

# The new BMW 6 Series Convertible. Contents.



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# 1. Captivating from the outside, magnificent from the inside. The new BMW 6 Series Convertible.

Words such as “breathtaking”, “irresistible” and “flawless” pepper the history of BMW convertibles. And now the brand has added a new chapter to a tradition of open-top cars that stretches back decades. The new BMW 6 Series Convertible fulfills the wishes of discerning automotive aesthetes with its finely honed sense for sporty driving pleasure, groundbreaking luxury and sparkling looks. In the exclusive environs of the premium convertible market, the 2+2-seater makes a convincing case for itself with the most efficient engines, most advanced chassis technology and most innovative comfort, infotainment and safety features in its segment.

A sweeping bonnet, set-back passenger compartment, long wheelbase and flat waistline embody the hallmark proportions of a BMW convertible. The new BMW 6 Series Convertible combines these features with a classic soft-top roof in customary “fin” design. Powerfully contoured surfaces and the surging dynamism of its lines promise assured driving properties. The luxurious ambience of the interior is highlighted by the driver-oriented cockpit set-up and wraps the front passenger and rear passengers in a feeling of exclusive security. Nowhere is the high-class functionality of the interior underlined more prominently than in the redesigned freestanding Control Display of the standard-fitted iDrive control system.

The new BMW 6 Series Convertible is available with two engine variants from launch. The eight-cylinder powerplant in the BMW 650i Convertible produces 300 kW/407 hp, while an exclusive variant of the six-cylinder in-line engine with BMW TwinPower Turbo, direct injection and VALVETRONIC – generating 235 kW/320 hp – has been developed for the BMW 640i Convertible. Both engines team up as standard with an eight-speed Sports automatic gearbox. Standard-fitted BMW EfficientDynamics features include the Auto Start-Stop function in the BMW 640i Convertible.

Chassis technology unmatched in its segment works in tandem with the cutting-edge engines to ensure even greater dynamic capability and a similarly discernible improvement in ride comfort compared to its

predecessor. The new BMW 6 Series Convertible comes as standard with Drive Dynamic Control, which allows drivers to choose their own suspension settings, while the Adaptive Drive system is available as an option with electrically controlled dampers and roll stabilisation. In addition to the standard-fitted electromechanical power steering, another unique feature in this segment is the optional Integral Active Steering system.

The new BMW 6 Series Convertible also underlines its progressive character with numerous BMW ConnectedDrive features that none of its rivals can match. The selection of optional driver assistance systems includes a rear-view camera, Surround View, BMW Night Vision with pedestrian recognition and BMW Parking Assistant. The new BMW 6 Series Convertible is the only car in its segment to be available with a Head-Up Display. Making its debut in the new soft top, the latest generation of the system uses a broader palette of colours to create an even more detailed and sharper image.

**The design: athletic elegance, natural sportiness and sparkling looks.**

The luxurious yet dynamic driving experience of the new BMW 6 Series Convertible is reflected in the athletic elegance and sense-tingling sportiness of its exterior design. A long, sweeping bonnet, set-back passenger compartment, long wheelbase and flat waistline combine to create the proportions typical of a BMW convertible. The precise interplay of eye-catching lines and meticulously sculpted surfaces help to give the new BMW 6 Series Convertible its arresting looks.

Like the lines projecting out from the nose of the car and continuing along its full length, the harmoniously curved surfaces of the body take their cue from the movement of waves sent out by the bow of a motor boat piercing the water. Continuing the theme, the waistline surface which leads the body into the interior mimics the character of a boat deck.

**The front end: surging forward and focusing on the road.**

The new BMW 6 Series Convertible also displays its dynamic character in its front end design. The large, slightly forward-slanting BMW kidney grille – its “shark nose” – gives the car a sense of surging forward, while a broad air intake, strikingly contoured bonnet and muscular wheel arches hint at its powerful engine technology and impressive roadholding. High-quality chrome

elements positioned on the outer edges of the front apron further accentuate the width of the car. The optional foglamps consisting of a string of three LED units are placed in front of these chrome elements.

The standard xenon headlights of the new BMW 6 Series Convertible pick up on the brand's familiar "twin round" look. As standard, an accent strip cuts across the top of them; this is replaced by an LED accent light if the optional Adaptive Headlights are specified. The daytime running lights take the form of LED light rings, whose bright white light illuminates the distinctive front end look. A horizontal light strip below the daytime running lights, meanwhile, performs direction indicator duties.

### **Side view: elongated lines, athletic curves.**

Uninterrupted, flowing lines lend the silhouette of the BMW 6 Series Convertible a sweeping elegance. Powerful curves mimicking the natural movement of waves give the car's side view a natural athleticism. The hallmark BMW swage line at door handle level is spawned in the front wheel arch gill – which houses the side indicator – and extends all the way back into the rear lights.

Another character line is released from the bulge of the front wing, stretching powerfully over the front wheel like a wave before dropping down and continuing horizontally towards the rear. Together with the swage line, it creates a dynamic wedge shape which emphasises the car's forward-surgingly character.

### **The striking V-shape and accentuated width of the rear end create a powerful appearance.**

Wide and flat surfaces define the rear of the new BMW 6 Series Convertible. The dominance of horizontal lines adds extra emphasis to the wider track of the new car compared to its predecessor. In addition, downward-converging lines underline the car's focus on the road, echoing the approach at the front end. This distinctive V-shape is created by lines including the side edges of the boot lid, the licence plate surround and the contours of the reflectors positioned in the bumper. The slightly concave lower section of the boot lid produces light and shade effects which lend an extra lightness to the rear of the car.

The two-part rear light clusters give the brand's familiar L-shape a particularly sporty, dynamic edge. Inside the units, two LED-powered light strips create the familiar BMW night-time look. The indicators and brake lights are also LED units.

**The interior: seats for four – and each one made to measure.**

The new BMW 6 Series Convertible is designed to be a 2+2-seater. Its interior offers individually tailored seats for the driver, front passenger and rear passengers. High-quality materials, carefully coordinated colours and, once again, meticulously formed surfaces combine to produce an ambience defined by luxury, sweeping dynamism and stylish functionality. A hallmark BMW element of the interior design is the driver-oriented cockpit layout. The central section of the instrument panel, containing the iDrive system's Control Display, the central air vents and the controls for the audio system and air conditioning, are all angled slightly towards the driver. Added to which, the gearshift lever and the buttons for the parking brake, roof operation and Drive Dynamic Control are located on a surface that opens out towards the driver and is set lower than the front passenger side of the centre console.

The front passenger area is bordered by a surface curving elegantly from the armrest over the side edge of the centre console, upwards and outwards into the instrument panel and then horizontally into the door trim. This provides a harmonious surround for the front passenger area, creating a feeling of exclusive security. The contour of the rear waistline surface, which extends slightly into the interior between the head restraints, highlights the individual seat layout of the rear.

**Premiere: freestanding Control Display with flatscreen design.**

The black-panel instrument cluster of the new BMW 6 Series Convertible combines the traditional sports car circular instruments with state-of-the-art display technology. The navigation system, telephone and entertainment functions are operated using the standard-fitted iDrive control system, whose Control Display boasts an innovative design. The on-board monitor takes the form of a freestanding display for the first time in the new BMW 6 Series Convertible. The standard 7-inch screen can be upgraded to 10.2 inches by ordering the optional Navigation system Professional, and the larger screen has a high-quality galvanised chrome surround. The minimal depth of the

display gives it the character of a flatscreen unit. The new arrangement of the Control Display – which now reaches further into the passenger compartment – also influences the architecture of the instrument panel, which rises up steeply in front of the driver and front passenger in the style of a powerboat cockpit

This impression is further enhanced by the structure of the door trim panels. Their surfaces have a powerfully taut look and, like the black waistline surface, pull in and rise up to create a smooth transition into the instrument panel, giving the interior the effect of wrapping around the driver and front passenger.

### **Exclusive and distinctive: the fin roof.**

The new BMW 6 Series Convertible again comes with an electrically powered soft-top roof with “fin” architecture. The multi-layer roof – which has been optimised once again in terms of its acoustic properties and structural rigidity – offers outstanding thermal insulation and thus enables the new convertible to be used comfortably all year round. The fins project out along the flanks of the 6 Series into its rear section, accentuating the car’s gracefully sweeping silhouette even more keenly than on its predecessor and giving it an unmistakable appearance. The upshot is that the transition of the roofline into the rear end flows as smoothly as on a hard-top coupé. The upright, heated, glass rear window is positioned directly behind the rear seats and can be lowered separately from the roof.

The automatic opening and closing operation for the roof is activated as standard using a button on the centre console. The Comfort Access option allows the process to be initiated using the remote control button on the car key. Opening the roof takes 21 seconds, the closing process 24 seconds. Both operations can be activated while on the move at speeds of up to 40 km/h (25 mph).

The fin roof of the new BMW 6 Series Convertible is available in three colour variants, including new Anthracite Silver effect, which adds a stylish lustre. Two non-metallic exterior paint finishes and seven metallic shades are available. As an alternative to the standard Dakota leather trim, customers can also specify the Exclusive Nappa leather variant which can be ordered in four colour options. As well as the instrument panel, the centre console and the

upper sections of the rear door panel and side trim can also be lined with Exclusive Nappa leather as an option. Plus, interior elements covered with Exclusive Nappa leather can also be ordered with optional stitching in a contrasting colour. The double stitching stands out from the leather surface, lending a particularly elegant flourish to the design of the interior.

**Optimised seat comfort; boot capacity can be expanded as required.**

At 4,894 millimetres (192.6 in.) in length, the new BMW 6 Series Convertible is 74 millimetres (2.9 in.) longer than its predecessor. Its similarly extended wheelbase now stretches to 2,855 millimetres (112.4 in.). The car has also grown by 39 millimetres (1.5 in.) in width, and now measures 1,894 millimetres (74.5 in.) across, while 9 millimetres (0.35 in.) have been shaved off its height (now 1,365 mm / 53.7 in.). These dimensions not only create a significantly more powerful and, at the same time, elegantly sweeping overall impression, they also take interior spaciousness to new levels. Despite its lower height, the new BMW 6 Series Convertible offers greater headroom in both the front and the rear. Added to which, the height adjustment of the driver and front passenger seats cover a greater range. The increase in the width of the interior is noticeable from all four seats, and passengers in the rear seats also benefit from additional legroom. The tilt angle of the rear seat backrest has seen further optimisation over the predecessor model and now achieves virtually the same angle as you will find in BMW saloons.

A ski bag with an opening in the rear seat backrest is available as an option and offers space for two sets of skis. The new BMW 6 Series Convertible boasts 300 litres (10.6 cu. ft.) of boot space with the roof open, allowing two 46-inch golfbags and a business case to be accommodated. With the roof closed, the variable soft-top stowage compartment can be folded up in a single movement to increase boot capacity to 350 litres (12.3 cu. ft.).

**Newly developed lightweight seats, comprehensive safety equipment.**

The new BMW 6 Series Convertible is fitted with newly developed lightweight seats with an integrated seatbelt system, and the seats are available in three variants. As an alternative to the standard items, customers can also order

sports seats with integral head restraints or comfort seats with a wider range of adjustment. All seat variants come with crash-activated head restraints.

The range of standard safety equipment also includes front airbags, head-thorax side airbags integrated into the seat frame, three-point automatic belts for all seats, belt force limiters and front belt tensioners, ISOFIX child seat mounts in the rear and a roll-over protection system. The roll-over system further developed specifically for the new BMW 6 Series Convertible consists of two bars placed behind the rear head restraints. As soon as the central safety electronics register a danger of the car rolling over, the pyrotechnic release mechanism is activated, at which point the high-strength aluminium bars rise up from their rest position in a fraction of a second.

Carefully targeted advances in the use of materials and in the development of the car's load-bearing structure have significantly enhanced the body's construction in terms of the agility and safety it offers. Its static torsional rigidity is now around 50 per cent greater than that of its predecessor. In the interests of weight optimisation, the doors, bonnet and front axle spring mounts are all aluminium, while the front side panels, roof lid and boot are made from glass fibre composite.

### **Majestic power: eight- and six-cylinder engines with BMW TwinPower Turbo.**

Instantaneous power development and majestic torque are the stand-out features of the two engines available for the new BMW 6 Series Convertible from launch. The V8 powerplant and six-cylinder in-line unit both have BMW TwinPower Turbo technology and direct injection, and combine their sporting character with outstanding smoothness and exceptional efficiency.

The 4.4-litre eight-cylinder engine in the new BMW 650i Convertible develops a maximum 300 kW/407 hp between 5,500 and 6,400 rpm, and puts its peak torque of 600 Newton metres (443 lb-ft) on tap between 1,750 and 4,500 rpm. This unique engine, whose turbochargers are positioned in the V-shaped area between the cylinder banks, produces an instantaneous and sustained wave of power, making it a feast for the enthusiast driver.

The new BMW 650i Convertible completes the sprint from 0 to 100 km/h (62 mph) in 5.0 seconds, and the engine electronics eventually step in to halt acceleration at 250 km/h (155 mph). This range-topping engine also boasts



extraordinary efficiency for a model in its output class, as average fuel consumption of 10.7 litres per 100 kilometres in the EU test cycle (26.4 mpg imp) and CO<sub>2</sub> emissions of 249 grams per kilometre clearly show.

The six-cylinder in-line engine under the bonnet of the new BMW 640i Convertible complements its BMW TwinPower Turbo technology and petrol direct injection with VALVETRONIC fully variable valve control. All of which enables the 3.0-litre unit to develop a maximum 235 kW/320 hp at 5,800 rpm and maximum torque of 450 Newton metres (332 lb-ft) between 1,300 and 4,500 rpm. This engine propels the BMW 640i Convertible from 0 to 100 km/h (62 mph) in 5.7 seconds and on to an electronically limited top speed of 250 km/h (155 mph). Its average fuel economy in the EU test cycle comes in at 7.9 litres per 100 kilometres (35.8 mpg imp), while CO<sub>2</sub> emissions are 185 grams per kilometre.

### **Eight-speed Sports automatic and BMW EfficientDynamics as standard.**

The eight-speed Sports automatic gearbox fitted as standard in the new BMW 6 Series Convertible boasts a combination of sportiness, shift comfort and efficiency unmatched in its segment. Its minimal converter slip and rapid and precise gear changes set it apart from the crowd. An innovative gear set configuration allows this transmission to offer eight gears and a correspondingly wide gear range – which optimises the car's sprinting power yet also allows the driver to save fuel by driving at low revs – despite its compact construction and low weight. The driver can also change gear manually using shift paddles on the steering wheel.

In addition to the efficiency of the engines and eight-speed Sports automatic, an extensive range of BMW EfficientDynamics measures also contribute to reducing fuel consumption and emissions. Technology such as Brake Energy Regeneration, Electric Power Steering (EPS), the need-based operation of ancillary components, intelligent lightweight construction and low-rolling-resistance tyres ensure maximum efficiency. Plus, the new BMW 640i Convertible is also equipped with automatic active air flap control and the Auto Start-Stop function. When the driver draws to a standstill at junctions or in a traffic jam the engine is automatically switched off. As soon as the driver

releases the brake pedal, the engine starts up again. If the driver is using the Auto Hold function, the engine is restarted when the accelerator is depressed.

