

**VARIPROP** GP  
FEATHERING PROPELLERS



**VARILOCK**   
SHAFT BRAKE

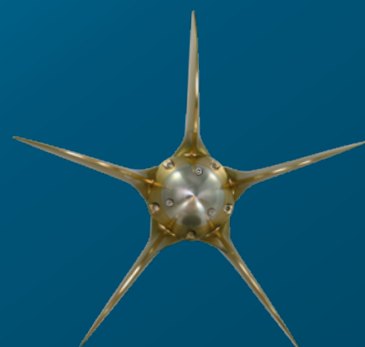


**OUR TEAM FOR BETTER SAILING:  
THE NEW VARIPROP GP 5-BLADE  
& THE VARILOCK SHAFT BRAKE**



PRODUCTS OF

**SPW** GmbH  
SAIL PROPELLER- UND WELLENBAU



# GRAND PERFORMANCE WITH 5 BLADES

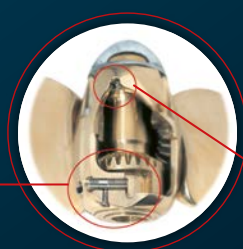
Smooth running at its best, low drag and perfect harbour manoeuvres:  
The Variprop GP 5-Blatt simply delivers sovereignty in every situation.

The VARIPROP GP 5-Blatt is exemplary in every respect. In terms of harbour manoeuvres, there is nothing comparable in this propeller category - especially in narrow harbours, the excellent handling brings enormous advantages. Under power, the VARIPROP GP 5-blade offers more than just impressive smoothness and excellent thrust values in forward and reverse. And just like the 2-, 3- and 4-blade models from the VARIPROP GP series, the drag of the 5-blade is hardly noticeable under sail.

Other unique features include the stepless pitch adjustment fitted as standard and the integrated shock absorber. The pitch adjustment allows you to optimise the pitch, if desired, in forward and/or reverse independently while attached under the boat. The integrated shock absorber reliably protects the propeller from wear. In addition, the VARIPROP GP 5-blade is filled with a highly viscous special grease in the hub.

## Perfect teamwork: The VARIPROP GP 5-blade and the VARILOCK shaft brake

Various tests, including in the cavitation tank at SVAtch GmbH Potsdam, have shown that a 5-blade arrangement leads to hydrodynamic rotation. This can be counteracted by locking the shaft: The rotation is prevented and the blades reliably go into the sailing position. **The optimal solution is to install a shaft brake, which has other advantages in addition to the reliable locking of the shaft.**



External pitch adjustment (patented)

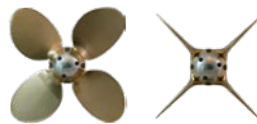
SoftStop™ shock absorber



2-blade  
up to 40 PS / 40 kW



3-blade  
up to 550 PS / 88 kW



4-blade  
up to 120 PS / 88 kW



5-blade  
up to 150 PS / 110 kW

The feathering propellers of the VARIPROP GP series are available as 2-, 3-, 4- and 5-blade versions. What they all have in common are the unique features that make the VARIPROP so special and your cruises such an experience. We will advise you on the model that is perfect for you.

### Individual calculation for your yacht

A good propeller is only as good as its interpretation in dimensions! Numerous data such as ship length, engine power and weight of the yacht must be precisely gathered in order to get the right propeller dimensions in diameter and pitch for the respective yacht. Not only diameter and pitch, but also blade profile and the number of blades require exact determination in order to achieve maximum efficiency, smoothness and effectiveness.

### Gawn blade profile

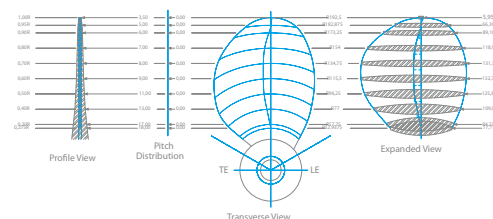
The symmetrical high-tech GAWN blade profile is mainly used for high-performance fixed pitch propellers on motor boats, for rudder profiles and also in aviation - and in our VARIPROP GP series feathering propellers.

Thanks to the GAWN profile, the VARIPROP GP propellers are convincing on the yacht market with smooth-running, energy-efficient behaviour. It has made a **reduction of the average fuel consumption by up to 10%** possible due to high thrust values, depending on the number of propeller blades.

*Or to put it another way: the VARIPROP GP makes it possible to achieve a greater etmal. This is climate-friendly: less fuel consumption equals less CO<sup>2</sup> emission!*

### Patented pitch adjustment

The forward and reverse pitch setting can be varied independently in seconds, even underwater. You do not have to dismantle your VARIPROP for this. It can easily be optimised in the mounted state. Of course, easy-to-understand instructions and the necessary tools are included with every VARIPROP.



*The symmetrical high-tech GAWN blade profile:  
More thrust, less fuel consumption and more  
speed under sail.*

### SoftStop™ shock absorber

The integrated mechanical multi-disc brake (patented) reduces unpleasant switching noises. This protects the stops of the propeller considerably from wear.

