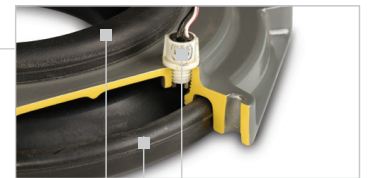
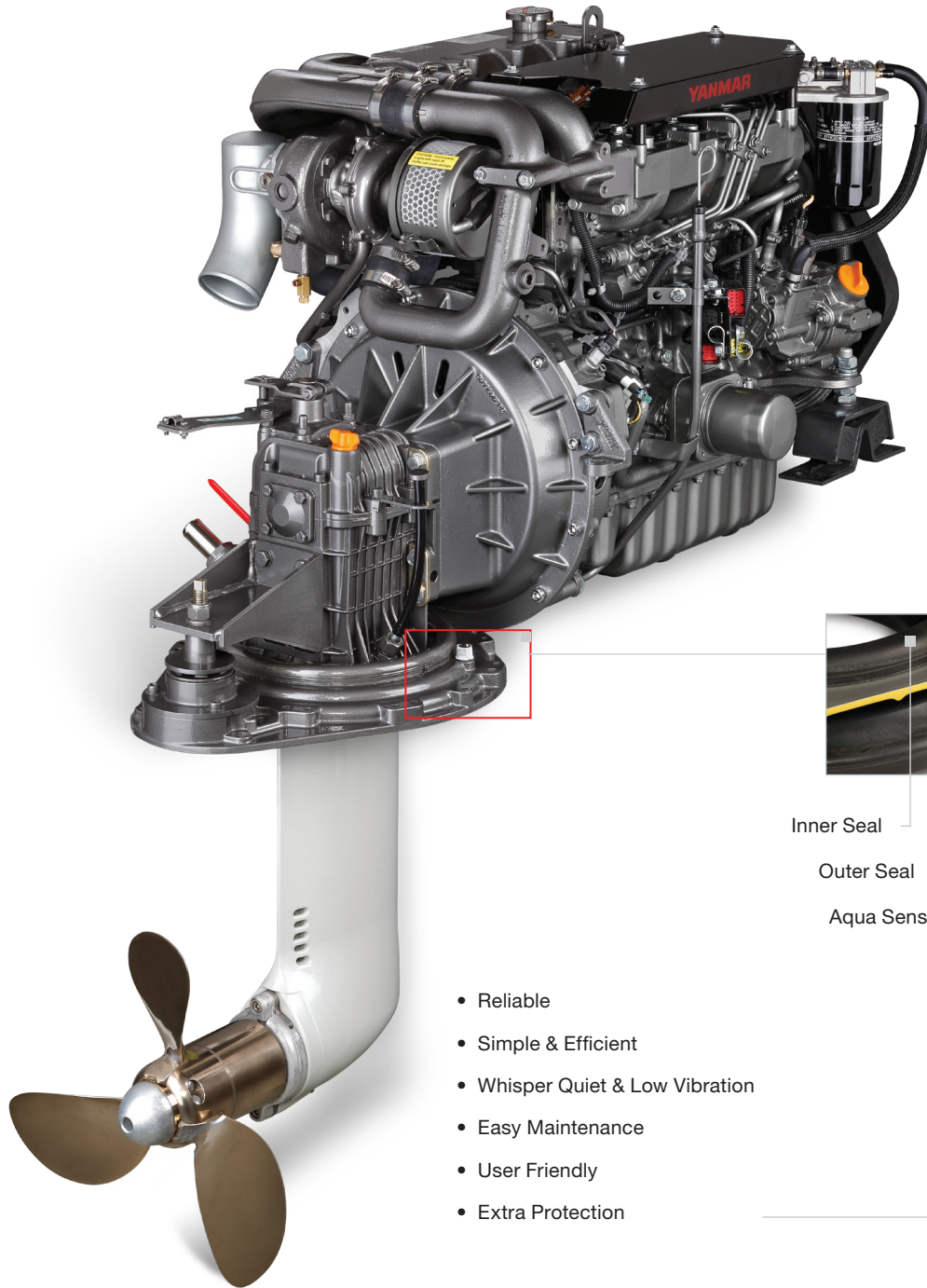




