

# **POWERBOAT 2017**

The latest innovations, engines, drivelines and options









#### FORWARD DRIVE PAGE 20

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## The smarter way to Easy Boating

To truly relax and enjoy boating, owners need simple, safe and intuitive equipment designed to make the whole experience enjoyable – regardless of whether they are experienced or new to life on the water. This is the idea behind our philosophy of Easy Boating.

We work in partnership with boat builders around the world. Through our unique helm-to-prop approach, all our equipment is designed to work perfectly together.

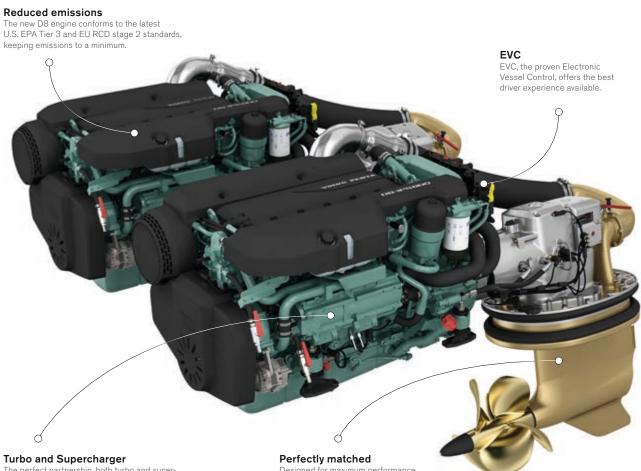
All this matters. Because there is nothing better than a fully integrated and intuitive system to keep you connected to the environment around you – at all times. We develop new products designed to put control at your fingertips, like the e-Key remote or Joystick for Inboard. Others, like the Battery Management System are out of sight, silently working in the background to manage your power needs. We continue to open up more exciting possibilities – making boating easier and more accessible to more people than ever before. That's why our offer even extends beyond the optimizing of the boat, to a worldwide customer service and support network.

It's the smarter way to Easy Boating.



## Latest news for 2017

This year, our latest wave of innovation brings you even closer to an integrated boating experience – the smarter way to Easy Boating. Technology lovers will enjoy the latest upgrades to our award-winning Glass Cockpit range, as well as our new Battery Management System that simplifies the handling of power onboard – and from a distance, via the optional e-Key remote. And whether you favor inboard shaft or the latest Volvo Penta IPS pod propulsion system, comfort and performance are within easy reach. The updated engine range now boasts an even wider selection of power outputs – thanks to the all-new D8 engine.



Turbo and Supercharger The perfect partnership, both turbo and supercharging gives outstanding low-end torque that is maintained throughout the rev range. **Perfectly matched** Designed for maximum performance, the latest pod and propeller works in perfect harmony with the D8 engine.

#### New D8 engine for IPS and Inboard

For those who enjoy performance, 2017 sees the launch of the new D8-550 and D8-600 engines for Inboard and the new D8-IPS700 and D8-IPS800 for the IPS range – whichever propulsion system you choose, both offer more power together with lower noise and optimized fuel consumption. Available for diesel inboard and twin or triple IPS installations.





#### Battery Management System - you are in charge

Forget heavy bunches of keys and finding main circuit breakers. The new Battery Management System – with e-Key remote – allows you to manage your onboard electrical system remotely. By pressing the ON button the system powers up with car functionality and at the same time authorizes you as the user of the boat. In combination with EVC, the Battery Management System gives you a complete overview of battery status in user displays conveniently located in up to six stations onboard. The system offers you a number of smart features such as battery protection and automatic start aid. This function temporally borrows energy from the auxiliary battery to ensure you have the power to start up your engine. Battery management is safe and robust. Compared to a traditional system, it saves a number of components, wires and connection points to increase reliability.



#### Glass Cockpit System - now in widescreen

Now available from 7 to 24 inch widescreen format, the Glass Cockpit System integrates all driver information in one location. The multi-function, touchscreen displays give you a full overview of navigation and engine data, together with Easy Boating functions such as Autopilot and Joystick driving. The display layouts are fully customizable so that you can decide when, where and how the information is presented. This increases your safety, awareness and enjoyment at sea.



#### Joystick for Inboard

Joystick for Aquamatic and Volvo Penta IPS is now available for inboards. While most comparable systems only communicate with the thrusters, Joystick for Inboard coordinates the rudders, gearbox, throttle and thrusters together – giving inboard owners a superior driving and docking experience.

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### **Volvo Penta driver interface**

Once again, Volvo Penta has created a new standard. With the Glass Cockpit System as a central feature, we have realized our vision of a completely new, marine driver environment.

Inspired by the knowledge and experience of the Volvo Group – one of the world's most prominent manufacturers of driver environments – we have focused on making the interface between you and your boat as simple, easy and intuitive as possible.



#### 1. Propulsion and navigation in one

The Glass Cockpit System gives you a complete overview of both propulsion and navigation by displaying all data on responsive, widescreen displays. You can even switch between screens and information from the drivers chair using the optional remote control.

#### 2. The power of a single e-Key

With the e-Key panel you only need one key to lock and unlock the system. Swipe the e-Key in front of the panel or press the ON button on the e-Key Remote and the system powers up – authorizing you as the user of the boat. You can also program the e-Key Remote to operate on specific onboard functions such as deck and interior lighting or an automated gangway.



