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# The new BMW 7 Series.

## Description in Brief.



- Fifth generation of the BMW 7 Series – a brand-new interpretation of style, luxury and driving experience. Entering the market with three engine variants: BMW 750i, BMW 740i, and BMW 730d. Additional body variants of this luxury saloon in the guise of the BMW 750Li and BMW 740Li, with wheelbase extended by 140 millimetres (5.5") and particular focus on extra comfort at the rear.
- Design of the new BMW 7 Series standing for natural presence, superior sportiness and precise elegance. The features of the car are authentically visualised through its modern, progressive look, with a brand-new range of engines ensuring BMW EfficientDynamics of the highest standard. Lightweight engineering and innovative suspension technology ensure dynamic driving qualities quite unique in the luxury class. Driver assistance systems and comfort functions exclusive to BMW set the foundation for a truly fascinating driving experience.
- An unmistakable, superior look bears out the sporting character so typical of BMW in its most elegant form. Through design features such as the car's dynamic proportions, the low and stretched side view, sculptured surfaces, the BMW kidney grille standing for modern style, the large, upright and low-slung BMW kidney grille and horizontally accentuated lines at the rear emphasising the sheer power and width of the car, this luxury saloon offers unique, unparalleled character.
- Through its interior design, the BMW 7 Series is a particularly modern rendition of pure luxury. The innovative interior

concept with clearly structured arrangement of driving and comfort functions ensures added superiority. The ambience is exclusive, sophisticated and, in particular, inviting. Gently swinging shapes, high-quality materials as well as enhanced space and comfort give the interior its harmonious, generous and luxurious impression. The driver-oriented cockpit with its special display in innovative Black Panel technology, the electronic selector lever on the automatic transmission featured as standard on the centre console in the immediate vicinity of the Dynamic Driving Control unit and BMW iDrive control, as well as the multifunction steering wheel with an extended range of functions guarantee an unprecedented driving experience.

- New generation of BMW's trendsetting iDrive control system: 10.2-inch display, high-resolution graphic presentation, optimised menu structure, new iDrive Controller for the selection and management of functions by turning, pressing and tipping, direct selection buttons and, for the first time, freely programmable favourite buttons for even more intuitive control and operation. Function-optimised navigation systems, audio system with hard disc memory. World debut of BMW ConnectedDrive offering unrestricted access to the internet through the car's display as an option.
- Brand-new range of engines: V8 petrol engine with Twin Turbo technology and direct fuel injection (High Precision Injection) at the top of the range (300 kW/407 hp), power-optimised straight-six with Twin Turbo and

High Precision Injection (240 kW/326 hp), newly developed straight-six diesel with turbocharger and third-generation common rail fuel injection (180 kW/245 hp). All engine variants with extremely low fuel consumption and emissions for a car in this segment.

- Six-speed automatic transmission with optimised gearshift dynamics featured as standard on all engine variants, faster gearshift, improved shift comfort, reduced fuel consumption, and electronic gear selector.
- All-round lightweight concept as an additional contribution to BMW EfficientDynamics: Use of multi-phase steel and heat-formed steel profiles in the body structures. Roof, doors, front lid and side panels made of aluminium, aluminium

pressure-cast spring supports at the front, final drive with aluminium housing, all power units with aluminium crankcase.

- All-new suspension optimising both driving dynamics and, in particular, motoring comfort: First BMW Saloon with double-arm front axle, integral V rear axle exclusive to BMW, front and rear axles made largely of aluminium. Air suspension at the rear standard on the BMW 750Li and BMW 740Li. Hydraulic rack-and-pinion steering with on-demand steering assistance pump. World debut: Integral Active Steering as a symbiosis of Active Steering on the front axle and speed-related rear-wheel steering as an option.
- Innovative Dynamic Damping Control including Dynamic Driving Control featured as standard. The dampers, gearshift

dynamics, as well as the gas pedal and steering assistance map are varied by the Dynamic Driving Control button on the centre console for the stages COMFORT, NORMAL, and SPORTS. Special traction mode and SPORTS+ setting with reduced/deactivated DSC control for a particularly sporting style of motoring. Dynamic drive, anti-sway control available as an option.

- Unique combination of innovative driver assistance systems in the luxury class (optional): Cruise control with Stop & Go, Lane Departure Warning including speed limit indicator, Lane Change Warning, Head-Up Display, High-Beam Assistant, BMW Night Vision for the first time with detection of individual persons, Side View, back-up camera.

- Maximum occupant protection ensured by optimised body structure in conjunction with comprehensive, interacting and electronically controlled passive safety systems, three-point inertia-reel seat belts on all seats, side airbags and head airbags at the side, crash activated headrests at the front, runflat tyres, tyre defect indicator. Bi-xenon dual headlights including a daytime lights function, foglamps and two-stage brake lights featured as standard, Adaptive Headlights with variable light distribution and Bending Lights as an option. Enhanced automatic emergency call function on BMW ConnectedDrive as a further option.
- Wide range of comfort functions and innovative entertainment options: audio system with hard disc memory, AUX-in sleeve featured as standard. USB port, multi-channel audio system,

DAB double tuner, DVD system at the rear, iDrive Controller for operating entertainment, telecommunication and navigation functions from the rear seats, four-zone automatic air conditioning, active seat ventilation, massage seats, innovative, contoured sliding roof optimised for noise control and design, online and telematics services provided by BMW ConnectedDrive (BMW Online, BMW Assist, BMW TeleServices) as an option, Integrated Owner's Manual featured as standard.

