The Integral Safety Concept. Mercedes-Benz Buses and Coaches.

Mercedes-Benz
The standard for buses.
It’s what we’re all about:
The vision of accident-free driving.

We are moved by the vision of accident-free driving. That is why we are continually developing new safety and assist systems. Buses are perceived as one of the safest forms of transport in the world. The innovations of Mercedes-Benz have played a decisive part in this. As a leading manufacturer of buses and coaches, we at Mercedes-Benz shoulder particular responsibility for the safety of passengers, drivers and road users. The primary cause of accidents is an error when turning off, making U-turns, reversing, and moving off. This is followed by leaving the road due to driving too close to the vehicle ahead, and excessive speed.
Driven by a clear vision of accident-free driving, Mercedes-Benz pursues an integral safety concept. It offers the complete answer to the quest for greater safety in bus travel. Forward-looking assist systems protect you better than any guardian angel. Many innovations using safety technology which are standard today celebrated their début in a vehicle bearing the iconic star: for example, the Anti-lock Braking System (ABS), the Electronic Stability Program (ESP), or Active Brake Assist (ABA) for active driving safety.

Fourfold protection. Rigorous implementation of this safety consciousness is reflected in the fact that the concept covers all phases of automotive safety, from driving safety, safety in dangerous situations, and protection in the event of an accident, through to minimising the consequences of accidents.

Four guardian angels – just in case.

Phase 1: Driving in safety.
Most accidents begin long before a collision: due to a distracted driver, poor visibility, or unexpected hazard. An ergonomic and well-laid out driver’s workstation like state-of-the-art assist and safety systems (for example, ABA 3, AEBS, ACC, Aids, ESP®, SPA, DBL) contribute to a considerably higher level of driving safety.

Phase 2: When danger strikes.
In spite of all this, should it come to a critical situation, systems are integrated in the bus that react autonomously. As a result, collisions and unstable driving states are avoided as far as possible. The Active Brake Assist (ABA 3), and the Electronic Stability Program (ESP) are just two examples of this.

Phase 3: In an accident.
If a collision is unavoidable, various systems protect the driver, the attendant, the passengers, and other road users. The Front Collision Guard (FCG) in the front end, and the energy-absorbing backrests and partitions are outstanding, important developments in this area.

Phase 4: After an accident.
After an accident various measures and systems intervene to prevent something worse happening, and to provide rapid assistance. Therefore the provision of pertinent information to rescue services is particularly important. A detailed knowledge of our vehicles and their safety systems helps rescue services get to injured persons more quickly – thereby saving lives. We offer support in the form of a rescue guide that you can find on our website.


1. Safety when driving.
2. Safety when danger strikes.
3. Protection in an accident.
4. Protection after an accident.

The Integral Safety Concept.

Four safety phases.

*Active Brake Assist (ABA), Advanced Emergency Braking System (AEBS), Adaptive Cruise Control (ACC), ATTENTION ASSIST (AtAs), Electronic Stability Program (ESP), Lane Assistant (SPA), Continuous Braking Limiter (DBL)
The most important safety features at a glance.

Web special with the most important safety and assist systems. On our website you can find our web special on the topic of safety together with detailed descriptions of the most important safety features in our buses. You will also find information on the services available to you at Mercedes-Benz Buses and Coaches. The complete package makes us the brand for safety so that every journey will be a good one for you.

Find out more about a selection of important safety features, from minibus to touring coach in our web special at:
http://safety.bus.mercedes-benz.com
Priority for driving safety.

Adaptive Cruise Control* (ACC) is a prerequisite for Active Brake Assist (ABA 3). It reduces the stress on drivers using trunk roads and motorways. If the ACC detects a slower vehicle ahead, it automatically slows the bus down until a safe distance is achieved based on the vehicle’s speed. This can be defined by the driver himself.

The ACC keeps the safety distance preselected by the driver constant. For this purpose a radar sensor continuously scans the road in front of the bus. The sensor continuously measures the distance from vehicles travelling ahead, and also registers any obstacles. If there is no vehicle travelling in front, the ACC functions as a cruise control.

