



## OYSTER PERPETUAL ROLEX DEEPSEA

### FEATURES

- ▶ OYSTER case, waterproof to 3,900 metres (12,800 feet)
- ▶ RINGLOCK SYSTEM case architecture
- ▶ Helium escape valve
- ▶ Rotatable 60-minute graduated bezel with virtually scratchproof CERACHROM insert
- ▶ CHROMALIGHT display with long-lasting luminescence
- ▶ Officially certified Swiss chronometer (COSC)
- ▶ Self-winding mechanical movement, *Manufacture Rolex* calibre 3135
- ▶ Paramagnetic blue PARACHROM hairspring
- ▶ OYSTERLOCK safety clasp with ROLEX GLIDELOCK system for fine adjustments of the bracelet length, and FLIPLock extension link

### THE WATCH OF THE DEEP

Waterproof to an extreme depth of 3,900 metres (12,800 feet), the Oyster Perpetual ROLEX DEEPSEA illustrates the supremacy of Rolex in mastering waterproofness.

Presented in 2008, the Rolex DEEPSEA meets the most exacting demands of professional divers in terms of robustness, precision and reliability, while featuring the aesthetic codes characteristic of the OYSTER.

### AN ABUNDANCE OF TECHNOLOGY

A new-generation divers' watch, the ROLEX DEEPSEA benefits from exclusive technical innovations like the RINGLOCK SYSTEM. This new case architecture patented by Rolex enables the watch to resist the colossal pressure exerted by water at the depth of 3,900 metres, equivalent to a weight of approximately three tonnes on the crystal.

The RINGLOCK SYSTEM is based on a combination of three elements:

- ▶ a high-performance nitrogen-alloyed stainless steel ring, positioned inside the middle case of the watch between the crystal and the case back, which withstands the water pressure;
- ▶ a slightly domed 5 mm thick synthetic sapphire crystal;
- ▶ a case back made from grade 5 titanium held tight against the high-performance ring by a screw-down 904L steel ring.

These three components are set in a middle case fashioned from a solid block of particularly corrosion-resistant 904L steel. The TRIPLOCK winding crown, equipped with three seals, screws down securely against the case, completing the waterproofness system and offering watertight security akin to a submarine's hatch.

The case of the ROLEX DEEPSEA is also equipped with a helium escape valve. This allows the helium that penetrates the watch during deep-water saturation dives to escape, without harming the timepiece when the gas expands during the decompression stages in a hyperbaric chamber. The case is the product of a perfect alchemy of form and function, aesthetics and technology.

### **STRINGENT WATERPROOFNESS TESTS**

In deep-sea diving, absolute reliability and security are of the essence. Each ROLEX DEEPSEA must therefore undergo Rolex's stringent waterproofness tests. To this end, a special hyperbaric test tank was developed in conjunction with COMEX (Compagnie Maritime d'Expertises, the world-renowned French company specializing in underwater engineering and hyperbaric technologies). Every single ROLEX DEEPSEA is tested to ensure its waterproofness to a depth of 3,900 metres with an additional safety margin of 25 per cent.

### **BEZEL WITH HIGHLY RESISTANT CERACHROM INSERT**

The unidirectional rotatable bezel of the ROLEX DEEPSEA is fitted with a 60-minute graduated black CERACHROM insert that allows divers to monitor their time underwater for their safety. The insert, made of an extremely hard and corrosion-resistant ceramic, is virtually scratchproof and its colour is unaffected by ultraviolet rays. The numerals and the graduations are engraved in the ceramic and coated with platinum using a PVD (Physical Vapour Deposition) process patented by Rolex. The bezel's knurled edge offers excellent grip when manipulating the bezel to set dive time.

### **LEGIBLE AND FUNCTIONAL**

Great attention was paid to the legibility of this Professional diver's watch. The CHROMALIGHT hour markers and hands are filled with a luminescent material emitting a long-lasting blue glow – lasting up to two times longer than traditional materials. On the bezel, the zero marker of the graduation, in the form of a triangle, is visible in the dark thanks to a capsule containing the same luminescent material.

### SECURITY COMFORT AND ERGONOMICS

The ROLEX DEEPSEA's OYSTER bracelet is equipped with an OYSTERLOCK safety clasp that prevents accidental opening, and with a double extension system that allows the watch to be worn comfortably over a diving suit up to 7 mm thick. The FLIPLock extension link extends the bracelet by 26 mm, while the ROLEX GLIDELOCK system allows fine adjustments of the bracelet length in 2 mm increments for a total of approximately 20 mm. Neither of them requires the use of any tools.

