



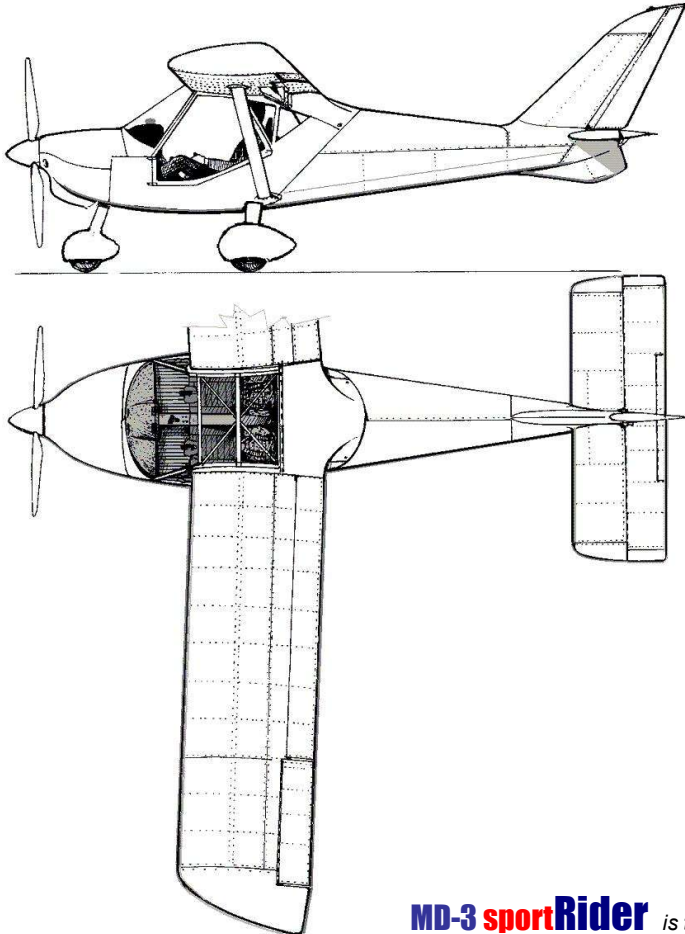
MD-3 sportRider

http://www.flyitalia.it

Classical LSA all-metal high-wing with side-by-side seats
designed to be ideal for training, cross-country and

flying for fun

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Wing span	9,0 m	
Length	5.9 m	
Wing area	9,9 m²	
	UL	sport
Engine ROTAX	912 UL - 80 HP	912 S - 100 HP
Empty weight	275 kg	295 kg
Max. take-off weight	576 kg	576 kg
Max. permissible speed	V_{NE}	250 km/hr
Max. cruising speed V _H	200 km/hr	222 km/hr
Optimal cruising speed	180 km/hr	200 km/hr
Stall speed	81 km/hr	81 km/hr
Stall speed with flaps	67 km/hr	67 km/hr
Max. climb rate _{MTOW}	4 m/s	6 m/s
fuel consumption _{economy flight}	13 l/hour	15 l/hour
Maximum load factor	+ 4 / -2, max. ultimate + 6 / -3	

MD-3 sportRider is the US brother of European Ultralight MD3 Rider from Flyitalia.

A team of experienced designers used for its design long time skills in aircraft development from commuters like L-410 through general aviation and gliders as Blanik to ultralights Gryf, Skyboy and a lot of other, flying in thousands worldwide - to offer the best combination between good quality and performances, simple structure, aerodynamic shape and enough cabin comfort to enjoy longer trips.



MD-3 Rider interior :

Original interior in first prototype uses pushing throttle and choke, twin-throttle version and level throttle version for option.

From first time of development we chosen interior can be our "trade mark" = sport car like, comfortable, ergonomic, safety.

Air diffuser Alfa Romeo, standard middle communication panel for radio, GPS map and FLYdat ...

Negative swept wing brings greater outside view, to enjoy cross-country flying.

For LSA prepared option of a *little heavier* **YOKE CONTROL** version



MD-3 Rider

easy access to pilot place :

Large carbon-fiber doors 120° openable to the front enables comfortable access into adjustable pilot seat.



MD-3 Rider has all-metal semi-monocoque airframe, primary glued and riveted from aluminum alloy sheets by blind rivets.

This design enables longer life and simple production and maintenance without great skills.

Fuselage cockpit cage is welded from steel tubes. Its basic structure has firewall, engine mounting hinges and front wheel bracket in the front, doors and main gear hinges on its sides and instrument panel frame and seats brackets in the middle.

Rear fuselage part is riveted from aluminum alloy sheets with integral fin and tail hinges in the rear.

Side canopy doors hinged on the front enables great view and easy access. Composite engine cowling and rear part of the canopy fairing create natural aerodynamic shape without usual square corners.

All metal wings with simple aerodynamically shaped strut and efficient MS(1)-0313 airfoil with Ω -beam pressed ribs and integral fuel tanks 100 liters. Ailerons and large flaps with 15°, 25° and 35° deflection are hinged on rear help-beam. Large aerodynamically shaped wingtips increase wing efficiency.

Classic-type all-metal **tail** has symmetrical NACA 12% profile. **Elevator** has electrically controlled trim-tab as a standard.

Full dual control with classic joysticks and pedals for both pilots. Flap lever, trim lever and throttle are placed on the central column. Yoke control as an option

Elevator is controlled by rods, **Ailerons** are controlled by rods and cables, **Rudder** is controlled by cables in plastic glide tubes.

Flaps are controlled by electric actuator placed in the cockpit ceiling., for UL version by hand lever with 15° and 30° deflection

Wings can be (optional) **quickly folded** to the tail and horizontal tail surfaces can be dismantled for transportation or storage.

Instrument panel with central engine instruments and drivers panel, full cockpit upholstery with adjustable seats.

Tricycle type **landing gear**, with steerable 13x4" nose wheel, composite legs of main undercarriage and front wheel leg and fork welded from steel tubes. 14x4" main wheels have hydraulic disc brakes, controlled by lever on the central column.

MD-3 Rider basic design philosophy:

Good performances, cockpit comfort, peculiar styling, great life, low cost, and exceptional aptitude for cross-country.

Designed according to the Czech and Germany UL requirements, and according LSA limits.