



Jaeger-LeCoultre presents three new interpretations of its Duomètre line

The Duomètre Sphérotourbillon, Duomètre Chronographe and Duomètre Quantième Lunaire watches exude a sophistication tinged with originality. They feature dials of magnetite grey with an opaline finish, a deep and intense colour that will appeal to those who love assertively masculine watches.

Duomètre Sphérotourbillon

A striking design, a unique function, and refinement in the purest tradition of watchmaking – the Duomètre Sphérotourbillon combines all these ingredients. This grand complication demonstrates that it is possible to bring together technical performance, understated aesthetics, and a very expressive watchmaking complication.

The Sphérotourbillon: a tourbillon that can be set with total precision

At the very core of the Dual-Wing concept, precision was the byword for Jaeger-LeCoultre's master watchmakers when deciding their approach to creating the Duomètre Sphérotourbillon watch. Only a small number of tourbillon watches have a clearly legible seconds display with a dedicated counter, and even fewer allow the seconds indication to be stopped.

Using the Dual-Wing concept has enabled Jaeger-LeCoultre's watchmakers to create a tourbillon with precision adjustment. The small seconds can be reset to zero according to the flyback principle by using a push-piece located under the tourbillon at 2 o'clock.

A particular feature of the flyback is that it does not stop the function of the regulating organ. The small seconds hand is reset, and immediately continues its course. As a result, the watch retains maximum precision, accurate to one second, even while the time is being set.

A multi-axis tourbillon

Above and beyond its exemplary reliability, the major feature of this Sphérotourbillon watch – the fourth in the Duomètre line of exceptional timepieces – is its tourbillon.

Initially devised for pocket-watches, the traditional tourbillon does not compensate for the effects of gravity in all positions. An additional rotation axis must be added in order to achieve a three-

dimensional rotation movement and thus prove itself effective in all the positions that a watch worn on the wrist may adopt.

A fascinating spectacle is revealed by the cut-away dial as the tourbillon completes a rotating motion that is highly unusual in nature. As well as revolving around the axis in its titanium cage, the tourbillon turns around a second axis, tilted at 20°. The combination of these two distinct and rapid rotations (30 and 15 seconds respectively) enables the watch to defy the effects of gravity in all positions.

This spectacular tourbillon includes all the innovations that gave Jaeger-LeCoultre a brilliant victory in the first chronometry competition of the 21st century. The cage, machined in a single piece from a block of titanium, combines lightness and high precision. The cylindrical balance-spring, with its two terminal curves, beats with a concentric action that is impossible to obtain with a traditional balance-spring.

The balance wheel, with its ample inertia, oscillates at a frequency of 21,600 vibrations per hour. The stud support is for its part protected from any shocks or accidental impacts that may be suffered by the watch, thanks to a screw locking system.

For enhanced visual pleasure, a transparent case-back provides an admirable “backstage” view of the workings of the hand-assembled and decorated movement, Jaeger-LeCoultre Calibre 382.

Making complexity beautiful

The timepiece’s technological complexity nevertheless retains all its beauty. The model’s innovative spirit is combined with a design inspired by the pocket watches of yesteryear, conceived with an eye to elegance and refinement.

The quality of finish of the movement-blanks, made of untreated nickel silver, reinforces the impression of exclusiveness exuded by the Duomètre Sphérotourbillon. With its characteristic Jaeger-LeCoultre “côtes soleillées” motifs, clear-cut protruding and recessed angles, and harmonious forms, the design of the Jaeger-LeCoultre Calibre 382 is the perfect embodiment of the fine art of watchmaking.

Demonstrating profound respect for ideal proportions and watchmaking design codes – expressed through a sophisticated pink gold case, a plain and readable dial, polished lugs and bezel, and a satin-brushed case middle – the Duomètre’s signature aesthetic is meticulously preserved in this model and creates a striking contrast with the level of complexity of the movement housed within. The Dual-Wing concept is reflected on the dial with the presence of two separate zones: to the left sits the opening revealing the secrets of the Sphérotourbillon, and to the right is the main dial, indicating local time and the date, subtly placed on a lower level all around the dial.

An additional 24-hour subdial occupying the upper part of the dial serves to display the time in another time-zone, while the small seconds appear in the lower part of the dial.



Duomètre Chronographe

To make a chronograph watch as accurate as a chronometer was the stiff challenge the Jaeger-LeCoultre watchmakers set themselves in developing the first Duomètre. Their secret weapon was the Dual-Wing concept.

The Jaeger-LeCoultre Manufacture chose to equip the first model in the Duomètre collection with the chronograph function. This led to the Duomètre Chronographe model, with styling and technical characteristics that immediately earned it a place in the highest echelons of artistic watchmaking.

