



## Master Compressor Diving, a new generation of mechanical diver's watches.

In harmony with its determination to maintain a consistently avant-garde approach, based on a tradition going back to the legendary Polaris diver's watches, Jaeger-LeCoultre presents a new series of three diver's watches equipped with spectacular original features. The latter include a case custom designed to withstand 1000-metre depth pressures and an innovative mechanical depth gauge that owes its very existence to the unique Jaeger-LeCoultre DNA. Master Compressor Diving Pro Geographic is the star diver's model with a 46.3-mm diameter and a mechanical depth gauge, while the Master Compressor Diving GMT and Master Compressor Diving Chronograph measure 44 mm in diameter.

### A milestone invention for the "Diving Pro" model: the mechanical depth gauge (depth sensor chamber)

Jaeger-LeCoultre engineers are particularly proud of their latest technical accomplishment, distinctly visible in the chamber on the outer side of the case: the creation of a revolutionary mechanical depth sensor capable of measuring depths ranging from 0 to 80 metres.

This ingenious device will find its place in the history books because, like any revolutionary idea, it is based on an extraordinarily simple principle that offers the advantage of avoiding any danger of clogging, while the absence of gaskets guarantees perfect long-term reliability. In designing it, the Jaeger-LeCoultre technicians conceived the idea of transposing the exclusive system that has been driving the Atmos clock for almost 80 years into a mechanism governed by aquatic pressure rather than air pressure. The Atmos mechanism consists in a gas capsule that expands or contracts according to the slightest variations in air temperature, and its infinitesimal movements are used to wind the mainspring of the movement. In a similar way, the depth gauge of the Master Compressor Diving Pro Geographic is composed of a membrane that expands or contracts according to the aquatic pressure exercised on its metal head. Its movements in turn act upon the dedicated large blue depth gauge pointer by means of a clever transmission system that is partially visible on the dial itself. The large rhodium-plated component, called a rack, as well as the central pinion, are specifically shaped to enable a logarithmic-scale display that is more detailed over the first 40 metres.

This valuable function was designed to be operational even when out of the water. The lucky owner of a Master Compressor Diving Pro Geographic can at any time choose to press slightly on the head of the depth gauge membrane in order to check whether it is running smoothly and to observe the relative movement of the pointer according to the intensity of the pressure applied, as well as the changes in the membrane visible through an opening on the side of the chamber.

In an era when diving computers frequently indicate the body's nitrogen count, calculate decompression stages or measure water temperatures, the depth gauge on the new Master Diving Pro Geographic constitutes an impressive achievement combining inventiveness and technical genius. Unmistakably an instrument intended for professionals, it symbolises the inexhaustible creativity and reliability of the timepieces conceived and produced within an exceptional Manufacture.



### **A professional case guaranteed water-resistant to 1000 metres**

The 44-mm cases of the Master Compressor Diving GMT and Chronograph are designed to withstand extreme conditions at depths of as much as 1000 metres, thanks to an entirely new geometrical approach.

Jaeger-LeCoultre engineers have optimised the case to resist the extreme pressures exerted well below sea level by varying the thickness of the case middle, the back and the crystal. The thickest point of the middle now measures more than 5 mm – almost double that of a watch that is water resistant to 100 metres. The back is screwed in to ensure regular and more reliable compression of the joint under strong pressure. The sturdy cambered 3.60 mm-thick sapphire crystal will need to hold its own at the incredible depth of 1000 metres, corresponding to a pressure of 890 kilograms – the weight of a small car!

The design matches the technical performances of these exceptional watches. The lugs have been subtly reshaped to fit more smoothly with the diving bezel, whereas the case with its shape that has been optimised to resist extremely strong underwater pressures confers a powerful visual identity on these professional instruments.

### **Sturdiness, water resistance, reliability**

As one would expect, the Master Compressor Diving professional models are characterised by their diving bezel featuring cutting-edge technical and aesthetic details. The latter has a 120-tooth system that means it can be indexed every 30 seconds. Like the hands and numerals on the dial, the reference triangle is luminescent to facilitate reliable dive-time calculations.

The Master Compressor Diving also guarantees excellent readability thanks to the oversized numerals and hour-markers, the new shape of the luminescent hands and the use of blue – the only colour able to ensure maximal contrast below the water's surface. Water acts like a colour filter, the intensity of which varies according to its composition (such as the presence of salt, plankton, etc.). The higher the water above, the more effective the filter, and the more it reduces the spectrum of colours. At depths of between 30 to 60 metres, blue is the only perceptible shade. All of which explains why this colour has been chosen, in particular for the movement operating indicator which bears vital testimony to the fact that the watch is still running and will thus still be readable from several dozen metres below the surface, as well as for the depth-gauge indications.

