

# RS125 RS50 THE SCHOOL OF CHAMPIONS

**aprilia**

**RS**  
125

**RS**  
50



**2008**  
WORLD CHAMPIONS

GP250 CONSTRUCTOR  
GP125 CONSTRUCTOR



# RS125 RS50 THE SCHOOL OF CHAMPIONS

Aprilia's vast experience and advanced technology have always set the pace for 125 supersports. The best selling RS 125 is capable of satisfying the dreams and aspirations of young riders and generating a sense of true passion and challenge. With its stylish design and advanced technology, RS 125 symbolises Aprilia's supremacy in this area, a supremacy that can take you to new heights. A concentration of unrivalled technical solutions, RS 125 has all the style and aerodynamics of a real GP racer. On the track and on the road, it is a superb launch pad for your riding talent and racing passion. RS 125: dedicated to the champions of tomorrow.

**2008**  
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GP250 CONSTRUCTOR  
GP125 CONSTRUCTOR





# RS125 RACING TECHNOLOGY



## RACING INSTRUMENTATION

The compact and lightweight dashboard provides all the functions of a real racing unit. It includes an analogue rev counter and a multi-functional digital display with handlebar controls to access tachometer, trip counter, battery voltage meter, clock and 20 lap timer, coolant temperature gauge and fuel reserve indicator. The unit also incorporates provision for interfacing with a racetrack finish line timing system.

## COMFORT AND SAFETY

The upside down fork and rear suspension with rising rate linkages guarantee the highest levels of handling, safety and comfort, both in everyday traffic and on the racetrack. Even the brakes represent the best the market currently has to offer. The radial front caliper is a four piston unit and is coupled with a metal braided brake hose and a 320 mm floating disc. The rear brake also combines with a 220 mm disc and metal braided brake hose. The result is precise, balanced and powerful 'GP' style braking.

## RACING WHEELS

The 'Y' spoke alloy wheels have six spokes at the front and five at the rear. These low weight, high strength wheels are fitted with tubeless radial tyres for unrivalled agility and superb road-holding under all conditions.

## POWER AND RELIABILITY

The famous liquid cooled, single cylinder, two-stroke engine that drives the RS 125 sets the standard for 125 cc powerplants. Derived from Aprilia's vast competition experience, it is reliable on the road and powerful on the track, thanks to refined technical solutions like reed valve induction in the crankcase and an anti-vibration countershaft. And of course it is homologated to Euro 3 standards for maximum performance plus respect for the environment.



## ADVANCED AERODYNAMICS

With its aggressive, penetrating and exciting design, the RS 125 instantly expresses all your desires for victory. Its sleek lines are the result of the latest aerodynamic developments and extensive wind-tunnel testing. The RS 125 offers unrivalled protection against turbulence. In fact, everything about it, from its nose fairing with latest generation twin headlights to its mean-looking and streamlined tail with integrated seat and powerful rear lights is designed to offer minimal resistance to the air.

## GP SWINGARM

One of the most prestige components on the new RS 125 is its die-cast aluminium alloy swingarm. In addition to guaranteeing the highest degree of torsional rigidity of any production 125, the swingarm's special design also lets you lean further than ever on the track without touching the asphalt.

## RACE-WINNING AGILITY

The RS 125's sophisticated and lightweight frame is developed from the superb racing frames of Aprilia's amazing 125 GP bikes. Made from polished aluminium alloy, it guarantees extremely high torsional rigidity, and delivers maximum control and agility under racing conditions.

# 125cc





**RS125**   **RS50**





# RS50 RACING TECHNOLOGY



#### ON BOARD COMPUTER

The performance of the RS 50 is kept constantly under control just like that of a racing machine. The instrumentation includes a rev counter, odometer, trip counter, a racing chronometer with a 20 lap memory, and a service indicator.

#### RACING FRAME

The RS 50's aluminium double beam frame features an extruded profile and internal reinforcement to deliver unrivalled control in bends and amazingly agile direction changes.

**THE MOTORCYCLE OF TOMORROW'S CHAMPIONS.** If you've always dreamed of lining up on a GP starting grid, and leading the field on a true supersport, then the RS 50 is the bike for you. Its technical solutions come directly from the pits of the MotoGP World Championship. In fact, everything about the RS 50 is derived from the Aprilia's 2008 World Champion 125 and 250 GP bikes. Its sleek, aggressive and irresistible looks, for example, are designed for maximum aerodynamic penetration. So stand out from the crowd on the RS 50: the bike of tomorrow's champions.



#### RACING SUSPENSION

The swingarm is a double member, extruded aluminium unit with reinforcement truss and a hydraulic monoshock.

## 50cc

**WORLD CHAMPIONSHIP TECHNOLOGY.** With an ultra-modern two-stroke engine, racing frame and suspension, advanced brakes and racetrack wheels, the RS 50 offers you unrivalled performance, control and safety. Its ergonomic controls, fuel tank and seat are designed to fit your body; its fairing offers all-round wind protection; its footrests provide the ultimate in support. Only Aprilia can give you so much, plus the prestige of a legendary name.



#### RACING EXHAUST

The under-seat exhaust ensures perfect balance and makes a major contribution to the bike's exceptional, aerodynamic form. The system is manufactured using racing technology to ensure maximum power output.



