

**DESIGNED
FOR RACERS**
**BUILT
FOR RIDERS**

aprilia[®]

RSV4 RF
RSV4 RR

#be **a** racer

RSV4^{RF}

#be **a** racer

Being a Racer is not a profession but a way of being,
something that is inside us, in our DNA.

If you love to get on your bike, feel the wind glide along
the fairing and watch the world go by through your visor,
we understand you.

We feel like that from our very first roar.

Are you a real racer?
Visit our website bearacerclub.aprilia.com
and join the club



WINNING TECHNOLOGY FROM RACE TO ROAD

APRILIA RSV4 IS THE WORLD CHAMPION BIKE IN THE WORLD SUPERBIKE. WITH 294 GRAND PRIX RACES WON IN WORLD CHAMPIONSHIP GP MOTORCYCLE RACING, APRILIA HOLDS THE RECORD FOR THE MOST WINS OF ANY EUROPEAN MANUFACTURER IN THE HISTORY OF MAXIMUM MOTORCYCLE COMPETITION. THESE ARE JOINED BY AN IMPRESSIVE 54 WORLD TITLES: 38 IN WORLD CHAMPIONSHIP GP MOTORCYCLE RACING (20 IN 125 AND 18 IN 250), 7 IN SUPERBIKE (RIDER AND MANUFACTURER DOUBLE WIN IN 2010, 2012 AND 2014 AND MANUFACTURER IN 2013) AND 9 IN OFF ROAD DISCIPLINES (7 IN SUPERMOTO AND 2 IN TRIAL). TECHNOLOGY, INNOVATION: APRILIA HAS RACING IN ITS BLOOD, IN ITS HEAD, IN ITS DNA.



**“APRILIA RACING
IS THE MOST SUCCESSFUL
EUROPEAN TEAM”**

aprilia®

RSV4^{RF}



SUPERBIKE

TO CELEBRATE THE ARRIVAL OF THE NEW RSV4, APRILIA IS ALSO OFFERING A LIMITED EDITION OF 500 NUMBERED UNITS CALLED THE RSV4 RF, THAT COMES STANDARD WITH THE RACE PACK, WHICH INCLUDES FORGED ALUMINIUM WHEELS AND ÖHLINS SUSPENSION (SHOCK ABSORBER, FORK AND STEERING DAMPER), AS WELL AS DEDICATED GRAPHICS.

aprilia®

RSV4RR



SUPERTECH

APRILIA RSV4 RR IS AVAILABLE IN TWO ATTRACTIVE COLOUR SCHEMES, BOTH MATTE, ON A BLACK AND GREY BASE (BUCINE GREY AND ASCARI BLACK).