The first movement to use this new construction principle was the Jaeger-LeCoultre Calibre 380, boasting the major asset of displaying the time with chronometer-worthy precision. In accordance with the Dual-Wing concept, the first gear train is entirely dedicated to the time function (hours, minutes, seconds), while the second gear train is exclusively devoted to the chronograph function and features a 1/6th second jumping seconds.

Each of these two mechanisms is powered by its own barrel ensuring a 50-hour power reserve (50 hours for the time, 50 hours for the chronograph). There are no transfers of energy between the two.

To simplify use and for aesthetic reasons, a single crown serves to wind both barrels: turning the crown clockwise winds the time, and turning it counter-clockwise winds the chronograph.

This Calibre 380 makes the first Duomètre the very first wrist chronograph watch to operate without a coupling system to handle the stop/start time measurement functions. A single push-piece ensures perfect synchronisation of all five chronograph counters.

With its case featuring welded lugs, its opaline magnetite grey dial and its Calibre 380 – the first representative of the Dual-Wing lineage – the Duomètre, brilliantly reinvented the great watchmaking classic.



Duomètre Quantième Lunaire

Day, date, month... Gear trains, adjustments, power... Because running such an elaborate complication as a calendar within a classic watch naturally has a detrimental effect on the precision of the time indications, the Jaeger-LeCoultre watchmakers knew they had found in the Dual-Wing concept an instrument capable of creating a perfect alchemy: a calendar watch that was as accurate as a chronometer.

Arranged on the elegant and easily readable dial, the hours, minutes, seconds, calendar, and moon-phase displays appear to make the Duomètre Quantième Lunaire a conventional timepiece. But inside the case and partially hidden from view beats Calibre 381, a prodigious movement boasting unprecedented precision based on the Dual-Wing concept, which propels the watch firmly into the spheres of fine watchmaking.



Dual-Wing Concept – the pioneering movement

With its Duomètre line and its Dual-Wing concept, Jaeger-LeCoultre plays a pioneering role in the field of fine watchmaking by creating a movement with an entirely innovative structure, giving rise to unprecedented functions.

With the Dual-Wing concept, the watchmakers of the Jaeger-LeCoultre Manufacture developed a solution that at last resolves a recurrent problem on complex mechanical watches: any complication naturally uses up some of the power provided by the barrel. This energy consumption disrupts the constant supply that is required by the meticulously adjusted regulating organ to fulfil its function as precisely as possible.

In order for the measurement of time to be carried out with absolute accuracy, it is essential that the power supply delivered by the barrel to the gear trains and escapement should be absolutely steady.

One time, two movements

Christened Dual-Wing, this concept serves to separate energy provision to the complication from that to the movement, which is fed by its own barrel, thus guaranteeing a constant level of supply. It spelled a revolution in the field of fine watchmaking.

First unveiled in 2007, it enabled Jaeger-LeCoultre to reinvent the chronograph by endowing the Duomètre Chronographe with chronometer-worthy accuracy, while displaying the time thus counted off to the nearest 1/6th of a second.

It was then given a new application on the Duomètre Quantième Lunaire and the Duomètre Sphérotourbillon.

DUAL-WING IN A FEW WORDS:

It is a revolutionary watch concept based on a unique construction: two distinct mechanisms united within the same case and providing scope for unprecedented functions.



THE JAEGER-LECOULTRE MANUFACTURE

Since its founding in 1833, Jaeger-LeCoultre has been delighting connoisseurs of Fine Watchmaking. Heirs to the inventive spirit of the Manufacture founder, Antoine LeCoultre, its artisans unite their expertise in creating collections that are as surprising as they are sophisticated: **Reverso, Master, Rendez-Vous, Duomètre, Geophysic®, and Atmos.**



REVERSO 85TH ANNIVERSARY

The Grande Maison is perpetually inspired by its rich history. The Hybris Mechanica® and Hybris Artistica® collections testify to the creative passion driving the men and women who exercise their skills beneath its roof.

In 2016, Jaeger-LeCoultre reveals the unexpected and showcases a new vision of the Reverso, which is celebrating its 85th birthday.