#### 3. Intuitive handling

Volvo Penta Joysticks make driving and docking easier than ever. With an optional joystick for Volvo Penta IPS, Aquamatic Sterndrive and Diesel Inboard-powered boats, driving and docking have never been easier. The buttons put a unique combination of functions within easy reach.

#### 4. An ergonomic success

All Volvo Penta controls are ergonomic with a solid high-quality feel. On this top-mounted control, all EVC functions are activated and adjusted via easily accessible buttons – for increased comfort, better drivability and enhanced safety.

#### 5. Steering in style

Volvo Penta's selection of steering wheels combines high quality with a stylish design that is perfectly matched to our range of EVC controls and displays. Available in different stainless steel models and combined with mahogany or leather.

## **Easy Boating features**

Whether it's an intuitive electronic interface or a high-performance drive system, every piece of Volvo Penta equipment is developed with you in mind - enhanced integration and usability that's designed to make your life on the water even more relaxing and enjoyable.

#### Joystick control - available for all systems

Aquamatic, Volvo Penta IPS and now Inboard shaft installations can benefit the advantages of precision maneuverability. Regardless of which propulsion system you choose, you can add useful features such as Joystick Docking and Joystick Driving.



#### **Joystick Driving**

A whole new way to maneuver with precision at all speeds. You steer comfortably with the joystick. The integrated autopilot supports by automatically engaging after every course change.



#### Joystick Docking

Makes docking easy, even fun. Forget complicated maneuvers in close quarters. Just move the joystick in any direction and your boat will follow. You can install up to six Joystick Docking stations on your boat.



#### Features

	Volvo Penta IPS	Aquamatic Sterndrive	Forward Drive	Diesel Inboard
Joystick Docking	•	• 2)	-	• 2)
Joystick Driving	٠	• 2)	-	• 2)
Dynamic Positioning System	٠	-	-	-
Battery Management System	٠	٠	٠	•
Sportfish Mode	٠	-	-	-
Autopilot	٠	• 2)	-	• 2)
Interceptor System	٠	• 2)	-	•
Powertrim Assistant	-	٠	٠	-
Tow Mode for water sport	-	• 1)	٠	-
Glass Cockpit System	٠	٠	٠	•
Trip computer	٠	٠	٠	•
Cruise control	•	٠	٠	•
Single-lever Mode	•	• 2)	-	•
Low-speed Mode	•	-	-	• 3)

• Available - Not available 1) Single installations 2) Twin installations 3) D4-D13

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#### **Dynamic Positioning System**

With Volvo Penta IPS, the Dynamic Positioning System is the perfect feature when you want to maintain your position for a moment. For example, when you are preparing for docking, waiting to refuel or for a bridge or lock to open. Just press the DPS button and the system will hold your boat's heading and safely keep it within a very limited area, even during strong currents or windy conditions.





#### Interceptor System

The robust and compact design of the Interceptor System (IS) ensures efficient and reliable trimming for Volvo Penta-powered yachts 40–100 feet. Fully integrated with EVC, it has become the perfect Auto-mode solution. Fully automatic trim adjustments will make your driving easier than ever.



Cruise control

With fingertip control of your engine rpm, you can fine-tune your boat's speed for best possible fuel economy and comfort.



#### Low-speed Mode

Reduces boat speed at idling by 50% from 5–6 knots to 2–3 knots. Integrated in the control. Perfect when you're driving in marinas and canals.



**Glass Cockpit System** Gathers all driver information in one place – for enhanced overview and instant control of both navigation and engine.



Battery Management System The system gives you a complete overview of battery status, helping you to manage your onboard electrical system.



#### Autopilot EVC-integrated, locks automatically to steering wheel course changes (shadow drive).



**Powertrim Assistant** Gives you the best possible drive trim – fully automatically –

drive trim - fully automatically for perfect running attitude. Results in optimum performance and low fuel consumption.



#### **Trip computer**

Get trip computer functionality with information about fuel consumption, distance to empty, trip time and much more for optimizing your boat's performance.



#### Sportfish Mode

Makes it possible for you to rapidly turn your boat around its own axis – and follow the fish at high speed in reverse, using only the engine controls.



Tow Mode for water sport

Limits your boat's speed to your preset maximum rpm. Maintains the set speed and compensates for any changes in load, for maximum water sport fun.



Single-lever Mode Operate twin, triple or quad engines with only one lever. Gives you easy control over speed even in rough seas.

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## Leading the way forward

Volvo Penta IPS is still a revolution. Thousands of applications have been installed onboard hundreds of boat models worldwide. Now with a wider range available, even more customers can appreciate the superior benefits of pod systems, compared with inboard shafts.

#### Key characteristics

Maneuverability, onboard comfort and performance – Volvo Penta IPS takes these characteristics to a whole new level. In addition, the layout of IPS creates more usable space onboard and has influenced many of the world's leading yacht designers.

#### The benefits of Volvo Penta IPS

- 40% longer cruising range
- 20% higher top speed
- 30% reduced fuel consumption
- 30% less CO<sub>2</sub> emissions
- 50% lower perceived noise level
- Safe and predictable handling
- Joystick control
- Creates more space onboard

These are approximate figures comparing IPS with inboard shafts at cruising speed with planing hulls.





