

New Standard for Marine Diesel Engines

S-Series

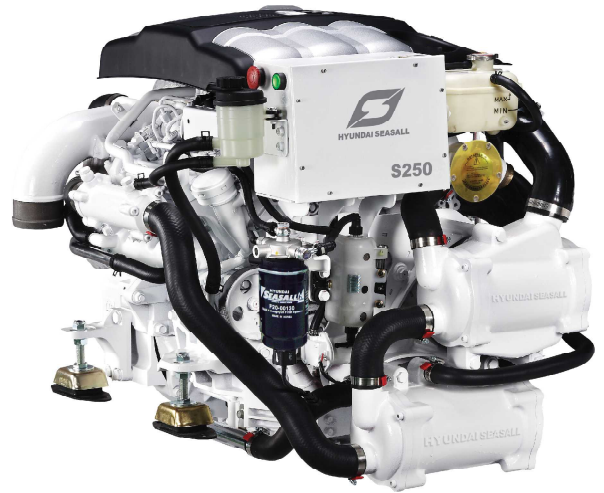
250hp [184kW] / 220hp [162kW] acc. to ISO 8665

Piezo controlled common rail injection system delivers 250 hp and 50kg·m of torque from the 3.0 litre V6 Common Rail Direct Injection (CRDi) engine.

The advanced design makes it ultralight, quiet and fuel efficient with extremely compact dimensions.

Durability and Reliability

The engine features a unique Compacted Graphite Iron (CGI) cylinder block. The CGI block is lighter and quieter than conventional grey cast iron and demonstrates at least 85 percent higher tensile strength, 45 percent higher stiffness and approximately double the fatigue strength of iron and aluminum. It is a prime example of the type of innovation and improvement which Hyundai SeasAll is bringing to the marine engine industry.



Technical Descriptions

Material

- Compacted Graphite Iron (CGI) cylinder block
- Aluminum head
- Nine balance weight crankshaft
- Oil cooled pistons
- V6 4-valve DOHC
- Hydraulic lash adjusters
- Integrated water jacket
- Low noise duplex timing chain
- Hydraulic timing chain tensioner
- Single 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
- Chain drive engine oil pump

Fuel System

- Common Rail Direct Injection (CRDi)-Piezo Injector
- Fuel filter with sensor to detect water in the fuel
- Electric low pressure pump
- Dual pressure control valve
- High pressure fuel pump

Electrical System

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

Cooling System

- Seawater pump directly driven from the camshaft
- Seawater cooled intercooler, heat exchanger
- Auxiliary connector for cabin heating
- Corrosion resistant material for the seawater circuit

Engine Operating Indicator



- Engine self protection and diagnosis
- Displays CAN information
- Displays engine diagnostic error codes
- Audible alarm and control lamps

Air Inlet System

- Reusable airfilter

Exhaust System

- Engine coolant cooled exhaust manifold
- Water cooled exhaust system
- Seawater cooled exhaust elbow

Turbocharger

- Electric Variable Geometry Turbine (E-VGT)

Engine Coupler

- Life-long and rattle free rubber roller coupler

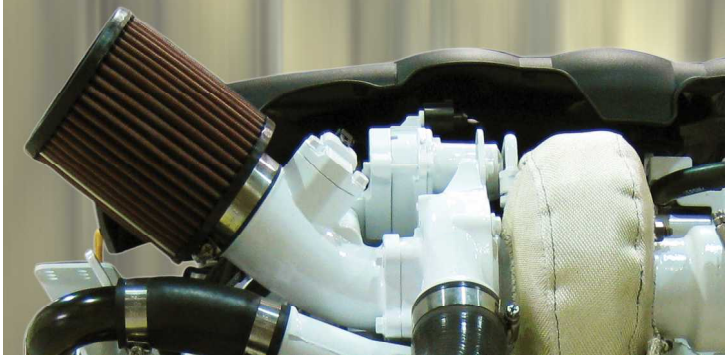
Emissions

- EPA Tier 2, IMO and RCD compliant

Noise Level

- 69.3dB (RCD Standard 75dB)