**Advanced chassis technology including Electric Power Steering; Integral Active Steering available as an option.**

Cutting-edge chassis technology gives the new BMW 6 Series Convertible the tools it needs to lay on sporty handling characteristics and exceptional comfort. Both the double wishbone front axle and the integral rear axle are made predominantly from aluminium. The chassis set-up is geared to the requirements of drivers with sporting intentions, although the dampers also respond sensitively to bumps in the road surface under high lateral acceleration. The optional Adaptive Drive system, which includes Dynamic Damper Control and the Dynamic Drive active roll stabilisation system, offers the driver even more precise responses. The electronically controlled dampers adapt to both the nature of the road surface and the driver's style to prevent unwanted movements in the car body. The roll stabilisation system reduces factors such as body sway in fast-driven corners and sudden direction changes.

Electric Power Steering with Servotronic serves up the familiar BMW recipe of precision, comfort and efficiency, and is unique in the BMW 6 Series Convertible's segment. Added to which, the new BMW 6 Series Convertible is the first car in its class that can be ordered – as an option – with Integral Active Steering. This system combines the Active Steering system for the front axle already available for the predecessor model with a steering rear axle, allowing the steering angle and power assistance to be controlled at both the front and the rear with the help of electric motors. Precisely harmonised wheel turns pave the way for extraordinary agility in dynamic driving situations. And Integral Active Steering also displays an impressively deft touch around twisty mountain passes and in city traffic.

**Drive Dynamic Control allows a choice of suspension settings.**

With Drive Dynamic Control the virtues of sportiness and comfort can take precedence as the situation demands. The driver can make his own choice of suspension settings in NORMAL, SPORT and SPORT+ modes using a button on the centre console. If the Adaptive Drive option has been specified,

he can also make use of the COMFORT setting. In this mode, as well as adjusting the accelerator pedal progression, engine responses, power steering characteristics, DSC response thresholds and the shift dynamics of the automatic gearbox, Drive Dynamic Control also tweaks the damper responses and roll stabilisation settings. On cars fitted with Integral Active Steering, the basic steering set-up is also adjusted according to the mode selected, not just the level of power assistance. As a result, in SPORT and SPORT+ modes the car's sporting responses are sharpened even further.

The lightweight floating-calliper brakes with inner-vented discs are easy to use with precision, and their effectiveness is reinforced by Dynamic Stability Control (DSC). This driving stability system brings together technology such as the Anti-lock Braking System (ABS), Dynamic Traction Control (DTC), Cornering Brake Control (CBC), Dynamic Brake Control (DBC), the Start-off Assistant, the automatic Brake Drying function and brake fade compensation. Standard equipment also includes 18-inch light-alloy wheels on the new BMW 650i Convertible or 17-inch rims for the new BMW 640i Convertible, as well as runflat tyres and a runflat indicator.

### **Cutting-edge comfort-enhancing features and exclusive options from BMW ConnectedDrive.**

Among the comfort-enhancing features included as standard in the new BMW 6 Series Convertible are 2-zone automatic climate control with convertible mode, a hi-fi audio system with CD player and AUX-IN socket, a multifunction steering wheel, electrically operated front seats with memory function and a rain sensor with integrated automatic driving lights control. Among the highlights of the optional equipment list are Adaptive Headlights, a heated steering wheel, active seat ventilation, active seats and the Navigation system Professional with a hard disk for storing maps and personal music collections.

The new BMW 6 Series Convertible is available with an even greater variety of driver assistance systems and mobility services from BMW ConnectedDrive. It can be ordered with technology such as the Lane Change Warning System, Lane Departure Warning System, Speed Limit Info, BMW Night Vision with pedestrian recognition, rear-view camera, Surround View and the BMW Parking Assistant. Innovative technologies optimise the

integration of the Apple iPhone and other smartphones, as well as music players. And, in addition to internet access, BMW ConnectedDrive also allows email messages received on a smartphone to be shown on the Control Display as well as the use of internet-based services for navigation and entertainment.

What's more, the latest-generation Head-Up Display – a unique feature in this class – is making its debut in the new BMW 6 Series Convertible. The system projects driving-related information onto the windscreen within the driver's direct field of view. The graphics and symbols are now displayed using a full spectrum of colours, allowing traffic symbols, for example, to be realistically depicted.

**The BMW 6 Series Convertible: exclusive driving pleasure and a unique heritage.**

The new BMW 6 Series Convertible sees the world's most successful manufacturer of premium cars building on an unparalleled tradition. The allure of exclusive driving pleasure in open-top BMW sports cars continues to hold a magnetic attraction after more than 70 years. The extraordinary history of BMW convertibles stretches from the legendary BMW 328 – which provided the basis for the winning car in the 1940 Mille Miglia – via the highly coveted BMW 507 of the 1950s, to the dynamic and groundbreaking predecessor to the new BMW 6 Series Convertible.

The new BMW 6 Series Convertible is built at the BMW plant in Dingolfing, Germany. Also rolling off the assembly line at the BMW Group's largest production plant are the BMW 7 Series and BMW 5 Series models. The flexible and efficient processes at the plant combine state-of-the-art production technology with a standard of quality defined by meticulous craftsmanship in the manufacture of premium cars configured to customer requirements.

## 2. At a glance.



- A new edition of the luxurious premium-class BMW 6 Series Convertible, redefining aesthetics, stylish presence and driving pleasure in an open-top premium car.
- Open-top 2+2-seater with noticeably increased interior space, innovative equipment features and significant advances in terms of both dynamics and ride comfort.
- Further development of the characteristic soft-top roof with “fin” architecture and a retractable glass rear window.
- Two engine variants at market launch: the BMW 650i Convertible with eight-cylinder engine (300 kW/407 hp) and the BMW 640i Convertible with six-cylinder in-line powerplant (235 kW/320 hp).
- Both engine variants link up as standard with an eight-speed Sports automatic gearbox; BMW EfficientDynamics measures unequalled in the segment, including the Auto Start-Stop function in the BMW 640i Convertible.
- Newly developed chassis, only car in its segment with Electric Power Steering and optional Integral Active Steering, Drive Dynamic Control as standard and Adaptive Drive as an option.
- Standard BMW iDrive control system with freestanding Control Display; unrivalled range of BMW ConnectedDrive features, including the latest-generation Head-Up Display with realistic, full-colour-spectrum graphics, rear-view camera, Speed Limit Info, BMW Night Vision and Parking Assistant.

- Engine variants:

**BMW 650i Convertible:** V8 petrol engine with BMW TwinPower Turbo and direct injection.

Displacement: 4,395 cc, output: 300 kW/407 hp at

5,500 – 6,400 rpm,

max. torque: 600 Nm/443 lb-ft at 1,750 – 4,500 rpm.

Acceleration 0–100 km/h (62 mph): 5.0 seconds,

top speed: 250 km/h (155 mph).

Average fuel consumption according to EU standard:

10.7 litres/100 kilometres (26.4 mpg imp),

CO<sub>2</sub> emissions according to EU standard: 249 g/km,

exhaust standard: EU5.

**BMW 640i Convertible:** Six-cylinder in-line petrol engine with BMW TwinPower Turbo, direct injection and VALVETRONIC.

Displacement: 2,979 cc, output: 235 kW/320 hp at 5,800 rpm,

max. torque: 450 Nm/332 lb-ft at 1,300 – 4,500 rpm.

Acceleration 0–100 km/h (62 mph): 5.7 seconds,

top speed: 250 km/h (155 mph).

Average fuel consumption according to EU standard:

7.9 litres/100 kilometres (35.8 mpg imp),

CO<sub>2</sub> emissions according to EU standard: 185 g/km,

exhaust standard: EU5.



### 3. Design: ravishing aesthetics for a grand entrance.

- **Dynamic and elegant stretched look.**
- **Precisely sculpted surfaces suggesting wave motion evoke a naturally evolved, sensuous sportiness.**
- **Spacious interior with individually defined seats, Control Display in exclusive flatscreen design.**

The new BMW 6 Series Convertible embodies the most exclusive form of sheer driving pleasure in an open-top BMW. Its bodywork styling signals athletic elegance and a natural, sensuous sportiness that herald a driving experience as luxurious as it is dynamic. Its interior imparts an exclusive sense of security, features a driver-oriented cockpit layout in familiar BMW style, and is compelling for its stylish functionality. The clear division between the car body and its roof is further underlined by the contrasting colours of the bodywork and fabric soft top. With the top down, the black waistline with its chrome surround strikingly highlights the transition between the exterior bodywork and the passenger compartment.

An elongated bonnet, a long wheelbase and a passenger cell set well back team up with the flat waistline to create the proportions typical of a BMW Convertible. Thanks to the fin-structure roof, these proportions lose nothing of their impact even with the top up. Totalling 4,894 millimetres (192.6 in.) in length, the new BMW 6 Series Convertible outstrips its predecessor by 74 millimetres (2.9 in.). The width of the car has expanded by 39 millimetres (1.5 in.) to 1,894 (74.5 in.), while its height has dropped by 9 (0.35 in.) to 1,365 millimetres (53.7 in.). The wheelbase of the open 2+2-seater has gained 75 millimetres (2.9 in.), bringing it to 2,855 millimetres (112.4 in.).

The new BMW 6 Series Convertible strikes a highly dynamic stance by virtue of its horizontal orientation, the distinctive lines that emerge at the front end and sweep along the entire length of the car, and body surfaces that are shaped in a subtle but powerful style. The outward projecting lines and the harmonious convex and concave contours take their cue from the movement of waves as a powerboat slices through the water.

In keeping with this, the surface of the waistline at the transition between the body and the interior has been designed to evoke the character of a boat deck. This black waistline which surrounds the entire passenger compartment is further accentuated by a high-quality chrome surround. At the rear of the car, this chrome frame takes up the characteristic shape of the fin roof, making it recognisable even with the soft top down.

### **The front end: surging forward and focusing on the road.**

The new BMW 6 Series Convertible also displays its dynamic character in the design of the front end. Strongly angled A-pillars lend the cabin an emphatically low-profile look. The large BMW kidney grille with its slight forward tilt (“shark nose”) evokes a strong forward thrust, while the broad air intake, strikingly contoured bonnet and muscular wheel arches point to the car’s powerful drive technology and secure roadholding. The kidney grille slats – chrome-plated on the BMW 650i Convertible, black on the inside and chrome-plated on the front on the BMW 640i Convertible – are slightly angled towards the top, likewise giving them a forward-tilting impression.

The contour lines of the bonnet converge towards the front of the car, while the headlight contours and kidney grille along with the outer air intake surrounds continue the V shape to make the car appear focused on the road ahead. High-quality chrome elements set well to the outside of the front apron team up with the creases below them to draw attention to the wheel arches, further emphasising the width of the car. The optional foglamps, comprising three adjacent LED light units, are positioned in front of these chrome elements.

The xenon headlights, a standard feature of the new BMW 6 Series Convertible, come in the brand’s familiar twin round style. Also standard is the accent strip – or, in conjunction with the optional Adaptive Headlights, the LED accent light – that cuts across the top of the headlight. LED light rings serve as daytime running lights, strikingly conveying the distinctive front end look with their bright white light. A horizontal light strip below these rings acts as a direction indicator.

### **Side view: elongated lines, athletic curves.**

An uninterrupted flow of lines lends the silhouette of the new BMW 6 Series Convertible a sweeping elegance, while powerfully chiselled contours inspired



by the movement of waves give the side view a natural athleticism. A subtly sweeping line runs from the headlight into the front wheel arch and is taken up by the waistline, from where it flows in a straight, virtually horizontal line all the way to the rear. Taking a parallel course is the swage line at door handle height. This starts in the gill, which is set high up in the front side panel and also serves as the side scuttle for the direction indicator, and extends all the way to the rear light cluster. A particularly subtle interplay between the surface design and the flow of lines can be seen in the strongly flared rear wheel arch, where the bulging side panel diminishes the prominence of the swage line.

A further character line emerges from the swell of the front wing, powerfully stretching over the front wheel like a wave before dropping down between the gill and the door and then levelling out towards the rear. In conjunction with the swage line, this creates a dynamic wedge shape that accentuates the car's forward-surg-ing impression. At the same time an emphatic crease is formed between the recessed character line and the extruding door sill line. In conjunction with another, much narrower crease, this lends the door sill area a sporty lightness.

**Striking V-shape and accentuated width of the rear end create a powerful appearance.**

Broad, flat surfaces define the rear of the new BMW 6 Series Convertible. The resulting dominance of horizontal lines gives extra emphasis to the wider track of the car compared to that of its predecessor, while downward-converging lines accentuate the car's focus on the road, echoing the effect at the front. This distinctive V-shape is created, among other elements, by the side seams of the boot lid, the licence plate surround and the contours of the reflectors, which are positioned in the bumper. The visual centre of gravity is also lowered by the low-mounted licence plate surround in characteristic BMW 6 Series style.

The slightly concave lower section of the boot lid generates light and shade effects which lend an extra lightness to the rear of the car. At the lower part of the rear, the exhaust tail pipes are positioned on either side of a diffuser-style apron. On the BMW 650i Convertible they are trapezoidal in shape while on the BMW 640i Convertible they are round.

The two-part rear light clusters display the customary BMW L-shape in a particularly wide rendition that extends far into the boot lid. The swage line that flows into the rear lights forges a harmonious link between the side and the rear of the car. Inside the rear light clusters, two LED-powered light strips generate the familiar BMW night-time look, an effect that is reinforced by the L-shaped lower light unit. The direction indicators and brake lights are also LED-powered. The wide additional brake light is located in the upper edge of the boot lid.

**The interior: seats for four – and each one made to measure.**

The new BMW 6 Series Convertible is designed as a 2+2-seater. Its interior provides individually tailored seats for the driver, front passenger and rear passengers. High-grade materials, carefully devised colour schemes and meticulously sculpted surfaces on the inside as well combine to create an ambience defined by luxury, sweeping dynamism and stylish functionality. The generous interior space is emphasised by the horizontal structure of the instrument panel, further accentuated by a galvanised trim strip below the air vents on the driver's side in a line which is carried over to the front passenger side in the shape of a crease on the glove compartment lid.

A hallmark BMW element of the interior look is the familiar driver-oriented cockpit layout. The centre section of the instrument panel, housing the Control Display for the iDrive operating system, the central air vents and the controls for the audio system and air conditioning, is inclined slightly towards the driver, while the gearshift lever and the switches for the parking brake, roof operation and Drive Dynamic Control are located on a surface that opens out towards the driver and is set lower than the front passenger side of the centre console.

The front passenger area is enclosed by an elegantly curving surface which flows from the armrest over the side edge of the centre console, upwards and outwards into the instrument panel, and then horizontally into the door trim panel. This creates a harmonious surround for the front passenger area, evoking a sense of exclusive security. As an option, this surface can be highlighted by stitching in a contrast colour.

The individual layout of the two rear seats is emphasised by the contour of the waistline surface, which projects slightly into the cabin between the head restraints.

**Premiere: freestanding Control Display with flatscreen design.**

The new BMW 6 Series Convertible features an instrument cluster in black-panel technology which combines the traditional circular dials of a sports car with modern display technology. At rest, it forms a homogeneous black surface revealing only the chrome-finish surrounds, gauge needles, numbers and scale markings on the dials along with the red warning field in the rev counter as permanently visible features. Like the integrated warning and telltale lights, a high-resolution 9.2-inch info display on the lower edge of the instrument cluster – which includes the mileage counter, fuel consumption and recuperation display as well as feedback from the driver assistance systems and Check/Control messages – only becomes visible when activated. This black-panel technology, which made its debut in the BMW 7 Series, is also used for the climate control displays in the centre section of the instrument panel.

The navigation, telephone and entertainment functions are controlled via the standard iDrive operating system, whose Control Display boasts an innovative design in the new BMW 6 Series Convertible. The on-board monitor measures 7 inches as standard and, in conjunction with the Navigation system Professional, extends to 10.2 inches with a galvanised chrome surround. It appears for the first time as a freestanding display whose minimal depth gives it a flatscreen look. The new arrangement of the Control Display, which now projects further into the passenger compartment, also impacts on the architecture of the instrument panel that rises steeply in front of the occupants in a style reminiscent of a powerboat cockpit.