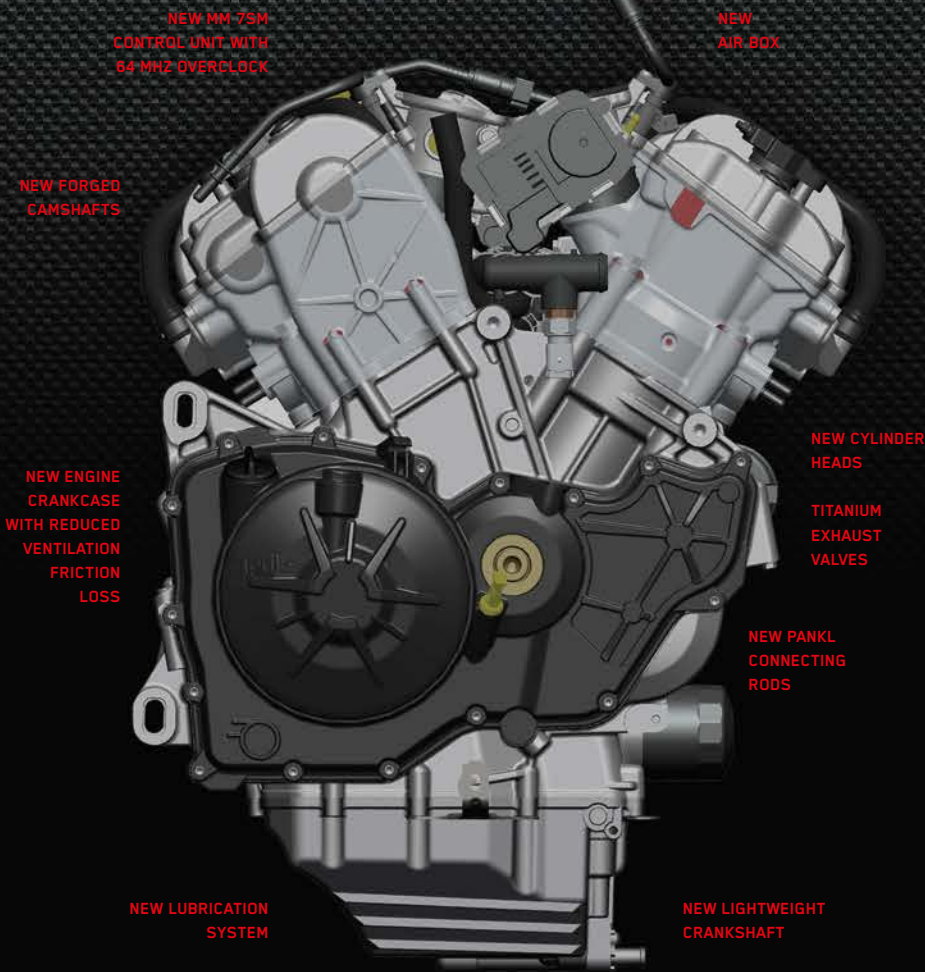
ALSO AVAILABLE IN RACE PACK VERSION.

201HP

RSV4

01 POWER

THE REVOLUTION OF THE RSV4 STARTS FROM THE HEART OF THE BIKE, YOU CAN HEAR THE OVERWHELMING ROAR OF THE 65° V4 ENGINE AND IS MEASURED BY THE FANTASTIC PERFORMANCE ON THE RACE CIRCUIT. THE 65° V4 ENGINE IS INDEED THE MOST REVOLUTIONARY AND AT THE SAME TIME THE MOST POWERFUL EVER BUILT BY APRILIA.



NEW MM 7SM CONTROL UNIT WITH 64 MHZ OVERCLOCK

NEW AIR BOX

NEW FORGED CAMSHAFTS

NEW CYLINDER HEADS

TITANIUM EXHAUST VALVES

NEW PANKL CONNECTING RODS

NEW LUBRICATION SYSTEM

NEW LIGHTWEIGHT CRANKSHAFT



ONLY 225 MM

NARROW V

Its "narrow" V architecture provides an engine as compact as a twin-cylinder, perfectly integrated in the chassis, and at the same time, with an extreme cylinder bore, improving performances in terms of power and torque. Vibrations mitigated thanks to a balancing countershaft.



HIGH DUCTS



LOW DUCTS



RACE READY

Intake system with ducts at variable height based on the engine speed, which optimises the level of torque requested at every moment and at every speed. Ultra-lightweight materials, such as titanium and magnesium, reducing the overall weight.

DUAL INJECTION

Advanced solutions also with regard to the fuel system. Two injectors per cylinder: - one after the throttle valve for excellent speed tractability - the other, a fan pattern injector, in the airbox, which comes into play at higher loads and engine speeds, for more effective fuel atomisation and vaporisation and increased power output. To ensure the right torque and ideal power delivery in all situations.



CASSETTE TYPE GEARBOX

The cassette type gearbox is a typical racing solution for optimal engine management on any track, thanks to rapid gear ratio replacement and short gearbox maintenance times. The three lowest gears are spaced closer for extra speed on the straight. The clutch equipped with mechanical slipper system improves control over the engine brake and the bike's stability during any hard braking phase.