### CALIBRE 3135, A SUPERLATIVE CHRONOMETER

The ROLEX DEEPSEA is equipped with calibre 3135, a self-winding mechanical movement entirely developed and manufactured by Rolex. Like all Rolex PERPETUAL movements, the 3135 is a certified Swiss chronometer, a designation reserved for high-precision watches that have successfully passed the Swiss Official Chronometer Testing Institute (COSC) tests. Its architecture, like that of all OYSTER watch movements, makes it singularly reliable.

The oscillator, the true heart of the watch, has a large balance wheel with variable inertia regulated extremely precisely with gold MICROSTELLA nuts. It is held firmly in place by a height-adjustable traversing bridge enabling very stable positioning to increase shock resistance. The oscillator features a blue PARACHROM hairspring patented and manufactured by Rolex in an exclusive alloy. Insensitive to magnetic fields, the PARACHROM hairspring offers great stability when exposed to temperature variations and remains up to 10 times more precise than a traditional hairspring in case of shocks. It is equipped with a Breguet overcoil, enhancing the isochronism of the oscillations.

Calibre 3135 is fitted with a self-winding module featuring a PERPETUAL rotor, which ensures continuous winding of the mainspring by harnessing the movements of the wrist to provide a constant source of energy.

The ROLEX DEEPSEA's movement will be seen only by certified Rolex watchmakers, yet it is beautifully finished and decorated in keeping with the brand's uncompromising quality standards.

### PERPETUATING THE PIONEERING SPIRIT

Through its exceptional performance in terms of robustness and waterproofness, the ROLEX DEEPSEA is a member of the prestigious family of Rolex divers' watches such as the SUBMARINER and the SUBMARINER DATE. Its name pays tribute to the DEEP SEA SPECIAL, an experimental

model that reached the record depth of 10,916 metres in the Pacific Ocean when the bathyscaphe *Trieste* descended into the Mariana Trench in 1960.

#### **FROM THE ROLEX DEEPSEA TO THE ROLEX DEEPSEA CHALLENGE**

In 2012, the innovative case architecture of the Oyster PERPETUAL ROLEX DEEPSEA and its RINGLOCK SYSTEM directly inspired the design of the Oyster Perpetual ROLEX DEEPSEA CHALLENGE, an experimental divers' watch guaranteed waterproof to a depth of 12,000 metres (39,370 feet). Entirely designed and manufactured by Rolex, it can resist the extreme pressure found in the deepest reaches of the oceans. On 26 March, it accompanied film-maker (*Titanic, Avatar*) and explorer James Cameron on his solo 10,898-metre dive to Challenger Deep, the ocean's deepest point, located in the Mariana Trench. "The ROLEX DEEPSEA CHALLENGE," attached to the manipulator arm of the submersible, "was the reliable companion throughout the dive," said James Cameron after the historic event.

## TECHNICAL SPECIFICATIONS

### OYSTER PERPETUAL ROLEX DEEPSEA

<b>CATEGORY</b>	▶ Professional watch
<b>CASE</b>	▶ OYSTER (monobloc middle case, screw-down case back and winding crown) ▶ RINGLOCK SYSTEM case architecture with nitrogen-alloyed steel ring Helium escape valve
Diameter	▶ 44 mm
Materials	▶ 904L steel, case back in grade 5 titanium
Winding crown	▶ Screw-down, TRIPLOCK triple waterproofness system
Crown guard	▶ Integral part of the middle case
Crystal	▶ Domed, 5 mm-thick scratch-resistant synthetic sapphire
Bezel	▶ Unidirectional rotatable 60-minute graduated; CERACHROM insert made of ceramic, numerals and graduations coated in platinum via PVD
Waterproofness	▶ 3,900 m (12,800 ft)
<b>MOVEMENT</b>	▶ Calibre 3135, <i>Manufacture Rolex</i> ▶ Mechanical movement, bidirectional self-winding via PERPETUAL rotor
Precision	▶ Officially certified Swiss chronometer (COSC)
Functions	▶ Centre hour, minute and seconds hands. Instantaneous date with rapid setting. Stop-seconds for precise time setting
Oscillator	▶ Frequency: 28,800 beats/hour (4 Hz) ▶ Paramagnetic blue PARACHROM hairspring with Breguet overcoil ▶ Large balance wheel with variable inertia, high-precision regulating via gold MICROSTELLA nuts
Power reserve	▶ Approximately 48 hours
<b>BRACELET</b>	▶ OYSTER; folding OYSTERLOCK safety clasp with ROLEX GLIDELOCK system for fine adjustment of bracelet length, and FLIPLock extension link