brembo®

Gran Turismo Catalog North America

High performance brake systems

Introduction

Brembo...#1 in brakes!

Brembo is a world leader in the engineering, development and production of high-performance braking systems and components for cars, motorcycles and commercial vehicles. The company operates on 3 continents, with production facilities in 9 countries and sales networks in 70 national territories worldwide.

Research never ceases

Brembo has always invested in R&D, in its quest to offer a product at the leading edge, guaranteeing safety and performance. Research and Development is the focus for 6% of investments, and the efforts of 400 engineers.

Brembo, racing and winning

For over 30 years, Brembo has equipped the cars and bikes of the world's premier drivers and riders to win more motorsports championships than any other company.

Brembo - all done in-house

The entire manufacturing process is an in-house operation: design, development, testing, machining, quality control, distribution, service.

Brembo means top Quality

Brembo brakes are manufactured under ISO 9004 and ISO 14000 standards. Aftermarket products are also covered by Brembo Warranty and carry AB/TÜV certification from the German Federal Road Safety Office.

Top vehicle makers use Brembo

Brembo produces original equipment braking systems for the top vehicle makers: Aston Martin, Audi, BMW, Cadillac, Chrysler, Ferrari, Ford, General Motors, Honda, Jaguar, Jeep, Land Rover, Mercedes-Benz, Mitsubishi, Nissan, Porsche, Subaru, Volkswagen, to name a few.

Brembo High Performance

The experience accumulated through years of intensive research in the competition field has allowed us to create product lines that are differentiated on the basis of the application types and different research and development procedures adopted. Thanks to the results obtained, car sports enthusiasts who insist on replacing original brake systems with Brembo High Performance equipment are able to improve their riding style in terms of performance and safety while also ramping up the overall aesthetic appeal of their machines.


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Gran Turismo Brake System

GRAN TURISMO APPLICATIONS

The Gran Turismo system's level of technology and performance is unrivaled by any other product on the market. By utilizing larger calipers and discs, thermal capacity and brake torque is increased. This potent combination offers the extreme in Brembo's leading edge technology for high performance street or track use applications.

- Brembo 2, 4, 6, or 8 piston calipers (depending on applications) with sequentially sized pistons; includes color choices of red, yellow, black or silver calipers
- Brembo two piece "floating" hat and rotor assemblies reduce unsprung and rotating weight and dissipate heat faster
- Brembo drilled or slotted and one or two piece discs up to 16 in (405 mm)
- Stainless steel braided brake lines: DOT/TÜV approved
- Brembo high performance brake pads
- Brembo "floating" anti-rattle disc hardware
- Brembo billet caliper mounting brackets
- Most of GT applications comes with TÜV Certification

* Brembo brake systems are fully compatible with ABS and traction control system. All of the necessary hardware is included to insure seamless installation.


GT-R Brake System
brembo

CALIPERS

- Sequentially sized 4 and 6 piston calipers.
- Monobloc radial mount one piece design, machined from billet aluminum.
- Nickel-plated finish with red machined-in Brembo logo.
- Stainless steel radiated piston inserts to protect the caliper, pistons and brake fluid from heat transfer.
- Full range of piston sizes provide vehicle specific engineering for "Optimum Brake Balance" and performance.

DISCS

- Two piece floating hat and rotor assemblies reduce un-sprung weight and rotational mass and dissipate heat quickly.
- Floating anti-rattle rotor hardware, developed by Brembo for McLaren F1 road car, prevents wear to the hat and eliminates noise associated with floating rotors.
- Available in drilled or slotted rotors. Slotted recommended for track use.
- Dimensions of rotors ranging from 13.6 in (345 mm) to 16 in (405 mm) in diameter and from 1.1-1.3 in (28 - 34 mm) in thickness.

PADS

- Available with Brembo High Performance Street Pads; Optional Race/Track pad compounds available.

OTHER MAJOR COMPONENTS

- Billet mounting brackets and adapters.
- DOT and TÜV certified Goodridge stainless steel brake lines.

ADVANTAGES OF NEW GT-R CALIPERS

- Reduced un-sprung weight.
- Increased stiffness.
- Increased heat rejection.
- Improved pedal feel.
- Corrosion resistant nickel-plated race finish.
- Hand-assembled.

RANGE OF APPLICATIONS

Availability for the majority of High Performance vehicles currently in our GT range.

