

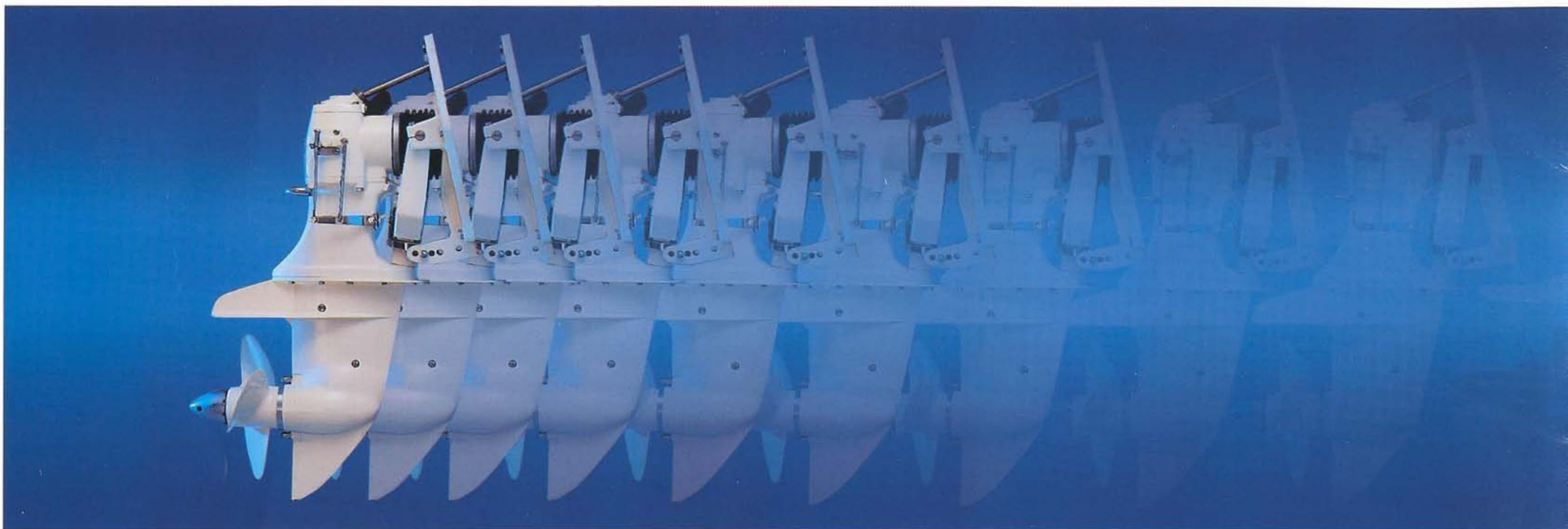
*The complete Aquamatic  
performance programme*



**VOLVO  
PENTA**



# *Aquamatic. Thirty years of constant improvement for your boat*



The long line of technical innovations that proudly bear the name of Volvo Penta began with the introduction of the Aquamatic more than thirty years ago.

Even in those days our business concept for the future development of marine products had already been formulated. All our efforts were to be concentrated on finding ways in which to offer Volvo Penta owners all over the world a better life afloat. We would find new solutions and develop new, innovative products.

They still are. We still do.

In all important respects, development work within Volvo Penta, as within the rest of the Volvo Group, has been focused on enhancing benefits for owners. These have included greater safety at sea, greater reliability, higher standards of comfort and better overall economy, all of them without compromising on the all-important question of engine performance. They represent an overall view that in many ways affects

the actual work of development, and thus the end-product itself.

Take the Aquamatic, for example. The name doesn't stand for just one isolated product. It stands for a complete system of propulsion that combines engine, drive and propeller, matching them to one another to produce the optimum product, a product that offers operational reliability, long service life, high performance, maximum manoeuvrability and maximum fuel economy. Again and again we have proved that it is by taking this overall view that the best solutions can be identified and the work of development carried yet another stage further.

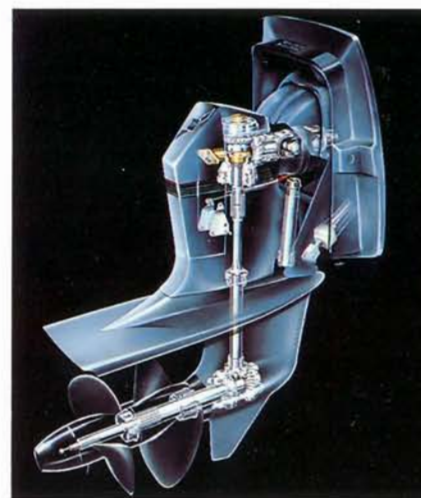
Volvo Penta were first in the field with an Aquamatic even for diesel engines.

We were the first to offer owners Duoprop, the twin counter-rotating propeller system with all its advantages in terms of performance, comfort and fuel economy. A unique product that has proven its value for 10 years.

# ating pleasure



And now we've scored another first. The introduction of the 42 Series with its compressor charging and Duoprop makes it clear, who it is that really leads the field in terms of technical development. For the first time ever, the diesel engine can now take up the fight with the large petrol V8 where acceleration and top speeds are concerned. Just a few years ago the idea would have been regarded as utopian. The introduction of the 42 Series also means that we are now able to present a range of engines and high-performance propulsion systems to meet the needs of practically every boatowner, whether his craft is a small sports boat or a large motor cruiser. And all these systems feature our basic business concept, that of offering owners the maximum freedom from fuss and the maximum amount of safety and reliability, right down to the smallest detail. It's this that makes owning a boat the pleasure it's meant to be.



*With its unique mesh and its shift mechanism in the upper bevel gear, Volvo Penta's Aquamatic drive laid the foundations for a completely new approach amongst manufacturers of pleasure craft as long ago as 1959.*



# *Duoprop. The greatest improvement in boating since the prop*



What's so unique about Duoprop is the mass of advantages it offers, from the moment the ignition key is turned and the boat gets under way. The first thing to note is the incredible acceleration. The twin counter-rotating propellers get a firm grip in the water, and with lightning speed bring the boat up to her planing threshold, 30% faster than a single propeller can do.

