

# The new-generation B-Class

**Press Information**

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The descriptions and information in this press kit apply to the international Mercedes-Benz model range and may vary from country to country.

## Mercedes-Benz B-Class: Sports Tourer in better shape than ever

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**Stuttgart – After three successful years, Mercedes-Benz has overhauled the design and engineering of the B-Class. The facelift programme focused on environmental compatibility, economic efficiency and comfort, with further advances being made in each of these areas. Thanks to a series of detailed improvements, the four-cylinder engines now burn up to seven percent less fuel than previously, and distinguish themselves with remarkably low exhaust emissions that undercut the current EU limits by as much as 90 percent. Mercedes-Benz has developed a new ECO start/stop function for the high-volume B 150 and B 170 models. This switches off the engine when stopped at traffic lights, for example, producing a fuel saving of up to nine percent in practical use. Additional new developments include the bi-fuel petrol/natural-gas drive in the B 170 NGT BlueEFFICIENCY, along with active parking assist which helps drivers to both find a suitable parking spot, and then manoeuvre into it.**

Since its market premiere in summer 2005, the B-Class has evolved into the blueprint for a new species of car which harmonises the benefits of various vehicle concepts: the four-door model boasts the dynamic design of a sporty saloon, the exterior dimensions of a compact car, the spaciousness of an estate, the versatility of a mini MPV and the trademark safety of a Mercedes-Benz.

The sales figures for the B-Class to date provide clear evidence that the Mercedes-Benz product planners hit the mark with a concept that caters to the motoring needs of today's sophisticated society: since mid-2005, over 350,000 motorists around the world have been won over by the Sports Tourer.

The restyled **front end** injects the B-Class with more poise and assurance than before. This is primarily down to the radiator grille with its three chromed cross fins painted in metallic grey and the Mercedes star integrated into its centre. However, the more imposing appearance of the B-Class also stems from the new-look bumper – whose design emphasises the large air intake at the bottom – as

well as the modified bonnet. This new design idiom makes the front look broad and, as a consequence, especially powerful, symbolising the sporty attributes of the B-Class even more clearly than before. The **design at the sides** seems more harmonious and elegant than before, because the exterior mirror housings, door handles and skirt panels are now painted to match the body colour on all model variants.

The **rear styling** picks up on the dynamic flow of lines at the front and along the sides. A direct visual link is created by the tail light assemblies, whose upper edges merge seamlessly with the character line along the vehicle's sides. The tail lights sport a new high-brilliance look and draw the gaze to the large tailgate, which now comes with an ergonomically enhanced chrome handle strip.

### **Interior: high-grade appointments with new upholsteries and trims**

High-class appeal, attention to detail and a sense of ample spaciousness – these qualities have always been intrinsic to the B-Class. The winning blend of forms, colours and materials teams up with the interior's roominess, the pleasant feel of all its surface materials and the expansive window areas to produce a most inviting ambience. This is helped by the high seating position – which, incidentally, improves the driver's all-round view, too – while the relatively high waistline fosters a sense of security without making the occupants feel confined.

The Mercedes design team has further upgraded the interior with a new upholstery fabric, plus a new **fabric pattern** for the seat cushions. If the B-Class is ordered with the **sports package**, the side seat bolsters are trimmed in ARTICO man-made leather and the centre panels in fabric. The interior door linings likewise feature a new fabric trim.

The **centre console** continues to be bordered by trim strips on both sides, but they are now made from diagonally brushed aluminium in a smoke grey finish. The same, integrated trim is found again in the vicinity of the gearshift and in the door panelling, giving the interior an added sense of refinement.

## **Diesel engines: fuel consumption reduced by seven percent**

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The B-Class continues to be available with a choice of six engines – two direct-injection diesel units (80 kW/109 hp and 103 kW/140 hp) delivering up to 300 newton metres of torque, as well as four petrol engines with a peak power output of up to 142 kW/193 hp and a maximum torque of 280 newton metres. The four-cylinder power units have undergone a series of detailed improvements in order to further reduce fuel consumption.

For the **diesel models**, this means that the combined NEDC fuel consumption of the B 180 CDI and B 200 CDI has dropped by as much as seven percent – depending on tyre size – to 5.2 - 5.4 and 5.4 - 5.6 litres per 100 kilometres, respectively. The two turbodiesel models, which are particularly smooth-running thanks to a balancer shaft, will therefore be an even less frequent sight at the filling station from now on; the B 180 CDI can clock up over 1000 kilometres on a single tank of fuel (54 litres).

## **Petrol models: new fuel-saving ECO start/stop function**

Depending on the model and engine output, the four **petrol** variants of the B-Class return fuel consumption figures of between 6.6 and 8.1 litres per 100 kilometres on the NEDC driving cycle. From autumn 2008, motoring is set to become even more economical with the arrival of the B 150 and B 170 BlueEFFICIENCY models featuring the **ECO start/stop function**. This newly developed function automatically switches the engine off when the driver shifts to neutral at low speed whilst depressing the brake pedal. If the criteria for stopping the engine are fulfilled, a special display appears in the instrument cluster to inform the driver.

The moment the clutch is pressed or the brake pedal released, the engine springs back to life almost noiselessly and in a fraction of a second. This ability to restart the engine swiftly yet smoothly gives the ECO start/stop function a key edge over other systems of this type. To achieve this, Mercedes-Benz fits a **starter-generator** which is connected to the crankshaft via the belt drive. This allows the

engine to start much faster and far more quietly than with the conventional starter. During the journey, the starter-generator feeds the electrical system on board the B-Class with energy. An intelligent control system ensures that the battery is only charged when needed, and that charging predominantly takes place when the engine is on the overrun to convert braking energy into electrical energy by recuperation.

In practical operation, substantial fuel savings of up to nine percent can be achieved with the ECO start/stop function, particularly when driving in city traffic with frequent stops at traffic lights or in tailbacks.

#### **Natural-gas drive: a clean and economical alternative**

A further new addition to the B-Class range bears the initials "NGT" on the right-hand side of its tailgate. They stand for "**Natural Gas Technology**" and identify a model variant which is as economical as it is environmentally compatible, courtesy of its bi-fuel drive: the B 170 NGT BlueEFFICIENCY is able to run on both natural gas and premium grade petrol while delivering an identical maximum output of 85 kW/116 hp.

In addition to the petrol tank, there are five natural gas reservoirs whose total capacity of 16 kilograms equates to a range of over 300 kilometres. With overall NEDC consumption figures of 7.3 litres of premium petrol and 4.9 kilograms of natural gas per 100 kilometres, the new B 170 NGT BlueEFFICIENCY is therefore able to attain a total range in excess of 1000 kilometres. The driver determines which power source the engine is run on at the touch of a button using the multifunction steering wheel; an electronic control unit carries out the switch instantaneously without any jolts – even while on the move.

The four-cylinder engine has been modified by Mercedes-Benz to include additional gas injectors on the underside of the intake manifold. A close-coupled pressure governor with an electromagnetic shut-off valve regulates the supply of natural gas and keeps the pressure within the system constant.

The installation of the gas reservoirs, which are located in the rear and underneath the front passenger footwell, reduces the boot capacity of the B-Class by 128 to 422 litres (as per the VDA measurement method), but there is still sufficient space for carrying a family's luggage.

