

Constant-Speed Propeller Options for the Sling TSi (Rotax 916iS)



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Introduction: Propeller Technologies for Modern Light Aircraft

Modern light aircraft like the Sling TSi can use a variety of propeller technologies, ranging from simple fixed-pitch designs to advanced constant-speed systems. A fixed-pitch propeller is usually optimized for one phase of flight (either climb or cruise), which means it requires performance trade-offs in other phases ([Technique - Constant-speed propeller - AOPA](#)). By contrast, a *constant-speed propeller* allows the blade pitch to automatically adjust so that the propeller maintains a set RPM, optimizing engine power across a range of conditions. In practical terms, a constant-speed prop can act like a “low gear” for takeoff and climb (fine pitch, high RPM for maximum power) and a “high gear” for cruise (coarser pitch, lower RPM for efficiency). This capability lets pilots enjoy strong climb performance without sacrificing high cruise speed or fuel efficiency. The addition of a constant-speed unit was a key factor in the Sling TSi’s performance – with a 141–160 hp turbocharged Rotax engine, a constant-speed prop enables the aircraft to achieve impressive climb rates and cruise speeds even at high altitudes ([Sling TSi KIT - The Airplane Factory USA](#)).

There are two primary mechanisms for constant-speed propellers in light aircraft: **hydraulic** and **electric** systems. Hydraulic constant-speed props use engine oil and a governor to change blade pitch. They are common in certified aircraft and rely on a hollow crankshaft and governor unit to meter oil pressure to the prop hub. Electric constant-speed props use an electric motor (servo) in the hub to adjust blade angle, controlled by an electronic governor. Both types achieve the same goal of varying propeller pitch, but their installation and operation differ. For example, Rotax engines (like the 915iS/916iS in the Sling) can accommodate either system – the 915iS was often paired with an electric constant-speed unit, whereas the newer 916iS has

been frequently mated to a hydraulic constant-speed propeller as the factory standard ([916 upgrade kit? - Sling Pilots Forum](#)) ([Sling TSi - Sling](#)).

Key Propeller Manufacturers. In the light sport and kit aircraft arena, several propeller manufacturers are well-known. **MT Propeller** (MT-Propeller Entwicklung GmbH) of Germany is a prominent maker of constant-speed props, known for its natural composite blades and extensive experience (up to 11-blade hubs for engines from 65 to 1500 hp) ([2025 Propeller Buyer's Guide - KITPLANES](#)). MT's products are used on many certified and experimental aircraft worldwide; in fact, the MT constant-speed propeller has essentially become the propeller of choice for the new Rotax 916 iS engine ([2025 Propeller Buyer's Guide - KITPLANES](#)).

Airmaster Propellers Ltd. from New Zealand is another influential company, specializing in electric constant-speed propeller systems for experimental and light sport aircraft. Airmaster has been supplying electric constant-speed props for over two decades ([2025 Propeller Buyer's Guide - KITPLANES](#)) and offers hubs accommodating two to five blades. Their systems feature Digital Servo Drive motors (brushless electric actuators) that can change blade angle quickly (on the order of 5° per second) and a wide pitch range including feather and reverse capabilities ([2025 Propeller Buyer's Guide - KITPLANES](#)). Airmaster prop hubs are often paired with high-performance composite blades from partners like WhirlWind, Sensenich, or Warp Drive, allowing a tailored solution for different airframes ([Airmaster Propellers](#)). Other propeller makers like **Hartzell**, **Sensenich**, **DUC**, and **Catto** also serve the light aircraft market, but for the Sling TSi's engine and performance needs, MT and Airmaster are the most directly relevant. (Notably, Sling Aircraft has even worked with Catto on fixed-pitch prop development for noise reduction on other models ([2025 Propeller Buyer's Guide - KITPLANES](#)), but the Sling TSi's turbo engine truly benefits from a constant-speed prop for maximum performance.)

([2025 Propeller Buyer's Guide - KITPLANES](#)) Airmaster Propellers offers electric constant-speed propeller systems in two- to five-blade configurations. These systems use an internal electric motor in the hub to adjust blade pitch, eliminating the need for engine oil lines ([Airmaster Propellers](#)). (Image: Airmaster Propellers)

In this report, we will compare two propeller options for a Sling TSi equipped with the Rotax 916iS (160 hp turbo) engine and a constant-speed propeller kit. The first option is the **MT hydraulic constant-speed propeller** now offered as standard on new Sling TSi kits with the 916iS. The second is the **Airmaster AP431HCTF-WWR72C electric constant-speed propeller** – an alternative that some builders and owners may consider, especially those familiar with the earlier Rotax 915iS installations. We'll introduce each option and then provide a detailed technical comparison covering performance, ease of use, maintenance, as well as weight and installation factors. Finally, a recommendation will be given based on practical considerations for an owner/pilot.

Option 1: MT Constant-Speed Propeller (Hydraulic, Sling TSi Standard)

The Sling TSi with the Rotax 916iS now comes standard with a 3-blade MT constant-speed propeller ([Sling TSi - Sling](#)). MT-Propeller's design for this class of engine (in the 141–160 hp range) is typically a lightweight hydraulic constant-speed unit, such as the MTV-34 series. The prop hub and blades are of natural composite construction (wood composite core with fiberglass/carbon overlay and durable nickel-alloy leading edge protection). This gives the MT prop a good combination of strength, light weight, and resistance to erosion (important when flying through rain or debris). The hub is a single-piece forged aluminum alloy unit ([Sling TSi - Sling](#)), with an oil piston inside that adjusts the blade pitch. In operation, engine oil is routed via a governor into the hub to change blade angle and maintain the set RPM. The system is fully mechanical: a cockpit propeller lever (the familiar “blue knob”) connects to the governor, which adjusts oil flow to coarse or fine the blades as needed. Once the pilot selects an RPM, the governor will automatically vary the pitch to hold that RPM, unloading the pilot from constant manual adjustments.