The next thing to note is the boat's speed under way. A diesel fitted with Duoprop, for example, is up to 15% faster than one with a single propeller.

And then there's the feeling of total control, thanks to the fantastic manoeuvrability, safe in the knowledge that Duoprop will never lose its grip in the water, however fast and hard the turn.

Under way, one also notices that it's quieter on board, thanks to lower levels of hull vibrations.

The unique Duoprop also ensures you of a smooth cavitation-free ride. In fact, the standard of comfort is appreciably higher.

To cap it all, with Duoprop one can go further. Fuel economy has been improved by up to 15%.

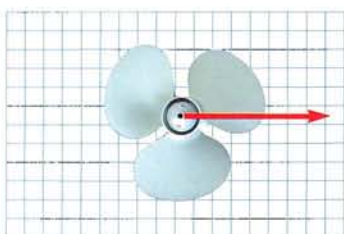
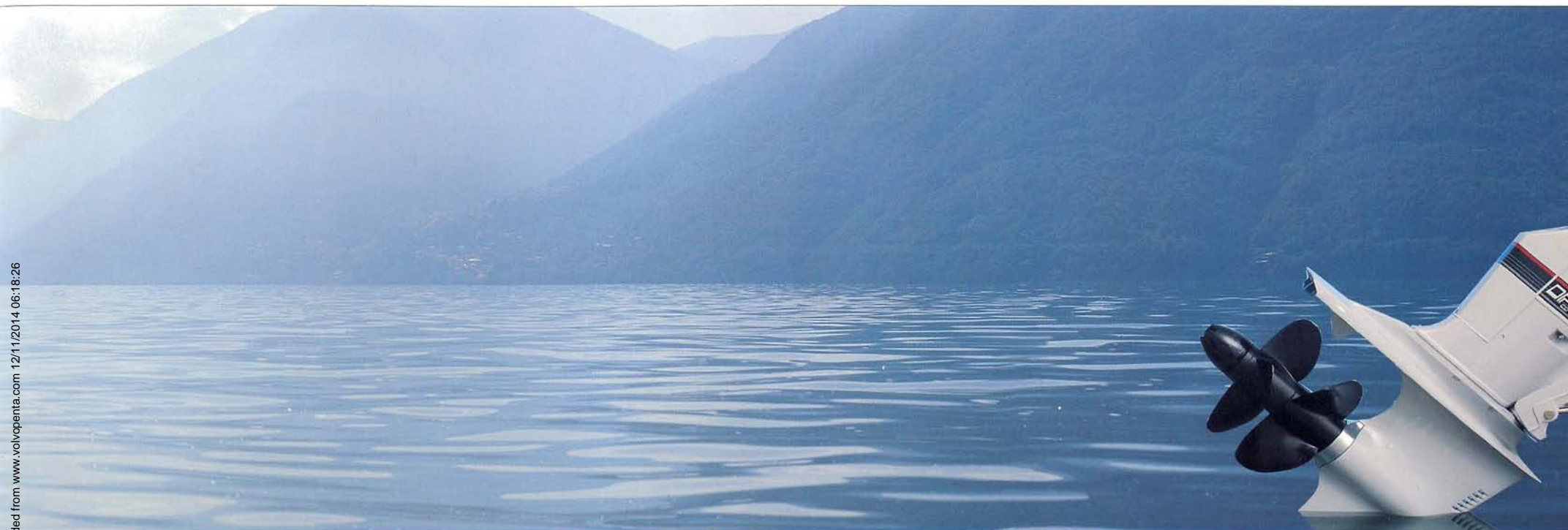
It's all thanks to the unique Volvo Penta concept of twin propellers, but of different size. The smaller aft propeller that rotates in the wake of the larger front one, is matched in size to optimize the overall efficiency of the propulsion system.

This sophisticated propeller concept eliminates the lateral forces that would otherwise tend to push the boat to one side. Instead, their counter-rotation results in forces that push the boat forwards, to give a better grip in the water, eliminate cavitation and improve propulsion. Ever since we first introduced it 10 years ago, this stroke of genius has been ensuring more pleasure at the helm, greater safety and reliability and better fuel economy for thousands and thousands of owners the world over.

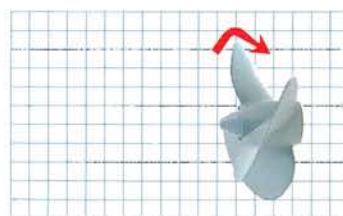
Duoprop is simply the best thing that has happened in boating since the propeller itself was invented.



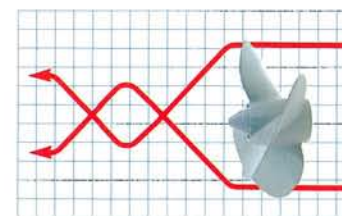
# eller was invented



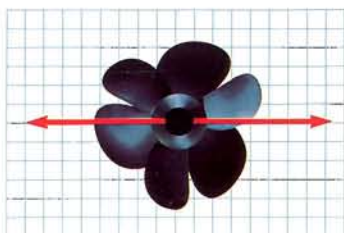
A single propeller has only a small blade surface in relation to power output. A single propeller has a tendency to climb like a water wheel, and in doing so will create lateral forces.



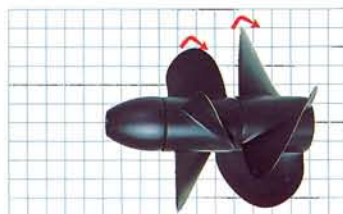
A single propeller rotates at high speed in order to convert the power transmitted to it. This results in increased load on the propeller blades, causing cavitation problems, high turbulence round the tips of the blades and other induced losses of power output.



