

The Unimog.

The benchmark for off-road capability.

Mercedes-Benz

Trucks you can trust



You can reach milestones. Or set new ones. The extreme all-terrain Unimog.

Progress and safety, perfection and responsibility, performance and innovation – these are just some of the values Unimog customers rightly associate with Mercedes-Benz. In the Unimog we have reinterpreted these values. The results set new standards: outstanding off-road capability, exceptional efficiency, advanced large-series technology and superb systems expertise, combined into a successful overall concept. The Unimog U 4023 / U 5023 – a further milestone in the development of commercial vehicles with extreme off-road capabilities.



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Find out more at mbs.mercedes-benz.com

Off-road perfection: the Unimog concept.

Rubble, snow, sand or unsurfaced roads: the Unimog U 4023 / U 5023 always gets through. The outstandingly mobile off-road Unimog can cope with virtually any challenge, thanks to its cutting-edge technology. All-wheel drive and outstanding torsional flexibility give this rugged vehicle an advantage on rough terrain: the Unimog transports your manpower, materials and heavy equipment to where they're needed, no matter how remote a spot.

Superior chassis concept

The unique off-road capability of the Unimog has its origins in its innovative suspension system: the torsionally flexible frame with three-point mounting of cab, engine and transmission system, as well as the suspension mounting using torque tube engineering, wishbone steering and coil springs, make a degree of articulation of up to 30° possible. All-wheel drive, single tyres, central tyre inflation (Tirecontrol plus) and differential locks add up to ensure maximum off-road traction. And thanks to its low centre of gravity, operational stability is assured, even on very steep slopes. The Unimog benefits in particular from its high ground clearance of up to half a metre when in off-road operation. This is made possible by its portal axles as well as by the positioning of all major assemblies above the lower edge of the frame.



Versatile potential uses.

A true utility vehicle with the capability of displaying its full abilities even in the most remote areas – the Unimog is the embodiment of off-road mobility. Even in the deepest wilderness, hydraulic, mechanical and electrical drive systems deliver the right output for the most diverse implements and attachments. The carefully thought-out drive concept means the vehicle is predestined to cope with a huge range of different tasks. Three mounting areas with standardised connection points make it easy to mount attachments and change implements.

System expertise.

The Unimog is far more than simply a vehicle. The combination with permanently installed attachments or changing working implements creates a system offering exceptional diversity, flexibility and productivity. Mercedes-Benz has worked closely with international implement manufacturers and bodybuilders for decades now, and in the Unimog brings together the experience and expertise of specialists with the in-depth knowledge of expert Unimog partners. As a result, you are sure to find tailored solutions even for the most unusual requirements.

Off-road capability. Robust. Efficient.

The advantages of the Unimog U 4023 / U 5023 at a glance.

Economical.

- + State-of-the-art, efficient and volume-tested Mercedes-Benz drive technology
- + Low consumption of fuel, AdBlue® and engine oil
- + Low maintenance costs thanks to long maintenance intervals
- + Driving speeds up to 90 km/h (56 mph)
- + Powerful premium engine brake

Environmentally friendly.

- + State-of-the-art and eco-friendly BlueTec 6 engine generation
- + Future-proof through compliance with Euro VI standard
- + Drastic reduction of pollutant and particulate emissions by up to 90% compared to the previous Euro V engines

Rugged and reliable.

- + Durability thanks to top-class workmanship
- + Large radiator in a protected location above the bumper

GER U 5023

- + Fully welded frame and encapsulated drivetrain ensure long service life
- + High level of reliability thanks to large-scale production and testing

User-friendly

- + Spacious, ergonomic cab with modern interior
- + Innovative and straightforward control
- + High-performance heating and air-conditioning
- + Front camera to increase visibility

Practically-oriented

+ Exceptional levels of off-road capability

+ Transmission power take-offs still usable

+ Engine power take-off provides mechanical

interface for powering implements (600 Nm)

if sub-frame used for attachments

+ Standardised attachment points

+ Powerful vehicle hydraulics

+ Crewcab with space for seven

Reversing camera

and safety

Powerful.