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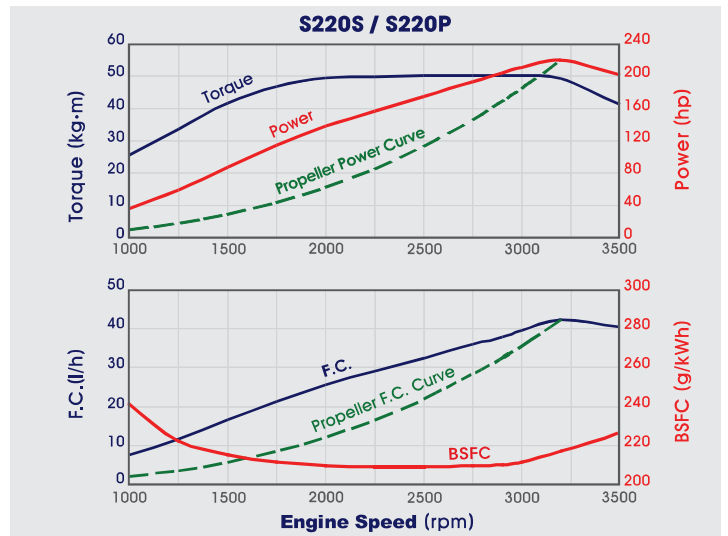
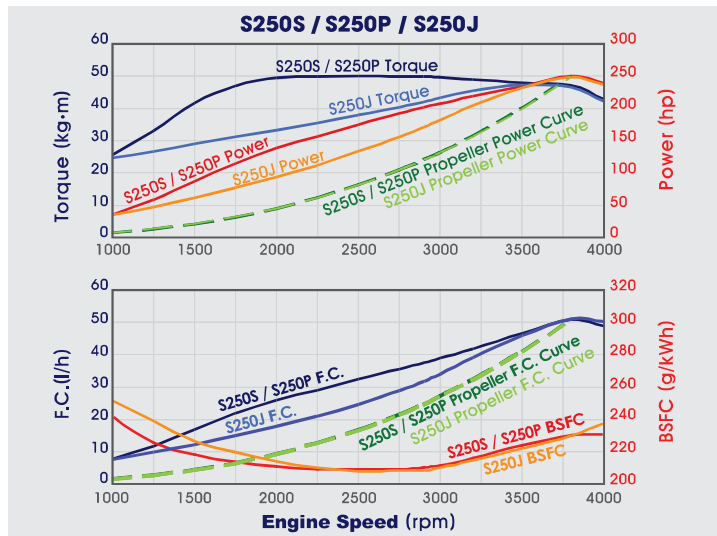
S 3.0 Series Diesel Engine Specifications

Engine type	S250S	S250P	S250J	S220S	S220P
Engine Duty Rating	Pleasure Duty (S5) Special Pleasure Duty, Special Light Duty Commercial (S4)			Light Duty Commercial (S3)	
	4-Stroke, 4-Valve, E-VGT with Intercooler, Fresh Water Cooling				
Output [HP (kW)]	250 (184)			220 (162)	
RPM @ Full Load	3,800			3,200	
Cylinders	V6				
Displacement [cc]	2959				
Bore x Stroke [mm]	84 X 89				
Compression Ratio	17.5 : 1				
Max. Torque @ RPM	50 kg-m @ 2,500		48 kg-m @ 3,500		50 kg-m @ 2,500
Injection System	Common Rail Direct Injection (CRDI) - Piezo Injector				
Alternator [A]	150				
Electronic Engine Diagnostic	YES				
MAX. Fuel Consumption [l/h]	51.0			42.3	
Dry Weight [kg]	334				
Propulsion system	Stern drive	Shaft drive	Waterjet	Stern drive	Shaft drive