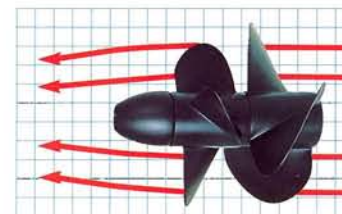
A single propeller creates a rotation of the water jet. This means that energy is wasted on useless water rotation.



Duoprop with its twin counter-rotating propellers has double the blade surface, and the two propellers balance one another thus eliminating lateral forces.



Duoprop distributes the power transmitted to it over a number of blades, resulting in only half the load, half the turbulence round the tips of the blades and half the induced losses of power output. The decrease in the load on the propeller blades also reduces cavitation.



Duoprop's twin counter-rotating propellers create an axially symmetrical jet of water, so that all energy is used to propel the boat forwards.

# *The Kompressor engine. Diesel technology that takes you right*



The modern marine diesel engine already offers owners important qualities such as reliability, fuel economy and impressive performance at top speeds. The one thing that has offered a potential for further development has been acceleration, which has been rather poor compared with that of the petrol driven engine. During recent years, therefore, most development work on diesels has been concentrated on ways of achieving even better torque.

With the arrival of Volvo Penta's 42 engines, the dilemma of poor acceleration is now a thing of the past.

Thanks to its unique combination of compression feeding, turbocharging and Duoprop, we now have a propulsion system that unites all the marine diesel engine's other excellent qualities with the acceleration of the large petrol driven V8.

What happens is this. When you accelerate, the mechanical com-

pressor automatically switches on, compressing the intake air, thereby creating a higher torque right from the start. Once the turbocharger has begun to work and is creating its own pressure, a non-return valve opens and what you have is a straightforward turbocharged marine diesel.

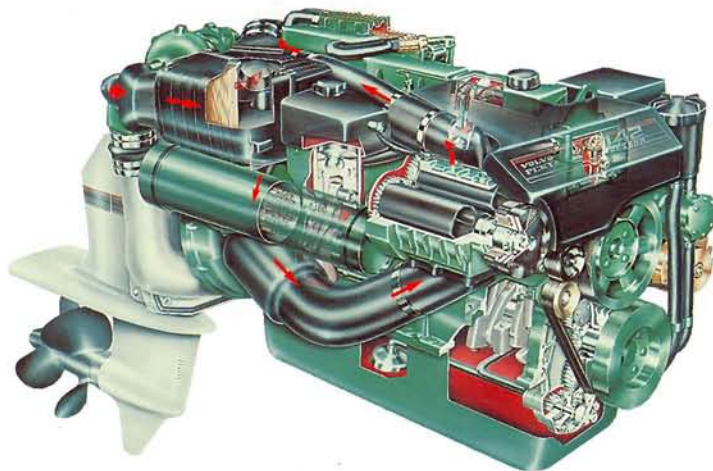
The compressor is only in use when it's really needed, for producing maximum power to bring the boat to planing. Once the boat is planing the turbocharger, aftercooler and direct fuel injection system see to it that power is optimized, and guarantee top performance.

High torque even at low engine revolutions also means that it's now possible to obtain the full benefit of Duoprop, including enhanced standards of comfort on board. Taken all in all, it places the 42 engines in a very special top category of marine propulsion systems.

Or, to put it in simple terms, the 42 engines are the best there is.



# ht into the future

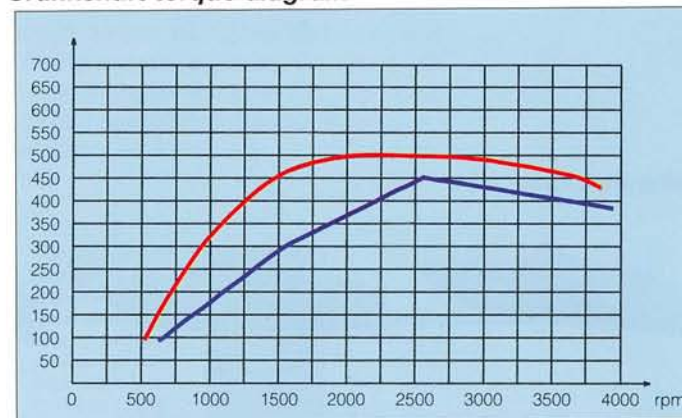


Volvo Penta's latest concept, the Kompressor series, offers

- 40% faster acceleration
- Lower fuel consumption
- Higher top speeds
- Improved handling characteristics
- Lower sensitivity to load
- Lower noise levels

The interplay between mechanical compressor and turbocharger makes for fast, powerful, consistent running through the whole register of engine revolutions.

**Crankshaft torque diagram**



– red torque curve KAD 42 - the compressor engine.

– blue average torque curve of a turbo aftercooled diesel engine.



# Power trim. The easy way to get full control at all speeds



## Using the power trim



At speeds below the planing threshold, trim the drive in to lower the boat's bow. This produces a smooth ride and directional stability during acceleration. The drive should also be trimmed in to reach planing speed faster.

At speeds above the planing threshold, trim the drive out to a point at which the area of the wetted hull surface is reduced to a minimum and the ride feels smooth.

In heavy seas. Trim in the drive to partially lower the bow it will give you a more comfortable ride.





Volvo Penta's Aquamatic drive with integral hydraulic power trim gives the helmsman full control over the boat in different sea and load conditions as well as running in shallow water.

Volvo Penta's power trim system has three functions: **Power Trim function.** Power trim makes it easier to bring the boat up to planing position. Thanks to the power trim the boat's running angle can be fine adjusted to the load and running conditions. Combined with Duoprop power trim reduces sensitivity to sea, load and speed conditions to a minimum. **Beach function.** With the drive in the beach mode the drive is partly lifted and the boat can be slowly manoeuvred through shallow waters in either forward or reverse. **Tilt function.** The tilt function allows the driver to lift the drive to a maximum to clear bottom obstacles and to keep the drive in a lifted position when so required. The Aquamatic also features an integral kick-up function. It kicks up the drive in the event of the drive hitting an obstacle in the water.

