

PRODUCT GUIDE SAILING 2007-2008

FOR SAILORS ONLY

ENGINES, INSTRUMENTS & ACCESSORIES

**VOLVO
PENTA**



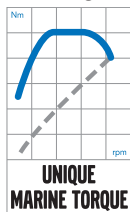
CLEAN. QUIET. POWERFUL.

Your sailboat engine should be your most dependable partner. Starting reliably under all conditions. Giving you the power you need for tricky docking situations. Providing electricity, hot water and heating. Yet quiet and clean.

The D series sailboat engines from Volvo Penta give you superior comfort and reliability. Whether you're just sailing to the next bay or around the world.

Torque for sailboats

Volvo Penta D series engines deliver high torque even at low revs. That means plenty of power and quick response to your commands when manoeuvring in a harbour. It also means the capacity to drive the most powerful alternators in the business.



Low revs = high comfort

The D series engines are rated at just 2 800–3 200 rpm, which means a mere 2 000–2 500 rpm at cruising speed. The result is minimal vibrations and low noise – which are further reduced if you have Saildrive.

Good to you - and to the environment

Low exhaust emissions are just as important to the environment as they are to your

boating enjoyment. There's almost no unpleasant smell or smoke. Not even when you start the engine or accelerate. And when you've docked, there are no nasty oil films on the water.

The D series complies not only with emission regulations from the EU RCD, but also with the significantly more stringent US EPA Tier 2 emission regulations.





THE D SERIES FOR SAILBOATS

Improved performance

- High torque from low rpm
- High-efficiency Saildrive
- Patented high-thrust propellers

Greater comfort

- Low revs
- Low emissions
- Electrical stop as standard
- Minimal vibrations and low noise
- Smart, flexible instrumentation