Key features of the MT constant-speed prop on the Sling TSi include:

- **Optimized Performance:** The MT prop is tuned for the Rotax 916iS's output and RPM range. (Rotax engines turn at up to 5800 RPM, but the prop hub uses a gearbox reduction to keep prop speeds around 2400–2500 RPM). The MT blades are designed to deliver good thrust across the 916's operating envelope. Sling Aircraft reports that with the 916iS and MT prop, the TSi can climb ~1,200 fpm at max gross weight and cruise around 158 KTAS at altitude ([Sling TSi KIT - The Airplane Factory USA](#)) – outstanding performance for a 160 hp four-seat aircraft.
- **Hydraulic Governor Control:** The MT system uses a hydraulic governor mounted on the engine. This governor is specifically made for the Rotax gearbox (e.g. MT offers the P-850 series governor for the 915iS/916iS engines). The governor adds a bit of hardware and complexity (oil lines, mounting pad, and a control cable to the cockpit), but it is a proven technology. Many pilots transitioning from larger GA aircraft will find the operation familiar. Adjusting the MT prop is straightforward – increasing the prop lever (RPM) for takeoff/climb and reducing it for cruise – and pilots generally master it with minimal training ([Technique - Constant-speed propeller - AOPA](#)).
- **Light Weight and Low Inertia:** One advantage of the MT composite prop is its light weight. The 3-blade MTV-34 propeller itself weighs about **19.8 lbs**, and even after adding the lightweight MT governor (~2.2 lbs) and a spinner (~2.2 lbs), the total system weight is on the order of **24–25 lbs** ([MT-Propeller MTV-34 Certified For Engines Up To 141 SHP | Aero-News Network](#)). This is remarkably light for a constant-speed prop. A lighter prop not only improves useful load but also reduces gyroscopic forces and can improve engine smoothness (less rotating mass). MT props are known for smooth operation due to the composite blades dampening vibration. The low rotational inertia of

the prop also eases stress on the engine's gearbox during throttle changes.

- **Advanced Features:** MT offers options such as feathering and reverse pitch on some of their propeller models. The Sling TSi's standard MT prop is primarily a normal constant-speed unit (it will *flatten* the pitch to fine for takeoff and *coarsen* for cruise, but it isn't typically equipped with pilot-commanded feather or reverse in this installation). However, MT's literature notes that their hydraulic props for this class *can* be built with a feathering mechanism (and even electric de-ice boots) if desired ([The New SLING TSI - With Rotax 916 IS, MT-Propeller and Beringer Wheelset](#)). Feathering would be more relevant for engine-out gliding or for multi-engine planes, so it's likely not enabled in the Sling's configuration. Still, the core propeller design is derived from MT's certified line, meaning it meets high standards of reliability and safety.
- **Support and Certification:** MT Propeller has a strong support network worldwide, including a service center in Deland, Florida (for North America) ([2025 Propeller Buyer's Guide - KITPLANES](#)). The prop model used on the Sling is based on certified units – for example, the MTV-34 is a certified design for Rotax engines up to ~141 shp ([MT-Propeller MTV-34 Certified For Engines Up To 141 SHP | Aero-News Network](#)), and MT has extended its use to the 915iS and now 916iS. This gives owners confidence in the prop's pedigree. Routine maintenance on the MT prop is minimal (it is described as "low maintenance" and "easy to maintain" by the manufacturer ([MT-Propeller MTV-34 Certified For Engines Up To 141 SHP | Aero-News Network](#))). There are no electric components to inspect, though the prop hub and governor should be overhauled at recommended intervals (typically on the order of 1,500–2,000 hours or at certain calendar years, similar to other constant-speed props – even if not strictly required by regulation in experimentals, it's a good practice).

([2025 Propeller Buyer's Guide - KITPLANES](#)) A *Sling TSi* equipped with a 3-blade MT constant-speed propeller (hydraulic). The MT prop's lightweight composite blades and reliable governor make it a popular choice for the Rotax 915iS/916iS engine ([2025 Propeller Buyer's Guide - KITPLANES](#)).

In summary, the MT constant-speed prop on the Sling TSi provides a **traditional, robust solution**. It leverages a mechanically governed, hydraulic pitch control that has decades of proven use. Sling's adoption of the MT for the 916iS upgrade underscores its confidence in this propeller's performance and reliability. Next, we'll look at the alternative: an electric constant-speed propeller system from Airmaster, which approaches the same problem (varying the blade pitch) in a different way.

Option 2: Airmaster AP431HCTF-WWR72C Propeller (Electric Constant-Speed)

The Airmaster AP431HCTF-WWR72C is a **three-blade electric constant-speed propeller system** designed specifically for the Rotax 916 series engines ([AP431HCTF-WWR72C|Airmaster Propellers](#)). Airmaster propellers have been popular among Sling builders (and other kit plane enthusiasts) using the Rotax 912/914/915 engines, so it's a natural consideration for a 916iS-powered Sling as well. In fact, the standard Sling TSi kit with the earlier Rotax 915iS included an Airmaster constant-speed prop option (paired with WhirlWind or Warp Drive blades). Many Sling 4/TSi aircraft flying today use Airmaster electric props, and the AP431HCTF-WWR72C model extends that capability to the higher horsepower 916iS.

Design and Features: The AP431HCTF-WWR72C consists of Airmaster's AP431 series hub and three **WhirlWind Series R** composite blades (the "WWR72C" in the model name refers to WhirlWind Rotor series, ~72-inch diameter, Type C blades) ([AP431HCTF-WWR72C|Airmaster Propellers](#)). WhirlWind blades are carbon-fiber composite with a wide-chord, high-efficiency airfoil. They also have inlaid nickel leading edges for protection, much like the MT blades ([AP431HCTF-WWR72C|Airmaster Propellers](#)). The hub is constructed with high-strength materials (steel blade retention components and an aluminum hub) to handle up to 160 hp and the Rotax's RPM ([AP431HCTF-WWR72C|Airmaster Propellers](#)). Notably, this hub is designed to allow **feathering** of the blades – a feature useful for engine-out glide or for motor-glider applications. It is a tractor (puller) configuration turning clockwise, which matches the Sling's needs ([AP431HCTF-WWR72C|Airmaster Propellers](#)).

Where the Airmaster truly differs is in its **pitch control mechanism**. Inside the hub, instead of oil pistons, there is an electric *Faulhaber* servo drive motor. This high-precision electric motor, combined with Airmaster's electronic controller (the AC200 series), adjusts the blade pitch. According to Airmaster, their latest digital servo drive can change blade angle quickly (on the order of 5 degrees per second) and reliably ([2025 Propeller Buyer's Guide - KITPLANES](#)). The pitch range available is very broad: blades can go from a negative pitch angle (for reverse thrust) through fine pitch and all the way to coarse (feather) ([2025 Propeller Buyer's Guide - KITPLANES](#)). In normal operation on a single-engine Sling, reverse is not utilized, but the capability for a full-feathering stop is there.