### High-strength NiBrAl bronze

Nibral bronze (also called ice class material) is the best material for propeller production. Our VARIPROP bearings are made of Nibral bronze at the sensitive parts, especially where any switching movement takes place during manoeuvring. This means: Our propellers last forever! Expensive spare parts are no longer necessary!

### Preset pitch

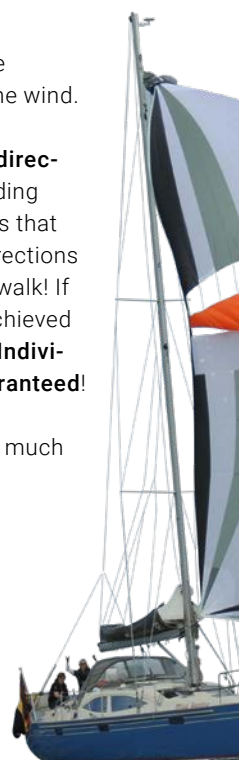
You receive VARIPROP completely ready to use. All you have to do is unpack, mount and sail away.

### Sitting performance under engine and sail

The quality of a propeller shows in the water. And that's what a VARIPROP is designed for, and it shows in all the aspects that sailing entails:

- + **15–20% higher sailing speed:** Because the blades turn into the sailing position when the engine is switched off due to waterflow\*.
- + **No annoying propeller turbulence:** At the rudder, your yacht sails much more stable and you can sail much higher on the wind.
- + **Optimum thrust when motoring in both directions:** When switching to reverse, the leading edge of the blades turns 180°. This means that the efficiency for manoeuvring in both directions is the same - without any hindering prop walk! If desired, however, the prop walk can be achieved in reverse by adjusting the reverse pitch. **Individual production of your propeller is guaranteed!**
- + **Improved stopping power:** This provides much more control in reverse when mooring.

\* With the 5-blade version, the shaft must be locked for an optimal sail position.





# BETTER UNDER SAIL. FOR SURE.

The Varilock shaft brake: Excellent and easy installation on board your yacht. It is particularly suitable for our VARIPROP GP 5-blade and vessels with a hydraulic gearbox. But the VARILOCK is also an optimal addition to engines with mechanical gears and increases the longevity of all components!

The VARILOCK shaft lock provides the following advantages:

- + It positions every sailing propeller, whether feathering or folding propeller, in a smooth and efficient sailing position.
- + It is characterised by a very simple operation using a Bowden cable, which can be relocated to the cockpit or installed in an easily accessible place near the shaft and shaft brake.
- + It is safe because it opens automatically as soon as the engine is started and the gear builds up torque on the shaft in advance.

Our VARILOCK has been developed primarily for the new generation VARIPROP GP 5-blade. For this purpose, we carried out scientific studies in the cavitation tank of SVAttech GmbH (Schiffbau-Versuchsanstalt Potsdam).

The forces, which are generated hydrodynamically in a 5-blade feathering propeller shaft installation, can be locked by the lightweight, modern VARILOCK shaft brake - even at high sailing speeds of 15 kn and more.

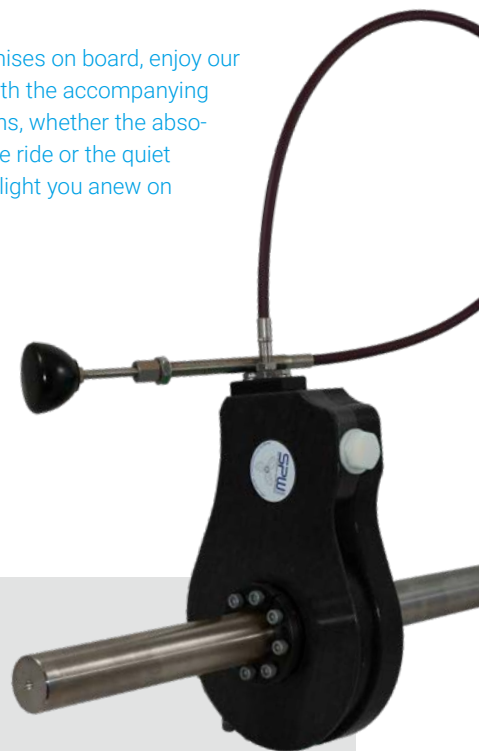
Especially in combination with the modern Gawn blade profile of our VARIPROP feathering propellers, which are available with 2, 3, 4 and 5 blades, the VARILOCK proves to be extremely effective. The already low drag can be further minimised by the VARILOCK which optimises the sailing position of the propeller.

Don't allow any compromises on board, enjoy our VARIPROP GP 5 blade with the accompanying VARILOCK. All applications, whether the absolutely low-vibration engine ride or the quiet sailing experience will delight you anew on every trip!

## Have you ever thought that ...

- + your gearbox could be damaged if your shaft turns when a fixed pitch propeller or bad sailing propeller is installed?
- + the shaft system is subject to high wear in the entire system, including the shaft bearings, the seal and the gearbox, when a propeller rotates under sail, and that the gearbox may even have to be cooled in sailing mode?
- + you have to block your propeller at a regatta in order to comply with the regatta rules? Indeed, most regatta rules include such a clause!
- + you can hardly turn your shaft by hand into the best sailing position of the propeller under sail?