- Range of engines:

BMW 750i:	V8 petrol engine with Twin Turbo and direct fuel injection (High Precision Injection)
Capacity:	4,395 cc
max output:	300 kW/407 hp from 5,500–6,400 rpm
max torque:	600 Nm/442 lb-ft from 1,750–4,500 rpm
Acceleration	
0–100 km/h:	5.2 s (BMW 750Li: 5.3 s)
Top speed:	250 km/h (155 mph)
Average fuel consumption	11.4 l/100 km (24.8 mpg imp)
to EU standard:	(BMW 750Li: 11.4 l/100 km)
CO <sub>2</sub> emissions to EU standard:	266 g/km (BMW 750Li: 266 g/km)

BMW 740i: Straight-six petrol engine with  
 Twin Turbo and direct fuel injection  
 (High Precision Injection)

Capacity: 2,979 cc  
 Max output: 240 kW/326 hp at 5,800 rpm  
 Max torque: 450 Nm/332 lb-ft from 1,500–4,500 rpm  
 Acceleration  
 0–100 km/h: 5.9 s (BMW 740Li: 6.0 s)  
 Top speed: 250 km/h (155 mph)  
 Average fuel  
 consumption 9.9 l/100 km (28.5 mpg imp)  
 to EU standard: (BMW 740Li: 10.0 l/100 km [28.2 mpg imp])  
 CO<sub>2</sub> emissions  
 to EU standard: 232 g/km (BMW 740Li: 235 g/km)

BMW 730d: Straight-six diesel engine with  
 turbocharger (variable turbine geometry)  
 and third-generation common-rail direct  
 fuel injection

Capacity: 2,993 cc  
 Max output: 180 kW/245 hp at 4,000 rpm  
 Max torque: 540 Nm/398 lb-ft from 1,750–3,000 rpm  
 Acceleration  
 0–100 km/h: 7.2 s  
 Top speed: 245 km/h (152 mph)  
 Average fuel  
 consumption 7.2 l/100 km (39.2 mpg imp)  
 to EU standard: 7.2 l/100 km (39.2 mpg imp)  
 CO<sub>2</sub> emissions  
 to EU standard: 192 g/km





# The Most Innovative Rendition of Luxury and Dynamic Performance: The new BMW 7 Series.



From time to time the benchmarks in progressive automotive technology are set anew. And now such a rare and great moment is coming once again, with the new BMW 7 Series poised to enter the market. Introducing the fifth generation of this outstanding luxury saloon, the world's most successful manufacturer of premium cars shows how sheer driving pleasure and the thrill of exclusive generosity can be perfectly combined with one another in optimum harmony. The new BMW 7 Series stands for inspiring luxury, thrilling driving dynamics, and overwhelming visual presence. It is the result of stylish design and the supreme art of engineering. Not least, this top-end saloon owes its trendsetting character to a wide range of innovations serving to make driving and travelling in the new BMW 7 Series a lasting impression of wonderful class the driver and occupants will enjoy forever. Suspension technology unprecedented the

world over and a brand-new range of engines help to make the new BMW 7 Series an incomparable driving experience in all model versions. For the first time, the new model combines optionally available active steering with integrated rear-wheel steering, offering a new dimension of steering comfort and agility as well as unparalleled driving stability under even the most dynamic driving conditions. The new BMW 7 Series comes as standard with BMW's newly developed Dynamic Damping Control. Likewise featured as standard, Dynamic Driving Control enables the driver at the touch of a button to choose the degree of damping force, the gearshift dynamics of the automatic transmission, as well as the control maps for the gas pedal and steering assistance. Anti-sway control is available as an additional option, with its intervention and effect tailored to the damper set-up and program selected by the driver.

**A perfect combination of efficiency and dynamics, luxury and innovation.**

The new BMW 7 Series is entering the market with a V8 and a straight-six gasoline engine both featuring Twin Turbo technology and direct fuel injection (High Precision Injection) as well as the first representative of a new generation of six-cylinder diesel engines. Benefiting from these drive units and the wide range of engine technologies serving to enhance the all-round standard of efficiency to an even higher level, the various models in the BMW 7 Series, following the BMW EfficientDynamics development strategy, now also offer truly outstanding performance, fuel economy and emission management data in their respective segments. The eight-cylinder developing maximum output of 300 kW/407 hp between 5,500 and 6,400 rpm in

the BMW 750i, for example, is the most efficient engine in its performance class and the only engine of its kind worldwide with the turbochargers fitted in the V-space between the two rows of cylinders.

The two six-cylinders, in turn, reach a level of power and performance so far restricted to eight-cylinder power units, combining this potential with outstanding efficiency and much lower weight with a positive effect on the balance of the car and, accordingly, its all-round agility. Especially for the BMW 740i, output of the six-cylinder Twin Turbo has been raised to 240 kW/326 hp at 5,800 rpm. The newly developed six-cylinder diesel in the BMW 730d, in turn, develops maximum output of 180 kW/245 hp at 4,000 rpm. And it goes without saying that all engines comply in full with the strict EU 5 emission standard.

**Paving the way once again:  
iDrive control in the BMW 7 Series.**

The new BMW 7 Series is a forerunner for the entire automobile sector also in terms of control systems for all kinds of vehicle functions. Just like the former model featuring the trendsetting BMW iDrive control concept for the first time, the new BMW 7 Series again sets the standard in terms of ergonomics, efficiency and functions for optimum control of the car.

High-resolution graphics on the Control Display, the new, standardised menu guidance, and optimised operation of the Controller are additional highlights boasted by the new generation of the BMW iDrive control system. Direct selection buttons on the Controller now provide access to the menus

controlling the radio, CD, navigation, and telecommunication functions. Visual control aids and consistent user guidance in the display facilitate orientation within the various menus. In practice, these navigation functions offer unique size, clarity, brilliance, detail and variability in the presentation of data on maps, a map preview function facilitating selection of the desired destination from the list of towns and cities. New operating logic with letters and numbers arranged in circular form in the display speeds up the process of entering addresses or telephone numbers.

**Even greater safety than before:  
Lane Change Warning, Active Brake Assistant, and  
BMW Night Vision with detection of individual persons.**

Apart from driving comfort, active safety is also enhanced to a new level of perfection in the new BMW 7 Series by way of innovative and, in part, exclusive BMW driver assistance systems: As an example, the new BMW 7 Series is the first saloon in its segment available with a Head-Up Display projecting driving information on to the windscreen.

