



# Airmaster

*High Performance Propeller Systems*

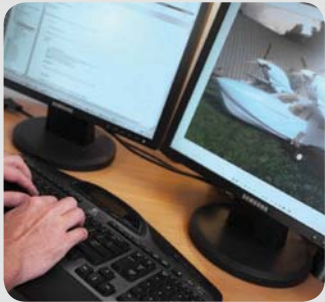
## AP332S

### Constant Speed Feathering Propeller



## Higher Performance for your Aircraft

Airmaster Propellers are setting new standards of performance and value in the light experimental aircraft market. By combining the best composite blade technology currently available, with a precise and reliable constant speed hub system, Airmaster is able to provide a unique performance enhancement to today's modern aircraft.



## Mission Statement

Our aim is to produce a range of the highest quality, best performing Constant Speed Propeller systems at a reasonable cost. Our goal is for the Airmaster name to be synonymous with: Quality, Performance, Technical Innovation and Value.

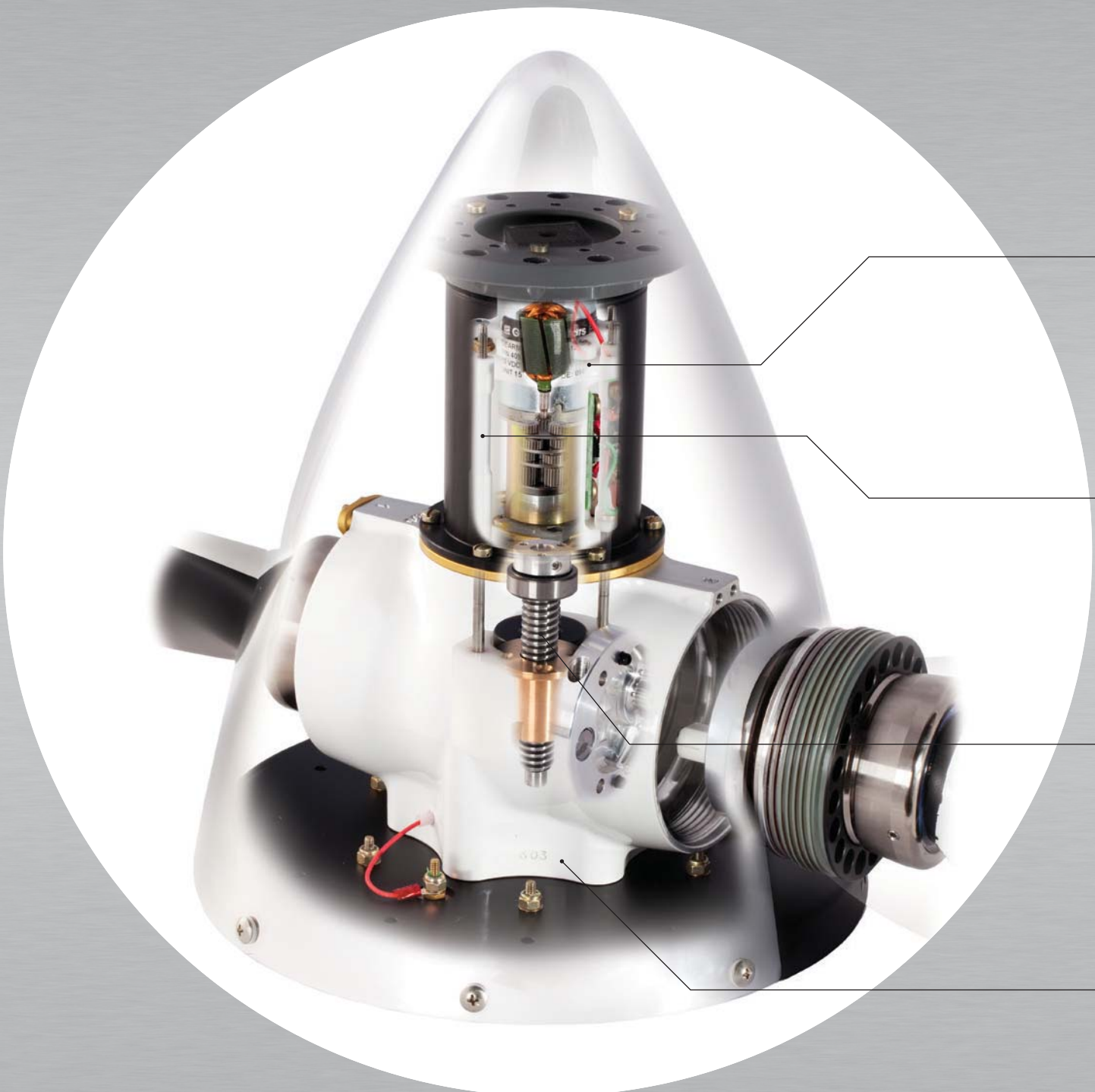


## Money Back Guarantee

We place a lot of pride in the quality of our propellers and offer a money back guarantee of satisfaction in addition to the standard product warranty of two years.

We are so confident that you will be pleased with the performance and quality of your Airmaster propeller, we are willing to fully refund the purchase price any time up to sixty days after delivery.

This gives you complete buying protection and peace of mind.



Model AP420 shown for illustration purposes



## Airmaster AC200 'SmartPitch' Controllers



**Easy to Operate** with simple selection of engine speeds for TakeOff, Climb and Cruise.



**Precise Speed Control** from modern electric 'solid state' governor.



**Hold Speed** adjustable in flight to pilots requirements.

**Flexible and Robust** with full manual override.

**Advanced Functions** feathering capability is standard and reversing functions are available as an option for amphibious aircraft.



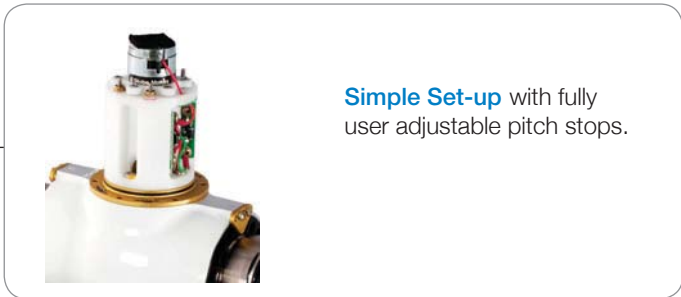
