



## **STāSIS R8 - Brake System**

### **General Description**

The STāSIS/Alcon 2 piece aluminum hat/rotor assembly replaces the original equipment manufacturer (OEM) 365 mm pin style cast iron rotor with a 390 mm full floating rotor and the OEM 356 mm pin style cast iron rotor with a 355 mm full floating rotor. This system saves approximately 3 lb of un-sprung weight per corner and corrects for the mismatch in brake cooling airflow due to the OEM system using driver side directional castings for both sides of the brake system. Compared to the OEM rotor cross drilling, the STāSIS rotor features directional slotting to whisk away pad material and water without introducing stress concentrations. The heat treated iron-based rotor is cooled by the vented aluminum STāSIS hat, increasing the thermal capacity of the system.

For our braking systems, design goals such as rotating mass, heat retention/radiation, and brake bias are prioritized. Rotating mass and heat retention is minimized, while radiation is maximized. Brake bias is measured and adjusted to optimally suit each application.

Every part designed by STāSIS is thoroughly analyzed using the latest in Finite Element Analysis, as well as being subjected to destructive testing. Before being released to the public, every component is rigorously tested both on the racetrack and street. This thorough testing ensures our products can stand up to the widely varying conditions encountered in daily driving.

STāSIS can be defined as a condition of balance among various forces and that is the driving force behind our unique engineering approach. Drawing on years of motorsport and engineering experience the STāSIS team develops a range of products for a vehicle that work harmoniously together.

### **System Contents**

- (4) STāSIS/ALCON 2 piece floating rotor assemblies
- (8) STāSIS Spacers for OEM Caliper
- (1) Necessary mounting hardware

### **Supported Audi Vehicles**

Model:	R8
Model Years:	2008-Present
Note:	Not for vehicles utilizing factory ceramic brake system



## Features

- 390/355 mm STaSiS/Alcon Rotor
  - Very large air gap with directional aerofoil's which provide optimized air flow characteristics to enhance cooling
  - STaSiS cooling vanes directionally correct on both sides of vehicle unlike OEM Rotors
  - 2-piece floating rotor construction utilizes a 6061 aluminum hat, enables up to .080" radial expansion, and .030" axial expansion
  - Able to operate at temperatures in excess of 1000° F

	OEM Audi R8		STaSiS/ALCON	
	Front	Rear	Front	Rear
Rotor Diameter (mm)	365	356	390	355
Rotor Thickness (mm)	34	32	34	32
Air Gap (mm)	11.75	14.12	19.5	18
Rotor Weight (lbs)	24	20	21.1	17.9
Caliper Description	Brembo Monoblock 8 Piston	Brembo 2 Piece 4 Piston	*	*
Caliper Weight (lbs)	12	13	*	*

Table 1: Comparison of OEM B8 A4 and STaSiS/ALCON Brake Systems

\*STaSiS Brake System retains factory calipers