The tried and trusted compression keys ensure optimal security thanks to the supercharging of one of the four toric gaskets by reducing the volume of its recess. In their diving version, they come with a slightly larger diameter and are clad in black rubber to ensure an excellent grip and easy handling under water.

The three models in the Master Compression Diving line are all crafted from a light and ultra-resistant grade 5 titanium, satin-brushed to reduce any glinting under water.

Moreover, the extraordinary reliability of Jaeger-LeCoultre movements guarantees peerlessly accurate time measurement, a crucial factor in safe diving.

### **Indispensable accessories**

The models in the Master Compressor Diving series are delivered with various types of wristband, depending on their version and the owner's wishes. The articulated triple-link



bracelet, composed of a metal frame, is moulded in black rubber combining stainless properties with unprecedented wearer comfort. For the titanium models, the articulated bracelet is available in the same metal. Finally, all versions are delivered with an additional ultra-resistant diving strap in Cordura® complete with Velcro fastening. The 44 mm models are also available with a rubber-clad strap featuring universally recognised resistance.

### Three typically Jaeger-LeCoultre functions

While the automatic movements driving the new series of Master Compressor Diving watches all feature the trademark precision, sturdiness and reliability of the calibres developed and built by the Manufacture Jaeger-LeCoultre, each model is distinguished by its own functions.

The **Master Compressor Diving Pro Geographic**, which is recognisable by its 46.3-mm diameter and its characteristic appearance due to the presence of the depth gauge, houses a new *Geographic* sports movement. All the wearer needs to do is position the city symbolising a given time zone in an aperture at 6 o'clock, and the time there is automatically shown on a 24-hour subdial at 9 o'clock. Nonetheless, this indication highlights the "rack" required to transmit the depth indication, read off by a pointer on the logarithmic scale of the depth gauge shown on an outer dial ring. The date appears in an aperture at 3 o'clock, whereas the luminescent movement operating indicator is located in the lower part of the dial. Equipped with the automatic movement, Jaeger-LeCoultre Calibre 979, and water-resistant to 300 metres, the Diving Pro Geographic model is available in satin-brushed grade 5 titanium.

Measuring 44 mm in diameter, the **Master Compressor Diving Chronograph** is water resistant to 1000 metres – an exceptional feat for a chronograph watch, as well as pushpieces fitted with the compression system. The hours and minutes, as well as the chronograph seconds, are shown by central hands moving over the main dial, whereas the chronograph hours and minutes appear in subdials at 3 and 9 o'clock. The date is displayed through an aperture between 4 and 5 o'clock, while the luminescent movement operating indicator is shown in a semi-circular opening at 6 o'clock. The outer dial ring features a pulsometer enabling one to determine the number of heartbeats per minute. This is done by starting the chronograph seconds hand and stopping it after the 30<sup>th</sup> heartbeat measured. This function is particularly appreciated by sports enthusiasts wishing to optimise their training by taking account of their maximum pulse rates. It proves indispensable for free-diving, precisely because the diver's task consists in reducing their heart rate. Endowed with a comfortable 65-hour power reserve, the Master Compressor Diving Chronograph is available in satin-brushed pink gold, or in a limited edition of 1500 in satin-brushed grade 5 titanium.

The **Master Compressor Diving GMT**, water-resistant to 100 metres, measures 44 mm in diameter. Its functions comprise the indication of local time that can be adjusted in one-hour increments in either direction, the time in a second time zone shown on a 24-hour subdial at 9 o'clock, the minutes and the date in a window at 3 o'clock. It is also distinguished by a luminescent movement operating indicator appearing in the lower part of the dial in the unusual shape of an elongated rectangle.

Equipped with an automatic movement, Jaeger-LeCoultre Calibre 975D, the GMT model is available in a limited series of 1500 in satin-brushed grade 5 titanium.

This inseparable blend of form and function gives a unique face to the new Master Compressor Diving models, simultaneously revealing the serious nature of a professional instrument and the inventive flair of a company that considers aesthetic challenges as the indispensable complement to any technical accomplishments. In this respect, the remarkable functionality of the Master



Compressor Diving watches is simply incomparable. Each in their own way embodies the constantly renewed inventiveness of the Manufacture in the Vallée de Joux that perpetuates an historical legacy spanning almost two centuries of landmarks in applied creativity.