The lower carbon dioxide emissions and cheaper fuel costs make natural gas an attractive alternative to petrol and diesel, both ecologically and economically speaking. On the NEDC cycle, the CO<sub>2</sub> emissions are 17 percent lower than in the petrol-powered B 170 at 135 grams per kilometre. If the 4.9 kilograms (7.5 m<sup>3</sup>) of natural gas consumed per 100 kilometres by the new B 170 NGT BlueEFFICIENCY is converted into the equivalent quantity of petrol energy, the fuel cost per kilometre is around 50 percent less than when running on petrol.

#### **Environmental Certificate: first ever lifecycle assessment for NGT drive too**

Mercedes engineers have, for the first time, compiled an eco balance sheet for the natural-gas drive. It forms one element of the Environmental Certificate awarded to the B-Class by Germany's TÜV Technical Inspection Authority. Mercedes-Benz is the only automotive brand in the world to have been granted this certificate, which is based on the stringent international standard ISO 14062 "**Design For Environment**". It is a confirmation of the Stuttgart-based brand's commitment to all aspects of environmental protection. In contrast to just the standardised measurement of exhaust emissions and fuel consumption on the roller dynamometer, Mercedes engineers analyse the environmental compatibility of vehicles over their entire lifecycle – starting with their manufacture, continuing with their many years of use and finishing with their end-of-life disposal.

In all, over 40,000 individual processes come under scrutiny, whose analysis, computation and evaluation ultimately produce a comprehensive eco profile. This in turn forms the basis for the environmental certificate of the B-Class.

The results of this integrated analysis over a total distance travelled of 150,000 kilometres highlight, for example, a number of clear advantages for the natural-gas drive. The overall **CO<sub>2</sub> emissions** are some 20 percent below the

figure for the comparable petrol-engined model. Nitrogen oxide emissions are eleven percent lower, while the experts have calculated a 54 percent difference in carbon monoxide emissions over the entire lifecycle in favour of the natural-gas drive. The greater ecological cost of the manufacturing process for the new B 170 NGT is therefore balanced out after a distance of 17,300 kilometres.

The environmentally driven concept of the B-Class is clearly evident from its use of high-quality **recycled plastics**, for instance, or its components made from **natural materials**, including flax, cotton, coconut fibre, wood veneer and fibres from the abaca banana.

Mercedes-Benz has put together a **brochure** containing detailed information about the environmental certificate awarded to the B-Class, and published it on the internet at [www.media.daimler.com](http://www.media.daimler.com).

### **Occupant protection: extensive safety features enhanced yet further**

When it comes to safety, the B-Class sets an example for all other models of these dimensions to follow: in the European NCAP test programme, the Sports Tourer was awarded the highest rating of five stars.

The comprehensive safety specification, comprising two-stage front airbags, belt tensioners for the front and outer rear seats, belt force limiters plus active head restraints in the front, ISOFIX child seat attachment points and head/thorax sidebags, has now been complemented by the addition of crash-responsive **emergency lighting** in the passenger compartment. Following an accident of a predetermined severity, the lighting comes on automatically to allow the occupants to get their bearings more easily in the dark and expedite the work of the rescue services.

Accident prevention is the overriding priority of the Mercedes safety concept – a concept that is geared towards motoring reality. To help them bring critical situations under control safely and with ease, drivers of the B-Class can count on highly effective, standard-fit technology in the form of systems such as ABS, Brake Assist and ESP<sup>®</sup>. Mercedes engineers have however gone that little bit further by seeking to devise a way of offering other motorists added safety too. The result is a simple but highly effective method of avoiding rear-end collisions: **flashing brake lights**. This safety technology is included as standard on the 2008 model year B-Class.

During testing, Mercedes engineers were able to ascertain that the braking reaction time of motorists is quickened by an average of 0.2 seconds if they see a flashing red warning signal instead of conventional brake lights in an emergency braking situation. This shortens the stopping distance by around 4.40 metres if they are travelling at a speed of 80 km/h, and by a whole 5.50 metres or so when braking from 100 km/h. Brake lights flashing at a high frequency therefore prove to be an effective means of alerting drivers behind to the risk of a rear-end collision.

The flashing brake lights are triggered automatically if the driver initiates emergency braking when travelling at a speed of 50 km/h or more. And if the B-Class is braked to a stop from a speed of over 70 km/h, the hazard warning lights will come on too.

**Assistance systems: automatic parking with ultrasound and electric steering**

The Electronic Stability Program has been expanded to include a new, standard function: the automatic **hill-start assist**. This prevents the B-Class from rolling backwards as the driver switches from the brake to the accelerator pedal when starting off uphill. In such situations, the ESP<sup>®</sup> briefly maintains the brake pressure to make pulling away easy.

Reverse parking will pose less of a challenge for motorists in future. The new **active parking assist** (optional) searches for an appropriate spot at the side of the road as the B-Class drives by, than takes care of all the steering manoeuvres as the driver reverses into it. How it works: at speeds below 35 km/h, ultrasonic sensors at the sides of the car scan the zones to the immediate left and right of the B-Class, and measure the length and depth of any potential parking spaces. Once a suitable spot has been found, the system flashes up a message in the display to inform the driver. When the driver engages reverse, confirms the display and presses the accelerator, the active parking assist takes over the steering and automatically manoeuvres the B-Class into the space. All the driver has to do is operate the accelerator and brake; the **PARKTRONIC** system's ultrasonic sensors provide further assistance by indicating how much room there is in front of and behind the B-Class.

To be able to use the automatic parking feature, the parking spot only has to be 1.30 metres longer than the B-Class – an indication of the technology's tremendous precision.

The newly developed assistance system comprises a total of ten ultrasonic sensors in the front and rear bumper, as well as an electronic control unit that processes the sensor signals and calculates the best path to take into the parking space. This information is supplied to the electromechanical power steering in the B-Class, enabling its electric motor to perform the necessary steering movements.

### **Infotainment: new systems for digital listening pleasure and Europe-wide navigation**

It is not just the spacious interior, the high-grade materials and the standard automatic climate control that make the B-Class such a pleasure to travel in: the new generation of **infotainment systems** has an important role to play too. There are three new options to choose from: Audio 20, Audio 50 APS and COMAND APS. All three units incorporate a radio with dual tuner, colour display, Bluetooth interface for mobile phones, CD player, automatic volume adjustment, plus a connection for external audio devices in the glove compartment.

The **Audio 50 APS** additionally features a Europe-wide DVD-based navigation system and DVD player, while the top-of-the-range **COMAND APS** offers even more functions, including the even faster HDD navigation system, the Music Register, a slot for SD memory cards as well as voice control.

To cater for motorists who have their personal music compilations stored on an MP3 player, a USB stick or any other external audio device, Mercedes-Benz has developed an interactive **media interface**. It can be specified as an option and allows iPod & Co. to be linked up to the Sports Tourer's infotainment system. This has the advantage of allowing the external audio devices to be operated by simply using the buttons on the multifunction steering wheel, while the track titles are shown in both the instrument cluster and the centre console's colour display.

The sophisticated infotainment systems may be optionally combined with the "Logic7<sup>®</sup>" **surround sound system**, which transforms the passenger compartment of the B-Class into a concert hall on wheels.