ADVANCED ELECTRONICS

In the 65° V4, the most refined engine engineering is combined with the most advanced electronics with the new MM 7SM control unit with 64 MHZ overclock. The Multimap Ride-by-Wire technology offers endless possibilities in controlling power delivery, with the possibility to change the "character" of the bike, selecting one of the three mappings available on the handlebars:

T - TRACK Developed for top riders: the optimal power delivery at every instant and unmatched smoothness

S - SPORT A very reactive response to the minimum actions on the twistgrip. For the rider that wants to feel a seamless connection with more than 200 hp

R - RACE Directly derived from Aprilia's SBK racing bikes: minimal engine brake intervention during deceleration and optimal throttle response at every opening, for the ultimate lap time

V465°

02 CONTROL

RSV4

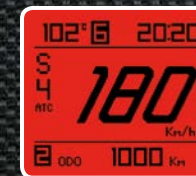
RSV4 RF AND RSV RR ARE ONE GENERATION AHEAD OF EVERYONE ELSE, ON THE TRACK AND ON THE ROAD, THANKS TO THEIR NEW, EXCLUSIVE PERFORMANCE RIDE CONTROL PACKAGE, INTEGRATED WITH RIDE-BY-WIRE, DERIVED FROM THE INCREDIBLE SUCCESS IN THE WORLD SBK CHAMPIONSHIP. A RELIABLE, CUSTOMISABLE ASSISTANT TO HELP YOU CONTROL THE POWER OUTPUT AND TRACTION OF THE BIKE, SETTING NEW BENCHMARKS IN PERFORMANCE AND RESULTS. FOR AN UNPRECEDENTED RIDING EXPERIENCE.

a PRC

The digital display offers two different screens that hold the most significant information for road and track use, respectively:

ROAD

Shows road speed in the foreground, plus additional indications such as engine mapping and ATC setting, shift position, speedometer, temperature and clock.



RACE

Highlights the lap timer, shift position, engine mapping and ATC setting, with a smaller space for speed and temperature indications.



ATC

(Aprilia Traction Control)

MAXIMUM TRACTION IN TURNS

Helps to achieve better grip, thanks to a patented "slip control" system, fine tuning power delivery according to bank angle. Smooth modulation gives the rider a better feeling of the drive wheel, allowing him to choose from 8 settings, even while riding and without closing the throttle, using a dedicated joystick. The system includes an automatic setup procedure to record and adjust to wheel diameters so as to ensure accurate response regardless of tyre and brand.



ALC

(Aprilia Launch Control)

LIGHTNING-FAST STARTS

It provides optimal power delivery when setting off from a standing start, working hand in hand with the wheelie control system to maximise start-off acceleration. It is set from the menu on the dashboard on 3 levels, with the bike standing still, and is then "engaged" at the time of use.



AWC

(Aprilia Wheelie Control)

TOTAL CONTROL UNDER ACCELERATION

Optimal acceleration control is achieved by a patented "wheelie detection" control system that gently places the wheel back down onto the road. The system has three settings that can be selected at standstill independently of the other systems.

AQS

(Aprilia Quick Shift)

GEAR CHANGE IN MILLISECONDS

This electronic gear change system allows you to shift up without using the clutch and without closing the throttle, reducing the decrease in engine speed and improving lap time on the track. There are 3 system kick-in calibrations according to three different engine rpm thresholds.

MODE BUTTON AND ATC SETTING JOYSTICK

STARTER AND MAP SELECT BUTTON

The AWC and ALC systems are set up from the instrument panel menu, using the "mode" button on the left of the handlebars. The ATC system, on the other hand, can be set to one of the eight available settings at any time, even with the throttle open, via a user-friendly joystick on the left of the handlebars.

AUTO-CALIBRATION

The APRC system is able to self calibrate to adapt traction control reaction to new tyres different from the original equipment.