- + Efficient engine with 170 kW (231 hp) and high torque
- + Transmission with short shift times
- + Large-capacity batteries
- + High load ratings

- + Optional Tirecontrol plus central tyre inflation system with practical presets
- + All-wheel drive for excellent traction
- + Good ground clearance thanks to portal axles
- + Short frame overhangs for wide angles of
- + Low-range ratio for gradeability up to 100%
- + Fording capability up to 1.20 m

Good on gradients.

- + Differential locks
- approach and departure
- + Torsionally-flexible vehicle frame

Superior chassis concept.

There's no line it can't cross. Not even the tree line.

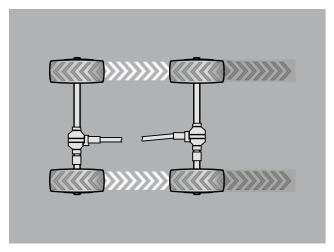
Portal axles, all-wheel drive, tyre pressure control, differential locks on both axles and an extremely torsionally flexible frame enable the U 4023 and the U 5023 to get ahead even on arduous terrain. Proven a thousand times over, every day the vehicle is ready to be put to another hard test: your next deployment.



Outstanding off-road capability.

No matter what stones lie across your path - the Unimog is built to take on well-nigh every obstacle. Its engageeven over difficult terrain. The Unimog is equipped with two features that ensure added traction: differential locks can be engaged to prevent wheels from spinning. And the central tyre inflation system, Tirecontrol plus, adjusts tyre pressure to the ground beneath the wheels. The reasons behind the single-tyre design are also well thought-out: the rear wheels follow in the tracks of the front wheels and thus benefit from the stability provided by the already compacted surface.

Secure off-road: the Unimog U 4023 / U 5023. In order to integrate the BlueTec 6 technologies into the vehicle and able all-wheel drive ensures the vehicle moves steadily on, at the same time maintain its outstanding off-road handling capability, the engine was centrally positioned under the cab. This gives several benefits, including a balanced axle load distribution, which has a positive effect on the vehicle's handling characteristics. And if the Unimog does need to stop, it does so using the pneumatic braking system with off-road ABS, automatic braking power control according to the vehicle load (ALB) and disc brakes on all four wheels.



The principle of single tyres: the rear wheels follow in the tracks made by the front wheels. This improves traction and spares the terrain.



Central tyre inflation (Tirecontrol plus)

The control concept makes setting the pressure of the tyres extremely simple. The switch logic allows the user to choose between the pre-parameterised modes "Road", "Sand" and "Rough". This allows intuitive setting of the correct mode for the current road surface, with incorrect operation a virtual impossibility. Tirecontrol plus also brings benefits for nature: driving off-road with lowered tyre pressure improves traction, whilst also reducing the impact on the land.

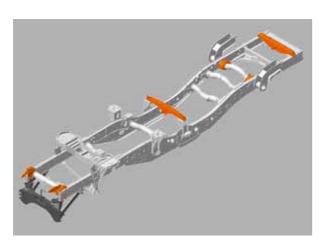




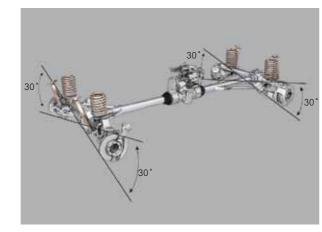
Torsionally rigid and robust: the frame design.

Flexible and robust in operation. The key factor in the off-road ability of the Unimog U 4023 / Unimog U 5023 is the offset vehicle frame. Its torsional flexibility, together with the torque tube technology and 3-point mountings for engine, transmission and implements, makes possible a diagonal twist of up to 600 mm. The welded frame gives it the durability to withstand the twisting strain. At the same time, the frame offset gives the vehicle a low centre of gravity with high ground clearance.

A further plus in off-road operations: torque tube suspension. Connecting the axles by means of a torque tube and torque ball to the transmission allows a degree of articulation of as much as 30°. Furthermore, the encapsulation protects the drive shaft from damage from dust, water or other influences.



The offset frame with welded tubular cross members is the key to the vehicle's torsional flexibility.



Torque tube technology and coil springs facilitate extreme spring travel and extensive axle articulation of up to 30°.