This impression is further underlined by the structure of the door trim panels: their surfaces have a powerfully taut character and, like the black waistline surface at the front, also pull inwards to emphatically enclose the driver and front passenger area. The door trim is divided by a decorative surface in a contrasting colour which starts at the waistline in the rear and gains in volume on its way forward, thus assuming the contour of a wave flowing all the way into the instrument panel.

**Exclusive touch: exterior paintwork, roof colours and interior design.**

The soft top of the new BMW 6 Series Convertible comes in a choice of three colours. In addition to Black and Beige, the new colour option Anthracite Silver effect is also available and makes for a high-quality glossy effect. For the bodywork there is a choice of two non-metallic and seven metallic colours. New additions to the range are the metallic finishes Vermilion Red, Havana Brown and Orion Silver.

As an alternative to the standard Dakota leather upholstery in Black, Ivory White or Cinnamon Brown, there is the Exclusive Nappa leather variant which also comes in Vermilion Red. The choice of upholstery can be combined with the interior colours Black or Ivory White. To match these the interior trim is available in four variations: Diamond Black, Brushed Aluminium, Fine-wood trim Poplar Grain Grey high-gloss and Fine-wood trim American Oak high-gloss.



## 4. Fin roof: perfect protection, perfectly styled.

- **Distinctive, coupé-like flowing roofline.**
- **Superior noise and temperature insulation, top can be raised and lowered by remote control or while driving, stows compactly in the variable soft-top compartment.**
- **Independently opening, heated rear window.**

Exclusive to this model, the new BMW 6 Series Convertible features a power-operated fabric fin-structure soft top. Designed in the classic style of a large BMW convertible, the soft top also brings significant weight savings and stows compactly in the soft-top compartment between the rear seats and the boot. Even more than on the previous model the “fins”, which extend along the sides of the vehicle and into the rear, enhance the elegant silhouette, which is long and extended, and ensure that the BMW 6 Series Convertible is instantly identifiable. They also create a coupé-style soft transition between the roofline and the rear of the vehicle.

The multi-layer soft top, which has undergone further improvements in its acoustic properties and the stiffness of its frame, offers excellent thermal insulation to keep the interior snug and comfortable whatever the time of year. Acoustic and thermal insulation is provided by an intermediate polyurethane (PU) layer between the outer covering and the interior lining. The seam-free lining adds to the sense of interior harmony and spaciousness.

The new BMW 6 Series Convertible’s fin roof is available in three different colours. Black and beige are joined for the first time by a new, optional Anthracite Silver effect version, for an upscale “shimmering” look.

### **Fully automatic soft-top mechanism can be operated by remote control and while on the move.**

The automatic soft-top lowering/raising function is controlled by a button on the centre console. Lowering is completed in 21 seconds and raising in 24 seconds. Both operations can be performed even while driving, at speeds of up to 40 km/h (25 mph). A separate button, located in the driver’s door, is

used to lower or raise the side windows. This function automatically lowers or raises both the front and rear side windows in tandem. The windows can also be opened from a distance of up to 30 metres (approx. 100 ft.) away from the vehicle, using the remote function on the vehicle key.

It is also possible to remotely operate the soft top itself, from a distance of up to 1.5 metres (5 ft.) from the vehicle, using the optional Comfort Access function. Over the same range, Comfort Access can also be used to remotely close the side windows.

During the lowering process the soft top also folds, in a precisely defined sequence, and stows away compactly in the soft-top compartment. The variable soft-top compartment features a special mechanism that allows luggage space to be maximised when the top is raised. Using a recessed grip accessed via the boot, the empty soft-top compartment can be simply folded up out of the way. This provides up to 50 litres (1.7 cu. ft.) of extra luggage space.

### **Independently opening rear window for versatile fresh air control.**

The heated, vertical glass rear window, which is situated just behind the rear seats, is retracted independently from the soft top itself. This reduces the volume of the soft-top components that actually need to be stowed in the soft-top compartment, leaving more room for luggage in the low-profile boot of the new BMW 6 Series Convertible. The independent rear window also allows just the right amount of fresh air to be admitted to the car. When the soft top is raised, a pleasant level of ventilation can be provided by lowering the rear window. Conversely, leaving the rear window up while lowering the top helps to keep air turbulence in the rear to a minimum.

Airflow in the passenger compartment can be carefully regulated with the optional wind deflector, which mounts quickly and easily in the rear of the new BMW 6 Series Convertible. The upper frame section of the wind deflector can be raised or lowered manually. The wind deflector is fully collapsible, and when stashed away in its bag takes up little space in the boot.



## 5. Driving experience: top-class dynamic capability and poise.

- **V8 and six-cylinder in-line petrol engines with BMW TwinPower Turbo, 300 kW/407 hp and 235 kW/320 hp.**
- **State-of-the-art chassis technology, Drive Dynamic Control as standard.**
- **Unique in its segment: Integral Active Steering, Adaptive Drive.**

Inspiring design and groundbreaking technology define the character of the new BMW 6 Series Convertible. It is instantly recognisable and reveals more of its character with each passing kilometre. The new soft-top BMW is already an enthralling sight standing at the kerbside, but on the move the aesthetic allure of its styling shines through even more brightly. In the same way, the performance figures of the 6 Series Convertible give a clear hint of its impressive sporting capability, but you'll only experience the huge potential of the car's drive and chassis technology when you actually drive it.

The engines available for the new BMW 6 Series Convertible from launch boast the sporting performance characteristics you would expect of BMW, combined with a level of efficiency no competitor in their respective classes can match. Customers can choose between a V8 powerplant and a six-cylinder in-line unit, both of which have BMW TwinPower Turbo technology and direct injection. The new BMW 6 Series Convertible is the first car in its segment to be equipped as standard with an eight-speed automatic gearbox. Meanwhile, advanced chassis technology provides even greater dynamics and ensures a noticeable improvement in ride comfort over its predecessor. The new BMW 6 Series Convertible comes as standard with Drive Dynamic Control, which allows the driver a choice of suspension settings. And the Adaptive Drive system, complete with electronically controlled dampers and roll stabilisation, can be specified as an option. The standard Electric Power Steering and optional Integral Active Steering are both unique features in this segment.

## **Majestic power fuelling unbeatable dynamics: V8 engine with BMW TwinPower Turbo in the BMW 650i Convertible.**

Instantaneous power development, majestic torque, outstanding smoothness and an exemplary level of efficiency mark out the V8 engine lurking under the bonnet of the range-topping BMW 650i Convertible. The 4.4-litre eight-cylinder unit, which brings together BMW TwinPower Turbo technology and petrol direct injection, develops a maximum 300 kW/407 hp between 5,500 and 6,400 rpm. Peak torque of 600 Newton metres (443 lb-ft) is available between 1,750 and 4,500 rpm.

Drivers will be thrilled by how this unique engine, with its turbochargers and catalytic converters positioned in the V-shaped space between the cylinder banks, generates instantaneous and sustained power delivery. The key elements underpinning the innovative construction principle of the all-aluminium engine are its compact dimensions and a model-specific arrangement of the intake and exhaust ducts. Their reduced pipe length and larger cross section minimise the pressure losses on the intake and exhaust sides of the engine. The two turbochargers each supply four cylinders with compressed air, ensuring an exceptionally fast throttle response. Indeed, impressive torque is on tap from low down the engine speed range, and the new BMW 650i Convertible sprints from 0 to 100 km/h (62 mph) in 5.0 seconds. Intoxicating reserves of power are still available at higher speeds as well, the engine electronics holding fire until the car has reached its 250 km/h (155 mph) top speed before curtailing its acceleration.

One of the main contributors to the V8 engine achieving such an extraordinary level of efficiency for this output class is its extremely precise petrol direct injection system. The principle of spray-guided injection with injectors positioned centrally between the valves and very close to the spark plug ensures that precise amounts of fuel are injected into the cylinders. The combination of BMW TwinPower Turbo technology and direct injection gives the 4.4-litre V8 the output of conventional naturally-aspirated engines with 10 or 12 cylinders and far greater displacement. And the V8 weighs less and has significantly lower fuel consumption and emissions values than such larger engines. In the new BMW 650i Convertible this outstanding efficiency is expressed in average fuel economy of 10.7 litres per 100 kilometres (26.4 mpg imp) in the EU test cycle and CO<sub>2</sub> emissions of 249 grams per kilometre.



**An ideal combination of a free-revving character and impressive efficiency: the six-cylinder in-line engine with BMW TwinPower Turbo in the BMW 640i Convertible.**

In addition to BMW TwinPower Turbo technology and petrol direct injection, the six-cylinder in-line engine in the new BMW 640i Convertible also enjoys the services of VALVETRONIC fully variable valve control. This allows the 3.0-litre powerplant to produce maximum output of 235 kW/320 hp at 5,800 rpm and peak torque of 450 Newton metres (332 lb-ft) between 1,300 and 4,500 rpm.

The combination of BMW TwinPower Turbo technology and direct injection also proves to be an extremely efficient way of boosting output in the six-cylinder engine. Its charge system – which operates according to the twin-scroll principle, whereby the ducts from each set of three cylinders are kept separate in both the exhaust manifold and the turbocharger itself – develops power from low engine speeds and therefore ensures immediate responses to every movement of the accelerator. In tandem with the hallmark high-revving characteristics of a BMW straight-six engine, this produces enthrallingly sporty performance.

VALVETRONIC fully variable valve control, moreover, maximises the engine's responsiveness. This technology controls the amount of lift of the intake valves, rendering the throttle butterfly used in earlier engine generations superfluous. Throttle losses in the gas cycle are therefore minimised, which has a positive impact on both the efficiency of the powerplant and its torque development.

This variant of the six-cylinder in-line engine has been developed exclusively for the new BMW 640i Convertible to deliver specific output and torque levels, and enables the car to power from a standstill to 100 km/h (62 mph) in 5.7 seconds. The top speed of the BMW 640i Convertible is electronically limited to 250 km/h (155 mph). It burns an average 7.9 litres of fuel per 100 kilometres (35.8 mpg imp) in the EU test cycle, while CO<sub>2</sub> emissions stand at 185 grams per kilometre.

**Eight-speed Sports automatic fitted as standard: maximum shift comfort, rapid and precise gear changes, shift paddles on the steering wheel.**

The eight-speed Sports automatic gearbox fitted as standard in the new BMW 6 Series Convertible lends it a combination of sporting prowess, shift comfort and efficiency none of its rivals can match. In the BMW 640i Convertible the automatic gearbox also enables the driver to use the Auto Start-Stop function, which switches the engine off automatically when the car stops at junctions or in a traffic jam.

The eight-speed automatic gearbox stands out with its innovative gear set configuration. This allows it to offer more gears and a wider gear range than the six-speed automatic fitted in the predecessor model without having a negative impact on the system's size, weight and inherent efficiency. Eight forward gears and the reverse gear are provided by four simple gearsets and five shift elements. This is the first time that these elements have been arranged in this way in an eight-speed automatic. Only two of the total of five clutches are open at a time in each gear, ensuring that drag losses are much lower than those of automatic gearboxes available on the market up to now.

With the number of gears having risen to eight, smaller increases in engine revs are required when changing gear between the smallest and largest ratio despite the wider gear range. When the driver accelerates, the harmonious gradation of ratios ensures an extremely consistent increase in speed. The eight-speed gearbox has even shorter reaction and shift times than the six-speed automatic, which enhances both comfort and driving dynamics. Only one clutch has to be open when changing up or down. Direct "target gear" finding capability also allows the driver to change up or down through more than two gears extremely quickly. The downshift that usually takes place under sudden acceleration (kickdown) from eighth gear to second is likewise a direct shift, which only requires one clutch to open.

The eight-speed Sports automatic is operated with a specifically designed gearshift lever on the centre console which the driver can use to select the driving mode and for manual gear changes. In Sport mode the gear changes are adjusted to achieve top performance. Modified clutch control allows extremely fast switches between engine speeds and minimal shift times.

If the manual gearshift program is activated, the gears can be changed sequentially through push and pull movements on the gearshift lever. The new BMW 6 Series Convertible also comes with gearshift paddles on the steering wheel. Their operating logic follows the principle which has proved so effective in BMW M cars: upshifts are with the right paddle, downshifts with the left. The shift paddles are fixed to the steering wheel, enabling the driver to change gear through corners without having to take his hands off the wheel.

**Advanced chassis technology allows unbeatable dynamics without compromising on comfort.**

The cutting-edge chassis technology in the new BMW 6 Series Convertible provides all the ingredients for sporty handling and exceptional levels of comfort. Both the double wishbone front axle and the integral rear axle are made chiefly from aluminium. The chassis set-up is geared to the requirements of drivers with sporting ambitions, although the dampers still respond sensitively to uneven patches in the road under high lateral acceleration. Plus, the front and rear axle form a roll axis running almost parallel to the road itself. This leads to strikingly harmonious and stable cornering which is not impaired by diagonal roll.

Precisely adjusted wheel camber allows the front axle kinematics to ensure optimum contact between the tyres and the road. In this way, high lateral forces can be transferred and, in so doing, both outstandingly sporty driving characteristics and a comfortable chassis set-up can be achieved. The impact of disturbing forces on the steering is also minimised.

The integral rear axle of the new BMW 6 Series Convertible absorbs the drive and dynamic forces acting on the suspension through the wheel carriers, rear axle subframe, rocker arm and three control arms. The innovative elastokinematic mounting for the rocker arm allows longitudinal forces to be offset to the rear through direct, straight spring action. This ensures that radial and axial forces acting on the rocker arm's rubber mounts are kept clearly separate from one another. By, in effect, separating the suspension from the road and the drivetrain the rear axle provides first-class acoustic comfort and minimises vibrations.

### **An option for optimum handling: Adaptive Drive.**

The optionally available Adaptive Drive system, which includes Dynamic Damper Control and the Dynamic Drive active roll stabilisation system, boasts even more precise responses. The electronically controlled dampers adjust to both the nature of the road surface and the driver's style at the wheel in order to prevent unwanted vehicle movements. The driver can use Drive Dynamic Control to modify the damper control characteristics by selecting either a comfortable, normal or sporty setting.

The electronically controlled damper system in the new BMW 6 Series Convertible adjusts the compression and rebound settings continuously and independently from one another. For example, a stiff chassis setting can be combined with comfortable responses to unevenness in the road surface. The control unit of the damping system processes the data supplied by sensors on the lifting movements of the wheels and the ride height of the car. The driving speed and the damper setting chosen by the driver are also taken into account in calculating the damping force required for each individual wheel to even out body movements. This data is fed back to the damper units at intervals of just 2.5 milliseconds.

The roll stabilisation feature of the Adaptive Drive system reduces, among other things, body roll in high-speed corners and under sudden changes in direction. Sensors calculate the amount of body roll based on the driving situation at hand, and this is then counteracted quickly and precisely by rotary actuators in the front and rear axle stabilisers, leading to a significant improvement in the load alteration effect.

### **Unique in its segment: Electric Power Steering fitted as standard, Integral Active Steering as an option.**

The Electric Power Steering (EPS) with Servotronic function in the new BMW 6 Series Convertible combines hallmark BMW precision, comfort and efficiency and is unique in its segment. In this system an electric motor generates the power assistance, which is determined according to the speed of the car. This motor works particularly efficiently, as it is only activated when power assistance is being used. Added to which, EPS eliminates steering jolts and other unwanted vibrations extremely effectively.

