

# POWERBOAT 2015

ENGINES, OPTIONS AND NEWS



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Download a **QR code reader** to scan the QR codes in this brochure – or go to volvopenta.com.



Volvo Penta has always strived to make boating simple and pleasurable. We started by making our engines reliable and meeting the highest quality standards. Today, after more than 100 years, engines are still our foundation. But now they are also vital parts of highly sophisticated drive systems, integrated with advanced electronic systems and available with cutting-edge functions and features - and, at the same time, easier to handle.

This is how we work to make your time on the water more enjoyable than ever. We call it Easy Boating.



## **BEST-IN-CLASS MANEUVERING**

Docking your boat in a crowded harbor should not be stressful no matter the size of your boat. Nor should it be a hard time finding your perfect route at sea - or maneuvering altogether. The IPS pod drive system, joystick docking and driving, and the Glass Cockpit System are just a few of the Volvo Penta products that will make maneuvering your boat a pure pleasure every time.



## I FADING THE WAY

By encouraging innovation and constantly aiming for higher quality, improved safety and minimized environmental impact we have been the leader in the marine industry. And thanks to a long, never-ending line of groundbreaking innovations we still are.

# DEVELOPED, MANUFACTURED AND SERVICED BY ONE COMPANY

All Volvo Penta products - propellers, drives, engines, controls, instruments, accessories, etc. - are developed for perfect interaction and optimal performance. For you, it means one single contact for the whole package, not least service and support. Safe, secure and simple.

#### **ENVIRONMENTAL LEADERSHIP**

Reducing the environmental impact of our engines to a minimum is a top priority for us, and - we believe - also to you. With a highly fuel-efficient Volvo Penta engine, you can do your bit for the environment.

# EASY BOATING HIGHLIGHTS

This year's highlights enhance integration, simplicity and system thinking in order to make your boat life truly relaxing and enjoyable.

The single most important component in this process is Volvo Penta's unique electronic platform, Electronic Vessel Control (EVC). This innovative design for integration of your boat's engines, electronics and unique Volvo Penta options, has grown into a platform of possibilities.

#### **GLASS COCKPIT SYSTEM**

In just one year, this exceptional system has revolutionized leisure boat controlling and monitoring. It gathers all driving information, warnings and alarms, and displays it all on one or more, high-tech displays with touch-screen functionality. This provides the operator a perfect overview and total control of navigation and propulsion in one place. The result is a cleaner dashboard with a common design and interface for intuitive handling, making it easier for you as a driver to concentrate on what's happening at the moment.

#### Auto Guidance - unique in the industry

Combined with the Volvo Penta Autopilot, the unique Auto Guidance feature will under your supervision drive

your boat past chartered obstacles to your destination.









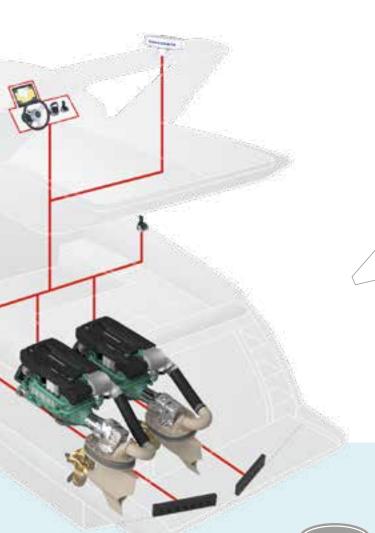
Change the layout and activate functions with a push of a button on the joystick.

#### Link preset layouts to the joystick and control

With the Glass Cockpit system, you can customize and save screen layouts, and link them to buttons on the joystick and control. When you press an assigned button, all displays switch in sync to the linked layout. For example, press the "docking" button on the joystick and the layout changes to a docking camera view.

#### Award-winning innovation

In 2013, the Glass Cockpit system received the IBEX Innovation Award in Louisville, KY, USA, and the DAME Design Award at the Marine Equipment Trade Show (METS) in Amsterdam. In 2014, China Boat Show honored Volvo Penta's Glass Cockpit system with the Asian Marine & Boating Award, highlighting the advanced technology and design.