Important attributes of the Airmaster AP431 system:

- **Electronic Governor with Presets:** The pilot interfaces with the Airmaster prop through an electronic control unit (AC200F controller). Typically, this is a small control box or panel that offers preset RPM modes (for example: Takeoff, Climb, Cruise, and Feather). The Airmaster makes using a constant-speed prop very simple – essentially push-button control. For takeoff, the pilot would select the high-RPM setting (fine pitch) to allow the Rotax to turn up to 5800 RPM. Once airborne, a tap of a button can select a Climb or Cruise mode, and the prop's controller will automatically adjust pitch to target a lower

RPM (e.g. 5500 for climb, 5000 for cruise, or whatever values are programmed). This removes the need for manually modulating a prop lever; the system's electronics handle the RPM adjustment smoothly. Many pilots appreciate this automation, as it reduces workload (especially for those not accustomed to constant-speed props). In essence, the Airmaster can function almost like a single-lever control – the pilot mostly manages the throttle, and the prop controller looks after the RPM. (Pilots can still fine-tune RPM or select manual mode if needed, but the presets cover most situations.)

- **Performance:** In terms of performance output, an electric constant-speed prop like the Airmaster achieves the same end results as a hydraulic unit. With the AP431-WWR72C on the 916iS, the Sling TSi's performance is on par with the MT prop setup. Sling's published figures (1200 fpm climb, ~158 KTAS cruise) were attained with the "new large-chord Airmaster electric constant-speed prop" as well ([Sling TSi KIT - The Airplane Factory USA](#)). The wide chord WhirlWind blades on the Airmaster prop provide excellent thrust at low speeds (for strong climb and short takeoff roll), while still maintaining efficiency at cruise thanks to their modern airfoil design ([AP431HCTF-WWR72C|Airmaster Propellers](#)). Because the Airmaster system can fully fine the blades for takeoff, the Rotax engine is able to reach its maximum 5800 RPM and 160 hp output promptly on takeoff. In climb and cruise, the system will coarsen the pitch to keep the engine at the optimal RPM, just as the MT prop would. Pilots who have flown both systems generally report **no significant difference in airspeed or climb rate** between the MT and Airmaster props when both are properly optimized for the aircraft. Both are three-blade props of similar diameter, both have efficient blade designs, so cruise speed and fuel burn are nearly identical for a given RPM and manifold pressure.
- **Reliability and Fail-safe:** Airmaster has designed the system to be fail-safe and low-maintenance. The servo motor in newer models is brushless (reducing wear) ([2025 Propeller Buyer's Guide - KITPLANES](#)), and the control system is built with redundancies. In the rare event of an electrical failure – for example, if the controller lost power or a wiring issue occurred – the propeller will **stay at its last commanded pitch** ([Airmaster Propellers](#)). In other words, it defaults to acting like a fixed-pitch prop until power is restored. This is an important safety consideration: unlike some older electric props that might drift to an undesirable pitch without power, the Airmaster will hold whatever angle it was at. If a failure occurred during cruise, the prop would just remain in cruise pitch; if it happened right at takeoff (high RPM), the prop would be "stuck" in fine pitch, essentially behaving like a climb prop – not ideal for cruise efficiency, but it guarantees you'll have takeoff thrust when you need it. Additionally, the presence of a manual feather switch (depending on installation) could allow the pilot to command feather in an engine-out scenario. The system's mechanical simplicity (few moving parts besides the blades and servo gearing) makes it quite robust. Many Airmaster units have been flying on Rotax engines for years with an excellent service record.
- **Weight and Build:** The Airmaster AP431HCTF-WWR72C weighs about **31 lbs (14 kg)** for the hub, blades, and spinner assembly ([AP431HCTF-WWR72C|Airmaster](#)

[Propellers](#)). This is a bit heavier than the MT system on the Sling (which, as noted, is ~24–25 lbs total). The weight difference is partly due to the electric motor and the heavier hub required to house it. However, 31 lbs is still relatively light for a constant-speed prop assembly, considering many certified constant-speed props (with metal blades) can weigh 40+ lbs. The Airmaster's weight on the nose has implications for the aircraft's weight-and-balance, which we'll discuss in comparison. The moment of inertia of the Airmaster prop is listed around $0.78 \text{ kg}\cdot\text{m}^2$ ([AP431HCTF-WWR72C|Airmaster Propellers](#)), which is within limits for the Rotax gearbox (important so as not to strain the gearbox with a too-heavy prop). The Airmaster does not impose significant gyroscopic forces beyond any other 3-blade prop of its size when flown within normal envelopes.

- **Maintenance:** Routine maintenance for the Airmaster prop is straightforward. There is **no oil system** to worry about – which means no chance of prop oil leaks, no need for oil line fittings, and no external governor to service. Airmaster recommends periodic inspections and lubrication of the hub. In fact, owners typically remove each blade and apply fresh grease to the blade shank bearings annually (["Airmaster" Propellers - Engines and Props - Recreational Flying](#)). This task is not difficult and can be done during an annual condition inspection. Aside from that, the electric controller and motor do not require frequent attention. According to Airmaster's documentation, the prop should be overhauled at 2,000 hours of operation (returned to the factory for a thorough rebuild) ([\[PDF\] Operator's Manual - Airmaster Propellers](#)). This overhaul interval is comparable to or slightly longer than typical constant-speed prop overhauls in certified aviation. Because the system is modular, some components (like the electronic control box) could be swapped or serviced independently if needed. Airmaster provides technical support from New Zealand and via international dealers. In the U.S., there are authorized resellers who can assist owners, though a full factory overhaul might involve shipping components back to NZ if no domestic overhaul facility is available for that specific hub.

In summary, the Airmaster AP431HCTF-WWR72C offers a **high-tech, user-friendly solution** for a Sling TSi's constant-speed prop needs. It leverages electronic automation to simplify propeller management and has a solid track record on Rotax-powered aircraft. The next section will directly compare the MT and Airmaster options across several categories: performance, usability, maintenance, and the practical aspects of weight and installation on the Sling TSi.

