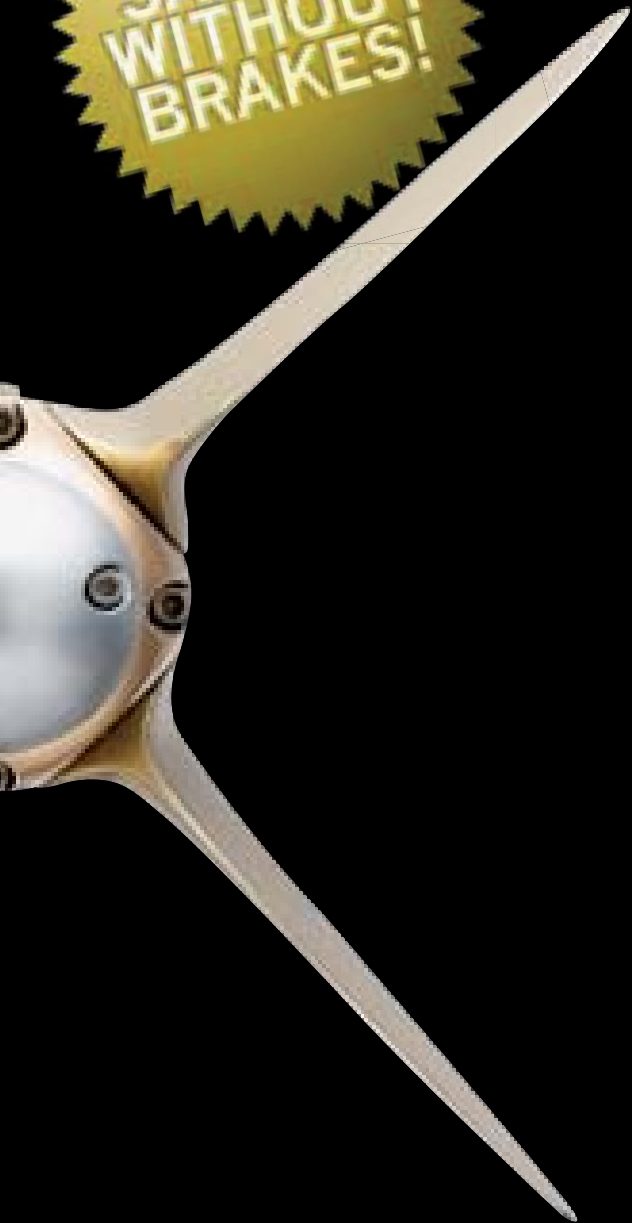


VARIPROP

FEATHERING PROPELLERS

SAILING
WITHOUT
BRAKES!



DO YOU DRIVE YOUR CAR WITH THE HANDBRAKE ON?

VARIPROP

FEATHERING PROPELLERS

SAILING WITHOUT BRAKES!

SIMPLY THE FINEST AUTOMATIC FEATHERING SAILING PROPELLER IN THE WORLD!

Basic Features and Benefits of MOST Feathering Propellers

1. When the engine is turned off, the waterflow rotates the blades automatically into the feathered position.

BENEFITS:

Drag is almost eliminated and speed increases 15% to 20%, depending on wind conditions. Propeller turbulence vanishes and a substantially enhanced rudder effect is achieved.

2. When shifting into reverse, less than one shaft rotation turns the leading edge of the blades 180 degrees.

BENEFITS:

Efficiency (thrust) in reverse is equal to forward, 30% - 40% more than all fixed propellers. You get improved stopping power; however, this also increases "Prop Walk" (raddle wheel effect) unless reverse pitch can be adjusted independently for better control when docking.

Unique Features of VARIPROP

1. Independently adjustable external pitch control. Forward and reverse pitches can be changed in just seconds- even underwater

BENEFITS:

Custom fine tuning (in micrometer-small increments) of reverse thrust vs. prop-walk. (For most owners, eliminating prop walk is more important than maximizing reverse thrust.)