2 PIECE RADIAL CALIPERS

- Lightweight 2 Piece Aluminum Alloy Body
- Quick Release Pad System
- Sequentially Sized Pistons
- Radial Mount Design

4 PISTON CALIPER – A, F

- Fits discs up to 328 x 28mm
- Fits on Acura NSX/RSX/TSX, Audi A3/A4/TT, BMW 3 Series, Ford Focus SVT, Honda Civic Si/S2000, Lexus IS300, MIstubishi Eclipse, Mazda Miata/RX8, Subaru WRX, Volkswagen Golf/Jetta/GTI
- Available in Red, Silver and Black

4 PISTON CALIPER – B, H

- Fits discs up to 380 x 32mm
- Fits on Audi S4, BMW M3, Chevy Corvette C5/C6, Dodge Viper/Magnum/Charger/300C, Ford Mustang/Cobra, Ferrari 550/575, Mistsubishi Lancer Evo 8/9, Nissan 350z/G35, Porsche 993/996/997, Subaru STi, Toyota Supra
- Available in Red, Silver and Black

4 PISTON CALIPER – C

- Fits discs up to 345 x 28mm
- Fits on Rear Applications - Audi A4/S4, BMW M3/3/5/7 Series, Chevy Corvette, Dodge Viper/Magnum/Charger/300C, Ferrari 550/575, Mercedes CLS/E/S/SL, Mitsubishi Evo 8/9, Porsche 993/996/997, Toyota Supra
- Available in Red, Silver and Black

6 PISTON SUV CALIPER - J

- Fits discs up to 405 x 34mm
- Fits on Cadillac Escalade, Chevy Tahoe/Suburban/Avalanche, Dodge Ram 1500, Ford F150, GMC Yukon/Denali, Hummer H2, Range Rover Sport
- Available in Red, Silver and Black

2 PIECE AXIAL CALIPERS

- **Lightweight 2 Piece Aluminum Alloy Body**
- **Quick Release Pad System**
- **Sequentially Sized Pistons**
- **Axial Mount Design**

4 PISTON COBRA R CALIPER - E

- Fits discs up to 330 x 28mm
- Only for Ford Mustang GT/Cobra
- Available in Black only

2 PISTON REAR CALIPER - E

- Fits discs up to 316 x 20mm
- BMW 3 Series
- Available in Red, Silver, Black and Gold

PARKING BRAKE - D

- Lightweight Aluminum Alloy Body
- Single Piston
- Axial Mount Design
- Mechanical Operation
- Available in Black only

MONOBLOC CALIPERS

- Lightweight Monobloc 1 Piece Aluminum Alloy Body
- Quick Release Pad System
- Sequentially Sized Pistons
- Radial Mount Design

4 PISTON MONOBLOC CALIPER - P

- Fits discs up to 380 x 28mm
- Fits on Rear Applications - BMW M3/M5/ M6, Chevy Corvette C5/C6, Mercedes, Porsche 996/997/Turbo/GT3/Cayenne, Range Rover
- Available in Red, Silver, Black and Yellow

6 PISTON MONOBLOC CALIPER – M, N

- Fits discs up to 405 x 34mm
- Fits on Audi RS4, BMW M3/M5/M6, Chevy Corvette C6, Ford GT, Ferrari 360/430, Mercedes AMG CLS/E/S/SL, Porsche 996/997/Turbo/ GT3/ Cayenne
- Available in Red, Silver, Black and Yellow

8 PISTON MONOBLOC CALIPER - G

- Fits discs up to 380 x 34mm
- Fits on Audi A8, BMW 5/X5/6/7/ Z8, Cadillac Escalade, Chevy Tahoe/ Suburban/Avalanche, Dodge Magnum/ Charger/300C, Ford F150, GMC Yukon/ Denali, Mercedes CLS/E/S/SL, Nissan Titan/ Armada, Porsche Cayenne, Range Rover
- Available in Red, Silver and Black

GT-R CALIPERS

- Sequentially sized 4 and 6 piston calipers.
- Monobloc radial mount one piece design, machined from billet aluminum.
- Nickel-plated finish with red machined-in Brembo logo.
- Stainless steel radiated piston inserts to protect the caliper, pistons and brake fluid from heat transfer.
- Full range of piston sizes provide vehicle specific engineering for “Optimum Brake Balance” and performance.