# DYNAMIC POSITIONING SYSTEM



With Volvo Penta IPS, the Dynamic Positioning System is the perfect feature when you want to "lie still" 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 in a current 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 in EVC, it has become the perfect Auto-mode solution. Fully automatic trim adjustments will make your driving easier than ever.

### Better visibility

With the auto version, you just press a button and the system will continuously optimize your boat's running attitude. When you accelerate, the system will lift the stern and lower the bow to greatly increase you forward visibility – and take you onto the plane more quickly. When you turn a boat with IPS or Aquamatic with electronic steering, it will lean just perfectly and not as much as without auto or trim. This true turn will greatly improve on-board comfort as well as the visibility to the sides.



Without IS.



With IS, the boat is quickly up on plane with better forward visibility.

# EXTEND YOUR COVERAGE FROM 2 TO 5 YEARS

With Volvo Penta's Extended Coverage you can keep your complete Volvo Penta engine package fully protected even after the regular 2-year standard warranty has expired. With the Extended Coverage package, you can add three more years of full protection to your engine package. Read more on **page 20**.

# THE UNIQUE 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 full control of both propulsion and navigation by displaying all data on flexible high-tech displays. The greatly enhanced overview makes it easier for you to focus on what's important at the moment. Glass Cockpit is Easy Boating.

#### 2. INTUITIVE HANDLING

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

#### 3. SMART START

The smart e-Key system provides a convenient key system for easier handling and theft prevention – sweep the e-Key in front of the e-Key panel to switch the ignition on and off, and press the button to start the engines. Only one key per boat is needed, regardless of the number of engines.









#### 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. EASY CONTROL

The Remote control for the Glass Cockpit system can be integrated as a keyboard into the driver's chair or the dashboard for an ergonomic and low-profile controlling solution. With a rotary knob and a joystick, it provides full control and easy navigation through menus and screens.

#### 6. 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.

# IN CHARGE THE EASY WAY

Our Easy Boating concept is far more than a wish for easy, safe and enjoyable boating. It's a dedicated strategy for making your boating the carefree activity it should be. But most of all, it comprises an increasing number of useful, hands-on products and functions that put you in charge the easy way.

Which Easy Boating options will benefit you the most?



Volvo Penta's electronic platform, the EVC system, fully integrates the boat's engines, electronics and the unique set of options available from Volvo Penta. You easily master and monitor all functions through the controls and displays. Practically all Volvo Penta engines are EVC integrated.

With Volvo Penta you need just one single contact for the whole package.





## **EASY BOATING OPTIONS**

Take the opportunity to customize your boat with the options of your choice – when you order a new boat or when you wish to upgrade your present boat. The table shows what is available for each drive system. Talk to your Volvo Penta dealer for advice!

	VOLVO PENTA IPS	AQUAMATIC STERNDRIVE	INBOARD
Joystick Docking	0	O 1)	-
Joystick Driving	0	O 1)	-
Dynamic Positioning System	0	-	-
Sportfish Mode	0	-	-
Autopilot	0	O 1)	-
Interceptor System	0	0	0
Powertrim Assistant	-	0	-
Tow Mode for water sport	-	O <sup>2)</sup>	-
Glass Cockpit System	0	0	0
Trip computer	0	0	0
Cruise control	0	0	0
Single-lever Mode	0	0	0
Low-speed Mode	0	-	O 3)

<sup>&</sup>lt;sup>1)</sup> Requires factory-installed electronic steering <sup>2)</sup> Single installations <sup>3)</sup> D4-D13

Volvo Penta also offers complete EVC Control Packages, see page 22 for more information.



#### JOYSTICK DOCKING

The essence of easy boating: fingertip handling with perfect precision makes docking and close-quarter maneuvering simple, even fun.



#### INTERCEPTOR SYSTEM

The robust Interceptor System, IS, gives comfortable rides in all conditions. With the optional automatic mode, your boat's attitude is always optimized.



#### 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.



#### JOYSTICK DRIVING

A smart, new solution for intuitive driving – push and rotate the joystick for precise steering at all speeds.



#### POWERTRIM ASSISTANT

Gives you the best possible drive trim – fully automatically – for perfect running attitude. Results in optimum performance and low fuel consumption.