Technical Comparison: MT vs Airmaster Propeller Systems

Both the MT hydraulic constant-speed prop and the Airmaster electric constant-speed prop are capable systems for the Sling TSi. The choice between them comes down to nuances in

performance, daily operation, upkeep, and installation. Below is a breakdown of how the two options compare in key areas:

Performance (Climb, Cruise, Efficiency)

- **Thrust and Airspeed:** In terms of raw performance, **both propellers enable the Sling TSi to achieve its advertised climb and cruise figures.** With either the MT or the Airmaster, a 916iS-powered Sling can climb on the order of 1,100–1,200 ft/min at gross weight and reach cruise speeds around 155–160 KTAS at typical altitudes ([Sling TSi KIT - The Airplane Factory USA](#)). There is no strong evidence that one prop significantly outperforms the other in cruise speed or climb rate – any differences are on the order of a few percent at most. This makes sense given both are three-blade, 72-inch-class composite props tuned for the Rotax. The Airmaster's wide-chord WhirlWind blades provide excellent low-speed thrust, aiding climb and takeoff, while the MT's blades are also optimized and rigorously tested for the Rotax power band (the MTV-34 was vibration-tested and approved for the 915/916 engines) ([MT-Propeller MTV-34 Certified For Engines Up To 141 SHP | Aero-News Network](#)). Pilots report that switching from one to the other did not dramatically change their Sling's performance; rather, prop *governor settings* (like max RPM in climb) have more effect on performance than the brand of prop.
- **Engine RPM Management:** Both systems allow the Rotax engine to be operated in its ideal regimes. For takeoff, the props go to fine pitch to let the engine turn up to 5800 RPM (160 hp). For climb, RPM is typically reduced to 5500 to stay at max continuous power (around 136–140 hp for the 915/916). In cruise, many pilots will bring RPM down further (5000–5200, for example) for efficiency. The MT prop, being pilot-controlled via a lever, requires the pilot to manually reduce RPM after takeoff, whereas the Airmaster will automatically not exceed the preset climb RPM (often 5500) ([Max Continuous Power](#)). In practice, a pilot can achieve the same engine settings with either prop – it's just a question of manual vs. automated adjustment. Both props excel at allowing high RPM when needed and then “gear down” the prop for cruise. This yields better fuel economy: the Rotax 916 can be run at a lower RPM in cruise where specific fuel consumption is improved, without sacrificing throttle because the prop takes a bigger bite of air at the coarser pitch.
- **Responsiveness:** Early electric propellers had a reputation for slower response in RPM changes compared to hydraulic props, but Airmaster's modern servo is very quick. Airmaster's new digital servo drive can adjust blade angle at ~5° per second ([2025 Propeller Buyer's Guide - KITPLANES](#)). In flight, this means if you command a large RPM change (say from cruise to climb setting), the Airmaster will transition almost as fast as a hydraulic governor would. A member of the recreational flying community who used Airmaster noted that the current spec Airmaster props “change pitch just as fast as hydraulic propellers” (["Airmaster" Propellers - Engines and Props - Recreational Flying](#)). Thus, in a go-around or rapid power change, the Airmaster can keep up with the engine,

preventing overspeed just as a hydraulic unit would. Both systems will “hunt” a little to stabilize RPM if there’s a sudden load change (which is normal governor behavior). For typical operations (smooth power changes), they both maintain rock-steady RPM control.

- **Smoothness and Noise:** Both the MT and Airmaster options use three blades, which generally results in smoother operation and less vibration than a two-blade prop. A three-blade prop also runs at a lower per-blade frequency, reducing the noise and throbbing sensation in the cabin ([Airmaster Propellers](#)). The MT’s wooden-composite blades are known to absorb vibration, contributing to a smooth ride. The Airmaster’s WhirlWind blades and hub are finely balanced at the factory; when properly installed, they too are very smooth. There isn’t a clear winner here – Sling pilots have flown long cross-countries with both and found the experience pleasant. Noise-wise, at full power the prop noise will be dominated by tip speed and blade shape (both have scimitar-like blade shapes to reduce noise). At cruise RPM, the Sling TSi is relatively quiet inside, and from outside observers, both props meet noise regulations comfortably (the wide blades may lower the tip vortex noise a bit, but differences are marginal).
- **Special Features (Feathering/Reverse):** In normal single-engine piston operations, neither prop is routinely feathered or reversed. However, the Airmaster *does* include a feathering capability in the AP431HCTF model ([AP431HCTF-WWR72C|Airmaster Propellers](#)). The pilot could feather the prop in an engine-out emergency to reduce drag (which would significantly improve glide ratio). The MT prop on the Sling TSi likely does *not* have a pilot-accessible feather function (most small hydraulics don’t, unless specially modified). In an engine failure, a hydraulic prop usually springs to a default (either full fine or full coarse depending on design – many small props go to coarse on loss of oil pressure as a fail-safe). If the MT prop goes coarse without oil pressure, it would essentially feather itself nearly fully, which is beneficial. Reverse thrust is mostly a novelty in this context – while both systems *could* technically do it (MT has a reverse-capable option, Airmaster can go to -20° pitch), reverse is not utilized on the Sling (which is a tricycle gear aircraft; reverse is more useful on taildraggers or seaplanes to shorten rollout or back up). So, for practical purposes, both are equivalent in not using reverse, and feathering is a minor point in favor of Airmaster (in that a pilot *could* command it if set up to do so).

Bottom line on performance: You will get excellent climb and cruise performance with either the MT or Airmaster prop. The constant-speed function allows the Rotax 916 to give its best in all phases of flight. There is no significant cruise speed or fuel burn penalty with one versus the other – both are highly efficient. The differences in performance are subtle: the Airmaster might offer slightly more user-friendly RPM management, ensuring you don’t accidentally over-rev in a climb, whereas the MT gives you direct tactile control to fine-tune RPM. For most pilots and missions, these differences even out. If one were to conduct side-by-side flight tests, the results would likely be within a knot or two and a few fpm of climb, assuming both props are optimized for the Sling.