BREMBO BRAKE FLUID SPORT.EVO 500++

Formulated for the Enthusiast
Brembo SPORT.EVO 500++ is a premium specification Motor Vehicle Brake and Clutch Fluid which conforms to and exceeds the current international specifications U.S. FMVSS No.116 DOT 3 and DOT 4, SAE J1703, SAE J1704 and ISO 4925. Typical dry boiling point 520° F (271° C), typical wet boiling point 336° F (169° C). Brembo SPORT.EVO 500++ will mix safely with other DOT 3, DOT 4 and DOT 5.1 brake and clutch fluids conforming to the above specifications. While Brembo SPORT.EVO 500++ is suitable for use in the hydraulic brake and clutch systems of all cars, commercial vehicles and motorcycles for which a non-petroleum based fluid is specified, it has been specially formulated to meet the system performance requirements of the ENTHUSIAST upgrading the Braking System using a Brembo High Performance Kit. Brembo SPORT.EVO 500++ is well suited to vehicles with ABS braking systems.For maximum safety and performance Brembo recommends that brake fluid is changed every year. NOT SUITABLE FOR VEHICLES WITH MINERAL OIL SYSTEMS. If in doubt consult vehicle handbook.

Important notice:
Be aware NOT to mix Brembo SPORT.EVO 500++ with other fluids unless you follow the above technical specifications.

BREMBO BRAKE FLUID LCF 600 PLUS

Low compressibility factor at high temperature with more than 10% reduction in brake fluid compressibility at 356° F (180° C).

High dry boiling point
Typical Competitor Racing Fluids 590° F (310° C)
Brembo Racing LCF 600 plus 601° F (316° C)

Exclusively for racing use.
Brembo Racing LCF 600 plus has been specifically formulated to provide the highest performance under all racing conditions:
- an independently proven low compressibility at high temperatures
- a typical dry boiling point of 601° F (316° C)
- a typical wet boiling point of 399° F (204° C)

It even exceeds the requirements of U.S. FMVSS 116 DOT4 specification.

Compatibility
Compatible with all Brembo Racing Brake Systems. It can be mixed with other DOT3 and DOT4 racing brake fluids but for maximum performance advantage, before filling, other types of fluid should be drained form the brake system to avoid diluting the fluid characteristic. Brembo LCF 600 plus must not be used in Brake Systems containing magnesium parts.

Usage
- FOLLOW VEHICLE MANUFACTURERS RECOMMENDATIONS WHEN ADDING BRAKE FLUID.
- KEEP BRAKE FLUID CLEAN AND DRY. Contamination with dirt, water, petroleum products or other materials may result in brake failure or costly repairs.
- STORE BRAKE FLUID ONLY IN ITS ORIGINAL CONTAINER. KEEP CONTAINER CLEAN AND TIGHTLY CLOSED TO PREVENT ABSORPTION OF WATER.
- CAUTION. DO NOT REFILL CONTAINER AND DO NOT USE FOR OTHER LIQUIDS.

Caution
- IRRITATING TO EYES.
- KEEP OUT OF REACH OF CHILDREN.
- CONTAINS POLYALKYLENE GLYCOLETHERS AND POLYGLYCOLS. DO NOT SWALLOW. If swallowed, call medical assistance immediately and show this container.
- AVOID SKIN AND EYE CONTACT. In case of eye contact flush with plenty of water for 10 minutes. If irritation persists, seek medical advice. BRAKE FLUID WILL DAMAGE PAINTWORK. If spilt wash off immediately with plenty of water.

Program At A View

HIGHLY PROTECTIVE PACKAGING & COMPREHENSIVE INSTRUCTION MANUAL

Only Brembo packages each of its components in fitted foam insulation to ensure that each system reaches you in perfect condition. Comprehensive instruction manual included with every Brembo system.

CALIPER MOUNTING BRACKETS & HARDWARE

All caliper mounting brackets are precision milled from superior quality materials. Each Brembo system includes all necessary hardware for installation.

OPTIMUM BRAKE BALANCE

Brembo uses several hundred caliper, piston and disc combinations to achieve maximum performance and optimum brake balance. Calipers are designed with differential piston bore sizes for even pad wear and OEM approved dust boots to protect the pressure seals & fluid.

OPTIMUM BRAKE BALANCE

BREMBO HIGH PERFORMANCE BRAKE PADS

Each Brembo system is delivered with preloaded calipers. Brake pads are selected vehicle specific for high performance.