With the additional Stop & Go function (ACC with Stop Assist), the ACC remains active in congested traffic, and reliably positions itself relative to the vehicle ahead with the automatic stop and go.

Active Brake Assist – Advanced Emergency Braking System (AEBS). The AEBS comes into play when it comes to detecting whether the driver is approaching something dangerously fast, a tailback for example. This helps avoid rear-end collisions with heavy goods vehicles.

With the additional Stop & Go function (ACC with Stop Assist), the ACC remains active in congested traffic, and reliably positions itself relative to the vehicle ahead with the automatic stop and go.

The Advanced Emergency Braking System (AEBS) uses a radar system to detect vehicles ahead, both moving and stationary, continuously determining the difference in speed between the vehicles. If there is no change in driving activity and a collision is inevitable, the driver first receives a warning, and the vehicle automatically performs partial braking.

If the driver fails to react and a collision seems imminent, the vehicle automatically performs full emergency braking. As full braking is initiated in good time during the emergency braking phase, the consequences of a collision can be drastically reduced.

The present legal requirements of emergency braking assist systems are more than fulfilled by the AEBS; in fact the system already complies with the testing regulations applicable from 2018. ABA 3 goes one step further, since it intervenes even earlier than AEBS in the case of stationary obstacles.

Start: with responsibility. Stop: the danger.

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The Electronic Stability Program (ESP®) is an active system for increasing driving safety and stability. It contributes noticeably to a reduction in the risk of a skid during cornering or evasive manoeuvres. This is done by precisely regulating the braking forces at each road wheel in dynamically critical situations, for example when the bus is cornering at the limit. At the same time the engine power is throttled back. Within physical limits, finely regulating the braking in this way prevents any possible "breakaway" by the bus.

One of the parameters ESP® monitors is the lateral acceleration of the bus. If the bus reaches a critical driving condition in wide curves – such as motorway exits – or when rapidly changing lanes, the speed of the vehicle is automatically reduced until driving stability is restored. ESP® is similar to the system used in cars, but offers extended functions adapted for buses.

ESP® is only one of a multitude of innovative electronic aids that support the driver in Mercedes-Benz buses.

The Electropneumatic-Braking-System (EBS), a further development of the conventional air brake, offers many advantages. It ensures that the brakes respond more quickly and with greater precision when the driver depresses the brake pedal. When braking, the control unit first activates the continuous brake (retarder). If greater retardation is required, the control unit uses the information in the data network to determine the optimum braking pressure for every axle. As a result, stopping distances are much shorter, and brake disc and lining wear significantly less. The shorter stopping distance reduces the likelihood of a collision.

The Roll-pitch control system (WNR) with electronically controlled shock absorbers. It stabilises the vehicle automatically, thus enhancing roadholding to suit the current load and road conditions. This in turn not only enhances driving safety, but also ensures first-class ride comfort.

Articulated Turntable Controller (ATC). ATC controls the hydraulic damping of the articulation joint rapidly as required, based on data from the CAN data bus. In unstable driving conditions the driving dynamics controller intervenes, achieving virtually the same effect as the ESP® electronic stability program. It provides a new level of safety for articulated buses.

Maximum road performance.
Minimal strain.
Continuous Braking Limiter (DBL). All Mercedes-Benz coaches are equipped with a continuous braking limiter as a standard feature for exemplary safety. It continuously monitors the speed of the vehicle, and prevents the bus from accelerating undesirably on downhill sections.

The DBL is a safety system that makes it impossible for the driver to improperly disengage the drive train by depressing the clutch, for example when driving downhill. It continuously monitors the speed of the vehicle. If a vehicle exceeds the maximum allowed speed, for example when driving downhill, the DBL communicates with the other safety systems. First, the fuel injection to the engine is cut off. If this is not enough, the retarder, the wear-free continuous brake, is also brought in. This increases safety on road sections with a steep downhill gradient, and makes accidental speeding, which might otherwise very easily occur, impossible.

The Tire pressure monitoring system (TPM) indicates the actual pressure in the individual tires, and warns of any deviation from the optimum pressure. This provides additional safety, especially in Mercedes-Benz coaches and interurban buses. Pressure monitoring has a positive effect on fuel consumption, and prevents dangerous tire wear and dangerous tire damage during long-distance operation.

