

fly line



DG-303 ELAN



ELAN AMS gliders



DG-303 ELAN - High performance Standard Class glider

It gives us great pleasure to be able to present the DG-303 ELAN, a Standard Class sailplane which is a result of a continuous development resulting in improved flight performance.

The DG-303 ELAN modified air-section and standard winglets result in a lower air resistance and distinctly improved performances in flight at high speed and in thermaling.

The DG-303 ELAN offers you the best chances to win competitions by improved thermaling characteristics and thermaling performance, especially with high waterballast loading.

DG-ELAN-AMS sailplanes provide a high level of pilot safety features-impact resistant double walled cockpit with a practical designed backrest and an integrated headrest.

The emergency canopy release system has been designed in conformity with the findings of a German safety related programs.

A comfortable safety cockpit with its splendid visibility is a testimony that the DG-303 ELAN is a new generation of high performance glider.

DG-303 ELAN Acro - Not only for aerobatic pilots

DG-303 ELAN Acro and DG-303 ELAN differ mainly in the structural reinforcements. That is the reason why the DG-303 ELAN Acro is particularly suited for competition use and cross-country pilots who in addition flying also have a possibility of flying aerobatics.

Winglets are standard so DG-303 ELAN and DG-303 ELAN Acro also permit installation of smoke-generators to winglets fittings.

Even more manoeuvres are certified than for corresponding two-seaters. Aerobatic flying does not require a reduction of wing span which means that the DG-303 ELAN Acro can be flown as Standard Class competition sailplane.

The DG-303 ELAN Acro is also better suited for demonstration flights because Standard Class sailplanes look more aesthetic than a sailplane with short wing span designed for aerobatic competitions only.

The DG-303 ELAN Acro has the same emergency canopy release system and cockpit furnishing as DG-303 ELAN.

The DG-303 ELAN and DG-303 ELAN Acro are available in Standard Class and Club Class version (DG-303 Club ELAN and DG-303 Club ELAN Acro) where blowing turbulators are replaced with 3D turbulators.

Brief description & Safety

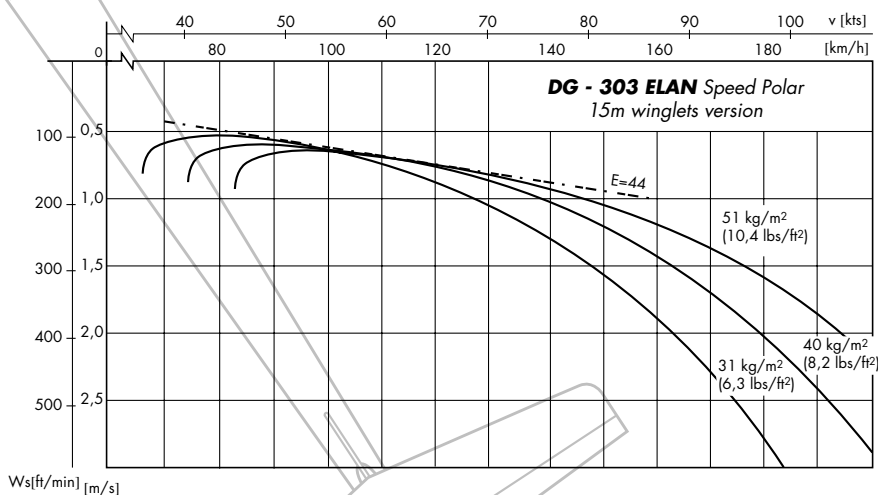
- Complete airframe in glassfibre construction.
- Winglets including wings parting at 14,5 m are standard equipment.
- Safety cockpit: integral inner seat-shell for additional pilot protection.
- Safety harness geometry to minimize the risk of "submarining".
- Adjustable seatback with integrated headrest.
- Outstanding visibility.
- Optimised canopy release system.
- Adjustable rudder pedals.
- Landing gear operating handle at the left side, no change of hands necessary.
- Landing gear control buzzer is standard equipment.
- Automatic hook ups for all controls and the water ballast system.
- Effective airbrakes and wheel brake.
- Well proven spring mounted retractable landing gear with large 5.00-5 tyre.
- Tail-wheel, radio antenna in vertical fin, compartment for oxygen bottle are standard equipment.