Usability and Pilot Workload

- **Pilot Control Method:** The MT propeller uses the classic manual propeller lever in the cockpit (the “blue knob”). Flying with the MT constant-speed is essentially the same as in many constant-speed propeller airplanes: during takeoff you push the prop lever full forward (max RPM), and once at safe altitude you can pull it back to dial in a cruise or climb RPM. Operating a constant-speed prop is **only slightly more involved than a fixed-pitch prop** and most pilots become comfortable with it after an hour or two of training ([Technique - Constant-speed propeller - AOPA](#)). The Airmaster prop, on the other hand, is controlled by an **electronic prop control unit**. Typically, you have buttons or switches for preset RPMs. In the Sling TSi’s implementation, the Airmaster’s presets mean you effectively **don’t have a dedicated prop lever** – you manage engine power with the throttle and select prop modes with the controller. This can reduce workload: for example, on climb-out you might simply hit a “Climb” button at 1000 ft and the prop will automatically transition to 5500 RPM without you fine-tuning a lever. In cruise, one button press sets a cruise RPM. It’s very much “set and forget.” Pilots coming from single-lever engine controls (like FADEC-controlled engines or some modern aircraft) often appreciate this simplicity. On the other hand, some pilots **enjoy the fine control** of a manual prop lever. It can be satisfying to smoothly adjust the RPM by hand, and you always know exactly what the prop is doing because *you’re* directly controlling it. Neither approach is inherently difficult – it’s a matter of preference and familiarity.
- **Automation and Features:** The Airmaster system’s electronic control not only provides presets but can also integrate certain automatic features. For instance, some Airmaster controllers can be linked to the avionics (EFIS) to display RPM or even accept commands. The system ensures that the prop will not exceed redline RPM as long as it’s in the correct mode (the “Takeoff” mode might allow full 5800 RPM for 5 minutes, whereas “Climb” mode might limit to 5500). This means the pilot can shove the throttle full forward in climb mode and not worry about overspeeding – the controller will coarse up the blades to hold 5500 RPM ([Max Continuous Power](#)). With the MT prop, the **pilot** is the one preventing overspeed: you set the prop lever and if you push the throttle too far with a coarse setting, you could potentially exceed 5500 RPM until you react. In practice, it’s easy to manage (and the Rotax ECU also helps by limiting fuel beyond certain RPM), but the Airmaster’s automation adds a layer of protection. The Airmaster also typically has a **feather switch** (for ground testing or emergency use) which, when activated, drives the blades to feather position electronically – something not available in the standard Sling TSi’s MT prop setup.
- **Pilot Workload:** In normal operations, the difference in workload is minor, but noticeable. With the MT, a typical flight sequence is: set full RPM for takeoff, reduce RPM for climb, adjust again for cruise, enrich RPM for descent if needed, etc. With the Airmaster, the sequence is: select Takeoff mode (if not already in it) for takeoff, press Climb mode after takeoff, press Cruise mode when leveling off. Both require the pilot to do *something* at each phase, but pressing a button can be slightly simpler than moving a

lever to the exact right spot. Workload is also reduced in that the Airmaster's ECU takes care of fine adjustments – once you select a mode, you can ignore the prop RPM and it will hold it. With a manual prop, you might need to make a small tweak as you stabilize in cruise to get the RPM exactly where you want it. However, these adjustments quickly become second nature to a pilot.

- **Engine/Prop Coordination:** The Rotax 916 iS is a full FADEC engine, meaning mixture is auto-managed and it provides engine data digitally. There has been talk of **single-lever control** where the engine ECU could control the prop directly (as is done in some FADEC diesel aircraft engines). MT Propeller has indicated that *single-lever FADEC options* are being offered for new Rotax engines ([2025 Propeller Buyer's Guide - KITPLANES](#)). If such a system is implemented, it could make the MT prop functionally as easy as the Airmaster (the throttle would become the single power control and a computer would adjust the prop). As of now (2024/2025), most Sling TSi installations use conventional separate controls. It's worth noting that a builder on the Sling forum interpreted "manual prop" to mean having a separate prop lever, versus an automated single-lever setup ([916 upgrade kit? - Sling Pilots Forum](#)) ([916 upgrade kit? - Sling Pilots Forum](#)). So far, Sling is delivering the 916iS with a manual prop control (blue lever) for the MT, and the Airmaster installs have their electronic controller. In summary, *both setups demand similar pilot attention*, but the **Airmaster simplifies the learning curve** (especially for pilots transitioning from solely fixed-pitch experience or those who haven't used a "blue knob" in a while).
- **In-Flight Adjustability:** One advantage of the manual MT system is that you have **continuous adjustability** of RPM. You can set, for example, 5300 RPM or 5100 RPM or any value you desire, at any time. The Airmaster presets are programmable, and you can usually toggle a manual mode to fine-tune, but the interface is not as analog. In practice, Airmaster gives you a few discrete settings (you could program multiple if you want, and even the ability to nudge RPM up or down with buttons is often available). For most flying, a low, medium, high RPM setting scheme is sufficient. But a meticulous pilot might enjoy having infinite adjustment with the MT. It's a bit like comparing a manual transmission to an automatic in a car – both get you there, but the manual allows a bit more direct control (and some pilots love managing that, others are happy to let automation do it).
- **Workload in High-Demand Scenarios:** Consider flying into a short strip or busy airspace: With the MT, on approach you might push the prop lever full forward (as is standard procedure for landing – to have full power available for a go-around). With Airmaster, you might hit the Takeoff mode button on downwind or final to ensure high RPM. Both are quick actions. In a go-around, the MT prop will already be set, you just push throttle and climb. With Airmaster, you would push throttle (if you hadn't already gone to Takeoff mode, you might hit the button as you firewall the throttle, but it will anyway try to maintain the climb RPM you had set – which might be 5500 – so you'd get slightly less than max power unless you remember to select the higher RPM mode).

These are small differences that good procedures can mitigate. Overall, neither prop system is likely to overload the pilot; the Sling TSi's avionics and ergonomics are designed for relatively easy single-pilot operation.

In summary, the **Airmaster wins on convenience** – it's very user-friendly, using automation to reduce pilot tasks – while the **MT wins on direct engagement**, giving the pilot tactile control and a traditional flying experience. If you are a non-expert pilot, you will likely find the Airmaster easier to manage initially (since it handles prop governance for you). But even a low-time pilot can learn to manage the MT constant-speed in an hour of dual instruction ([Technique - Constant-speed propeller - AOPA](#)). Once learned, the workload difference is negligible. Some Sling builders explicitly prefer having manual control ("I'd prefer being able to control RPM anyway," as one said when discussing single-lever vs. manual prop) ([916 upgrade kit? - Sling Pilots Forum](#)), while others welcome the Airmaster's preset system.

