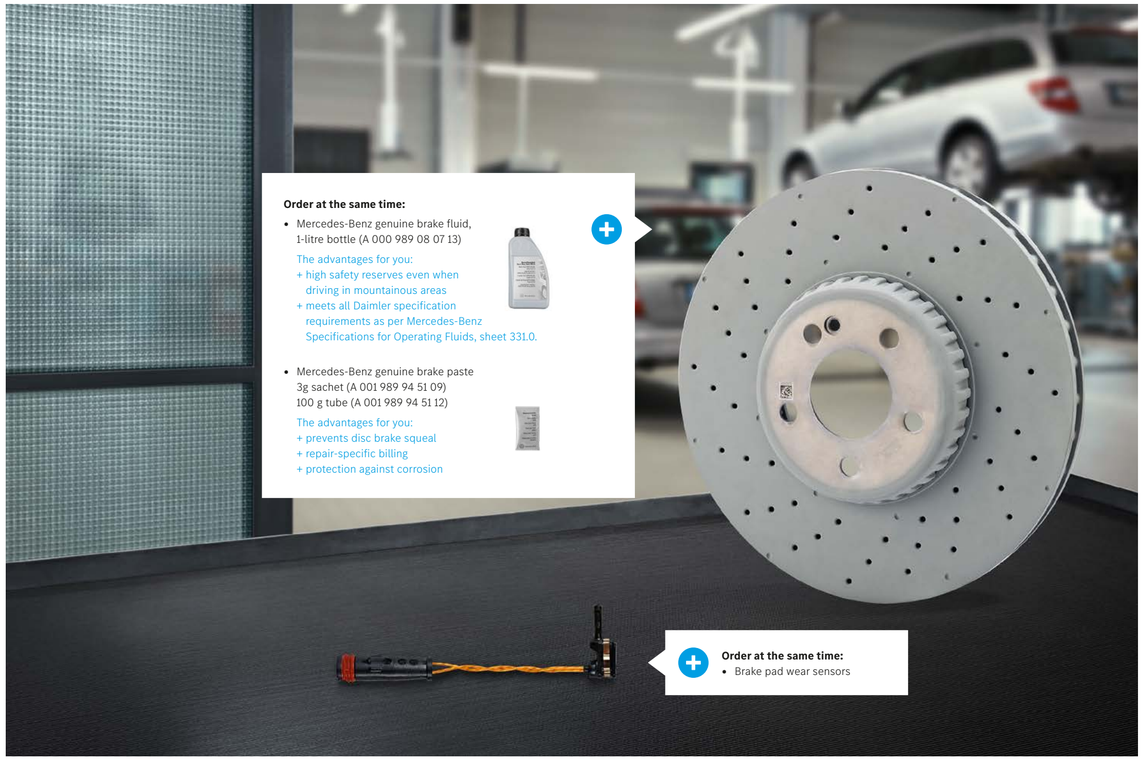
Brakes.

Product		The advantages for your customers	The advantages for you	Practical hint
Brake pads. Ensure optimum braking performance.		• Specifically developed and adapted for each Mercedes-Benz model. • Avoidance of brake noise. • Low degree of wear for high mileage.	• The complete configuration, including all the small parts needed for installation, and the perfect fit ensure quick and easy installation and therefore low service costs for your customers.	• Developed to fit the ABS and ESP systems in Mercedes-Benz vehicles, also taking into account the vehicle weight and all other components in the braking system.
Brake discs. Quiet-running and avoidance of noise and vibration thanks to perfect fit.		• Optimum friction pairing. • Outstanding braking performance from day one. • Resistant to cracks and deformation. • Outstanding corrosion protection thanks to a special protective coating.	• Quick to install as the protective coating does not require removal. • Time-saving thanks to shorter running-in phase as the optimum friction coefficient is reached quickly.	• Brakes deliver exceptionally high performance, braking the vehicle from 100 km/h to 0 in around 2.7 seconds!
Light brake discs. Light brake disc with innovative gearing between brake ring and steel hub.		• Improved fuel consumption and ride comfort thanks to reduced weight (up to 1.5 kg per brake disc).	• Homologated track width only with use of light brake disc. Brake discs with hub > 2.5 mm may require separate approval (depending on national legislation).	• Cast iron discs usually have a thicker hub and are not approved by Mercedes-Benz Group AG for the relevant models.

Products bearing this symbol were subject to a competitive comparison. A selection of the test results can be found on the following pages.



The benchmark for quality, safety and economy.

Mercedes-Benz genuine brake pads and brake discs.

The reliability and performance of brake pads and brake discs are key to ensuring the safety of both vehicle occupants and other road users. After all, poor braking performance can significantly increase braking distance. Inferior materials can also lead to heavy corrosion, brake noise and increased wear. As such, Mercedes-Benz places the highest demands on safeguarding the quality of brake pads and brake discs.

