TL Ultralight TL-96 Sting Model Guide

The TL Ultralight TL-96 Sting is a single-engine piston ultralight. The only source supplied is a TL Ultralight flight and operational manual for the TL-96 Star (s/n 99 S 25). The figures below are the Star's, so confirm them for any Sting you look at. It is a two-seat, full-composite, low-wing aircraft with side-by-side seats, tricycle gear and a 68 litre fuel tank.

KEY TAKEAWAYS

- Source manual covers the TL-96 Star, not the Sting by name. Confirm which figures apply to the aircraft you are buying.
- Two seats side by side, 450 kg maximum takeoff weight, 299 kg empty weight, 68 litre integrated fuel tank.
- Rotax 912, 912S and 914 engines are the most used. The manual says none is certificated as a flying engine.
- Day VFR only, no aerobatics, and the pilot must always be able to glide to a preselected landing area.

WHAT IT IS

Two-seat, full-composite, low-wing ultralight with a flying (all-moving) elevator, a three-wheel undercarriage with hydraulic disc brakes, and a steerable nose wheel. Two-position flaps. Certificated under UL 2 for sport and recreational use. Commercial flights are not allowed except training and leasing.

PERFORMANCE IN BRIEF

At 450 kg, sea level: never-exceed 275 km/h, maximum level speed 230 km/h, cruise 180-220 km/h. Climb is 4.6 m/s with the Rotax 912 and 4.8 m/s with the 912S. Practical ceiling is 6500 m. Takeoff over a 15 m obstacle is 290 m (912) or 250 m (912S). Landing roll is 100 m with brakes.

WHAT TO CHECK WHEN BUYING

Check the weight and balance records against the 22-28 %SAT centre of gravity range and the 70 kg minimum crew weight. Check the service history against the 50, 100, 200 and 300 hour inspections, and the propeller for vibration. Check the rescue system and its lock if fitted, and the canopy hinge. Look for dents in the sandwich skin from stepping off the walkway.

SPECIFICATIONS

Wing Span M	9.2
Length M	6.5
Height M	2.15
Wing Area M2	12.1
Empty Weight Kg	299
Fuel Capacity L	68
Max Takeoff Weight Kg	450
Max Fuel Weight Kg	49

PERFORMANCE

Vne Km H	275
Max Level Speed Km H	230
Climb Rate 912 M S	4.6
Climb Rate 912s M S	4.8
Practical Ceiling M	6500
Takeoff Roll 912 M	90
Takeoff Roll 912s M	75
Landing Roll With Brakes M	100

V-SPEEDS

Vne Km H	275
Vfe First Flap Km H	140
Vfe Second Flap Km H	120
Stall No Flaps Km H	72
Stall Landing Flaps Km H	62
Takeoff Speed Km H	75
Climb Speed Km H	130
Max Turbulence Speed Km H	180

WEIGHT & BALANCE

Max Takeoff Weight Kg	450
Max Landing Weight Kg	450
Max Fuel Weight Kg	49
Max Seat Load Kg	90
Max Baggage Kg	4
Min Crew Weight Kg	70
Cg Forward Limit Pct Sat	22
Cg Aft Limit Pct Sat	28

SAFETY NOTES

- Rotax engines are not certificated as flying engines and may fail suddenly. The manual says the pilot is responsible for always being able to land without power.
- Aerobatics, intentional spins and drops are strictly prohibited. Flight is limited to day VFR. Never exceed 450 kg.
- Step only on the marked antiskid walkway. Do not taxi with the cabin open, and do not leave the canopy open facing the sun.

AI-aggregated guide for the TL Ultralight TL-96 Sting · sources: Flight and Operational Manual TL-96 STAR (#102772) · generated 2026-11-26 · Reference only, not for flight. Check the original documents before relying on this guide.