Optional cruise control complete with an integrated Stop & Go function likewise supports the driver, allowing him to cruise along smoothly on the motorway or on country roads, keeping an appropriate distance from the vehicle ahead at all times even in

slow, irregular traffic at very low speeds. And the Active Brake Assistant included in this system is able to significantly reduce the risk of bumper-to-bumper collisions. Yet another new feature BMW is presenting for the first time is the newly developed Lane Change Warning. Together with Lane Departure Warning likewise available on the BMW 7 Series, this system enhances driver awareness whenever necessary by generating vibration signals on the steering wheel.

With the Lane Change Warning function this vibration alert is supplemented by an LED display flashing on and off on the base of the exterior mirror. The speed limit display featured in connection with Lane Change Warning provides permanent information on the speed limit currently allowed on the route the driver is taking. A further innovation is BMW Night Vision now

able to detect and recognise even individual persons on or near the road. And with the extended emergency call function offered by BMW ConnectedDrive, the BMW 7 Series has yet another safety feature exclusive to BMW.

**World-first introduction of unrestricted access to the internet in the car.**

Technical innovations in the areas of air conditioning, entertainment and communication, as well as extra space and comfort within the interior, make the experience of driving in the BMW 7 Series an outstanding pleasure for both the driver and his passengers. And now BMW is becoming the first car maker in the world to offer unrestricted use of the internet within the car through BMW ConnectedDrive. This makes the Controller and the Control Display of the iDrive system a genuine online terminal enabling the user to call up any website he would like to access from the worldwide data network. Exclusive to the new BMW 7 Series, BMW ConnectedDrive even allows remote control of the car's auxiliary heating and ventilation from the

user's mobile phone as yet another option. Automatic air conditioning featured as standard in the BMW 7 Series ensures particularly fine dosage and variation of temperatures within the car, free of draughts or unpleasant air turbulence. As an option there is also four-zone automatic air conditioning offering individual control also for the passengers at the rear.

The BMW 750Li and BMW 740Li also available right from the start upon the introduction of the new BMW 7 Series ensure even greater comfort and luxury at the rear. They come with wheelbase extended by 140 millimetres or 5.5", offer additional legroom and headroom at the rear, and boast a wide range of comfort features either fitted as standard or available as an option, making even long drives in the new BMW 7 Series a relaxing and entertaining experience.

### **Sportiness of the most elegant kind typical of BMW.**

The No 1 design theme characterising the new BMW 7 Series is the harmonious combination of elegance and sportiness. Apart from the car's long wheelbase, the long and sleek engine compartment lid, and the short overhang at the front, the passenger compartment moved further to the rear and the low, sleek roofline emphasise and, indeed, highlight the dynamic proportions of the new BMW 7 Series. The unusually dynamic and stretched lines of the car are therefore a clear testimony to superior sportiness and at the same time convey a powerful impression of precise elegance.

The balanced harmony of these features comes out particularly clearly in the side-line of the car, firm and taut areas around the



wheel arches and on the doors as well as the slender shoulder areas above the contour line extending back from the headlights at the front to the rear light clusters accentuating the elegant character of the saloon.

With its particularly light and dynamic look, the greenhouse adds an especially sporting touch borne out above all by the slender window frames and roof columns. Through its contours alone, the new saloon is somehow reminiscent of a coupé with its sleek lines stretching from the low transition of the engine compartment lid into the low-slung A-pillars through the low roofline all the way to the rear with its soft and gentle swinging curvature.

### **The front end: clear structures and generous surfaces ensuring natural presence.**

With its large and puristically styled engine compartment lid, the new BMW 7 Series offers a clear and calm look from the front. The contour lines of the car come together at the front end, pointing towards the BMW kidney grille, just like the headlight units tapering out towards the middle of the car. The BMW kidney grille is indeed the most conspicuous design feature at the front, emanating natural presence and supremacy in its large dimensions, upright position, and extra-low arrangement within the front air dam. Intentionally not being surrounded by function joints, the kidney grille again emphasises its precise position, the rising bars in the grille serving at the same time to accentuate the powerful look of the front end. The wide lower air intake

scoop stretches across the entire front air dam right round to the sides. Foglamps in clear glass look positioned far to the outside at the edge of the air intakes serve additionally to accentuate the wide track of the car, a further feature adding to this flair being a chrome band forming the upper border on top of the air intakes.

Dual round headlights in generous design generate the concentrated look and focus again so typical of BMW. Indeed, this look is particularly striking on the new BMW 7 Series, borne out, first, by the corona rings providing a daytime lights function and, second, by an additional light bar which, like an eyelid, stretches across the round headlights at the top to provide a particularly visual dividing line. Another new design highlight is the direction indicators made up in each case of eight LED lights positioned in two vertical rows at the outside next to the cylindrical lights.

### **Sculptured surfaces and precise lines determining the side view.**

Modern design of the car's surfaces giving the saloon its unmistakable character is yet another highlight of the BMW brand in general and the new BMW 7 Series in particular. The sculptured overall effect generated in this way results from the combination of skilled craftsmanship, precise technology, and a clear feeling for the unique flair and style of a BMW. The interplay of concave and convex surfaces so typical of a BMW creates a highly effective course of light and shade, emphasising both the powerful and dynamic expression and the cultivated elegance of the car. The side panels, for example, appear to grow out smoothly over the rear wheels of the car without creating the impression of a conventional wheel arch.



The shoulder line gives the side of the new BMW 7 Series particular elegance by stretching from the headlights at the front via the door openers all the way to the light clusters at the rear. Beneath this precisely finished line the side surfaces are modelled in a convex structure, then following a concave curve at the lower edge of the doors. At the bottom these panels border on to the doorsill line rising up higher than usual.

Interacting with one another, the shoulder and doorsill lines give the car a particularly stretched look from the side. At the same time the doorsill line in its elevated position adds the impression of a particularly slender body stature. Yet a further important impression is added by the chrome-plated side gill with its integrated directional indicator function at the transition from the front side panel to the driver's and, respectively, front passenger's

door. The character line highlighting the wheel arches merges out of the front edge of the side gill, continuing in a gentle sweep into the doorsill line. And serving as an important proportion feature on sporting vehicles of this calibre, the gill intake at the side emphasises the long distance between the front axle and the instrument panel.