Mercedes-Benz lightweight brake discs have a high-tensile sheet- steel hub which is connected to an iron brake ring by a gearing concept. The weight is reduced by up to 1.5 kg per disc thanks to the use of thin steel in place of cast iron for the brake disc bowl, thus saving up to 6 kg per vehicle – while at the same time still meeting the highest safety standards. The weight reduction also helps improve fuel economy and minimise emissions.

Technical benefits through innovation. The reduction in unsprung mass means driving is more comfortable.

Workshops also benefit. The wear indicator on the Mercedes-Benz genuine brake disc eliminates the need for time-consuming measure-ments, as the critical wear limit can be determined at a glance.

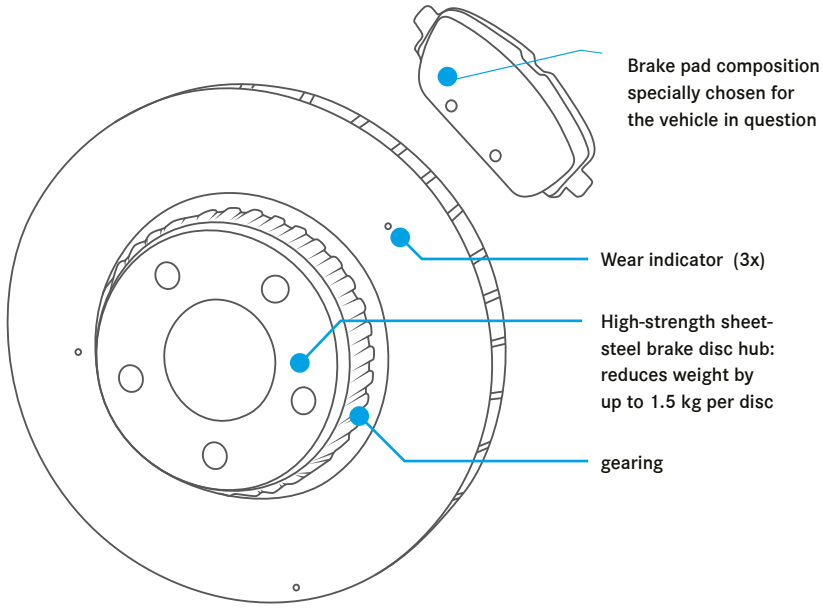
Quick overview of test results. The best choice: GenuineParts.

	Mercedes-Benz	Competitor 1	Competitor 2
Installation check	+	+	+
Braking distance at 100 km/h (cold brakes)	+	+	+
Braking distance at 130 km/h (warm brakes)	+	+	+
Braking distance at 160/200 km/h (cold brakes)	+	+	0
Disc-fracturing resistance	+	– *	0
Friction value between brake pad and disc	+	+	–
Wear resistance	0	–	+

Score list	1	2	3

\+ Excellent 0 Good – Satisfactory

Genuine brake pads and discs from Mercedes-Benz achieved the top overall score when it came to fracturing resistance, friction value and wear. They are designed to optimally fit the respective vehicle model.



The product test: Mercedes-Benz Vs. Competitor

The **independent test institute DEKRA** has carried out various tests with three pairings each of brake pad and brake disc. The products tested are suitable for the C- and E-Class of the 205, 213 and 238 series. The test vehicle was a Mercedes-Benz C 200, 205 series.

Test criteria.

Installation.

- Accuracy
- Installation time

Why is this test important?

The optimum fit is a prerequisite for short assembly and disassembly times.

How was it tested?
The competitors' products were compared with the Mercedes-Benz genuine parts using a digital caliper and angle gauge and installed in the test vehicle when new. During installation, the dimensional accuracy and installation time were checked.

Braking distance.

- Braking distance 100 km/h cold brake
- Braking distance 130 km/h warm brake
- Braking distance 160/200 km/h cold brake

Why is this test important?
The most important parameters for the assessment of the braking force are the braking distance from different speeds in the cold state of the brake, as well as the decrease in the braking effect with increasing braking temperature (fading).

How was it tested?
With cold braking (less than 100 'C), several braking operations were carried out from 100 km/h, as well as 160 km/h and 200 km/h with maximum pedal force to a standstill.

For the brake tests with a warm braking system, ten consecutive braking operations were carried out from a speed of 130 km/h to a standstill. We started with cold brakes (less than 100 'C). Due to rapid successive braking, the brake system heated up increasingly.

Dynamometer.

- Lens crack resistance
- Coefficient of friction between brake pad and disc
- Wear resistance

Why is this test important?
Robust and durable products need to be changed less frequently. The optimum coefficient of friction between the brake pad and the brake disc is crucial for braking performance.

How was it tested?
The crack development on the brake disc was examined and evaluated. For this purpose, 30 conditioning brakes were carried out to grind in the friction pairing and 1.200 brakes with different start and end speeds as well as decelerations. For the further tests, more than 200 conditioning brakes were carried out to grind in the friction pairing and several brakes with changing driving and speed profiles, start and end speeds, brake pressures, decelerations and temperatures. In the case of the brake pads, the wear was determined in millimeters and in the case of the brake discs, the weight wear was determined in grams.