#### RADIAL CALIPER

The RS 50's radial front brake is powerful and smooth to guarantee maximum active safety.

#### LIGHTWEIGHT WHEELS

The 'Y' spoke wheels feature the same design as those fitted to Aprilia's GP bikes. Lightweight and balanced for stability in bends, these wheels are specially designed for use with the latest generation of radial tyres.





RS125

Aprilia Black



Fluo Red



Replica SBK



RS50

Aprilia Black



Fluo Red



Replica SBK



Engine	Liquid cooled, single cylinder two stroke. Aluminium cylinder with Nikasil coated liner. Read valve intake. Separate lubrication. Homologated to Euro 3 standards.
Bore by stroke	54 x 54.5 mm
Displacement	124.8 cc
Compression ratio	12.5 ± 0.5 : 1
Carburettor	Dell'Orto VHST Ø 28 mm
Ignition	Electronic CDI ignition.
Starting	Electric.
Alternator	12 V – 180 W
Lubrication	Separate mixing with variable displacement, volumetric pump.
Gearbox	6 speed.  1 <sup>st</sup> 10/30 (0.33); 2 <sup>nd</sup> 14/29 (0.48); 3 <sup>rd</sup> 17/27 (0.63); 4 <sup>th</sup> 19/25 (0.76); 5 <sup>th</sup> 21/24 (0.87); 6 <sup>th</sup> 22/23 (0.67).
Primary drive	Gearbox: 63/19 (3.31)
Final drive	Chain: 17/40 (2.35)
Clutch	Multi-disc in oil bath.
Frame	Sloping twin-spar frame in thin wall box section cast aluminium, with reinforcement cross-ribbing.

Front suspension	Upside down hydraulic fork, Ø 40 mm. Wheel travel 120 mm.
Rear suspension	Swingarm with asymmetric members in thin wall box section cast aluminium. Hydraulic monoshock with adjustable spring preload. Wheel travel 120 mm
Front Brakes	Floating Ø 320 mm disc. Radial caliper with four differential diameter pistons, Ø 32 mm – Ø 27 mm.
Rear Brakes	Single Ø 220 mm disc. Caliper with two Ø 30 mm pistons.
Wheels	Aluminium alloy. Front 3.00 x 17"; rear 4,00 x 17".
Tyres	Tubeless radial. Front 110/70 17"; rear 150/60 17".
Dimensions	Overall length 1,955 mm Overall width (at handlebars) 720 mm Overall height (at windshield) 1,100 mm Seat height 805 mm Wheelbase 1,345 mm
Tank	14 litres (3.5 litre reserve)

Engine type	Liquid cooled, single cylinder two stroke.
Bore and stroke	39.86 x 40 mm
Displacement	49.9 cc
Compression ratio	11.5 :1
Carburettor	Dell'Orto PHVA Ø 17.5
Ignition	Electronic C.D.I.
Starting	Electric
Battery	12 V – 4 Ah
Lubrication	Automatic mixer.
Gearbox	6 speed. Ratios: 1 <sup>st</sup> 11/34; 2 <sup>nd</sup> 15/30; 3 <sup>rd</sup> 18/27; 4 <sup>th</sup> 20/24; 5 <sup>th</sup> 22/23; 6 <sup>th</sup> 23/22
Primary drive	Gears. Ratio: 21/78
Final drive	Chain. Ratio: 14/53
Clutch	Multi-plate.
Exhaust emissions	Euro 2
Front suspension	40 mm upside down fork; wheel travel 120 mm.
Rear suspension	Double reinforced member aluminium swingarm with bracing arch; hydraulic monoshock; wheel travel 110 mm.

Frame	Aluminium twin beam frame with extruded profiles and internal reinforcement.
Front Brakes	Radial caliper with two 28 mm opposed pistons; 300 mm Ø stainless steel disc; braided brake hose.
Rear Brakes	180 mm stainless steel disc; caliper with two 25 mm opposed pistons; braided brake hose.
Rims	Light alloy 6 ‘Y’ spokes. Front: 2.75 x 17". Rear: 3.50 x 17".
Tyres	Tubeless radiali Front: 110/80 - 17". Rear: 130/70 - 17".
Dimensions	Overall length 1965 mm. Overall width 720 mm. Max height at windshield 1.100 mm. Seat height 810 mm. Wheelbase 1,310.5 mm.
Tank capacity	13 litres.

**Euro3** RS 125 is an ecological vehicle with communitarian homologation Euro 3, in the respect of the acoustic and atmospheric pollution limits.

**Euro2** RS 50 is an ecological vehicle with communitarian homologation Euro 2, in the respect of the acoustic and atmospheric pollution limits.

Drive safely always wearing a helmet and protective clothing. Observe the laws of the road and respect the environment. Carefully read the owners' handbook. Photographs, technical data, specifications and colors shown in this brochure refer to the Italian market version and may be subject to change without prior notice. Ask your official Aprilia dealers for full details. In order to maintain your machine in a safe and efficient manner, always demand official Aprilia Spare Parts, which are guaranteed by Aprilia Quality Service in respect of current legislation.

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Dealer



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