

## Information and Specifications for the Allegro 2007 Model

<b>Allegro 2007 Model Specifications</b>	
<b>Engine options</b>	Rotax 912 UL 80hp Rotax 912 ULS 100hp
<b>Airframe Dimensions</b>	
Wing Span	10800 mm
Airframe Length	6100 mm
Total Height	2100 mm
Wing Area	11.4 m <sup>2</sup>
Aspect Ratio	9.5
Wing Chord-max	1200 mm
Wing Chord-min	655 mm
Airfoil Section	SM 701 Profile, tapered tip wing
<b>Performance Details Rotax 912 80hp Engine</b>	
Max Speed VNE	118 Knots
Cruise Speed	95 Knots
Stall Speed	35 knots
Rate of Climb	985 fpm
Max Range	700 Nautical Miles with LR tanks
Take off run	150 m
Take off to clear 15m	250 m
Landing run	100 m
Landing over 15m obstacle	220 m
<b>Aileron and rudder deflection</b>	
Aileron Up	165 mm +/- 5 mm
Down	55 mm +/- 5 mm
Elevator Up	79 mm +/- 5 mm
Down	66 mm +/- 5 mm
Rudder Right	134 mm +/- 5 mm
Left	134 mm +/- 5 mm
<b>Other Data</b>	
Undercarriage tricycle	Front landing gear with suspension Rear landing gear composite
Main Wheel Track	1550 mm
Maximum Service Ceiling	4500m / 14,737 feet
<b>Tyre Dimensions</b>	
Main wheels	14 x 4 (350 x 100)
Nose wheel	14 x 4 (350 x 100)
<b>Tyre Pressure</b>	
Nose wheel	0.10 -0,12 Mpa (15 psi - 17 psi)
Main wheels	0.18 Mpa (26 psi)

Suspension	by flexibility in the laminated undercarriage leg		
Wheel brakes	hydraulic brakes		
<b>Fuel tank volume</b>	63 Litre Standard Tanks 103 Litre Long-Range Tanks		
<b>Weights</b>			
Maximum Take-off Weight	520 Kg (600 Kg currently being certified)		
Empty Weight	275 Kg		
Maximum useful load	245 Kg		
Minimum Front-Seat Pilot Weight	55 kg		
Max Weight of the Crew & Fuel	245 kg		
Baggage Weight	10 kg		
<b>Standard Aircraft Equipment</b>			
Compass	Climb Indicator VSI		
Fuel Gauge	Tachometer		
CHT Gauge	Oil temperature gauge		
Engine Operating Hours	Oil pressure gauge		
Airspeed	Altimeter		
Slip / Skid Gauge	Flap Position Indicator		
3 Blade Woodcomp Propeller	Hydraulic Disk Brakes		
Fuel pressure gauge	Choke		
Map box in instrument panel	First Aid kit		
Fire Extinguisher			
<b>Towing Equipment</b>			
Type	TOST S.No.		
Maximum weight of towed glider	500 kg		
Minimum length of tow rope	40 m		
Maximum length of tow rope	60 m		
Tow rope safety fuse	300 Kg		
<b>Operation Limitations</b>			
Wing flaps	Lever position	Flaps Deflection	Never Exceed Speed
Cruise position	0	-4.5 degrees	VNE 118 Knots
Take-off	1	15 degrees	VFE 60 Knots
Landing	2	48 degrees	VFE 60 Knots
<b>Stall speeds at MTOW 520 kgs - level flight</b>			
Wing Flaps Position	Engine Power Output	IAS Knots	CAS Knots
0	Engine at idle	46 Knots	43 Knots
1	Engine at idle	40 knots	39 knots
2	Engine at idle	37 knots	35 knots