The model-specific set-up of the Electric Power Steering system provides a high level of precision and the feedback typical of BMW cars. In addition to this basic set-up, the driver can also select another steering setting which shows an even sharper focus on precision. It is activated when the driver selects SPORT mode through Drive Dynamic Control or when the DSC stability control system is deactivated.

Electric Power Steering also enables extremely precise control of the steering responses. The standard Servotronic function provides speed-sensitive power assistance. For example, when parking or manoeuvring at low speeds only a small amount of force is required. At higher speeds, the level of power assistance is reduced to optimise contact with the road surface and straight-line stability.

Added to which, the new BMW 6 Series Convertible is the only car in its class to be available as an option with Integral Active Steering. This system combines the Active Steering system for the front wheels (already available for the predecessor model) with a steering rear axle. The degree of steering assistance is controlled by Servotronic, the steering angle using the superimposed transmission of Active Steering on the front axle – both according to the speed of the car. In addition, the system controls the steering angle of the rear wheels using a concentrically arranged motor with spindle drive on the rear axle. Both at the front and the rear, Integral Active Steering varies the steering angle using an electric motor, whose control unit takes into account the data gathered by sensors on wheel speed, steering wheel movement, yaw rate and lateral acceleration, and so ensures optimum steering responses in any situation. The precisely coordinated wheel turns help the new BMW 6 Series Convertible to achieve an extraordinarily high level of agility in dynamic driving situations. Integral Active Steering also ensures the car is impressively nimble on twisty mountain passes and in city traffic.

The Active Steering system on the front wheels allows the driver to manoeuvre the car at low speeds with a small number of steering wheel movements and without changing grip on the steering wheel. At higher speeds, however, the steering wheel movement leads to less wheel turn, optimising precision on the way into corners. By turning the rear wheels by up to 2.5 degrees when the driver moves the steering wheel, Integral Active

Steering further increases the car's agility in city traffic and through corners. To this end, the rear wheels are turned in the opposite direction to the steering angle of the front wheels at speeds up to 60 km/h (37 mph). As well as reducing the car's turning circle by around 0.5 metres (1.6 ft.), comfort is enhanced by the reduced amount of steering effort required. At higher speeds, Integral Active Steering gives the car incredibly comfortable and assured reactions when changing lanes and cornering. The rear wheels follow the same steering movements as the front wheels, enabling the car to follow the course set by the driver with even greater immediacy and precision.

### **Drive Dynamic Control allows a choice of suspension settings.**

The new BMW 6 Series Convertible is fitted as standard with Drive Dynamic Control. This system gives the driver the ability to vary the car's sporting characteristics and comfort according to the situation at hand. Using a button on the centre console the driver can choose his desired suspension settings through the NORMAL, SPORT and SPORT+ modes. If he has specified the Adaptive Drive option he will also be able to select COMFORT mode. As well as adjusting the accelerator pedal progression, engine responses, power steering characteristics, DSC intervention thresholds and the shift dynamics of the automatic gearbox, in this setting Drive Dynamic Control also tweaks the damper responses and roll stabilisation settings. Whatever mode he chooses, the driver is activating a preconfigured and coherent overall set-up based on the right drive and chassis component settings for the job at hand.

In cars also equipped with Integral Active Steering, the basic set-up of the steering – as well as the degree of power assistance – is adjusted according to the mode selected. As a result, in SPORT and SPORT+ modes the car's sporting responses are sharpened even further.

Drive Dynamic Control offers a specific configuration for SPORT mode. The driver can use the iDrive control system to select either the normal or the sporty setting for both the drive and chassis components. This allows the sporty option to be selected for the drive components even in situations when the condition of the road discourages stiffer damper characteristics.

Another button can be used to select the DSC settings. Here, the driver can activate a special traction program which makes it easier to pull away and drive on surfaces such as loose sand or deep snow. The special DSC mode

Dynamic Traction Control (DTC) raises the intervention thresholds of the stability control system and is also activated in SPORT+ mode, allowing slight wheel slip on the driven axle. The dynamic oversteer this encourages opens the door to extremely sporty cornering and controlled drifts.

Selecting DSC Off mode activates dynamic brake intervention, which performs a similar role to an electronic locking function for the rear differential. To optimise traction, this technology brakes a spinning driven wheel under acceleration in tight corners so that the car can maintain drive through the other driven wheel.

### **Lightweight brakes and DSC stability control.**

The lightweight floating-calliper brakes with inner-vented discs are easy to use with precision. The front brake discs have a diameter of 374 millimetres (14.7 in.) on the BMW 650i Convertible and 348 millimetres (13.7 in.) on the BMW 640i Convertible, while the rear brake discs measure 345 millimetres (13.5 in.) on both model variants. Both cars also use discs on which the friction ring is riveted onto the aluminium bowl. Together, this construction – patented by BMW and now also used by other carmakers – and the frame-type aluminium callipers on the front axle significantly reduce unsprung masses.

Dynamic Stability Control (DSC) helps to maximise the effectiveness of the brakes. This driving stability system brings together technology such as the Anti-lock Braking System (ABS), Dynamic Traction Control (DTC), Cornering Brake Control (CBC) and Dynamic Brake Control (DBC). When braking temperatures reach extremely high levels, a carefully calculated increase in brake pressure prevents a drop-off in effectiveness (fading). Regular brake drying optimises braking performance in wet conditions, and the Brake Standby function instantly builds up moderate brake pressure if the driver takes his foot quickly off the accelerator. The Start-off Assistant, meanwhile, makes it easier to move away from a standstill up an incline. Standard equipment also includes 18-inch light-alloy wheels on the new BMW 650i Convertible or 17-inch versions on the new BMW 640i Convertible, as well as runflat tyres and a runflat indicator. Customers can also specify a range of other light-alloy wheels as an option – in 18-inch to 20-inch format.

### **Electromechanical parking brake with Auto Hold function.**

The new BMW 6 Series Convertible also comes as standard with an electromechanical parking brake. This system is activated by a single pull of the marked switch on the centre console. To release the parking brake the driver presses this switch at the same time as pushing down on the brake pedal. This configuration makes it impossible to release the parking brake unintentionally when the ignition is switched off. Keeping the parking brake switch pulled up while on the move triggers an ABS-controlled automatic emergency braking manoeuvre using the DSC hydraulics.

The electromechanical parking brake also has an Auto Hold function, which enhances comfort in stop-start traffic, in particular. If the car draws to a standstill – on the flat or on an incline – it is automatically held in place by constant brake pressure until the driver presses the accelerator again. This means the driver does not have to keep the brake pedal pressed down during the holding phase. The Auto Hold function is activated and deactivated using a separate button on the centre console.

### **Integrated Chassis Management and FlexRay technology.**

Integrated Chassis Management (ICM) ensures the flawless interplay of all the systems affecting driving dynamics. The driving situation is constantly analysed (using numerous signals from sensors) to allow the drive and chassis functions to be harmonised within fractions of a second, and therefore to ensure optimum stability at all times. Even in abruptly fluctuating conditions – e.g. changes in road surface, sudden steering movements, or sharp acceleration or braking – ICM reacts by initiating precise responses from the DSC actuators and, if specified, the optional Integral Active Steering and Adaptive Drive system.

The way in which the chassis control systems and drivetrain are linked together, using the FlexRay high-speed data transfer system, is also unique. Developed for production by a consortium in which BMW played a leading role, the system stands out with its unmatched data transfer capacity. BMW is the world's first carmaker to introduce FlexRay technology into its series-produced cars.





## 6. **BMW EfficientDynamics in the new BMW 6 Series Convertible: less fuel consumption, more driving pleasure.**

- **Unmatched in the segment: the BMW 640i Convertible with Auto Start-Stop function.**
- **Engines and gearbox boast outstanding efficiency.**
- **Electric Power Steering provides additional improvement in efficiency.**

The highly exclusive driving pleasure exuded by the new BMW 6 Series Convertible is rooted in groundbreaking innovations reflecting the outstanding development expertise of the world's most successful maker of premium cars. This expertise imbues every BMW model with an array of distinctive qualities, ranging from the characteristic aesthetics of its design, via the brand's hallmark dynamic flair and excellent ride comfort, all the way to top-quality equipment features. The core attributes of a new BMW also include exceptional efficiency. The extraordinarily impressive blend of fuel economy and performance which also marks out the new BMW 6 Series Convertible has been achieved on the back of the rigorously applied BMW EfficientDynamics development strategy, which follows an intelligent path to greater driving pleasure. The results can be seen on a particularly grand scale in the new BMW 6 Series Convertible, with both the new BMW 650i Convertible and new BMW 640i Convertible offering significantly improved performance and much lower fuel consumption and emissions than their respective predecessors.

The new BMW 6 Series Convertible underlines its progressive character with substantial advances in terms of efficiency. Its fuel consumption and CO<sub>2</sub> emissions are in part significantly lower than the values of most other cars in its segment. The new BMW 6 Series Convertible therefore embodies an extremely contemporary form of luxury, one not defined by the wasteful use of resources but instead spawned directly from superior technology. The driving pleasure in the new BMW 6 Series Convertible takes on an additional quality thanks to its top-class performance in terms of efficiency as well as power.

Like the engines, with their BMW TwinPower Turbo technology, the eight-speed Sports automatic fitted in the new BMW 6 Series Convertible was also developed under the umbrella of the BMW EfficientDynamics strategy. In addition to the impressive efficiency of the drive and power transfer systems, the extensive application of lightweight design, advanced aerodynamic details and numerous other efficiency-enhancing measures ensure that BMW has also made impressive progress in the premium segment of top-class convertibles when it comes to cutting fuel consumption and emissions. Despite the engine output of the BMW 650i Convertible increasing by 30 kW/40 hp and the BMW 640i Convertible producing 35 kW/48 hp more than its predecessor, the average fuel consumption of both models in the EU test cycle is 0.2 litres per 100 kilometres below the respective values of the predecessor models certified according to the EU 4 standard (an improvement of approx. 0.5 and 0.9 mpg imp respectively).

**Petrol engines with BMW TwinPower Turbo: the efficient road to more driving pleasure.**

The two petrol engines available for the new BMW 6 Series Convertible from launch put their own stamp on the hallmark BMW responsiveness, high-revving characteristics and smoothness that are set to captivate customers once again. Another attribute the two engines have in common is unrivalled levels of efficiency in their respective output classes. Both the V8 powerplant in the new BMW 650i Convertible and the straight-six unit in the new BMW 640i Convertible boast brand-specific technological innovations which – in line with the principle of BMW EfficientDynamics – increase both output and efficiency. The composition of these technologies and the way they are applied are tailored to the individual character of each engine. In addition, the all-aluminium construction of both engines is a key player in weight optimisation, which has a positive effect not only on fuel economy but also on the car's agility, due to its reduced front axle load.

The use of BMW TwinPower Turbo technology in combination with direct injection represents an extremely efficient method of boosting the output of both the V8 and six-cylinder in-line engine. In contrast to turbo engines of conventional design, the turbocharging technology used by BMW ensures lag-free power development from low down the rev range. Immediate responses and sustained power delivery mark out the BMW TwinPower

Turbo engines, although the eight-cylinder and the six-cylinder unit follow different turbocharging principles to achieve the same goal. The 4.4-litre engine in the new BMW 650i Convertible has two turbochargers positioned in a compact construction in the V-shaped space between the cylinder banks and each supply four cylinders with compressed air. The 3.0-litre powerplant in the BMW 640i Convertible, meanwhile, operates according to the twin-scroll principle, whereby the ducts from each set of three cylinders are kept separate in both the exhaust manifold and the turbocharger itself. This reduces exhaust back pressure at low revs and boosts responsiveness. BMW TwinPower Turbo technology helps both the eight-cylinder and six-cylinder engines to generate a level of output that a conventional naturally-aspirated engine would only be able to match with much larger displacement – and the significantly greater weight and fuel consumption that would go with it.

Both engines also benefit from second-generation direct injection. This spray-guided fuel injection technology sees injectors positioned centrally between the valves and very close to the spark plug, ensuring that fuel is injected into the cylinders with great precision – both in terms of the quantity of fuel involved and the duration of the injection process. The fuel is sprayed into the combustion chambers with up to 200 bar of pressure in order to deliver extremely high energy output and clean combustion. In this way, measurable reductions in fuel consumption can be achieved in everyday driving conditions. In addition, the cooling effect of the fuel injected directly into the cylinders enables a higher compression ratio, which further enhances the efficiency of the engine.

The six-cylinder in-line powerplant in the new BMW 640i Convertible sees BMW TwinPower Turbo technology and direct injection teaming up with VALVETRONIC. This fully variable control of the intake valve lift and timing allows the throttle losses in the gas cycle to be minimised and the energy in the fuel to be used extremely efficiently. As well as this, it enables further optimisation of the engine's responsiveness.

### **Eight-speed Sports automatic gearbox displays exceptional efficiency.**

The eight-speed Sports automatic gearbox fitted in the new BMW 6 Series Convertible fully embodies the principles of BMW EfficientDynamics. It is distinguished by its innovative gear set configuration, which allows it to offer more gears and a wider gear spread than the six-speed automatic fitted in the predecessor model, but without any negative impact on the system's size, weight and inherent efficiency. Short shift times and direct "target gear" finding capability when downshifting – for maximum acceleration – enable it to enhance driving dynamics. At the same time, its minimal converter slip (limited to moving off), impressive inherent efficiency, low friction losses (by virtue of having only two open clutches), the longer ratios of the higher gears and the gearbox management technology, which aids driving at low engine speeds, all allow much improved fuel economy over a six-speed automatic.

### **Unique in the segment: the Auto Start-Stop function.**

The new BMW 640i Convertible comes as standard with the Auto Start-Stop function. This system prevents unnecessary fuel consumption by reducing the amount of time the engine spends at idle when the driver has stopped at a junction or in a traffic jam. As soon as the car comes to a standstill, the engine of the BMW 640i Convertible automatically switches off. When it is clear to move off again, all the driver has to do is take his foot off the brake pedal and the engine springs back into action without delay.

This automatic engine switch-off function can also be used when the Auto Hold function is activated. Here, when the driver wants to pull away again, he simply presses the accelerator to prompt the engine back into life.

The automatic climate control system also makes a contribution to reducing fuel consumption, courtesy of a globally unique innovation. An evaporator developed specially for optimised cooling storage enables a pleasantly cooled interior to stay that way if the car is at a standstill and the engine has been switched off. The climate control can continue to work for twice as long as conventional systems when the engine has been switched off.

### **Brake Energy Regeneration with recuperation display.**

Also included as standard, Brake Energy Regeneration uses intelligent energy flow management to ensure that the generation of energy for the on-board

power supply is concentrated during phases when the car is coasting or braking. This lightens the load on the engine and allows electricity to be generated largely without burning any fuel. The generator is then generally deactivated when the driver accelerates, putting more drive power at his disposal.

A recuperation display in the instrument cluster highlights the effect Brake Energy Regeneration is having at any one time. A diagram next to the real-time fuel consumption display in the lower part of the rev counter indicates energy generation when the car is coasting or braking. The blue arrow graphics are activated whenever Brake Energy Regeneration is feeding energy generated without burning fuel into the on-board power supply.

### **Electric Power Steering and the need-based operation of ancillary components reduced the energy requirement.**

The need-based operation of ancillary components and use of Electric Power Steering also play a role in improving in-car energy management. For example, the demand-controlled coolant pump uses up far less energy than conventional systems which run permanently at full capacity. Plus, the pressure-controlled fuel pump and the introduction of on-demand pump technology for the chassis control systems both do their bit to promote the carefully targeted use of energy.