Maintenance, Durability and Support

- **Maintenance Intervals:** Both propeller options are relatively low-maintenance, but they do have prescribed service intervals. The **MT propeller** (composite blades, hydraulic hub) doesn't require any short-term maintenance aside from general inspections (checking bolt torques, inspecting for nicks on blades, etc.). There is no daily or frequent maintenance needed on the hub in normal use. Over the long term, MT propellers typically have a recommended **overhaul interval (TBO)** in the range of 1,500 or 2,000 hours or 6 years, whichever comes first (this is common for certified constant-speed props). The exact interval for the MTV-34 on an experimental might not be mandated, but adhering to MT's certified guidelines is wise. Overhaul would involve sending the prop to an MT-approved shop for disassembly, inspection, bearing replacement, seal replacement, etc. The MT governor on the engine also requires maintenance – it has its own small oil filter screen that should be checked at oil changes, and it may have its own overhaul schedule (for certified use, governors are often overhauled with the prop or engine). The **Airmaster propeller** similarly has a long-term overhaul schedule: Airmaster specifies that at **2,000 hours** the hub should be returned to the factory for overhaul ([\[PDF\] Operator's Manual - Airmaster Propellers](#)). This involves a detailed inspection of the motor, gears, bearings, and replacement of any worn components. In calendar terms, Airmaster doesn't impose a strict year limit publicly, but many owners will perform overhaul or at least a deep inspection after, say, 10 years if the hours aren't reached, just due to aging of components like grease or wiring.
- **Routine Maintenance:** On a routine basis, the **Airmaster requires a bit more regular care**: specifically, *annual blade removal and regreasing* of the hub bearings is recommended (["Airmaster" Propellers - Engines and Props - Recreational Flying](#)). This task involves unbolting each blade (one at a time), cleaning and applying grease to its shank or the hub bearings, and reassembling. It's not very time consuming (maybe adds an hour or two to an annual inspection) and does not require special tools beyond what

a builder would have. Many owner-pilots handle this themselves as preventive maintenance. The MT prop, in contrast, **does not need annual greasing** – its hub is sealed and lubricated internally, and there's no electric motor to service. Some MT hubs have grease fittings, but on these lightweight models, the maintenance is typically just at overhaul. One must keep an eye on the hub for any oil leakage (from the piston seals) – a few drops inside the spinner would indicate it needs attention. Oil leaks in a hydraulic prop cannot usually be fixed in the field; the prop would need to go to a prop shop for new seals ([Airmaster Propellers](#)). That said, leaks are uncommon in a properly maintained unit.

- **Durability:** Both props are designed to be very durable. The **composite blades** on both have nickel leading edges, which make them highly resistant to rain erosion or small stone nicks. Wooden-core composite (MT) and foam or hollow composite (WhirlWind) both have long service lives and can often be repaired if lightly damaged. MT has a lot of real-world data from fleets of aircraft – their blades often last decades if not subjected to abuse. WhirlWind blades (as used in Airmaster) are also known in the sport aviation community for being high performance and durable; WhirlWind is a respected brand, supplying blades for everything from kit planes to air racers. In the event of a prop strike or a significant blade damage, **MT blades would typically need to be sent to an MT service center for repair or replacement**, and **Airmaster/WhirlWind blades would need to go back to Airmaster or an authorized composite repair center**. Neither is something an owner can repair in their hangar beyond filling small chips. The hubs themselves – the MT's metal hub and the Airmaster's motor gearbox – are both robust. It's worth noting that Airmaster has continuously improved their hub design; earlier models used brushes to transfer power (and those brushes would wear over time), but the new AP431 uses a **brushless motor with a slip-ring** for power transfer ([2025 Propeller Buyer's Guide - KITPLANES](#)). Slip rings do still wear, but they are designed for long life and are replaceable parts. The MT hub has few moving parts (just the piston and blades). In terms of **life-limit**, composite blades generally have no strict fatigue life like metal props do; as long as they pass inspection, they can keep flying. The constant-speed mechanisms on both will last many hundreds of hours without issue if lubricated (grease or oil) properly.
- **Reliability:** Both the MT and Airmaster systems have proven reliable in service. The **MT hydraulic prop** is about as simple as it gets – it relies on engine oil pressure and a spring, so aside from seal leaks or governor malfunctions (which are rare and usually slowly developing issues), it's unlikely to fail abruptly. The **Airmaster electric prop** has more potential failure points in theory (wires, motor, controller), but Airmaster has designed in safeguards. We discussed the fail-safe mode (prop stays at last pitch on electrical failure) ([Airmaster Propellers](#)). The motor and gearbox are engineered to high standards – Airmaster props have flown on Rotax engines for many years, including in harsh environments (LSA trainers, bush planes, etc.). Airmaster's track record is good: instances of in-flight failure are very uncommon. One limitation to note: the Airmaster controller and motor do draw electrical power when operating. This is a modest load (on

the order of a few amps when moving the blades). The Sling TSi's electrical system can easily handle this, and if the power system fails, as noted, the prop just stays put. So as long as you monitor your alternator/battery health (which you'd do for all avionics anyway), there's no reliability concern.

- **Support Network:** MT Propeller has an extensive support network. Since MT props are used on many certified aircraft (Cirrus, Diamond, some Cessnas and Pipers, etc.), there are many prop shops that can service MT units. MT's U.S. facility can handle overhauls and major repairs, and there are MT service partners across the globe. Getting parts like seals, blades, or hardware for an MT is generally straightforward through these channels. **Airmaster Propellers** is a smaller company and based in New Zealand, but they do have authorized resellers and service representatives in various regions (the company's contact list shows resellers in North America, Europe, etc. ([Airmaster Propellers](#)) ([Airmaster Propellers](#))). Typically, if an Airmaster prop needs heavy maintenance, it might have to be shipped back to the factory in NZ, especially for the full 2000h overhaul. That can mean higher shipping cost and some downtime. However, many owners report that Airmaster's customer service is very responsive, and because the product is modular, they can sometimes ship smaller sub-components or assist local mechanics in doing certain repairs. For example, if a slip ring assembly needed replacement, Airmaster might ship that part rather than require the whole prop back. Still, one could argue that **MT's support is more accessible**, particularly in the U.S. and Europe, simply due to the number of MT units in circulation and certified infrastructure around them.
- **Hydraulic vs Electric Maintenance:** Airmaster's own FAQ nicely summarizes some differences: An electric CS prop **does not require a special engine shaft or governor**, making it simpler to fit on many engines ([Airmaster Propellers](#)). It is easy to operate and resilient to failures (just becomes fixed-pitch if something goes wrong) ([Airmaster Propellers](#)). Meanwhile, a hydraulic CS prop **does** require a hollow shaft (Rotax engines must be ordered with the hydraulic prop flange option) and a mechanical governor. Hydraulic systems have oil that can leak and typically must be overhauled on a calendar basis ([Airmaster Propellers](#)). They also note that hydraulic props require an "expensive governor" and custom installation of oil lines and a control cable by the builder ([Airmaster Propellers](#)). What this means for maintenance is that the hydraulic route has more components to inspect (oil lines, the governor, etc.) and more potential points of failure from a mechanical standpoint (though again, these are quite reliable components generally). The electric route packages all the complexity into the prop hub and controller, which either works or, if it fails, essentially freezes (no mess or immediate danger).
- **Cost of Maintenance:** While exact costs can vary, an **overhaul on an MT prop** might be performed at a local prop shop for a few thousand dollars (depending on what needs replacement). An **overhaul on an Airmaster prop** will likely involve sending it to NZ; Airmaster would replace wear parts like bearings and perhaps the motor brushes if it

were an older model, test everything, etc. The cost might be comparable to a prop overhaul, but shipping could add to it. Some owners might elect to run beyond 2000h in experimental world if everything is working fine (not recommended, but it can happen). On the flip side, if an MT prop needed an unscheduled repair (say the hub started leaking oil at 500h), you'd have to send it off, whereas if an Airmaster had an issue like a controller failure, it might be solvable by swapping a controller box without removing the prop.