ABS principle of operation: Sensors fitted on all four wheels inform a central control device of the speed detected at each wheel. If the sensitive point for blocking the wheels is reached during braking, the wheel is kept at this specific threshold by varying the pressure. It takes only a second to increase and lower the brake pressure. When braking, all the forces acting on the wheels, and the rolling behaviour are continuously recorded. The braking forces acting on the wheels are distributed so that no wheel is blocked, and the steering capability of the vehicle is virtually retained.

As early as December 1970, Mercedes-Benz presented the first electronically controlled ABS worldwide – a revolution in driving and road safety. Selective electronic braking intervention prevents permanent blocking of the wheels during braking.

The risk of losing directional stability is minimized and the vehicle can be steered in the desired direction, even during full emergency braking. ABS technology forms the basis for advanced electronic safety systems, such as the Electronic Stability Program (ESP®).

ASR principle of operation: This electronic assistant prevents the driven wheels from spinning in two ways. Firstly, ASR minimizes the spin of the wheel by metered application of the brakes. Secondly, the torque of the engine is regulated by the “electronic accelerator pedal”. Even at full throttle, in critical situations the engine only provides as much power as the driven wheels can transmit – a major safety advantage when moving off and for driving stability. When moving off, the torque acting on the driven wheels and the speed of each wheel is monitored. The torque distribution is controlled so that wheel spin is prevented. The flow of power is therefore always at an optimum level.

During acceleration, ASR assists the driver to minimize spinning of the driven wheels, and thus minimizes the risk of the rear of the vehicle (rear wheel drive) breaking away to one side. Especially for engines with a powerful torque, ASR thus offers more comfort and increased safety when driving off, in particular on road surfaces where the grip varies.


Anti-lock Braking System (ABS), Acceleration Skid Control (ASR), and Tire pressure monitoring system (TPM). ABS and ASR prevent the wheels locking during braking, and the wheels spinning when moving off. TPM monitors the air pressure of the tires and reports any deviation from the target pressure to the driver in the central display.
Toeing the line.

The Lane Assistant (SPA) warns the driver of an unintended change of lane by a pulsation in the seat.

With the aid of a camera system behind the windshield SPA detects if the vehicle is about to veer off the road. It constantly monitors the distance of the bus from the lane markings. As soon as the vehicle crosses any of the markings, the driver is alerted by a pulsation in the seat on the relevant side. It is active above a speed of 60 km/h, and can be switched off by operating the turn signal, for example when initiating a change of lane.
Good partners look after each other.

Active Brake Assist (ABA 3). ABA can save lives: If Active Brake Assist detects an acute risk of a rear-end collision with a slower or stationary vehicle ahead, it applies full braking following an escalating series of warnings.

The Travego with ABA 3 not only reduces the consequences of a severe accident, but can even autonomously prevent accidents within physical limits. In addition, with ABA 3 it is also possible to avoid accidents with stationary obstacles up to a speed of 60 km/h, thus surpassing current legal requirements. Mercedes-Benz offers the new Active Brake Assist (ABA 3) as an option in the Travego provided the high-decker is ordered with Adaptive cruise control (ACC).

Active Brake Assist is based on the Adaptive cruise control (ACC). It uses the radar sensor of the ACC, which can detect moving obstacles within a defined zone ahead of the bus. The distance from and the relative speed of the vehicle in front are continuously measured and evaluated.

If there is a danger of rear-end collision in a static traffic situation, a multistage warning concept comes into operation. First the driver is warned by a red illuminated triangle with the outline of a vehicle in the instrument panel as well as acoustically by a rising tone. If the danger of collision becomes more acute and the driver fails to react, partial braking is initiated. At the same time, by gently increasing the brake power, the system takes into consideration the passengers on board. If the driver still fails to react, the system then applies full braking power of its own accord.

To warn traffic following the vehicle, the brake lights come on during partial braking and flashing stop lamps are activated during full braking. If the vehicle is brought to a standstill under emergency braking, the hazard warning lights come on automatically. The Active Brake Assist cannot always prevent accidents, but by applying braking power it can considerably reduce the speed of any collision and consequently the severity of any accident.
Phase 2: Safety when danger strikes. 