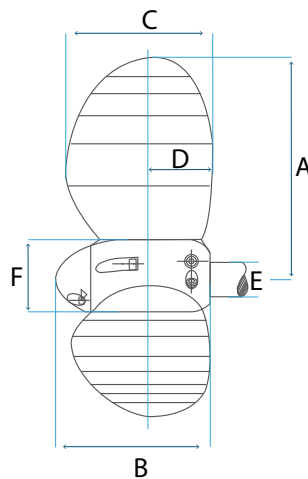
**The VARILOCK solves all such problems in a uniquely simple component.**



# DIMENSIONS

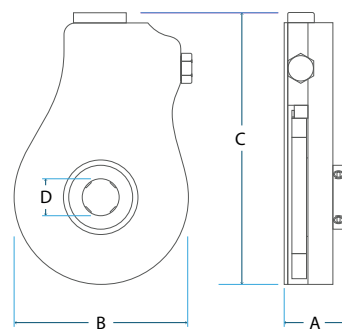
## VARIPROP GP-110

Propeller Ø.		A	B	C	D	E		F	HP range
inch	mm	mm	mm	mm	mm	mm	inch	mm	PS/kW
16	406	203	170	125	70	20-35	1"-1 3/8"	ø 110	max. 14 to. 30-90 PS 22-66 kW
17	432	216		135					
18	457	229		145					
19	483	242		155					
20	508	254		160					



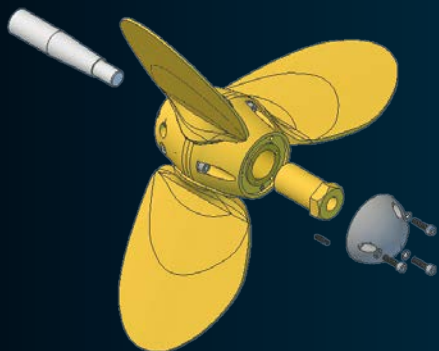
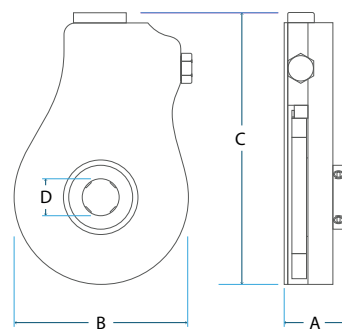
## VARIPROP GP-130

Propeller Ø.		A	B	C	D	E		F	HP range
inch	mm	mm	mm	mm	mm	mm	inch	mm	PS/kW
21	533	266	215	175	85	35-50	1 3/8"-2"	ø 130	max. 28 to. 60-150 PS 45-110 kW
23	584	292		185					
25	635	317		195					
27	686	343		205					



## VARILOCK shaft brake

Typ	A	B	C	D		weight
	mm	mm	mm	mm	inch	kg
VL-1	57	165	251	20-35	1" - 1 3/8"	2.9
VL-2	77	280	465	35-50	1 3/8" - 2"	3.5



### Easy Installation:

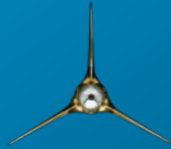
The VARIPROP is mounted on the taper of your shaft or saildrive spline just like a fixed pitch propeller. Fasten the propeller with the corresponding prop nut, tighten the nut and secure it with a set screw. Glue the prop nut into the thread with the supplied Loctite. Afterwards, install the zinc anode. Done.



The VARI-Family



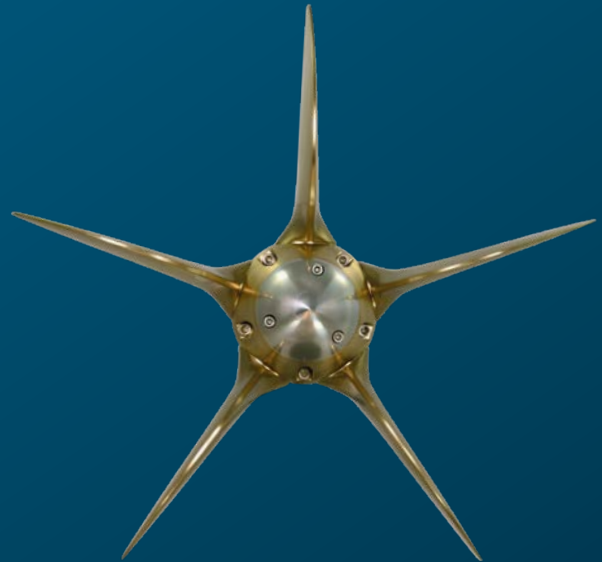
**VARIPROP**  
FEATHERING PROPELLERS



**VARIPROFILE**  
Feathering Propeller



**VARIFOLD**  
FOLDING PROPELLERS



YOU CAN PURCHASE **ANODES, SERVICE  
PACKAGES** AND ALL OTHER *SPARE PARTS* FOR  
YOUR **VARIPROP** IN OUR ONLINE SHOP AT  
<https://shop.spw-gmbh.de>



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