



PRESS RELEASE

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For immediate circulation

Superior design and performance: Brembo presents the new “Extrema” caliper

Designed especially for a sports car *par excellence* — the successor to the Ferrari Enzo — the new “Extrema” Brembo caliper features an innovative design and reduced weight and mechatronics.

Well known as a benchmark setter in the field of brake systems, the name of Brembo has always been synonymous with performance and innovation: concepts perfectly reflected in the new brake system designed for the supercar “Made in Maranello”, the successor to the Ferrari Enzo, unveiled today at the Geneva Motor Show.

In developing the new “Extrema” caliper, Brembo affirms its DNA as an experimenter and researcher of solutions that continue to raise the already high standards of the company's products.

Attractive styling and superior performance, provided by innovative design and the use of mechatronics: the “Extrema” Brembo caliper is designed for high end cars with a strong sporting vocation. In short, a product designed to meet the demands of an extremely demanding and continuously evolving market.

Brembo supplies the whole braking system on the new special limited edition of the Ferrari. This is the Maranello-based manufacturer's first car to be fitted with the hybrid HY-KERS technology that associates the V12 power unit, delivering up to 800HP, with a 120kW electric motor that recovers the energy produced while braking, also thanks to the experience gained on the F1 tracks with the Ferrari KERS system.

New design, higher performance

The new “Extrema” Brembo caliper has distinctive traits that derives from a more minimalist approach in design, appearing decidedly more exposed and hollowed out than its predecessors. An aggressive and innovative look that translates, first and foremost, into a **significant reduction (more than 3 kg) of non-suspended weight** and a better feel through the pedal, with **less power absorbed** than hitherto (**10% reduction**).

The newly designed caliper also improves ventilation, with the result that **brake fluid temperature is reduced by more than 30°C**. This aspect of performance has been verified by thorough-going tests conducted on the Ferrari test track at Fiorano.

Whilst the front wheels have a six piston caliper, and the rear wheels a four piston type incorporating the electric parking brake, the two calipers are visually identical. Viewed from the side, in effect, there is no discernible difference.

The advantages of mechatronics

For the first time, in the new “Extrema” Brembo caliper, the electric parking brake is incorporated directly in the caliper.

Thanks to mechatronics, which enables a close interrelation between different disciplines — mechanics, electronics, IT —, Brembo has produced an electronic control unit and control software that manages the parking brake.

Colours

The new “Extrema” caliper will be available initially in nine colour finishes, eight painted and one anodized.

Brembo to the fore

The new “Extrema” caliper derives directly from the involvement of Brembo in Formula 1.

- Given the high loads generated by the pressure of the pistons on the pads, maximum stiffness and minimal deformation are assured by adopting a **monobloc** design, in other words the caliper body is machined from a single billet of cast aluminium.
- The front calipers are equipped with **six pistons** specified with dissimilar diameters to ensure uniform wear on the pads, which otherwise would deteriorate more quickly on the disc entry side.
- The rear calipers have **four pistons** with dissimilar diameters. The pistons are equipped with heat shims and drilled radially around the circumference engaging the pad, in order to attenuate the transmission of friction heat to the brake fluid in the hydraulic system.
- The **brake pads** are made by Brembo; the friction material is a mixture of specifically measured organic elements, guaranteeing the best possible braking performance with Brembo CCM brake discs, made from a ceramic compound.
- Launched in 2002 on the Ferrari Enzo, **Brembo CCM discs** weigh over 50% less than cast iron discs. This advantage drastically reduces the unsprung weight of the vehicle, which in turn ensures exceptional dynamic behaviour and excellent driving comfort.

You can download the 3D animation and images of the new “Extrema” caliper from the following ftp:

<ftp://217.220.77.66/public/giornalisti>

Username => giornalista

Password => 10carta20

About Brembo SpA

Brembo SpA is the world leader and acknowledged innovator of disc brake technology for automotive vehicles. Brembo supplies high performance brake systems for the most important manufacturers of cars, commercial vehicles and motorbikes worldwide, as well as clutches, seats, seat belts and other components for racing. Brembo is also a leader in the racing sector and has won more than 200 championships. Today the company operates in 16 countries on 3 continents, with 22 production and business sites, and a pool of 7.023 employees, about 10% of whom are engineers and product specialists active in the R&D. 2012 turnover is € 1.044,6 million (30.09.2012). Brembo is the owner of the Brembo, Breco, Bybre, Marchesini, and Sabelt brands and operates through the AP Racing brand.

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