The servo motor for the Electric Power Steering system is only activated when power assistance is necessary or requested by the driver. For example, when the car is travelling in a straight line or around a corner with a constant steering angle, no energy is used. These measures help to reduce the car's electricity needs, and as a result the generator has to convert much less primary energy into electricity. The power loss from conventional air conditioning compressors can also be reduced using intelligent control technology. In the new BMW 6 Series Convertible the compressor is separated from the drive belt by a magnetic clutch as soon as the air conditioning is deactivated.

The aim of reducing friction losses applies to all components. For example, the use of a special light transmission oil in conjunction with a reduced amount of oil in the final drive reduces both friction and oil splash losses immediately after setting off. As with the new BMW 7 Series and new

BMW 5 Series, the use of a final drive made from aluminium in the new BMW 6 Series Convertible speeds up the warm-up phase and decreases thermal loads at high speeds.

Reducing drag also helps to cut fuel consumption. The new BMW 640i Convertible is fitted with active air flaps which open and close according to the driving situation. In this way, the car's aerodynamic properties can be further improved when relatively little cooling air is required. The extremely smooth underbody also aids the airflow underneath the car.

### **Cutting fuel consumption with intelligent lightweight design.**

Judicious selection of materials also helps to optimise the weight of the new BMW 6 Series Convertible. In so doing, it also has a positive effect on the car's agility and lowers its fuel consumption and emissions. This weight optimisation has been combined with an improvement in passive safety; the car's mean body strength is 29 per cent greater than its predecessor. This has been achieved primarily through the use of high-strength multi-phase steels, high-strength hot-moulded steels and aluminium.

The doors and bonnet of the new BMW 6 Series Convertible are made from aluminium, while the front side panels, roof lid and boot lid are plastic. The pressure-cast aluminium spring mounts, the high proportion of aluminium in the axle constructions and the likewise aluminium engines also help to optimise the car's weight. And the principles of lightweight design were similarly followed in the construction of the soft-top roof, the stowage compartment for the roof weighing 50 per cent less than its predecessor.



## 7. **BMW ConnectedDrive in the new BMW 6 Series Convertible: intelligent integration and innovation.**

- **BMW-exclusive driver assistance systems and mobility services, including office functions and internet access.**
- **Unique in this segment: Head-Up Display and Parking Assistant.**
- **Full smartphone integration allows album cover and email display in Control Display.**

Cutting-edge innovations for an exclusive driving experience are a hallmark of the new BMW 6 Series Convertible. They are also a big theme of its driver assistance systems and mobility services, where the new Convertible again takes pole position in its class. BMW ConnectedDrive comprises an unrivalled range of standard and optional features designed to provide the highest standards of in-car comfort, infotainment and safety. Through intelligent integration between the driver, the vehicle and the outside world, BMW ConnectedDrive provides relevant information in all driving situations – for even greater driving enjoyment. The extensive BMW ConnectedDrive range of systems and services, which even in the premium luxury-class segment is quite unique, provides further proof of the technological superiority and innovative character of the new BMW 6 Series Convertible.

The assistance systems for the 6 Series Convertible include a new highlight – the new-generation Head-Up Display, which is making its world debut in this model. Featuring highly detailed, full-colour graphics, this optional system – which is unique in the BMW 6 Series Convertible segment – offers even sharper and clearer display technology than before. Also new in the BMW 6 Series Convertible segment are the driver assistance systems Parking Assistant, rear-view camera, Surround View, Speed Limit Info, Lane Departure Warning System, Lane Change Warning System and BMW Night Vision with pedestrian recognition.

The BMW ConnectedDrive technology for mobile device integration and use of internet-based navigation and infotainment services is likewise unique in this class. As well as offering internet access, the new BMW 6 Series Convertible also allows emails received via smartphone, album covers from a

music player and images from Google's Panoramio database to be shown on the Control Display of the standard-fitted iDrive control system.

**Full-colour, ultra-sharp display quality and more information:  
world debut for new-generation Head-Up Display system.**

Like its predecessor, the new BMW 6 Series Convertible is still the only vehicle in its segment with an optional Head-Up Display system. By projecting important information onto the windscreen, directly in the driver's line of sight, the Head-Up Display minimises distraction from the road and traffic. The new-generation system brings a further improvement in display quality: the symbols are projected onto the windscreen in ultra-clear resolution. Full-colour capability makes the road sign symbols even more realistic. At the same time the Head-Up Display is now able to present a wider range of information. Depending on vehicle specification, High Guiding information supplied by the navigation system, information from the Speed Limit Info system, Check/Control messages, status messages from the Lane Departure Warning System and warnings from the BMW Night Vision system can all be shown in the Head-Up Display. The positioning of the messages on the windscreen is highly ergonomic, so that drivers are aware of them without having to switch focus or take their eyes off the road.

The intensity of the projection automatically adjusts to the ambient light level, and the brightness setting can be adjusted via the iDrive menu. The driver can also choose what information he wants to appear in the Head-Up Display in addition to road speed and warnings from the driver assistance systems.

**Unique in the BMW 6 Series Convertible segment: BMW Parking Assistant.**

The list of innovations in the new BMW 6 Series Convertible that are unique in this segment also includes the Parking Assistant. This system helps the driver perform parallel parking manoeuvres safely and conveniently. It starts by checking for suitable parking spaces, using ultrasound sensors integrated in the side indicator surrounds. While driving by at speeds of up to 35 km/h (22 mph), these sensors continuously scan the length and width of potential roadside parking spaces.

If the Parking Assistant is activated, it informs the driver of suitable parking spaces – which must be at least 1.20 metres (approx. 4 ft.) longer than the



vehicle itself – as he drives past. When a space has been chosen, the manoeuvre can be performed as soon as the driver comes to a stop and shifts to reverse. If the system is not activated, scanning still takes place in the background. Should the driver shift to reverse and a suitable parking space is available, the relevant information will then be shown in the Control Display. The driver confirms that he wishes to use the Parking Assistant by pressing the iDrive Controller. Now all he has to do is operate the accelerator and brake pedals and monitor his surroundings, leaving the Parking Assistant to take care of the steering. Throughout the reverse parking manoeuvre, audible and visual signals from Park Distance Control (PDC), the rear-view camera and the Surround View system help the driver keep his distance from other vehicles or objects.

### **The complete picture: rear-view camera and Surround View.**

To supplement the PDC system, which uses sensors to monitor the distance from objects in front or behind, the new BMW 6 Series Convertible can also be equipped with a rear-view camera. The camera is integrated in the boot lid under the BMW badge, which keeps it protected from dirt. When the rear-view camera is activated, the badge pivots up out of the way and the system begins scanning the area to the rear. The perspective-corrected colour images are relayed to the Control Display. Superimposed on the images are interactive tracking lines which indicate the optimal steering angle for parking, as well as the tightest turning circle.

The Surround View system provides an even more comprehensive picture. In addition to the rear-view camera and the PDC sensors, this system also uses two cameras in the side mirrors. The data acquired by Surround View is relayed to a central computer which generates a full bird's eye view of both vehicle and surroundings and presents the image in the Control Display. This view allows the driver to manoeuvre very precisely in confined spaces.

The Side View subfunction of the optional Surround View system uses two cameras integrated in the front wings to provide an improved view of cross-traffic. These images too are relayed to the Control Display, where they not only act as a manoeuvring aid but above all give the driver an early idea of what is happening on the road to the left and right of the car when pulling out from narrow and concealed gateways or car park exits.

### **Safely on track with the Lane Change Warning System and Lane Departure Warning System.**

The optional Lane Change Warning System in the new BMW 6 Series Convertible alerts the driver to potentially critical situations when overtaking. Using two radar sensors at the rear of the car, the system monitors traffic in the adjacent lanes from the blind spot rearwards over a distance of approximately 60 metres (200 ft.). Whenever a vehicle is detected in this critical zone, a yellow triangle symbol in the housing of the driver's side exterior mirror lights up. If the driver then still goes ahead and operates the direction indicator, indicating an intention to pull in or out, the LED symbol starts to flash. A further warning is provided in the form of a discreet but unmistakable vibration of the steering wheel rim.

The optional Lane Departure Warning System checks for signs of an unintentional lane departure whenever the vehicle is travelling at a speed of at least 70 km/h (43 mph). The system comprises a windscreen-mounted camera in the rear-view mirror area, a data comparison unit and a signal generator which causes the steering wheel to vibrate. The camera tracks the lane markings on at least one side of the car, while the data comparison unit compares these markings with the position of the vehicle and at the same time takes into account vehicle speed. The system also operates on bends, when driving in narrow traffic lanes and – as soon as the headlights have been switched on – in the dark. It does not give a warning if the driver has signalled an intention to change lanes or direction by prior operation of the direction indicator.

### **Keeping to the ideal speed – with Speed Limit Info and speed limiter.**

The windscreen-mounted camera is also used by a further driver assistance and convenience system: Speed Limit Info. In combination with the navigation system Professional, Speed Limit Info helps alert drivers to the current speed limit on the road on which they are travelling. The camera continuously monitors road signs, including variable-message overhead signs on motorways. This information is checked against the navigation system's database of speed limits. The camera ensures that additional signs, for example wet-weather speed limits or temporary restrictions at roadworks, are taken into account. Speed restrictions registered in this way are displayed by

means of a traffic sign symbol in the instrument cluster, or in the optional Head-Up Display, until the restriction is either lifted or changes.

### **Improved safety in the dark: High-Beam Assistant and BMW Night Vision with pedestrian recognition.**

The optional High-Beam Assistant provides enhanced safety at night. The system automatically switches the high beam on and off, as conditions require, ensuring that the driver always has optimal visibility but sparing him the job of switching manually between high and low beam. Images recorded by the windscreen-mounted camera allow the system to identify preceding and oncoming traffic. The system also switches to low beam if ambient lighting is bright enough – for example in built-up areas.

The new BMW 6 Series Convertible is the only vehicle in its segment that is available with a Night Vision system with pedestrian recognition. The second-generation BMW Night Vision system sets new standards in night-time accident prevention. The centrepiece of the system is a front-mounted thermal imaging camera, which is seamlessly integrated into the styling of the car. The camera provides a real-time video image in the central Control Display, in which people, animals and other heat-radiating objects are shown in high resolution, even if they are outside the area of the headlight beam.

In the BMW Night Vision system, the night vision display is combined with automatic pedestrian recognition. A controller scrutinises the video data, using intelligent algorithms to search specifically for pedestrians and cyclists who are on a potential collision course with the vehicle. If the system identifies such road users who could be at risk, it warns the driver via the Control Display and the optional Head-Up Display. The pedestrian and cyclist warning is only given when a collision risk is detected, taking into account vehicle speed, steering angle and yaw rate.

### **Exclusive to BMW ConnectedDrive: innovative mobility services and increased integration of mobile devices.**

The BMW ConnectedDrive range of mobility services, internet-based services and technologies for mobile device integration is uniquely diverse. Integration of all entertainment, information and communication functions in a single in-car central control unit ensures unsurpassed standards of intuitive, convenient and foolproof control.

BMW ConnectedDrive provides customers with extensive, user-friendly support in a wide range of situations, for example with BMW Assist. BMW Assist offers Advanced Emergency Call with automatic vehicle location and accident severity detection, enhanced traffic information, a comprehensive telephone Enquiry Service and the interactive communication portal My Info, which includes the Google Send-to-Car function. BMW TeleServices, meanwhile, includes automatic arrangement of service appointments, taking into account the information supplied by the on-board Condition Based Service diagnosis system, which monitors the condition of consumable items. This information is transmitted by telephone to the customer's BMW Service partner. BMW ConnectedDrive also includes the remote services – telephone-based services which drivers can use, say, to have their vehicle locked or unlocked, or to locate it using the metre-accurate vehicle finder function.

**Optimised journey planning with internet-enabled navigation.**

BMW ConnectedDrive provides enhanced convenience for navigation system users in the form of a number of world-exclusive functions. For example, the new BMW 6 Series Convertible is available with the Destination Images and Weather in Map View services, which supplement the navigation system's database with dynamic content from BMW Online. With this kind of connectivity, journey planning is easy and fun. The Destination Images service provides drivers with additional guidance and orientation on their way to a destination, in the form of images from the Google Panoramio website. When the navigation system is active, images of the inputted destination are sent direct from Panoramio to the vehicle via a BMW Online internet connection.

The Weather in Map View service provides drivers with up-to-date European weather news. If the navigation function has been activated, the service will display current weather conditions, including temperatures, at selected European locations. Map scales start at 1 cm to 20 kilometres. Weather data is updated every two hours.

Customers of the BMW Online mobility service can use the Google Local Search function to send local information straight from the world's best-known on-line search engine to their vehicle. The system automatically identifies the vehicle's current location and destination and displays search results for the

relevant area, with address, telephone number and distances. The results are also shown in the familiar Google Map format, as used on the internet. The Google Maps database can be used like a business directory. The search results can then be easily imported to the navigation system or phone at the press of a button. If the search results include a URL, the website can then be accessed via this link directly from the vehicle – providing the vehicle is specified with the optional internet function.

Via the navigation system options menu, BMW Online customers can also access additional information from Google Maps about selected points of interest. This includes all the latest information supplied by Google Maps on the internet, such as pictures, ratings by other users and opening times.

BMW ConnectedDrive offers a further navigation-related service in the form of BMW Routes. Before starting their journey, drivers can select customised routes and send them straight from the PC to their vehicle. Alternatively, they can save them on a USB stick, and transfer them from there to the navigation system. The navigation system then guides the driver to his destination along the selected route, providing additional information about local attractions along the way.

### **Taking entertainment pleasure to the next level: album cover artwork display and Bluetooth Audio Streaming.**

The album cover artwork display function makes it even easier to retrieve audio files from a mobile phone or portable music player. The music library on the portable device, which must be integrated into the vehicle via the USB interface, is accessed using the iDrive control system. The Control Display then shows the album track lists together with the corresponding album cover images from the mobile phone or music player.

Bluetooth Audio Streaming from mobile devices, a further new service, provides wireless access to and remote control of a mobile audio player, whose audio files are then streamed wirelessly to the vehicle entertainment system. Bluetooth Audio Streaming also displays the audio player's music library on the iDrive Control Display. The files are selected using the iDrive Controller, and it is possible to access audio files while making a phone call.

**Exclusive to BMW ConnectedDrive: emails displayed via Bluetooth.**

BMW is the first carmaker in the world to offer in-car email display via Bluetooth. In the new BMW 6 Series Convertible, owners of a BlackBerry smartphone from mobile phone manufacturer RIM (Research In Motion) can access their mobile phone's email folder using the iDrive control system. Using a new Bluetooth interface to integrate the BlackBerry into the vehicle, it is possible to receive emails, show them on the Control Display and read them aloud using an optional text-to-speech function.

This new possibility for accessing emails is based on the already introduced BMW ConnectedDrive Bluetooth Office functions, which likewise offer world-leading functionality and allow transfer of call records, contact lists, calendar entries, text messages (SMS), tasks and notes from compatible smartphones to the vehicle, via Bluetooth interface. The relevant entries on the phone can be selected using the iDrive Controller and shown on the Control Display. Image files on the phone for a given contact address can likewise be shown on the Control Display.

**Still unique: in-car internet access.**

In 2008, BMW became the world's first car manufacturer to provide in-car internet access. The new BMW 6 Series Convertible is still the only vehicle in its segment to offer this functionality. Websites are selected using the Controller and displayed on the iDrive Control Display. The data is transmitted using EDGE (Enhanced Data Rates for GSM Evolution) technology. EDGE offers full geographical coverage, unlike UMTS, and is also three to four times faster than the GPRS wireless standard. Fast downloading and optimised display of web pages are ensured by a special BMW server.



