ACCESSORIES
FOR THE FLIGHT

LIGHT ALLOY STREAMLINED TUBING

Streamlined tubing in light alloy 6005 – T5, used by the most famous U.L.M. Manufacturers, also certified, for the construction of wing struts.

ART. 10.001.000	(A x B)	81,75 x 34,00	mm	1.100 gr/m
ART. 10.002.000	(A x B)	71,00 x 30,40	mm	840 gr/m
ART. 10.003.000	(A x B)	52,50 x 22,50	mm	530 gr/m
*ART. 10.004.000	(A x B)	39,50 x 14,80	mm	270 gr/m

Bars' lenght: 6400 mm

WHEELS

WHEELS WITH "HYDROCONIC" BRAKES
Our new and advanced braking system has now been introduced in the sport aviation sector. This type of brake, called **"HYDROCONIC"**, demonstrates its superb quality either on fast and normal performance crafts. Also provides excellent aerodynamics, thanks to its clean and protrusion free design.
The set is now available also with Avional axle (instead of steel), with a weight reduction of gr. 370 each wheel.
Available sizes: 5.00x5" - 5.00x6" - 6.00x6"

WHEELS WITHOUT BRAKE
Available sizes: 4", 5", 6". They may be used with different types of brakes. For medium quantity orders we can manufacture wheels on Customer's design.

TYRES
Available sizes:
4,00 x 6" (4 plyes) - 5,00 x 6" (4/6 plyes) - 6,00 x 6" (4/6 plyes)
4,00 x 5" (4 plyes) - 5,00 x 5" (4/6 plyes) - 4,00 x 4" (4 plyes)

MASTER BRAKE PUMP
Master brake pump we recommend for its quality and for the easy availability of spare parts.

GASCOLATOR

If you need a fuel filter and you want also a quick drain for the water which may be present in the fuel, this is, for sure, the best, cheapest and most functional solution. On demand We have different models, for the arrangement of the inlet and the outlet of fuel, either with or without the pressure control.

alisport srl

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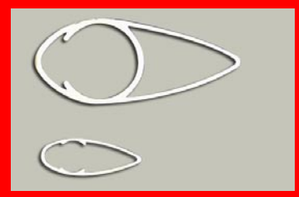
IN FLIGHT VARIABLE PITCH PROPELLERS IDROVARIO

WHEELS WITH "HYDROCONIC" BRAKES

LIGHT ALLOY STREAMLINED TUBING



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PROPELLERS PRODUCTS DIVISION

0506

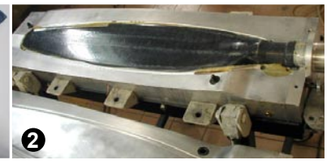
IN-FLIGHT **VARIABLE PITCH PROPELLERS "IDROVARIO"**

Experience acquired by Alisport into design and production of composite structures perfectly integrates AVTEK know-how, a Company from years specialized in the manufacturing of ultralight avionic components, in particular of **in-flight variable pitch propellers "IDROVARIO", with hydraulic control system.**
The new structural design and the new production technology allow us to grant a very high product reliability, joined with an **important weight reduction.** All our propellers are now characterized by **blades entirely made with carbon fiber** and by the use of **"pre-preg" materials.**
The hydraulic control system is the most advanced, lightweight and reliable actually available.The system is operating with hand control and with electro-hydraulic control, through the application of a ratio-motor, controlled by a simple switch or by "constanst speed electronic governor". Our propellers are suitable for the installation on almost all Rotax engines, at two or four strokes.

BLADES

This new blades generation has a **structure entirely made with epoxy pre-preg carbon fabrics:**

❶ - important weight reduction: this means a lower stress generated by the centrifugal force and by the engine torque.
- very high strength joined with an adequate stiffness.



❷ Maximum reliability of the manufacturing process:
- fabrics cut out made on a numeric control cutting machine.
- right weight ratio resin/fabric.
- precise checks of lamination plans.
- curing made directly into the mould, with control and recording of temperatures.

The blades project has been realized by using CAD-3D softwares and the strength verifications have been done with "finit element analysis (F.E.A.), with tensile-bending static load test ❸ and with dynamic test on a bench.❹

STANDARD BLADE
available in right and left versions, these blades have demonstrated remarkable performances, in both the two for 80 hp engines and three blades propellers for 100 and 120 hp engines. **Blade weight 1.65 lbs.**

HS BLADE
available in right version, these blades are perfect for high speed fliers. **Blade weight 1.76 lbs.**

BAYBLADE
Available in right version for aircrafts with reduced ground clearance and high performances. **Blade weight 1.65 lbs.**

MODEL	PROP Ø		WEIGHT**		INERTIA MOMENTUM		MAX. REVS	ENGINE POWER	ROTATION DIRECTION
	(mm)	(in.)	(kg)	(lbs)	(kg* cm²)	(lbs* sq. in.)	(revs/1')	(HP)	
2 BLADES - HS	1760	69,29	5,8	12,8	3260	1100	2450	100/115	RH only
2 BLADES - STD	1720	67,72	5,7	12,5	2940	1000	2560	80	*RH* or *LH*
3 BLADES - STD	1760	69,29	7,9	17,4	4400	1500	2560	80/100/115	*RH* or *LH*
2 BLADES - BB	1620	63,78	5,4	11,84	2000	680	2560	80	*RH*
3 BLADES - BB	1660	65,35	7,6	16,67	3370	1146	2560	100	*RH*
4 BLADES - BB	1670	65,75	10,0	21,93	4600	1565	2560	115	*RH*

**including hub - excluding spinner

CONTROL SYSTEM DEVICES

A) ROTATING JOINT
Rotating hydraulic joint let oil to flow through the reduction gear shaft.

B) MANUAL DEVICE
For controlling propeller pitch.

C) ELECTRIC PUMP
Electric oil pump for the regulation of the propeller pitch, controlled by a manual switch or connected to an "electronic governor" which transforms the propeller from a simple adjustable pitch to a "constant speed" propeller, while flying.

ELECTRONIC GOVERNOR

Perfectly improved, these instruments permit the electronic control of the pitch, transforming the propellers operated with electric oil pump in "constant speed" propellers. The electronic governors we supply are characterized by a simple operative concept, a strong structure and an excellent reliability.

Mod. Autoprop Ø 80 mm (3 1/8")
Mod. Flybox Ø 57 mm (2 1/4")

HYDRAULIC GOVERNOR

The hydraulic governor, placed on the selected engine, is giving you the possibility of piloting propellers, assuring exceptional continuity of operation and reliablity.

Hydraulic Governor Mod. JIHOSTROJ

SPINNERS

The spinners are supplied complete with plate and trimmed. On demand the working for the blades passage is carried out.

1) "ALU" SPINNER (in alluminium sheet)
Ø 254 mm (Ø 10")
Ø 310 mm (Ø 12 1/4")

2) SPINNER "CARBON" (in carbon fibre)
Ø 200 mm (Ø 7 7/8")
Ø 240 mm (Ø 9 1/2")
Ø 300 mm (Ø 11 3/4")