ABS

03 BALANCE

ABSOLUTE BALANCE. THE CHASSIS WAS DESIGNED AROUND THE 65° V4 ENGINE, TO ATTAIN PERFECT CENTRALISATION OF MASSES. A RESULT OPTIMISED BY THE POSITION OF THE TANK, WITH FUEL MOSTLY UNDERNEATH THE SADDLE, TO REDUCE THE BALANCE DIFFERENCES BETWEEN FULL AND EMPTY.



RACE ABS

RSV4 RR and RSV4 RF adopt the highly advanced RACE ABS as standard. The new anti-lock braking system was conceived to guarantee maximum safety on the road, but it was developed to help obtain optimum performance on the track. Aprilia worked in close cooperation with Bosch to define optimum calibration of the ABS 9MP unit, which represents the utmost in refinement and technology available today. The system weighs in at a record 2 kg.



RACING SUSPENSION

Fully adjustable suspension that can be adapted to any type of route, whether track or road. 43 mm front fork and Sachs progressive monoshock absorber.

STEERING DAMPER

The steering damper guarantees impeccable high speed stability and millimetre precision in setting the bike up for turns.

RACING BRAKES

RSV4 has a top-of-the-range front brake system: powerful, precise and modular. Brembo M430 monobloc calipers with 4 pistons and radial pump, which hold a 320 mm disc with aluminium flange. The rear brake consists of a Brembo calliper with 2 pistons and 220 mm disc: the best available in racing technologies.

04 TRACK READY

RSV4

THE ONLY STANDARD BIKE THAT IS CUSTOM-MADE FOR YOU. RSV4 RR IS THE FIRST STANDARD FOUR CYLINDER BIKE THAT IS TRULY "TRACK READY", THANKS TO A REVOLUTIONARY DESIGN PHILOSOPHY, THE COMPONENTS, THE MOST ADVANCED RACING TECHNOLOGY CURRENTLY AVAILABLE AND THE ENDLESS SETTING POSSIBILITIES. ANY FIT LIKE A GLOVE TO EACH RACING STYLE AND TRACK TYPE.

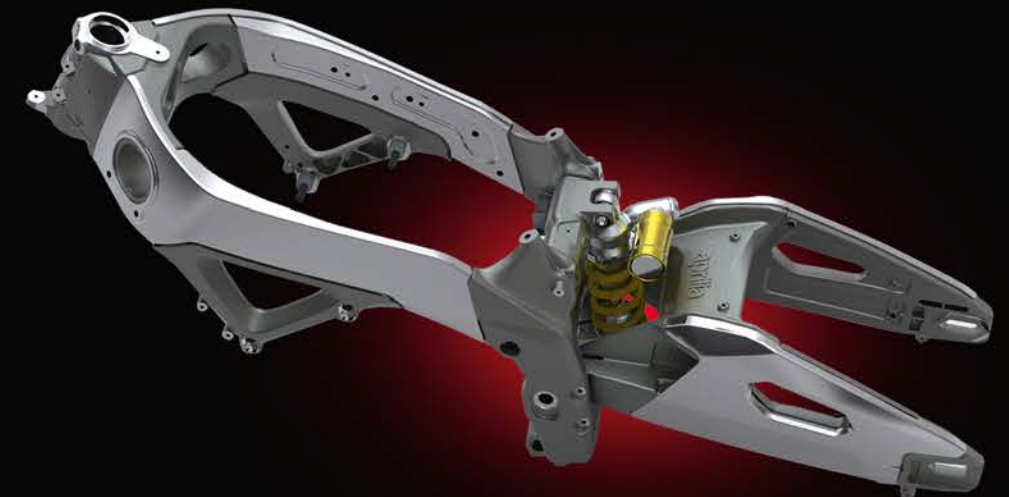


ALUMINIUM FRAME

The frame is a masterpiece of technology in full view, made with cast and pressed elements, according to Aprilia's tradition. It boasts a high level of torsional and bending rigidity for perfect control and feeling when entering and completing a turn. Also the swingarm, the result of Aprilia's racing experience, is a rigid and ultra-light "mix" of cast and pressed aluminium elements, providing exceptional reactivity when setting the suspension.