## 8. Equipment: exclusive options for greater individuality.

- **iDrive operating system with freestanding Control Display.**
- **2-zone automatic climate control and HiFi audio system as standard, hard disk navigation as an option.**
- **Newly developed seats in three variants with a wide range of adjustment and comfort functions.**

With its high-grade standard equipment and numerous options that are unique among its competitors, the new BMW 6 Series Convertible underscores its premium character as well as its stand-out position as a particularly exclusive and progressive luxury-class vehicle. This status is also reinforced by the high-quality materials and exceptionally stylish colour schemes of the interior design and seat upholstery. Among the standard features in the new BMW 6 Series Convertible are leather seats and automatic climate control with extended functions, including separate temperature controls for the driver and front passenger. Another feature is the iDrive control system along with the Control Display, which is now integrated into the instrument panel as a freestanding screen. Thanks to standard and optional driver assistance systems and mobility services from the BMW ConnectedDrive development field, driving comfort, safety and the use of information and entertainment in the new BMW 6 Series Convertible reach unmatched levels in this segment.

Standard equipment features in the new BMW 6 Series Convertible include fully automatic roof operation, electrically operated window lifts for the front and rear side windows, bi-xenon headlights, as well as electrically adjustable, folding and automatically heated exterior mirrors. Also on board as standard on the drive and chassis technology front are Drive Dynamic Control, a leather steering wheel with multifunction buttons, Servotronic speed-dependent power steering and an electromechanical parking brake with Auto Hold function.

The engine of the new BMW 6 Series Convertible can be started by pressing the Start/Stop button as soon as the remote control key is inside the car,

rendering the conventional key opening superfluous. Comfort Access is an optional feature that not only enables automatic locking and unlocking of the car but extends the possibilities when it comes to fully automatic opening and closing of the roof. For example, pressing the remote control button integrated in the key activates the roof and side window operation from a distance of up to 1.5 metres (5 ft.) from the car. A further special option is the Soft Close Automatic function for the doors.

**Newly developed lightweight seats in three variants, leather with SunReflective Technology as standard, active seats optional.**

The lightweight seats with integrated belt system developed for the new BMW 6 Series Convertible come in a choice of three variants. The standard version features crash-activated head restraints as well as electric adjustment of the seat height and fore/aft position, backrest angle and head restraint height, including memory function for the driver and front passenger seats. Adjustment is via controls located on the outer front of the seat frame.

Sports seats are optionally available. They feature raised seat and backrest sides for optimal lateral support and come fitted with an integrated head restraint as well a manually adjustable thigh support. The sports seats also offer lumbar adjustment as an option. Comfort seats are another option, boasting comfort head restraints, lumbar support and electric adjustment of the thigh support, backrest width and angle of the upper backrest segment.

All seat variants feature an Easy Entry function: a brief tap of a switch automatically moves the seat as far forward as possible to allow easy access into the rear of the car.

All seat variants can be optionally ordered with seat heating on the driver's and front passenger's side. For the sports and comfort seats, there is also the added option of active seat ventilation. Comfort seats can be further specified with the active seat function for the driver and front passenger: the seat surface moves up and down at regular intervals to mobilise the muscles in the pelvic and lumbar spine area so as to prevent muscle tension and fatigue.

Offering an alternative to the standard Dakota leather upholstery is the optional Exclusive Nappa leather with extended features. Both leather variants come with BMW's exclusive SunReflective Technology: a special treatment of



the leather integrates colour pigments which reflect the infrared rays of sunlight, thus significantly reducing the build-up of heat on the surfaces when the car is parked with the top down.

Ensuring an even more exclusive ambience tailored to individual tastes and styles are select design features and particularly high-quality materials in the interior. As an option, Exclusive Nappa leather can be extended from the instrument panel to line the centre console and the upper areas of the door and side trim in the rear as well. A further option offers contrast stitching for the interior elements lined in Exclusive Nappa leather. This double stitching in a colour that contrasts with the leather surface adds a particularly premium, contour-enhancing accent.

Also available are ceramic applications for the gearshift lever, a/c controls and the Controller surround. The ambient light option comprises additional lighting for the door panels, map pockets, rear side trim, storage compartment under the centre armrest, door sills and luggage compartment.

### **Automatic climate control with innovative evaporator technology and Convertible mode as standard.**

The standard automatic climate control system features active charcoal filters, a fogging and solar sensor and the possibility of residual heat utilisation and auxiliary ventilation. It also offers a wide range of sensors that measure comfort levels in the interior, along with separate temperature control and individual adjustment of air volume and distribution on the driver and front passenger side. The climate control's AUTO program can also be individually adjusted for the driver and front passenger to five levels of intensity.

In conjunction with the Auto Start-Stop function of the BMW 640i Convertible, a world-first innovation provides an added comfort enhancement. An evaporator specially developed to optimise cooling storage enables the agreeable climate inside the car to be sustained even when the engine is switched off during a stop. Compared with conventional systems, this allows the desired temperature to be maintained for around double the time with the engine switched off.

A further feature is the Convertible mode. This is automatically activated when the top is down and ensures speed-related air volume control and

cooling or heating based on the outside temperature. As well as auxiliary heating, the new BMW 6 Series Convertible can also be ordered with a heated steering wheel. When it comes to loading the car, the optional ski bag is a potentially convenient asset: it can be pushed into the passenger compartment through an aperture between the two rear seats.

**Radio Professional with HiFi loudspeaker system as standard, navigation system Professional with hard disk storage as an option.**

The Radio Professional HiFi audio system that features as standard in the new BMW 6 Series Convertible comes with an MP3-compatible CD drive, an AUX-IN connection and a HiFi loudspeaker system with nine speakers. Available options are a 6-disc DVD changer, a TV module, a Digital Audio Broadcasting (DAB) receiver and the HiFi system Professional comprising 12 loudspeakers and a digital amplifier, and featuring DIRAC signal processing and model-specific equalizing.

The optionally available navigation system Professional has all navigation data stored on an 80 GB hard disk. This data carrier is permanently installed in the vehicle and can also be used to store a personal music library. Music files can be downloaded from CDs, external MP3 players or USB sticks, for example, with more than 12 GB of memory reserved on the hard disk for this purpose.

The navigation system Professional provides route directions through a combination of map displays featuring high-resolution graphics and arrows. The full-screen map display, moreover, provides a remarkably detailed overview of the area the car is travelling in. Both maps and individual symbols can be displayed as three-dimensional graphics. An elevation map can additionally be called up. Selected sights along the route are highlighted in the form of photorealistic graphics, while a preview map facilitates the choice of destination. As an alternative to the full-screen view, an assistance window can be activated in the Control Display either to show further images or to provide information from the on-board computer or details of entertainment listings, for example. A special map view under the menu item "Highlight Traffic Conditions" visually displays the latest congestion alerts. The High Guiding function with integrated lane recommendation transfers detail views – e.g. right of way rules at an unclear intersection – from the screen directly to the instrument cluster or, optionally, to the Head-Up Display.

**World-first: integrated owner's manual.**

The standard equipment of the new BMW 6 Series Convertible further includes the globally unique integrated owner's manual. Using the iDrive system, the driver can call up information on all the equipment details in the car. Thanks to animations with audio information and slide shows, operating instructions are easy to understand. Short, pertinent texts and interactive graphics allow the information to be quickly absorbed.



## 9. **BMW Individual range for the new BMW 6 Series Convertible: a clear espousal of personal style.**

- **Utmost exclusivity thanks to unique design, select materials and precision craftsmanship.**
- **Eloquent paintwork colours with an iridescent effect and forged alloy wheels.**
- **Full leather upholstery and interior trim strips in new variants.**

Choosing a BMW 6 Series Convertible is a reflection of the most exacting demands on driving pleasure and automotive exclusivity. The BMW Individual range opens up further scope for realising one's own personal style. Available from autumn 2011, the options for paintwork, alloy rims and interior fittings specially tailored to the new BMW 6 Series Convertible offer intriguing prospects of turning an extraordinary car into a one-off that satisfies both individual preferences and the highest quality standards.

The selection of materials, the quality of workmanship and the design of all products from the BMW Individual range live up to the BMW Group's standards of excellence while also setting benchmarks for exclusiveness in a premium automobile. As such, the portfolio of products represents the utmost in customer orientation by combining the safety and maturity of a series-production car with the supreme appeal of a one-off model. Innovative production techniques achieve unique effects in the highly complex painting processes, for example, while carefully selected, high-grade leather and wood are specially treated to highlight their natural characteristics.

All items in the BMW Individual range are available as separate options. Also available for the BMW 6 Series Convertible is a BMW Individual Composition made up of products whose colours and materials are chosen to deliver a perfectly harmonious result. Individual customer requirements can also met, all the way to a one-off created entirely in the BMW Individual workshop.

### **BMW Individual paintwork for a dazzling appearance.**

When the driver of a new BMW 6 Series Convertible chooses BMW Individual paintwork, this instantly marks him or her out as having an appreciation of the

finer things in life. Thanks to the application of up to seven layers of paint and the addition of special colour pigments, the BMW Individual paint finishes achieve fascinating iridescent effects, an extraordinary brilliance and exceptional depth. The selection of BMW Individual colours for the new BMW 6 Series Convertible includes Citrine Black metallic, Ruby Black metallic and Moonstone metallic, along with the newly developed variant Tansanite Blue metallic, which is available for the first time. The palette also includes the BMW Individual special paints Brilliant White metallic and Agate Brown metallic.

All bodywork paint variants can be combined with the BMW Individual High Gloss Shadow Line or BMW Individual Exterior Line Aluminium satinated. Contributing to a particularly striking look are the BMW Individual rear lettering and BMW Individual light-alloy wheels available for the BMW 6 Series Convertible. As well as 19-inch V-spoke wheels, customers can also opt for 20-inch forged light-alloy rims in V-spoke design.

**Carefully selected, treated with care: BMW Individual full leather trim in fine-grain Merino.**

The premium character of BMW Individual full leather trim in fine-grain Merino stems from scrupulously selected, flawless raw material and exceptionally careful processing techniques. As a result, the leather used for the seats, door trim panels, centre console and instrument panel retains its natural, open-pored structure, remains breathable and provides the utmost comfort. Its soft, fine-grain surface boasts an extremely elegant look and is particularly pleasant to the touch. Full leather trim is available for the new BMW 6 Series Convertible in the colours Platinum, Champagne, Amaro Brown and Cohiba Brown, as well as the new Opal White variant. A further feature of the leather trim is individual stitching on the seats, which have seams and piping in a contrasting colour.

There are three variants of BMW Individual interior trim strips to choose from to ensure a perfect combination with the selected shade of leather. In addition to Piano Finish Black and Plane Auburn dark wood, the variant Ash Grain White makes its debut in the new BMW 6 Series Convertible. To echo the interior trim strips, a further option offers a matching BMW Individual wood inlay for the steering wheel.

The BMW Individual Composition configured for the new BMW 6 Series Convertible comprises colour-coordinated variants of the full leather trim, interior trim strips and wood inlay for the leather steering wheel. The car also features illuminated BMW Individual door sill finishers.



## 10. Body and safety: the ideal combination of strength and lightweight design.

- **Mean body strength increased by 29 per cent.**
- **Selective use of high-tensile and ultra-high-tensile steels; doors, bonnet and spring supports in aluminium, side panels and boot lid in plastic.**
- **Lightweight seats with integrated belts, roll-over protection system.**

With its elaborately designed body structure, an intelligent multi-material mix, state-of-the-art production processes and a safety package whose components are all carefully synchronised, the new BMW 6 Series Convertible offers an ideal combination of occupant protection, agility and weight optimisation. Its body structure sets new standards in its combination of strength with intelligent lightweight design. Optimised impact force routing and use of strategically positioned reinforcements significantly improve body stiffness, while centralised control of the restraint systems ensures optimal protection across a wide range of collision types. Innovative measures for improving pedestrian protection also form part of the safety concept. As a result, the new BMW 6 Series Convertible is equipped to achieve excellent crash test ratings across the full spectrum of internationally relevant crash tests.

### **Intelligent multi-material mix for increased torsional stiffness and optimised weight.**

Intelligent use of high-tensile multi-phase steels and hot-formed ultra-high-tensile steels gives the safety passenger cell of the new BMW 6 Series Convertible maximum strength for relatively low weight. Compared to the predecessor model, the mean strength of the body materials has increased by approximately 29 per cent, with a 50 per cent increase in static torsional stiffness. These improvements are all reflected in high standards of passive safety and superior vehicle dynamics. The new model also achieves an outstanding score on its "lightweight coefficient", which is the ratio of torsional stiffness to vehicle area and weight.

The doors and bonnet of the new BMW 6 Series Convertible are made from aluminium. For the doors alone, this material brings weight savings of 14 kilograms over an equivalent steel component. State-of-the art production technology allows the doors – which feature frameless windows – to be built as a laser-welded sheet metal shell construction. For the first time, the new BMW 6 Series Convertible now features fully retractable side windows with trap release at the rear as well as the front.

The front side panels are made of thermoplastic, which brings a weight saving of approximately two kilograms over conventional steel components. But the Sheet Moulding Compound (SMC) glass fibre composite used in the boot lid and soft-top compartment cover has further advantages, too. It also offers superior formability compared with sheet steel, and therefore greater design freedom, and allows all the various aerial systems to be invisibly integrated into the boot lid.

### **Centralised control of airbags and roll-over protection system.**

Robust load-path structures, large and precisely defined deformation zones and highly efficient restraint systems provide the basis for a high level of passive safety in the new BMW 6 Series Convertible. In a frontal crash, impact forces are dispersed via multiple force paths in the floor structure, side members and front bulkhead and absorbed in the deformation zones, thereby keeping them away from the passenger compartment. The load-path structures contain a high proportion of multi-phase and hot-stamped steels, while an additional bumper system in the front axle area helps to disperse forces acting on the front of the vehicle. The safety steering column, which features a load-controlled deformation element and a large sliding section, shields the driver from impact forces acting from the direction of the engine compartment. Reinforced side structures in the B-pillars and the door sills, high-strength door reinforcements and strong seat cross-members limit the degree of deformation and speed of intrusion in a side impact.

The standard safety specification also includes front airbags, seat frame-mounted head-thorax side airbags, three-point inertia reel seatbelts on all seats with belt force limiters and belt latch tensioners on the front seats, and ISOFIX child seat attachment systems in the rear.



The new BMW 6 Series Convertible is equipped with a roll-over protection system which is automatically activated if the vehicle monitoring sensors detect a risk of roll-over. In this event, two high-strength aluminium roll-over bars are automatically extended, with split-second speed, from behind the rear head restraints. In conjunction with the ultra-high-tensile steel A-pillars and the strong windscreen frame, the roll-over bars help to preserve the occupant survival space. The spring-loaded roll-over bars are activated by pyrotechnic actuators in response to a signal from the central safety electronics, which simultaneously activates the belt latch tensioners and the head-thorax side airbags.

### **New lightweight seats with integrated belt system.**

The new BMW 6 Series Convertible features newly developed lightweight seats with integrated belt system, which are available in three versions. As an alternative to the standard version, sports seats with integrated head restraints, or comfort seats with extended adjustment functions, are also offered. With their reduced vertical dimensions, these seats provide a typical sports car-style low seating position.

Despite its reduced overall height compared with its predecessor model, the new BMW 6 Series Convertible offers more headroom both front and rear, and the height adjustment range of both the driver's and the front passenger's seats has been increased. All the seats benefit from the increase in interior width, while seat comfort in the rear is enhanced by additional legroom. The rear seat backrest angle has been further optimised compared with the outgoing model and is now approximately the same as on the BMW saloons.

