

New Standard for Marine Diesel Engines

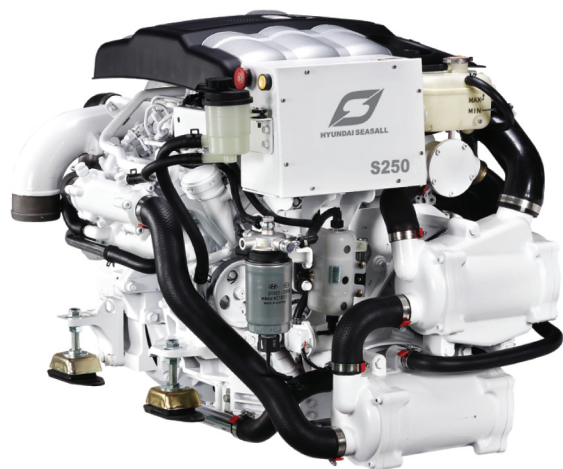
S250

250ps [184kW] acc. to ISO 8665

Piezo controlled common rail injection system delivers 250ps and 50kg·m torque from the 3.0 liter V6 Common Rail Direct injection (CRDI) engine. Advanced design also makes it ultra light, quiet and fuel efficient, with its dimensions extremely compact.

Durability and Reliability

Advantageous is the use of Compacted Graphite Iron (CGI) for the cylinder block. The CGI block is lighter and quieter than conventional grey cast iron and demonstrates at least 80 percent higher tensile strength, 45 percent higher stiffness and approximately double the fatigue strength of iron and aluminum. It lasts longer than anyone of us ever expected. It is the source of innovation and improvement in the marine engine industry.



Technical Description

Material

- Compacted Graphite Iron CGI cylinder block
- Aluminum head
- Nine balance weight crank shaft
- Oil cooled piston
- V6 4 valve DOHC
- Hydraulic lash adjusters
- Integrated water jacket
- Low noise duplex timing chain
- Hydraulic timing chain tensioner
- One-serpentine belt system
- Drive belt auto tensioner

Engine mounting

- Adjustable engine mount

Lubrication system

- Easily exchangeable oil filter cartridge
- Electric oil extraction pump
- Seawater cooled oil cooler (power steering/mission oil)
- Chain drive engine oil pump
- Hyrax wire indicator oil level gauge

Fuel system

- Common rail direct injection (Piezo injector)
- Fuel filter with sensor detecting water in fuel
- Electric low pressure pump
- Dual pressure control valve
- high pressure fuel pump

Electrical system

- 12 volt system and 150A alternator
- Auxiliary stop button
- Glow plugs for a trouble-free cold start

Cooling system

- Camshaft directly connected water pump
- Water cooled after-cooler, heat exchanger
- Auxiliary connector for heating aids
- Anti-corrosion materials

Engine Operating Indicator



- Engine self protection and diagnosis
- Display CAN information
- Display engine diagnostic error code
- Audible alarm and control lamps

Air inlet system

- Reusable airfilter

Exhaust system

- Engine coolant cooled exhaust manifold
- Water cooled exhaust elbow

Turbocharger

- Electric variable geometry turbine (E-VGT)

Engine Coupler

- Rubber roller coupler type of reliable, no bonding for sterndrive
- Torsion spring type for gearbox

Emissions

- EPA Tier 2, IMO and RCD compliant

Noise Level (RCD)

- 69dB (RCD Standard 75dB)

■ S250 Specification

Engine type	S250S	S250P	S250J
Engine duty rating	Pleasure & Light commercial		
	4-Stroke, 4-Valve		
	E-VGT with intercooler, fresh water cooling		
Output [ps(kW)] _{acc. to ISO 8665}	250(184)		
rpm @ full load	3800		
Cylinders	V6		
Displacement [cc]	2959		
Bore [mm]	84		
Stroke [mm]	89		
Compression ratio	17.5:1		
Max. torque [kgm]	50		48
at speed [rpm]	2500		3500
Injection system	Common Rail Direct Injection (Piezo injector)		
Alternator [A]	150		
Electronic engine diagnostic	YES		
MAX. Fuel consumption [l/h]	51.0		
Weight [kg]	334		
Propulsion system	Stern drive	Shaft drive	Waterjet

