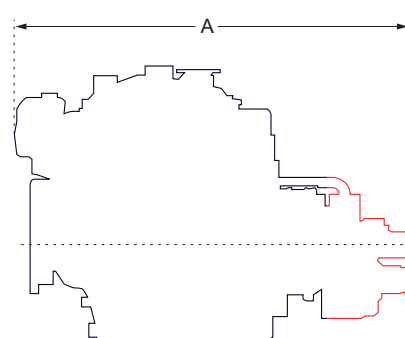
Left side view, engine only



Rear view with gearbox YX-30-2



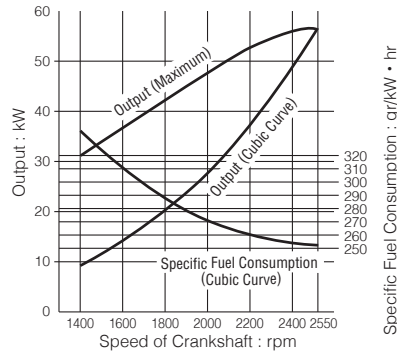
Left side view with gearbox YX-30-2



Model	A	B	C	D	E	F	G	H	I
4CHE3 x YX-30-2	1258	1022	688	232	292	735	9	232	510



PERFORMANCE CURVES



Rating definitions: hp = 0.7355 kW Ratings are based on conditions of 100 kPa, 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.

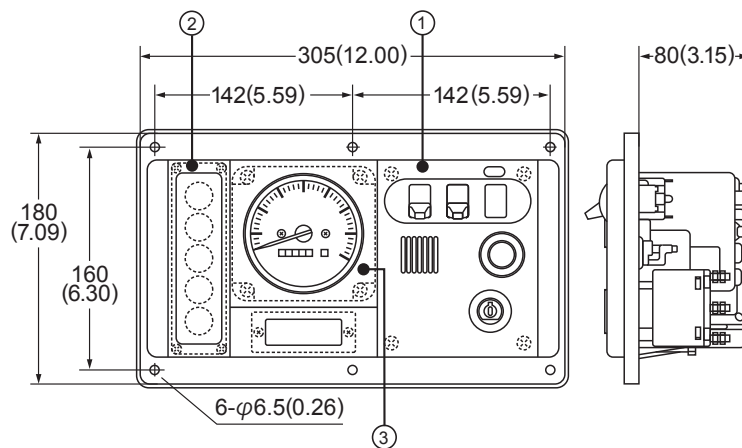
M= For applications where use of rated power is less than 10 hours continuous out of every 16 hours and operation is less than 3000 hours per year. When combined with a correctly matched propeller which allows the engine rated speed to be achieved in a fully loaded vessel state, the reduced-power operation can be at or below 50 rpm of the rated speed.

Fuel rates: Specific gravity 0.835 g/cc, low calorific value 42700 kJ/kg [10200 kcal/kg], Cetane No. 45.

MARINE GEARS SPECIFICATIONS

<b>Model</b>	<b>YX-30-2</b>			
Type	Hydraulic multi-disc clutch			
Dry Weight	70 kg			
Reduction Ratio [Ahead]	2.03	2.55	2.96	3.48
Direction of rotation [propeller shaft]	Clockwise or counter-clockwise viewed from stern			

INSTRUMENT PANEL B-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
- L.O. filter clogged

**3 Tachometer unit**

- Tachometer with hour meter

NOTE: All data subject to change without notice. Text and illustrations are not binding.