GOODRIDGE STAINLESS STEEL BRAIDED BRAKE LINES

Goodridge is the leading line supplier to OE manufactures and championship winning race teams worldwide. With the tightest bend radius in the industry and the lowest rate of expansion, you can be assured that every inch of pressure from the pedal is transfered directly to where it counts - the caliper. Goodridge is the only brake hose system approved for use in every country in the world and is guaranteed for life.

FLOATING ANTI-RATTLE HARDWARE

Designed by Brembo to minimize noise between the floating disc & aluminum hat. Allows rotor to expand & contract naturally under extreme temperatures to reduce distortion of the hat & rotor assembly.

DRILLED / SLOTTED

Both drilled & slotted rotors offer improved initial bite & provide an exit path for water, debris & gases. Some manufacturers offer drilled rotors for performance and an aggressive look. Slotted rotors are recommended for extreme conditions & specifically fitted for vehicles with racing pads.

QUICK RELEASE PAD RETAINING SYSTEM

Incorporates anti-rattle feature to eliminate noise and is designed for quick and easy pad changes.

One-piece rotor assembly

Two-piece "floating" rotor assembly

OVERSIZED ONE-PIECE ROTORS

Incorporates the benefits of an oversized rotor and application specific vane geometry for increased brake torque and thermal capacity.

OVERSIZED TWO-PIECE "FLOATING" ROTORS

Race inspired design reduces unsprung and rotating weight while increasing brake torque and heat dissipation.

VANE GEOMETRY

Our discs use three distinctive vane patterns, pillar, straight & curved, to assure maximum air flow & cooling. Vane patterns are selected by Brembo Engineers to provide optimum heat dissipation for each application.

Most systems available in Red, Silver or Black calipers.
Parts are not sold separately.
Brembo brake systems are fully compatible with ABS and traction control systems.

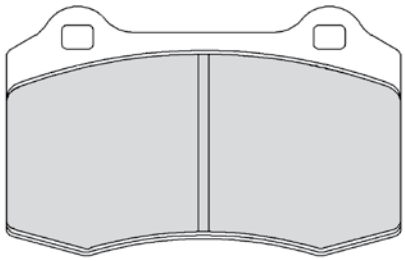
Disc available cross drilled or slotted.