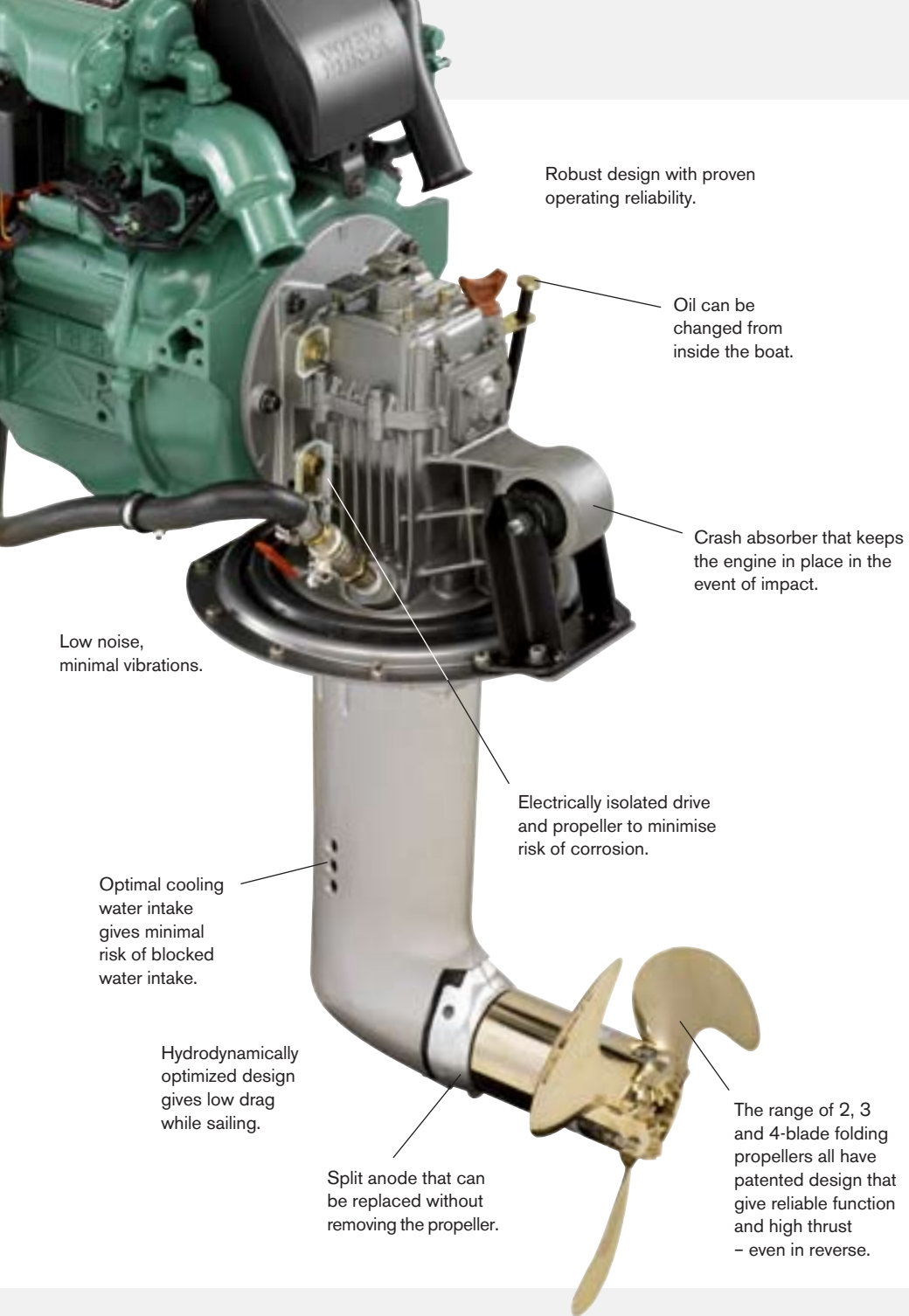
More efficient charging

- 115 or 140 A alternators
- Built-in charging sensor

Reliable, simple boat ownership

- Robust design
- Freshwater cooling as standard
- Relay-activated starter solenoid
- "Crash absorber" on the Saildrive
- Electrically isolated Saildrive
- Easy-to-maintain engine and a one-stop service contact





Robust design with proven operating reliability.

Oil can be changed from inside the boat.

Crash absorber that keeps the engine in place in the event of impact.

Low noise, minimal vibrations.

Electrically isolated drive and propeller to minimise risk of corrosion.

Optimal cooling water intake gives minimal risk of blocked water intake.

Hydrodynamically optimized design gives low drag while sailing.

Split anode that can be replaced without removing the propeller.

The range of 2, 3 and 4-blade folding propellers all have patented design that give reliable function and high thrust – even in reverse.

DETAILS THAT MAKE THE DIFFERENCE

The Saildrive. The 3-blade folding propeller. The built-in charging sensor. These are just a few examples of the many Volvo Penta innovations especially created for sailors.

We invite you to compare Volvo Penta with other sailboat engines. The differences are clear, particularly in the details – details that give you greater reliability, performance and comfort.

Freshwater cooling as standard on all engines.

Effective intake silencer contributes to low engine noise.

Built-in charging sensor gives correct voltage at the batteries. Always perfect charging.



115 A alternator with built-in charging sensor as standard on all engines (the D3 model has 140 A).





Saildrive – from Volvo Penta

The Saildrive was introduced by Volvo Penta in 1973. Today's models have all of the original benefits, plus a number of new ones you won't find anywhere else.

Patented folding propellers

Volvo Penta's patented 3- and 4-blade folding propellers are now complemented by a new 2-blade version. The range now cover engine outputs from 7 to 120 hp. All with low drag while sailing, but all the thrust of a fixed propeller – both forward and reverse.

Efficient charging as standard

Today's sailboats consume a lot of electricity. That's why we've equipped the D series with by far the best battery charger in the business – as standard equipment. It's a 115 A alternator with a built-in charging sensor. (The D3 has a 140 A alternator.)

EVC (Electronic Vessel Control) is available for the entire D series.

Optimised engine suspension boosts comfort.

THE D SERIES FOR SAILBOATS: 12–180 HP

Diesel engines specially designed for sailboats: low revs, low emissions and powerful thrust. Should you need something even more powerful, we've got engines all the way up to 775 hp.

D1-series

The most compact engines in our range. 2- and 3-cylinder marine diesels available with Saildrive or gearbox with straight or down-angled shaft. EVC integrated.



D2-series

4-cylinder marine diesels with Saildrive or gearbox with straight or down-angled shaft. The D2-75 has turbo and aftercooler. EVC integrated.



D3

5-cylinder diesel engine with EVC-controlled common rail fuel injection. Extremely lightweight and compact. Turbo and aftercooler. Gearbox with down-angled shaft or V-drive.



D4

4-cylinder diesel engine with EVC-controlled common rail fuel injection. Large, 3.7 l cylinder volume. Turbo and aftercooler. Electronic controls included. Gearbox with down-angled shaft or V-drive.



