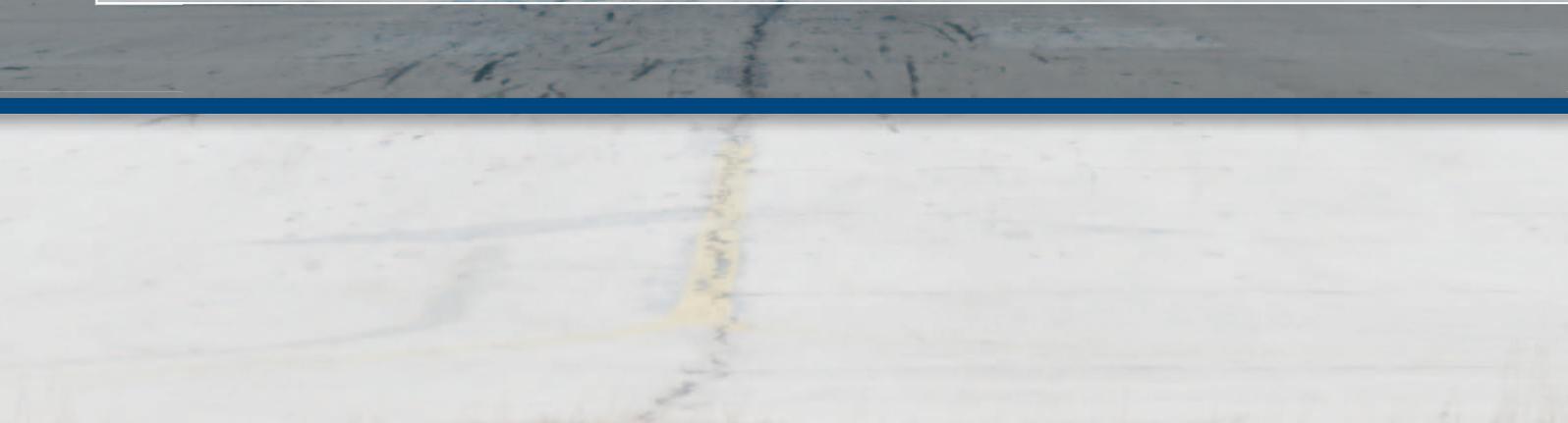




***DA42-VI***  
***GO FAR FAST***



# Exceed your expectations

## ADVANTAGE THROUGH INNOVATION

Elegant. Efficient. Superior power. Outstanding performance. Impressive long-range cruising capability. Innovative safety features. Exceptional reliability. These are only some of the attributes that describes our new DA42-VI. The DA42-VI combines generous refinement with Diamond Aircraft's characteristic quality and sophistication. Well-designed with new accents such as improved exterior design, the entire revision of the cowling and nacelle and a revolutionary new propeller, this aircraft exceeds your expectations.

A category-defining aircraft. The weight saving program can serve as a unique and distinctive milestone in the history of Diamond Aircraft. It is an incentive for the conscious enhancing our products and systems and helps redefine boundaries again. The goals of this development are to reduce fuel consumption and operating costs, while at the same time improving performance such as the maximum speed. The DA42-VI with its twin AE300 turbo diesel piston engines produced by Austro Engine is a superbly capable aircraft. The aircraft's extreme range, long endurance, advanced avionics and the astoundingly low fuel consumption of the Jet-A1-powered engines underline our effort to make flying more environmentally friendly. With the DA42-VI you can fly non-stop across mountain ranges and over oceans while you benefit from our de-icing system and IFR avionics if the weather gets bad en route

### The most important performance and weight improvements at a glance for a typical aircraft configuration:

Over 40 kg/88 lbs less weight compared to the DA42 NG	
Take-off distance ground roll:	919 ft
Max. cruise speed (at MCP):	197 kts
Climb rate (ISA SL):	1800 fpm
OEI climb rate:	average 280 fpm

and at your destination. In your DA42-VI you are able to travel directly to places you never thought possible.

Broaden your horizon. If you are looking for a new flight experience, an easy to operate aircraft, nearly as simple as a single engine aircraft, then the DA42-VI is the premium choice. All-in-all, it offers everything you need to enjoy your individual flight mission. Both, improvement and innovation, are the hallmarks of the new DA42-VI.



# DA42 VI - Evolution of efficiency.

## PERFORMANCE ENHANCEMENT

The improved performance results in a 919 ft take-off distance (ground roll) and a substantially higher initial climb gradient. We also indicate a maximum climb rate of 1,800 fpm at sea level and around 1,000 ft at FL180 at a climb speed of 120 kts at minimum weight. Adding this to the extended flying range and the low fuel consumption of 40 lt/hr, the DA42-VI is a convincing aircraft. Equipped with Jet-A1-powered AE300 turbocharged common-rail injected 2.0 l diesel engines, together producing 336 HP and an EECU single lever control system, it achieves a convenient cruise speed of 175 kts, and a maximum true airspeed up to 200 kts in FL160 and above.

## GO SAFE

Your safety is our highest priority! We focused on improving passenger comfort, active- and passive safety features. The DA42-VI is the undisputed technology leader in this segment. It offers the ultimate in redundancy: damage tolerance, fail-safe carbon airframe and cell with completely redundant electrical system and power sources, fuel system protection and of course twin engines with a convenient single-lever power plant control including automatic load indication.