Overall, **both props are built to high standards and require only periodic maintenance**. The MT prop has fewer routine tasks but potentially more involved work if something like a leak occurs. The Airmaster has a small annual task (greasing) but otherwise just needs an overhaul at a long interval. For an owner who is not near an MT service center, the Airmaster's ability to be maintained mostly on-aircraft (until overhaul) might be appealing. Conversely, for an owner who doesn't want to deal with any maintenance themselves, an MT can be serviced by many aviation mechanics and shops with familiarity.

Weight and Installation Considerations

Weight and balance, as well as the installation process, are practical considerations that differentiate the two prop options:

- **Propeller Weight:** The **MT constant-speed prop system is lighter** by several pounds. With spinner and governor, the MT setup on the Sling is roughly 24–25 pounds ([MT-Propeller MTV-34 Certified For Engines Up To 141 SHP | Aero-News Network](#)). The Airmaster with spinner is about 31 pounds ([AP431HCTF-WWR72C|Airmaster Propellers](#)). So we're looking at on the order of a **6 to 7 pound difference** on the nose in favor of the MT. Some anecdotal reports from builders suggest an even larger difference (one Kitfox builder estimated the MT system was about 14 lbs heavier than the Airmaster on his smaller aircraft, largely due to the governor and additional support hardware) ([MT vs Airmaster on 915iS](#)) ([MT vs Airmaster on 915iS](#)). In the Sling TSi's case, the delta appears closer to 7 lbs using official figures. This weight difference might sound small, but on a light aircraft it can matter for CG (center of gravity). The Sling TSi is a four-seat airplane, so it has a bit more heft and is less sensitive than a two-seat ultralight. However, it still has a forward CG tendency when carrying the heavy Rotax engine up front. Reducing nose weight can be beneficial – it potentially allows more flexibility in loading (you might not need as much ballast or can carry more weight in the luggage area without CG issues). Every pound off the nose also improves the power-to-weight slightly and climb performance marginally. So, **MT's lighter weight is a plus**. Using the Airmaster means ~7 lbs extra up front; in practice some Sling builders might counter that by carrying a bit more aft baggage or simply accepting a slightly more forward CG. The difference is unlikely to make or break loading in a Sling, but if you plan to operate at the extreme forward CG limit (e.g., two people and full fuel, no baggage), the lighter prop helps keep CG in range.

- **Balance and Handling:** A heavier propeller increases the moment of inertia at the nose. Pilots might not notice a 7 lb difference in flight handling, but it could subtly affect the feel. A lighter nose (MT) might make the plane a touch easier to flare on landing or less resistant to pitch change. Again, these differences are subtle and often masked by other variables. If anything, a heavier prop could dampen engine vibrations more (because of more inertia), but since both props are well balanced and the Rotax is smooth, that's not a concern. One Kitfox pilot with a Rotax 915 noted that after choosing the lighter Airmaster, he still had to add 15 lbs to the tail to get the CG where he wanted on his plane ([MT vs Airmaster on 915iS](#)), implying that the heavier MT would have required even more ballast. On the Sling TSi, the need for ballast is less likely unless you fly mostly solo with no rear passengers – but it highlights the principle that **weight up front often necessitates weight in back** for balance.
- **Installation Complexity:** The initial installation is one area where the two options diverge significantly. Installing the **MT hydraulic prop** means the engine must have the provision for a governor. The Rotax 916iS can be ordered “CS-ready” with a hollow prop shaft and a governor drive pad on the gearbox. Assuming our Sling’s 916iS is equipped for constant-speed (as the question states), you would need to mount the MT governor on the engine, run oil lines from the governor to the propeller flange, and fabricate or install a control linkage from the cockpit prop lever to the governor. Sling provides kits/instructions for this as part of their 916 install. It’s not terribly difficult for someone experienced, but it’s certainly more involved than a fixed-pitch prop installation. By contrast, installing the **Airmaster prop** is relatively self-contained. You bolt the hub to the engine’s prop flange (no special hollow shaft needed, though having one doesn’t hurt – it just won’t be used for oil). You install a brush block or slip ring assembly that allows electrical power to pass to the spinning hub (this typically mounts on the engine or engine side of the prop flange). Then you run a wiring harness back to the cockpit for the controller and power. Airmaster provides *pre-made installation kits* and detailed instructions, which makes it fairly plug-and-play ([AP431HCTF-WWR72C|Airmaster Propellers](#)). You do have to mount the control box and perhaps a circuit breaker, but overall many builders find **the electric prop easier to install** than the hydraulic. There are no oil lines to route, no governor to mount or safety wire, and no concerns about oil leaks during installation. Essentially, if you can handle basic electrical work and mounting a prop/spinner, you can install the Airmaster. One Airmaster FAQ point even emphasizes that no hydraulic system is required, making it fit on almost any engine, and that builders avoid having to fabricate the governor mount and oil plumbing ([Airmaster Propellers](#)) ([Airmaster Propellers](#)).
- **Retrofitting and Compatibility:** If an owner is **upgrading an existing Sling** (for example, going from a Rotax 915 with Airmaster to a 916), the installation considerations are important. In the Sling community, the “**916 Upgrade Kit**” is offered, which essentially swaps the 915iS engine and Airmaster prop for a 916iS and MT prop ([916 upgrade kit? - Sling Pilots Forum](#)). This upgrade is somewhat involved because it not only replaces the engine but also adds the governor and changes the cowling for the MT

spinner, etc. The cost was quoted around EUR 17,000 for the difference ([916 upgrade kit? - Sling Pilots Forum](#)) (including engine and prop differences), which indicates the MT route was costlier. Now, if someone already has a 916iS engine (with the governor pad ready) but had not bought a prop yet, they could choose either path. If they choose MT, they'll need to get the MT governor (roughly €3,000 as sold by RS Flight Systems ([MTV-34-1-A Tractor | RS Flight Systems](#))) and the prop itself (~€7,350 for the MTV-34 prop without spinner and tax ([MTV-34-1-A Tractor | RS Flight Systems](#))). If they choose Airmaster, they would buy the whole electric prop system typically as a package (hub, blades, spinner, controller) for likely somewhere in the same ballpark (perhaps slightly less than MT+governor combined – Airmaster pricing isn't published widely, but builders say it's a bit cheaper than MT). Installation-wise, if the plane was already set up for the Airmaster (wiring etc.), then sticking with Airmaster is simplest. If it was set up for MT (oil lines in place), sticking to MT is simplest.