VARIPROP allows you to customize that balance for optimum control, maneuverability and safety

Independent fine tuning of forward thrust means that **VARIPROP** delivers the best possible performance (speed, thrust, fuel economy) in forward without compromising reverse performance... and vice versa

External pitch adjustment

The patented pitch adjustment device allows you to adapt the propeller pitch individually to your sailing requirements without having to dismantle the VARIPROP - it can be easily optimized while mounted. An easy-to-understand manual and the necessary tools are provided with every VARIPROP.



SoftStop™ shock absorber

The integrated mechanical shock absorber reduces unpleasant operating noises. The pitch stops are substantially protected against wear..

2. SoftStop™ Shock Absorbing Multidisc Brake (patented) built into the VARIPROP hub

BENEFITS:

Dramatically reduces shock loads on gearbox and drivetrain, permits shifting at higher speeds without damage, preserves preset pitches by eliminating hard limit stop impacts (the typical "clunks" of all others)

The entire drive train benefits: longer cutless bearing life, minimized wear on gearbox, clutch plate, bearings

3. Gears are 35% - 50% larger than competing props

BENEFIT:

Substantially extended service life. With proper service props can last for decades, not just a few years.

Unique Features of VARIPROP

4. Precision engineering

Superb German precision engineering in a custom made prop vs. mass-produced competitors

BENEFITS:

Every VARIPROP is built to order-consistently 100%, up to stringent specs for reliable, smooth and efficient operation

Quality is assured by compliance with DIN EN ISO 9001 international manufacturing standards and approved according to the standards of the "Germanischer Lloyd".

5. Comes fully assembled and tested

BENEFIT:

VARIPROP mounts on your shaft just like a solid prop. No disassembly, no shaft modifications

6. Balanced by Hand

As a final step, each propeller is dynamically balanced by hand to perfection

BENEFIT:

Smoother, quieter running with absolutely zero vibration

7. Shortest hub

VARIPROP's hub is flush with the forward edges of the blades, and barely protrudes past the aft edges

BENEFITS:

VARIPROP will fit into the smaller prop apertures of older traditional "full keel" yachts - not possible with most competing propellers

Line cutters - SPURS or solid types - can be mounted very close to the VARIPROP blades, the ideal position. This is a huge advantage for boats operating in areas with fields of lobster pots, crab pots and fish traps. With competing props, because of their much longer hubs, all such cutters must be mounted farther away from the prop blades, which drastically reduces their effectiveness.

WHAT DO OUR CUSTOMERS SAY?

After owning "Windigo" (C&C 40) for 12 years this is the first year I have been able to achieve proper RPM's (2600) instead of 2100 or 2200 with little or no vibration. I have tried just about everything, such as replacing engine mounts, new flange and coupling, cutless bearing and realigning my strut. I have changed propellers from a MARTEC to a FLEXY-OLD. I even tried a MAX-PROP. All these changes and expense did not help my vibration and the harmonics. What a surprise when I put my 3-bladed VARIPROP on.... Vibrations are gone, I have much greater punch going into strong seas and lose considerably less speed... My stopping power has been greatly increased and my docking has been made easier with the way WINDIGO'S stern walked to port. Bottom line is, I am very pleased with my prop. It's the single best investment I have made to the boat.

Dick Emmerson, owner of the Windigo / Saint John, NB.



photo: Angus Yachts

SPW

SAIL PROPELLER- UND WELLENBAU GmbH

EASY INSTALLATION



SAILING WITHOUT BRAKES!

The VARIPROP is mounted on your tapered shaft or saildrive shaft exactly like a fixed blade propeller. No disassembly of any part of the VARIPROP is necessary unlike other feathering propellers found on the market. Secure locking of nut is attained by using LOCTITE to place a grub screw in a position that makes it impossible for the nut to come off. Finally the zinc cap is mounted and you are ready to go.