Volvo Penta's new **Power Steering** system improves the helmsman's control over the boat and gives high comfort. With power steering none of the steering forces are transmitted to the steering wheel. Combined with Duoprop power steering brings the driving comfort even one step further to the most complete steering system available for the demanding boater. For diesel powered boats and boats equipped with 740 petrol engines power steering is standard.



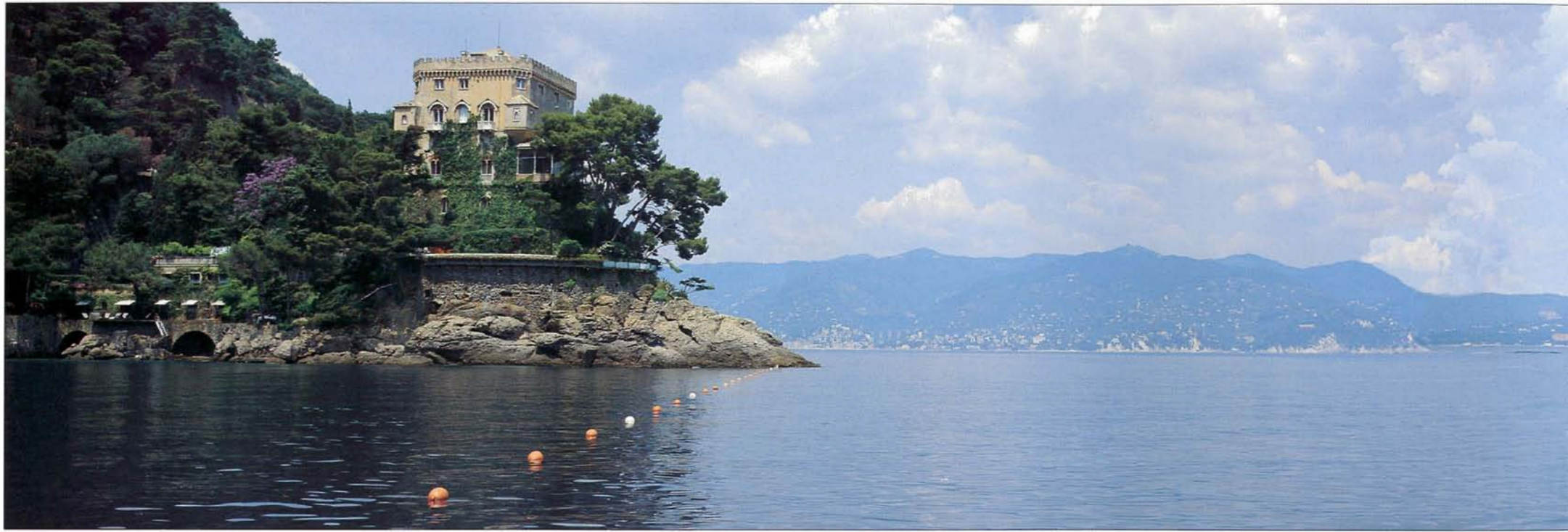
The computer display feature (CD) provides instantaneous information about actual drive position and the angle of the boat in the water, to give optimum engine performance and comfort on board.



Easy-to-handle power trim for fingertip control.



# *Four and six cylinder series. When you want more power than*



Our compact four cylinder engines have the advantage of extremely good power-to-weight ratios. This means that their propulsive power is considerably greater than one would expect from engines of their size. Good power-to-weight ratios also have the advantages that fuel economy is better and that these engines will take boats further for the same amount of fuel.

Volvo Penta's four cylinder engines are compact, but built into them there's a good deal of pleasure at the helm.

Volvo Penta's modern V6 engine is not far behind the large V8 where performance is concerned. And, when fitted with Duoprop, a

V6 from Volvo Penta will achieve acceleration rates and top speeds far more impressive than those of a conventional V6.

Only Volvo Penta can offer owners this combination.

With a small sports boat in which the full might of a V8 may seem somewhat superfluous, our V6 enables us to provide four perfect alternatives for boatowners who want the best in performance, reliability and fuel economy.

All feature Duoprop. The new 432/DP and 434/DP also feature a new balancing shaft specially developed to offer an even more comfortable ride with the minimum of engine vibration.





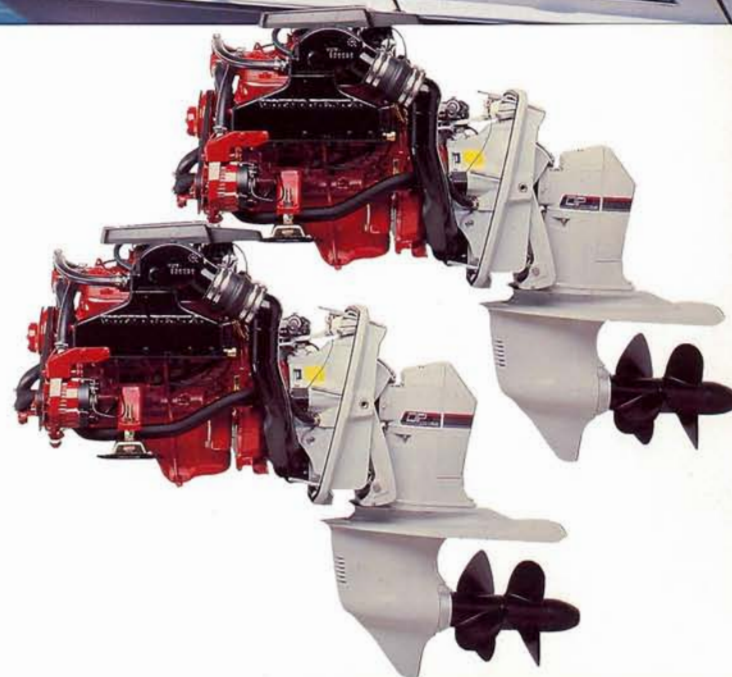
**230/SP.** Based on a modern 2,3 litre block and fitted with a single propeller Aquamatic drive, here's an engine that offers an ideal economy package with fast acceleration.