#### CRUISE CONTROL

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



#### DYNAMIC POSITIONING SYSTEM

Lets you hold and keep your boat's position and heading within a very limited area. Perfect when you're preparing for docking or waiting for refueling.



#### 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.



#### 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.



#### GLASS COCKPIT SYSTEM

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



#### 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.



#### **AUTOPILOT**

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



SEE EASY BOATING FILMS! Scan to see what Easy Boating is all about. Or go to volvopenta.com/easyboatingfilms to see the films.



# THE BENEFITS OF VOLVO PENTA IPS

- 40% LONGER CRUISING RANGE
- 50% LOWER PERCEIVED NOISE LEVEL

• 20% HIGHER TOP SPEED

- SAFE AND PREDICTABLE HANDLING
- 30% REDUCED FUEL CONSUMPTION
- JOYSTICK

• 30% LESS CO<sub>2</sub> EMISSIONS

Compared with inboard shafts at cruising with planing hulls, approximate figures.



World-leading yacht manufacturers have chosen to power their yachts with Volvo Penta IPS – for excellent maneuverability, low fuel consumption and more space for accommodation.

# THE INGENIOUS **VOLVO PENTA IPS**

After almost ten years on the leisure boat market, Volvo Penta IPS is still a revolution. Thousands of applications in hundreds of boat models have shown an inboard system that is superior to inboard shafts in all vital respects; maneuverability, on-board comfort and performance.

The unique benefits of forward facing propellers and Easy Boating functions are available for yachts up to 100 feet.

### FORWARD-FACING PROPELLERS WORK MORE EFFICIENTLY

The key to the outstanding IPS efficiency is that the twin, counter-rotating propellers face forward and work in undisturbed water. All power drives the boat forward and the propeller thrust is parallel with the hull. Forward-facing propellers also mean considerably improved on-board comfort as all exhaust fumes are emitted through the

pods (red arrow), into the prop wash and carried well behind the boat. Cavitation, finally, is not a problem. Since the propellers are positioned well • VIRTUALLY NO FUMES under the hull, air intrusion is stopped, even in sharp turns and during full acceleration.

- FORWARD-FACING EFFICIENCY
- CAVITATION-FREE
- LESS FUEL AND CO. **EMISSIONS**





# 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.



#### MINIMAL HUB FOR MAXIMUM BLADE AREA

In 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.

# **VOLVO PENTA IPS** RANGE AND OPTIONS

Thanks to an ever-growing range of unique functions for safer and easier boating, you can easily tailor your new IPS installation with added functionality. It's all designed, developed and tested by Volvo Penta - for a perfect match and optimal functionality.

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

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







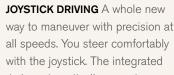
**HIGH MODE** When you need extra power at docking from the system, just press the High Mode button.



# DYNAMIC POSITIONING SYSTEM

Press the button and your boat's position and heading are held within a very limited area - the

EVC system transforms GPS data into steering angles, gear shifts and throttle positions.



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.



PERFORMANCE AND

Learn more about

Volvo Penta IPS.

**ENVIRONMENTAL CONCERN** 

Volvo Penta IPS is developed as the

most environmentally sound inboard

propulsion system. The IPS950 is

powered by the D11 engine. With

the unique twin-entry turbo and mechanical compressor, you will be

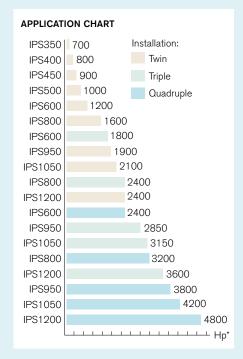
amazed by its performance.

# TRIM FOR A BETTER RIDE

The IS trim system keeps your boat more upright during turns, and lowers the bow during acceleration, improving comfort and visibility. Read more about IS on **page 5**.

### THE POWER RANGE

Volvo Penta IPS offers a complete range for yachts, sport cruisers, sportfishing and semi-planing boats up to 100 feet. All installations are equally easy to drive with standard controls, joystick and all Easy Boating options available.



\*The figures correspond to the approximate crankshaft power (hp) needed from an equivalent inboard shaft installation with a planing hull.



Three pod sizes – perfectly matched to each engine's power and torque.