Further design highlights clearly reveal the focus on precision and the ability of BMW's designers to accentuate selected design features in superior, subtle style. Like the side window graphics, for example, the headlight units and rear lights of the new BMW 7 Series are surrounded by a frame literally chiselled into the surface of the car – an effect clearly emphasising the reversed “swing” at the bottom of the C-pillars well-known to the expert as the “Hofmeister kick”. The window graphics, in turn,

boast a particularly sophisticated and, at the same time, sleek look through the chrome trim surrounding the glass surfaces and made out of one piece.

All of these design features are naturally also to be found on the BMW 750Li and BMW 740Li. With their wheelbase extended by 140 millimetres or 5.5", these particularly luxurious models offer even more comfort at the rear. The additional body length is provided completely along the rear doors, ensuring particularly comfortable entry to and exit from the car. And at the same time both models boast their own unique roofline and C-pillar contours providing a side view reminiscent of the "regular" saloon with its "normal" wheelbase.

### **Horizontal lines at the rear providing an extra touch of power and supremacy.**

The sculptured surfaces along the body also ensure a smooth and sleek transition from the side panels to the rear end of the new BMW 7 Series. The striking contour line along the car is continued, for example, around the rear light clusters with their particularly graphic structure. The rooflines, in turn, flow down along the rear flanks of the car all the way to the bumper, the entire rear end thus surrounded by dynamic lines with a particularly sporting touch.

Horizontal lines and light edges accentuate the powerful, superior and muscular impression of the car on its wide track particularly visible from the rear. The chrome trim above the

numberplate support connecting the rear light clusters with one another across the entire width of the luggage compartment lid adds another, particularly striking feature. The light edges along the luggage compartment lid and the rear bumper run parallel to the chrome trim bar also encompassing the reversing lights.

The additional segmentation of the bumper, finally, serves once again to emphasise the sheer width of the rear end, just like the two reflectors positioned far to the outside. The two-piece rear lights on the new BMW 7 Series come in that special L-shaped contour so typical of BMW. Inside, the rear lights are dominated by wide, horizontally-arranged light bars in a three-dimensional look rising up to the outside and therefore following the contours of the light units. Fed by LEDs, the light bars



generate a warm and homogeneous lighting effect. The direction indicators also come in LED technology, and the third brake light fitted in the upper edge of the rear window as well as the numberplate illumination also consist of light-emitting diodes.

### **Modern, luxurious, inviting: the interior.**

Apart from the supreme experience of space and comfort meeting the greatest demands both front and rear in terms of generous kneeroom, headroom and elbow freedom, the design and finish of the interior in the new BMW 7 Series emanates a wonderful impression of luxury in its most modern form.

The overall ambience is exclusive, sophisticated and, in particular, inviting. Both the overall design and layout as well as the combination of colours and the choice of materials symbolise exclusivity and harmony all in one. With the position of the centre console rising up slightly towards the driver and the cockpit structure promoting intuitive interaction with the car, the new BMW 7 Series comes with the particular style of driver

orientation so typical of the brand. The interior design reflects the full character of a car which, in its technology and design, caters specifically for the needs and well-being of both the driver and his passengers.

This generous and harmonious feeling of space is further emphasised through the coherent colour scheme on the dashboard and the door linings. The horizontally arranged colour levels extend throughout the complete interior, the upper door lining following a flowing line at the bottom reaching its lowest point on the B-pillar and rising up again gently towards the rear. In combination with the armrests positioned at exactly the opposite angle this creates an elegant combination of tense but smoothly harmonised surfaces on the doors. High-quality materials and outstanding quality of finish are

combined in the interior of the new BMW 7 Series with a supreme standard of craftsmanship and precision. Visible seams along the instrument panel and the upper doorsills, as well as the central ventilation units with double surrounds, again bear out exceptional attention to detail.

The dashboard comes as standard in a newly developed soft skin material almost identical through its soft surface and special grain to high-quality leather. The exclusive flair of the interior is emphasised additionally by the black colour on the instrument panel and the double seam finish.

As an option, the dashboard is also available in soft cowhide. The close connection of design and function is also borne out by the integration of the door openers in the chrome trim along

the door panels. Similarly, the door closing handles integrated in the door panel trim combine unpretentious design with superior function. The wide range of interior colours, trim and upholstery options available sets the foundation for customising the car according to the owner's personal style and preference. Indeed, an appropriate combination of colours and materials serves to highlight either the classic, sporting, elegant or representative character of this unique saloon, depending on the customer's individual choice.

Quite apart from the material chosen, a chrome highlight bar along the lower edge of the trim strips adds further style and brilliance. And for the first time a BMW luxury saloon is now also available with trim strips in aluminium design, just as BMW is becoming the world's first car maker to use high-tech

ceramics on selected control elements and switches: Instead of the galvanised material used as standard, this special ceramic material may be featured as an option on the iDrive Controller, the electronic gear selector lever, and the rotary knobs for the automatic air conditioning and audio system. And last but of course not least, the paintwork on the new BMW 7 Series is available in a choice of no less than 12 highly attractive colours.

**BMW 750Li and BMW 740Li:  
setting a new standard in motoring on the rear seats.**

The interior in the BMW 750Li and the BMW 740Li provides ideal conditions for grand touring comfort enhanced to an even higher level of perfection. The extra space provided by the extended wheelbase is reserved exclusively for the rear-seat passengers, just as the differently designed roofline provides extra headroom at the rear.

This clearly turns the Sheer Driving Pleasure so typical of a nBMW into an even greater experience, particularly when being driven by a chauffeur. Indeed, this supremacy is enhanced even further by the option to fit the rear with two single seats and a console in the middle including an iDrive Controller.