107.5146.30 - 107.5146.31

Galfer HP1000

Caliper family correspondence A/C/F

Length	Height	Thickness
109	51,5	15

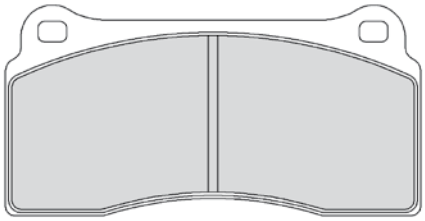


107.4865.80 - 107.4865.80M - 107.8645.16

HP1000 HP1000 HP1000 w/sensor

Caliper family correspondence B/H/P

Length	Height	Thickness
130	51,7/48,7	18

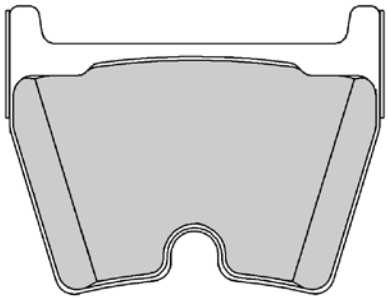


107.8544.20 - 107.9312.44

Caliper family correspondence G

Jurid HP1000

Length	Height	Thickness
95,3	57,5	16,7

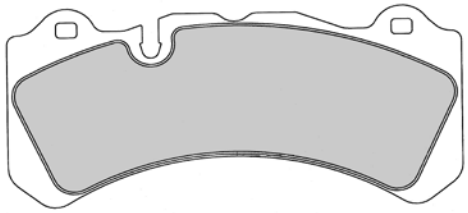


207.9551.13

Caliper family correspondence J/N

HP1000

Length	Height	Thickness
186	57,5	17,5

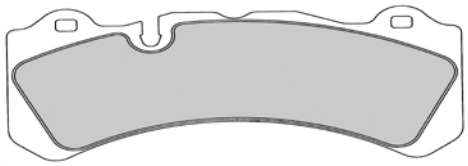


1XA5.71.M4

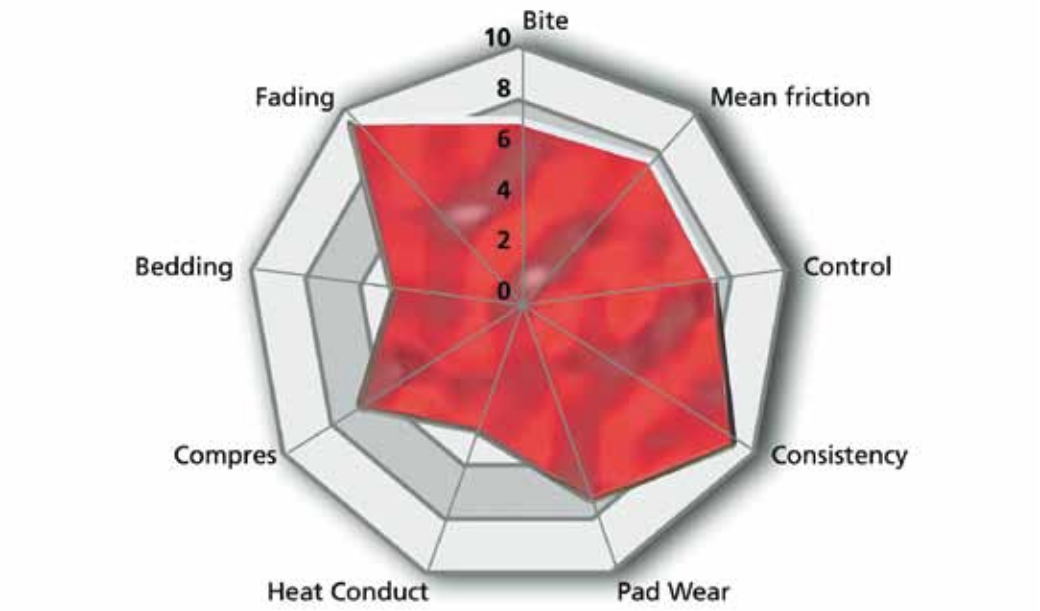
Caliper family correspondence M

HP1000

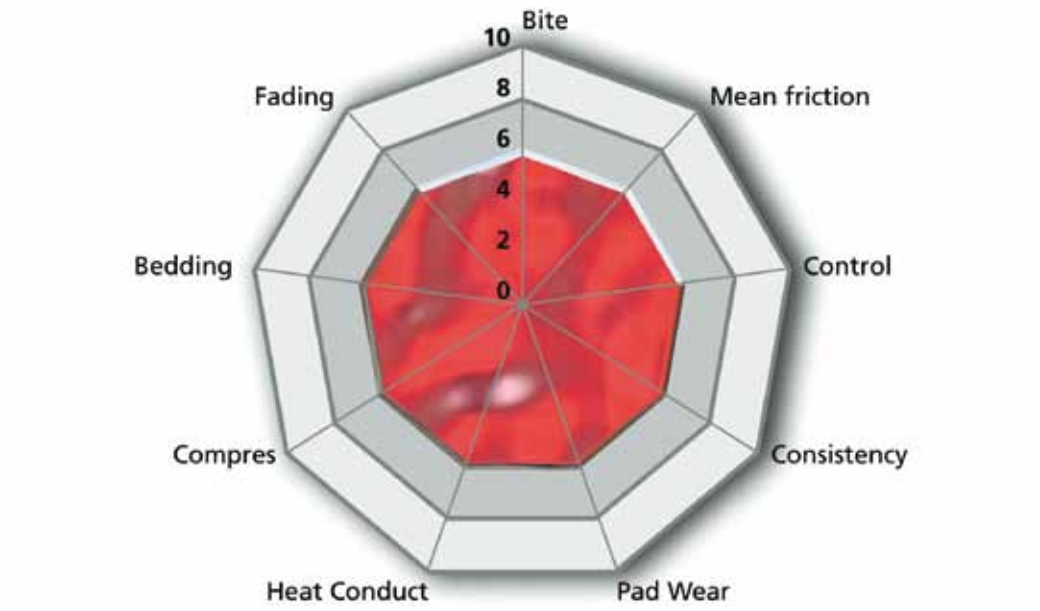
Length	Height	Thickness
186	52,5	17,5



High Performance HP 1000



OE



Radar Chart Index

Bite	Friction measured at the beginning of braking action
Mean Friction	Average level of friction during braking
Control	Constant and high level of friction
Consistency	Capability to repeat the same curve of friction stop after stop
Pad wear	Loss of material (reduction of thickness)
Heat Conduct	Thermal conductivity of the material
Compressibility	Elasticity of the material during compression
Bedding	Ability to make the disc ready for a right use in short time
Fading	Ability to reduce fading due to temperature

WHY DO I NEED TO UPGRADE MY BRAKE SYSTEM?