**UNCLUTTERED TRANSOM** The design of the Aquamatic sterndrive leaves the transom of the boat uncluttered. People on board will have easy access to the water, plenty of room for water sports equipment and a larger social area.

- BEACH AND SHALLOW-WATER TILT
- JOYSTICK
- POWERTRIM ASSISTANT

# THE SPORTY AQUAMATIC STERNDRIVE

The Aquamatic sterndrive is the world's leading sterndrive. In its own unique way, the Aquamatic sterndrive offers a total solution for boaters who want an optimal combination of performance, driving experience and comfort in 20–45 foot boats.

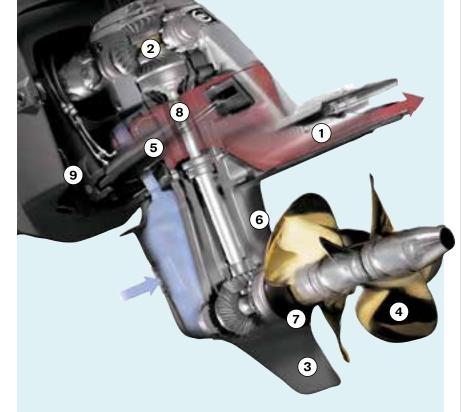
It's a perfectly matched package – from controls to engine, drive and propellers – available with a wide range of fuel-efficient and sporty diesel and gasoline engines.



# VOLVO PENTA DUOPROP PROPELLERS

- SAFE AND PREDICTABLE HANDLING
- QUICKER TO THE PLANE
- LOW FUEL CONSUMPTION
- STRAIGHT TRACKING EVEN IN REVERSE
- LOWER VIBRATION AND NOISE

All Volvo Penta propellers are also matched to the drive for optimal performance and service life.



**UNIQUE FEATURES** The Volvo Penta engines, the Aquamatic sterndrives and the Duoprop propellers offer a unique combination of features not available with other brands:

- **1.** Genuine through-the-drive exhaust leads fumes away and reduces noise.
- **2.** Smooth shifting and exceptional durability with patented cone clutch.
- Excellent corrosion resistance from saltwater-grade aluminum and multilayer paint process.
- Patented nickel-bronze-aluminum alloy propellers: extremely strong, corrosion and growth-resistant (DPH).
- Patented, fully hydraulic and X-act steering with superior steering control (DPH).

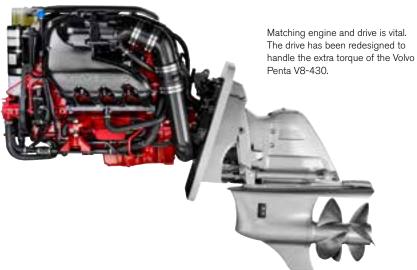
- **6.** Hydrodynamically designed lower housing reduces drag and increases performance.
- **7.** Patented "booster ring" that optimizes water flow to the propellers (DPH).
- **8.** The break-away shaft coupling is designed to protect the transmission by shearing if the propellers strike a submerged object at speed.
- Hydraulic powertrim with integrated kick-up function minimizes damage if a large underwater object is struck.

# AQUAMATIC STERNDRIVE RANGE AND OPTIONS

The Aquamatic sterndrive system is perfectly matched for optimal performance. Volvo Penta develops, tests and manufactures 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. Check them all out and make your own wish list!

DIESEL POWER RANGE 140-400 HP											
Engine	Power	Power (hp)									
D3	140	170	200	220							
D4	225	260	300								
D6	330	370	400								
with mechanical	compres	sor									
GASOLINE POWE	ER RAN	GE 20	0-430	HP							
Engine	Power (hp)										
Liigiiie	rowei	(III)									
V6	200	225									
			320								
V6	200	225	320	320	350	380	430				

Complete technical data on page 23.



# THE GASOLINE V8-430

The Volvo Penta V8-430 is a brilliant performer thanks to its excellent power-to-weight ratio. Its low noise and vibration levels enhance the on-board comfort. The effective catalyst keeps emissions and  $\rm CO_2$  levels low and eliminates smell. More about Volvo Penta gasoline engines on page 23.

# 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).



THE GLASS COCKPIT You get all vital driver information in one place – and a clean, uncluttered dashboard. The full EVC integration enables you to master all Volvo Penta features on one display.