RACE-READY ADJUSTMENTS

For the first time on a standard bike, in addition to fully adjustable suspension, the rake and position of the headstock can also be adjusted, as well as the height of the rear end, of the swingarm pin and even the engine position. No other bike on the market provides, with this ease, such a high level of customisation. With Aprilia RSV4, you go on the track and are first right away!



ELONGATED SWINGARM

The elongation of the rear swingarm has improved traction out of turns at full throttle.

05 ACCESSORIES

CUSTOMISED ACCESSORIES. ENHANCE YOUR RSV4 WITH THE RACE PACK COMPONENTS: FROM THE FORK TO THE ÖHLINS SHOCK ABSORBERS, FROM THE CARBON COMPONENTS TO THE FORGED WHEEL RIMS. OR CUSTOMISE IT WITH ORIGINAL ACCESSORIES BORN FROM APRILIA RACING EXPERIENCE: SUCH AS THE ALUMINIUM PARTS OBTAINED FROM THE BILLET OR THE SLIP-ON EXHAUST BY AKRAPOVIC. MAKE YOUR RSV4 EVEN MORE TECHNOLOGICAL AND HIGH PERFORMANCE.

DISCOVER ALL THE ORIGINAL APRILIA ACCESSORIES AT WWW.APRILIA.COM

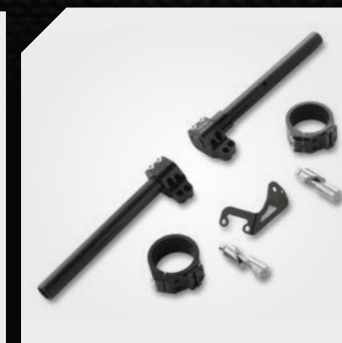
V4-MP TELEMETRY



THE FUTURE OF BIKE AND RIDER INTERACTION. WITH V4-MP RACING TELEMETRY ARRIVES ON YOUR BIKE. TURN YOUR SMARTPHONE INTO AN ACTIVE DEVICE FOR ADJUSTING APRILIA ELECTRONIC SYSTEMS. A NEW AND USEFUL TOOL THAT ENHANCES THE EXTENSIVE CATALOGUE OF ACCESSORIES FOR THE RSV4.

With this exceptional application, your smartphone becomes a veritable sophisticated on-board multifunctional computer. Communication between vehicle and rider becomes active: from your mobile phone you can change the bike settings, plus get tips in real-time on how to improve track performance in perfect safety. Some of the more prominent features of V4-MP include:

- ACTIVE ELECTRONIC SETUP
- ADAPTIVE RACE ASSISTANT
- ADVANCED TELEMETRY DASHBOARD



RACING ACCESSORY: intended solely for motorcycles used on tracks closed to public traffic and must not be used for any other purpose.



RSV4 RR
ASCARI BLACK



RSV4 RR
BUCINE GREY



RSV4 RR RACE PACK
ASCARI BLACK



RSV4 RR RACE PACK
BUCINE GREY



RSV4 RF (RACE PACK STANDARD)
SUPERPOLE

Engine

Aprilia V4 65° , 4-stroke, liquid cooled engine

with double overhead camshaft (DOHC) and four valves per cylinder

Fuel

Unleaded petrol

Bore and stroke

78 x 52.3 mm

Total engine capacity

999.6 cc

Compression ratio

13.5:1

Maximum power at crankshaft

201 hp (148 kW) at 13,000 rpm

Maximum torque at crankshaft

115 Nm at 10,500 rpm

Fuel system

Airbox with front dynamic air intakes.

Variable length intake ducts controlled via the engine control unit.