A Brembo High Performance Brake system offers many advantages over your vehicles original brake system. Increased diameter rotors and radial mount calipers greatly improve brake system performance, heat dissipation, and reduce brake fade. Aluminum calipers and lighter weight two piece rotors reduce unsprung weight and differential piston bores provide optimum brake balance and even pad wear.

IS THE BREMBO BRAKE UPGRADE DESIGNED SPECIFICALLY FOR MY VEHICLE?

Brembo Engineers design each brake upgrade specifically for your vehicle and driving conditions choosing from hundreds of caliper, piston and rotor combinations to achieve maximum performance and optimum brake balance. Additionally, Brembo Brake Upgrades are easy to install and are designed to work seamlessly with your vehicle's stock master cylinder, ABS and traction control system.

WILL I NEED OVERSIZED WHEELS AND TIRES?

Wheel size and wheel clearance are important considerations when upgrading your brake system. Many new performance vehicles come with larger wheels and tires and can accommodate a Brembo Brake Upgrade. Always check with your sales associate to ensure that your wheels provide the clearance and offset necessary to accommodate your new brake system.

DO I NEED TO UPGRADE THE FRONT AND REAR BRAKES?

Each Brembo upgrade is designed to give you the flexibility to upgrade front or front and rear while maintaining optimum brake balance and performance. Complete rear systems are available for many applications and are engineered specifically to compliment the front system.

WHAT IS THE DIFFERENCE BETWEEN DRILLED AND SLOTTED ROTORS?

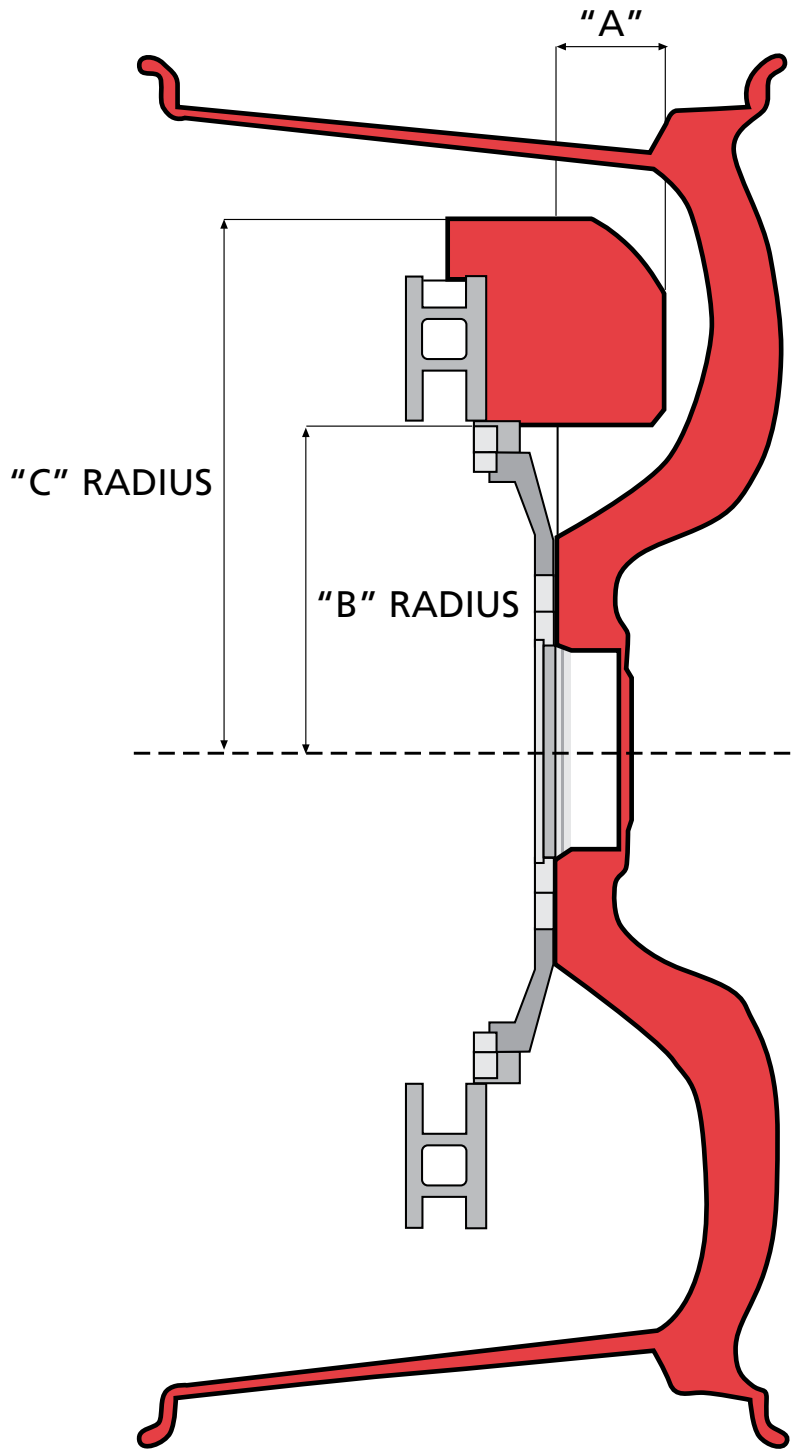
Both drilled and slotted rotors provide increased brake system performance. They continuously clean and refresh the pad surface, shed water and debris, prevent gas build up, and increase pad "bite". Drilled discs offer improved ventilation and slotted discs offer increased durability under extreme braking conditions, specifically when vehicles are fitted with race pads.