## HIGHLY EFFICIENT

Aquamatic Sterndrive with Duoprop propellers give the same high efficiency as Volvo Penta IPS – and reduced fuel consumption with up to 30%.

# 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 docking stations.



# TRIM FOR A BETTER RIDE

INTERCEPTOR SYSTEM This trim system, the automatic and fully EVC-integrated Interceptor System (IS), will make your boat driving significantly simpler, safer and more comfortable.

With the automatic mode activated, your boat's attitude is always optimized to give you excellent visibility – and higher safety – at all speeds. IS is designed for 40-foot and larger boats.

In an Aquamatic application with **POWERTRIM ASSISTANT** and the IS, the two are fully synchronized. This gives – also fully automatically – the best possible drive trim. The result is maximized comfort regardless of speed and maneuvers, but also low fuel consumption.



See the complete range of options for Aquamatic sterndrive on **page 8**.

**TOW MODE** Do you like water skiing, wakeboarding or tubing? Then you know that keeping the right speed is essential for the ultimate ride.

That's where Tow Mode comes in. Simply set your preferred rpm and you're ready to go!



# THE SUPERIOR INBOARD DIESEL

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 high-class cruising.



### TRIM FOR A BETTER RIDE

With the IS trim system, the acceleration/planing phase is shorter and the bow is kept significantly lower. This means not only increased safety, but also a better, more comfortable, ride. Read more about IS on **page 5**.



### **ROBUST CONTROL CENTER**

The comprehensive series of controls is your complete command center. Ergonomic and easy to use, designed for smooth driving and total control. Push-buttons for Low-speed Mode, Single-lever Mode, Cruise control and the Interceptor System can all be integrated in the standard controls.



**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 Inboard diesel on **page 8.** 











Learn more about Inboard diesel.

The D11-725 is based on the latest diesel engine technology which ensures high quality, reliability and long-term durability.



**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.

POWER RANGE 12-900 HP											
Engine	Power	Power (hp)									
D1	12	19	28								
D2	40	55	75								
D3	110	150	170	200	220						
D4	180	225	260	300							
D6	330	370	435								
D9	500	575									
D11	625	670	725								
D13	800	900									

Complete technical data on page 22.

**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.



# FULL SUPPORT ALL THE WAY

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 world-wide 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.

# **VOLVO PENTA ACTION SERVICE**

Volvo Penta Action Service is a unique service for Volvo Penta owners in Europe and North America. With this telephone service for rapid support, we offer 24-hour availability, 365 days a year.

#### **EXTENDED COVERAGE**

Extended Coverage for the complete Volvo Penta engine package is a complement to the Volvo Penta International Limited Warranty. By offering repair or replacement of defective parts also for years 3–5, it will keep Volvo Penta boaters all over the world fully protected even after the standard warranty has expired. Extended Coverage must be purchased through the Volvo Penta dealer when the engine is ordered.

# ONE POINT OF CONTACT

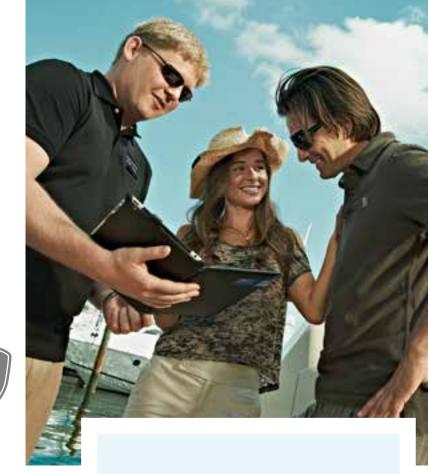
With Volvo Penta, you need just one point of contact for the whole package: engines, instruments, accessories, service, warranties, etc. This means simpler ownership – and easy boating.



Scan the code and see your nearest Volvo
Penta dealer – or download the Dealer locator
app for future needs. Or go to volvopenta.com/
dealerlocator.



Scan the code and read more about Volvo Penta Action Service.



# YACHT SERIES SUPPORT

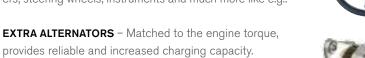
your yacht.

