

# THE NEW CHALLENGES OF FORMULA 1 AFTER 50 YEARS OF INNOVATIONS AND TRIUMPHS

## **Brembo celebrates half a century of victories in Formula 1 with cutting-edge solutions for the 2025 season**

*Bergamo (Italy), 10<sup>th</sup> March 2025* - Brembo confirms its leadership in the Formula 1 World Championship, which for the 2025 season returns to start from the Australian GP. Present in Formula 1 since 1975 and with over 500 Grand Prix victories, the Brembo group has developed new customized solutions for each team and will supply most of the cars with hydraulic material (calipers, master cylinders, and by-wire units) and friction components (carbon discs and pads).

This year, Brembo celebrates its 50th anniversary in the world of racing, a milestone that testifies to half a century of innovation, passion, and successes. Fifty years of research and development that have made Brembo an indispensable partner for Formula 1 teams, contributing to numerous successes and records. This milestone represents not only a moment of reflection on past achievements but also a continuous commitment to the future of motorsport, always striving to propose high-performance technical solutions, even for the new technologies that the racing world is introducing to road applications in the coming years.

### A look at the brake discs

In the last twenty years, Brembo has revolutionized the concept of the disc in Formula 1. At the beginning of the 2000s, carbon discs had a thickness of 28 mm, with a maximum of 72 holes arranged in a single row and a diameter of each hole greater than 10 mm. Today, the diameter of the discs has increased from 278 mm to 328 mm for the front and from 266 mm to 280 mm for the rear, with a thickness of 32 mm and a number of holes ranging from 1,000 to 1,100 for the front, while for the rear, 900 holes are provided in the most extreme configuration for cooling. For the 2025 championship, the last with the current technical regulations, the teams supplied by Brembo will be able to choose to use different levels of cooling and different systems for attaching the disc to the bell, through a machining of the internal diameter of the disc called 'spline'. The choice of one solution or the other depends on the needs of each individual team based on the design of the individual cars.

### Brembo Group calipers for all the teams

In 2025, Brembo confirms its full presence on the starting grid: the Brembo Group will once again supply its calipers to all 10 teams. Specifically, 9 teams will use Brembo calipers, while one team will be equipped with AP Racing calipers, a company based in Coventry (England) and part of the Italian group. Brembo will therefore supply all drivers on the grid with calipers up to 6 pistons, the maximum number allowed by the regulations, made of solid aluminum alloy and nickel-plated.

### Master Cylinder, BBW, and Clutches

Six teams will use brake master cylinders supplied by Brembo and AP Racing, while four teams will install by-wire units developed by Brembo and designed to manage the balance of dissipative and regenerative braking - during the braking action of recharging the hybrid system - between the front and rear axles. These units instantly vary the contribution of dissipative braking based on regenerative braking, ensuring optimal balance between the front and rear axles. Finally, eight teams will use carbon clutches made by AP Racing.

### Customization, telemetry and maintenance

Each team, based on the specific needs of the car, has collaborated with Brembo engineers to define the optimal ratio between weight and rigidity of the new brake calipers. Brembo's advanced design, digitization, testing and simulation methodologies have allowed the creation of a customized brake caliper model, achieving the desired ratio. In this context, some teams will prefer lighter but less rigid calipers, while others will opt for more rigid and heavier solutions. This delicate balance leads Brembo to develop tailor-made solutions for the braking system of each single-seater. Thanks to the sensors in the wheel corners, each team engineers can constantly monitor the temperature of discs and calipers and, based on the collected data, can support the driver in optimally managing the temperatures and braking balance of the car.

### About Brembo

Brembo leads the world in the design and production of high-performance braking systems and components for top-flight manufacturers of cars, motorbikes and commercial vehicles. Founded in 1961 in Italy, Brembo has a long-standing reputation for providing innovative solutions for OEMs and aftermarket. Brembo also competes in the most challenging motorsport championships in the world and has won over 700 titles.

Guided by its strategic vision – “Turning Energy into Inspiration” – Brembo's ambition is to help shape the future of mobility through cutting-edge, digital and sustainable solutions.

With over 16,000 people across 15 countries, 32 production and business sites, 9 R&D centers and with a turnover of € 3,849 million in 2023, Brembo is the trusted solution provider for everyone who demands the best driving experience.

[www.brembogroup.com](http://www.brembogroup.com)

For information: Luca Di Leo - Chief Communications Officer  
Tel. +39 035 6052164 @: [luca.dileo@brembo.com](mailto:luca.dileo@brembo.com)

Daniele Bettini - Motorsport Communications  
Tel. +39 345 6988272 @: [daniele.bettini@brembo.com](mailto:daniele.bettini@brembo.com)