These individual seats may then be adjusted fore-and-aft by up to 70 millimetres or 2.76", with the seat and backrest angle as well as the position of the headrests also being individually adjustable. As an option the new BMW 7 Series is available, inter alia, with four-zone automatic air conditioning complete with separate control at the rear, additional air vents and vanity mirrors in the roof lining, seat ventilation and massage seats, as well as two versions of BMW's sophisticated entertainment system at the rear complete with a DVD player and two monitors integrated in the front-seat backrests.

The entertainment functions are masterminded either by remote control or by an additional iDrive Controller on the centre console at the rear, again allowing the rear-seat passenger to enjoy an active driving experience.



**The control concept: clear structures for even greater driving pleasure and motoring comfort.**

The arrangement of controls and storage spaces in the new BMW 7 Series follows the principle of elegance and modern function. Apart from the extra-large glove compartment, storage boxes in the door panels and around the centre console, pockets in the back of the front seats, as well as an additional storage compartment between the driver's door and the steering wheel offer ample space for all kinds of odds and ends the driver and his passengers would like to take along.

Two cupholders are arranged conveniently on the centre console in front of the electronic gear selector lever. The buttons for adjusting the seats are arranged at the outside on the seats

themselves, the buttons for activating the optional seat memory function are housed in the door linings within easy and convenient reach even before the driver or passenger get into the car. The fundamental concept in arranging all control units was to give the entire passenger compartment a clear and functional structure. Hence, all driving functions are on the driver's side, all comfort functions are arranged further towards the middle. This applies both to the position of the buttons and levers in the cockpit and to the multifunction steering wheel, where the function buttons for cruise control, on the one hand, and the control elements for the audio system and telephone, on the other, are appropriately separated from one another. Apart from this horizontal arrangement of the control units for driving and comfort functions, the arrangement of all displays likewise ensures quick and intuitive orientation in the new BMW 7 Series. All primary

displays are in the upper part of the cockpit exactly on the level of the driver's eyes. The control units, in turn, are positioned further down within optimum ergonomic reach and, thanks to their different size, shape and surface, clearly distinguished from one another for optimum control without even looking. In each case the arrangement of the switches follows the respective context, the group of switches forming the lights control centre, for example, also serving to activate various driver assistance systems supporting the driver in perceiving his surroundings. The power unit in the new BMW 7 Series may be switched on and off by the start/stop button as soon as the straight-edged transmitter key is within the car, thus avoiding the need to push the key into a conventional key insert. The direction indicators and windscreen wipers, in turn, are operated by classic control levers on both sides of the steering wheel.

**Everything at a glance: classic circular dials, display in Black Panel technology.**

In its design, the instrument cluster in the new BMW 7 Series combines classic elements and new solutions to provide a complete, all-round and fully harmonious unit.

For the first time the entire instrument cluster is made up of a high-resolution colour display in Black Panel technology encompassing the four circular dials arranged in the traditional style of a sports car as well as a status and function display required for efficient motoring, navigation instructions, messages from the Check/Control, feedback from other control instruments and the Service Interval Indicator. The circular instruments offer the driver information on the most significant driving functions,

the two large instruments presenting road speed and engine speed, the two smaller displays to the right and left providing information on the supply of fuel and engine oil temperature.

When not in use, the display forms a smooth, homogeneous black surface showing only the chrome-coloured surrounds open to the bottom, the indicator needles and the scale markings on the circular instruments as well as the red warning fields on the rev counter, all of which appear in the displays as firm, permanent readings.

The numbers on the circular instruments as well as the integrated displays for the car's current fuel consumption and remaining range, on the other hand, are presented electronically. Like all other symbols on the display, therefore, they only become visible

when the system is activated. This offers an ideal combination of mechanical and electronic data feedback – quite literally, the best of both worlds providing an attractive look and very special flair.

As long as the car is parked, neither the numbers nor any other data are visible. But as soon as the driver opens the door, the car comes to life and the display automatically starts to operate. The chrome rings on the circular instruments open at the bottom are closed by bright lines of light, and the numbers as well as on-board information and telltales come on automatically as soon as the driver activates the ignition. And when the driver finally starts the engine, the specific functions he has activated are also shown clearly on the display. The instrument cluster corresponds in innovative style with the Control Display of the

iDrive control system and, if fitted as an option, with the Head-Up Display. So depending on the function chosen, information such as telephone numbers or a radio station may also be presented on the display if the driver has called up such information via the keys on the multifunction steering wheel.

And if the car is fitted with a navigation system, the instrument cluster will also support and enhance the High Guiding function. Clear, true-to-life arrow symbols give the driver information on changing his lane as well as assistance when bending at an unclear road junction.

Should the driver also use the Head-Up Display, information relevant to his driving requirements is presented primarily in this head-up position on the windscreen, not re-appearing again in

the instrument cluster until the Head-Up Display has been reactivated. The current settings on the automatic air conditioning are presented in a second display in Black Panel technology in the centre console, thus providing information on the interior temperature as well as the current ventilation mode with particular precision and in a sophisticated look. In the new BMW 7 Series, the user is indeed able to enter all settings for the automatic air conditioning via a group of buttons on the centre console.

### **Electronic gear selector lever and Dynamic Driving Control button on the centre console.**

Through the arrangement of control elements on the centre console, the driver is literally “invited” to drive the car in active style, enjoying convenient and intuitive management of all comfort functions. The new BMW 7 Series comes with an electronic gear selector lever on the centre console with the same gearshift pattern as on a conventional automatic transmission.

However, the transmission is now controlled via electrical signals, and not mechanically, the driver selecting the parking position by pressing the P button at the top of the selector lever. Then, to activate the manual gearshift, all the driver has to do is push the lever to the left, then shifting gears sequentially by hand.



Both the control unit for Dynamic Driving Control on the side facing the driver and the Controller of the iDrive control system on the opposite side come in the immediate vicinity of the gear selector lever.