**YANMAR**

MARINE DIESEL ENGINES

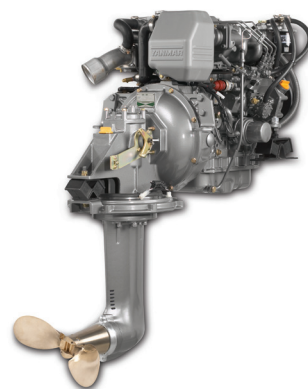
# Yanmar Sairdrive SD60 Series



Inner Seal  
Outer Seal  
Aqua Sensor

- Reliable
- Simple & Efficient
- Whisper Quiet & Low Vibration
- Easy Maintenance
- User Friendly
- Extra Protection

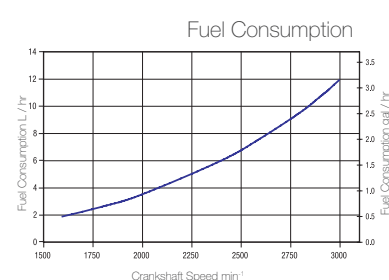
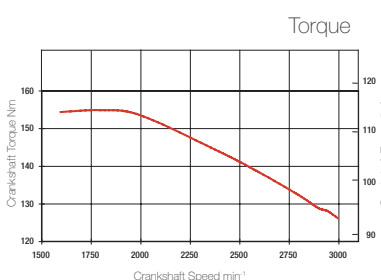
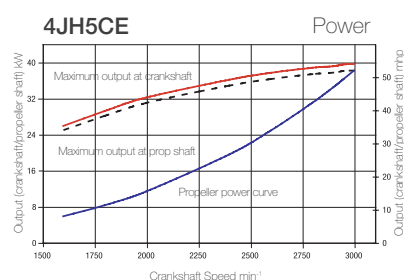
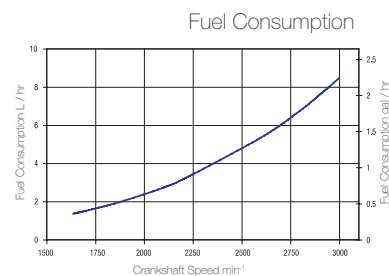
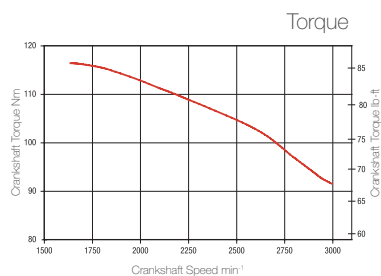
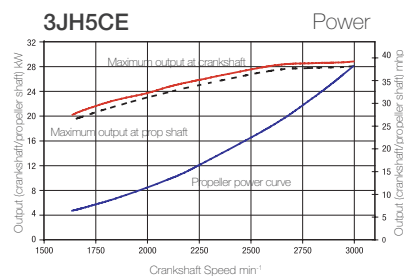
<b>Yanmar Sairdrive Type</b>	<b>SD60</b>
Reduction gear system	Constant mesh gear with wet type multi-disc clutch
Reduction ratio [fwd/asn]	2.23/2.23 2.49/2.49
Direction of rotation [propeller shaft - fwd]	Clockwise & counter clockwise viewed from flywheel side
Dry weight Sairdrive	44 kg [97 lbs]

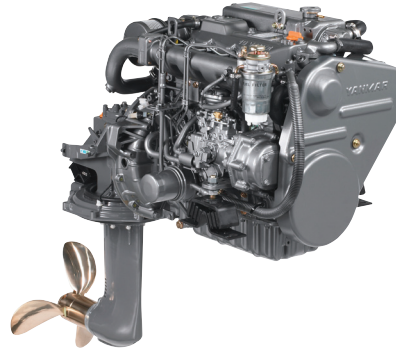
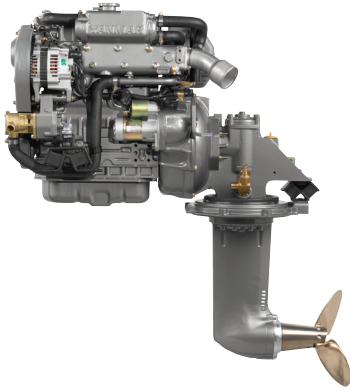