Some of the Boats using Propellers of the VARIPROP Series DF-80 - DF-140:

- | | | |
|--------------|------------------|----------------------|
| Anel | Halberg Rassy | Schiomieg catamarans |
| Baltic | Hunter | Southerly |
| Beneteau | Ionic | Sparkman and Stevens |
| Bristol | Island Packet | Swan |
| Bruckmann | Jeanneau | Sydney Yachts |
| Buizen | Lagoon | Tartan |
| C&C Yachts | Luffe | Tasman |
| Catalina | Malö | Van der Stadt |
| Cheo Lee | Maxi | Vancouver |
| Comfortina | Mirage | Vindö |
| Contest | Moody | Wauquiez |
| Comfortina | Morgan | X-Yachts |
| CS Yachts | Najad | ... and many more |
| Dehler | Nonsuch | |
| Dufour | OE | |
| Elan | Oyster | |
| Etap | Perry Catamarans | |
| Faury | Reinke | |
| First | Reiford | |
| Grand Soleil | Saga | |
| Hanse | Salona | |



photo: Bruckmann Yachts



photo: Angus Yachts



photo: Swans Yachts Sale



photo: Swans Yachts Sale



photo: Swans Yachts Sale

STANDARD PROPELLERS LARGER SIZES UP TO 50 INCHES ON DEMAND

DF-80

Propeller dia.		A	B	C	D	E	F		Output Horse Power Range	Prop net weight
inch	mm	mm	mm	mm	mm	mm	inch	mm	hp/kw	kg
12	305	152	105							4.8
13	330	165	110							5
14	355	178	120			20-25 and saildrive	3/4" - 1" and saildrive	max. 6.5 to.		5.5
15	380	190	130	60				5-30 / 3.6-22		6
16	406	203	135							6.5
17	432	216	145							7

DF-107

Propeller dia.		A	B	C	D	E	F		Output Horse Power Range	Prop net weight
inch	mm	mm	mm	mm	mm	mm	inch	mm	hp/kw	kg
15	380	190	115							8
16	406	203	125							8.5
17	432	216	135			20-35 and saildrive	1" - 1 3/8" and saildrive	max. 14 to.		9.5
18	457	229	145	70				30-80 / 22-59		10.5
19	483	242	155							11.5
20	508	254	160							12

DF-112

Propeller dia.		A	B	C	D	E	F		Output Horse Power Range	Prop net weight
inch	mm	mm	mm	mm	mm	mm	inch	mm	hp/kw	kg
20	510	255	165							17
21	533	286	175							17.5
22	560	280	180							18
23	584	292	185	85		35-40	1 3/8" - 1 1/2"	max. 20 to.		19
24	610	305	190					60-120 / 45-88		20
25	635	318	195							21

DF-128

Propeller dia.		A	B	C	D	E	F		Output Horse Power Range	Prop net weight
inch	mm	mm	mm	mm	mm	mm	inch	mm	hp/kw	kg
24	610	305	215							26
25	635	318	225							26.5
26	660	330	235	100		40-50	1 1/2" - 2"	max. 26 to.		27
27	685	343	240					100-140 / 73.5-103		27.5
28	715	358	250							28

DF-140

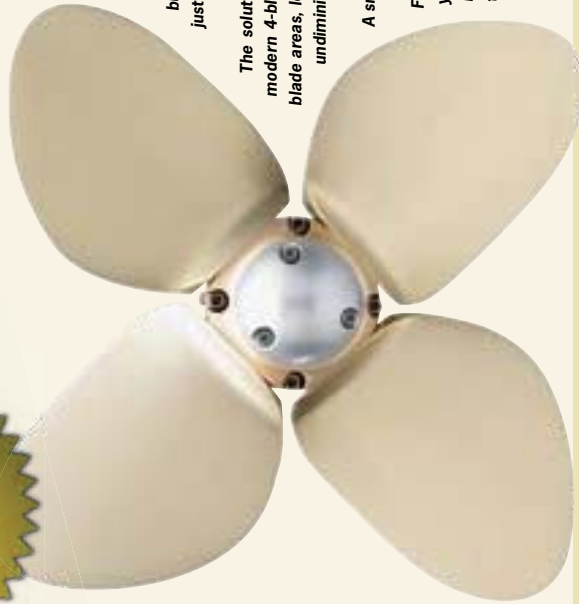
Propeller dia.		A	B	C	D	E	F		Output Horse Power Range	Prop net weight
inch	mm	mm	mm	mm	mm	mm	inch	mm	hp/kw	kg
24	610	305	195							26
26	660	330	210							28
28	715	356	230	112		max. dia. 55 mm	max. dia. 2 1/4" flat key	max. 50 to.		32
30	762	381	250					180 / 132		39
32	813	406	275							40

All VARIPROP are made out of high-strength NIBRAL material for long life.