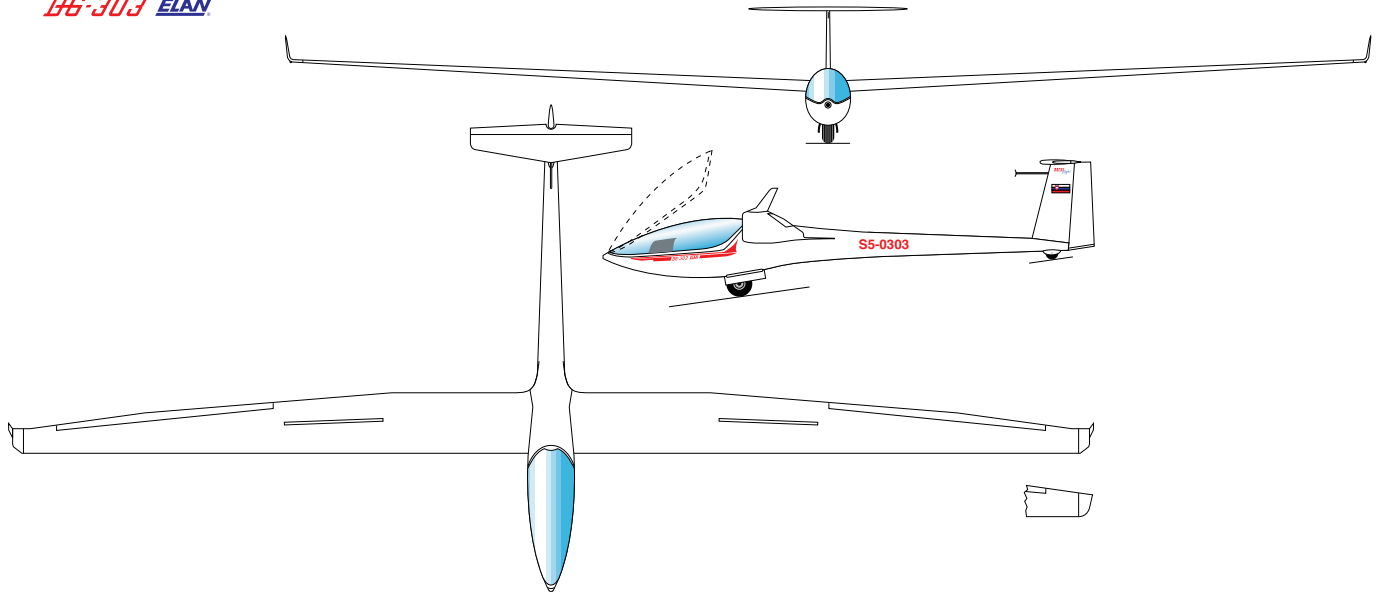
Technical specifications

Version			DG-303 ELAN		DG-303 Club ELAN		DG-303 ELAN Acro	
			DG-303 ELAN Acro		DG-303 Club ELAN Acro		DG-303 Club ELAN Acro	
category			U		U		A	
span	m	(ft)	15	(49.2)	15		15	
length	m	(ft)	6.8	(22.3)	6.8			
height	m	(ft)	1.39	(4.6)	1.39			
wing area	m ²	(ft ²)	10.27	(110.5)	10.27			
aspect ratio	/		21.91		21.91			
empty weight	kg	(lbs)	245	(540)	238	(525)		
waterballast wings standard	l	(USgal)	130	(34.3)	0			*
waterballast wings optional	l	(USgal)	190	(50.2)	130	(34.3)		*
waterballast in fin tank	l	(USgal)	5,5	(1.5)	0			*
max. take off weight	kg	(lbs)	525	(1157)	500	(1102)	370	(815)
max. wing loading	kg/m ²	(lbs/ft ²)	51.1	(10.5)	48.7	(10)	36.0	(7.4)
g-load at VA manoeuv. load	/		+5.3 - 2.65		+5.3 - 2.65		+7 -5 (at VA, VNE man. l.)	