## Master Compressor Diving Pro Geographic: technical characteristics

### Movement:

- mechanical automatic Jaeger-LeCoultre Calibre 979, crafted and decorated by hand
- 28,800 vibrations per hour
- 48-hour power reserve
- tbc parts
- 29 jewels
- 7.30 mm thick

### Functions:

- hours, minutes
- movement operating indicator
- 2<sup>nd</sup> time zone on 24-hour subdial at 9 o'clock
- 2<sup>nd</sup> time-zone city selection on 24-city disc at 6 o'clock
- date
- depth indicator

### Dial:

- black dial; luminescent stamped numerals and hour-markers
- white-blue-grey luminescent depth-gauge scale
- date: blue transferred numerals against a grey background
- movement operating indicator featuring a luminescent rectangle

### Hands:

- hours and minutes: trapeze-shaped, openworked, luminescent
- depth gauge: pointer in blued steel

### Crown:

- 1 crown at 2 o'clock, black rubber-moulded and equipped with a compression key, serving to start the watch, adjust the hours and minutes, synchronise the two time zones and adjust the 2<sup>nd</sup> time zone
- 1 crown at 4 o'clock, black rubber-moulded and equipped with a compression key, serving to select the 2<sup>nd</sup> time-zone city
- depth sensor chamber at 9 o'clock with black PVD-coated steel sensor

### Case:

- ø 46.3 mm in grade 5 titanium with steel diving bezel
- Master Compressor engraving on the case-back
- cambered sapphire crystal, hardness N°9
- water-resistant to 300 metres

### Straps:

- articulated rubber, moulded over a metal frame
- triple-link bracelet in titanium
- black alligator leather strap with white overstitching and 22 mm buckle
- also delivered with the watch as an alternative strap: a black Cordura® diving strap with black Velcro® strip

### References:

- platinum, limited series of 200, articulated rubber strap and diving strap: Q1856770
- titanium, articulated rubber strap and diving strap: Q185T770
- titanium, titanium bracelet and diving strap: Q185T170



## Master Compressor Diving GMT: technical characteristics

### Movement:

- mechanical automatic Jaeger-LeCoultre Calibre 975D, crafted and decorated by hand
- 28,800 vibrations per hour
- 48-hour power reserve
- 230 parts
- 29 jewels
- 5.70 mm thick

### Functions:

- local time adjustable in one-hour increments and in either direction
- reference time on a 24-hour subdial at 9 o'clock
- minute
- date
- movement operating indicator

### Dial:

- black dial, luminescent stamped numerals and hour-markers
- date: transferred numerals against a grey background
- movement operating indicator: luminescent blue and white disc

### Hands:

- hours and minutes: trapeze-shaped, openworked, luminescent
- 2<sup>nd</sup> time zone: rhodium-plated steel, blue arrow

### Crown:

- 1 crown, black rubber-moulded and equipped with a compression key, serving to start the watch, adjust the hours and minutes and synchronise the two time zones

### Case:

- ø 44 mm in grade 5 titanium with steel diving bezel
- Master Compressor engraving on the case-back
- cambered sapphire crystal, hardness N°9
- water-resistant to 1000 metres

### Straps:

- articulated rubber, moulded over a metal frame
- black rubber-moulded, 22 mm buckle
- triple-link bracelet in titanium
- also delivered with the watch as an alternative strap: a black Cordura® diving strap with black Velcro® strip

### References:

- titanium, limited edition of 1500, 3 strap/bracelet options:
  - articulated rubber and diving strap: Q187T770
  - titanium bracelet and diving strap: Q187T170
  - moulded rubber and diving strap: Q187T670



## Master Compressor Diving Chronograph: technical characteristics

### Movement:

- mechanical automatic Jaeger-LeCoultre Calibre 751 D, crafted and decorated by hand
- 28,800 vibrations per hour
- 65-hour power reserve
- 272 parts
- 41 jewels
- 5.65 mm thick

### Functions:

- hours, minutes
- chronograph: hour counter, 30-minute counter, central seconds hand
- date
- movement operating indicator

### Dial:

- black dial, luminescent stamped numerals and hour-markers
- date: transferred numerals
- movement operating indicator: blue and white or grey and white luminescent disc

### Hands:

- hours and minutes: trapeze-shaped, openworked, luminescent
- others: steel or brass, rhodium-plated or white

### Crown:

- 1 crown, black rubber-moulded and equipped with a compression key, serving to start the watch and to adjust the hours and minutes
- 2 pushpieces, black rubber-moulded and equipped with compression wing-nuts, serving to control the chronograph functions

### Case:

- ø 44 mm in grade 5 titanium or 18-carat pink gold, with steel or 18-carat pink gold diving bezel
- Master Compressor engraving on the case-back
- cambered sapphire crystal, hardness N°9
- screwed-in case-back
- water-resistant to 1000 metres

### Straps:

- articulated rubber, moulded over a metal frame
- black rubber-moulded, 22 mm buckle
- for the titanium model: triple-link bracelet in titanium
- also delivered with the watch as an alternative strap: a black Cordura® diving strap with black Velcro® strip

### References:

- :pink gold, bracelet options:
  - articulated rubber and diving strap: Q1862740
  - moulded rubber and diving strap: Q1862640
- titanium, limited series of 1500
  - articulated rubber and diving strap: Q186T770
  - moulded rubber and diving strap: Q186T670
  - titanium bracelet and diving strap: Q186T170