- **Spinner and Cowling:** Both props come with their own spinner. The shape of the spinner might differ (Sling designs the cowling to match a certain spinner profile). If switching types, one might need a different spinner or backing plate alignment. However, Sling's newer kits likely accommodate either since they offer both in marketing materials ([Sling TSi KIT - The Airplane Factory USA](#)). Weight-wise, the spinner weight is included in the earlier figures (both have composite spinners a couple pounds each). Not much difference there.
- **Electrical System Needs:** The Airmaster relies on the aircraft electrical system, so one must ensure the Sling's alternator/battery setup is up to par. The Rotax 916 comes with a standard alternator (generally alternator capable of ~430 watts) which is plenty to handle the prop controller plus avionics. The Airmaster controller should be wired through a circuit breaker for safety. The MT prop, conversely, **relies on the engine oil system** – one must ensure the engine is filled with the correct oil and that the governor is properly primed. It's also wise to add a prop governor oil line pressure gauge or at least be vigilant that the governor is working (a sudden overspeed could indicate governor issues).

In summary, from a builder's perspective, **the Airmaster is simpler to install** but heavier, while **the MT is lighter but needs more installation effort and engine-specific configuration**. From an owner's perspective (post-build), the weight difference is the more enduring factor: carrying unnecessary weight (especially at the nose) can be seen as a disadvantage. If one can save ~7 lbs by choosing MT, that's attractive. However, if one is uncomfortable with the mechanical complexity or doesn't have the engine equipped for it, Airmaster's easier install can save time and potential headaches. Sling now offers the aircraft with the MT by default, so new kits likely come with all the needed parts for that.

Cost Considerations

The **cost** difference between the MT and Airmaster options has been noted by builders. Generally, the MT hydraulic prop system tends to be **more expensive** upfront than the Airmaster electric system. One builder summarized their choice by saying: *“I went with the Airmaster due to price and weight difference, not because I thought it was a better prop.”* ([MT vs Airmaster on 915iS](#)). The MT prop plus governor and related hardware can indeed cost a few thousand dollars more than an equivalent Airmaster setup. For instance, as of early 2024, an MTV-34 prop, spinner, and governor could total around \$12,000-\$15,000 (estimate), whereas an Airmaster hub with blades and controller might be on the order of \$10,000-\$12,000. These figures can vary and often experimental aircraft manufacturers negotiate package deals, but if budget is a major factor, Airmaster might have an edge. However, it’s important to balance that against long-term considerations: the MT might have higher resale appeal (since it’s the “standard” now for 916 Sling), and it might retain value well being a certified-quality unit. The Airmaster’s slightly lower initial cost could be offset if one needs to ship it far for overhaul later. In any case, while cost is not the sole focus here, **practical ownership includes budgeting**, so keep in mind that the MT option likely involves a higher initial investment.

Conclusion and Recommendation

Both the MT hydraulic constant-speed propeller and the Airmaster electric constant-speed propeller are excellent, proven choices for a Sling TSi with the Rotax 916iS. Each comes with its own set of strengths:

- The **MT propeller** offers light weight, a traditional tactile flying experience, and a well-established service network. It integrates naturally with the 916iS and has become the factory default for new builds, reflecting Sling’s confidence in the system.
- The **Airmaster propeller**, by contrast, emphasizes pilot ease, electronic automation, and streamlined installation. It aligns well with the FADEC-based Rotax engine and modern pilot expectations, especially for those who value low workload and intuitive controls.

Why Airmaster is Recommended

In balancing the practical realities of **usability**, **maintenance**, and **performance** for a typical Sling TSi owner/pilot, the **Airmaster AP431HCTF-WWR72C** emerges as the more appealing overall option.

- **Usability:** The Airmaster stands out for its ease of use. With push-button preset modes and full electronic control, it transforms the constant-speed propeller experience into a “set-and-forget” operation. This is particularly valuable on long cross-countries or IFR flights, where cognitive load is already high. Pilots transitioning from fixed-pitch props or looking for a modern, low-friction cockpit environment will benefit most.

- **Maintenance:** Although the MT system avoids annual greasing, the Airmaster's maintenance routine is simple, predictable, and largely owner-manageable. There are no oil lines, governors, or leak risks, and the system is modular – electronics and servos can be serviced separately. Its 2,000-hour overhaul interval matches the MT, and for most owner-pilots, annual bearing greasing is a manageable task.
- **Performance:** In flight, the Airmaster performs identically to the MT – climb, cruise, fuel efficiency, and RPM management are all on par. But it does so with more automation, especially helpful when paired with the Sling's modern avionics.
- **Installation and Flexibility:** For new builders or retrofitters, the Airmaster offers a notably easier install. It avoids the need for a governor, oil lines, or special engine shaft configuration. It's also better suited to experimental aircraft where builders may not have access to advanced mechanical resources.
- **Technology Fit:** The Airmaster better reflects the direction of GA modernization. With a FADEC engine and a full glass cockpit, it makes sense to choose a prop system that embraces the same electronic philosophy. It future-proofs the Sling TSi for single-lever control integrations and simplifies cockpit ergonomics.

While the MT remains an excellent and well-supported option, **the Airmaster is recommended** for owners who prioritize ease of use, modern integration, and simplified maintenance. It may carry a small weight penalty and have a narrower global support network, but its overall system coherence and pilot-friendly operation make it the smarter choice for most Sling TSi builds today.

For a modern, digitally-native aircraft like the Sling TSi with a Rotax 916iS, the Airmaster offers a better match for the mission, the equipment, and the pilot experience.

Sources:

- Kitplanes Magazine – *2025 Propeller Buyer's Guide* (background on MT and Airmaster propeller technology) ([2025 Propeller Buyer's Guide - KITPLANES](#)) ([2025 Propeller Buyer's Guide - KITPLANES](#))
- Sling Aircraft – Sling TSi official information (Rotax 916iS# Constant-Speed Propeller Options for the Sling TSi (Rotax 916iS)