The unique history of each Jaeger-LeCoultre timepiece begins in the workshops of the Vallée de Joux, Switzerland and springs to life on the wrist of those who wear it and make it their own.

www.jaeger-lecoultre.com



Duomètre Sphérotourbillon

TECHNICAL CHARACTERISTICS

MOVEMENT

- Manually wound mechanical movement, Jaeger-LeCoultre Calibre 382, crafted, assembled, and decorated by hand, bridges and mainplate made of nickel silver
- Two barrels
- 50-hour power reserve
- 460 parts
- 55 jewels
- 10.45 mm in height
- 33.70 mm in diameter

SPHÉROTOURBILLON

- 105 parts
- Tourbillon carriage: Grade 5 titanium
- Total rotation speed: 30 seconds for a complete rotation
- 2 combined movements. Rotation speed of the carriage axis: 15 seconds for a complete rotation
Rotation speed of the carriage: 30 seconds for a complete rotation
- Inclination of the carriage: 20°
- Diameter of the carriage: 11.50 mm
- Weight of the carriage: 0.518 grammes
- 14-carat gold balance wheel with off-centred 14-carat gold inertia-blocks for adjusting inertia = 12.5 mg.cm², 21,600 vibrations per hour
- Cylindrical balance-spring

FUNCTIONS

- Hours (travel time zone), minutes, and small seconds with flyback
- Power reserves (indications and movement)
- Calendar with hand indication
- 24-Hour reference time zone
- Spherical tourbillon

CASE

- 18-carat pink gold
- Diameter: 42 mm
- Height: 14.1 mm (including its sapphire crystal)
- Polished and satin-brushed finishing
- Domed sapphire crystals, hardness No. 9, glareproofed on front and back
- Water resistance: 5 bar

DIAL

- Opaline magnetite grey
- Gold-plated appliques

HANDS

- Hours and minutes: leaf-type, gold-plated
- Small seconds: baton type with pear-shaped counterweight, rhodium-plated

CROWNS

- One crown to wind the watch, set the time (travel time-zone), adjust the date, and adjust the reference time-zone
- One push-piece at 2 o'clock to activate the small seconds flyback mechanism



STRAP

- Hand-sewn alligator leather, 18-carat pink gold folding clasp

REFERENCE

- 605244J



Duomètre Chronographe

TECHNICAL CHARACTERISTICS

MOVEMENT

- Manually wound mechanical movement, Jaeger-LeCoultre Calibre 380, crafted and decorated by hand
- 21 600 vibrations per hour
- 2 independent barrels, each with a 50-hour power reserve
- Approximately 445 parts
- 47 jewels
- 6.95 mm in height
- 33.70 in diameter (15 lines)

FUNCTIONS

- Hour, minute, centre seconds
- Power reserve
- Chronograph power reserve
- Chronograph: concentric hours and minutes, seconds
- Jumping seconds

DIAL

- Opaline magnetite grey
- Gold-plated appliques

HANDS

- Hour and minute: leaf-type, brass, gold-plated
- Chronograph hour and minute: leaf-type, rhodium-plated
- Seconds: baton with pear-shaped counterweight, gold-plated (hour-minute), rhodium-plated (chronograph)
- Power reserve: baton type, gold-plated (hour-minute), rhodium-plated (chronograph)

CROWN

- 1 crown to start the watch, and to wind the watch's power reserve
- Clockwise to wind the chronograph power reserve and counter-clockwise to adjust the hours and minutes
- 1 single push-piece to control the chronograph and jumping seconds: start/stop/reset

CASE

- ø 42 mm, 18-carat pink gold
- Welded lugs
- Polished and satin-brushed finishes
- Domed sapphire crystals, hardness No. 9, glareproofed on front and back
- Water-resistant to 50 metres

STRAPS AND BUCKLE

- Matte chocolate-brown 21/18
- 18 mm double folding clasp in 18-carat gold

REFERENCE

- Q601244J



Duomètre Quantième Lunaire

TECHNICAL CHARACTERISTICS

MOVEMENT

- Manually wound mechanical movement, Jaeger-LeCoultre Calibre 381, crafted, assembled, and decorated by hand
- 21 600 vibrations per hour
- 50-hour power reserve
- 375 parts
- 42 jewels
- 7.41 mm in height
- 33.70 mm in diameter
- Two independent barrels

FUNCTIONS

- Hours, minutes, seconds, and jumping stop seconds with zero/reset system, date
- Age and moon phase (for both hemispheres), power reserve
- Power reserve of the regulator

DIAL

- Opaline magnetite grey
- Gold-plated appliques

HANDS

- Hours and minutes: leaf-type, gold-plated
- Seconds: baton type with pear-shaped counterweight, gold-plated

CROWNS

- 1 crown for winding the watch, and for setting the hours and minutes
- 1 push-piece to adjust the date
- 1 corrector to adjust the moon phase

CASE

- Diameter: 42 mm, thickness: 13.6 mm
- 18-carat pink gold
- Polished and satin-brushed finishing
- Sapphire crystal, domed on the dial side, hardness No. 9, glareproofed on front and back
- Water resistance: 5 bar

STRAP

- Chocolate-brown alligator leather with 18-carat gold folding clasp

REFERENCE

- Q604244J