	Crankshaft kW/hp	Propeller shaft kW/hp	Rated rpm	No. of cyl.	Displace- ment, litres	Alternator 12 V
D1-13	9.0/12.2	8.6/11.8	3 200	2	0.5	115 A*
D1-20	14/19	13/18	3 200	3	0.8	115 A*
D1-30	21/28	20/27	3 200	3	1.1	115 A*
D2-40	29/40	28/38	3 200	4	1.5	115 A*
D2-55	41/55	39/53	3 000	4	2.2	115 A*
D2-75	55/75	53/72	3 000	4	2.2	115 A*

* With built-in charging sensor

	Crankshaft kW/hp	Propeller shaft kW/hp	Rated rpm	No. of cyl.	Displace- ment, litres	Alternator 12 V
D3-110	81/110	78/106	3 000	5	2.4	140 A
D4-180	132/180	128/174	2 800	4	3.7	115 A*

* With built-in charging sensor

SMART, FLEXIBLE INSTRUMENTATION

EVC – Volvo Penta’s electronic platform – gives you lots of opportunities. Select the instrumentation you want and engine data where you want it – why not in the chart plotter or at the navigation table?



Your choice!

EVC gives you full freedom of choice in instrumentation. You can have access to engine data from up to four places onboard. Thanks to CAN-bus technology, it's easy to install several displays – or get your engine data in a compatible chart plotter!

Reliable starts – simple stops

With automatic pre-heating and the relay-activated starter solenoid starts are reliable. Stopping the engine is just as easy – and the electric stop is standard on all D-series engines. D1/D2 features push-button starting and stopping, D3/D4 uses an ignition key.



Standard instrumentation for D1/D2 consists of a start/stop panel and the tachometer with info display that gives you continuous readings of the rpm and engine running hours. Alarm symbols are in the display, with audible signals for low oil pressure, high engine temperature and low charge.

D3/D4 has a standard set-up of the tachometer with info display and push button panel. You get comprehensive engine information, alarms in plain text, plus the opportunity to add trip computer functionality with data such as average fuel consumption, the distance your present fuel level will take you, trip distance, etc.



The EVC display is an alternative or complement to the tachometer. It shows the rpm, engine hours, charge, engine temperature and fuel level. Alarms for low oil pressure, low charge and high engine temperature. Extra senders also give speed, water temperature and depth. With D3/D4 you can get full trip computer functionality.



You can easily add traditional instruments for charge, fuel gauge, engine temperature and alarms. All Volvo Penta instruments are available with black or white background, black or chrome-plated rings and for flush-mounting.



With a NMEA 2000-compatible chart plotter, you can even read your engine data, such as rpm, operating time, fuel level, engine temperature and charge directly in the plotter.

THE ACCESSORIES YOU WANT

You get a complete range of accessories from your Volvo Penta dealer, divided in two brands: Genuine Volvo Penta Accessories and QL – Quality Line. Both brands are handled by Volvo Penta dealers: sales, service, support and warranty.

Thruster remote control

Operate the bow thruster from anywhere you want on the boat! Floating and waterproof remote with coded radio signal.



Compact, powerful bow thrusters

The QL CT600 and CT900 are very powerful yet compact and easily installed. Low on maintenance thanks to belt drive and stainless steel design.



2-blade folding propeller

The new 2-blade folding propeller offers the same patented blade design (high skew) as the 3- and 4-blade versions. This means that boats with engines from 7 hp can now benefit from outstanding thrust under power, safe operation and minimal drag while sailing.

More info in the Sailing Accessory brochure or in the "owners section" on the Volvo Penta website.



Extreme boats. Standard engines.

In October 2008 it is time for Volvo Ocean Race around the world. Yet another gruelling test for the world's top off-shore sailors – men and women.

This time with changes to the format, new harbours and modified class rule providing even more intense competition. The only thing certain is that it is



going to be tough. And that every boat, just as before, will be relying on standard Volvo Penta engines to supply electricity, water, heating and propulsion.

Service close at hand

Whether you only cruise local grounds or set off for further adventures, Volvo Penta Service is



always within reach! In over 130 countries there is a total of some 5000 authorised dealers who know your engine and have access to the right parts when you need them. The same goes for our entire range of accessories. Volvo Penta Action Service gives you help by telephone, 24 hours a day, 7 days a week. (Available in most markets in Europe and North America.)

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