



STāSIS S5 Cabriolet Monobloc Brake System

General Description

The STāSIS brake assembly replaces the 345 mm 1 piece cast iron rotor with a 2 piece rotor consisting of an aluminum hat and light weight rotor. Compared to the OEM rotor, the STāSIS rotor features directional slotting to whisk away pad material and water. The heat treated iron-based rotor is cooled by the vented aluminum STāSIS hat, increasing the thermal capacity of the system.

Braided stainless steel wrapped Teflon brake lines replace the flexible rubber factory units that deform when subjected to high braking pressures. Stronger lines allow less change under increased pressure and therefore the interaction between pedal application and caliper piston displacement is more linear. This allows the driver to more accurately apply braking modulation during spirited driving.

High boiling point brake fluid and performance brake pads replace the street-oriented OEM units – larger temperature ranges and higher temperature ceilings result.

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

- (2) STāSIS/ALCON 2 piece floating rotor assemblies
- (2) ALCON Mono 6 Calipers
- (2) STāSIS caliper mounting brackets
- (1) Set of high performance brake pads
- (1) High temp brake fluid
- (1) Goodridge brake lines
- (1) Necessary mounting hardware



Supported Audi Vehicles

Model: S5 Cabriolet
 Model Years: 2010-2011

Features

- 370/390 mm STāSIS/Alcon Turbulator rotor
 - Very large air gap with directional, turbulence inducing aerofoils which provides optimized air flow characteristics to enhance cooling
 - 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 breaching 1000° F
- Alcon Monobloc 6 piston caliper
 - Stronger, and 50% lighter than the OEM units
 - Unique internal, high resilient piston seals, allow quick piston activation/retraction for linear pedal input to piston output
 - Firm, linear pedal feel and largely unaffected by temperature increase
- STāSIS high performance brake pads
 - Great initial bite while maintaining exceptional rotor wear
 - Maintain high coefficient of friction up to approximately 1000° F
 - High fade resistance, great cold stopping power
- STāSIS high performance brake lines
 - Stainless Steel brake lines reduce volume changes during pressure modulation
 - Helps to reduce pedal fade, making interaction between pedal and caliper more predictable and constant
- High performance brake fluid
 - High boiling point, greatly reducing brake fade after repeated stops

	OEM	STāSIS/ALCON	
Rotor Diameter (mm)	345	370	390
Rotor Thickness (mm)	29.5	32	32
Air Gap (mm)	11.6	19	19
Rotor Weight (lbs)	23.75	19	20
Caliper Description	2 piece single piston slider	Monobloc 6 piston	Monobloc 6 piston
Caliper Weight (lbs)	18.25	7.80	7.80
Piston Sizes (mm)	57.15	30.13/34.95/37.82	30.13/34.95/37.82
Pad Annulus (mm)	62	49.25	49.25

Table 1: Comparison of OEM S5 Cabriolet and STāSIS/ALCON Brake Systems