4 BLADED POWER: THE VARIPROP "BLUE WATER"

**SAILING
WITHOUT
BRAKES!**



with all the advantages of her 2 & 3 bladed sisters the 4 bladed Variprop has a lot to offer.

Especially in blue water conditions, excessive blade loading causes cavitation noises, bubbles on blades and resulting loss of power, just when you need it most in the trough.

The solution is the VARIPROP, to-date worlds most modern 4-blade feathering propeller, with 30% larger blade areas, less blade loading, much greater thrust and undiminished power.

A smaller diameter fits where others cannot.

Fit a 4 blade VARIPROP. The cost is less than you might think. The results are simply amazing. Smooth running, under all conditions tremendous power, no vibration.



VARIPROP "BLUE WATER"
the ultimate cruising yacht propeller:
Sail ... without "towing a bucket"
Power ... into head seas like a tugboat

VARIPROP XLS EXTRA LARGE AND EXTRA STRONG!



**SIMPLY THE FINEST AUTOMATIC
FEATHERING SAILING PROPELLER
IN THE WORLD!**

Unique Features of VARIPROP XLS

- » Independently adjustable external pitch control (patented). Forward and Reverse pitches can be changed in just seconds even underwater.
- » Integrated shock absorber (patented) built into the VARIPROP hub
- » All XLS-VARIPROP are sealed to avoid loss of grease from the housing during operation. This ensures long life of the mechanical parts and also substantially extends service intervals.
- » Massive gearings last for decades of utterly reliable and trouble free services.
- » Comes fully assembled VARIPROP mounts on your shaft just like a solid propeller. No disassembly.

More large sailing vessels using the stunning VARIPROP XLS:

SY "ALTAIR"	SY "ORION"	Oyster 63
SY "DORIANA"	SY "SHABAB OMAN"	Oyster 82
SY "ELEONORA"	SY "SENTA"	Moody
SY "LULWORTH"	Scharping 60	Northwind 68
SY "KENTRA"	Baltic	Swan
SY "ASTRA"	Oyster 56	

» Refer to complete Data on web-site (www.variprop.de)

Altair	Eleonora
Length: 39 m,	Length: 36 m,
Weight: 161 to,	Weight: 240 to,
Engine: Gardner, 275 HP	Engine: Baudouin, 460 HP
3 blade VARIPROP DF 230	4 blade VARIPROP DF 310
Diameter: 34"	Diameter: 46"
Pitch: 25" / 22"	Pitch: 38" / 36"



photo: Pierre Lang



photo: Swans Yachts Sale



photo: Franco Pace



photo: Franco Pace



photo: Meer & Yachten (05/2003)



**SAILING
WITHOUT
BRAKES!**

**Power ... into head seas like a tugboat
Sail ... without "towing a bucket"**

- » Near zero sailing drag.
- » Powerful thrust in head seas.
- » Incredible control in reverse.
- » Reduces or eliminates "propwalk" in reverse.
- » External, and separate, pitch adjustment for forward AND reverse.
- » Massive gearings last for decades of utterly reliable and trouble free service.
- » Soft Stop™ MultiDisc Brake prevents impacts when reversing blades.
- » 2, 3 and 4 blade models.
- » Shortest hub length. Fits smallest apertures.
- » Delivery fully assembled, balanced and tested. Ready to install on any shaft with no modifications necessary.

**Simply the finest sailing
yacht propellers in
the world.**

MADE IN GERMANY

SPW GmbH
SAIL PROPELLER- UND WELLENBAU