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More information from Mercedes-Benz can be found at [www.media.daimler.com](http://www.media.daimler.com)

## New features of the B-Class

### **Design**

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- Front end: redesigned bonnet, radiator grille and bumper
- Side design: exterior mirrors in a new design and new light-alloy wheels
- Rear end: new, high-brilliance look and redesigned bumper
- Interior: new seat fabrics and trim of diagonally brushed aluminium

### **Equipment**

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- Exterior mirror housings, door handles and skirt panels painted in the vehicle colour
- Headlamp assist as standard
- ESP® with automatic hill-start assist as standard
- Steering column manually adjustable for reach

### **Safety**

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- Flashing brake lights as standard
- Crash-responsive emergency interior lighting as standard

### **Drive**

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- Improved engines with up to seven percent fuel savings
- ECO start/stop function optional for the B 150 and B 170
- New B 170 NGT BlueEFFICIENCY with petrol/natural gas bi-fuel drive

### **Technology**

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- Active parking assist as an optional extra
- New infotainment units with many additional functions
- Surround sound system on request
- COMAND APS with voice control and other features as standard
- Interactive media interface for connecting external audio units

## "B" for beautiful

- **New safety and comfort systems as standard**
- **Innovations for automatic parking and fuel economy**
- **Equipment packages for even more comfort, elegance and sportiness**

In presenting the B-Class in summer 2005, Mercedes-Benz produced the blueprint for a new, future-oriented market segment and a new species of car which precisely meets the wishes of today's motorists. The Sports Tourer combines generous spaciousness and great practicality with a dynamic design and a high level of driving pleasure. In other words, a touring, family and recreational car with an incomparable added experience value in terms of design and dynamism.

To date the B-Class has won over more than 350,000 drivers, making it one of the most successful new Mercedes model launches in recent years. For the product planners, designers and engineers this meant that there was actually little reason to make changes, however they have put together a highly appealing package of model facelift measures and given the Sports Tourer a more attractive profile than before in terms of safety, environmental compatibility, economy and comfort. These are supplemented with discreet but certainly effective design modifications which make for a more youthful appearance and emphasise the agility of the B-Class. In short: a successful makeover in every respect.

The extensive standard equipment of this model will be even more generous from spring 2008. At no extra cost, Mercedes customers will have the benefit of newly developed systems which further enhance their safety and comfort. These include for example headlamp assist, which switches on the vehicle lights automatically when the car enters a tunnel or an underground car park, hill-start assist, which prevents the vehicle from rolling backwards when moving off on an uphill gradient, and flashing brake lights which effectively warn following traffic when danger occurs. Power windows with one-touch control are also standard

equipment, as is a steering column adjustable for reach and crash-responsive emergency lighting.

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New standard features at a glance:

- Larger-capacity stowage compartment between the front seats
- Exterior mirrors, door handles and side skirt panels painted in the vehicle colour
- Hill-start assist
- Adaptive, flashing brake lights
- Crash-responsive emergency lighting
- Cup holders in a new design
- Power windows with one-touch control
- Headlamp assist
- Steering column also adjustable for reach
- Loading sill protection in black-grained plastic
- New-design wheel trims
- Upholstery fabrics in a new design
- Ambient and warning light in the tailgate

### **Premiere for innovative new developments**

High-tech systems from the Mercedes-Benz luxury class are available as optional extras for the B-Class, making the Sports Tourer more comfortable, more versatile – and more unique. One outstanding technical highlight is the new active parking assist, which helps the driver to reverse into parking spaces and carries out all the necessary steering movements automatically. Another new development, which Mercedes-Benz is offering in the A and B-Class for the first time, is the ECO start/stop function, which switches off the engine automatically when idling.

And finally there is a choice of three new infotainment units, which boast a colour display, Bluetooth interface, telephone keypad and a connection for external audio units. The new top-of-the-line Audio 50 APS and COMAND APS units also

have additional functions such as Europe-wide navigation and a DVD drive. COMAND APS is also equipped with a voice control system as standard.

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The newly developed optional extras for the B-Class at a glance:

- Active parking assist
- Audio 20, on request also with an integrated 6-disc CD changer
- Audio 50 APS with Europe-wide DVD navigation, on request with an integrated 6-disc DVD changer
- COMAND APS with HDD navigation and map display
- ECO start/stop function (for B 150 and B 170 with manual transmission)
- 16-inch light-alloy wheels in a 5 twin-spoke design (standard for B 200 CDI and B 200 TURBO)
- 17-inch light-alloy wheels in a 10-spoke or 5 twin-spoke design
- LINGUATRONIC voice control with whole-word commands
- LOGIC7 surround sound system
- Media interface for external music units

A number of optional extras are also included in the attractive equipment packages which Mercedes-Benz has put together for the B-Class. These are:

- **The Exterior Chrome package**, which includes matt-silver painted, chrome-embellished radiator grille louvres, fog lamps with chrome surrounds, a polished stainless steel exhaust tailpipe and stainless steel loading sill protection.
- **The Light and Sight package**, which includes a rain sensor for the windscreen wiper, headlamp switch-off delay, locator lighting, an automatically dimming rear-view mirror, reading lights in the rear, a reading light for the driver and footwell lights in the front.
- **The Sports package**, which has the same features as the chrome package and also includes a leather-covered steering wheel and shift lever, an

instrument cluster with white illumination, pedals with stainless steel caps and rubber studs, 17-inch light-alloy wheels and a sports suspension.

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- **The seat comfort package** with a height-adjustable front passenger seat, adjustable seat cushion angle and lumbar supports in the front.

## Fine-tuning to the last detail

- Radiator grille, bumpers and bonnet in a new design
- Door handles, mirror housings and side skirts painted in the vehicle colour
- Interior with new, high-grade materials

Mercedes designers envisaged a versatile, compact yet spacious car when they produced the basic stylistic concept for a B-Class some years ago – a car that offered space but also combined the exciting, dynamic appearance of a sporty automobile with the prestige of a Mercedes saloon.

The result was a new concept with its own design idiom: the Sports Tourer. Although it offers the space and comfort of larger saloons or estates, the taut forms and crisp lines of the B-Class suggest forward-flowing energy and create a desire to take the wheel.

This is truer than ever for the new-generation B-Class. The designers have revised the radiator grille as the stylistic centrepiece of the front end, as well as the bonnet and front bumper. The resulting recomposition makes the B-Class appear more purposeful than before. The three (previously four) cross fins in the radiator grille are now painted in metallic grey and embellished with fine chrome strips, while the redesigned bumper emphasises the large air intake at the bottom.

This new design idiom makes the front look broad and, as a consequence, especially powerful, symbolising the sporty attributes of the B-Class even more clearly than before. These qualities include the car's agility and its forward thrust, something which is further underlined by the more pronounced **arrow shape** of the bonnet, radiator grille and bumper. This has the effect of making the entire front section appear to be surging dynamically forwards – a highly expressive styling element of the current Mercedes design idiom, which can be appreciated better than ever before in the 2008 model year version of the B-Class.

The front end's arrow shape is continued rearwards in the form of an understated but effective line running up the centre of the bonnet. The sporty and powerful appearance of the B-Class is also underlined by the headlamps, which extend well into the flanks. This clear emphasis on width indicates unmistakable attributes such as power, poise and performance.

### **Expressive lines suggesting dynamism and elegance**

The vehicle's silhouette shows a clear two-box concept characterised by the tight, extended arch described from the roof pillars at the front end to the heavily inclined D-pillar, suggesting both dynamism and elegance. The rising side contour with the waistline already commencing in front of the mirror triangle gives a definite impression of forward thrust.

Typical distinguishing features of the current Mercedes style are also very much in evidence in the **side profile** of the B-Class, which presents an interplay between taut forms and crisp lines. Of particular note is the character line, which rises progressively from the front wing to the rear tail light, thereby marking an intriguing divide between the concave and convex-formed surfaces along the body's flanks. This line further underscores the body's wedge-shaped form, and thereby gives added impact to the Sports Tourer's athletic, powerful nature.