As an owner of a yacht powered by a Volvo Penta IPS 500–600 in a triple or quadruple application or an IPS 800–1200 in a twin, triple or quadruple application, 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

# UPGRADE YOUR BOATING

New accessories for your boat enable you to improve your boating regarding e.g. maneuverability, comfort and safety.

Volvo Penta develops and manufactures a wide range of accessories, perfectly matched to your engine and drive system – propellers, active corrosion protection, defrosters, steering wheels, instruments and much more like e.g.:



**PRE-FILTER WITH WATER-IN-FUEL ALARM** – Detects water in the fuel before it reaches the engine, alerts the driver via the EVC display at the helm.

**EVC FUNCTIONS** – Trip computer, Cruise control, Powertrim assistant, Single-lever Mode are examples of software available for easier boating. Learn more on **page 8**.

**BOAT TRIM SYSTEM (BTS)** – Full control over pitch and heel, and quicker to planing will increase fuel efficiency and comfort. Recommended for boats up to 40 foot.





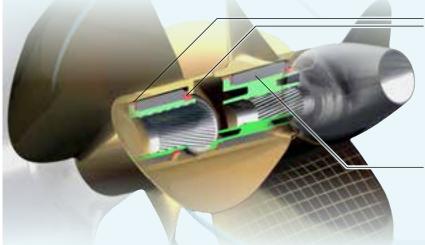






More than 100,000 parts and accessories are available to you in the Volvo Penta web shop at volvopentashop.com.

# PERFORMANCE LIES IN THE DETAILS



Electrical insulation protects the drive from galvanic corrosion caused by the propeller.

Shock-absorbing rubber bushing secures the drivetrain service life.

#### STATE-OF-THE-ART PROPELLER TECHNOLOGY

The superior performance of Volvo Penta's world-leading propellers gives you a better boating experience – and peace of mind. Designed for perfect match, they also secure the service life of your drive.

# REPOWER FOR A "NEW" BOAT LIFE

Give your boat a new life by repowering with a new engine! Experience the advantages of reduced fuel consumption, quieter operation, increased performance and charging capacity – and higher resale value.

Volvo Penta's complete repowering kits makes replacing an engine easier – often it's even possible to keep the existing drive. Contact your nearest Volvo Penta dealer to find out what applies to your drive package.



DIESEL			/	/	/			,; <sub>(O</sub> r	/		/			
INBOAF	RD		11/16	2			inig	çti /	met	× /	OKH	2		
		MILLE	XXV'		atliters	, ets	'e knei	/	anade.	, net	in the state of th	coding	6	/4/
		raft k	er shio	ipm /	cemen	Hinde	aressul ,	ion	wic his	ant Pou	riic sti.	uater C	ator I'v	axor Dr
ENGINE	Cisuk	Propell Propell	er shaft kwing	), , Oie	placenent liters	chinders High	presente fuelinis	flec <sub>ft</sub>	onic hanagemet	ant power	onic shift thought	and test coolings	ator 2 <sup>N</sup> Altern	saidr Jav
D1-13	9.0/12.2	8.6/11.8	3200	0.5	2	-	N	MDI	-	-	•	115A <sup>1)</sup>	-	130S
D1-20	14/19	13/18	3200	0.8	3	-	N	MDI	-	-	•	115A <sup>1)</sup>	-	130S
D1-30	21/28	20/27	3200	1.1	3	-	N	MDI	-	-	•	115A <sup>1)</sup>	-	130S
D2-40	29/40	28/38	3200	1.5	4	-	N	MDI	-	-	•	115A <sup>1)</sup>	-	130S
D2-55	41/55	39/53	3000	2.2	4	-	N	MDI	-	-	•	115A <sup>1)</sup>	-	130S
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	•	•	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	•	•	115A <sup>1)</sup>	-	-
D4-225	165/225	160/218	3500	3.7	4	CR	T/A/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	-	-
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	•	•	115A <sup>1)</sup>	-	-
D6-330	243/330	237/322	3500	5.5	6	CR	T/A/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	80A <sup>1)</sup>	-
D6-370	272/370	267/363	3500	5.5	6	CR	T/A/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	80A <sup>1)</sup>	-
D6-435	320/435	310/422	3500	5.5	6	CR	T/A/K/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	80A <sup>1)</sup>	-
D6-435 WJ	320/435	-	3500	5.5	6	CR	T/A/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	80A <sup>1)</sup>	-
D9-500	368/500	357/485	2600	9.4	6	UI	T/A/4V	EVC	T	•	•	115A <sup>1)</sup>	80A <sup>1)</sup>	-
D9-575	423/575	410/558	2500	9.4	6	UI	T/A/4V	EVC	Т	•	•	115A <sup>1)</sup>	80A <sup>1)</sup>	-
D11-625	460/626	446/607	2400	10.8	6	UI	T/A/4V	EVC	Т	•	•	-	80A <sup>1)</sup>	-
D11-670	493/670	478/650	2450	10.8	6	UI	T/A/4V	EVC	Т	•	•	-	80A <sup>1)</sup>	-
D11-725	533/725	517/703	2500	10.8	6	UI	T/A/4V	EVC	Т	•	•	-	80A <sup>1)</sup>	_
D13-800	588/800	562/765	2300	12.8	6	UI	T/A/4V	EVC	T	•	•	-	110A <sup>1)</sup>	-
D13-900	662/900	636/864	2300	12.8	6	UI	T2/A/4V	EVC	Т	•	•	-	110A <sup>1)</sup>	-