Dynamic Driving Control enables the driver to vary the set-up of the car at the touch of a button for the COMFORT, NORMAL, SPORTS, and SPORTS + modes, changing not only the set-up of Dynamic Damping Control and the response of DSC Dynamic Stability Control, but also the dynamic gearshift on the automatic transmission as well as the control maps for the gas pedal and steering assistance.

Another button positioned directly in front serves to choose the DSC set-up required: Pressing this button, the driver activates

a special traction mode serving, say, to facilitate the process of starting off on snow. This is done by DTC Dynamic Traction Control, a special mode of DSC serving to raise the driving stability response thresholds. And pressing down this button somewhat longer, the driver is also able to deactivate DSC completely.

The individual configuration of drivetrain and suspension set-ups chosen ensures a high standard of overall harmony in each mode of Dynamic Driving Control. Each change of the mode chosen, in turn, will give the driver clear and perceptible feedback, informing him that the car now has a different set-up.

Dynamic Driving Control allows individual configuration in the SPORTS mode, which in its basic setting gives both the

drivetrain and the suspension functions are more sporting character. But then, using the iDrive control system, the driver is able to influence either of these two factors as he wishes, returning one of them to the NORMAL mode. This enables him to enjoy a sporting set-up of the drivetrain elements even when on account of poor road conditions it would not be advisable to choose a harder damping setting.

Instead of a conventional handbrake, the new BMW 7 Series comes with an electrohydraulic parking brake operated simply by pressing a button, that is without the slightest effort. The Auto Hold function likewise operated by pressing a button serves to automatically keep the car at a standstill, ensuring greater comfort in stop-and-go traffic.

**Enhanced consistently for intuitive use:  
new BMW iDrive.**

The trendsetting BMW iDrive control system is also featured in the new BMW 7 Series for activating and controlling all entertainment, information, navigation, and telecommunication functions featured either as standard or as an option. Presented for the first time in the former model, this revolutionary system has fundamentally changed the general understanding of ergonomics, functionality and control logic in the automobile, with BMW iDrive setting a new standard particularly in the premium segment. Now, introducing the new generation of iDrive technology, BMW is increasing its lead over other manufacturers with comparable systems in both the quality of presentation and intuitive control.

Via the Controller on the centre console and the Control Display in the middle of the instrument panel, all control and display functions remain consistently separated from one another also with BMW's new iDrive. This serves to keep the control unit in exactly the right position in ergonomic terms and enables the driver to take in the information presented while hardly taking his eyes off the road and the traffic around him.

Measuring 10.2 inches, the Display is extremely large but is nevertheless integrated harmoniously in the instrument panel and, through its clear presentation and easy-to-understand, attractive graphics, again sets the standard versus the competition. Positioned on the same level as the instrument cluster, the Display is within clear sight of both the driver and the front passenger at exactly the right distance.

In its optimised ergonomic position, the newly developed Controller allows convenient and intuitive selection and activation of functions through standardised tipping, turning and pushing operations.

**Inviting functionality and practical benefits:  
BMW Controller with direct selection buttons.**

The new iDrive Controller now ensures even better and more intuitive use and operation. In its design, the Controller follows the most advanced insights into biomechanics clearly borne out by its surface touch qualities and clearly structured mechanical functions. The benefits of the control elements, the menu structure and the graphic presentation in Control Display support the driver right from the start and in ongoing, long-term use of the system.

A picture of the Controller shown in the Control Display gives the driver better orientation in choosing the next step in the control process. The individual operating steps activated by

tipping, turning or pushing the Controller are largely the same as the control functions well known from a computer when clicking the mouse or turning the wheel. Turning the Controller, for example, the user automatically goes through a list of individual menu items and is then able to select the function desired simply by pressing the button on top. Tipping the Controller to the left or right, in turn, enables the user to smoothly and easily navigate through the various menu levels. Clear graphic arrangement with separate levels building up on top of one another and the presentation of Controller movements currently available ensures maximum clarity and orientation, the functional options on the Controller and the graphic presentation in the Display thus supplementing one another. All menus are made up according to the same scheme and structure, enabling the user to make himself acquainted with their functions almost

immediately. The menu trees are extra-wide in order to provide as many options as possible without having to change to another menu level. And at the same time the functions are appropriately arranged to ensure direct and rapid access to the most important options used regularly by the driver and his passengers. Yet another innovation of the Controller is the introduction of four direct selection buttons for the menu options used most frequently. Pushing these buttons, the user is able to switch over to the CD, radio, telephone and navigation functions very quickly and conveniently. The range of direct selection buttons is rounded off by three command keys serving to call up the starter menu, to return to the menu activated last, and to access additional options in the current context. This makes search processes much shorter or even eliminates the need for such processes altogether.

**Proven in their quality and now even more versatile: favourite buttons.**

Offering superior versatility, BMW iDrive supports the driver in his personal style and control preferences, thus enhancing motoring comfort and individual choice to an even higher level than before. This is also the purpose of the favourite buttons arranged around the audio system in the centre console, which have already proven their merits in other BMW models.

Apart from radio stations, telephone numbers and navigation destinations, these buttons – a total of eight in all – now serve for the first time to save and directly access additional menu items available through BMW iDrive. Simply pressing a button, therefore, the driver is able not only to tune into his favourite

radio station or activate his home address, but may also display the navigation map in his favourite scale, access traffic reports, activate the balance control on the audio system loudspeakers, or move directly to a specific chapter of the Owner's Manual integrated in the system.

Coming complete with touch sensors, the favourite buttons first show the specific function saved on the Control Display before the actual process of activation, thus avoiding any faulty operation or mistakes.

### **Extra-large display with variable layout, preview maps, and full-screen images.**

The new iDrive in the BMW 7 Series comes with a 10.2-inch Control Display exceeding all graphic surfaces used so far in the automobile not only in its dimensions, since resolution of 1,280 x 480 pixels offers much better presentation of detailed graphics and images.

A combination of the most advanced hardware and software technologies ensures a most sophisticated look combined with genuine style. Menu lists are presented in white letters on a black background, clear symbols, modern graphics and a clear colour code enhancing the quality, brilliance, and reproduction of pictures.