The emotional appeal is also heightened by the large side window area, which shows a sporty taper towards the rear but in no way compromises the feeling of generous spaciousness enjoyed by the occupants. The impression of dynamic length is also emphasised because the mirror triangle and the B and C-pillars match the colour of the window surface, forming a visually uninterrupted line.

In the 2008 model year B-Class, the design at the sides seems even more harmonious and elegant than before because the exterior mirror housings, door handles and skirt panels are now painted to match the body colour on all model variants. The restyled wheel trims and light-alloy wheels add further touches of class to the exterior looks.

The athletic proportions resulting from a long wheelbase and short overhangs are well matched by the muscular front wings, which attract the eye to the 15 or 16-inch wheels depending on the engine variant. If the sports package is specified, the wheel arches even boast 17-inch light-alloy wheels in a sporty ten-spoke design.

### **Broad-shouldered rear end with an imposing presence**

The rear styling picks up on the dynamic flow of lines at the front and along the sides. A direct visual link is created by the tail light assemblies, whose upper edges merge seamlessly with the character line along the vehicle's sides. A very wide rear window extending slightly into the sides, as well as a rudimentary spoiler, visually lower the height of the vehicle and serve to emphasise its width even more.

The tail lights in a new, high-brilliance look draw the gaze to the large tailgate, which now comes with an ergonomically enhanced chrome handle strip. The rear bumper has been remodelled too, and includes a black-grained plastic insert on its upper face as standard which serves as a load sill guard. If the B-Class is specified with either the chrome or the sports package, this insert is made of polished stainless steel instead, to add yet another gleaming highlight to the tail's design.

Three new metallic paint finishes are optionally available: steppe brown, lotus blue and mountain grey.

### **High-grade interior for a feel-good atmosphere**

High-class appeal, attention to detail and a sense of ample spaciousness – these qualities have always been intrinsic to the B-Class. The blend of forms, colours and materials teams up with the interior's roominess, the pleasant feel of all its surface materials and the expansive window areas to produce a most inviting ambience. This is helped by the high seating position – which, incidentally,

improves the driver's all-round view, too – while the relatively high waistline fosters a sense of security.

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The Mercedes design team has upgraded the interior with a new upholstery fabric, plus a new **fabric pattern** for the seat cushions. If the B-Class is ordered with the **sports package**, the side seat bolsters are trimmed in ARTICO man-made leather and the centre panels in fabric. The interior door linings likewise feature a new fabric trim.

The centre console continues to be bordered by trim strips on both sides, but they are now made from diagonally brushed aluminium in a smoke grey finish. The same integrated trim is found again in the vicinity of the gearshift and in the door panelling, giving the interior an added sense of refinement. Such fine touches demonstrate just how much attention to detail has been invested in even the basic version of the B-Class, as well as the high standards to which it has been specified.

The high-grade interior door linings continue the basic lines of the dashboard and seamlessly extend them into the armrests, which house the power window switches in line with the overall operating logic. The same high-grade materials also provide a harmonious transition between the dashboard and the front doors, and ensure a perfect connection which rigorously avoids any interruption in the look and feel to give the occupants a feeling of safety and security. The same applies to the rear doors, which echo the front doors in their form and structure to provide an interior which appears to be cast from a single mould.

## Lower consumption with more driving pleasure

- **Fuel consumption reduced by up to seven percent in the NEDC test**
- **Practical ECO start/stop function for B 150 and B 170**
- **Parking assist for automatic reversing into parking spaces**
- **New infotainment units with Europe-wide navigation**

BlueEFFICIENCY is the new trademark for particularly economical and environmentally compatible Mercedes passenger cars. Three models bear the BlueEFFICIENCY emblem in the new-generation B-Class: the high-volume four-cylinder models B 150 and B 170 with the ECO start/stop function and the new B 170 NGT with its bi-fuel petrol/natural gas drive. Thanks to the automatic ECO start/stop function, the petrol models consume up to nine percent less fuel than comparable models without this feature. The NGT variant of the B-Class is happy with just 4.9 kilograms of natural gas per 100 kilometres (NEDC), and emits 17 percent less carbon dioxide than the petrol-powered B 170.

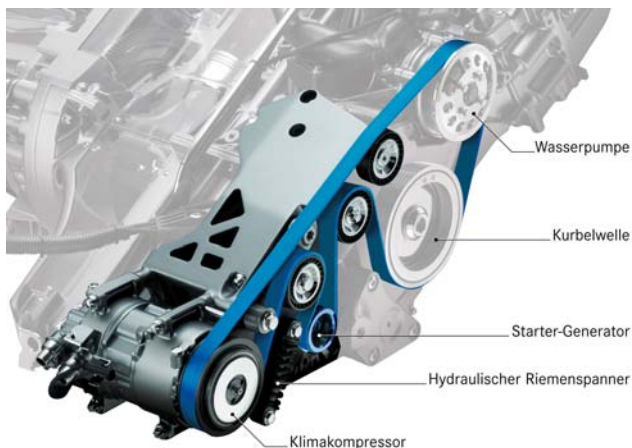
Mercedes-Benz has updated the other model variants in the B-Class in many detailed respects as well, also improving fuel consumption by up to seven percent versus the preceding models.

During the design and development of their BlueEFFICIENCY measures, the Mercedes specialists were primarily guided by the actual user behaviour of Mercedes customers as identified by a large-scale practical analysis. These data covering the day-to-day operating conditions and profiles of Mercedes models confirmed that the B-Class is predominantly used for short and medium-distance journeys with frequent traffic light stops, stop-and-go traffic and tailbacks. Accordingly Mercedes-Benz has developed a technology which offers significant fuel consumption advantages in these traffic situations: the ECO start/stop function (optionally available from autumn 2008).

The ECO start/stop function lowers fuel consumption and exhaust emissions by automatically switching off the engine during idling phases. The driver is

informed by a special display in the instrument cluster if and when the conditions for engine switch-off are met. When travelling at low speed, he only needs to shift the manual transmission to neutral and apply the brakes. The engine is then switched off, and the ECO display appears in the instrument cluster.

The ECO start/stop function demonstrates its superiority over other systems of this kind when restarting the engine. This process is not only very fast, but also particularly quiet when the driver operates the clutch or releases the brakes. This is the major advantage of the newly developed starter-generator, which is directly integrated into the engine's belt drive and powers the crankshaft – much more rapidly and quietly than with the conventional starter. During a journey the starter-generator acts as an alternator and feeds electrical power to the onboard network. An intelligent control system ensures that the battery is only recharged when necessary, with particular use of the engine's overrun phases when braking energy can be converted into electrical energy by recuperation.



**The practical ECO start/stop function is based on a starter-generator integrated into the engine's belt drive.**

The ECO start/stop function features an electronic control unit which adapts the functions of the system to the operating conditions. This means that the engine is not switched off at low or very high ambient temperatures, so that the heating or air conditioning continue to operate at their full efficiency.

Mercedes-Benz has subjected the ECO start/stop function to extensive practical trials in which around 175 test cars covered approx. 1.2 million test kilometres.

