

DOVA DV-1 Skylark Model Guide

The DOVA DV-1 Skylark is a two-seat, all-metal, low-wing ultralight with a tricycle gear, a steerable nose wheel and a Rotax 912 ULS piston engine. The current handbook (R1.1, June 2024) lists a 600 kg MTOW and 90 liters of fuel. It is for tourist, recreational and pilot-school flying in VFR only.

KEY TAKEAWAYS

- The 2024 POH lists 315 kg empty weight and 600 kg MTOW. Baggage is limited to 20 kg and pilots must weigh 60-120 kg.
- The Rotax 912 ULS burns 16-22 liters per hour. Fuel is carried in two 45-liter wing tanks, 90 liters in total.
- Older manuals list other weights, such as 450 kg MTOW in the 2011 maintenance manual. Confirm which manual fits the airframe.
- Engine overhaul is due at 2000 flight hours or 10 years, whichever comes first. Coolant is changed every 2 years.

WEIGHTS AND LOADING

The 2024 POH gives 315 kg empty, 600 kg MTOW and 20 kg baggage. Pilot weight must be 60-120 kg. The CG range is 21% to 36% SAT. Fuel is 2 x 45 liters, with at least 10 liters in one tank for takeoff. Approved fuels are premium unleaded 95 or 100 octane, or AVGAS 100 LL.

PERFORMANCE AND LIMITS

POH stall speeds at MTOW are 64 km/h clean and 59 km/h in landing configuration. Best climb is 110 km/h, best glide 95 km/h and Vne 254 km/h. Crosswind limit is 10 kt, headwind and tailwind limit 24 kt. The maintenance manual quotes 80 km/h clean and 73 km/h landing at 600 kg, so check these figures.

MAINTENANCE CHECKS

The maintenance manual lists inspections after the first 25 flight hours, then at 50 and 100 hours. Replace carburetor hoses, cooling and oil hoses, the alternator belt and the fuel pump with hoses every 5 years. Replace engine coolant every 2 years. Have an authorised shop do the work.

SPECIFICATIONS

Engine Model	Rotax 912 ULS
Seats	2
Wingspan M	8.14
Length M	6.62
Empty Weight Kg	315
Max Takeoff Weight Kg	600
Max Baggage Kg	20
Fuel Capacity Liters	90

PERFORMANCE

Max Crosswind Kts	10
Max Headwind Kts	24
Max Tailwind Kts	24
Fuel Burn Performance Cruise Liters Per Hour	22
Fuel Burn Regular Cruise Liters Per Hour	20
Fuel Burn Economy Cruise Liters Per Hour	16
Uncertified Ceiling M	3650

V-SPEEDS

Stall Clean Vs1 Kmh	64
Stall Landing Vs0 Kmh	59
Rotation Vr Kmh	60
Best Climb Vy Kmh	110
Best Glide Kmh	95
Max Flaps Extended Vfe Kmh	120
Maneuvering Va Kmh	158
Never Exceed Vne Kmh	254

WEIGHT & BALANCE

Empty Weight Kg	315
Max Takeoff Weight Kg	600
Max Baggage Kg	20
Min Pilot Weight Kg	60
Max Pilot Weight Kg	120
Cg Front Limit Pct Sat	21
Cg Rear Limit Pct Sat	36

SAFETY NOTES

- VFR day flight only, with no freezing conditions. Acrobatic turns and intentional spins are prohibited.
- The POH puts the second red line on the airspeed indicator at 280 km/h, but Vne is 254 km/h. Check the markings and placards.
- The pilot is responsible for the consequences of engine failure. Fly at heights and speeds that allow a safe landing. Unlock the rescue system trigger before flight.