All seat versions feature crash-activated head restraints. In the event of a rear-end collision this system, which is controlled by the central safety electronics, immediately moves the front part of the head restraint forward by up to 60 mm (2.3 in.) and upwards by up to 40 mm (1.5 in.). This reduces the distance between the restraint and the head even before the head snaps backwards in reaction to the impact, thereby increasing the stabilising and protective function of the head restraint and reducing the risk of injury or hyperextension of the cervical spine. For smaller passengers, ISOFIX child seat attachment systems on the rear seats, and a front and side airbag deactivation system to allow a child seat to be used on the front passenger seat, are both standard.

### **Optimised pedestrian protection with active bonnet system.**

To optimise passive pedestrian protection, in some national markets the new BMW 6 Series Convertible is equipped with an active bonnet system which automatically raises the bonnet in the event of a collision with a pedestrian. At speeds between 20 and 55 km/h (12 and 34 mph), a pyrotechnic actuator mechanism is activated if the sensors detect a pedestrian collision, raising the bonnet both at the front and at the rear.

The active bonnet-raising system creates additional under-bonnet deformation space. This extra impact-absorbing capacity helps to reduce the risk of injury and the potential consequences of the accident.

### **Optimal vision: bi-xenon headlamps, LED daytime running lights and Adaptive Headlights with variable light distribution.**

The new BMW 6 Series Convertible sports the brand's twin round headlamps, featuring bi-xenon technology as standard and providing excellent road illumination. The familiar LED light rings produce a strikingly bright white light and have two output settings. Dimmed to around 10 per cent of their full power, they function as sidelights, while on full power they function as the familiar BMW daytime running lights. Other standard features include a light sensor that automatically activates the low beam depending on ambient light levels, and a rain sensor that measures the intensity of the rain and adjusts the windscreen wiper accordingly.

Optionally, the new BMW 6 Series Convertible can be supplied with Adaptive Headlights with cornering lights, variable light distribution and adaptive headlight range adjustment. The Adaptive Headlights provide illumination that follows the line of the road. They swivel in line with the steering angle, the yaw rate and the speed of the car. The system also includes a cornering light function which comes on when the driver is making a turn. An additional beam of light is activated to illuminate the road in the direction in which the driver is turning.

Adaptive headlight range control also takes into account vertical irregularities in the road surface. When travelling over bumps or dips, the headlight beam is lowered or raised to provide optimal road illumination without dazzling oncoming traffic. Also integrated in the Adaptive Headlight system is variable light distribution, which varies the illumination range on straight roads as

required, extending the light beam and illuminated area in line with the speed of the vehicle.

The optional foglamps are each powered by three LED light units. They produce a light which is similar to daylight and provides bright and clear illumination of the road.

To prevent rear-end collisions, the new BMW 6 Series Convertible is equipped with dynamic brake lights. If the brakes are applied very forcefully, and if the ABS system intervenes, insistent flashing of the brake lights warns drivers behind that they too need to brake as hard as possible. Following very sharp deceleration, the hazard warning lights are automatically switched on when the vehicle has come to a stop.



# 11. Model history: top-down driving pleasure with a long heritage.

- **BMW 6 Series Convertible: a byword for open-top 2+2-seater aesthetics, dynamics and luxury.**
- **Authentic reinterpretation of classic BMW brand values.**
- **Motor sport legends and exclusive dream cars have shaped the history of the model.**

The driving experience in the new BMW 6 Series Convertible is defined by forward-looking technology and its character imbued with a compelling model history. For more than 70 years, open-top sports cars carrying the BMW badge have been a byword for exceptional dynamics and exclusive driving pleasure. With the new BMW 6 Series Convertible, the world's leading premium carmaker is perpetuating this unique tradition. The extraordinary history of the convertible extends from the legendary BMW 328 – which formed the basis of the 1940 Mille Miglia winner – via the BMW 507 dream car of the 1950s, to the dynamic and progressive predecessor of the new BMW 6 Series Convertible.

With their dynamic driving characteristics, groundbreaking innovations and highly developed aesthetics, convertibles by BMW have from the very start embodied the classic values of the brand. Their supreme performance derives from expertise gleaned in motor sport, while cutting-edge production technology and unique equipment features underscore the company's innovative strength. Beyond this, the premium character of a BMW convertible – as also manifest in its design – generates an inimitable charisma that is the stuff of desire. The new BMW 6 Series Convertible represents a new and authentic interpretation of these enduring brand values. With its dazzling looks, impressive athleticism and unrivalled range of innovative equipment features, this open-top 2+2-seater is the epitome of aesthetics, dynamics and luxury within its segment.

## **Milestones in car design underpin the history of BMW convertibles.**

The new BMW 6 Series Convertible thus belongs to the tradition of iconic classics that have had an enduring impact on automotive design and have lost

none of their fascination to this day. The ancestral lineage begins with the BMW 327 built in 1937, which in both convertible and sports coupé guise won over the car world with its flawless elegance and established itself as the most exclusive of BMW's pre-war models. Augmenting what was already a very powerful 55 hp engine for the time, the two variants were launched in 1938 as the BMW 327/328 with the 80 hp sports engine taken from the legendary BMW 328 Roadster. This in turn formed the basis for a sports coupé with an ultra-lightweight aluminium body, with which BMW drove to overall victory in the legendary Mille Miglia endurance race of 1940.

For even more exacting customers, BMW had yet another open-top model in its portfolio at the time: the BMW 335, available as a convertible as well as a saloon, was a status car that came with the guarantee of comfortable touring. Launched in 1939, this open-top four-seater boasted a luxurious interior ambience thanks to the application of leather, wood and chrome, while an all-synchromesh gearbox served to enhance driving comfort. The BMW 335 was powered by a 90 hp 3.5-litre straight-six engine, but was denied any lasting success. The war brought production of the BMW 335 to an end after only 410 units had left the factory, among them 158 convertibles.

**Exclusive driving experience: BMW 502 Convertible with Germany's first post-war V8 engine.**

The tried and tested six-cylinder engines experienced a remarkable renaissance in the early 1950s. They were deployed in the BMW 501, which began production in 1952 and was soon dubbed the "Baroque Angel" for its voluptuous bodywork styling with front wings that swept far back along the sides of the car. Following the saloon, 1954 also saw the launch of coupé and convertible versions of the BMW 501 in exclusive production runs.

The introduction of the BMW 502 in 1954 saw the convertible given a V8 engine befitting its status. Featuring an aluminium crankcase and cylinder head, this unit drew output of 100 hp from 2.6 litres' displacement. This V8 was the first eight-cylinder engine to emerge from post-war Germany and represented the most advanced powerplant in the market by virtue of its lightweight design concept.

## **Style icons with four and two seats: BMW 503 Convertible and BMW 507.**

In parallel with the further development of the 501 and 502 models, early plans were hatched at BMW to build a sports car. In time for the 1955 Frankfurt Motor Show, the company was ready to take the wraps off two spectacular new models: the BMW 503 Coupé and the BMW 507 Roadster. Both models were driven by the eight-cylinder engine, now enlarged to 3.2 litres, which raised output in the BMW 503 to 140 hp and all the way to 150 hp in the BMW 507. The four-seater BMW 503 was also available as a convertible. With features such as leather upholstery and electric window lifts, it met the burgeoning demand in the early days of the Economic Miracle for luxury combined with exceptionally elegant design.

The designs for the BMW 503 and BMW 507 hailed from the drawing board of the young German designer Albrecht Graf Goertz. A student of the famed industrial designer Raymond Loewy, Goertz had succeeded in combining elongated lateral lines and powerfully sweeping front sections with an elegance and lightness previously the preserve of Italian car design. This combination is still regarded today as a prime example of the sporting elegance that is also exemplified by the BMW 6 Series Convertible. Both 1950s models, with their stretched bonnet, well set-back passenger compartment and long wheelbase, already evidenced the now familiar BMW hallmarks of sporty design. The BMW 507, referred to in the media as the “dream car from the Isar” (the river that flows through Munich), also featured striking details such as a broad BMW kidney grille and the characteristic air intake gills in the front side panels.

The BMW 503 was a technical pioneer into the bargain: parts of the bodywork were made from aluminium and the alloy V8 engine propelled both the convertible and the coupé to a top speed of 190 km/h (118 mph). A brake servo came as standard, and from 1957 the transmission was bolted directly to the engine while the gear shift was moved to the centre floor from the steering wheel for the first time. The BMW 503 Convertible strongly appealed to drivers who set great store by dynamic, pleasurable motoring, sheer elegance and advanced technology – all attributes which, as far back as the early 1950s, bestowed on it the status to which luxury convertibles by BMW still lay claim today.

## **Exclusive driving pleasure makes a comeback: the BMW 6 Series Convertible.**

Following the end of the production cycle for the BMW 503 Convertible and the BMW 507, the Munich carmakers turned their attention in the 1960s to smaller vehicle classes in their development of open-top four-seaters. The one-off BMW 3200 CS drop-top built for the company's major shareholder Herbert Quandt in 1962, and now on display at BMW Classic, demonstrates that the creativity of the designers and developers could certainly have spawned further convertible models.

But the market situation led to a different strategy, and the eventual renaissance of the large BMW convertible in 2004 was all the more impressive for it. Just a few months after the coupé made its debut, a convertible variant joined the second BMW 6 Series range. Both models signalled the revival of a fascination with premium, sporty, two-door models that had evolved out of a long tradition. The BMW 6 Series Convertible embodied the pleasures of touring in an open-topped model whose design was as sporty as it was elegant. It established itself as a supremely desirable automobile for individualists with a taste for dynamics, exclusivity and cutting-edge technology. Boasting full everyday and year-round utility, it held out the prospect of exclusive driving pleasure to be savoured on a daily basis.

The BMW 635d Convertible launched in 2007 likewise introduced unique highlights to this vehicle segment, this time in terms of efficiency. The world's most powerful and sporty six-cylinder diesel engine with output of 210 kW/286 hp added another alluring facet to the driving experience in the premium convertible segment thanks to its hallmark traction. Between 2004 and 2010, the first-generation BMW 6 Series Convertible posted global sales of 49,053 units.

The new BMW 6 Series Convertible embodies the ideal prerequisites for the continuation of this success story. It consciously takes up the attributes of its predecessor model and develops them further, while also drawing on the values – evolved over decades – of BMW open-top four-seaters and integrating them in a modern-day interpretation. With its beguiling aesthetics, compelling dynamics and innovative luxury, this convertible adds genuine

lustre to a vehicle segment in which discerning automobile enthusiasts will find their dream car – past or present.





## 12. Production: top quality based on precision manufacturing.

- **New BMW 6 Series Convertible built at Dingolfing plant on same production lines as BMW 7 Series and BMW 5 Series.**
- **Process and component pooling between model series for efficient production and luxury-class quality standards.**
- **Convertibles a speciality since 1985; strong focus on innovative production technology.**

The new BMW 6 Series Convertible is a premium automobile designed to satisfy the highest expectations. Innovative production technology and a strong focus on quality and precision craftsmanship underpin all production processes used in its manufacture. The new generation of this luxury-class 2+2-seater is based on a new vehicle architecture that is also used in the luxury saloon models of the BMW 7 Series. The new BMW 6 Series Convertible is built at BMW's Dingolfing plant, on the same production lines as the new BMW 5 Series Saloon, the new BMW 5 Series Touring, the BMW 5 Series Gran Turismo and the BMW 7 Series models. Component sharing between the different model series, a key feature of this production concept, results in highest standards of manufacturing efficiency and quality.

The BMW plant in Dingolfing, Lower Bavaria, has been part of the global BMW production network since 1967. Today this network comprises 24 plants in 13 countries. Originally a component plant, in 1973 Dingolfing additionally went over to complete vehicle production, at the newly constructed Plant 2.4. Numerous awards are proof that the world's largest BMW production plant sets very high standards. More than 7 million BMWs have been built in Dingolfing to date. Approximately 18,600 people currently work at the site, more than 12,000 of them in car production at Plant 2.4.

In 1976, Dingolfing began building the very first generation of the BMW 6 Series. The second generation was built here too – including the BMW 6 Series Convertible, which was launched in 2004. With this model, Dingolfing continued a tradition of convertible manufacturing that dates back to production of the first generation of the BMW 3 Series Convertible in 1985.

### **Highest quality and efficiency through integrated production.**

Component and process pooling for the BMW 7 Series, BMW 5 Series and BMW 6 Series Convertible has important benefits for production quality and efficiency. The shared vehicle architecture provides the foundation for integrated production. Flexible design of the production systems allows the factory to continuously adapt its production mix to fluctuations in market demand. This is key to maintaining consistently high capacity utilisation and ensuring short delivery times to customers. The Customer-Oriented Sales and Production Process (KOVP) ensures that every vehicle is produced on time and to the required customer specifications. It also offers good opportunities for enhancing the efficiency of production processes.

Further synergy effects are achieved through modular component design. Components that share the same basic design can be easily modified to suit the different models in which they are installed – including the new BMW 6 Series Convertible – and different vehicle specification levels. The functionality and quality of these components are geared to the extremely strict standards demanded for the BMW 7 Series luxury saloons. To take two examples: the axle subframes are designed as a shared component but with model-specific drill holes to suit the track width of the vehicle in which they are fitted, while the air conditioning technology comprises a range of modules that can be mixed and matched in line with customer specifications in all three model ranges – the BMW 6 Series Convertible, the BMW 5 Series or the BMW 7 Series.

### **Top quality – from start to finish and in every detail.**

To meet BMW's strict quality standards right from day one, the plant begins testing the quality and dimensional accuracy of the 800-plus body parts and modules more than a year before the start of volume production, using a geometrically accurate body model. This "cubing model", or master model, which weighs approximately three tonnes, is precision-milled to an accuracy of 0.1 millimetres on the basis of design data, from a special solid, shrinkage-proof aluminium. In the course of extended liaison between manufacturer and suppliers, prototype parts, later followed by the first off-tool parts, are test-installed on this master model. The aim is to ensure precise dimensional accuracy and a good mutual fit both between the components themselves and between the components and the body by the time volume production

gets under way. The suppliers then build the components using tools and production machinery developed and produced by BMW.

### **Ongoing improvement of the production process.**

The vehicles are built at the BMW Dingolfing plant using the very latest principles of modern production process design and in line with the BMW Value-Added Production System (VPS). Process-sharing is a typical example of this cutting-edge approach. The use of shared vehicle components for the BMW 7 Series, BMW 5 Series and the new BMW 6 Series Convertible provides the basis for using integrated production processes as well, in which top-quality multi-model production on a single assembly line is combined with integrated production planning. For example, standardised processes are used for installing the chassis supports and for fitting the front ends and floor assembly in the body shop. Further advances in production process design are achieved through developments in the area of Value-Added Technology Processes (VTP) and logistics. The end goal is to achieve one-piece flow of parts and materials from the supplier through to the completion of the vehicle.

Convertible-specific assembly operations such as fitting the soft top and roll-over protection system are integrated in the main assembly line. One of the most important operations is the combined fitting and adjustment of the soft top. For these components, too, the inspection process is standardised. A high standard of delivery quality is then ensured by final leak tests and vehicle dynamics tests.

### **Innovative processes in the bodyshop.**

In technological terms as well, the accent is on developing innovative production techniques, which can be applied across several different model series and thus across higher production volumes. For example, the door production process used for the BMW 7 Series, BMW 5 Series and BMW 6 Series Convertible is based on innovative research and development work carried out at the Dingolfing-based BMW Group Aluminium Competence Centre. Newly developed aluminium processing technology also helps ensure good surface formability of sophisticated design features such as the character line in the side door, while the large, force-transmitting sheet aluminium shells used in the door structure ensure high rigidity. The

joining techniques used include laser-welding, structural bonding and “clinching”.

