# FEATHER STREAM™ PROPELLERS



## Average sailing speed often increased by 15%

The Darglow FeatherStream range of propellers allow your yacht to perform to its full potential in all circumstances.

FeatherStream fully feathering propellers are made in the UK by Darglow Engineering in Wareham Dorset. They range from 12" to 20" diameter, all with 3 or 4 feathering blades.



### Benefits of a **feathering** propeller

- FeatherStream propellers require no operating system and fit directly to the existing shaft or saidrive leg.
- The appropriate forward or reverse drive is automatically achieved when the engine is run ahead or astern.
- In forward drive near to fixed propeller performance, in reverse greatly improved manoeuvring.
- When the yacht is sailing the FeatherStream automatically feathers to give minimum drag. Average sailing speed is often increased by 15%.
   The shaft remains stationary and there is no need for a shaft brake.
- One big advantage of the FeatherStream range is the ability to fit into restricted apertures. Normally if there is a space for a fixed propeller, you can fit a FeatherStream propeller.
- Easily Pitch Adjustable

#### Disadvantages of fixed propellers •

More than a third of the total resistance to movement experienced by a sailing yacht hull can be derived from dragging a fixed 3 blade propeller.

- If a fixed propeller is free to rotate when sailing, there will be continuous noise and consequent wear of bearings and gearbox components.
- Propeller drag will cause turbulent water-flow over the surfaces of the rudder, resulting in unpredictable steering problems.

However, the FeatherStream range of propellers is a simple solution to allow your yacht to perform to it full potential in all circumstances.

### Our manufacturing process

**Design.** The latest 3D cad modelling technology is used by our engineering design team to ensure optimum results.

**Materials.** Aluminium bronze (AB2) is used in the body and centre shaft, and stainless steel for the blades. This gives a perfect match in terms of longevity, bearing material and corrosion resistance.

Investment casting. The benefits of the lost wax investment casting process may be summed up by four words; accuracy, versatility, integrity and finish. Few, if any alternative metal forming methods can offer such a unique and broad spectrum of advantages

**Machining.** All the bodies, centre shafts and blades are CNC machined to a very high standard, allowing all components to be interchangeable.

**Finishing.** All FeatherStream propellers are hand finished to customers vessel specification ie: vessel type, WLL,



displacement weight, engine power, gearbox ratio, shaft taper and saildrive details etc. The pitch of the propeller is then set at Darglow but with the facility to fine tune by the customers if required, by simply replacing the removable Pitch Cassette – so on-site pitch adjustment is simple, easy and quick. The props are checked for balance before final greasing and despatch.



## Easy to fit and maintain

**Fitting.** FeatherStream propellers are manufactured to fit the existing shaft or saildrive leg, delivered fully assembled and ready to go. They are as easy to fit as a normal propeller.

Maintenance. This is quick and easy, once a year it needs to be topped up by injecting it with grease. The zinc anode protects the propeller from electrolysis and needs to be replaced as necessary.





## FEATHER STREAM THE PROPELLERS



## Acclaim for FeatherStream:

## 92% less drag!

### YACHTING MONTHLY

'...a Feathering propeller will give at least 92% less drag than a fixed unit' Yachting Monthly, May 2009

'...prop drag will add about 4 hours to a typical cross-Channel passage' Yachting Monthly, May 2009

## Sailing is transformed!

'...the boat achieves around 1 knot extra...
the boat stops within its own length...best
of all the sailing is transformed'

Mr. Buchanan

## Delighted...

I am delighted with the improvement in the boat's overall performance - both under power and sail - since fitting the FeatherStream'

Propeller Hub Diameter Type A (shaft) (mm) (mm) (mm) (mm) (mm) (mm) (mm) (m
(inch) (shaft) (mm) (mm) (mm) (mm) (mm) (mm) (mm) (m
12 A 152 115 52 95 99 88 B 165 115 52 95 99 88 B 178 115 52 95 99 88
13 A
14 A 🗧 178 115 52 95 99 88
14 A 2 178 115 52 95 99 88
15 100 115 50 100 100 00
15 A = 190   115   52   120   109   88
16 A 203 115 52 120 109 88
<b>16</b> B ≅ 203 134 63 120 109 100
<b>17</b> B \\ \( \varphi\) 216   134   63   120   116   100
18 B 夏 228 134 63 120 116 100
15 B 29 190 134 63 120 109 100 16 16 B 203 134 63 120 109 100 17 B 216 134 63 120 116 100 18 B 228 134 63 120 116 100 19 B 241 134 63 134 126 100 10 10 10 10 10 10 10 10 10 10 10 10
20 B 254 134 63 134 126 100

#### **Propeller anatomy**

(A-G legend refers to diagram in above table)

A = Maximum shaft diameter

**B** = Radius of propeller

**C** = Hub length with short anode

**D** = Position of maximum propeller diameter

**E** = Maximum blade width

**F** = Position of maximum blade width

Saildrive

mounted

3 blade

**G** = Hub diameter