**250/SP.** When matched with a single propeller drive and integral power trim, the 2,5 litre twin-carburettor twin carburettor 250/SP has a power curve that's optimized for high performance.



**432/DP and 434/DP.** Both engines are based on a 4,29 litre block and fitted with Duoprop. The 432/DP features a double-barelled carburettor. The 434/DP with its four-barelled carburettor produces a smooth and high power output. Both engines feature a new balancing shaft that reduces engine vibrations, and a new ignition system for even greater reliability.

**430/DP and 431/DP.** Based on a 4,3 litre block and fitted with Duoprop the 430/DP and 431/DP offer you economical top performance.





# *The V8 series with Duoprop. When you want performance a st*



The combination of raw power and fine-tuned technology has given Volvo Penta's V8 Series an image that is unique in the field of marine engines.

The combination is a successful one.

On the one hand it features the tremendous cylinder displacement of the big V8. On the other are the technologically advanced twin Duoprop propellers, guaranteeing a propulsion system that offers top performance and high standards of comfort under way.

Duoprop makes maximum use of the power produced in the big cylinders of the V8 engine, converting it into efficient propulsive force with the minimum loss of output on the way from the cylinders to the propellers. The result is seen in maximum levels of performance and minimum fuel consumption.

Another, and equally important benefit that Duoprop has to offer,

and that is here seen to advantage, is the quite fantastic manoeuvrability, giving a safe and comfortable ride even at very high speeds or during hard turns. This is an aspect of safety at sea that is becoming more and more important in view of the high speeds that characterize boating today.

Volvo Penta's V8 Series with its five different models, ranging from a 5,0 litre model up to the Big Block with its 7,4 litres, covers every requirement in terms of performance and comfort, from fast boats for the whole family up to the ultimate in high-speed sports boats.

All five models feature Volvo Penta's Integral Power Trim and breakerless ignition, and can be fitted with our special silencer system, to give even better performance and an appreciable reduction in audible engine noise.



ep ahead



**500/DP and 501/DP.** Both models are based on a 5,0 litre block with water-cooled exhaust manifold and riser. The 500/DP with its two-barrelled carburettor is designed for high torque and low fuel consumption. Though its four-barrelled carburettor is more advanced, the emphasis on the 501/DP is on high top speeds. Both models are fitted with Duoprop.

**570/DP and 572/DP.** These powerful engines feature a 5,7 litre block specially designed for top performance at high speeds while still maintaining high standards of comfort on board. The 572/DP is equipped with a two-barrelled carburettor while the 570/DP has a four-barrelled carburettor. Both models are fitted with Duoprop.



**740/DP.** The biggest and most powerful of our V8 models, featuring a real Big Block engine with a 7,4 litre block. Fitted with a specially designed Duoprop system in stainless steel, for maximum performance.



# *The 31-41 diesel series with Duoprop. High performance with*



Modern marine diesel engines from Volvo Penta are designed for direct fuel injection, turbocharging and aftercooling, right from the drawing board stage. Direct fuel injection makes for greater reliability, increased power output and reduced exhaust emissions. Besides contributing to power output, turbocharging helps to reduce fuel consumption and engine noise levels, advantages that are further enhanced by aftercooling the intake air so that more oxygen can be fed into the combustion chamber.

Take all three together, and it becomes possible to build engines that are more compact, that offer maximum possible power output, and that are lean on fuel consumption.

Then add the excellent qualities that characterize the marine diesel such as its high level of reliability, long service life and low running costs, and it is easy to see why, in so many ways, the diesel has become the power source of the future in the world of marine engines.

At Volvo Penta we have taken the marine diesel engine yet a stage further than this, by matching it with our Aquamatic drive and fitting it with Duoprop.

And the results you can enjoy are striking:

Acceleration is up to 30% faster.

Fuel consumption as much as 15% lower.

And top speeds are around 15% higher.

The marine diesel engine underwent a revolution when we introduced Duoprop 10 years ago. And the revolution is still continuing, as owners who are looking for a combination of safety and reliability, maximum performance and minimum fuel consumption will know. It's no mere matter of chance that our 31-41 Series engines have sold in their thousands, all over the world, since we launched them on the market.

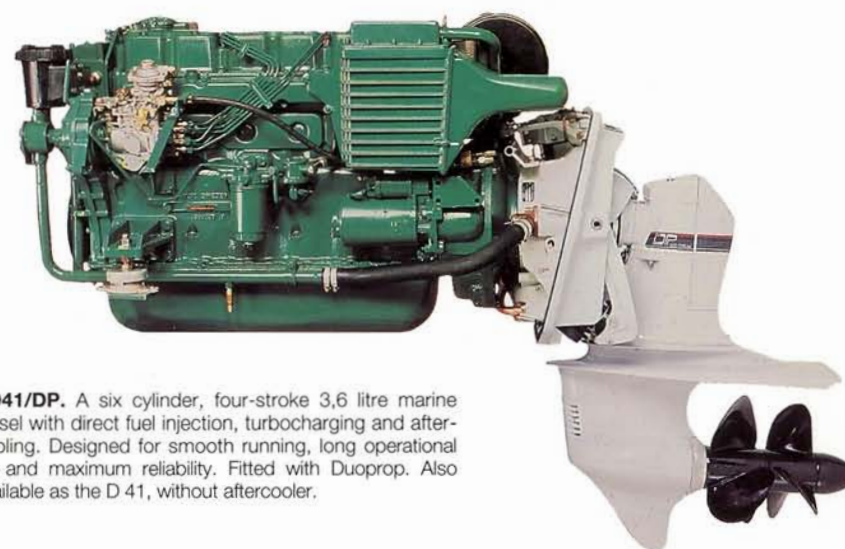
It's because no other engine manufacturer can offer owners the best of both worlds the way that Volvo Penta can.