manoeuvre speed VA	km/h	(kts)	200	(108)	200		178	(96)
max. speed VNE	km/h	(kts)	270	(146)	270		270	
stall. speed at 320kg	km/h	(kts)	65	(35)	65			
Gliding performance								
minimum sink	m/s	(ft/min)	0.57 winglets(112)		0.58 winglets(114)			
at weight	kg	(lbs)	320	(705)	320			*
best L/D ratio	/		43/1 winglets		41.5/1 winglets			
at weight	kg	(lbs)	320	(705)	320			*
best L/D ratio/	/		44/1 winglets		42.5/1 winglets			
at weight	kg	(lbs)	525	(1157)	500	(1102)		*

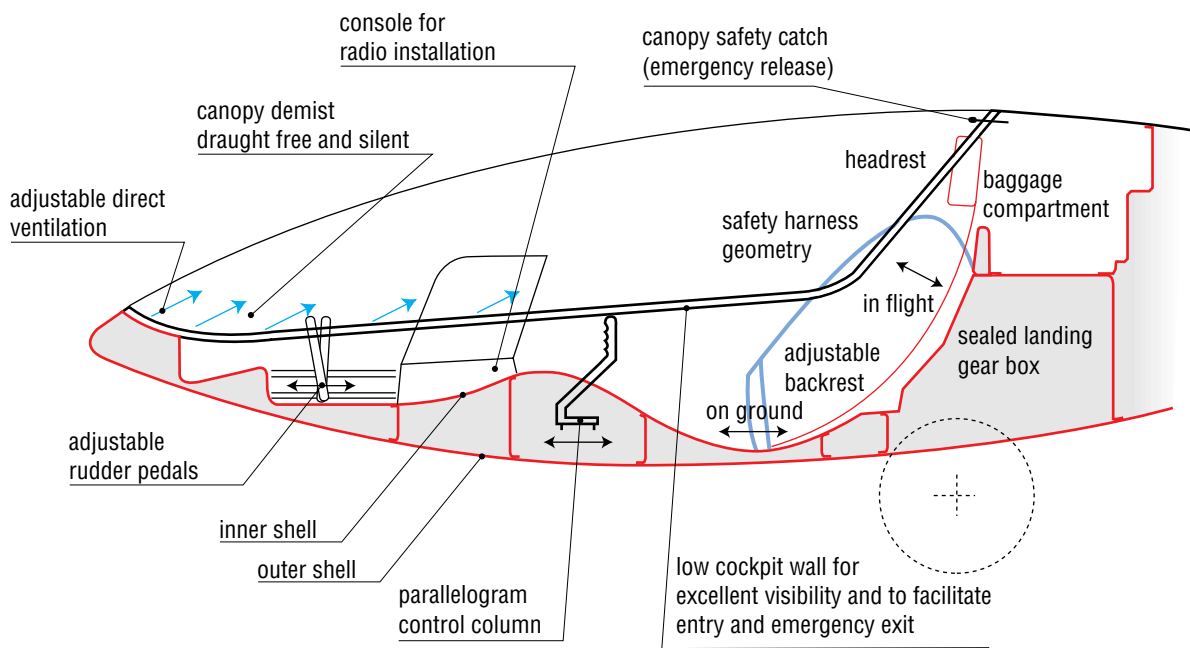
* ... aerobatic flying +7/-5 is permitted through normal 15 m wing ends instead of winglets and without waterballast

The DG-303 ELAN polar





Safety cockpit



For extra pilot protection an integral inner shell in the "Safety cockpit" provides increased strength and energy absorption in the event of crash landing.

