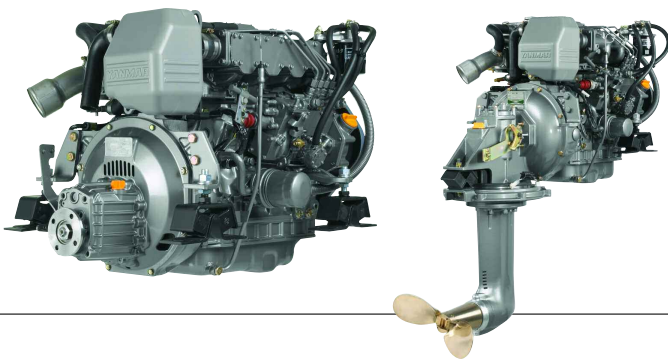


Yanmar type 4JH4E

The Powerful Gem

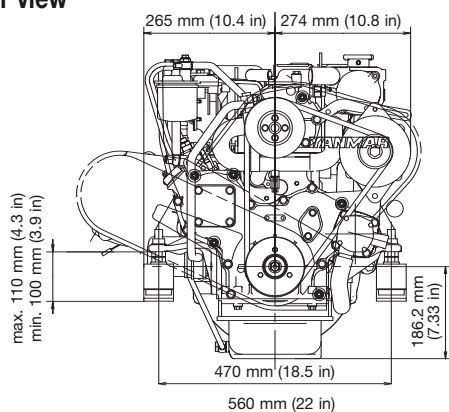


Configuration	4-stroke, vertical, water cooled diesel engine
Maximum output at crankshaft	* 40.5 kW (55 hp) / 3000 rpm ** 39.6 kW (54 hp) / 3000 rpm
Continuous rating output at crankshaft	36.8 kW (50 hp) / 2907 rpm
Displacement	2.19 L (134 cu in)
Bore x stroke	88 mm x 90 mm (3.46 in x 3.54 in)
Cylinders	4
Combustion system	Direct injection
Aspiration	Natural aspiration
Starting system	Electric starting 12 V - 1.4 kW
Alternator	12 V - 60 A (80 A optional)
Cooling system	Fresh water cooling by centrifugal fresh water pump and rubber impeller sea water pump
Lubrication system	Enclosed, forced lubricating system
Direction of rotation (crankshaft)	Counter clockwise viewed from stern
Dry weight without gear	200 kg (441 lbs)
Environmental	BSO II, SAV, EMC compliant and will meet the 2003/44/EC emission requirements
Engine mounting	Rubber type flexible mounting

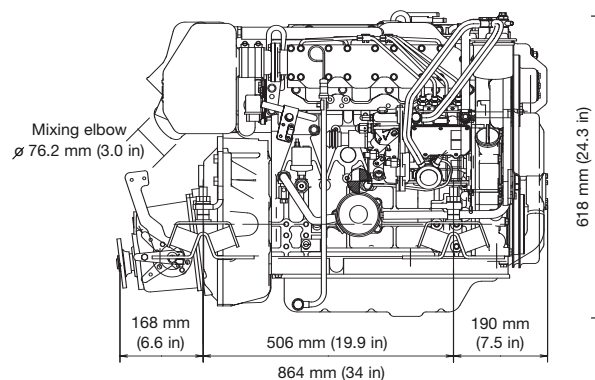
NOTE: Fuel condition: Density at 15°C = 0.842 g/cm³; 1 hp = 0.7355 kW
 * Fuel temperature 25°C at the inlet of the fuel injection pump (ISO 3046-1)
 ** Fuel temperature 40°C at the inlet of the fuel injection pump (ISO 8665)

Dimensions (For detailed line-drawings, please refer to our web-site: www.yanmarmarine.com)