## **VOLVO PENTA IPS**

#### **ENGINE**

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>	80A <sup>1)</sup>
IPS500	272/370	259/352	3500	5.5	6	CR	T/A/K/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	80A <sup>1)</sup>
IPS600	320/435	307/418	3500	5.5	6	CR	T/A/K/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	80A <sup>1)</sup>
IPS800	460/625	435/591	2400	10.8	6	UI	T/A/K/4V	EVC	Т	•	•	-	80A <sup>1)</sup>
IPS950	533/725	504/685	2500	10.8	6	UI	T/A/K/4V	EVC	Т	•	•	-	80A <sup>1)</sup>
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	•	•	-	110A <sup>1)</sup>

<sup>1)</sup> With built-in charging sensor

Standard
 Optional

□ Accessory

- Not available

# FULL CONTROL PACKAGES

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Volvo Penta IPS	•	•	•			Twin*
Diesel inboard	•	•	•			Twin
	•	•				Single
Aquamatic sterndrive	•	•	•		•	Twin
	•	•			•	Single
						Single**

\*Also for triple and quadruple \*\*Side mounted

We offer you the most popular functions at favorable prices in specially designed control software packages. All this functionality gives you full control.

**HIGH-PRESSURE FUEL INJECTION UI:** Unit injectors. **CR:** Common-rail fuel injection.

**ELECTRONIC MANAGEMENT EVC:** Electronic Vessel Control, EVC. **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°C). **Q:** Quality compensation. Constant power output regardless of fuel viscosity (heavy, regular or environmentally adapted fuel).

FUEL INJECTION MPI: Multi-port electronic fuel injection.

AQUAMATIC DRIVES SX: Single propeller. For gasoline engines and D3. Small transom cut-out. 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. Fresh water cooling. Includes exhaust mainfolds, water in bellows sensor and drive oil quality sensor.

**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.

DIESEL AQUAMATIC  ENGINE Condender and properties of the propertie															
ENGINE	Clark	Staff Mins	pler statt zwy.	J. Phr. Dish	acement likers	t dinders	Tropeseure fuer	ijor gje <sup>ch</sup>	onic managers	stant power	gonic shith the	navote colino	Traterie	ion type + sc	, steeling Propelle
D3-140	103/140	98/133	4000	2.4	5	CR	T/A/4V	EVC	T/Q	•	•	180A	SX/DPS/OX**	-	AL, SS
D3-170	125/170	119/162	4000	2.4	5	CR	T/A/4V	EVC	T/Q	•	•	180A	SX/DPS/OX**	-	AL, SS
D3-200	147/200	140/190	4000	2.4	5	CR	T/A/4V	EVC	T/Q	•	•	180A	DPS/OX**	-	AL, SS
D3-220	162/220	154/209	4000	2.4	5	CR	T/A/4V	EVC	T/Q	•	•	180A	DPS/OX**	-	AL, 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	•	NBR
D4-300	221/300	214/291	3500	3.7	4	CR	T/A/K/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	DPH	•	NBR
D6-330	243/330	233/317	3500	5.5	6	CR	T/A/4V	EVC	T/Q	•	•	115A <sup>1)</sup>	DPH	•	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	•	•	115A <sup>1)</sup>	DPH	•	NBR

<sup>1)</sup> With built-in charging sensor \* Not included \*\* Water-in-Drive and Water-in-Bellows sensors are not available with diesel engines.