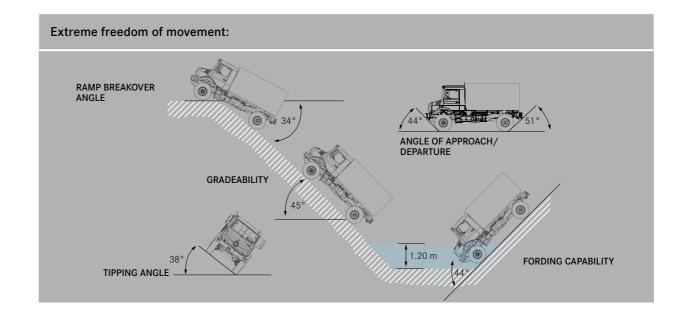
High ground clearance: overcoming virtually any obstacle.

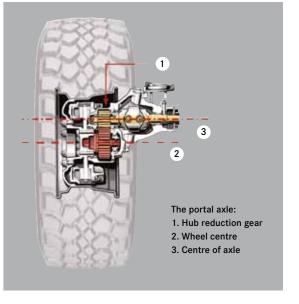
The intelligent response to any challenge. The typical Unimog portal axles ensure high ground clearance but with a low centre of gravity. And the asymmetrical arrangement of the axle differentials makes it easier to drive over obstacles. The suspension mounting has been strengthened and defies even the greatest stresses and strains. The axle design is equally rugged and allows the Unimog to cope with high load values.

Climb every mountain in the Unimog. The short frame overhang at front and rear provides wide approach/departure and breakover angles, meaning that there's virtually no terrain, however steep, that presents a problem for the Unimog. This vehicle is likewise at home in floods and waterlogged areas: waterproofed assemblies, a vertical air-intake pipe and high vent pipes allow the Unimog to ford water depths of up to 80 cm (optional 120 cm).



Water-resistant: high ground clearance, a vertical air-intake pipe and protected assemblies allow the Unimog to ford water depths of up to 80 cm (optional 120 cm).



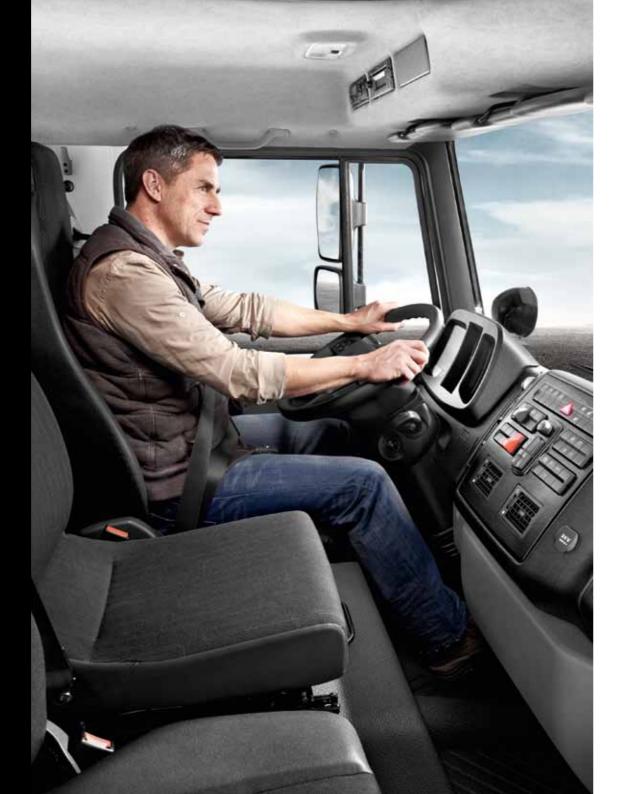


Superior chassis design

A desirable workplace.

User-friendliness and ergonomics.

Climb in, feel good, get going: the experience and suggestions of many users contributed to the development of the cab. They contributed to the comfortable seat position and to the ease of assessment of all the vehicle settings in the instrument cluster. These characteristics contribute in no small way to greater safety and ease of operation and ensure that work and comfort go hand in hand in the Unimog. For the quicker and more intuitively users can operate the many different driving and working functions, the safer and more reliably the vehicle can be deployed off-road.





The Unimog with crewcab.