Roughly half of these journeys were in city traffic, where the new ECO start/stop function made fuel savings of up to nine percent possible. Page 22

### Choice of four-cylinder engines from 95 to 193 hp

There is a choice of seven four-cylinder engines in the Mercedes-Benz B-Class – two direct-injection diesels, four petrol models and one model with bi-fuel petrol/natural gas drive:

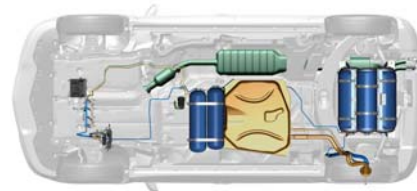
	<b>B 180 CDI</b>	<b>B 200 CDI</b>	<b>B 150</b>	<b>B 170</b>	<b>B 170 NGT</b>	<b>B 200</b>	<b>B 200 TURBO</b>
Displacement cc	1991	1991	1498	1699	2034	2034	2034
Output kW/hp	80/109	103/140	70/95	85/116	85/116	100/136	142/193
Max. torque Nm	250 at 1600- 2600 rpm	300 at 1600- 3000 rpm	140 at 3500- 4000 rpm	155 at 3500- 4000 rpm	165 at 3500- 4000 rpm	185 at 3500- 4000 rpm	280 at 1800- 4850 rpm
0-100 km/h    s	11.3	9.6	13.2	11.3	12.4	10.1	7.6
Max. speed km/h	183	200	174	184	184	196	225
NEDC consumption l/100 km*	5.2-5.4	5.4-5.6	6.2**-6.8	6.4**-7.1	7.5 m <sup>3</sup>	7.2-7.5	7.9-8.1
CO2 emissions g/km*	137-140	140-148	158-163	163-171	135	173-180	190-195

\*NEDC consumption; \*\* Available as a BlueEFFICIENCY model from autumn 2008

NGT (Natural Gas Technology) is the abbreviation used by Mercedes-Benz to designate models which are powered by both petrol and natural gas.

The natural gas variant of the B-Class is based on the B 170, but is equipped with a two-litre engine developing 85 kW/116 hp in natural gas or petrol operation. When the driver changes the power source to the four-cylinder engine by pressing a button on the steering wheel, a special electronic control unit carries out the switch from petrol to natural gas – or vice versa – instantaneously without any jolts.

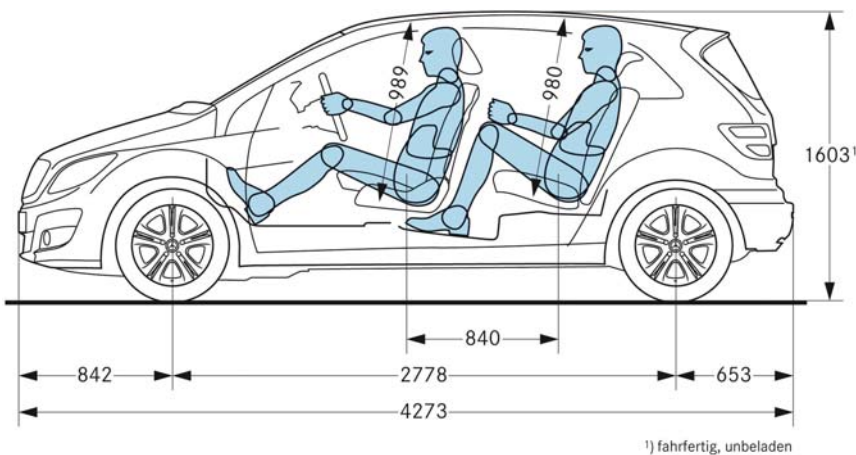
The four-cylinder engine has been modified by Mercedes-Benz to include additional gas injectors on the underside of the intake manifold. A close-coupled pressure governor with an electromagnetic shut-off valve regulates the supply of natural gas and keeps the pressure within the system constant. The natural gas is carried in special reservoirs located in the rear and underneath the front passenger footwell. They have an overall capacity of 16 kilograms – enough for a distance of more than 300 kilometres. If the driver then switches to petrol operation, he has a further operating range of more than 700 kilometres. The gas reservoirs reduce the boot capacity of the B-Class by 128 to 422 litres (acc. to the VDA measuring method).



**The natural gas reservoirs (shown in blue) are at the rear and beneath the front passenger footwell of the B-Class**

The B 170 NGT has an NEDC consumption of 4.9 kilograms of natural gas per 100 kilometres, and emits 135 grams of carbon dioxide per kilometre. This is around 17 percent less than for the petrol-powered B 170. Natural gas operation is also

economically advantageous: if the NEDC natural gas consumption is converted into the equivalent quantity of petrol energy, the fuel cost per kilometre in Germany is around 50 percent less than when running on petrol. Moreover, drivers in some countries benefit from tax advantages and public or private subsidies when purchasing a car powered by natural gas.



**The new-generation B-Class likewise excels with compact external dimensions and generous spaciousness in the interior**

### Further development of the real-life safety concept

The B-Class is among the safest vehicles in its market segment. This is not only due to the intelligent arrangement of the engine and transmission, which are in an inclined position partly in front of and partly beneath the passenger cell to provide a longer effective deformation path, or to the favourable, raised seating position of the occupants in the event of a side impact. The Sports Tourer is also ahead of many other cars in its class in being equipped with up-to-date and highly effective restraint systems. Standard equipment includes adaptive, two-stage front airbags, belt tensioners for the front seats and the outer rear seats, adaptive belt force limiters and active head restraints in the front, ISOFIX child seat anchorages in the rear and head/thorax sidebags for the driver and front passenger.

Mercedes-Benz has supplemented this extensive range of safety features with an emergency interior lighting system which is switched on automatically following a serious collision. This provides the occupants with better orientation at night, and facilitates the work of the emergency services when recovering injured passengers.

### **Flashing brake lights as a further contribution to accident prevention**

In the field of active safety, Mercedes-Benz rounds off the extensive safety features of the B-Class with a new development that is able to lower the risk of rear-end collisions: flashing brake lights.

This invention is based on the findings obtained from accident research, which show that three quarters of all serious traffic accidents could be avoided if drivers were given a clear warning of potential danger at an early stage. Mercedes engineers therefore developed the flashing brake light system and tested its effectiveness during practical trials. These showed that the braking response times of drivers are reduced by an average of up to 0.2 seconds if a flashing red warning signal is given instead of conventional brake lights in an emergency braking situation. As a result the stopping distance of the vehicle behind is reduced by around 4.40 metres at a speed of 80 km/h, and even by around 5.50 metres at 100 km/h. Flashing brake lights are therefore an effective means of preventing rear-end collisions. Thanks to this technology now included as standard, driving is therefore also made safer for those not travelling in a Mercedes-Benz.

Mercedes specialists tested various warning lights during the course of this study. Brake lights that flash more rapidly than the hazard warning lights during emergency braking proved to be particularly effective in warning following traffic of an impending rear-end collision. The Mercedes study also revealed that switching on the hazard warning system in a critical situation has only an insignificant effect on the reaction time of other drivers.

## **Additional new ESP<sup>®</sup> function for smooth starting on gradients**

Page 26

Newly developed driver support systems and functions not only make travel in the B-Class even safer, but also more comfortable. The centrepiece of many assistance systems is the Electronic Stability Program ESP<sup>®</sup>, whose control unit combines the functions of ABS, ASR and Brake Assist. ESP<sup>®</sup> also creates the preconditions for further driver support functions, one of which is STEER CONTROL. In critical handling situations, this system modifies the necessary steering forces to help the driver to stabilise the vehicle.