4 Marelli 48-mm throttle bodies with 8 injectors and latest generation Ride-by-Wire engine management.

Multiple engine maps selectable by the rider with bike in motion: T (Track), S (Sport), R (Race)

Ignition

Magneti Marelli digital electronic ignition system integrated in the engine control system,

with one spark plug per cylinder and stick coils

Starter

Electric

Exhaust

4 in 2 in 1 scheme, two lambda probes, single lateral silencer with throttle valve controlled

by the engine control unit and integrated trivalent catalytic converter (Euro 3)

Alternator

Flywheel mounted 450W alternator with rare earth magnets

Lubrication

Wet sump lubrication system with oil radiator and two oil pumps (lubrication and cooling)

Transmission

6-speed cassette type gearbox:

1st: 39/15 (2.600) 2nd: 33/16 (2.063) 3rd: 34/20 (1.700) 4th: 31/21 (1.476) 5th: 31/23 (1.348) 6th: 34/27 (1.259)

Gear lever with Aprilia Quick Shift electronic system (AQS)

Clutch

Multi plate wet clutch with mechanical slipper system

Primary drive

Straight cut gears and integrated flexible coupling, drive ratio: 73/44 (1,659)

Secondary drive

Chain: Drive ratio: 41/16 (2.5625)

Traction management

APRC System (Aprilia Performance Ride Control), which includes Traction Control (ATC), Wheelie Control (AWC),

Launch Control (ALC), all of which can be configured and deactivated independently

Chassis

Aluminium dual beam chassis with pressed and cast sheet elements.

Adjustments available: • headstock position and angle • engine height • swingarm pin height.

Sachs non-adjustable steering damper [Öhlins adjustable steering damper]

Front suspension

Sachs fork with 43 mm stanchions; **[Öhlins fork with TIN surface treatment]**.

Low profile forged aluminium radial calliper mountings. Adjustable spring preload and hydraulic compression and rebound damping. Wheel travel: 120 mm

Rear suspension

Double braced aluminium swingarm; mixed low thickness and sheet casting technology.

Sachs monoshock adjustable in: hydraulic compression and rebound damping, spring preload, wheelbase length.

[Öhlins monoshock with piggy-back completely adjustable in:

spring preload, wheelbase and hydraulic compression and rebound damping].

APS progressive linkage. Wheel travel 130 mm.

Brakes

Front: Dual 320 mm floating stainless steel discs with lightweight stainless steel rotor and aluminium flange

with 6 pins. Brembo M430 monobloc radial callipers with 4 30 mm opposing pistons.

Sintered pads. Radial pump and metal braided brake hose

Rear: 220 mm disc; Brembo calliper with two 32 mm separate pistons. Sintered pads.

ABS

Pump with integrated tank and metal braided hose Bosch 9MP ABS, with 3 map settings,

equipped with RLM (Rear wheel Lift-up Mitigation) strategy which can be disengaged

Wheel rims

Aprilia in aluminium alloy with 3 split spokes

[forged in aluminium alloy and fully machined, with 5 split spokes]

Front: 3.5"X17",

Rear: 6"X17"

Tyres

Radial tubeless.

Front: 120/70 ZR 17

Rear: 200/55 ZR 17 (alternative: 190/50 ZR 17; 190/55 ZR 17)

Dry weight

180 kg (without battery and fluids)

Tank

18.5 litres (including 4-litre reserve)

[the data in bold refers to RSV4 RF and RSV4 RR with RACE PACK]



Euro3 RSV4 is an environmentally friendly vehicle compliant with Euro 3 regulations for exhaust and noise emissions.

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 colours 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. Aprilia reserves the right to change colour/specification without prior notice.

The **aprilia** trademark is the property of Piaggio & C. S.p.A.

COMPANY WITH
ENVIRONMENTAL SYSTEM
CERTIFIED BY DNV
= ISO 14001 =

COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV
= ISO 9001 =

COMPANY WITH
SAFETY SYSTEM
CERTIFIED BY DNV
= OHSAS 18001 =

