

DA42NG



THE DEFINITION OF PERFECTION

DA42NG: HIGH-PERFORMANCE TWIN

The DA42NG is easy to fly and burns fuel like a single, but with the added safety of a second engine. Impressive cross-country performance pleases private pilots and business owners alike, while the low operating costs make it an ideal advanced trainer.

No wonder it's the best-selling piston twin, by far.

AT A GLANCE:

- YOM – 2022, Total Time – 80 Hours
- 4 seats, convenient access, Panoramic canopy
- Luxurious leather interior, G1000 NXi with 3-axis GFC700 and Yaw Damper
- Twin 168 hp Jet fuel AE300 Engines, Superb Single Engine Performance
- High Fuel Efficiency, TKS Ice Protection (FIKI)
- Air Conditioning & Weather Radar, Metallic Colour
- DME, TAS, SAM, SVT



The DA42-VI is wonderful. She does everything you promised. Climbs like a rocket through the ice layer, 1350 fpm and still 1100- 1200 at altitude. Radar is great. Use it a lot. Data link is great. Weather and sending emails and SMS at altitude. I don't think there is any other twin that comes close price/performance-wise. For those of us who don't want to spend what it takes to fly a turboprop, the DA42-VI is the perfect airplane. What a dream machine!"

- Consumption at 60% - 39.4 lt/h or 10.4 gal/h
- Max. Speed 365 km/h or 197 kts
- Max. Altitude 5,488 m or 18,000 ft

GO WHERE SINGLES FEAR TO TREAD.

Imagine this: It's getting dark. You're in the mountains, crossing big water or densely populated terrain. You're picking up ice and your intended destination just closed. At times like this, the security of the second engine, incredible endurance and single engine performance, a FIKI certified ice protection system, superior situational awareness courtesy of the supreme Garmin G1000 NXi glass flightdeck, and an autopilot with razor sharp precision and standard Electronic Stability & Protection (Garmin ESPTM), are – quite simply – life insurance.

The performance, stability, handling characteristics and ease of operation of the DA42 make it an easy transition from single to twin. Superb performance with a single engine service ceiling of 18,000' offers a margin of safety that single engine aircraft simply do not have. Especially when flying in inclement weather, over inhospitable terrain, over water and at night, nothing beats the safety of continued flight in case of engine failure. That is why Diamond's high performance piston is a twin.

AIRFRAME

The DA42 offers exceptional visibility thanks to its panoramic wrap around canopy and generous rear windows. Comfortable access for all on board is assured through the forward swinging canopy and large rear door that provides access to the folding rear seats and fuselage baggage area. Additional baggage is stowed in two generous nose compartments that are sized for golfbags and offer maximum flexibility in loading for any mission. Comfort is assured by adjustable front seatbacks and lumbar support. Luxury features abound throughout, including premium leather interiors in several styles and colors, all LED interior lighting, optional electric air conditioning and more.

The sleek all carbon composite airframe incorporates advanced aerodynamics with the latest in passive safety technology for high performance, great efficiency and superior occupant protection. The composite airframe is durable, easily maintained and will keep looking great for many years to come.

ENGINE

The turbocharged Austro AE300 jet fuel piston engines perfectly match the DA42's aerodynamically efficient airframe, burning less than 17 gph (64.3 lt/hr), combined, at a high speed cruise of 197 kts (365 km/h), and less than 10.4 gph (39.4 lt/hr) overall in a typical flight training environment.



PROPELLER

The propeller for the DA42-VI has been developed and designed in close cooperation with the company mt-propeller. Slightly bigger, increased diameter and a more curvy shape led to a performance improvement of 3 knots.

TKS PANELS

Sophisticated installation process for the TKS-panel has considerably increased the performance and aerodynamic qualities which resulted in less drag and improved lift.

FLUSH HEAD SCREWS

In spite of their flat and elegant impression the flush head screws provide high durability and a higher speed for our customers. Your benefits: high efficiency and a sovereign elegance.

LUGGAGE COMPARTMENT

The improvements incorporate aesthetic, functional and aerodynamic advantages. With an advanced new hinge concept gaps could be reduced to a minimum clearance and increased the opening angle. Additionally the doors are sealed with a better seal design and provide better protection for your luggage.

INTERIOR

Product enhancement does not stop with interior design. By using lightweight materials, such as ultra light floor coverings, a significant additional weight reduction, increased speed and enhanced performance of the aircraft, could be achieved.

WING FAIRINGS

Right from the development stage, the engineers at Diamond Aircraft laid the foundations for a new generation of wing fairings. Attached under the wing they are covering exposed flap hinges and control rods contributing to the efficiency of the DA42.

NEW RUDDER

With the redesign of the rudder we succeeded not only in aerodynamic benefits by reducing drag but also in decreasing the minimum control speed which has been reduced by over 5 kts. This means better directional controllability with the critical engine inoperative at a lower speed, and an appreciable reduced take-off distance.

PERFORMANCE (MTOM, ISA)

Max. speed (16,000 ft, MCP) 1,760 kg TOW	365 km/h TAS	197 kts TAS
Max. cruising speed (16,000 ft, MCP)	352 km/h TAS	190 kts TAS
Cruise speed at 75% (16,000 ft)	324 km/h TAS	175 kts TAS
Stall speed, landing configuration	115 km/h CAS	62 kts CAS
Rate of climb (MSL)	5.7 m/s	1,114 ft/min
Single engine service ceiling (climb rate 50 ft/min)	4,878 m	16,000 ft
Single engine absolute ceiling (climb rate 0 ft/min)	5,335 m	17,500 ft
Range at 60% (12,000 ft, incl. auxiliary tank) incl. climb, no reserves	2,038 km	1,100 nm
Max. range (FL 180, 50% PWR) incl. climb, no reserves	2,269 km	1,225 nm
Consumption at 60% in total	39.4 lt/hr	10.4 US gal/hr
Take-off performance (MSL, ground roll / take-off obstacle) Short field t/o procedure	375 m / 649 m	1,230 ft / 2,129 ft
Landing performance (MSL, ground roll / landing distance)	387 m / 647 m	1,269 ft / 2,122 ft
Max. operating altitude	5,488 m	18,000 ft
Max. demonstrated crosswind	46 km/h	25 kts