The structure of the control menu also facilitates the process of finding the functions desired. Flat menu trees and systematic control concepts already well-known from the use of the computer facilitate rapid access to the options desired, with all function areas controlled by BMW iDrive being listed in the starter menu.

Selecting the item desired, the user will automatically open up a new menu table. The options available there are again presented in a list, such consistent user guidance offering additional orientation and enabling the user to stack menu tables on the display. Visual control aids ensure additional clarity, and if necessary all the user has to do is press the Back key on the Controller in order to reverse a false entry. Using the optional navigation system is also easier and more appealing than ever

before thanks to the optimised technical features now provided through BMW iDrive. Full-screen map presentation, for example, offers an incomparably detailed overview of the region the driver is currently travelling through, with both travel maps and individual symbols being presented as required in the form of attractive, three-dimensional graphics. And to supplement the perspective presentation provide so far, the user now also the choice of an elevation map. Selected sights along the route are presented as realistic graphics just like photographs.

The impressive technical capacities and features of the new system come out clearly right from the start when entering your destination: Whenever the driver chooses his destination from a list of towns or cities, a preview map of each destination proposed is presented in the display immediately during the

selection process, allowing the user to easily distinguish between various places with the same name simply by means of a geographic message. The process of spelling names (places or streets) as well as the entry of telephone numbers is likewise facilitated by a round “Speller”, as it is called, the circular arrangement of letters and numbers again speeding up the entry process.

### **Convenient combination of voice entry and Controller operation.**

Yet another innovation now introduced as part of BMW iDrive is so-called multi-modal operation by voice entry and the Controller. The user is able to switch freely from one of these entry modes to another while carrying out a specific function and may even maintain and actively use the active voice entry mode while entering data through the Controller. Voice control is activated by pressing the appropriate button on the multifunction steering wheel and is then switched off either automatically as soon as the user is finished or by pressing the button again. To facilitate voice entry, the commands available are shown in the Display, and in addition iDrive also responds to numerous synonyms of these terms shown on the screen.

Once again, BMW's optimised iDrive marks a significant step forward in the area of automotive control systems, combining greater efficiency, enhanced control logic and attractive, clear display graphics as a new highlight. BMW's new iDrive therefore serves to make driving the new BMW 7 Series an incomparable pleasure, further underlining the outstanding position of this exceptional premium car in the automobile market.

**Power units: superior, dynamic, and very efficient.**

The world's most efficient V8 gasoline engine, the most powerful straight-six in the BMW engine range, and the first representative of a new generation of straight-six diesels: The choice of power units available right from the start upon the introduction of the new BMW 7 Series is full of superlatives.

The three engines combine dynamic power and performance, supreme refinement and outstanding efficiency, offering a varying degree of these individual features while nevertheless sharing one overall forte they all have in common: In their respective segments, they offer an unparalleled balance of performance, on the one hand, and economy, on the other. The new eight-cylinder in the BMW 750i is the most efficient

engine in its class. The two six-cylinders, in turn, enter a range of power and performance so far offered only by an eight-cylinder, at the same time combining this potential with exemplary efficiency and much lower weight. Reduced load on the front axle ensures a harmonious balance and thus enhances the overall agility of the car. The new power units are therefore worthy

representatives of the BMW EfficientDynamics development strategy also serving to provide a number of further innovations in the new BMW 7 Series. Apart from the new engines, features such as Brake Energy Regeneration, on-demand management of ancillary units, consistent lightweight technology, and optimised aerodynamics including electronic management of the air



flaps on the BMW 740i and the BMW 730d reduce both fuel consumption and emissions to an even lower level than before. This enhancement of efficiency is particularly impressive with the new BMW 730d: Offering average fuel consumption of just 7.2 litres/100 kilometres (39.2 mpg imp) in the EU test cycle, this is the most economical car in its class.

**Unique: eight-cylinder gasoline engine with Twin Turbo technology and High Precision Injection in the new BMW 750i.**

The new BMW 7 Series is quite clearly the perfect synthesis of elegance and sportiness. Its engines combine superior refinement with dynamic power and performance, making them simply ideal for this outstanding saloon. The new eight-cylinder power unit in the BMW engine range offers all these qualities at the highest level of power and performance: Displacing 4.4 litres, the new V8 with Twin Turbo technology and direct petrol injection (High Precision Injection) offers maximum output of 300 kW/407 hp in the speed range between 5,500 and 6,400 rpm. Peak torque is 600 Newton-metres or 442 lb-ft maintained consistently between 1,750 and 4,500 rpm.

An innovation in technology to be seen for the first time on an eight-cylinder gasoline engine is the arrangement of the turbochargers and catalysts in the V-section between the two rows of cylinders. This makes the engine unusually compact and at the same time allows re-arrangement of the intake and exhaust manifolds. The result is a reduction of manifold length and larger cross-sections, with pressure losses on the intake and exhaust side being minimised significantly.

The all-aluminium power unit of the BMW 750i offers the qualities typical of an eight-cylinder in exceptionally sporting style. The engine combines superior torque and pulling force from low speeds with an ongoing and truly impressive surge of power, the BMW 750i accelerating from a standstill to 100 km/h in just 5.2 seconds.



Power reserves remain more than sufficient also at higher speeds, acceleration thus continuing smoothly and swiftly all the way to 250 km/h or 155 mph, when the electronic control unit cuts in to keep top speed to this limit.

### **Twin Turbo technology for an ongoing surge of power and muscle.**

The power and performance so characteristic of the new V8 power unit is determined primarily by BMW's Twin Turbo technology. Featuring two turbochargers each supplying four cylinders with compressed air, this superior technology ensures unparalleled spontaneity in the engine's reaction to the gas pedal. The turbo "gap" so typical of a conventional turbocharged engine – the time passing until the turbocharger develops its special "boost" – has been eliminated completely.