TÜV Certification

Most of the GT and sport line comes with the approval granted by the German Ministry of Transport on TÜV certification. This is because Brembo actually develops and manufactures its entire range of brakes discs in its own factories to very high quality standards ensured by stringent control of the whole production process.

Disclaimer

The specifications and information shown in this catalogue were obtained from reliable sources, and believed to be accurate at the time of publication. Although Brembo believes this information to be correct, no warranty is made or implied as to the accuracy of this information, and Brembo does not accept or assume responsibility for errors, changes, omissions, or for harm resulting therefrom.



Wheel Measurement
General Note
Given dimensions are related to the Brake system. Brembo recommends a minimum clearance of 3mm between the caliper and the wheel spoke or rim.

Example
1B1.8006A for Chevrolet C5 Corvette
- With a straight edge, measure from the middle of the wheel center bore out to 122 mm for the location of the bottom of the caliper.
- Now measure down from the straight edge to the back of the wheel spoke for the system's "A" measurement. This system needs 49mm or more to leave sufficient caliper clearance.

Repeat these (two) steps for caliper clearance through to the top of the caliper.

BEDDING PROCEDURE

It is very important to follow proper brake bedding procedure following installation. This is necessary not only for optimum performance of the system, but also to avoid onset of judder (vibration felt through brake and steering).
The discs are delivered with a thin zinc coating to prevent corrosion. Prior to beginning the bedding procedure, this plating must be removed from the braking surfaces by driving the car slowly (under 30mph) and performing very light brake applications in order to remove the plating without generating heat. With too much heat or pedal pressure, this plating can be deposited unevenly on the disc, and impregnated into the pad, further increasing the likelihood of judder development. Once a visual inspection of the braking surfaces confirms that the plating has been evenly removed, begin with the bedding procedure as specified below.

- Drive vehicle to a remote area and perform at least 30 brake applications of 3 second duration. Use light/ medium deceleration with varying starting speeds. Leave at least ½ mile between each brake application
- The purpose of this procedure is to gradually increase the temperature in the components without thermal shock, and to mate the brake pad and disc friction surfaces
- After the repeated stops, drive the vehicle for several miles with little or no braking in order to adequately cool the components
- The system is now ready for normal use

NOTE: This entire procedure must be complete before driving the vehicle as normal. It is especially important that this process is completed before any extended same-speed driving is done (i.e. freeway travel). Failure to follow these instructions greatly increases the likelihood of judder development.
NOTE: After installation or bleeding of the brake system, flush any brake fluid from around the bleed screws, etc, using soapy water. Over time, brake fluid trapped in these areas may cause paint damage. Additionally, do not use acidic wheel cleaners when washing your vehicle, as they can cause damage to the caliper finish and aluminum disc mounting bells, as well as to the wheels themselves. Use only soap and water when cleaning wheels or braking components.