If, as well as all the materials it can carry, the Unimog needs to carry a team of up to seven workers to a location, the crewcab is a valuable addition. In this case the cab is fitted with an additional rear bench seat with for four people – each sitting in comfort and secured by an individual seat belt. Four individual air-sprung seats are available as an option. The crewcab makes it a straightforward process to get the whole team to a remote work site, even across extreme terrain. As well as sufficient head- and legroom there's plenty of



Seven comfortable seats: with a crewcab, the Unimog becomes a people carrier.

stowage space underneath the folding rear bench seat to store tools, equipment and personal items safely and within easy reach. Further stowage space is available in the compartments in the front doors. A total of four wide-opening doors – two on each side of the vehicle – improve the ergonomics of getting in and out of the rear passenger compartment.



Two wide-opening doors on each side add to the ease of getting in and out.









Offers optimum working conditions: the operating concept.

Get there in comfort and safety. The cab assists the driver, in particular when the job needs to be done and there's little time for lengthy deliberation: intuitive and ergonomic controls help to simplify operation. The seat position in the low-vibration sector behind the front axle allows comfortable off-road driving and provides a very good overall view of the terrain ahead. The latter is optimally illuminated by the daytime running lamps and the headlamps.

Make yourself at home. The interior provides a high level of comfort and makes work easier. The heating and air conditioning system provides the right temperature to ensure good working conditions in every weather. The standard high roof and adapted transmission tunnel offer space for two full-fledged single seats and an optional centre seat. This sophisticated workplace also features a CD radio with Bluetooth® hands-free system. The central stowage compartment and the standard-fit glove compartment give the cab a tidy and ordered aspect.

Innovative details.

- **01** The neat organisation of the cab creates a pleasant working atmosphere. The multifunction steering wheel fits your hand perfectly and allows easy access to the hands-free system and the instrument cluster display.
- **02** The instrument cluster has a large and bright display showing all the important information, such as oil level, air pressure and the hydraulic system settings.
- **03** Functions such as gearshifting, the premium engine brake and Electronic Quick Reverse are integrated in the steering-column lever.
- **04** Easily accessible and clearly structured controls. A real innovation in terms of user-friendly control is the central tyre inflation system, Tirecontrol plus, with its practical presets.
- **05** The standard height and tilt-adjustable steering column ensures an optimal seating position for the driver.



16 Ergonomic working area

Multiple attachments for extreme applications.

Working in areas that others cannot even reach.

The Unimog is an all-in-one transportation and working vehicle. Thanks to its uncompromising high-terrain capability, it can transport equipment, materials and manpower to their place of deployment well off the beaten track, let alone the asphalt road. And once it has got there, it works reliably and superlatively well. The reasons for this lie in the pre-installed, ex-factory mounting areas and interfaces and in the drive systems for fitted or interchangeable implements. The highly off-road-capable Unimog has two different transmission power take-offs as well as one engine PTO. The option of a vehicle hydraulics system for the universal deployment of implements and continuous consumers is also available on board. Standardised sockets provide electrical power. The mounting area is particularly versatile: it can take a drop-side body, a box body or can accommodate special solutions for specific requirements. All this together results in a sturdy and highly mobile workshop that enables work to be completed safely and reliably.

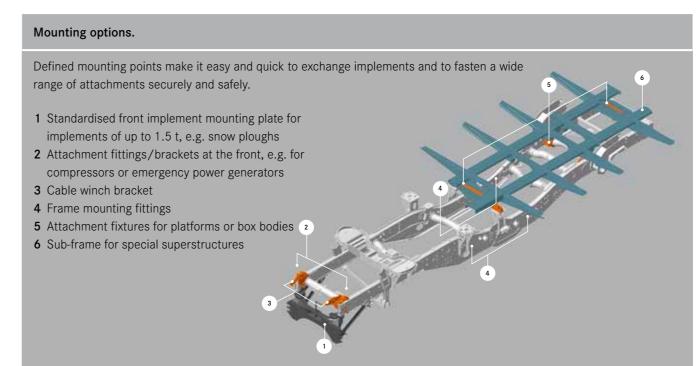


Powerful transmission and engine PTOs. The engine-driven power take-off opens up a wide range of potential applications, for example for the operation of a firefighting or hydraulic pump. The proven transmission power take-offs can also be integrated into the extreme all-terrain Unimog as an option, for example a fast one for hydraulic pumps and a very fast one for firefighting pumps. The design of the sub-frame makes the transmission power take-offs easy to access and versatile in their potential uses.