#### Faster, further, cleaner and quieter

Volvo Penta IPS is designed to improve all aspects of propulsion. The numbers speak for themselves. Forward-facing, counter-rotating propellers reduce  $CO_2$  emissions by 30%, while also reducing fuel consumption and perceived noise levels.

And that's not all. Together with the latest Volvo Penta engines you get 20% more speed, together with a 40% longer cruising range.

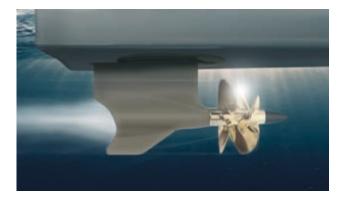


#### The joystick

The joystick is perhaps the most well-known feature of Volvo Penta IPS, putting outstanding maneuverability and a unique combination of functions within easy reach. Dynamic Positioning, Joystick Driving, Joystick Docking and High Mode all offer easier handling and increased safety.

## Forward-facing technology

The key to the outstanding efficiency of the Volvo Penta IPS pod system is in the configuration itself. The twin counter-rotating propellers are mounted together in a forward-facing position to work in undisturbed water. So when you engage the throttle, the power pulls the boat forward through the water rather than pushing it – putting world-class maneuverability at your fingertips.



#### Increased performance. Reduced emissions.

Forward-facing propellers considerably improve on-board comfort and reduce emissions at the stern. All exhaust fumes are emitted through the pods, into the prop wash and carried well behind the boat. Cavitation is not a problem as propellers are positioned well under the hull; air intrusion is stopped, even in sharp turns and during full acceleration.

#### Superior performance

The all-new D8-IPS800 propulsion
 package includes dual-stage turbo charging

 providing outstanding performance and
 excellent maneuverability at low speeds.

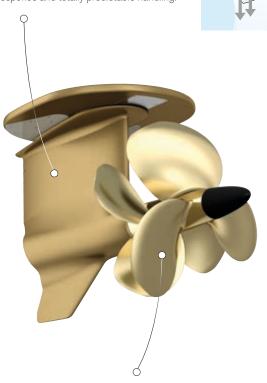
#### 35% higher efficiency

The forward-facing solution and an efficient flat-surface planing hull give around 35% higher efficiency at fast cruising than inboard shafts.



#### Steerable pods

Steerable pods harness the thrust and point it in the desired direction. This gives an immediate response and totally predictable handling.





#### **Multiple installations**

Volvo Penta IPS is available in twin, triple and quadruple installations. Suitable for a wide range of boat designs, the lighter and more compact engine installation delivers a superior power-toweight ratio. This results in a smaller engine room and more space for accommodation.

#### Minimal hub for maximum blade area

With Volvo Penta IPS, the exhaust doesn't go through the propeller hub. The minimal hub diameter results in a larger active blade area and thus, a significantly better grip in the water.

## **AQUAMATIC STERNDRIVE**



## The sporty choice

The Aquamatic Sterndrive is the world's leading sterndrive. In its own unique way, this well-proven system offers a total solution for boaters seeking the ultimate combination of performance, driving experience and comfort in 20–45 foot boats.

It's a perfectly matched package – cleverly thought through from the controls to the engine and all the way to the drive and propellers. Aquamatic Sterndrive is available with a wide range of fuel-efficient yet sporty diesel and gasoline engines.

### The benefits of the Aquamatic Sterndrive

- Low fuel consumption
- DuoProp propellers
- Low CO<sub>2</sub> emissions
- Low noise and vibrations
- Excellent low-speed maneuverability
- Beach and shallow-water tilt
- Allows for a swim platform
- Joystick control
- Powertrim Assistant





#### Increasing efficiency

An Aquamatic Sterndrive with DuoProp propellers achieves the same efficiency as Volvo Penta IPS – both reduce fuel consumption by up to 30% compared to inboard shaft installations.



#### The sterndrive joystick

The buttons on the joystick put a unique combination of functions within easy reach. Joystick Driving, Joystick Docking and High Mode offer easier handling, increased safety and more fun.

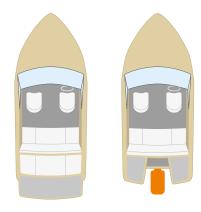


#### **Powertrim Assistant**

Powertrim Assistant can be synchronized with the Interceptor System in an Aquamatic application. This automatically gives the best possible drive trim. The result is maximized comfort regardless of speed and maneuvers, together with low fuel consumption.

## The Aquamatic evolution

The Aquamatic Sterndrive system is perfectly matched for optimal performance. Since introducing the first version in 1959, Volvo Penta has continued to evolve the design by developing, testing and manufacturing the whole package - the key to the outstanding efficiency. To improve your boating experience further, you can choose from a wide range of options for easier and more comfortable boating.



#### Sterndrive vs. Outboards

An Aquamatic Sterndrive gives you a number of advantages over a standard outboard installation. Firstly, flexibility and design: Placed further forward and with improved weight distribution, the concealed engine bay of a Sterndrive makes for a better and more flexible use of space - either above for a sundeck or behind for a swim platform. Secondly, the performance: With power steering as standard, the boat is easy to handle. Together with DuoProp, this gives the boat outstanding maneuverability and performance. As Sterndrives are located in the hull, you gain more options for larger engine displacement and therefore more amounts of torque. This translates into less strain on the engine, better fuel economy and a longer life cycle.

