

# VOLVO PENTA AQUAMATIC DUOPROP

## 5.7/DP

8-cylinder, 4-stroke, gasoline marine engine  
Up to 206 kW (280 hp)

### Engine

The 5.7 liter is a GM Vortec gasoline engine in a V-8 configuration featuring: seawater cooling with cast iron cylinder block, cylinder heads and exhaust manifolds, which are specially developed for the marine industry. The exhaust manifolds and risers are EDP treated for increased durability. In addition, the seawater pump is located on the front of the engine for easy accessibility.

### Fuel injection (GSi)

The TBI system is monitored by an Electronic Control Module (ECM) and gives the following advantages: more responsive and smoother acceleration, excellent turnkey starts in all weather conditions, smooth reliable idling, reduced fuel consumption, and improved control of emissions.

Additional features built into the system include: engine knock control for compensation of less than perfect gasoline, overspeed protection, rpm reduction of the engine for low oil pressure and high engine temperature, platinum tipped spark plugs for longer life and trouble free starts, altitude compensation for air density, and self-diagnostic capabilities. Also, there are two fuel pumps for low and high pressure respectively.

### Aquamatic sterndrive

The Duoprop drive with its twin counter-rotating propellers features exhaust outlets through the propeller hub and cavitation plate producing a harmonious drive unit with unbeatable characteristics in the boat in terms of speed, acceleration, steering, maneuvering, fuel economy and less noise and vibration.

The drive is equipped with a cone clutch for easy and smooth shifting, pattern-matched spiral bevel gears for

5.7GSi with DP-S  
Duoprop drive



optimum strength and minimum gear whine, a break-away shaft coupling to prevent costly drive train repairs, and sacrificial zincs located both on the drive and transom shield.

The drive is equipped with easily maneuvered hydraulic power trim for obtaining the best running position at different sea and load conditions.

A choice of stainless steel and aluminum propellers are available for different applications.

The 5.7 features standard power steering for maximum driving comfort.

### Electrical system

The electrical system features a 12 V corrosion-protected marine electrical system which meets the U.S. Coast Guard requirements. The engine is wired for easy plug-in connection to the instrument panel. The engine electrical system and the electric hydraulic power trim is protected by a 50 A circuit breaker and comes equipped with a 65 A alternator. Full instrumentation including trim gauge

and wiring harness (option on certain markets).

### Technical description:

#### Engine and block

- Cylinder block and cylinder heads made of cast iron for good corrosion resistance
- Pistons with two compression rings and one oil scraper ring
- Five-bearing crankshaft
- Valve train consisting of single camshaft, hydraulic valve lifters, push rods and two overhead valves per cylinder

#### Engine mounting

- Two adjustable rubber mounts, one on each side of the engine, and two between transom shield assembly and engine

#### Lubrication system

- Pressure lubrication system with full-flow oil filter of spin-on type

#### Fuel system

- Throttle body fuel injection (TBI – GSi)
- Fuel filter with water separator
- Two electric fuel feed pumps (GSi)
- Stainless steel fuel lines

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## Inlet and exhaust system

- Marine intake manifold developed for throttle body injection (GSi)
- Flame arrestor
- Closed crankcase ventilation
- Seawater-cooled exhaust manifolds and risers made of cast iron
- Complete exhaust line with pipe and bellows for exhaust outlet through the drive

## Cooling system

- Thermostatically controlled seawater cooling
- Crankmounted seawater pump
- Multi-V belt with spring tensioner (GSi)
- Electrocoated exhaust risers and manifolds

## Electrical system

- 12 V corrosion-protected electrical system
- ECM unit ensures constant optimum performance with diagnostic capability (GSi)
- Outlet on alternator for voltage sensor cable for optimized charging
- 65 A alternator with internal transistorized voltage regulator
- Breakerless electronic ignition system
- Platinum tipped spark plugs
- Two 50 A resettable fuses for protection of the engines's electrical system and power trim
- One 20 A resettable fuse for protection of the fuel feed pumps and one 12.5 A resettable

fuse for protection of the fuel injection system (GSi)