Vehicle hydraulics and electrical interfaces. Attachments such as cable winches, snow ploughs, front loaders or hydraulic tools can be powered with the vehicle's hydraulics. The single-circuit hydraulics provide working pressure of 240 bar at a volume of 60 l/min and 24 kW pump output. Standard sockets are positioned on the front and at the rear end. Four standard sockets are available to provide the power supply to the implements.



Off-road working made possible by engine and transmission-driven power take-offs.





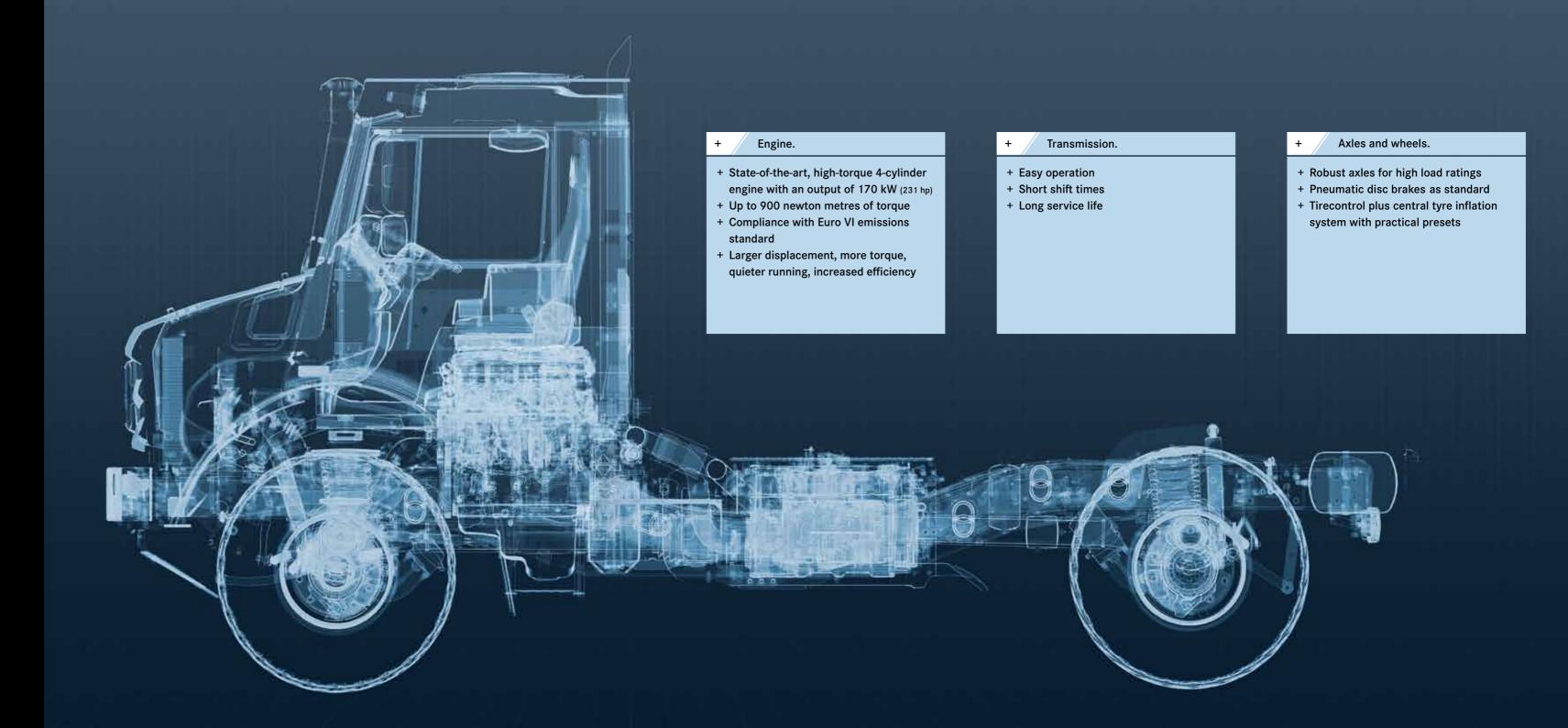
The expert in disaster intervention: the highly off-road-capable Unimog.

BlueEFFICIENCY POWER.

Efficiently into the future.