EVC

Volvo Penta DPH drive

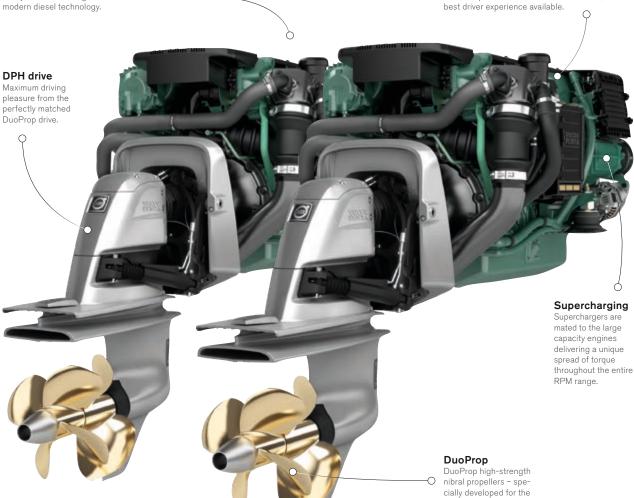


Volvo Penta Gasoline sterndrives with catalysts produce up to 94% less carbon monoxide than the marine industry outboard standard.

EVC, the proven Electronic Vessel Control, offers the

#### D6-400 DPH

Six cylinder diesel engines that utilize the latest in modern diesel technology.







### Your command center for a perfect ride

With Volvo Penta's range of controls you easily form your complete command center. That means comfortable and ergonomic control of all essential functions like electronic shift and throttle, integrated buttons for engine and drive functions, Powertrim control in the lever and individual Powertrim buttons (twin installation).



#### Drivelines - for the perfect match

Our propulsion packages are designed to operate in perfect harmony – an engine and driveline that can convert Volvo Penta-generated torque into superior power and performance in the water.

#### The complete package

We develop, design and manufacture everything for the ultimate statement in reliability and performance. We've had this complete-package approach for almost 60 years. It's the only way.

#### DuoProp technology

The twin counter-rotating propellers grip hard to produce unparalleled thrust, acceleration, planing and handling with significantly lower vibration and noise levels.

## Gasoline engines – the next generation

Robust low-end torque. Exhilarating high-end power. Exceptional mid-range response. You'll find it all in the latest Volvo Penta gasoline engines. Our new generation of V6 and V8 engines now include direct fuel injection, Variable Valve Timing (VVT) and fresh-water cooling throughout the range.

#### The future is here

Our catalyzed premium gasoline engines exceed the toughest emissions standards on the planet – offering a superior power-to-weight ratio for increased torque and acceleration at every throttle setting. Our next generation lineup relies on today's proven automotive engine platform with new aluminum blocks at their heart.



#### **Direct fuel injection**

The move from multi-port technology to direct injection creates a cleaner burn and improved fuel economy. So more energy comes from each drop of fuel.

#### Variable Valve Timing

Improved response and acceleration across the RPM range.

#### Catalyst for very low emissions

Reduced CO emissions at idle by 95%.

#### Fresh-water cooling

All our gasoline engines come with fresh-water cooling, which means no salt or raw water exposure to any engine parts.

#### Simplified service points

Volvo Penta's next generation gasoline engines share common parts and common service locations on the engine unit, across the full lineup.





#### Powerful and efficient

The new generation engines boast a range of positive figures. Fuel consumption at base cruise is up to 10% lower. Engine responsiveness has also improved dramatically – acceleration from 0-30mph is up to faster 31% compared with last year's equivalent engine. Top speeds have also increased over previous models.



### The glory of repowering

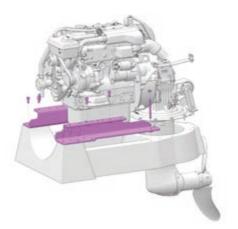
Has your boat lost some of its former power and glory? A simple and economical way to significantly improve your boat's overall performance – and take your boating life to a new level – is to simply replace its engine. Volvo Penta's repowering kits for D1, D2 and D3 engines will help you make a cost-effective transition to the latest generation of diesel engines.

#### A multitude of benefits

Installing a new engine will increase the value of your boat, but above all, it will very tangibly improve your boat's performance. Maneuverability will improve along with onboard comfort thanks to quieter operation and lower vibration levels. Fuel consumption and emission levels will drop thanks to modern technology. You will also benefit from increased charging capacity and overall reliability, and – last but not least – the Volvo Penta 2+3 years warranty.

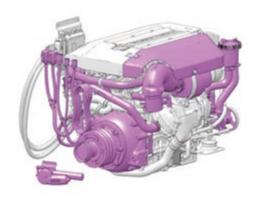
#### Easy installation

The repowering kits are developed by Volvo Penta and have been thoroughly tested, ensuring a safe, easy, and cost-effective replacement. Every kit is made to match and cause minimal impact to your existing engine bed. All parts and components are included along with complete installation instructions.



#### D1/D2 Repowering kit

The D1/D2 Repowering kit is available for Volvo Penta engines in both shaft and Saildrive installations. A set of perfectly matched components will minimize time-consuming fiberglass work.



#### D3 Repowering kit

The D3 Repowering kit offers a perfect match between the new D3 diesel engine and your existing Volvo Penta drive, offering full EVC functionality and access to a wide range of accessories.