#### **GASOLINE AQUAMATIC** Probable shartstaming Displacement likers Kleshwatel coding Lic. of childers Allenator 124 fuelinie etion Propellers Matiph **ENGINE** V6-200 149/200 4600 4.3 V6 MPI EGC 75A SX/DPS AL. SS V6-225 168/225 4800 4.3 V6 MPI EGC/EVC\* 75A SX/DPS AL, SS \*\* V8-270 201/270 5000 5.0 V8 EGC/EVC\*\* 75A SX/DPS/OX AL. SS MPI V8-300 224/300 5000 5.7 V8 MPI EGC/EVC\*\* 75A SX/DPS/OX AL. SS □\*\*\* 239/320 V8-320 5000 5.7 V8 MPI EGC/EVC\*\* □\*\*\* 75A SX/DPS/OX AL, SS

#### **ENGINES WITH CATALYTIC CONVERTER**

V8-225-C	168/225	4800	5.7	V8	MPI	EGC/EVC**	**		75A	SX/DPS	AL, SS
V8-270-C	201/270	5000	5.0	V8	MPI	EGC/EVC**	**	□***	75A	SX/DPS/OX	AL, SS
V8-300-C	224/300	5000	5.7	V8	MPI	EGC/EVC**	**	□***	75A	SX/DPS/OX	AL, SS
V8-320-C	239/320	5000	5.7	V8	MPI	EGC/EVC**	**	□***	75A	SX/DPS/OX	AL, SS
V8-350-CE	261/350	6000	6.0	V8	MPI	EGC/EVC**	**	•	75A	DPS/OX	SS
V8-380-C	283/380	6000	6.0	V8	MPI	EGC/EVC**	**	•	75A	DPS/OX	SS
V8-430-CE	321/430	6000	6.0	V8	MPI	EVC	•	•	75A	DPS/0X	SS

<sup>\*</sup> Not included \*\* Standard or optional depending on market. Check with your local Volvo Penta representative \*\*\* Standard with OceanX

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.

# PERFECTLY MATCHED, THOROUGHLY TESTED

All Volvo Penta engines, transmissions, control systems, drives and propellers are developed to fit together. This means higher reliability and better performance – for you.

#### UNIQUE MARINE TORQUE

Volvo Penta engines excel with their unique marine torque. High torque at low rpm gives rapid acceleration to the plane and massive maneuvering power. At high rpm, full-throttle torque increases if the engine loses rpm and gives efficient cruising speed in all conditions.



# IMPROVED ENVIRONMENTAL CHARACTERISTICS

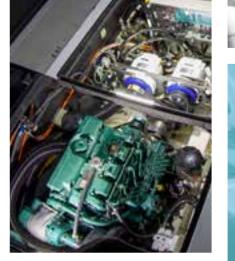
Now, practically all Volvo Penta diesel engines meet the industry's most stringent environmental requirements – Tier 3. Volvo Penta gasoline engines with catalysts also meet the most stringent requirements – US EPA and CARB 4 Star. For us, the work to minimize every aspect of the environmental impact is always in focus and a continuous process.



# HERE, EVERYTHING IS EXTREME BUT THE ENGINE

For nine months, starting on 4 October, 2014, the Volvo Ocean Race will once again attract the attention of the world. As in previous years, all competing boats are equipped with Volvo Penta standard engines. This time however, only one engine – the standard Volvo Penta D2-75 with Sdrive – will supply both auxiliary and propulsion power.

The extensive race will be an exciting display of adventure and drama, but also of human cooperation and endurance. For the D2-75 engines the race will present an opportunity to, once again, prove the reliability and performance of Volvo Penta engines.



VOLVO PENTA

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