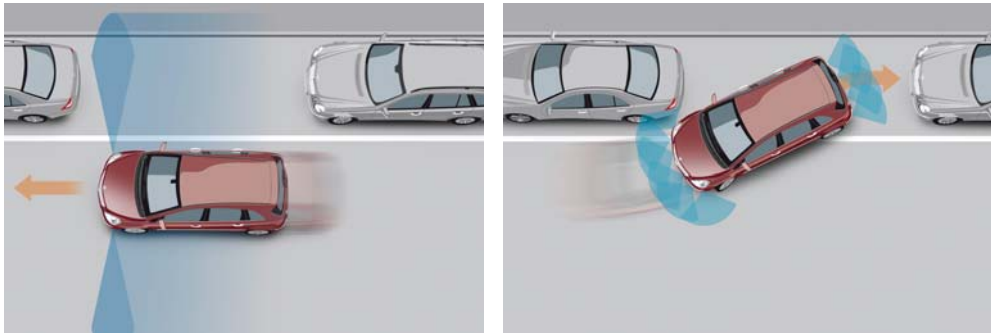
Automatic start-off assist is another standard function of the Electronic Stability Program, and is mainly aimed at increased comfort. It prevents the car from rolling backwards when the driver changes from the brake pedal to the accelerator when moving off on an uphill gradient. In these situations ESP<sup>®</sup> maintains the brake pressure for a short time, so that the driver can move off smoothly.

## **Automatic parking with ultrasound and electromechanical steering**

Finding and reversing into a parking space is also made easier and more convenient with the newly developed, optional parking assist system, which uses ten ultrasonic sensors. These sensors are active up to a speed of 35 km/h, and scan the area to the left and right of the vehicle, measuring the length and depth of possible parking spaces. A "P" symbol in the instrument cluster informs the driver that this electronic search for a parking space is in progress.

Once a suitable parking space has been found, an arrow appears in the display to inform the driver on which side of the road the parking space is located. Now the driver only needs to stop, engage reverse gear and confirm his acceptance of the recommended parking space by pressing a key on the multifunction steering wheel. As soon as he operates the accelerator, active parking assist takes over the steering and automatically manoeuvres the B-Class into the parking space. The driver only needs to accelerate and operate the brakes; the ultrasonic sensors of

the PARKTRONIC system assist in this by keeping him informed about the distance to the vehicle in front of and behind his car.



**Finding a space:** Ultrasonic sensors measure the length and depth of parking spaces on both sides of the road.

**Parking:** Active parking assist steers the car into the parking space, while the driver merely accelerates and brakes.

The ten ultrasonic sensors in the front and rear bumpers send their information to an electronic control unit, which not only measures the size of the parking space but also calculates the best possible entry path. The data are fed to the electromechanical power steering of the B-Class, whose electric motor performs the necessary steering movements of its own accord.

Active parking assist enables drivers to use parking spaces which they would normally pass by. This is because the system works so precisely that the parking space only has to be 1.30 metres longer than the B-Class – an indication of the technology's tremendous precision. This means that the Sports Tourer can be accommodated in parking spaces with a length of only 5.57 metres.

### **New infotainment units with numerous additional functions**

Information, communication, navigation and entertainment – four terms which are nowadays just as important to drivers as e.g. agile handling, a high standard of comfort or a powerful engine. Nobody wants to be without news, telephone, route guidance or musical enjoyment, even in the car. Accordingly these topics enjoy a very high priority during the development of new Mercedes models. The engineers in Sindelfingen have developed new systems for the B-Class which bring cutting-edge technology from the luxury class to the compact class.

There is a choice of three new units, all of them with a colour display, a twin or triple tuner for superior radio reception, speed-sensitive volume control, a keypad for entering telephone numbers and radio frequencies, a connection for external audio units and a Bluetooth interface that wirelessly connects a mobile phone to the onboard hands-free system.

- **Audio 20 with CD player**

This car radio with an integral CD player (MP3-capable) includes an FM/ MW, AM and LW tuner with automatic station search, RDS (during FM reception), direct frequency input via the keypad in the centre console and a 5-inch colour display.

- **Audio 50 APS with DVD navigation**

This infotainment system combines a car radio, telephone exchange and Europe-wide DVD navigation system in a single head unit. The route guidance information - with zoom function - is arrow-based and appears on a 5-inch colour display. The integral DVD drive can be used for navigation or audio data. If the optional 6-disc DVD changer is specified, Audio 50 APS also includes the improved LINGUATRONIC voice control system with whole-word commands.

- **COMAND APS with HDD navigation and MUSIC REGISTER**

This multimedia system has a Europe-wide navigation system whose data are stored on a 40 gigabyte hard disc, allowing particularly fast access to the navigation data and even faster route calculation. The route map is shown on a 6.5-inch, high-resolution colour display. COMAND APS also includes a MUSIC REGISTER with a memory capacity of four gigabytes. This enables the driver to store around 1000 music tracks in the MP3 format from CDs, DVDs or memory cards. The system automatically recognises the titles and performers, and shows them on the colour display. Above the display the unit has a slot for SD memory cards which can also be used to store music files. COMAND APS also features voice control as standard, and a 6-disc DVD changer is available on request.

The **Audio 5** car radio with its familiar functions and features remains part of the range available for the B-Class. Page 29

### **Interactive interface for connecting external audio units**

Equipping COMAND APS with a music register and memory card slot shows that entertainment was an important aspect during the development of the new audio units: Mercedes customers are able to compile their own musical playlist and take it with them on an SD card. Now an iPod, USB stick or other external audio unit can also be connected to the onboard infotainment system of the B-Class. A newly developed universal media interface available ex factory for all the infotainment systems makes this possible. All that is required is a suitable cable which is available from the Mercedes accessories range.

This interface is much more than just an electronic “socket” in the glove compartment. The new technology also includes a control unit that connects the external music files with the onboard electronics and operating system of the B-Class. This means that the music stored in an iPod is also displayed in the instrument cluster and the colour display in the centre console, and can be conveniently selected using the buttons on the multifunction steering wheel. While the portable audio unit is connected to the onboard system via the media interface, its battery is also charged.

The ultimate musical enjoyment is guaranteed if the optional Logic7<sup>®</sup> surround sound system is ordered. This offers a natural 360-degree sound experience for all the occupants – a concert hall on wheels. It makes no difference whether the music source is a DVD or CD, or whether the recording is in Dolby 5.1 Surround or normal stereo. The music signals are distributed by twelve loudspeakers and an amplifier with an output of 450 watts.

Voice control is standard equipment in the B-Class if Mercedes customers specify Audio 50 APS with a 6-disc DVD changer or the COMAND APS multimedia unit. LINGUATRONIC operates the telephone, audio and navigation systems particularly conveniently by whole-word commands. This means that the driver need no longer spell out commands, but merely has to say what he or she requires when entering a destination, selecting a radio station or choosing a name from the stored telephone directory.

During this brief dialogue the sound signal is digitised, converted into a frequency range and analysed. Within milliseconds the computer identifies various characteristics of the voice signal and recognises what are known as the phonemes or linguistic components. The electronics rapidly check each sound, join the different phonemes together, compare them with the contents of a stored phoneme dictionary and ascertain the acoustic probability of the word. This enables the system to recognise even very minor differences in pronunciation, e.g. between the words "Town" and "Down". The phonemes of six different languages are stored.

With LINGUATRONIC Mercedes-Benz makes an important contribution to traffic safety, as the driver no longer needs to take his hands off the wheel to operate the telephone or audio equipment. His workload is reduced and he is better able to concentrate on the traffic situation. In 1996 Mercedes-Benz was the first automobile brand to offer such an onboard system.