## COMFORT AND STYLE

The Diamond Aircraft DA42-VI is a byword for creative solutions, thoughtfully designed details and robust quality. Its sleek lines and powerful engines with the new and improved three-blade constant speed propellers are sure to attract crowds

wherever you show up. A combination of leading edge technology with proven composite airframe materials and build techniques, Diamond is committed to providing pilots with exceptional aviation experiences. Fully IFR certified with the Garmin G1000, GFC700 autopilot and available known ice protection, it is making a pilot's life easier and giving you and your passengers the comfort and safety you are looking for.

## MAINTENANCE AS FAST AS YOUR BUSINESS

Diamond Aircraft offers the right level of maintenance, logistics and equipment solutions tailored to your individual needs and business requirements. With our partners you have the highest possible experience level of developing diesel engine technology, produced by Austro Engine GmbH. The improvement of our DA42-VI goes hand in hand with the development of new generations of engines. For instance, the extension of the TBO (Time-Between-Overhaul) for the AE 300 series of aircraft engines from 1,000 hours up to 1,200 hours, demonstrates our commitment to innovation and the continued quality improvement of our products.

## IMPRESSIVE RESULTS

With the DA42-VI you will enjoy lower operating costs, lower fuel consumption (compared to previous diesel engine aircraft) with a noticeable effect on the improved performance and comfort.





OE-VFT

DA42 V1

#### 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.

#### Propeller:

Our revolutionary new propeller 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.

#### Cowling/Nacelle:

The embodiment of modern design and technical excellence: sleek style and noble workmanship in every detail. We have achieved a systematic appraisal and further developments of the existing modular systems, which makes our aircraft faster, more aerodynamic and more advanced.

Redesign of the air intakes for charge air, engine cooling, fuel cooling, gear box cooling and cabin heat. The streamlined shape of the new cowling as well as the repositioning of the fuel cooler resulted in more thrust and less aerodynamic drag which made the DA42-VI about 8 knots faster.

#### 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.





#### **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-VI.

#### **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.



#### **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.



#### **Interior:**

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



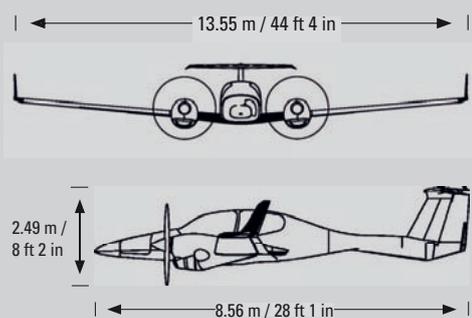
## Power plant

Engines	2x Austro Engine AE 300 turbocharged common-rail injected 2.0 liter diesel engine with 168 HP and EECU single lever control system
Propellers	MT propeller MTV-6-R-C/CF 190-69 3-blade constant speed propeller
Fuel grades	Jet A-1, Jet A, TS-1 (Russia, Ukraine), RT (Russia, Ukraine), <b>Diesel EN 590</b> No. 3 Jet Fuel (China), JP-8

## Performance/ consumption (MTOW)

Max. cruise speed (16,000 ft, MCP), 1760 kg TOW	365 km/h TAS	197 kts TAS
Max. cruise speed (16,000 ft, MCP)	353 km/h TAS	193 kts TAS
Cruise speed at 60% (16,000 ft)	322 km/h TAS	174 kts TAS
Stall speed, clean	124 km/h CAS	67 kts CAS
Stall speed, landing configuration	113 km/h CAS	61 kts CAS
Rate of climb (ISA SL), 1760 kg TOW	9.1 m/s	1,800 fpm
Rate of climb (ISA SL)	7.1 m/s	1,400 fpm
Rate of climb (18,000 ft)	5.0 m/s	1,000 fpm
Single Engine Service Ceiling	5,486 m	18,000 ft
Range at 60%, standard-/ long range tank	1,470 km/ 2,245 km	795 nm/ 1,215 nm
Consumption at 60%	39.4 lt/hr	10.4 US gal/hr
Take-off distance 50 ft (ISA SL)	598 m	1,961 ft
Take-off ground roll (ISA SL), 1760 kg TOW	280 m	919 ft
Take-off ground roll (ISA SL)	354 m	1,161 ft
Landing distance 50 ft (ISA SL)	570 m	1,870 ft
Landing ground roll (ISA SL)	340 m	1,115 ft
Max. operating altitude	5,486 m	18,000 ft
Max. demonstrated crosswind	46 km/h	25 kts

## Dimensions/ mass/ loading



Length	8.56 m	28 ft 1 in
Height	2.49 m	8 ft 2 in
Wing span	13.55 m	44 ft 4 in
Seats	4	4
Empty weight *)	1,410 kg	3,109 lbs
MTOM	1,900 kg	4,189 lbs
Payload *)	490 kg	1,080 lbs
Fuel capacity standard-/ long range tank	189 lt/ 289 lt	50 US gal/ 76.4 US gal

\*) Specifications apply to standard equipped aircraft (with DME, TAS, WX500, AUX, TKS, standard light weight interior without adjustable seats), if not otherwise stated. The above data are approximately specifications and may change without notice.



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