

# DIESEL INBOARD ENGINE

# S240P

240ps[176.5kW] acc. to ISO 8665

## New standards for diesel inboard

SEASALL S240P is based on S-Engine of the most advanced and successful diesel engines developed by Hyundai's Powertrain R&D Center, the 3.0 liter V-6 diesel with piezo controlled common rail injection which powers Hyundai and Kia Motor Company's luxury utility vehicle, Veracruz and Mohave.

### Performance

Piezo controlled 2nd generation common rail injection system deliver 240ps and 50kgm torque from the 3.0 V6 CRDi engine. Advanced design also makes it ultra light, extremely compact dimensions, quiet and fuel efficient.

### Durability and Reliability

Leading the list of refinements 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.

SEASALL marine diesel engine is conducting durability tests under more severe conditions to secure the durability reliability of its powertrain parts. In addition, Hyundai's powertrain technology has been working hard to develop technologies needed to strengthen the powertrain, reduce combustion noise and vibration.

### Emission

The common rail multiple injection features enable this engine to improve the main aspect of diesel in environmental terms, by minimizing the main defect represented by the emission of particulates and NOx. And also improved low-temperature combustion stability through lean air-fuel rationing was made possible via designs for fuel injection optimization, intake port optimization, and improved combustion performance. This satisfy the world's strictest exhaust emissions standards.

### Service

Contact your closest SEASALL marine service center. All engine components and consumable spare parts are available at any SEASALL marine and points of the Hyundai & Kia Motor Company part networks.



### Technical Description

#### Material

- CGI (Compacted Graphite Iron) engine cyl. Block
- Breathes through an all-aluminum head

#### Engine mounting

- Adjustable front & rear engine mount

#### Lubrication system

- Easily exchangeable oil filter cartridge
- Electric oil scavenger pump
- Freshwater-cooled engine oil cooler

#### Fuel system

- Piezo electric common rail fuel injection system
- Fuel filter with water separator and warning alarm
- Electric fuel pump

#### Electrical system

- 12 volt system and 150A alternator
- Auxiliary stop button

#### Cooling system

- Camshaft direct connected seawater pump
- Seawater cooled aftercooler, heat exchanger, transmission oil cooler
- Connector prepared for cabin heater

#### Air inlet system

- Oil-wetted air cleaner
- Crankcase gases vented into the air inlet

#### Exhaust system

- Freshwater cooled exhaust manifold
- Seawater cooled exhaust elbow

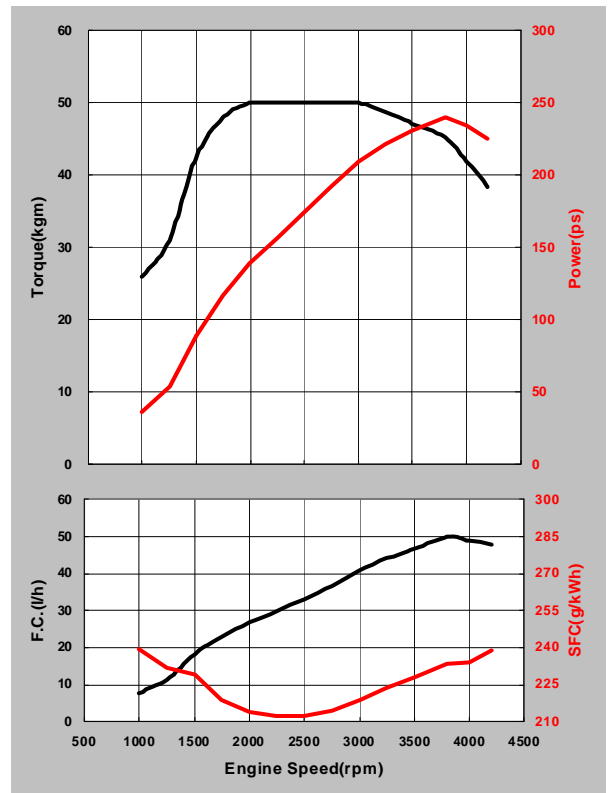
#### Turbocharger

- Electric variable geometry turbine(E-VGT)

# S240P

## TECHNICAL DATA

Engine type	S240P
	4-stroke, electronically variable turbocharger
	After-cooled, direct-injection, fresh water cooling
Output ps(kW)	240(176.5)
rpm at full load	3800
Cylinders	V6
Displacement [cm <sup>3</sup> ]	2959
Bore [mm]	84
Stroke [mm]	89
Compression ratio	17.3 : 1
Max. torque [kgm]	50
at speed [rpm]	2000~3000
Injection system	Piezo controlled common rail injection(1600bar)
Alternator [A]	150
Engine diagnostic	Yes
Weight [kg]	320



### Standard Instruments/Control

- Key switch – ignition and start function
- Mechanical control head for throttle and shift
- Engine revolution counter with hourmeter
- Temperature gage for engine coolant temperature
- Battery voltage gage
- Engine operating indicator

### Engine Operating Indicator

- Display CAN information about engine RPM, battery voltage, fuel consumption, coolant temperature, state of key on-off and gear neutral, full load operating time
- Display engine diagnostics error code
- Audible alarm and control lamps

### Options

- Electric control system
- Connecting cables for dual station

### Transmission

- ZF 45A
- ZF 25A/63A (option)

### Emissions

- EPA Tier 2, IMO and RCD compliant