# ***built-in reliability***



**AD31/DP.** A four cylinder, four-stroke 2,4 litre marine diesel with direct fuel injection, turbocharging and aftercooling. Featuring a precision machined cast iron cylinder block and head, for long service life and maximum reliability. Fitted with Duoprop.



**AD41/DP.** A six cylinder, four-stroke 3,6 litre marine diesel with direct fuel injection, turbocharging and aftercooling. Designed for smooth running, long operational life and maximum reliability. Fitted with Duoprop. Also available as the D 41, without aftercooler.



# ***KAD 42. A new dimension in your boating life***



With the introduction of Volvo Penta's 42 Series, the world now has a marine diesel capable of absolutely top performance throughout the whole register of engine revolutions.

Here is a worthy challenger to the big petrol driven V8, capable of meeting it on its own ground in terms of acceleration and top speeds.

The secret behind the 42 Series' fantastic performance lies in the interplay between mechanical compressor and turbocharger.

The turbocharger is always at work. It's at its best at around 2400 rpm and above.

But when you accelerate there is always a short delay before the turbocharger reacts. This limits the power output, especially at low rpm when the level of exhaust gases is relatively low.

It's here that the compressor comes into the picture.

Because the compressor operates mechanically, and so is not

dependent on the level of exhaust gases. When you accelerate rapidly, it comes in right from the start, and continues to operate until the turbocharger is running at its best. At medium rpm, before the turbocharger is working at its best, the compressor continues to operate, to guarantee optimum performance.

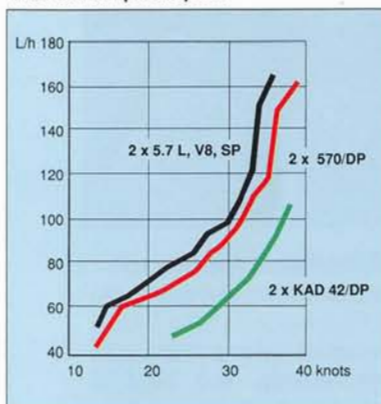
This new solution to an old problem ensures constant high torque right from the moment the engine is switched on, to give both faster acceleration and higher top speeds, not forgetting lower fuel consumption.

Accordingly, the new 42 Series engines offer a faster and more safely ride and at less expense. Three important considerations to weigh in balance when deciding on which engine to choose.



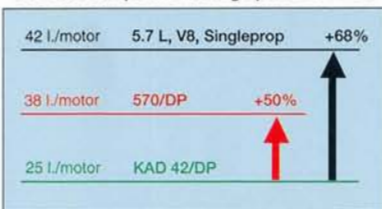


Fuel consumption/speed



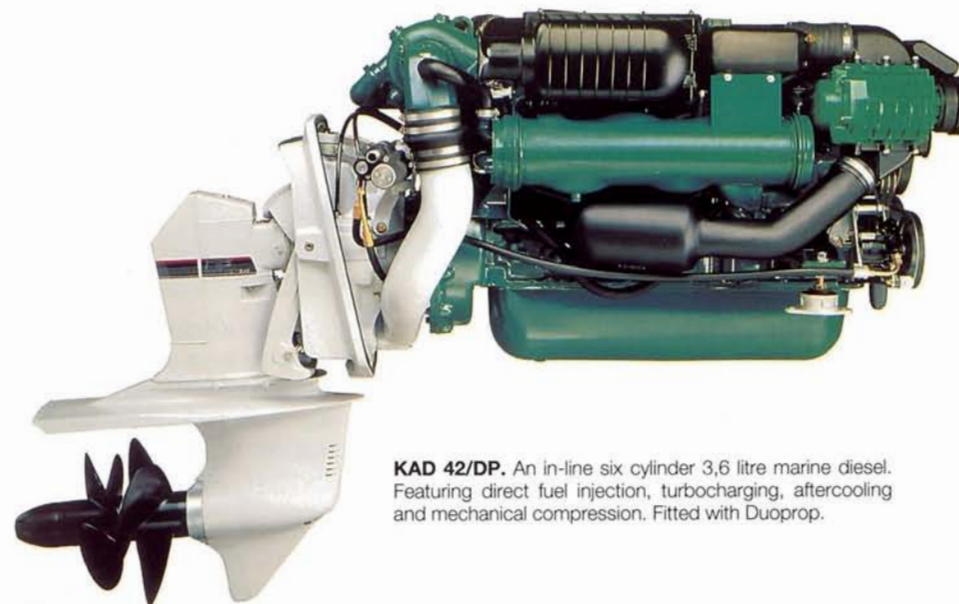
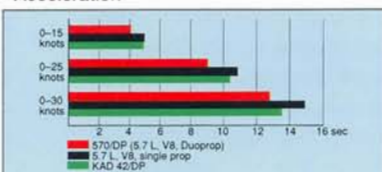
With a twin KAD 42/DP installation, fuel consumption is 50% lower than with a singleprop 5,7 litre petrol-driven V8.

Fuel consumption cruising speed 25 knots



Astonishing! Cruising at 25 knots, fuel requirement with a singleprop 5,7 litre petrol-driven V8 is 68% higher than with a KAD 42/DP.

Acceleration



**KAD 42/DP.** An in-line six cylinder 3,6 litre marine diesel. Featuring direct fuel injection, turbocharging, aftercooling and mechanical compression. Fitted with Duoprop.



# Improving your standard of comfort



By making sure that accessories and spare parts are genuine Volvo Penta parts, tested and approved, owners will know they can rely on them, in the same way as they rely on their boats' engine. They are tailor-made for use with Volvo Penta engines and drives, in order to protect your investment.



## **A wide choice of instruments**

Instruments to help with navigation and to ensure comfort and safety on board. Specially designed in water-resistant, anti-corrosion materials.



## **Control systems**

High quality controls that ensure safe, comfortable manoeuvring. Twin lever or single lever, with combined throttle control and gear function.



## **Steering systems**

A new hydraulic steering system also available for boats with flying bridge. Wheels made of anti-magnetic, anti-corrosion materials, and the STS 330 low-friction mechanical steering system.