The BMW Dingolfing plant is using innovative processes in sheet steel processing too. 50 million euros has been invested at this site on two new sheet steel presses which are now turning out exceptionally high-quality body parts. These parts will in future also be used on the new BMW 6 Series Convertible. With the first of the two new presses installed at the Dingolfing plant, BMW became the world’s first carmaker to use an innovative hot-stamping technique whereby galvanised sheet steel is cold-formed, then heated to a temperature of over 900 degrees Celsius, then immediately cooled to a temperature of around 70 degrees and hardened. The cooling is performed in a press with integrated water cooling and takes just a few seconds. This technique gives the components between three and four times the strength of conventional sheet steel.

The second of the two new presses, a progressive die (“prog die”) high-speed press, is designed with the emphasis on highly efficient production and high energy efficiency. The Dingolfing prog die press is one of the largest of its kind in the world. Integrating many different process stages, it achieves an output of up to 160 components per minute, in 40 press strokes. Up to 21 operations are performed simultaneously – from initial stamping and various drawing operations to insertion of stamped parts. The sheet metal is fed to the press straight from the coil and moves progressively through the press as each operation is performed. This technique results in more efficient use of material and reduced energy consumption, saving approximately 5 million kilowatt-hours of electricity a year compared with conventional stamping processes.

**In-line painting includes plastic side panels and boot lid.**

The thermoplastics used for the front side panels, and the Sheet Moulding Compound (SMC) glass fibre composite used for the boot lid and soft-top compartment cover, are further areas where innovative processes bring weight savings at the same time as meeting specific design requirements and flexibility standards. SMC offers better curved surface formability than sheet steel components. Also, the boot lid and soft-top compartment cover, along with the newly developed, heat-resistant thermoplastic side walls, can be

integrated in the Dingolfing plant's in-line painting process, allowing these components too to be fitted at the body-in-white stage and then painted at the same time as the rest of the body.

# 13. Specifications.

## BMW 640i Convertible, BMW 650i Convertible.



	BMW 640i Convertible		BMW 650i Convertible
<b>Body</b>			
No. of doors/seats		2 / 4	2 / 4
Length/width/height (unladen)	mm	4894 / 1894 / 1365	4894 / 1894 / 1365
Wheelbase	mm	2855	2855
Track, front/rear	mm	1600 / 1657	1600 / 1657
Ground clearance	mm	123	123
Turning circle	m	11.7	11.7
Tank capacity	ca. l	70	70
Cooling system incl heating	l	9.3	11.4
Engine oil <sup>1)</sup>	l	6.5	8.5
Weight, unladen, to DIN/EU	kg	1840 / 1915	1940 / 2015
Max load to DIN	kg	450	450
Max permissible weight	kg	2290	2390
Max axle load, front/rear	kg	1100 / 1290	1180 / 1310
Max trailer load, braked (12%)/unbraked	kg	- / -	- / -
Max roof load/towbar download	kg	- / -	- / -
Luggage comp capacity	l	300-350	300-350
Air drag	c <sub>x</sub> x A	0.31 x 2.23	0.32 x 2.23
<b>Engine</b>			
Configuration/No of cyls/valves		Straight / 6 / 4	V90/8/4
Engine technology		BMW TwinPower Turbo, direct injection, fully variable valve control (VALVETRONIC)	BMW TwinPower Turbo, direct injection
Effective capacity	cc	2979	4395
Bore/stroke	mm	89.6 / 84.0	88.3 / 89.0
Compression ratio	:1	10.2	10.0
Fuel grade		min RON 91	min RON 91
Output	kW/hp	235 / 320	300 / 407
at	rpm	5800-6000	5500-6400
Torque	Nm	450	600
at	rpm	1300-4500	1750-4500
<b>Electrical system</b>			
Battery/Installation	Ah/-	90/luggage comp	105/luggage comp
Alternator	AW	210 / 2940	210 / 2940
<b>Driving dynamics and safety</b>			
Suspension, front		Double track control arm with separate lower track arm level, aluminium, small steering roll radius, anti-dive	
Suspension, rear		Integral-V multi-arm axle, aluminium, with steering function, anti-squat and anti-dive, double acoustic separation	
Brakes, front		Single-piston aluminium swing-calliper disc brakes in frame structure	
Diameter	mm	348 x 30 / vented	374 x 36 / vented
Brakes, rear		Single-piston aluminium swing-calliper disc brakes	
Diameter	mm	345 x 24 / vented	345 x 24 / vented
Driving stability systems		Standard: DSC incl ABS, ASC and DTC (Dynamic Traction Control), CBC (Cornering Brake Control), DBC (Dynamic Brake Control), Dry Braking function, Fading Compensation, Start-Off Assistant; optional: Adaptive Drive	
Safety equipment		Standard: airbags for driver and front passenger, side airbags with combined head airbags for driver and front passenger, three-point inertia-reel seatbelts on all seats with belt latch tensioner and belt force limiter integrated in the front seats, crash-activated head restraints at the front, roll-over protection system, crash sensors, Tyre Defect Indicator	
Steering		Electric Power Steering (EPS) with Servotronic; optional: Integral Active Steering	
Steering ratio, overall	:1	17.1	17.1
Tyres, front/rear		225/55 R17 97Y RSC	245/45 R18 96Y RSC
Rims, front/rear		8J x 17 LM	8J x 18 LM

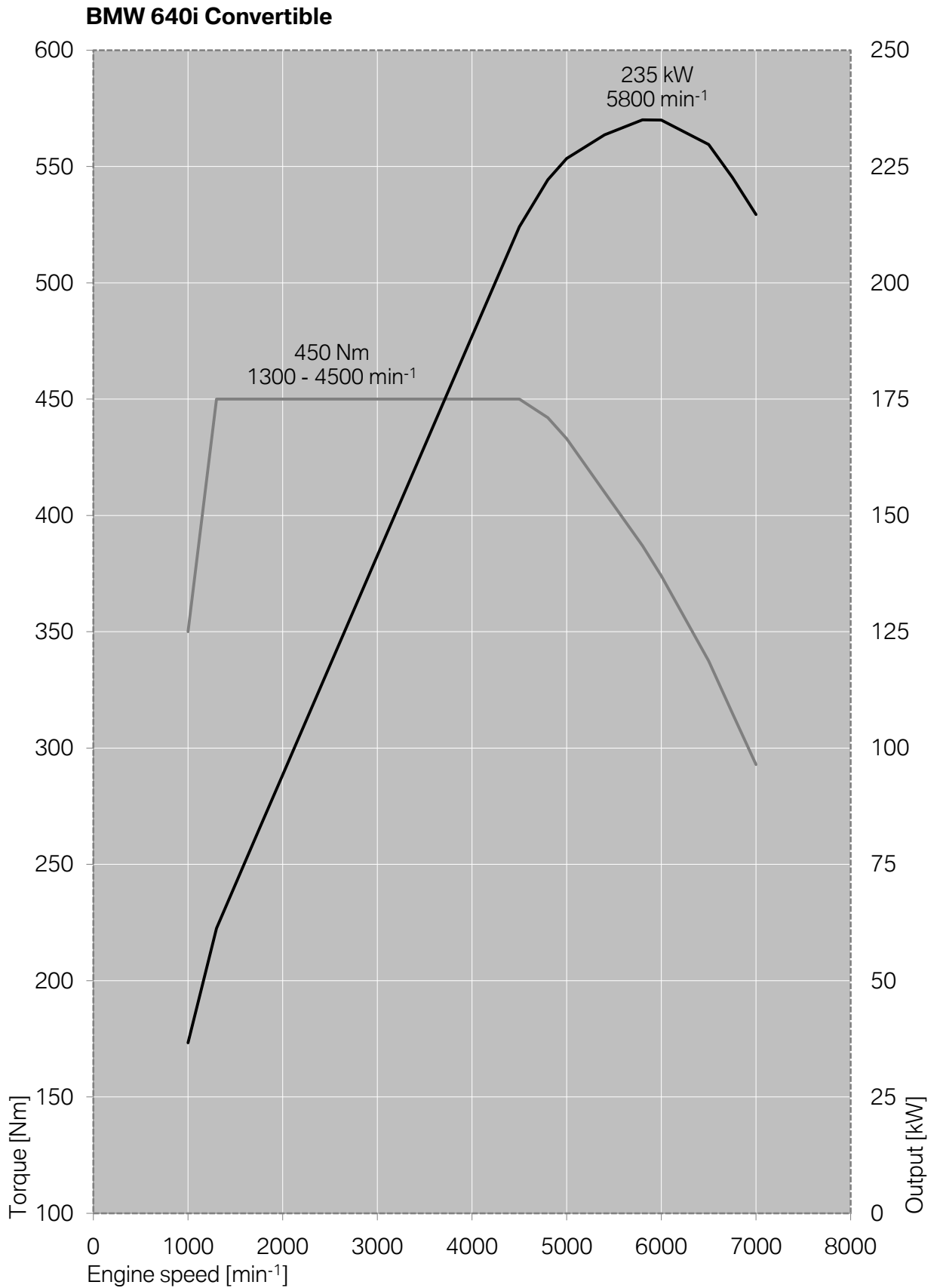
		<b>BMW 640i Convertible</b>	<b>BMW 650i Convertible</b>	
<b>BMW ConnectedDrive</b>				
Comfort	Optional: BMW Assist incl Enquiry Service, remote-control functions and V-Info+ (Traffic Info plus), BMW TeleServices, integration of mobile devices			
Infotainment	Optional: internet access, BMW Online incl Park Info, National Info, Google Local Search, News, Realtime Weather, BMW Routes, Office functions, Bluetooth Audio Streaming and Online Update Music Tracks			
Safety	Optional: Adaptive Headlights with cornering lights, variable light distribution and adaptive headlight range control, High Beam Assistant, Park Distance Control, rear-view camera, Surround View incl Top View and Side View, BMW Night Vision with pedestrian recognition, Head-Up Display, Parking Assistant, Lane Change Warning, Lane Departure Warning, Speed Limit Info, Automatic/Advanced Emergency Call			
<b>Transmission</b>				
Type of gearbox	Eight-speed automatic with Steptronic			
Gear ratios	I	:1	4.714	4.714
	II	:1	3.143	3.143
	III	:1	2.106	2.106
	IV	:1	1.667	1.667
	V	:1	1.285	1.285
	VI	:1	1.000	1.000
	VII	:1	0.839	0.839
	VIII	:1	0.667	0.667
	R	:1	3.295	3.317
Final drive		:1	3.232	3.077
<b>Performance</b>				
Power-to-weight ratio	kg/kW		7.8	6.5
Output per litre	kW/l		78.9	68.3
Acceleration	0–100 km/h	s	5.7	5.0
	0–1000 m	s	25.2	23.8
in 4th gear	80–120 km/h	s	–	–
Top speed	km/h		250	250
<b>BMW EfficientDynamics</b>				
BMW EfficientDynamics standard features	Brake Energy Regeneration with recuperation display, Auto Start-Stop function (BMW 640i), intelligent lightweight construction, on-demand operation of ancillary units, air flap control (BMW 640i), Electric Power Steering (EPS), detachable a/c compressor, tyres with reduced rolling resistance			
<b>Fuel consumption EU</b>				
Urban	l/100km		10.9	15.5
Extra-urban	l/100km		6.2	7.9
Combined	l/100km		7.9	10.7
CO <sub>2</sub>	g/km		185	249
Emission rating			EU5	EU5
<b>Insurance group</b>				
KH / VK / TK			2 <sup>1)</sup>	2 <sup>1)</sup>

Specifications apply to ACEA markets; data relevant to homologation applicable in part only to Germany (weight)

<sup>1)</sup> Oil change

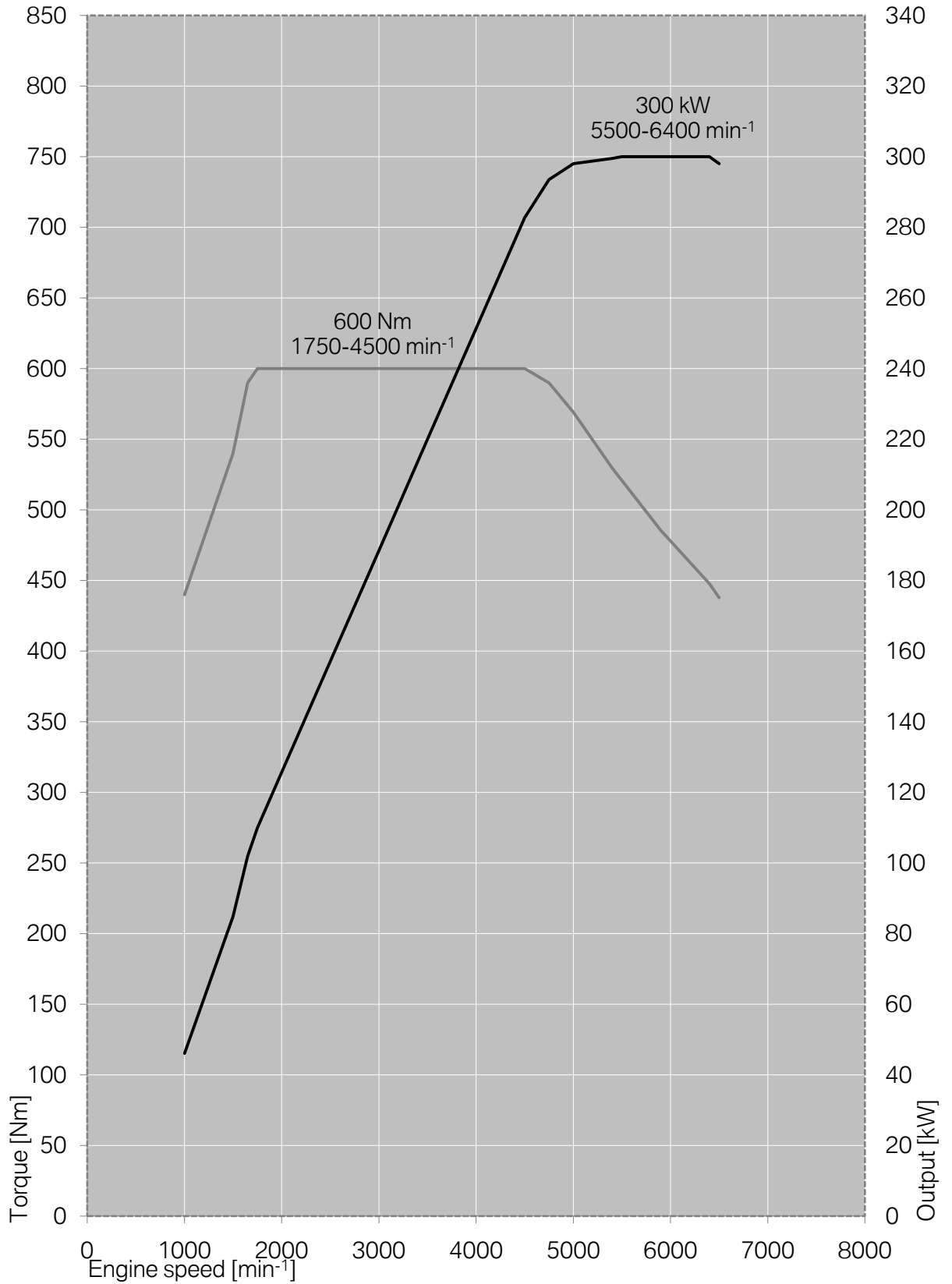
<sup>2)</sup> Data not yet available

# 14. Power and torque diagrams.





### BMW 650i Convertible



# 15. Exterior and interior dimensions.