Brake Assist (BAS). It is precisely at that critical moment when the driver may brake too fast but not strongly enough that the Brake Assist kicks in. It interprets the braking behaviour: in an emergency braking situation, it boosts the braking power to a maximum within fractions of a second, and virtually jolt-free.

The principle: Through constant comparison of data, the microcomputer immediately detects when the brake pedal is suddenly depressed at a speed greater than usual, and concludes from this that there is an emergency braking situation. At the same time the control unit also takes into account the speed, as well as the loading condition of the bus. In addition, the BAS microcomputer is linked by data bus with the control units of the Electronic Stability Program (ESP®) and other associated systems, such as the engine and transmission electronics. The electronics of the BAS "is constantly learning during the journey" so as to ensure optimum adaptation of the brake pressure in every situation.

It happens just at the critical moment: instead of fully applying the brakes and leaving the foot resolutely down on the pedal, the driver might brake quickly, but not strongly enough. In an emergency situation like this, the electronic brake assistant (BAS) kicks in automatically. It interprets the braking behaviour: in an emergency braking event, it boosts the braking power to a maximum within fractions of a second, and virtually jolt-free.

Thanks to BAS the braking and stopping distance is considerably reduced. With an average gain in reaction time of 0.4 seconds, the reduction in the braking distance of a coach at a presumed speed of 100 km/h (62.5 mph) can be up to 10 metres, a tremendous increase in safety in emergency situations.

Time for a coffee break.

ATTENTION ASSIST (AtAs). The new AtAs* is unique in a coach. It detects tiredness and lack of concentration of the driver, indicating a necessary break with a coffee cup icon on the display.

The optional Attention Assist (AtAs) is unique in coaches. It is characterized by its versatility. It registers parameters such as steering angle, speed, longitudinal and lateral acceleration, trip duration, driver signals and change of driver. By correlating the data, the ATTENTION ASSIST deduces the condition of the driver. If the data indicates lack of concentration or tiredness, a coffee cup icon appears on the display as an advisory message to take a necessary break.

*Optional extra
Intelligent light system: See and be seen.

Cornering light and curve illumination. The cornering light switches on at night, as soon as a turn indicator is operated, or the steering wheel is turned. It illuminates over a 65° angle around the bend. The intelligent curve illumination improves vision in bends by 90%.

Optimum visibility at all times.

Intelligent light system: See and be seen.

Cornering lights ensure much greater safety when turning at night at poorly lit intersections, because the fog lamp on the inside of the bend is steered, thereby achieving better illumination of the area. It switches on automatically at speeds of up to 40 km/h if the main headlamps are switched on, and the turn indicator is set, or the steering wheel is turned.

The cornering light function is assumed by the fog lights. It is controlled on the basis of actual information on speed, steering angle and turn indicator position. Using this data, the control unit ensures that the cornering light always functions correctly in a wide range of driving situations: at intersections, at roundabouts, and when reversing. Rather than switching the cornering light abruptly on or off, the intelligent electronics dims it up or down. This gives the eye a chance to adjust to changing light situations.

Daytime running light, dipped beam, light and rain sensor

Phase 1: Safety when driving.

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Intelligent light system:

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Daytime running light. Additional optional extras also increase the level of safety. The LED daytime running light is integrated in the headlamp housing.

Dipped beam. The xenon light emitted by the headlamps forms a broad carpet of light ahead of the vehicle, combined with a long range.

This makes the sides of the road visible, even in bends, and where the road is very wide. In difficult driving situations and in poor weather both visibility and orientation are therefore improved.

Rain and light sensors are integrated into one element. The rain sensor controller is linked up to the intermittent wipe control function, and employs modern infrared technology. Two invisible light beams emitted from two LEDs scan an area of the windscreen. These light beams are reflected to varying degrees according to how heavy the rainfall is. The rain sensor detects this and adjusts the wipe interval appropriately. When the rain is heavier the sensor switches to continuous wipe mode. When the rain stops the windscreen wiper is automatically switched off.