Driving on motorways at 90 km/h or working at walking pace: the Unimog with BlueEFFICIENCY Power is efficient at every engine speed – and meets the Euro VI emissions standard. Intensive work on the vehicle's engineering was required to achieve these ambitious objectives. The result is a drive system with efficient engines, a powerful transmission and robust axles, all of which add up to make high load ratings possible.





At the heart of economic efficiency. Perfectly coordinated drive system technology.

Mercedes-Benz BlueEFFICIENCY Power technologies do more than just comply with the Euro VI emissions standard. They combine exceptional efficiency and environmental compatibility. The outstanding results are due to the volume-tested Mercedes-Benz engine generation, the highly effective cooling system and the exhaust gas aftertreatment unit.

The state-of-the-art 170 kW 4-cylinder engine is particularly maintenance-friendly, frugal, smooth-running and powerful. It is characterised by its high torque and by the good results achieved for exhaust emissions, consumption and power-to-weight ratio. This means that the performance level of the powerful 4-cylinder engine corresponds to that of a previous 6-cylinder engine. 4-valve technology and common rail high-pressure direct injection at 2400 bar add to its effectiveness. However, the power unit serves not only to drive the vehicle forwards, but can act as a brake as well: the double-speed decompression engine brake plays an important part in improving overall economic efficiency.

Lower emissions for added environmental compatibility.

In terms of exhaust gas aftertreatment, the current generation of engines relies on BlueTec 6 technology, which has already proved its worth in daily use with heavy-duty mass-produced engines. In the exhaust gas aftertreatment unit, the well-tested SCR catalytic converter reduces the nitrogen oxides to a minimum. The consumption of the AdBlue additive required for this sinks significantly, while the diesel particulate filter prevents almost any soot particles from escaping.



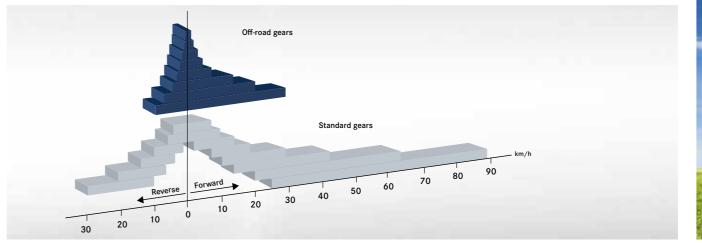
Increased output, lower emissions: the BlueTec 6 engine in the extreme all-terrain Unimog is a 4-cylinder unit with an output of 170 kW. Working in conjunction with the engine cooling system and the exhaust gas aftertreatment unit, this state-of-the-art engine complies with the Euro VI emissions standard. The standard requires a reduction of diesel particulates and nitrogen oxide emissions of 90% in comparison with Euro V.

The highly effective transmission system with short shift

times. In the Unimog, the fully synchronised electro-pneumatic transmission with its eight forward and six reverse gears provides the tractive power. A special off-road gear set with an additional eight forward and eight reverse gears for driving at low speeds is also available. It is characterised by excellent smoothness of operation, a long service life and great efficiency. And changes in the direction of travel are speeded up by the synchronised Electronic Quick Reverse feature.



The right level of gear reduction at the touch of a button: convenient gear-changing with the steering-column switch.



The quick-reversing gearshift system that is a hallmark of the Unimog: with 16 forward and 14 reverse gears, the Unimog will always deliver the optimum speed, on or off-road.

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BlueEFFICIENCY Power

Mercedes-Benz quality.

The Unimog integrates leading commercial vehicle technology that is already proven in large-scale production.

Built in Wörth, at the largest truck assembly plant in the world: the Unimog meets the high quality standards of the commercial vehicle industry. As a global leader of medium-heavy and heavy trucks, Mercedes-Benz sets itself ambitious targets: standards are what defines quality and reliability. And the workforce of over 11,000 located at the modern and environmentally-friendly Wörth plant also meet these expectations. Since 1963, over three million commercial vehicles have been manufactured here. Alongside the so-called you can trust."

A-series (Actros, Arocs, Antos and Atego), Mercedes-Benz Special Trucks also designs and manufactures all its vehicles

at the plant, using a good number of identical components. The fleet comprises the extreme all-terrain Unimog, the Unimog implement carrier, the Econic and the Zetros. The model series are all subject to the same extremely strict testing and trial cycles as the large-scale production series. The passion for commercial vehicles is best expressed by the motto of the workforce at the Wörth plant: "We aspire to get a little better each day to fulfil our brand pledge to our customers: Trucks you can trust."