Rear view

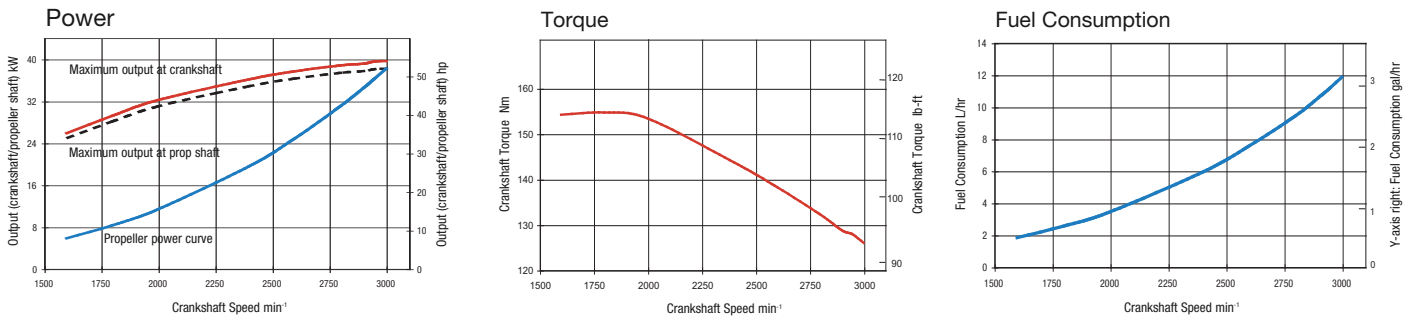


Right side view



4JH4E w/ KM35A marine gear

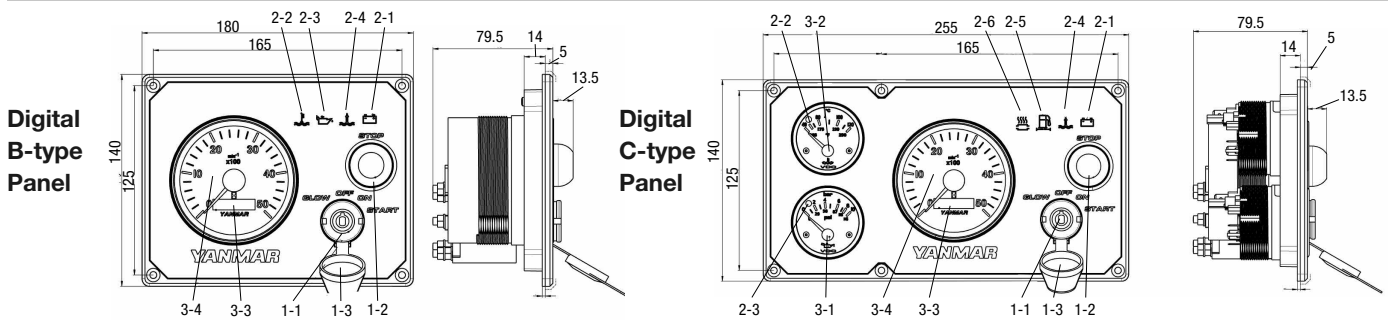
Performance Curves (Output is according ISO 8665 - Output includes +/- 3% tolerance)



Marine Gears/Drive

Model	KM35P	ZF30M	KM35A2 (down angle : 7)	KM4A1(down angle: 7)			Saildrive (SD50)	
Type	Mechanical cone clutch	Mechanical Multi Plate clutch	Mechanical cone clutch	Mechanical cone clutch			Mechanical cone clutch	
Dry weight	12 kg (27 lbs)	28 kg (61 lbs)	13 kg (29 lbs)	28 kg (61 lbs)			40 kg (88 lbs)	
Reduction ratio (fwd/asn)	2.36/3.16 2.61/3.16	2.15/2.64 2.70/2.64	2.33/3.04 2.64/3.04	1.47/1.47	2.14/2.14	2.63/2.63	3.30/3.30	2.32/2.32
Propeller speed(fwd/asn)	1232/921 1114/921	1353/1103 1078/1103	1246/955 1103/955	1983/1983	1360/1360	1106/1106	882/882	1253/1253
Direction of rotation (propeller shaft - fwd)	Clockwise viewed from stern		Clockwise viewed from stern	Clockwise & counter clockwise viewed from stern			Clockwise & counter clockwise viewed from stern	
Dry weight engine and gear/drive	212 kg (467 lbs)	228 kg (502 lbs)	213 kg (470 lbs)	228 kg (502 lbs)			240 kg (529 lbs)	
Length engine and gear/drive	871 mm (34 in)	950 mm (37 in)	864 mm (34 in)	922 mm (36 in)			1067 mm (42 in)	

Instrument Panels



Function	Type of instrument panel	
	Digital B-type Panel	Digital C-type Panel
① Switch unit		
1-1 Key switch for GLOW/OFF/ON/START (4-position switch)	O	O
1-2 Push button switch for engine stop	O	O
1-3 Moisture cap for key switch	O	O
② Alarm lamp unit		
2-1 Battery low charge alarm	O	O
2-2 Coolant high temperature alarm	O	O
2-3 Lubricating oil low pressure	O	O
2-4 Water in sail drive seal alarm	O	O
2-5 Water in fuel filter alarm	X	O*
2-6 Sea water insufficient flow alarm	X	O*
③ Meters		
3-1 Lubricating oil pressure meter	X	O
3-2 Coolant temperature meter	X	O
3-3 Hour meter	O	O
3-4 Tachometer	O	O
④ Audible alarm buzzer	O	O

Note: O = Equipped on panel X = Not equipped on panel *function not available for 4JH4E natural aspiration engines

Accessories

Standard Package

- Set of flexible mounting
- Exhaust/water mixing elbow (L-type)
- V-belt cover
- Expansion tank for fresh water cooling system
- Alternator 12 V - 60 A
- Electric stop solenoid

Optional

- Additional Digital B-type instrument panel
- Additional Digital C-type instrument panel
- Primary 80 A alternator or second 60/80 A alternator
- Alternator bracket and cover for second alternator
- Exhaust/water mixing elbow, U-type (high riser)
- Various extension wire harnesses
- Various couplings (straights, tapers, slits)

Texts and illustrations are not binding. Yanmar Marine reserves the right to introduce adaptations without prior notification.