

STEMME S10-VT technical data

Dimensions, External

Wing span	23.00 m (75 ft 5 1/2 in)
Wing aspect ratio	29.29
Width, wings folded	11.40 m (37 ft 4 1/2 in)
Length over-all	8.42 m (27 ft 7 1/2 in)
Fuselage max width	1.18 m (3 ft 10 1/2 in)
Height over-all	1.80 m (5 ft 10 1/2 in)
Wheel track	1.15 m (3 ft 9 1/4 in)
Wheel base	5.42 m (17 ft 9 1/2 in)
Propeller diameter	1.63 m (5 ft 4 1/4 in)

Dimensions, Internal

Cockpit width	1.16 m (3 ft 9 1/2 in)
Cockpit height	0.93 m (3 ft 1/2 in)

Areas

Wings, gross	18.70 m ² (201.3 sq ft)
Horizontal tail, gross	1.46 m ² (15.8 sq ft)
Vertical tail, gross	1.51 m ² (16.3 sq ft)

Weights and Loadings

Weight, empty	660 kg (1,455 lb)
Max T-O & landing weight	850 kg (1,874 lb)
Max wing loading	45.5 kg/m ² (9.31 lb/sq ft)
Max power loading	10.06 kg/kW (16.53 lb/hp)

Performance, general

Never-exceed speed (VNE)	146 kt (270 km/h; 168 mph)
Manoeuvring speed	97 kt (180 km/h; 112 mph)
Stalling speed (flaps in landing position)	42 kt (78 km/h; 48 mph)
g-limits	+5.3/-2.65

Performance, powered

Max cruising speed (MSL)	121 kt (225 km/h; 139 mph)
Max cruising speed (FL100)	140 kt (248 km/h; 154 mph)
Max rate of climb (MSL, MTOW)	4,14 m/s (817 ft/min)
Service ceiling	30,000 ft (9,140 m)
T-O run (MSL, ISA, MTOW)	205 m (675 ft)
T-O distance (MSL, ISA, MTOW)	447 m (1470 ft)
Max range with standard fuel (2x45 ltr)	697 nm (1,290 km)
Max range with extended fuel (2x60 ltr)	929 nm (1,720 km)

Performance, unpowered

Best glide ratio at 57 kt (106 km/h; 66 mph)	Up to 50
Min rate of sink at 45 kt (83 km/h; 52 mph)	Down to 112 ft/min (0.57 m/s)

Operational Noise Level, according to

German light aircraft rules LSL, chapter X	71.3 dBA
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