S250



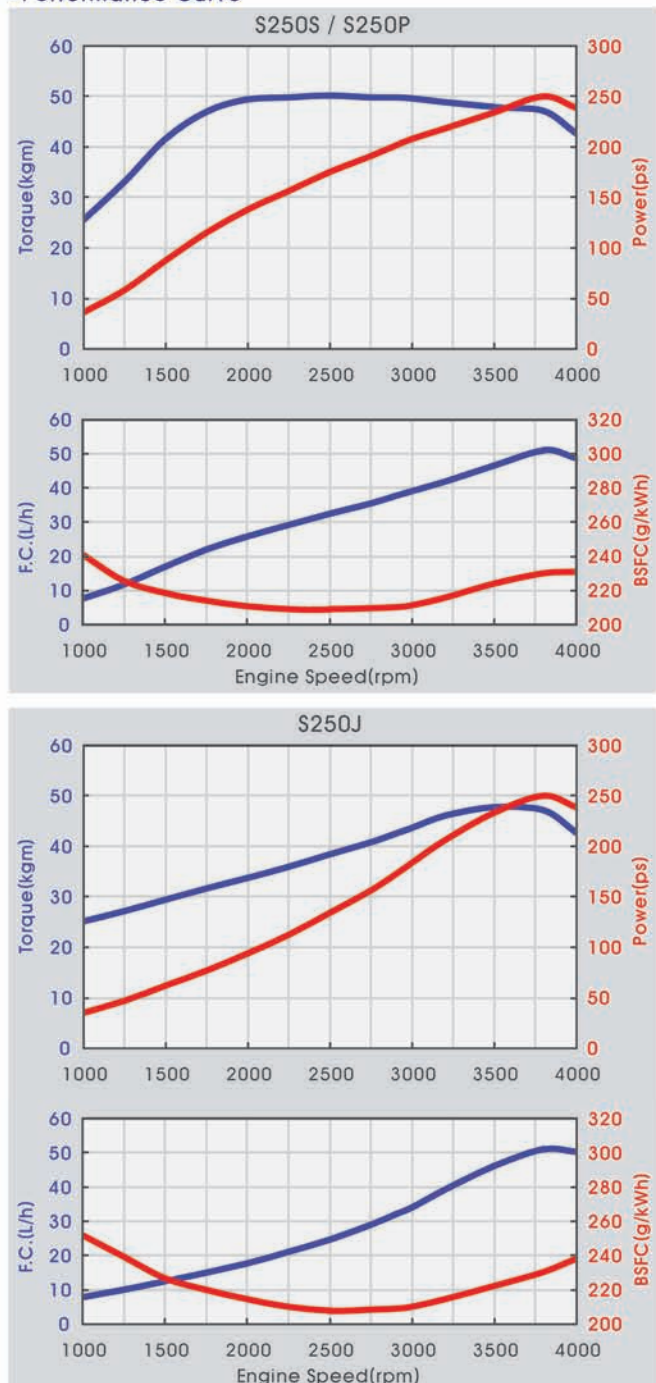
■ Stern drive for S250S

Model	Bravo One X Diesel	Bravo Two X Diesel	Bravo Three X Diesel
Gear ratio	1.36/1.50/1.65	1.65/1.81/2.0/2.2	1.50/1.65/1.81/2.0/2.2
Weight[kg]	59	64	68

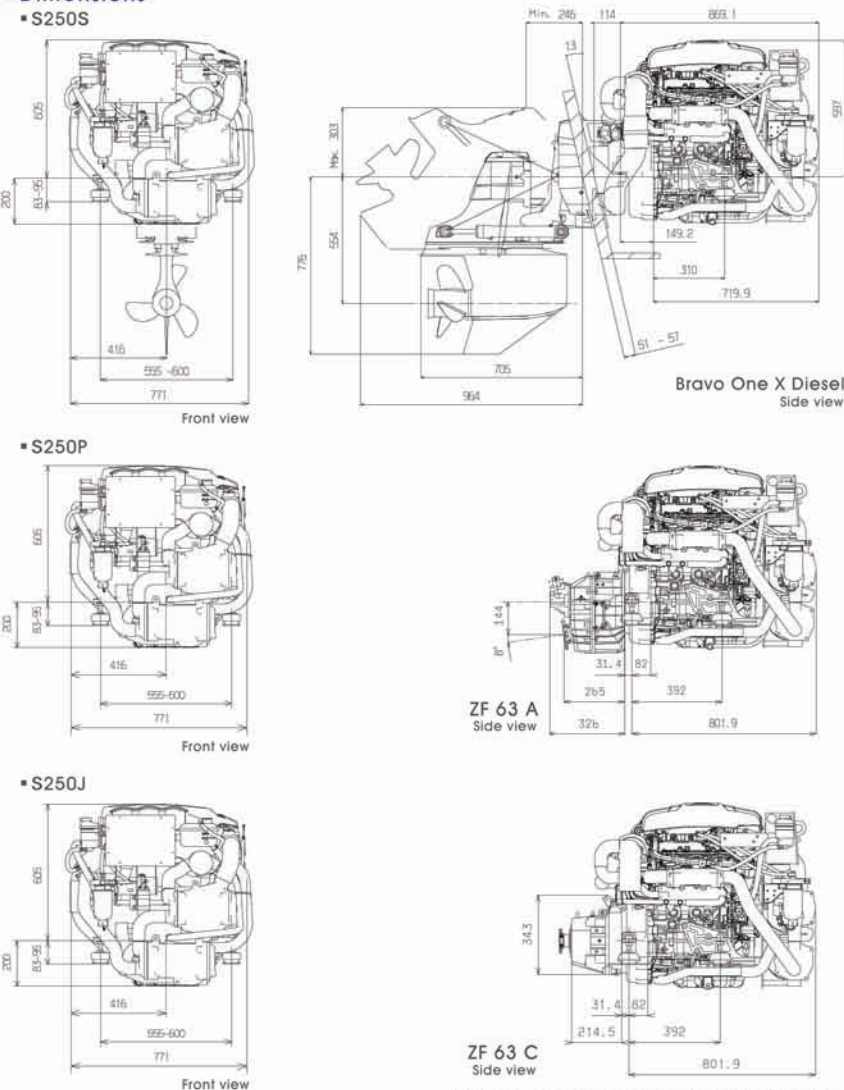
■ Marine Gear

Model	ZF 63 A for S250P	ZF 63 C for S250J	ZF 45 C for S250J
Gear Ratio	1.22 / 1.56 / 2.04 / 2.52 / 2.70	1:1	1:1
Weight [kg]	44	32	31

■ Performance Curve



■ Dimensions



* This data is subject to continual updates without notice.

Local Representative