## Mercedes-Benz B 180 CDI

Page 31

### Engine

No. of cylinders/arrangement		4 in-line, 4 valves per cylinder
Displacement	Cc	1991
Bore x stroke	Mm	83.0 x 92.0
Rated output	kW/hp	80/109 at 4200 rpm
Rated torque	Nm	250 at 1600-2600 rpm
Max. engine speed	Rpm	4800
Compression ratio		18.0 : 1
Mixture formation		Common-rail direct injection, turbocharger

### Power transfer

Transmission		Six-speed manual transmission
Clutch		Single-disc dry clutch
Ratios	Final drive	3.24 (gears 1-4)/2.70 (gears 5-6, R)
	1st gear	3.93
	2nd gear	2.22
	3rd gear	1.39
	4th gear	0.98
	5th gear	0.93
	6th gear	0.81
	Reverse	4.68

### Running gear

Front axle	McPherson strut suspension, wishbones, twin-tube gas-pressure shock absorbers with selective damping system and coil springs, torsion bar stabiliser
Rear axle	Parabolic rear axle, coil springs, single-tube gas-pressure shock absorbers with selective damping system and coil springs, torsion bar stabiliser
Braking system	Hydraulic dual-circuit braking system with vacuum servo, ABS and Brake Assist, front discs internally ventilated, rear discs solid, lever-type parking brake, ESP®
Steering	Electromechanical speed-sensitive steering
Wheels	6 J x 16
Tyres	205/55 R 16

### Dimensions and weights

Wheelbase	Mm	2778
Track front/rear	Mm	1552/1547
Overall length	Mm	4273
Overall width	Mm	1777
Overall height	Mm	1604
Turning circle	M	11.95
Boot capacity*	L	544-2245
Kerb weight acc. to EC**	Kg	1435
Payload acc. to EC	Kg	445
Gross vehicle weight	Kg	1880
Tank capacity/reserve	L	54/6

### Performance and fuel consumption

Acceleration 0-100 km/h	S	11.3
Max. speed	km/h	183
NEDC consumption comb.	l/100 km	5.2-5.4
CO2 emissions	g/km	137-140

\*Acc. to VDA measuring method; \*\*including driver (75 kg)

## Mercedes-Benz B 200 CDI

Page 32

### Engine

No. of cylinders/arrangement		4 in-line, 4 valves per cylinder
Displacement	Cc	1991
Bore x stroke	Mm	83.0 x 92.0
Rated output	kW/hp	103/140 at 4200 rpm
Rated torque	Nm	300 at 1600-3000 rpm
Max. engine speed	Rpm	4800
Compression ratio		18.0 : 1
Mixture formation		Common-rail direct injection, turbocharger

### Power transfer

Transmission		Six-speed manual transmission
Clutch		Single-disc dry clutch
Ratios	Final drive	3.24 (gears 1-4)/2.70 (gears 5-6, R)
	1st gear	3.93
	2nd gear	2.22
	3rd gear	1.39
	4th gear	0.98
	5th gear	0.93
	6th gear	0.81
	Reverse	4.68

### Running gear

Front axle	McPherson strut suspension, wishbones, twin-tube gas-pressure shock absorbers with selective damping system and coil springs, torsion bar stabiliser
Rear axle	Parabolic rear axle, coil springs, single-tube gas-pressure shock absorbers with selective damping system and coil springs, torsion bar stabiliser
Braking system	Hydraulic dual-circuit braking system with vacuum servo, ABS and Brake Assist, front discs internally ventilated, rear discs solid, lever-type parking brake, ESP®
Steering	Electromechanical speed-sensitive steering
Wheels	6 J x 16
Tyres	205/55 R 16

### Dimensions and weights

Wheelbase	Mm	2778
Track front/rear	Mm	1552/1547
Overall length	Mm	4273
Overall width	Mm	1777
Overall height	Mm	1604
Turning circle	M	11.95
Boot capacity*	L	544-2245
Kerb weight acc. to EC**	Kg	1435
Payload acc. to EC	Kg	445
Gross vehicle weight	Kg	1880
Tank capacity/reserve	L	54/6

### Performance and fuel consumption

Acceleration 0-100 km/h	S	9.6
Max. speed	km/h	200
NEDC consumption comb.	l/100 km	5.4-5.6
CO2 emissions	g/km	140-148

\*Acc. to VDA measuring method; \*\*including driver (75 kg)

## Mercedes-Benz B 150

Page 33

### Engine

No. of cylinders/arrangement		4 in-line, 2 valves per cylinder
Displacement	Cc	1498
Bore x stroke	Mm	83.0 x 69.2
Rated output	kW/hp	70/95 at 5200 rpm
Rated torque	Nm	140 at 3500-4000 rpm
Max. engine speed	Rpm	6300
Compression ratio		11.0 : 1
Mixture formation		Microprocessor-controlled petrol injection with hot-film airflow sensor (HFM)

### Power transfer

Transmission		Five-speed manual transmission
Clutch		Single-disc dry clutch
Ratios	Final drive	4.06
	1st gear	3.64
	2nd gear	2.04
	3rd gear	1.33
	4th gear	1.03
	5th gear	0.82
	Reverse	3.29

### Running gear

Front axle	McPherson strut suspension, wishbones, twin-tube gas-pressure shock absorbers with selective damping system and coil springs, torsion bar stabiliser
Rear axle	Parabolic rear axle, coil springs, single-tube gas-pressure shock absorbers with selective damping system and coil springs, torsion bar stabiliser
Braking system	Hydraulic dual-circuit braking system with vacuum servo, ABS and Brake Assist, front discs internally ventilated, rear discs solid, lever-type parking brake, ESP®
Steering	Electromechanical speed-sensitive steering
Wheels	6 J x 15
Tyres	195/65 R 15

### Dimensions and weights

Wheelbase	Mm	2778
Track front/rear	Mm	1556/1551
Overall length	Mm	4273
Overall width	Mm	1777
Overall height	Mm	1603
Turning circle	M	11.95
Boot capacity*	L	544-2245
Kerb weight acc. to EC**	Kg	1300
Payload acc. to EC	Kg	535
Gross vehicle weight	Kg	1835
Tank capacity/reserve	L	54/6

### Performance and fuel consumption

Acceleration 0-100 km/h	S	13.2
Max. speed	km/h	174
NEDC consumption comb.	l/100 km	6.6-6.8
CO2 emissions	g/km	158-163

\*Acc. to VDA measuring method; \*\*including driver (75 kg)

## Mercedes-Benz B 170

Page 34

### Engine

No. of cylinders/arrangement		4 in-line, 2 valves per cylinder
Displacement	Cc	1699
Bore x stroke	Mm	83.0 x 78.5
Rated output	kW/hp	85/116 at 5500 rpm
Rated torque	Nm	155 at 3500-4000 rpm
Max. engine speed	Rpm	6300
Compression ratio		11.0 : 1
Mixture formation		Microprocessor-controlled petrol injection with hot-film airflow sensor (HFM)

### Power transfer

Transmission		Five-speed manual transmission
Clutch		Single-disc dry clutch
Ratios	Final drive	3.88
	1st gear	3.64
	2nd gear	2.04
	3rd gear	1.33
	4th gear	1.03
	5th gear	0.82
	Reverse	3.29

### Running gear

Front axle	McPherson strut suspension, wishbones, twin-tube gas-pressure shock absorbers with selective damping system and coil springs, torsion bar stabiliser
Rear axle	Parabolic rear axle, coil springs, single-tube gas-pressure shock absorbers with selective damping system and coil springs, torsion bar stabiliser
Braking system	Hydraulic dual-circuit braking system with vacuum servo, ABS and Brake Assist, front discs internally ventilated, rear discs solid, lever-type parking brake, ESP®
Steering	Electromechanical speed-sensitive steering
Wheels	6 J x 15
Tyres	195/65 R 15

