

DG-1001M

The self-launching two-seater sailplane

Highest performance in the 20m two-seater class combined with a powerful engine for trouble-free launching

- The DG-1001M is equipped with a new engine developed by the Solo company. This engine has several innovative features distinguishing it from the engines currently used in similar applications:
 - Electronic fuel injection for higher power output at high altitudes, lower fuel consumption and smooth operation at reduced power settings (cruise).
 - More power for safe self-launching, approx. 50 kW / 68 hp
- The DG-1001M retractable powerplant system features fundamental differences from the systems using toothed drive belts. In contrast to toothed belt drives where the engine must be mounted rigidly to the propeller mast, the DG-1001M features a flexible mount for vibration insulation. Instead of a toothed belt, 5 high-tech V-belts are used. These belts can tolerate the movements between engine and drive system. The system is redundant as any 4 of the 5 belts can take up the full load.
- Powerplant controls and indicators are similar to DG self-launchers for easiest handling. Controls and indicators are standard equipment in both cockpits.
- DEI-NT including stall warning and many additional features, as known from the DG-808C. Landing gear warning and warning in case of airbrakes not locked are integrated as standard features.
- Wing wheels and steerable tailwheel for easy taxiing. The wing wheels are mounted only approx. 8.5 m outboard of the fuselage centre to allow taxiing on narrow taxiways.

Technical data

Wingspan	m	20
Wing surface	m ²	17,53
Aspect ratio	/	22,82
Length	m	8,57
Fuselage height	m	1,0
Fuselage width	m	0,73
Horizontal tailplane span	m	3,2
Waterballast (optional)	max. kg (l)	160
Empty mass with basic instruments	approx. kg	520
Wing loading (with 80kg payload)	approx. kg/m ²	34,2
Max. mass	kg	790
Max. wing loading	kg/m ²	45
Max. speed	km/h	270
Stall speed (mass 600kg)	km/h	70
Certified for aerobatics	Category U simple aerobatics	

Performance

Best glide ratio (max. mass) approx.	/	1:47
at	km/h	124
Lowest rate of sink (single seated)	m/s	0,55
at	km/h	88

Powerplant

Engine	Solo 2 625 03 two-cylinder, two-stroke-engine with electronic fuel injection	
Power	50 KW / 68 hp	
Reduction gear	approx. 1:3	
Fuel capacity in fuselage tank	40 Liter	
Propeller	Composite	

DG-Flugzeugbau GmbH

Otto-Lilienthal-Weg 2 / Am Flugplatz • D 76646 Bruchsal • Germany
Tel: +49 (0) 7251 3020-100 • Fax: +49 (0) 7251 3020-200
e-mail: dg@dg-flugzeugbau.de • Internet: www.dg-flugzeugbau.de

issued: July 2010 subject to change