- Starter motor power 1.0 kW
- Audio alarm for temperature and oil pressure

## Instruments

(option on certain markets)

- Complete instrument panel including: Rev counter, engine temperature gauge, oil pressure gauge, voltmeter, key switch, two fuses, instrument light switch
- Wiring harness from engine to instrument panel
- Digital trim gauge with active corrosion protection
- Maneuver switch for power trim
- Wiring harness from trim pump to maneuver switch for power trim and trim gauge

## Drive

- Duoprop
- Cone clutch
- Coolant water intake for the engine located at the lower part of the drive
- Pattern-matched spiral bevel gears
- Exhaust outlets through propeller hub and cavitation plate
- Overload protection sleeve (break-away coupling)
- The drive can be tilted 55°

- The drive can be turned 28° in each direction with power steering
- Built-in kick-up function to reduce possible damage, in the event the drive strikes an underwater object
- Belt-driven power steering pump
- Oil cooler for power steering
- Active corrosion protection as accessory

## Power Trim

- Electrically operated hydraulic system with trim gauge for best driving comfort

## Accessories

An extensive range of accessories for:

- Fuel system
- Cooling system
- Control system
- Steering system
- Instruments
- Electric system
- Comfort & Safety
- Propeller & Drive
- Maintenance

For detailed information, please see Accessory catalogs.

Contact your local Volvo Penta dealer for further information.

Not all models, standard equipment and accessories are available in all countries. All specifications are subject to change without notice.

The engine illustrated may not be entirely identical to production standard engines.

## Technical Data

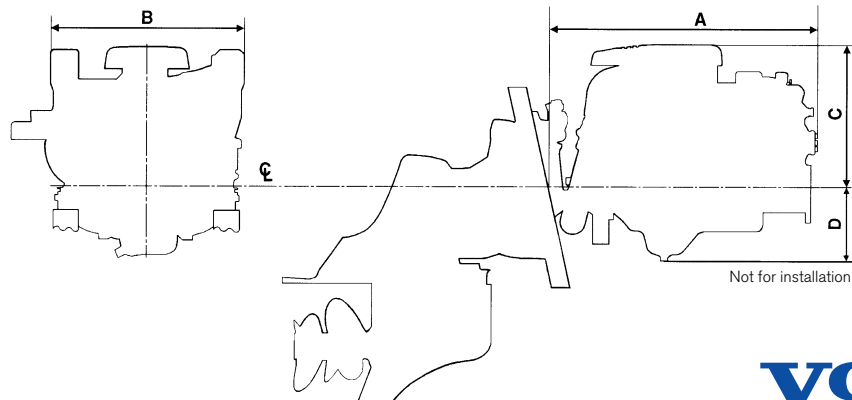
Engine designation .....	<b>5.7GSi<sup>1)</sup></b>	<b>5.7GS</b>
Propeller shaft power kW (hp) .....	206 (280)	184 (250)
Max. engine speed, rpm .....	5000	4800
Displacement, l (in <sup>3</sup> ) .....	5.7 (350)	5.7 (350)
Number of cylinders .....	V-8	V-8
Fuel system .....	EFI-TBI	2 BBL
Bore/stroke, mm .....	101.6/88.4	101.6/88.4
in. ....	(4.00/3.48)	(4.00/3.48)
Compression ratio .....	9.4:1	9.4:1
Volvo Penta Duoprop drive .....	<b>DP-S</b>	<b>DP-S</b>
Ratio .....	1.78:1 or 1.95:1	1.95:1 or 1.78:1
Dry weight engine, transom shield and drive, kg (lb) .....	455 (1002)	449 (990)
A. Engine length along crank center line, mm (in.) .....	939 (36.95)	933 (36.75)
B. Engine width, mm (in.) .....	716 (28.2)	718 (28.2)
C. Height above crankshaft, mm (in.) ....	556 (21.9)	559 (22)
D. Height below crankshaft, mm (in.) ....	251 (9.9)	251 (9.9)

<sup>1)</sup> SAV-1 approved

Propshaft power according to ISO 8665

Duty rating: R5 (Pleasure Duty)

IMEC Standard



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**AB Volvo Penta**

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