### Dimensions and weights

Wheelbase	Mm	2778
Track front/rear	Mm	1556/1551
Overall length	Mm	4273
Overall width	Mm	1777
Overall height	Mm	1603
Turning circle	M	11.95
Boot capacity*	L	544-2245
Kerb weight acc. to EC**	Kg	1310
Payload acc. to EC	Kg	520
Gross vehicle weight	Kg	1830
Tank capacity/reserve	L	54/6

### Performance and fuel consumption

Acceleration 0-100 km/h	S	11.3
Max. speed	km/h	184
NEDC consumption comb.	l/100 km	6.8-7.1
CO2 emissions	g/km	163-171

\*Acc. to VDA measuring method; \*\*including driver (75 kg)

## Mercedes-Benz B 170 NGT

Page 35

### Engine

No. of cylinders/arrangement		4 in-line, 2 valves per cylinder
Displacement	cc	2034
Bore x stroke	mm	83.0 x 94.0
Rated output	kW/hp	85/116 at 5750 rpm
Rated torque	Nm	165 at 3500-4000 rpm
Max. engine speed	rpm	6300
Compression ratio		11.0 : 1
Mixture formation		Microprocessor-controlled petrol injection with hot-film airflow sensor (HFM)

### Power transfer

Transmission		Five-speed manual transmission
Clutch		Single-disc dry clutch
Ratios	Final drive	3.88
	1st gear	3.64
	2nd gear	2.04
	3rd gear	1.33
	4th gear	1.03
	5th gear	0.82
	Reverse	3.29

### Running gear

Front axle	McPherson strut suspension, wishbones, twin-tube gas-pressure shock absorbers with selective damping system and coil springs, torsion bar stabiliser
Rear axle	Parabolic rear axle, coil springs, single-tube gas-pressure shock absorbers with selective damping system and coil springs, torsion bar stabiliser
Braking system	Hydraulic dual-circuit braking system with vacuum servo, ABS and Brake Assist, front discs internally ventilated, rear discs solid, lever-type parking brake, ESP®
Steering	Electromechanical speed-sensitive steering
Wheels	6 J x 16
Tyres	205/55 R 16

### Dimensions and weights

Wheelbase	mm	2778
Track front/rear	mm	1552/1547
Overall length	mm	4273
Overall width	mm	1777
Overall height	mm	1624
Turning circle	m	11.95
Boot capacity*	l	416-2117
Kerb weight acc. to EC**	kg	1470
Payload acc. to EC	kg	480
Gross vehicle weight	kg	1950
Tank capacity/reserve	l	54/6

### Performance and fuel consumption

		Petrol	Natural gas
Acceleration 0-100 km/h	s	12.4	12.4
Max. speed	km/h	184	184
NEDC consumption comb.	l/100 km	7.3	4.9 kg/100 km
CO2 emissions	g/km	175	135

\*acc. to VDA measuring method; \*\*including driver (75 kg)

## Mercedes-Benz B 200

Page 36

### Engine

No. of cylinders/arrangement		4 in-line, 2 valves per cylinder
Displacement	cc	2034
Bore x stroke	mm	83.0 x 94.0
Rated output	kW/hp	100/136 at 5500 rpm
Rated torque	Nm	185 at 3500-4000 rpm
Max. engine speed	rpm	6300
Compression ratio		11.0 : 1
Mixture formation		Microprocessor-controlled petrol injection with hot-film airflow sensor (HFM)

### Power transfer

Transmission		Five-speed manual transmission
Clutch		Single-disc dry clutch
Ratios	Final drive	3.72
	1st gear	3.64
	2nd gear	2.04
	3rd gear	1.33
	4th gear	1.03
	5th gear	0.82
	Reverse	3.29

### Running gear

Front axle	McPherson strut suspension, wishbones, twin-tube gas-pressure shock absorbers with selective damping system and coil springs, torsion bar stabiliser
Rear axle	Parabolic rear axle, coil springs, single-tube gas-pressure shock absorbers with selective damping system and coil springs, torsion bar stabiliser
Braking system	Hydraulic dual-circuit braking system with vacuum servo, ABS and Brake Assist, front discs internally ventilated, rear discs solid, lever-type parking brake, ESP®
Steering	Electromechanical speed-sensitive steering
Wheels	6 J x 16
Tyres	205/55 R 16

### Dimensions and weights

Wheelbase	mm	2778
Track front/rear	mm	1552/1547
Overall length	mm	4273
Overall width	mm	1777
Overall height	mm	1604
Turning circle	m	11.95
Boot capacity*	l	544-2245
Kerb weight acc. to EC**	kg	1345
Payload acc. to EC	kg	535
Gross vehicle weight	kg	1880
Tank capacity/reserve	l	54/6

### Performance and fuel consumption

Acceleration 0-100 km/h	s	10.1
Max. speed	km/h	196
NEDC consumption comb.	l/100 km	7.2-7.5
CO2 emissions	g/km	173-180

\*Acc. to VDA measuring method; \*\*including driver (75 kg)

## Mercedes-Benz B 200 TURBO

Page 37

### Engine

No. of cylinders/arrangement		4 in-line, 2 valves per cylinder
Displacement	cc	2034
Bore x stroke	mm	83.0 x 94.0
Rated output	kW/hp	142/193 at 5000 rpm
Rated torque	Nm	280 at 1800-4850 rpm
Max. engine speed	rpm	6000
Compression ratio		9.0 : 1
Mixture formation		Microprocessor-controlled petrol injection with hot-film airflow sensor (HFM), turbocharger

### Power transfer

Transmission		Six-speed manual transmission
Clutch		Single-disc dry clutch
Ratios	Final drive	3.24 (gears 1-4) / 2.70 (gears 5,6, R)
	1st gear	4.21
	2nd gear	2.54
	3rd gear	1.71
	4th gear	1.26
	5th gear	1.18
	6th gear	0.95
	Reverse	5.02

### Running gear

Front axle	McPherson strut suspension, wishbones, twin-tube gas-pressure shock absorbers with selective damping system and coil springs, torsion bar stabiliser
Rear axle	Parabolic rear axle, coil springs, single-tube gas-pressure shock absorbers with selective damping system and coil springs, torsion bar stabiliser
Braking system	Hydraulic dual-circuit braking system with vacuum servo, ABS and Brake Assist, front discs internally ventilated, rear discs solid, lever-type parking brake, ESP <sup>®</sup>
Steering	Electromechanical speed-sensitive steering
Wheels	6 J x 16
Tyres	205/55 R 16

### Dimensions and weights

Wheelbase	mm	2778
Track front/rear	mm	1552/1547
Overall length	mm	4273
Overall width	mm	1777
Overall height	mm	1604
Turning circle	m	11.95
Boot capacity*	l	544-2245
Kerb weight acc. to EC**	kg	1370
Payload acc. to EC	kg	510
Gross vehicle weight	kg	1880
Tank capacity/reserve	l	54/6

### Performance and fuel consumption

Acceleration 0-100 km/h	s	7.6
Max. speed	km/h	225
NEDC consumption comb.	l/100 km	7.9-8.1
CO2 emissions	g/km	190-195

\* Acc. to VDA measuring method; \*\*including driver (75 kg)