<b>Engine Model</b>	<b>3JH5CE x SD60</b>
Configuration	4-stroke, vertical, water-cooled diesel engine
Maximum output at crankshaft	* 28.7 kW@3000 rpm [39 mhp@3000 rpm]
Continuous rating output at crankshaft	26.7 kW@2907 rpm [36.3 mhp@2907 rpm]
Displacement	1.64 ltr [100 cu in]
Bore x stroke	88 mm x 90 mm [3.46 in x 3.54 in]
Cylinders	3
Combustion system	Direct injection
Aspiration	Natural aspiration
Starting system	Electric starting 12V - 1.4 kW
Alternator	12V - 120A
Cooling system	Fresh water cooling
Lubrication system	Enclosed, forced lubricating system
Lubrication oil for Saildrive	15W40
Direction of rotation [propeller]	Counterclockwise viewed from flywheel side
Dry weight with Saildrive	213 kg [470 lbs]
Environmental	EU: RCD BSO II EMC
Engine mounting	Rubber type flexible mounting

**NOTE:**

Fuel condition: Density at 15°C = 0.84 g/cm<sup>3</sup>; 1kW = 1.3596 mhp = 1.3410 HP  
 \* Fuel temperature 40°C at the inlet of the fuel injection pump [ISO 8665:2006]  
 Technical data is according to ISO 8665: 2006

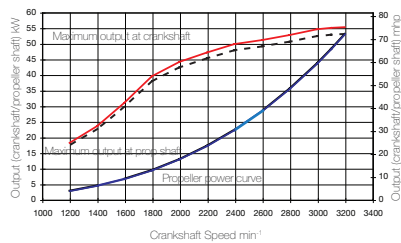




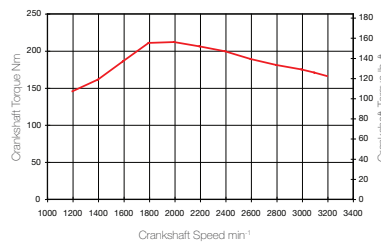
4JH5CE x SD60	4JH4-TCE x SD60-T
4-stroke, vertical, water-cooled diesel engine	4-stroke, vertical, water-cooled diesel engine
* 39.6 kW@3000 rpm [54 mhp@3000 rpm]	* 55.2 kW@3200 rpm [75 mhp@3200 rpm]
36.8 kW@2907 rpm [50 mhp@2907 rpm]	50.2 kW@3100 rpm [68 mhp@3100 rpm]
2.19 ltr [134 cu in]	1.99 ltr [122 cu in]
88 mm x 90 mm [3.46 in x 3.54 in]	84 mm x 90 mm [3.31 in x 3.54 in]
4	4, 4-valves per cylinder
Direct injection	Direct injection
Natural aspiration	Turbo charged
Electric starting 12V - 1.4 kW	Electric starting 12V - 1.4 kW
12V - 120A	12V - 120A
Fresh water cooling	Fresh water cooling
Enclosed, forced lubricating system	Enclosed, forced lubricating system
15W40	15W40
Counterclockwise viewed from flywheel side	Counterclockwise viewed from flywheel side
240 kg [529 lbs]	249 kg [549 lbs]
EU: RCD BSO II EMC	EU: RCD BSO II EMC
Rubber type flexible mounting	Rubber type flexible mounting

