

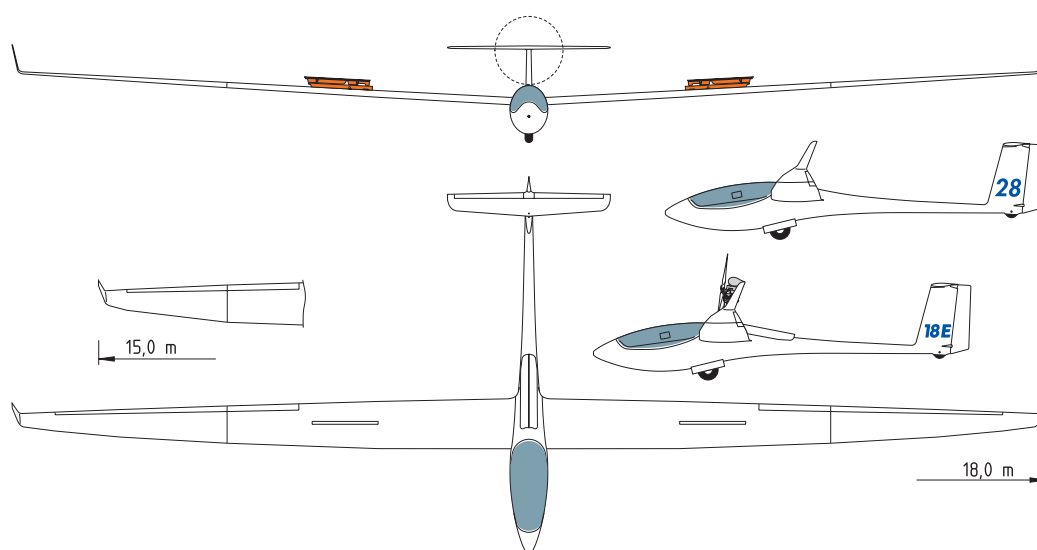


# ASW 28-18 ASW 28-18 E

...a class of its own!



...competence right from the beginning



# ASW 28-18

## ASW 28-18 E

After the very positive response to the ASW 28 many pilots requested an 18 meter version for greater flexibility and increased performance. Our challenge was to transfer the superb handling of the original ASW 28 into the ASW 28-18 and further improve an already elegant appearance. Now the aircraft is in series production and there can be no doubt that both objectives were fully met. Inner wing panels and interchangeable winglets are identical but different wingtips (for either 15 or 18 meter configuration) have created a versatile glider which is pleasing to the eye on the ground and sheer delight in the air.

With the ASW 27 / ASW 28 series we have proven that an award winning safety cockpit can provide excellent visibility and first class pilot comfort at the same time. We strongly believe that pilots can only maintain peak performance for any length of time if they are not confined to a narrow cockpit but have a bit of spare room in every direction.

Typical for all Schleicher sailplanes the integrated instrument panel hinges upwards with the canopy and is neatly enclosing the instruments. A "Roeger" canopy jettison system is neatly integrated into the canopy/fuselage design. Ample cockpit ventilation is provided by adjustable air intakes through the aircraft's nose, the clear vision panel and an airliner style vent on the right cockpit wall. A speed trim integrated into the control column, the comfortable seat cushions and the adjustable rudder pedals are only some of the many cockpit features that Schleicher customers have come to expect. Solar panels neatly integrated into fuselage or engine bay doors are available as optional extras.

A pneumatic tail wheel as well as dual releases for aerotow and winch launching are factory standard. Generous rubber shock absorbers and the big 350x125 tire (with hydraulic disc brake) characterise the retractable undercarriage. An overload weak link is incorporated for occupant protection in case of a very heavy landing and the entire unit is installed in an airtight compartment to avoid drag creating air leakage from the fuselage interior.

The efficient but at the same time low-drag airfoil of elevator and stabilizer was developed by the Delft University of Technology. Hallmark of the modern wing are the highly refined aerodynamics with blowhole technology for boundary layer control. (Best glide ratio is 48:1) The maximum all up weight of 575 kg allows wing loadings of up to 48 kg/m<sup>2</sup> and enables the ASW 28-18 pilot to take full advantage of a truly remarkable high speed cruise.