**Instant Pilot Feedback** through clear indications informing the pilot of the propeller status.

## Product Features

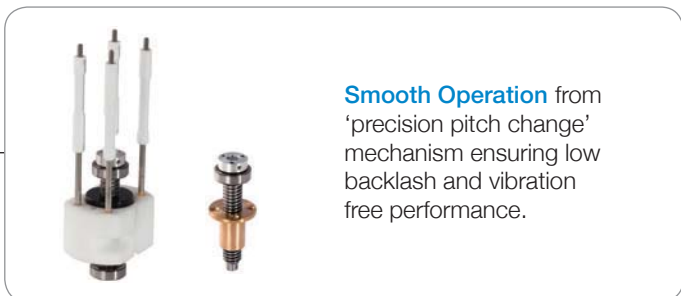
Each Airmaster propeller is crafted to the specific requirements of your aircraft and engine combination. We supply a full system incorporating CS hub, composite blades, CS governor, spinner, extensions, wiring and hardware.



**Electric Actuation** using a quality servo gearmotor



**Simple Set-up** with fully user adjustable pitch stops.



**Smooth Operation** from 'precision pitch change' mechanism ensuring low backlash and vibration free performance.



**Superior Strength** from fully machined, one piece hub.



**Easy Installation** and maintenance due to removable blade cartridge.

### Blade Options AP332S

A wide range of high performing carbon composite blades using the industry standard 1.5in shank size are available.

- Aerodynamically advanced blade designs from Whirlwind Propellers Corp (USA). Efficient, quiet and light weight.
- Solid metal inlaid leading edge provides excellent protection against airborne water damage.
- Flexible design allows for clockwise and anti-clockwise rotation on tractor and pusher applications. Available for a range diameters and a variety of airspeeds.
- High gloss, natural carbon fibre finish gives good looks and a long life.



### Spinner Options

High quality spun aluminium spinners, pre-cut and fitted in a choice of sizes and finishes of painted, polished, or matt for painting.



### Mounting Options

Propeller extensions available in sizes 0.5in (12.5mm) up to 4in (100mm) to suit every engine and aircraft combination.