4JH4-TCE

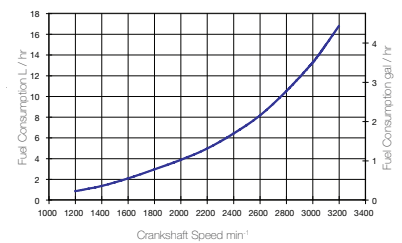
Power



Torque



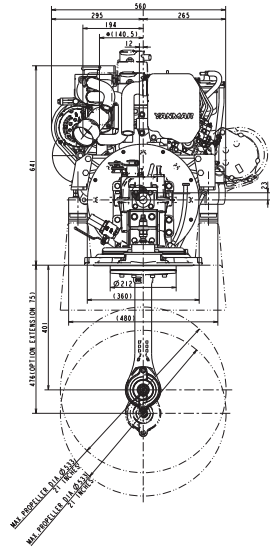
Fuel Consumption



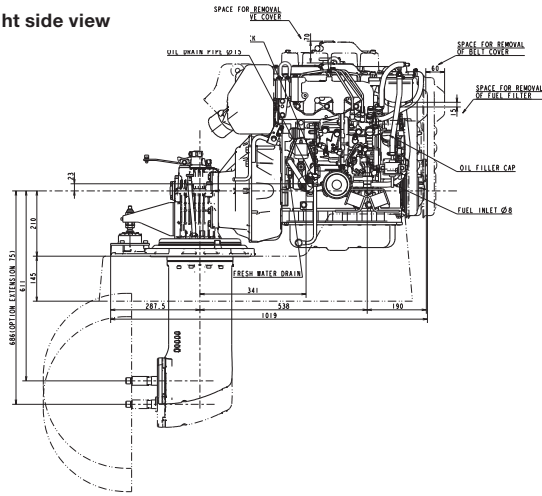


3JH5CE x SD60

Rear view

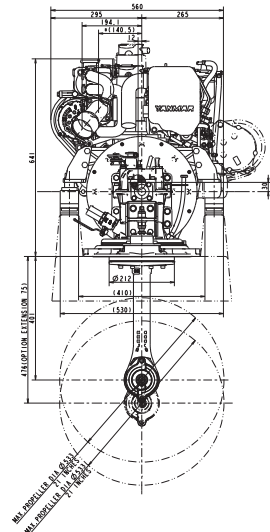


Right side view

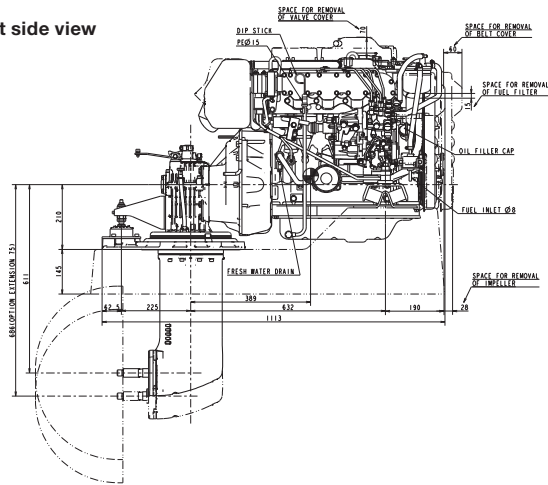


4JH5CE x SD60

Rear view

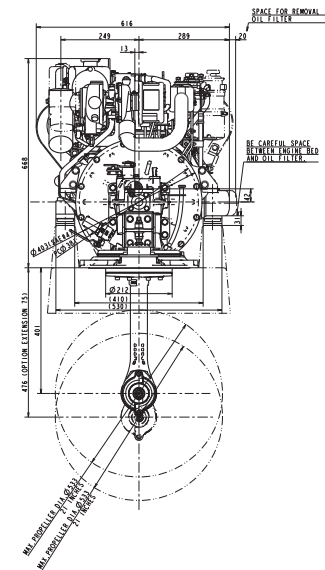


Right side view

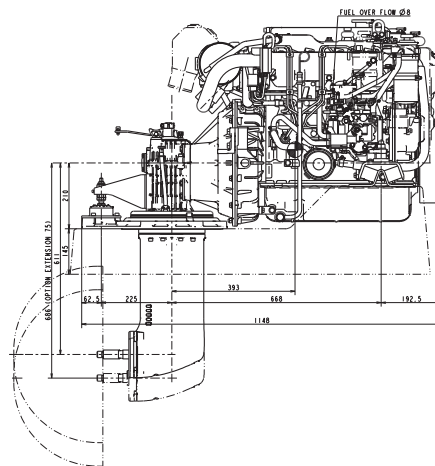


4JH4-TCE x SD60-T

Rear view



Right side view



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