The Mercedes-Benz Wörth plant: the Mercedes-Benz Unimog is designed and manufactured at the world's largest truck production plant. The engines come from the Mercedes-Benz engine plant in Mannheim.



High quality standards: Mercedes-Benz sets itself very high quality standards for every Unimog produced – from its development, during its testing and in its production.



Financial services.

Flexibility that gives plenty of elbow room.

Our customised financial services make your accounting more flexible. Jointly with the Mercedes-Benz Bank and our Unimog partners, we can provide customised service offers such as leasing, financing, extended warranties, mobility concepts and rental vehicles. Contact your authorised Mercedes-Benz Dealer for more information.

Creating added value. Daimler Financial Services.

- + Daimler Financial Services finances and leases around 40% of all vehicles produced by Daimler worldwide
- + The Stuttgart-based company is active in almost 40 countries and the most internationally oriented of all automotive financial service providers
- + Daimler Financial Services employs around 7000 staff worldwide

Financing. Flexible offers to widen your financial scope. For instance seasonal payment financing, which means that you pay more in busy months and less in quiet months, or final payment financing, which has a higher final payment so that the monthly rates are lower, or Plus3 financing. At the end of the contractual period, you can then decide whether to sell your Unimog and make the final payment or whether to return the vehicle to your Dealer at the price guaranteed in your contract¹. You can also keep your Unimog when you make the final payment. Make the most of taking a follow-up financing and repay the final payment in reasonable monthly payments. Even when you take the standard financing, you are guaranteed to get attractive and flexible terms. Once you have decided which new vehicle you would like, talk to your sales representative to settle the terms for its financing.

Terminable lease contract. The greatest flexibility with lower payments: after a minimum rental period of 24 months, you can terminate the contract by giving a month's notice – and then have a choice of follow-up options: you can return your Unimog and take a different model as required or buy the vehicle from your Mercedes-Benz partner.

Leasing. Instead of paying the entire purchase price, you can also pay for the use of the vehicle with a leasing contract from the Mercedes-Benz Bank. You then agree on convenient monthly payments over a period of time arranged with your Mercedes-Benz partner to suit your requirements. Be kind to your budget and make the most of easy-to-calculate and transparent costs.

Mercedes-Benz Bank Service Leasing. One contract, many advantages. With this attractive package you can regulate the greater part of your fleet costs: acquisition and service. This gives you the greatest planning security.

Local Authority Leasing. With our Local Authority Leasing we can provide every public budget with a suitable solution. You can change to new vehicles at regular intervals which means you get a modern and economical fleet at the same time. It doesn't matter whether it is for ambulances, fire tenders or road maintenance – with Local Authority Leasing, you're making the right decision.

¹This option is based on an additional agreement between you and your dealer.

Your Unimog partner will be pleased to give you a customised offer. Why not contact them now?

26 Financial services

Mercedes-Benz Service.

We're committed to your mobility.

Wherever you put your Unimog to work, Mercedes-Benz is close at hand. At over 650 Unimog Service Support Points in more than 130 countries around the world, we will take care of your Unimog straight away if you need us to. With the same care and attention to detail, the same expertise and the same technical resources that we put into its original assembly. This comes courtesy of our countrywide service network manned by knowledgeable Unimog partners.

We respect experience. Including that of others. For our services, it is the active care that is important. The open exchange of experience is part of this. And not just with our customers, but also with our colleagues. In this way, efficient and economic solutions can be found. This enables our service partners to meet our very high standards every day as far as quality, costs and environmental awareness are concerned. By making clear statements, providing clear fault analysis and cost-oriented solutions. And if parts have to be changed, then of course only Mercedes-Benz genuine parts which have met our stringent quality and availability standards are ever used.



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What you can expect from Mercedes-Benz:

- + First-class service quality at over 650 locations in more than 130 countries worldwide
- + Maintenance, diagnosis and repairs
- + Technical support and personal attention
- + Advice and training to suit requirements
- + Driver, safety and technical training
- + Partnership and fairness

Top service offers from Mercedes-Benz Special Trucks.

+ **Service Extend:** drivetrain guarantee concerning the engine, transmission and much more.

