

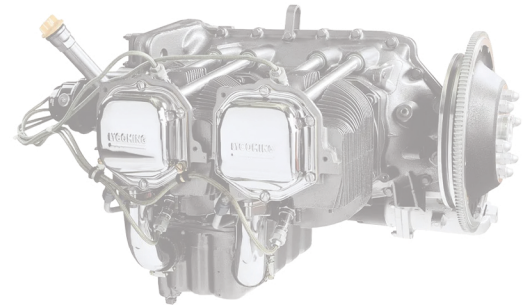
ASCALON



Range of Ground-Adjustable Carbon Propellers
for direct-drive engines (Lycoming & Continental)

Technical Overview

- 2-blade & 3-blade ground-adjustable pitch
- Full-Carbon blades with Titanium leading-edge protection
- Direction of Rotation: CW
- Designed for Lycoming & Continental direct-drive engines
- 4-cylinder engines ≤ 210 hp / 6-cylinder engines ≤ 270 hp



Key Data

- Diameter range: 140 to 210 cm / 55" to 82.7"
- Weight: 2-blade = 6 kg / 13.3 lb - 3-blade = 7 kg / 15.5 lb
- TBO = 2500 hours
- Moment of Inertia: 0.6 kg·m² (for 2-blade \varnothing 190 cm - same as wooden props)
- Noise reduction: 4 to 6 dB(A) vs a standard propeller
- Carbon Spinners: 9 diameters (from 260 to 380 mm)
- Carbon Integrated Hub Extension: from -15 to +230 mm

Advanced Engineering

Derived from the proven DURANDAL platform - (over 10,000 propellers in service worldwide.)
Multi-objective optimization for high aerodynamic efficiency, minimal weight,
superior strength & reduced acoustic signature
Advanced airfoil optimization using evolutionary algorithms
Carbon + Titanium materials for long-term durability

Availability

Available now for Experimental aircraft
EASA CS-P certification in progress - expected 2026

E-Props ESR® Effect

Performance across the entire flight envelope. Variable pitch performance - without the complexity. Takeoff power. Cruise efficiency. No compromise.

Why pilots choose ASCALON

- E-Props ESR® Effect
- Exceptionally smooth - near-zero vibrations
- Significant noise reduction
- Excellent durability
- Maximum efficiency. From takeoff to cruise - no compromise.
- Proven performance in flight testing

Torsional Vibrations: Validated by Test

E-PROPS conducted a rigorous experimental torsional vibration study on Lycoming O-320 and O-360 engines, measuring crankshaft loads with internal strain gauges during ground and flight tests - across different propeller types (aluminium, wooden, carbon). The E-Props propellers demonstrated the lowest vibratory excitation of all configurations tested, with minimal resonance amplitude and significantly reduced torsional torque on the crankshaft.



Advanced Carbon Propellers
Light is Right - Strength is Core