

RM 67-02

EXTRAFLAT AUTOMATIC

TECHNICAL SPECIFICATIONS OF THE RICHARD MILLE RM 67-02 EXTRAFLAT AUTOMATIC

CALIBRE CRMA7: automatic skeletonised winding movement with hours and minutes.

Dimensions : 38.70 x 47.52 x 7.80mm.

MAIN FEATURES

POWER RESERVE

Circa 50 hours (±10%).

BASEPLATE AND BRIDGES IN GRADE 5 TITANIUM

Grade 5 titanium with black DLC treatment confers great rigidity on the baseplate, as well as precise surface flatness, which is essential for the perfect functioning of the gear train. The bridges are also in grade 5 titanium, with a grey DLC treatment. These components are satin-finished, microblasted and bevelled by hand.

The skeletonised baseplate and the bridges have been subjected to separate and extensive validation tests to ensure optimal strength.

FREE-SPRUNG BALANCE WITH VARIABLE INERTIA

This mechanism guarantees greater reliability when subjected to shock, and during movement assembly or disassembly, hence better chronometric results over time. The regulator index is eliminated, and a more accurate and repeatable adjustment is possible, thanks to 4 small adjustable weights located directly on the balance.

ROTOR IN CARBON TPT® AND WHITE GOLD

Relying on a rotor made of Carbon TPT® and white gold, combined with the OneWay® winding system, which has ceramic ball bearings, the barrel can be efficiently wound while maintaining the compact dimensions of an extra-flat, skeletonised movement.

FAST-ROTATING BARREL (5 hours per revolution instead of 7.5 hours)

This type of barrel has the following advantages:

- The phenomenon of periodic internal mainspring adhesion is significantly diminished, thereby increasing performance;
- An excellent mainspring delta curve is achieved, with an ideal power reserve/performance and regularity ratio.





GEAR TEETH PROFILE

The entire going train of the watch, the primary transmitter of power throughout the movement, utilises a special profile for the teeth of the wheels. Developed specifically for the calibre CRMA7, the wheels maintain a 20° pressure angle.

This system equalises any discrepancies that might arise between the centres of each wheel, for instance during thermal changes and normal use, and promotes an excellent transmission of torque to the balance wheel, thus supporting superior chronometric characteristics.

SPLINE SCREWS IN GRADE 5 TITANIUM FOR THE BRIDGES

This permits better control of the torque applied to the screws during assembly. These screws are unaffected by physical manipulation during assembly or disassembly and age well.

OTHER FEATURES

- Movement dimensions: 28.40 x 31.25
- Thickness: 3.60 mm
- Jewels: 25
- Balance: CuBe, 4 arms, 4 setting screws, inertia of moment 7.5 mg·cm², angle of lift 50°
- Frequency: 28,800 vph (4 Hz)
- Balance spring: AK3
- Shock protection: INCABLOC 908.22.211.100 (transparent)

CASE

The front and back bezels of the RM 67-02 are made from Quartz TPT®. This material, which possesses a remarkable damascene surface is composed of layers of parallel filaments obtained from separating silica threads.

Quartz fibres are generally used for very high-performance applications due to their resistance to high temperatures, their strength and their transparency to electromagnetic waves.

Fibres are aligned in layers no thicker than 45 microns and saturated in three new resins developed specially for Richard Mille: green and yellow for the Wayne van Niekerk version and crimson for the Mutaz Essa Barshim version. These layers are then stacked using an automatic positioning system that changes the orientation of the fibre between each layer by 45°. After being heated to 120°C and subjected to a pressure of 6 bars they are machined on a CNC machine at Richard Mille's manufacturing facilities.

The caseband is machined from Carbon TPT®, a material produced using an identical process to Quartz TPT®, but from carbon threads.

The complete case construction is water-resistant to 30 metres thanks to two Nitril O-rings, and is assembled with 12 spline screws in grade 5 titanium and 316L stainless steel washers.



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HEAT AND COLD
5 POS.

ADJUSTER

WATER RESISTANT 30M

RM67-02 EQ/002
NUTAZ



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HEAT AND COLD
5 POS

MATER RESISTANT 30M

RM67-02 FQ/002
WAYDE VAN NIEKERK

SWISS MADE

ADJUSTER

SPLINE SCREWS IN GRADE 5 TITANIUM FOR THE CASE

This permits better control of the torque applied to the screws during assembly. These screws are therefore unaffected by physical manipulation during assembly or disassembly and age well.

UPPER FLANGE

In carbon; index points filled with approved luminous material.

DIAL

In grade 5 titanium, DLC treated and hand painted.

Thickness: 0.40mm

CRYSTAL

Bezel side: in sapphire (1,800 Vickers) with anti-glare treatment (2 sides).

Thickness: 1.00 mm

Case back: in sapphire with anti-glare treatment (2 sides)

Thickness: at the centre 1.00 mm and outer edges 1.75 mm

FINISHING

MOVEMENT

- Microblasted anglage
- Microblasted milled section
- Microblasted sinks
- Grey and black electroplasma treatment for the baseplate and the bridges

STEEL PARTS

- Satin-finished surfaces
- Anglage hand polished
- Hand-polished sinks
- Burnished sections

PROFILE-TURNING

- Lapped and polished ends
- Burnished pivots
- Post faces polished

WHEELS

- Concave chamfering with a diamond tool
- Diamond-polished angles
- Circular-finished faces
- Rhodium plating (before cutting the teeth)