

ARCOBALENO FORMULA



The Arcobaleno Formula was designed with the precise purpose to put a powerful, safe and reliable race car on the market. It is the ideal car for the racing enthusiasts looking for fun, excitement and, above all, for the young people coming from Karting willing to approach the racing world.

The Arcobaleno offers high performance and maximum safety, with very simple and extremely reliable mechanics. In order to get reliability, to optimize the power/weight ratio and to keep the maintenance costs low, it is powered by a standard motorcycle engine with a power output of 140 HP. The total weight of the car is 816 lb. (370 kg). Particular care was taken in the frame design. Its strength capability was designed to exceed the expected engine power. Rigid frame, simple and efficient technical solutions, adjustable suspensions, possible aerodynamic adjustments coupled with the specific tires which quickly dissipate the kinetic energy in case of spinning: All these features make the Arcobaleno Formula a very professional single-seat car, which involves the driver to constantly search for his own limits without omitting the pleasure of a fast and exciting track experience.

TECHNICAL DETAILS:

CHASSIS: Cro-moly tube space frame, with aluminum panels riveted and glued to frame.

SUSPENSIONS: Front suspension configuration consists of two upright coils over shocks with pull-rods. The rear suspension design consists of two horizontal coils over shocks with push rods. Both front and back have 12 adjustment settings.

BRAKES:

(2) Front discs 10.63" (270 mm) diameter by .45" (11.5 mm) thick, single rear ventilated disc 9.45" (240 mm) diameter by .85" (21.5 mm) thick, 4 pistons calipers.

ENGINE:

YAMAHA R1. YZF 1000 cc.

140 BHP @ 10,000 RPM, 4 cylinder, 4 stroke, 20 valves. Forced lubrication system with oil cooler. Water-cooled. 1.5" (38 mm) MIKUNI carburetors, with Rainbow Spark by Pegaso, with a programmable intrusion-proof rpm limiting device. (8,000 to 12,000 rpm)

GEARBOX:

5 speed sequential.

POWERTRAIN:

Chain with sprockets + reverse gear (Arcobaleno), 4 available different rear sprocket ratios for maximum velocity from 165 to 230 Km/h. (Ratio: 13/42, 14/38, 14/40, 17/39)

CAR CHARACTERISTICS:

WHEEL BASE: 88.60' (2250 mm)
FRONT TRACK: 55.12' (1400 mm)
REAR TRACK: 53.35' (1355 mm)
MIN GROUND CLEARANCE: 1.77' (45 mm)
MAX HEIGHT: 43.31' (1110 mm)
OVERALL LENGTH: 139.76' (3550 mm)
OVERALL WIDTH: 63.00' (1600 mm)
WEIGHT: 815.73 lb (370 Kg)

RIMS:

Speedline magnesium 6.5' x 1'(165 mm x 25 mm) front, 8' X 13' (203 mm x 330 mm) rear

TIRES:

AVON Front: 6' x 19.5' x 13' (152 mm x 495 mm x 330 mm)
AVON Rear: 8' X 19.5' X 13' (152 mm x 495 mm x 330 mm)

ADJUSTABLE WINGS:

Front and rear wings already low velocity operation.