### ***For even greater comfort ...***

Extra alternators for electrical supply, power take-off brackets for extra equipment, and hot water outlets for showers and washing dishes are available, to turn comfort into something approaching luxury.



### ***Propellers***

Volvo Penta offers owners a wide range of propellers for use with our unique Duoprop system, providing optimum performance. A full range of single propellers is also available, for both single and twin engine installations.



### ***Maintenance***

Engine and transmission oils, specially selected and tested to suit prevailing conditions. Developed to give minimum wear and tear on engines and transmissions alike.



### ***Antifouling paint and Primer***

The new antifouling paint and primer have been specially produced and tested for use on Volvo Penta drives. The antifouling paint is Teflon™-based and tin-free. It effectively prevents marine growths.



# *Parts and service. Your assurance of a more problemfree way*



The cornerstones of Volvo Penta's after sales service concept are availability, quality, professional skills, reliability and freedom from fuss.

We've continuously developed them over the years to create a network of Volvo Penta dealers and service engineers who can offer owners both skilled service and a full range of spare parts, anywhere in Europe and in more than 100 other countries all over the world where Volvo Penta is represented.

## ***Availability***

Today our network comprises some 4000 Volvo Penta dealers worldwide. In addition to providing service, they can also offer owners advice and instructions on how to carry out do-it-yourself service and maintenance. They can supply spare parts and maintenance parts for Volvo Penta engines, including those that are no longer in production, because we ensure parts availability for up to fifteen years.

As a rule, a dealer will have the necessary part in stock, but even if he doesn't, it can be ordered and will be dealt with as soon as it has been requisitioned.

## ***Quality***

By buying genuine Volvo Penta spare parts, owners can be sure that what they're buying are parts that meet the same strict requirements as to quality as those to which the original product was subject. This is because



# to own a boat



we at Volvo Penta are ready to stand by our guarantees and obligations in respect of all components supplied, including spare parts and maintenance parts.

## **Professional skills**

All Volvo Penta dealers are specially trained to enable them to service our products. Our training schemes also cover other staff whose job it is to know about the best way of servicing Volvo Penta products.

## **Reliability**

Using products from Volvo Penta, servicing them and using original Volvo Penta spare parts is the best way there is of guarding against unnecessary interruptions and breakdowns, and at the same time enhancing the built-in feeling of reliability and safety at sea.

## **Freedom from fuss**

Volvo Penta owners start off knowing that they have the edge over other owners when it

comes to freedom from fuss. It's because, first and foremost, they know that their boats are fitted with engines and drives that guarantee absolutely top quality.

Together with availability, quality, professional skills and reliability, freedom from fuss is one of the cornerstones of our after sales service, supporting a network of some 4 000 Volvo Penta dealers whose job it is to ensure that owning a boat is the pleasure it's meant to be. Because that's what boating is all about.



# Technical specifications

Engine designation	Propeller shaft power <sup>1)</sup> kW/hp	Full throttle operation	Displacement, litres	Number of cylinders	Cylinder bore/stroke, mm	Compression ratio	Weight (SP/DP) kg	Carburettor/Injection system	Seawater pump fitted at the front of the engine	Freshwater cooling	Exhaust outlet through the drive	2" and 4" exhaust riser extension	High performance silencer, straight through transom or hull side	Ignition system, breakerless	Extra alternator	Double diode, Charging distributor	Gear ratio DP
<b>230/SP</b>	81 110	4700-5000	2,3	4	96,0 80,0	9,7:1	266	1-Barrel	●	●	●	◆	◆	◆	◆	▲	◆
<b>250/SP</b>	99 135	4800-5500	2,5	4	96,0 86,0	9,7:1	282	2x1-Barrel	●	●	●	◆	◆	◆	◆	▲	▲
<b>430/DP</b>	114 155	4100-4500	4,3	6	101,6 88,4	9,3:1	359 DP 355 SP	2-Barrel	●	▲	●	▲	▲	●	◆	▲	2,30:
<b>431/DP</b>	129 175	4400-4800	4,3	6	101,6 88,4	9,3:1	359 DP 355 SP	4-Barrel	●	▲	●	▲	▲	●	◆	▲	1,95: 2,30:
<b>432/DP</b>	121 165	4400-4800	4,3	6	101,6 88,4	9,0:1	360 DP 356 SP	2-Barrel	●	▲	●	▲	▲	●	◆	▲	2,30:
<b>434/DP</b>	136 185	4400-4800	4,3	6	101,6 88,4	9,0:1	360 DP 356 SP	4-Barrel	●	▲	●	▲	▲	●	◆	▲	1,95: 2,30:
<b>500/DP</b>	140 190	4200-4600	5,0	8	94,9 88,4	9,3:1	402 DP 398 SP	2-Barrel	●	▲	●	▲	▲	●	◆	▲	1,95:
<b>501/DP</b>	151 205	4400-4800	5,0	8	94,9 88,4	9,3:1	402 DP 398 SP	4-Barrel	●	▲	●	▲	▲	●	◆	▲	1,95:
<b>570/DP</b>	180 245	4200-4600	5,7	8	101,6 88,4	9,3:1	402 DP 398 SP	4-Barrel	●	▲	●	▲	▲	●	◆	▲	1,95:
<b>572/DP</b>	165 225	4200-4600	5,7	8	101,6 88,4	9,3:1	402 DP 398 SP	2-Barrel	●	▲	●	▲	▲	●	◆	▲	1,95:
<b>740/DP</b>	221 300	4000-4400	7,4	8	108,0 101,6	8,0:1	536	4-Barrel	●	▲	●	▲ 3"and 6"	▲	●	◆	▲	1,78:
<b>AD 31/DP</b>	88 120	3700-3900	2,4	4	92,0 90,0	17,5:1	440 DP 433 SP	Direct injection diesel	●	●	●	◆	◆	◆	▲	▲	2,30:
<b>D 41/DP</b>	103 140	3700-3900	3,6	6	92,0 90,0	17,5:1	510 DP 503 SP	Direct injection diesel	●	●	●	◆	◆	◆	▲	▲	1,78: 1,95:
<b>AD 41/DP</b>	136 185	3700-3900	3,6	6	92,0 90,0	17,5:1	520 DP 513 SP	Direct injection diesel	●	●	●	◆	◆	◆	▲	▲	1,78: 1,95:
<b>KAD 42/DP</b>	159 216	3700-3900	3,6	6	92,0 90,0	17,8:1	542	Direct injection diesel	●	●	●	◆	◆	◆	▲	▲	1,78:

Operating conditions: Pleasure craft operation.