The integrated light sensor is switched on together with the dipped beam that is automatically turned on at dusk or in poor light conditions. Both relieve the driver, who can then concentrate better on the traffic.
Safeguarding when driving. | Driver’s workstation

Shining example. Powerful halogen headlamps are part of the standard safety equipment of Mercedes-Benz buses and coaches. As an option, Xenon/LED headlamps illuminate the road even better. The LED daytime running lights make it easier to be seen by other road users and so contribute to even greater safety in road traffic.

If you see more, you can see farther ahead.

The ergonomic driver’s workstation. With a clearly laid out ergonomic cockpit the driver can direct his full attention to the road.

Touring coach or regular service bus: buses and coaches from Mercedes-Benz are outstanding for being so easy to drive, which contributes to passenger safety. After all, our developers have done their utmost to further optimise the driver’s area to the needs of the driver so that he can direct his full attention to the road. A relaxed and focused driver enhances safety considerably.

A perfect basis for this is created by the cockpit. It sets completely new standards as regards ease of operation, instrumentation, and comfort. The switches and instruments are arranged in such a manner that the driver can easily reach them without having to adjust his position. The instrument panel is arranged very clearly, allowing the most important data to be gathered at a glance. Operation is simple via the practical layout on the new multifunction steering wheel. Menu navigation is intuitive and easy. An ergonomic steering column stalk helps to make gearshifting easy. Then there are the low window openings and well devised mirror systems. They give the driver the best possible view.
Immersion for long-term protection.

Thanks to seamless coating on the outside and inside of all frame components, KTL achieves unbeatable anti-corrosion protection that ensures lasting strength for the entire bodyshell. The frame is dipped diagonally into a basin, and withdrawn with the opposite tilt so that the protective paint can also reach complicated structures. By applying an electrical voltage the paint separates out as a homogeneous layer onto the body skeleton. Controlling the electrical current influences the thickness of the paint coat. The KTL coating offers effective and long-lasting protection against corrosion. It has a good resistance to chemical stresses, thereby ensuring safety by maintaining strength.

Body strength ECE-R 66/02

A good basis.

Roll-over protection ECE-R 66/02. The strength of the bus body is a major factor in the passive safety of the bus. Its resilience can help reduce the consequences of an accident.

The high strength of bus bodies from Mercedes-Benz Buses and Coaches is guaranteed not least by all-round, weight-optimised annular frame components. The strength is defined in compliance with regulation ECE-R 66. This specifies the exact "survival space" that must be guaranteed by the structural design in the event of an accident.

The Citaro already meets future ECE regulations now. Invisible but crucial modifications and advances have taken place under the attractive shell of the new Citaro. The body shell continues to be based on the proven rib frame technology – one of the innovations from the first generation of the Citaro – but is now of stiffer construction, thereby offering passengers even better protection against a side impact. The body shell of the new Citaro has also been developed with an eye on the future ECE-R 66/02 regulation. This defines the survival space for the passenger compartment in a rollover accident. The new Citaro already meets the future regulation that does not come into force until 2017.

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Passive safety. Active protection.

Frontal impact protection. In the Mercedes-Benz Citaro particular importance has been attached to the safety of the driver. Directive ECE-R 29 is applicable to trucks, and since 1975 it has defined the survival space of a truck driver in a frontal crash. This directive was used voluntarily as a standard for the Citaro. Compliance with ECE-R 29 has been verified by a pendulum impact test. The Frontal impact protection is based on this standard, and is unique for city buses. The rigid frame structure enhances passive safety.

Front Collision Guard (FCG). The FCG is a crash element that absorbs the energy of a collision through deformation, thereby protecting the occupants.

FCG is a unique passive safety system for protecting the driver and attendants in the event of a frontal crash. It begins with a transverse profile, which creates an underside guard to protect other road users in the event of an accident and can, for example, intercept a passenger car. The structure behind this profile consists of crash elements that can selectively dissipate energy if a collision occurs.

In addition, the driver’s area, including steering, pedals and seat, is now located on a massive frame section that is displaced rearward as a complete unit in the event of a serious head-on collision, thereby increasing the survival space by vital centimetres. The designers derived the effectiveness of the Front Collision Guard not only on the computer but also validated it in a number of realistic crash tests.
Building safe vehicles is the top priority of Mercedes-Benz. Part of our integral safety concept also includes considering all measures that can minimise the consequences of an accident. A key component of our work is therefore providing pertinent information for the rescue services. The better they know our vehicles and safety systems, the faster they can reach the injured – and so save lives.