## **VOLVO PENTA FORWARD DRIVE**

## Forward Drive – for an active lifestyle

Whether you are wakesurfing, fishing or simply cruising around, Volvo Penta Forward Drive is designed to accommodate a range of watersports and active lifestyles on the water. The combination of DuoProp propulsion and forward-facing propellers provides endless fun on the water, while delivering superior fuel economy, speed, acceleration and maneuverability.

#### Clean and efficient propulsion

Powerful gasoline engines complete the propulsion system with less noise and low-level vibration. And now you can enjoy wakesurfing, fishing or simply relaxing at the stern as exhaust fumes are eliminated with ports that run down through the drive and exit underwater.



#### DuoProp - unparalleled thrust

Twin counter-rotating propellers bite hard to produce unparalleled thrust, straight and true tracking plus faster acceleration on the plane.

#### The perfect match

Designed, developed and tested as one package. Our gasoline engines deliver superior performance together with the innovative Forward Drive system.

#### Performance

Variable trim angles provide the right thrust for leisure cruising as well as top speeds. And when speeding to plane it is much faster than conventional inboards. Turns are much tighter and faster thanks to directional thrust.

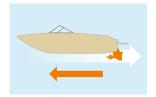


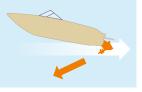
#### Your command center for a perfect ride

With the Volvo Penta range of controls you easily form your complete command center. That means comfortable and ergonomic control of all essential functions like electronic shift and throttle, integrated buttons for engine and drive functions and Powertrim control are all in the lever and have a manual override.

#### DuoProp

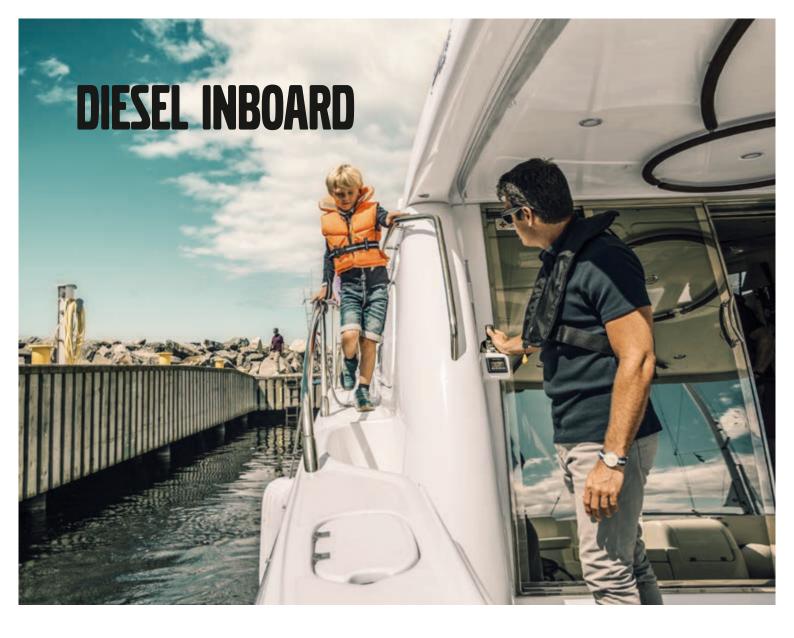
Stainless steel DuoProp propellers interact with each other to evenly distribute torque under load.





#### **Powertrim Assistant**

Powertrim allows drivers to customize their water sports experience with an adjustable angle of thrust. Variable, downward thrust draws the stern lower into the water. Used in combination with an enlarged trim plate, it fine-tunes your wake surfing wave and wakeboarding wakes on the fly. When on the move, the trim allows effortless, comfortable cruising.



### **Engines for superior cruising**

The responsive Volvo Penta diesel engines for inboard shaft installations excel in drivability. Their unique marine torque and rapid acceleration, combined with class leading power-to-weight ratio make them a superior choice for a wide variety of demanding boaters. Add high reliability, fuel efficiency, low emissions and a range of smart features and you have all that you need for superior cruising.

#### Joystick makes handling easy

The joystick is the latest addition to controls for twin inboard installations making handling and docking easier for inboard boat owners. It connects the rudder with the gear, throttle and thrusters. The advanced EVC system converts driver inputs across all four functions for outstanding maneuverability while docking or driving.



#### D8-550 and D8-600

The new Diesel Inboard engine is almost 200 kg lighter than its predecessor the D9, with almost 10% more power. The D8 diesel engine is available with either 550 or 600hp.

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#### Unique marine torque

The Volvo Penta engines' unique marine torque gives efficient cruising speed in all conditions: rapid acceleration to the plane and maneuvering power at low rpm and increased full-throttle torque if the engine loses rpm at high rpm.



#### From 12 to 900 hp

From the compact D1 to the massively powerful D13, Volvo Penta's inboard range consists of eight different engine sizes with various power levels – you can always find one that's perfectly matched to your boat.

#### Low-speed Mode

Reduce your boat's speed at idling by approximately 50% for easier maneuvering and docking. Integrated in the standard controls.

#### Single-lever Mode

Drive twin engines with one lever. Easy and precise even in rough seas.

