

# FEATHERSTREAM

PROPELLERS

Other products in the FeatherStream range



Anodes



2, 3 and 4 fixed blade propellers



Cutlass bearings



Prop' pullers



Feathering grease



Prop' shafts

Designed and produced - [www.forwardcreative.com](http://www.forwardcreative.com)



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# FEATHERSTREAM

PROPELLERS




A range of  
British-made  
feathering propellers  
from a company  
with pedigree!

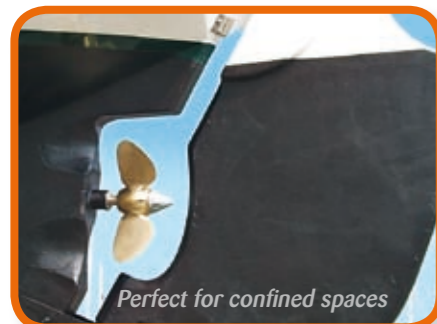




## Delivering increased performance - with total control!

 **Darglow FeatherStream range of propellers is a simple solution to 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 three feathering blades.**



### Benefits of a feathering propeller

- FeatherStream propellers require no operating system and fit directly to the existing shaft.
- 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 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.

### 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 its 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) used in the bodies and centre shaft, ANC 4A heat treated Stainless steel blades, give a perfect match in terms of longevity, bearing material and corrosion resistance.

**Casting.** The Investment Casting Process commences with the production of High Quality Wax Patterns from aluminium steel Injection Tool. These are then mounted onto a wax runner system and the assembled mould is coated several times with ceramic material and air-dried.

On completion, the mould is de waxed leaving an empty shell which is subsequently



fired and filled with aluminium bronze (AB2) for the body and centre shaft metal, 316 stainless steel for the blades, the shell is then allowed to cool and removed.

Castings are cut from the riser/runner system, finished, the blades are then heat treated and passed through to quality control for a rigid Inspection Programme.

The benefits of the 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 shaft 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 details etc. the pitch of the propeller is then set at Darglow but with the facility to fine tune by the customers if required. The props are checked for balance before final greasing and despatch.

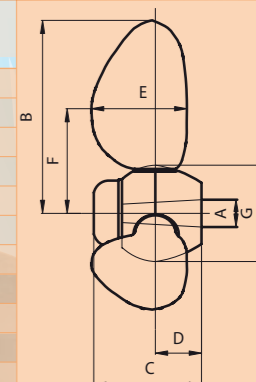
### Easy to fit and maintain

**Fitting.** FeatherStream propellers are manufactured to fit the existing shaft, 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.



Propeller Diameter (inch)	Hub Type	Propeller dimensions						
		A (inch)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
12	A	1	152	105	45	95	95	88
13	A	1	165	105	45	95	95	88
14	A	1	178	105	45	95	95	88
15	A	1	190	105	55	120	105	88
16	A	1	203	105	55	120	105	88
15	B	1.25	190	130	55	120	105	100
16	B	1.25	203	130	55	120	105	100
17	B	1.25	216	130	55	120	112	100
18	B	1.25	228	130	55	120	112	100
19	B	1.25	241	130	55	134	122	100
20	B	1.25	254	130	55	134	122	100



### Propeller anatomy

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

**A** = Maximum shaft diameter in inches  
**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  
**G** = Hub diameter

### 12"- 16" series propeller

### 15"- 20" series propeller

Zinc anode head

Nickel aluminium bronze hub

Stainless steel blades