



PRESS RELEASE

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For immediate release

BREMBO: NEW RALLY PRODUCTS

NEW WRC CALIPER – LIQUID COOLING

Rally drivers need to have more and more aggressive friction materials available, therefore Brembo has created a new 32-38 mm piston liquid-cooling caliper, made entirely from aluminium alloy.

The need for this type of caliper comes from the fact that, during WRC championship on Tarmac, standard calipers were unable to grant enough cooling of the system, reducing the driver control in the braking phase.

This liquid cooling system is completely new for Brembo in WRC and it aims to ensure a significant increase in braking performance. In fact, with this new caliper a drop in temperature of about 80°-100° is obtained with up to 45% improvement on caliper temperature compared to air cooled systems.

The thermal drop allows the use of pads with more aggressive compounds that guarantee higher bite and a higher friction coefficient preventing excessive overheating of the calipers.

The new liquid cooling 4 piston caliper is entirely machined from billet and has a particularly lightweight structure. In fact, it is similar in the design to a standard caliper with the addition of a few specific features such as the reservoirs and radiating surfaces for liquid circulation required for this type of cooling.

This structure allows a only 0,2kgs of weight increase than WRC air-cooling caliper which, added to the significant thermal gain, gives an improvement in braking system performance.

The WRC liquid cooling caliper was introduced for the first time in the German race of the World Rally championship with excellent results.

LIGHTWEIGHT RALLY DISC

The Lightweight Rally disc is a new type of disc designed for the most extreme competitions in the World Rally championship.

It is a cast iron disc that has been lightened by about 20% with completely redesigned ventilation to allow significantly more efficient air circulation during the cooling phase.

The disc is available in 300 mm or 355 mm diameter versions.

Each of the two versions has different thickness depending on the use:

- more conservative 28 mm for the 300 mm disc and 32 for the 355 mm disc;
- more extreme, 25.4 mm and 30 mm respectively for the 300 mm and 355 mm diameter;

HAND BRAKE

In order to supply even more complete car equipment, Brembo has designed a hand brake dedicated to four-wheel drive Rally cars.

The Brembo hand brake can be equipped with 2 parallel master cylinders, one for handbrake and one for differential release. The car chassis fixing support is made entirely from billet aluminium.

This system allows to delay the braking action of master cylinder in relation to the differential release.

This ensure that only the rear wheels will be locked when disconnected from the transmission.



PEDAL BOX ASSEMBLY

The new Racing pedal box assembly it's a completely new product made by Brembo to equip racing vehicles.

Designed and developed directly in Rally races, this pedal box assembly began initially to equip WRC and GT championship cars, but it is clearly suited for any competition where maximum performance is required.

The structure is floor mounted and there are 3 pedals divided into two groups, also available separately: brake - clutch and gas.

The brake – clutch group, linked by a single stud and the brake pedal with an upside-down Y shape, contribute to give to the system a significantly optimized stiffness; the alignment of the fixing holes allows the use of only two tracks, so the system is lighter and simpler to install.

The gas pedal group has a separate frame from the brake - clutch group, allowing unrestricted and optimized mounting. The gas pedal group has an electronic dual sensor in order to ensure operation even in the event of a fault with the main sensor.

The overall weight of the pedal assembly is just 3.25 kg.

For Brembo even the smallest details make a big difference and that is why the pedal assembly has various features that make it extremely customizable and adaptable to the needs of each driver. In fact, both the groups mount fully adjustable pedals and plates, the master cylinders, all push types, are available in various diameters and version such as the "Performance" versions where the free travel is controlled and calibrated for each master cylinder.

As an alternative option to the brake-clutch assembly, customers can request, with two different lengths, the Remote Adjuster for active braking balancing regulation. This tool allows the driver to change the braking distribution between the front and rear directly from the cockpit, therefore changing the vehicle balancing.

BREMBO FORGED RALLY CALIPER

Brembo, always focused on the innovation of its products, has designed a new caliper dedicated to rally vehicles.

Optimizing the design of an historical non-ventilated rally brake caliper, Brembo has created a new one with a more efficient heat exchange.

With the forged Rally caliper Brembo revised the hydraulics and inserted holes for forced ventilation. The caliper also provides for the possibility to fix an air duct to convey the cooling air flow; these are all features which allow extremely efficient system cooling.

Its vertical mounting and the possibility of assembly in both trailing and leading configurations make it extremely versatile and give the team the option to freely chose the set-up which is best suited for their vehicle's layout.

On request Brembo can also provide a light version which allows the structure to be lightened by 15%.

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