Despite intensive efforts to make our buses as safe as possible, the possibility of injury cannot be completely ruled out in the event of an emergency. A short, fast and effective rescue chain will therefore continue to be essential in the future.

The rescue teams must gain access as quickly as possible to the injured without increasing the danger for the casualties or themselves. The prerequisite for this is the sound training of all rescue personnel. The “Guidelines for Rescue Services” gives detailed information about the construction, access arrangements and safety systems of our buses and coaches. In this way Mercedes-Benz supports rescue services during their training and at the scene of an accident.

Knowledge that can save lives.

Guidelines for rescue services. A guide with pertinent information for the rescue services so that a swift rescue chain of action is available.

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Phase 4: Protection after an accident. | Guidelines for rescue services

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Knowledge that can save lives.
Safety in signal yellow: probably the safest coach in the world.

Safety Coach. As the Safety Coach, the Travego combines all the safety systems presently available in one vehicle. It demonstrates the most up-to-date of all the safety and assist systems that can presently be supplied in a bus as a commercial vehicle. The range spans from the Electronic Stability Program ESP®, through Active Brake Assist, which automatically applies the brakes if there are stationary or moving obstacles in the path of the Travego, to the fire detection and fire extinguishing systems in the engine compartment.

We are driven by the vision of accident-free driving. That is why we are continually developing new safety systems and launching these onto the market.

Safety is a fundamental value of Mercedes-Benz, and an important component of corporate philosophy – as is the technological leadership, proof of which is evident by the on-going further development of the integral safety concept.
ADAPTIVE ESP®. Through selective management of brakes and engine, and while taking account of the loading condition, it increases the driving stability of the minibus when at the limit, in particular if the bus is cornering too fast or making abrupt evasive manoeuvres.

With ADAPTIVE ESP® it is easier to keep critical driving situations under control. Through selective management of brakes and engine, the ADAPTIVE ESP® increases the driving stability of the vehicle, in particular if the bus is cornering too fast or making abrupt evasive manoeuvres. Within the physical limits skidding, breakaway, or toppling of the vehicle are thus avoided, and the driver is able to keep the Sprinter minibus on track more easily. The ADAPTIVE ESP® acts depending on the load, and incorporates the actual loading condition in the electronic control processes.

Crosswind Assist. Strong gusts of crosswind can lead the vehicle to make a sudden change of course. The Crosswind Assist detects the external forces in good time from the sensors of the ADAPTIVE ESP® system. Above a speed of 80 km/h it automatically corrects the course of the vehicle by intervening with the wheel brakes on the side of the vehicle facing the wind. The change of course is thereby markedly reduced, largely compensating for the influence of the crosswind gust.

- ESP® sensors detect crosswind gusts
- Significantly reduces change of course by selective braking interventions on one side

Small bus, big on safety: our minibuses are role models in their class.
Blind Spot Assist. Above 30 km/h it constantly monitors the vehicle blind spot, giving a visual and acoustic warning if a lane change poses a danger:

- Two short-range radar sensors monitor the blind spot in a range of up to 3 m behind and alongside the vehicle
- Indication via illuminated warning triangles in the exterior mirrors
- Visual and acoustic warnings help avoid collisions
- The system is active above 30 km/h, and can be deactivated by a switch

Highbeam Assist. It is controlled by a monitor camera behind the windscreen that continuously senses the environment around the front of the vehicle, and the traffic situation ahead. If the system cannot detect any vehicles ahead or oncoming traffic within the dazzle range, the highbeam is automatically switched on:

- The highbeam is automatically switched on if the system has no other vehicles in the dazzle range
- The Highbeam Assist is activated when the rotary light switch is at AUTO and the highbeam function of the combination switch on the steering wheel is switched on
- It can be permanently deactivated from the instrument cluster. It is active above a speed of 35 km/h
Maximum: driving stability. Minimum: strain