AP332S Specifications			
<b>Power Capacity</b>	Reduction gear driven engines.	120hp (89.5kW)	
<b>Maximum Speed</b>	2500rpm		
<b>Maximum Diameter</b>	Up to 75in (1905mm)*		
<b>Moment of Inertia</b>	~0.5kgm <sup>2</sup> *		
<b>Weight</b>	On engine weight (hub, blades, spinner, brush block)	24lb (11kg)*	
	In cockpit weight (controller and cables)	0.6lb (0.3kg)	
<b>Prop Flange</b>	Rotax 4in PCD (ARP502)		
<b>Engines</b>	Rotax 912, 912S, 912iS, 914 Other engines may be suitable, please enquire.		
<b>Controller Power</b>	Voltage supply	10V-16V DC (12V DC nominal)	
	Current supply	Stand-by:	0.1A
		Cycling	0.5 – 2.0A
Breaker	3A		
<b>Program Interface</b>	USB / RS232 to PC		
<b>Speed Control</b>	Take Off	Factory pre-set, may be customised with serial cable and PC.	
	Climb	Factory pre-set, may be customised with serial cable and PC.	
	Cruise	Factory pre-set, may be customised with serial cable and PC.	
	Hold	Factory pre-set, may be customised with serial cable and PC.	
<b>Feather Function**</b>	Semi-automatic feather and un-feather cycle. Manual feather if required		
<b>Visual indication</b>	Fine stop, coarse stop, feather stop, fine running, coarse running, feather running, motor over-current, system open circuit, speed signal loss.		
<b>Installation</b>	Controller fits standard 2 ¼ in instrument cut-out.		

AP332S Options			
Blade Options	Spec	Diameter	Application
	WWR64W	64in (1625mm)	High Speed
	WWR68W	68in (1727mm)	General
	WWR70W	70in (1778mm)	General
	WWR70Z	70in (1778mm)	STOL
	WWR75W	75in (1905mm)	STOL
	WWL66Z	66in (1676mm)	General Pusher
	WWL70Z	70in (1778mm)	General Pusher
	Other blade makes and models available, please enquire.		
<b>Direction of Rotation</b>	Clockwise, or Anti-Clockwise.		
<b>Direction of Thrust</b>	Tractor or Pusher.		
<b>Spinner Diameter</b>	8.3in (210mm), 9.0in (228mm), 10.3in (261mm), 11.2in (284mm), 12.2in (310mm).		
<b>Spinner Finish</b>	Polished aluminium, Painted White, Matt (for painting).		
<b>Special Functions</b>	Reversing (Amphibious use only)**		
<b>Programming</b>	Kit available for reprogramming parameters. Includes MS Windows compatible program and serial (USB) cable.		

\* depends on blade selection.

\*\* only feathering or reversing option can be selected (not both).

## Performance



### An Airmaster CS Propeller System will give you:

- Higher top speed
- Shorter take-off roll
- Quicker climb
- Steeper descent
- Improved efficiency and flight range
- Quieter operation and lower pilot fatigue
- Safer flying
- Easy maintenance
- Complete backup from 'the factory' and a reseller network

### Performance tests have shown up to:

- 33% shorter ground roll
- 10% better climb than fixed pitch prop
- 20% improvement in cruise and economy

## Endorsements



### Sling Team - Sling2 /Airmaster AP332S-WWR70W

Winners of the South African PFA President's Trophy Air Race 2015!



### Bill Bertram CTSW

Just too sweet!!  
This plane already had a short take off. It just got shorter!!  
Top cruise before like 117kts.  
Now 131kts at 5400 rpm.  
Can run it all day at that. I love it.  
What a beautiful set up.



### Charles Chattin - Aeroprakt A22 (on floats)

My smooth water take-off distance was cut by a third.  
I can get off the water quickly with two on board. Cruise has been increased by 15 MPH.  
Great Prop.

## Contact

Contact us today to discuss your unique requirements.



### Airmaster Propellers Ltd

20 Haszard Rd, Massey  
PO Box 374, Kumeu  
Auckland, New Zealand  
Ph: +64 9 833 1794  
Fax: +64 9 833 1796  
sales@propellor.com  
www.propellor.com