1) Propeller shaft power according to ISO 8665 or according to the technically identical standards SAE J 1228 and ICOMIA 28-8.

● Standard ▲ Option ◆ Not available



Gear ratio SP

R + LH propeller  
rotation for SPStainless steel DP  
props C4-C7

Jackshaft (1650 mm)

1" and 4" drive extension

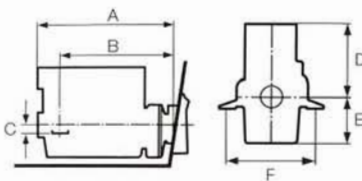
Power trim with  
Computer Display

Power steering

Hydraulic steering

Hot water outlet

Hour meter



Measurements in mm

Features  
Aquatic driveFeatures  
Diesel enginesFeatures  
Petrol engines

2,15:1	●	◆	◆	▲	●	▲	▲	▲	▲	A 865 B 674 C Min 134 Max 150	D 475 E 215 F 410	Gravity die cast aluminium alloys for high corrosion resistance.	Developed for marine applications from the very first beginning, Duoprop matched performance.	Fully waterjacketed exhaust system.
15:1	●	◆	◆	▲	●	▲	▲	▲	▲	A 875 B 674 C Min 134 Max 150	D 480 E 215 F 410	Pattern matched, helical-cut gears for smooth, quiet operation in either rotational direction.	Oilcooled pistons.	Direct driven easy accessible seawater pump.
89:1	●	▲	◆	▲	●	▲	▲	▲	▲	A 905 B 572 C Min 96 Max 112	D 490 E 230 F 572	Overload breakaway coupling minimizing gear damage in case of collision.	Replaceable wet cylinder liners and valve seats.	Spark proof flame arrestor.
61:1 89:1	●	▲	◆	▲	●	▲	▲	▲	▲	A 905 B 572 C Min 96 Max 112	D 490 E 230 F 572	Built-in kick-up feature to protect the drive.	Freshwater cooled engine block, cylinderhead and exhaust manifold.	14V/50A marine alternator. (14V/60A: 432, 434)
89:1	●	▲	◆	▲	●	▲	▲	▲	▲	A 905 B 568 C Min 96 Max 112	D 500 E 230 F 572	Volvo Penta's exclusive 6-step anti-corrosion treatment including painted internal water passages, plus stainless steel bolts and heli-coil inserts, sacrificial zincs, all aluminium parts powder painted.	Heatexchanger and oilcooler of tubular type.	Starter motor 1,4 kW.
61:1 89:1	●	▲	◆	▲	●	▲	▲	▲	▲	A 905 B 568 C Min 96 Max 112	D 515 E 230 F 572	Maintenance-free universal joint.	Freshwater cooled turbo-charger.	Flexible engine mounting for reduced noise and vibration.
61:1	●	▲	◆	▲	●	▲	▲	▲	▲	A 1017 B 680 C Min 100 Max 124	D 541 E 224 F 572	Oil dipstick conveniently located on top of the drive.	Exhaust elbow with stainless steel insert.	50A circuit breaker, protects electrical system from overload.
61:1	●	▲	◆	▲	●	▲	▲	▲	▲	A 1017 B 680 C Min 100 Max 124	D 543 E 224 F 572	Wide cavitation plate exhaust outlet for quicker planing.	Seawater cooled aftercooler (not D41) and oilcooler.	Easy plug-in instrument panel.
61:1	●	▲	◆	▲	●	▲	▲	▲	▲	A 1017 B 680 C Min 100 Max 124	D 541 E 224 F 572	Complete range of highly efficient aluminium and stainless steel propellers for Duoprop and singel propeller drives with built in rubber hubs.	Seawater cooled aftercooler (not D41) and oilcooler.	Easy access to all service point locations.
1,61:1	●	▲	◆	▲	●	▲	▲	▲	▲	A 1017 B 680 C Min 100 Max 124	D 541 E 224 F 572		14V/50A marine alternator.	
◆	◆	▲	◆	▲ 1"	●	●	▲	▲	▲	A 1072 B 684 C Min 100 Max 124	D 534 E 224 F 572		Starter motor 2,5 kW.	
1,61:1	●	▲	▲	▲	●	●	▲	▲	●	A 1008 B 741 C Min 112 Max 128	D 481 E 247 F 574		Flexible engine mounting for reduced noise and vibration.	
1,61:1	●	▲	▲	▲	●	●	▲	▲	●	A 1244 B 977 C Min 112 Max 128	D 481 E 269 F 574		Seawater strainer.	
1,61:1	●	▲	▲	▲	●	●	▲	▲	●	A 1244 B 977 C Min 112 Max 128	D 481 E 269 F 574		Easy access to all service point locations.	
◆	◆	▲	▲	▲ 1"	●	●	▲	▲	●	A 1244 B 977 C Min 112 Max 128	D 497 E 269 F 574		Easy plug-in instrument panel with audio alarm and electrically operated stop.	
													Extra power take-off available as an option.	
													Engines available with certificate for Bodensee.	

Volvo Penta reserves the right without prior notice, to revise prices, materials, standard equipment, specifications and models and to discontinue models. Not all models, standard equipment and accessories are available in all countries. The performance

and power data presented in this brochure is for boats, engines and conditions as tested and may vary within manufacturing tolerances. The engines shown are not in every respect identical with production standards.



# **VOLVO PENTA**

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