Partly as a result of large ailerons ASW 28-18 pilots enjoy a very fast rate of roll, superb control responsiveness and excellent control harmonization - all important pre-conditions for non-fatigue flying. Best of all, the docile flight characteristics extend right down to the speed of stall and beyond.

Assembly is made quick and easy by automatic control connections and an automatic hook up of ailerons on connection of the outer wing panels. In addition the wings of the ASW 28-18 are divided at just over half span for reduced weight and ease of rigging.

### The engine of the ASW 28-18 E

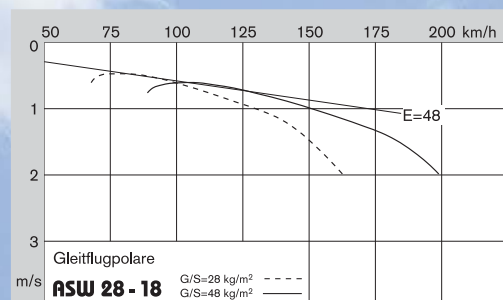
The lightweight 18hp SOLO 2350 2-cylinder engine powers the motorised "E" version. It comes with a direct driven 1.2 m diameter 2-bladed propeller and is extended/retracted by an electrical spindle drive. By doing away with the belt drive we have increased reliability, reduced weight and eliminated future maintenance. However, the most significant advance is a single control lever which makes engine management by far easier than any other system currently on the market. It is integrated in the left cockpit console and hence allows the pilot to keep his right hand on the control stick at all times. A mechanical propeller stop and a permanently installed refuelling pump are provided as factory standard. The rate of climb is just over 2kt or 1m/s.

With the ASW 28-18 E we continue our tradition of building first class motorized sailplanes. Top performance and superb handling are combined with a simple and most user friendly power plant currently available. Have a test flight and treat yourself to something special.

### MAIN DATA:

Wingspan (incl. winglets)	<b>15 m</b>	(49.2 ft)	<b>18 m</b>	(59 ft)
Wing area	10.5 m <sup>2</sup>	(113 ft <sup>2</sup> )	11.88 m <sup>2</sup>	(128 ft <sup>2</sup> )
Aspect ratio	21.43		27.27	
Height of winglet	0.5 m	(1.64 ft)		
Span of tail plane	2.85 m	(9.35 ft)		
Length of fuselage	6.585 m	(21.6 ft)		
Empty mass with minimum equipment	258 kg	(569 lbs)	270 kg	(595 lbs)
Max. take off weight	525 kg	(1157 lbs)	575 kg	(1267 lbs)
Max. wing loading	50 kg/m <sup>2</sup>	(10.24 lbs/ft <sup>2</sup> )	48.4 kg/m <sup>2</sup>	(9.91 lbs/ft <sup>2</sup> )
Min. wing loading	32 kg/m <sup>2</sup>	(6.55 lbs/ft <sup>2</sup> )	29 kg/m <sup>2</sup>	(5.93 lbs/ft <sup>2</sup> )
Max. water ballast	190 liters	(418 lbs)		
Useful load, max.	159 kg	(350 lbs)		
Max. pilot weight	115 kg	(253 lbs)		
Max. rough air speed	200 km/h	(108 kts)		
Vne	270 km/h	(145 kts)		
Min. speed	For 343 kg (756 lb) flight mass: 72 km/h (39 kts)		For 355 kg (783 lb) flight mass: 71 km/h (38 kts)	
Min. sink	0.56 m/s (110 ft/min)		0.48 m/s (94 ft/min)	
Best L/D (calculated)	45 (@ 100 km/h)		48 (@ 90 km/h)	

Retractable drive unit: SOLO 2350 - 2-stroke engine, 430 cc, 18 hp at 4200 rpm with direct driven 2-bladed fixed propeller made by A. Schleicher



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