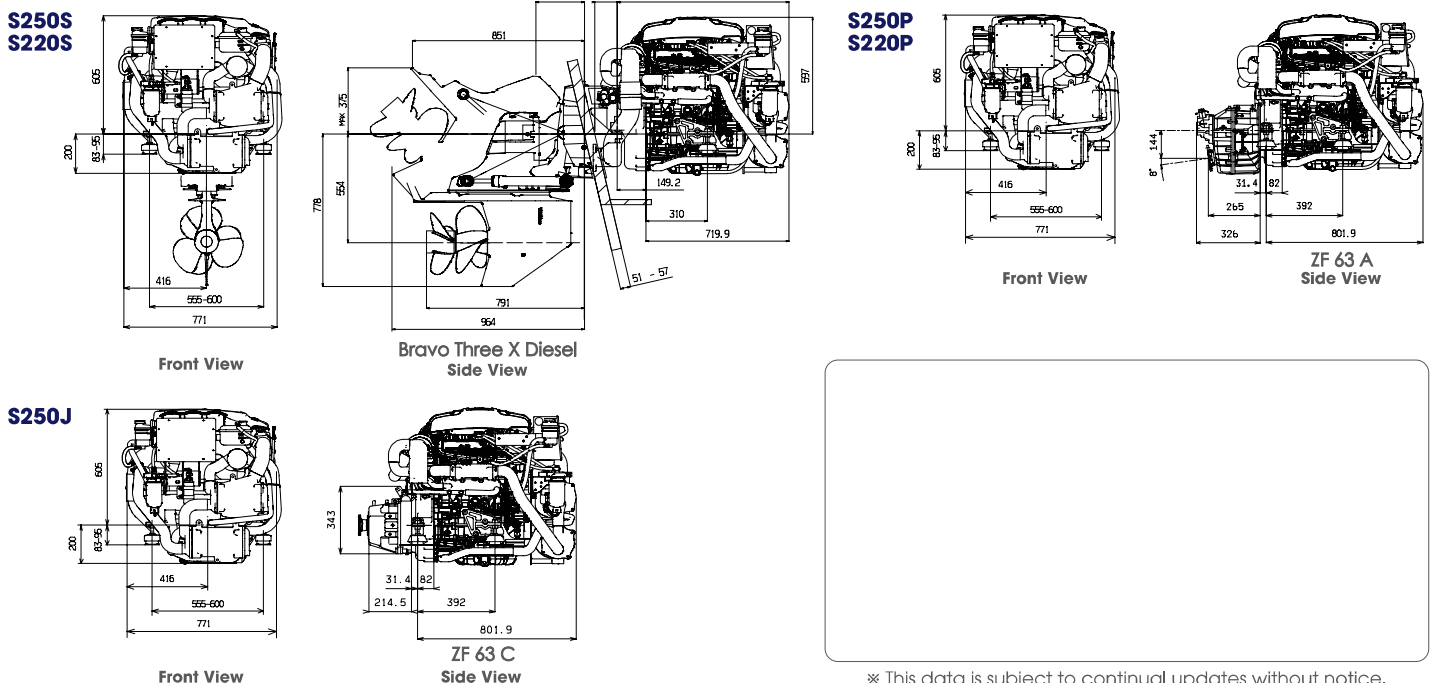
S 3.0 Series Propulsion System

Propulsion type	Model	S250S / S250P / S250J	S220S / S220P	Weight [kg]
Sterndrive	Bravo One X Diesel	1.36 / 1.50 / 1.65	1.50 / 1.65	59
	Bravo Two X Diesel	1.81 / 2.0 / 2.2	1.81 / 2.0 / 2.2	64
	Bravo Three X Diesel	1.50 / 1.65 / 1.81 / 2.0 / 2.2	1.65 / 1.81 / 2.0 / 2.2	68
Inboard	ZF 63 A for P	1.22 / 1.56 / 2.04 / 2.52 / 2.70	1.22 / 1.56 / 2.04 / 2.52 / 2.70	44
	ZF 63 C for J	1 : 1	-	32
	ZF 45 C for J	1 : 1	-	31

Performance Curve



Dimensions



* This data is subject to continual updates without notice.