#### Cruise control

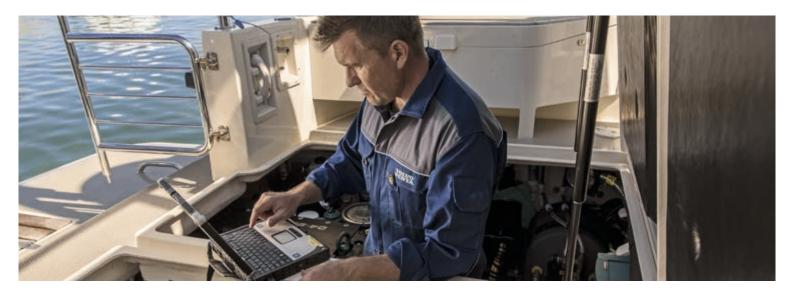
Fine-tune your boat's speed with the easy-to-reach button on the control.

See the complete range of Easy Boating options for Diesel Inboard on page 8.



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## Service and support

With Volvo Penta engines and accessories you are well prepared for enjoyable and safe boating. With only one contact for the whole package, you have the full support of the Volvo Penta service network. Our dealers are always ready to assist – and help maximize your boating time and pleasure.

#### **Global service network**

With every Volvo Penta product comes the support of a worldwide dealer network – present in more than 130 countries. These dealers are specialists in the maintenance and repair of your Volvo Penta products, using only genuine Volvo Penta parts.

#### One point of contact

With Volvo Penta, you need just one point of contact for the whole package: engines, instruments, accessories, service, warranties, etc. This means simpler ownership – and easy boating.

#### **International Limited Warranty**

In the first 2 years, or the applicable number of running hours, our engine and transmission warranty commitment covers the complete engine package. In the following 3 years, it covers major components.

#### **Extended Coverage**

Extended Coverage for the complete Volvo Penta engine package is a complement to our International Limited Warranty. By offering repair or replacement of defective parts also for the years 3–5, it will keep you fully protected even after the standard warranty has expired. The Extended Coverage must be purchased in conjunction with warranty registration.

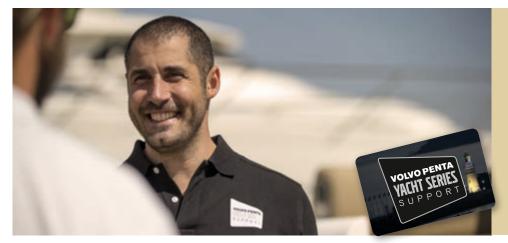


Find your dealer Go to www.volvopenta.com/dealerlocator or download our app to search among our 3,500 dealers worldwide.



#### Volvo Penta Action Service

Our global dealer network is backed up by the Volvo Penta Action Service, offering assistance 24 hours a day, every day of the year in 28 languages. www.volvopenta.com/actionservice.



#### Yacht series support

As an owner of a yacht powered by a Volvo Penta IPS500–600 in a triple or quadruple application or an IPS700-1200 in a twin, triple or quadruple installations, you are eligible for the Volvo Penta Yacht Series Support; an exclusive, around-the-clock support program that is fully on par with your propulsion system installation – and your yacht.

# Parts and accessories

Our range of parts and accessories are designed and engineered to the highest standards and built to work in perfect harmony with Volvo Penta engines. We call these Genuine Volvo Penta Parts and Accessories. And when you fit them, you can count on optimum performance, reliability and long service life.

#### Customize your boating

With such a comprehensive range of accessories perfectly matched to your engine and driveline, it is easier than ever to customize your boat's maneuverability, comfort and safety. Our range starts at the helm with steering wheels, instruments and displays, and continues under deck with items for engines including pre-fuel filters and extra alternators. Moving under water, we provide active corrosion protection and a complete range of state-of-the-art propellers.

#### Double your warranty

Genuine Volvo Penta Parts and Accessories are covered by our standard 12-month warranty. Have them supplied and installed by an authorized Volvo Penta dealer and we'll extend your warranty to 24 months – including the labor. Consult your nearest dealer for more details.









#### Volvo Penta shop

More than 100,000 parts and accessories are available to you in the Volvo Penta web shop at www.volvopentashop.com.



