

ORC Racing Concept

A pure racing clutch designed with one goal: victory. In demanding race environments like Super Taikyu, the ORC Racing Concept clutch was engineered to win. The flywheel is as light as possible, delivering an unprecedented sense of speed and agility. This circuit-spec, ultra-lightweight clutch allows for exceptionally aggressive driving.



ULTRA-LIGHTWEIGHT FLYWHEEL:

Using FEM analysis technology, we have adopted an ultra-lightweight flywheel that provides a different dimension of excitement.

CLUTCH COVER:

By using a special ultra-lightweight clutch cover and reducing the weight of the entire clutch, we have reduced the weight to 60-70% of the original clutch. (Depends on the car model).

QUICK SHIFT CHANGE:

The twin plate clutch eliminates the damper mechanism of the clutch disc and reduces the weight of the clutch disc, allowing for quick shifting. It also realizes a direct connection and minimized drive loss during shift changes.







Key advantages of Racing Concept Series:

- Maximum Power Handling: Designed to withstand the high horsepower and torque demands of racing engines, these clutches offer superior power transfer without slipping, ensuring that maximum engine output is efficiently delivered to the wheels.
- **Durability Under Extreme Conditions:** Built with materials that can handle intense heat and stress, the Racing Concept clutch provides long-lasting performance even during extended track sessions. The clutch remains reliable and effective, even under constant high-speed, high-temperature conditions.
- Precision and Quick Engagement: The clutch delivers fast, sharp engagement, allowing for immediate power transfer during gear changes. This responsiveness is crucial in competitive racing, where quick shifts can make a difference in lap times.
- (ii) **High Heat Resistance:** These clutches are built to resist the heat generated by aggressive driving and frequent shifting. Advanced materials like ceramics, carbon, or high-performance metals help maintain performance and prevent clutch fade even during prolonged races.
- Optimized Pedal Feedback: The Racing Concept clutch provides firm and precise pedal feedback, offering drivers the ability to make fine-tuned inputs for better control during racing. The firm engagement improves precision during high-speed shifts and cornering maneuvers.
- **Reduced Weight and Inertia:** Often lighter than standard clutches, Racing Concept clutches reduce the moment of inertia, enabling faster engine revs and quicker shifts. This helps improve acceleration and overall vehicle responsiveness, a critical advantage in motorsports.
- **Enhanced Synchronization:** Racing Concept clutches are designed for seamless synchronization with high-performance transmissions, ensuring smooth yet rapid gear shifts without lag or grinding, even under aggressive driving conditions.
- Track-Ready Performance: Developed for racing, these clutches are optimized for aggressive driving styles, including hard launches, fast gear shifts, and high-rev applications, making them the ideal choice for competitive motorsports.

In summary, the Racing Concept Clutch Series is purpose-built for the rigors of racing, offering durability, precision, and high power capacity. It provides optimal performance in extreme conditions, delivering the responsiveness and control needed for track dominance.