- + **Service Extend Plus:** follow-up guarantee for the whole vehicle concerning the engine, transmission and much more.
- + **Service Mobility:** local service, collect and return service, courtesy vehicle for the driver (only valid for a maximum of two years and only in conjunction with Service Extend Plus)
- Service Complete: full-service package for maintenance work and normal wear and tear as well as repairs (except those concerning attachments and bodies)
- + Mobility for local authorities by providing fully equipped vehicles (subject to availability, only valid for a maximum of two years)



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Unimog E-News. Stay up to date - one-off registration:
Unimog E-News delivers valuable background information,

Contact. Want to know more? We will happily put you in touch with one of our Unimog partners.

Contact and more – it's all online:

testimonies and news about the Unimog.

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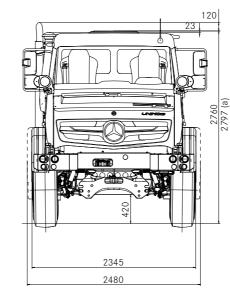
Technical data.

A strong team. The Unimog range of vehicles with exceptional off-road capability.

Model	U 4023	U 5023
Engine (Euro VI)	OM 934 LA	OM 934 LA
Power output	170 kW/231 hp	170 kW/231 hp
Torque at rated engine speed	900 Nm/2200 rpm	900 Nm/2200 rpm
Clutch	SAE-2 Ø 395 mm single-plate dry clutch (organic)	
Transmission	UG 100/8	UG 100/8
Axles	Torque-tube-controlled portal axles with spring coils	
Front axle (model variant)	737.367	737.223
Rear axle (model variant)	737.367	737.223
Electrical system	24 V	24 V
Battery capacity (standard/optional extra)	100/170 Ah	100/170 Ah
Tank capacity	Rated volume 160/235 I	Rated volume 160/235 I
Steering with max. steering pressure	ZF 8095 / 170 bar	ZF 8095 / 170 bar
Brakes	Pneumatic disc brakes	
Smallest tyre size (tyres/rims)	335/80 R 20	365/80 R 20
Largest tyre size (tyres/rims)	425/75 R 20	455/70 R 24
Drive type	Engaging all-wheel drive	
Wheelbase	3850 mm	3850 mm
Perm. GVW (max. with relevant optional extras)	10.3 t	15.0 t
Max. weight on front axle	4.6 t	6.4 t
Max. weight on rear axle	6.0 t	8.8 t
Angle of approach/departure front/rear	42°/46°	46°/50°
Turning circle	16.3 m	16.3 m
Mounting area (max. L × B × H)	4100 × 2280 × 1400 mm	4100×2280×1400 mm
Fording depth (standard/optional extra)	0.8 m/1.2 m	0.8 m/1.2 m
Speed	89 km/h*	89 km/h*

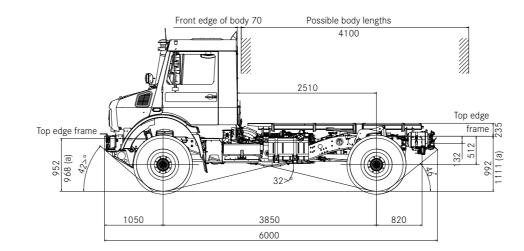
^{*} Limited legal speed limit

Unimog U 4023

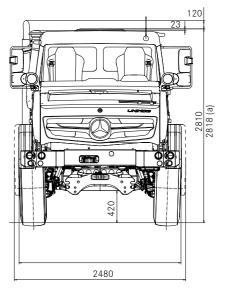


(a) Unladen vehicle

Drawing shows vehicle with compressed suspension and fitted with 365/80 tyres R 20, with OE=optional equipment, all dimensions in mm.

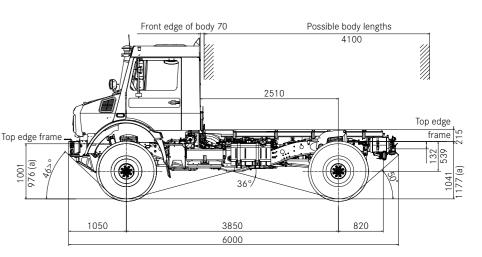


Unimog U 5023



(a) Unladen vehicle

Drawing shows vehicle with compressed suspension and fitted with 365/85 tyres R 20, with OE = optional equipment, all dimensions in mm.



Technical data



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