#### **Diesel inboard**

Engines	Crankshaft kW/hp	Propeller shaft kW/hp	Rated rpm	Displacement liters	No. of cylinders	High-pressure fuel injection	Aspiration	Electronic management	Constant power	Electronic shift/ throttle	Freshwater cooling	Alternator 12V	Alternator 24V	Saildrive
D1-13	9.0/12.2	8.6/11.8	3200	0.5	2	-	Ν	MDI	-	-	•	115A <sup>1)</sup>	-	130S
D1-20	14/19	13/18	3200	0.8	3	-	Ν	MDI	-	-	•	115A <sup>1)</sup>	-	130S
D1-30	20/27	19/26	3200	1.1	3	-	Ν	MDI	-	-	•	115A <sup>1)</sup>	-	130S
D2-40	27/37	26/36	3200	1.5	4	-	Ν	MDI	-	-	٠	115A <sup>1)</sup>	-	130S
D2-50	36/49	35/47	3000	2.2	4	-	Ν	MDI	-	-	٠	115A <sup>1)</sup>	-	130S
D2-60	44/60	42/58	3000	2.2	4	-	Т	MDI	-	-	٠	115A <sup>1)</sup>	-	150S
D2-75	55/75	53/72	3000	2.2	4	-	Т	MDI	-	-	•	115A <sup>1)</sup>	-	150S
D3-110	81/110	78/107	3000	2.4	5	CR	T/A/4V	EVC	T/Q	•	٠	180A	-	-
D3-150	110/150	106/144	3000	2.4	5	CR	T/A/4V	EVC	T/Q	•	•	180A	-	-
D3-170	125/170	121/165	4000	2.4	5	CR	T/A/4V	EVC	T/Q	•	•	180A	-	-
D3-200	147/200	143/194	4000	2.4	5	CR	T/A/4V	EVC	T/Q	•	•	180A	-	-
D3-220	162/220	157/213	4000	2.4	5	CR	T/A/4V	EVC	T/Q	•	•	180A	-	-
D4-180	132/180	128/174	2800	3.7	4	CR	T/A/4V	EVC	T/Q	•	•	115A1)	-	-
D4-225	165/225	160/218	3500	3.7	4	CR	T/A/4V	EVC	T/Q	•	•	115A1)	-	-
D4-260	191/260	186/253	3500	3.7	4	CR	T/A/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	-	-
D4-300	221/300	212/288	3500	3.7	4	CR	T/A/4V	EVC	T/Q	•	•	115A1)	-	-
D6-330	243/330	237/322	3500	5.5	6	CR	T/A/4V	EVC	T/Q	•	•	115A1)	80A1)	-
D6-370	272/370	267/363	3500	5.5	6	CR	T/A/4V	EVC	T/Q	•	•	115A1)	80A1)	-
D6-435	320/435	310/422	3500	5.5	6	CR	T/A/K/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	80A1)	-
D6-435 WJ	320/435	-	3500	5.5	6	CR	T/A/4V	EVC	T/Q	•	•	115A1)	80A1)	-
D8-550	405/550	392/534	2900	7.7	6	UI	T/A/4V	EVC	Т	•	•	-	80A1)	-
D8-600	441/600	428/582	3000	7.7	6	UI	T/A/4V	EVC	Т	•	•	-	80A1)	-
D11-625	460/626	446/607	2400	10.8	6	UI	T/A/4V	EVC	Т	•	•	-	80A1)	-
D11-670	493/670	478/650	2450	10.8	6	UI	T/A/4V	EVC	Т	•	•	-	80A1)	-
D11-725	533/725	517/703	2500	10.8	6	UI	T/A/4V	EVC	Т	٠	•	-	80A1)	-
D13-800	588/800	562/765	2300	12.8	6	UI	T/A/4V	EVC	Т	٠	•	-	110A1)	-
D13-900	662/900	636/864	2300	12.8	6	UI	T2/A/4V	EVC	Т	•	•	-	110A1)	-

#### Volvo Penta IPS

IPS350	191/260	182/248	3500	3.7	4	CR	T/A/K/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	-
IPS400	221/300	212/289	3500	3.7	4	CR	T/A/K/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	-
IPS450	243/330	230/314	3500	5.5	6	CR	T/A/K/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	80A1)
IPS500	272/370	259/352	3500	5.5	6	CR	T/A/K/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	80A1)
IPS600	320/435	307/418	3500	5.5	6	CR	T/A/K/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	80A1)
D8-IPS700	405/550	384/523	2900	7.7	6	UI	T2/K/4V	EVC	Т	•	•	-	80A1)
D8-IPS800	441/600	419/570	3000	7.7	6	UI	T2/K/4V	EVC	Т	•	•	-	80A1)
IPS800	460/625	435/591	2400	10.8	6	UI	T/A/K/4V	EVC	Т	•	•	-	80A1)
IPS950	533/725	504/685	2500	10.8	6	UI	T/A/K/4V	EVC	Т	•	•	-	80A1)
IPS1050	588/800	554/753	2300	12.8	6	UI	T2/A/4V	EVC	Т	•	•	-	110A <sup>1)</sup>
IPS1200	662/900	624/848	2300	12.8	6	UI	T2/A/4V	EVC	Т	•	•	-	110A1)

1) With built-in charging sensor

#### **Volvo Penta Forward Drive**

	Crankshaft kW/hp	Max rpm	Displacement liters	No. of cylinders	Fuel injection	Electronic management	Electronic shift/ throttle	Freshwater cooling	Alternator 12V	Drive	Propellers <sup>1)</sup>
	catalytic convert										
V6-240-C	179/240	5800	4.3	V6	DI	EGC/EVC	0	•	75A	FWD	SS
V6-280-C	209/280	5800	4.3	V6	DI	EGC/EVC	0	•	75A	FWD	SS
V8-300-C	224/300	5800	5.3	V8	DI	EGC/EVC	0	•	75A	FWD	SS
V8-350-C	261/350	5800	5.3	V8	DI	EGC/EVC	0	•	75A	FWD	SS
V8-380-C	283/380	6000	6.0	V8	MPI	EGC/EVC	0	•	75A	FWD	SS
V8-430-CE	321/430	6000	6.0	V8	MPI	EVC	٠	•	75A	FWD	SS

• Standard O Standard or optional depending on market - Not available 1) Not included For availability, check with your Volvo Penta representative.