**Lane Assistant.** It warns the driver through acoustic and visual signals of any unintended departure from the lane.

- Multifunctional camera registers clear lane markings
- A control and processes camera data and driver activity to determine whether a departure from the lane is intentional or not
- If lane markings are crossed unintentionally, the system gives an acoustic and visual warning
- The risk of accidents due to the driver nodding off or losing concentration can thus be reduced
- The system is active above 60 km/h and can be deactivated by a switch

**COLLISION PREVENTION ASSIST.** It gives the driver visual and acoustic warnings if the distance from the vehicle in front or from a stationary obstacle is too small, and supports him with emergency braking by the brake assist system BAS PRO.

- Radar and sensors vehicles ahead and stationary obstacles
- Visual warning signal if distance too short
- Additional acoustic warning if risk of collision
- Support from brake assist system BAS PRO if hard braking is necessary
- Active braking by the driver is assumed
- Can help to avoid rear-end collisions
- Works up to a distance of 65 m max.
- The system is active above 30 km/h, and can be deactivated by a switch

**Assist packages.** As an alternative to ordering the assist systems individually in the Sprinter minibus, as an option it can be convenient to order the safety assist systems as a package.

**The Lane Package**

**The Driver Assist Package**

*Not available for all models*
Driving on the safe side.

With the OMNIplus service programme. Even the best safety concept is more reliable if your drivers are fit in all the topics concerning safety, and are prepared for critical situations with theoretical and practical knowledge.

OMNIplus Safety Training. Your vehicle is valuable and so is your reputation as a bus or coach operator. In order to make your drivers even safer behind the wheel of your Mercedes-Benz bus or coach, they need certified training courses. For this there are a wide range of OMNIplus driver training courses. With OMNIplus Safety Training we can offer the right course for every driver, every task, and every requirement. Our Base-plus safety training courses include difficult tasks for avoiding "small" manoeuvring damage, as well as training in the correct behaviour during critical driving manoeuvres.

OMNIplus Emergency Breakdown Training. Even the fittest driver can only work optimally if he is perfectly familiar with his vehicle. The comfort and assist systems of our ultramodern buses and coaches are there to bring driver and passengers to their destination so that they are as relaxed and comfortable as possible. This means that your driver can operate and use these systems. The OMNIplus Emergency Breakdown Training teaches everything about what your bus can do and your drivers should know. This training course covering theory and practice is carried out on-site on your vehicles.
Important for you. Important for us. Technical data stored in the vehicle.

Electronic vehicle components (e.g. Airbag Control Unit, Engine Control Unit) contain data storage for vehicle technical data, including but not limited to Diagnostic Trouble Codes in the event of a malfunction, vehicle speed, braking force, or operating conditions of the Restraint System and Driver Assistance Systems in case of an accident (no audio and no video data recording). This data is either stored as a volatile e.g. Diagnostic Trouble Codes, over a short period of time (a few seconds only) e.g. in case of an accident or in aggregated form e.g. for component load evaluation. The data can be read using interfaces connected to the vehicle. Trained technicians can process and utilise the data to diagnose and repair possible malfunctions. The manufacturer can use the data to analyse and improve vehicle functions. When requested by the customer, technical data can form the basis of additional optional services. In general, data from the vehicle is transferred to the manufacturer or a third party only where legally allowed, or based on a contractual customer consent in accordance with data protection laws. Further information regarding storage of vehicle technical data is provided in the vehicle owner’s manual. Mercedes-Benz Buses and Coaches naturally handles customer data confidently.

About the information in this brochure.

Information about the product is subject to change after this brochure went to press (09/16). The manufacturer reserves the right to make changes in the design or form, deviations in colour, and changes to the scope of supply during the delivery period, insofar as the changes or deviations are reasonable for the customer, having regard to the interests of the seller. The illustrations may also show accessories and special equipment optional extras that do not form part of the standard scope of supply. Colours may vary for typographical reasons.

This brochure may also contain models and support services that are not available in some countries. Statements about statutory, legal and tax regulations and their effects are only applicable in the Federal Republic of Germany at the time this brochure went to press. Therefore please contact your Mercedes-Benz sales representative for the latest binding version.

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