#### **Diesel Aquamatic Sterndrive**

Engines	Crankshaft kW/hp	Propeller shaft kW/hp	Rated rpm	Displacement liters	No. of cylinders	High-pressure fuel injection	Aspiration	Electronic management	Constant power	Electronic shift/ throttle	Freshwater cooling	Alternator 12V	Drive	X-act steering	Propellers <sup>3)</sup>
D3-140	103/140	98/133	4000	2.4	5	CR	T/A/4V	EVC	T/Q	•	•	180A	SX/DPS/OX <sup>2)</sup>	-	AL <sup>4)</sup> , SS
D3-170	125/170	119/162	4000	2.4	5	CR	T/A/4V	EVC	T/Q	•	•	180A	SX/DPS/OX <sup>2)</sup>	-	AL <sup>4)</sup> , SS
D3-200	147/200	140/190	4000	2.4	5	CR	T/A/4V	EVC	T/Q	•	•	180A	DPS/OX <sup>2)</sup>	-	AL 4), SS
D3-220	162/220	154/209	4000	2.4	5	CR	T/A/4V	EVC	T/Q	•	•	180A	DPS/OX <sup>2)</sup>	-	AL <sup>4)</sup> , SS
D4-225	165/225	158/215	3500	3.7	4	CR	T/A/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	DPH	•	NBR
D4-260	191/260	184/250	3500	3.7	4	CR	T/A/K/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	DPH	٠	NBR
D4-300	221/300	214/291	3500	3.7	4	CR	T/A/K/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	DPH	٠	NBR
D6-330	243/330	233/317	3500	5.5	6	CR	T/A/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	DPH	٠	NBR
D6-370	272/370	261/355	3500	5.5	6	CR	T/A/K/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	DPH	•	NBR
D6-400	294/400	281/382	3500	5.5	6	CR	T/A/K/4V	EVC	T/Q	•	٠	115A <sup>1)</sup>	DPH	٠	NBR

1) With built-in charging sensor 2) Water-in-Drive and Water-in-Bellows sensors are not available with diesel engines 3) Not included 4) Only for SX/DPS

#### **Gasoline Aquamatic Sterndrive**

Engines	Crankshaft kW/hp	Max rpm	Displacement liters	No. of cylinders	Fuel injection	Electronic management	Electronic shift/ throttle	Freshwater cooling	Alternator 12V	Drive	Propellers <sup>1)</sup>
V6-200	149/200	5800	4.3	V6	DI	EGC	-	٠	75A	SX/DPS	AL, SS
V6-240	179/240	5800	4.3	V6	DI	EGC	-	•	75A	SX/DPS/OX	AL <sup>2)</sup> , SS
V6-280	209/280	5800	4.3	V6	DI	EGC	-	•	75A	SX/DPS/OX	AL 2), SS

#### Engines with catalytic converter

9											
V6-200-C	149/200	5800	4.3	V6	DI	EGC	-	٠	75A	SX/DPS	AL, SS
V6-240-C	179/240	5800	4.3	V6	DI	EGC/EVC	0	•	75A	SX/DPS/OX	AL 2), SS
V6-280-C	209/280	5800	4.3	V6	DI	EGC/EVC	0	•	75A	SX/DPS/OX	AL 2), SS
V8-300-C	224/300	5800	5.3	V8	DI	EGC/EVC	0	•	75A	SX/DPS/OX	AL <sup>2)</sup> , SS
V8-350-C	261/350	5800	5.3	V8	DI	EGC/EVC	0	•	75A	DPS/OX	SS
V8-380-C	283/380	6000	6.0	V8	MPI	EGC/EVC	0	•	75A	DPS/OX	SS
V8-430-CE	321/430	6000	6.0	V8	MPI	EVC	•	•	75A	DPS/OX	SS

• Standard O Standard or optional depending on market - Not available 1) Not included 2) Only for SX/DPS Check with your local Volvo Penta representative.

#### Abbreviations explained:

#### High-pressure fuel injection

UI: Unit injectors. CR: Common-rail fuel injection.

#### Electronic management

EVC: Electronic Vessel Control. EGC: Electronic Gas Control.

#### Aspiration

N: Naturally aspirated. T: Turbocharger. T2: Dual-stage turbochargers. A: Aftercooler. K: Compressor. 4V: 4 valves per cylinder.

#### Constant power

**T:** Temperature compensation. Constant power output regardless of fuel temperature ( $5-55^{\circ}$ C). **Q:** Quality compensation. Constant power output regardless of fuel viscosity (heavy, regular or environmentally adapted fuel).

#### **Fuel injection**

DI: Direct injection. MPI: Multi-port electronic fuel injection.

#### Drive

**SX:** Single propeller. For gasoline engines and D3. Small transom cutout. **DPS:** DuoProp. For gasoline engines and D3. Small transom cut-out. **DPH:** DuoProp. With X-act steering, specially developed for the D4 and D6 engines. Large transom cut-out. **OX:** OceanX. Includes exhaust manifolds, water-in-bellows sensor and drive oil quality sensor. **FWD**: Forward Drive. Forward facing, DuoProp. For gasoline engines only.

#### X-act steering

Servo-assisted hydraulic steering with external steering cylinders controlled by an exact feedback valve.

#### Propellers

AL: Aluminum. SS: Stainless steel. NBR: Nickel-bronze-aluminum alloy.

Power according to ISO 8665. Merchant fuel may influence engine power output and fuel consumption. For specific information on a certain engine model, ask your dealer for a Product Bulletin or go to volvopenta.com. Not all models, standard equipment and accessories are available in all markets. Every effort has been made to ensure that facts and figures are correct at the time of publication. Volvo Penta reserves the right to make changes without prior notice. Products shown may differ from production models.



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