The engine therefore revs up smoothly and full of power, maintaining its high level of torque throughout an exceptionally wide speed range. In its power characteristics it is reminiscent

of a significantly larger normal-aspiration engine, while the weight of the engine with its all-aluminium crankcase is significantly lower. Not only the weight, but also the fuel consumption of this new V8 power unit is exceptionally low for an engine in this performance category.

An important factor contributing to this superior fuel economy is double-VANOS infinite camshaft control now a regular feature of BMW power units. Double-VANOS is indeed one of the technologies which enables the V8 to develop exceptionally high torque from low engine speeds.

A key function in ensuring maximum fuel efficiency is provided by High Precision Injection, the second generation of direct gasoline injection featuring piezo-injectors positioned in the

cylinder head directly next to the spark plugs and delivering fuel into the combustion chambers at a pressure of 200 bar. This principle and the particular configuration of the fuel supply system guarantees extremely precise fuel dosage, with a positive effect on fuel economy, exhaust emissions, and engine noise.

Average fuel consumption of the BMW 750i in the EU test cycle is 11.4 litres/ 100 kilometres, equal to 24.8 mpg imp. Compared with the former model, this is an improvement by approximately 3 per cent, with an increase in engine output by 30 kW or 41 hp.

In other words, the new V8 power unit is entering the level of power and performance nowadays only offered by twelve-cylinder engines while at the same time offering the highest level of efficiency worldwide in the eight-cylinder segment.

CO<sub>2</sub> emissions by the new BMW 750i are 266 grams per kilometre, fulfilling both the US exhaust standard and the EU 5 classification in Europe.

**Even more power: straight-six with Twin Turbo and High Precision Injection in the BMW 740i.**

The second gasoline engine version of the new BMW 7 Series boasts the most powerful straight-six within BMW's complete range of power units. Like the new V8, the power unit featured in the BMW 740i comes with the combination of Twin Turbo technology and High Precision Injection exclusive to BMW, offering unparalleled power and performance combined with truly impressive all-round economy, particularly in consideration of the car's dynamic driving potential.

On this latest version of BMW's 3.0-litre straight-six, engine output has been increased by appropriate modification of the turbocharger system to 240 kW/326 hp. This peak power

comes at an engine speed of 5,800 rpm, with maximum torque of 450 Newton-metres or 332 lb-ft available from just 1,500 rpm.

On the straight-six with Twin Turbo technology, two exhaust gas turbochargers each deliver compressed air to three cylinders. The low inertia of these relatively small turbochargers ensures an optimum response with a virtually immediate surge of power and performance, building up turbocharger pressure without the slightest delay from low engine speeds.

The engine is therefore able to develop superior power and torque very quickly indeed, in a process further enhanced by infinite double-VANOS camshaft control. For the driver this unique quality of BMW's Twin Turbo gasoline engines means



a particularly superior form of elasticity and flexibility on the road. The extremely dynamic surge and build-up of power is also promoted by the high compression ratio of the engine made possible by High Precision Injection. With the fuel/air mixture being cooled by the direct injection of fuel, the compression ratio is higher than on a turbocharged engine with manifold injection. Engine efficiency is likewise improved in the process, offering more power on less fuel.

Yet a further feature is the central arrangement of the piezo-injectors between the valves and in the immediate vicinity of the spark plug ensuring particularly precise dosage of the fuel injected also on the straight-six power unit with High Precision Injection. The supreme standard of power and performance offered by the straight-six with Twin Turbo and High Precision Injection

was previously conceivable only with a far larger eight-cylinder. Now BMW's most powerful six-cylinder offers the same output and muscle on far less fuel. Engine weight is also much lower, inter alia on account of the all-aluminium crankcase, which naturally benefits the agility of the entire car: The BMW 740i accelerates to 100 km/h in 5.9 seconds and has a top speed limited electronically to 250 km/h or 155 mph.

Average fuel consumption in the EU test cycle is 9.9 litres/100 km (equal to 28.5 mpg imp), the CO<sub>2</sub> emission rating is 232 grams per kilometre. Compared with its predecessor, the new BMW 740i therefore offers 15 kW/20 hp more power and, at the same time, 12 per cent better fuel economy. And it almost goes without saying that the new BMW 740i fulfils all the requirements of the EU 5 emission standard.

**Ultra-modern diesel power:  
new straight-six with third-generation common-rail  
fuel injection in the BMW 730d.**

The first representative of a new generation of six-cylinder diesel engines is now making its world debut in the new BMW 730d. Introducing this outstanding engine, BMW is indeed further enhancing its worldwide leadership in the development of diesel power units.

Completely new from the ground up, this outstanding engine consistently implements the BMW EfficientDynamics development strategy by enhancing output and performance on less fuel and with lower emissions. Displacing 3.0 litres, the power unit develops maximum output of 180 kW/245 hp at engine



speed of 4,000 rpm. Maximum torque of 540 Newton-metres or 398 lb-ft comes at just 1,750 rpm, meaning that compared with its predecessor the new BMW 730d offers an increase in output by 10 kW/16 hp on fuel consumption down by 10 per cent. As a result, the new BMW 740d clearly ranks right at the top in the luxury segment in terms of all-round economy.

Both the crankcase and the cylinder head on the new diesel engine are made of ultra-strong aluminium alloy. The thoroughly upgraded turbocharger system with variable intake geometry ensures superior development of power and performance tailored harmoniously to current driving conditions and requirements. Fuel is supplied by third-generation common-rail direct injection incorporating piezo-injectors and operating at a peak pressure of 1,800 bar.

The injectors positioned in the centre of the combustion chambers and the valves in vertical arrangement guarantee a smooth and constant combustion process and help to reduce raw emissions at the same time. The diesel particulates filter and the oxidation catalyst are housed in the same unit positioned close to the engine directly downstream from the turbocharger turbine. A newly developed cylinder head made of aluminium serves to optimise engine acoustics, with engine noise and vibrations in the warming-up phase minimised also through the use of innovative ceramic glow plugs again serving to enhance engine efficiency. A further feature also important in this context is that the new diesel engine, through its lower height and the rearrangement of the chain drive and vacuum pump, offers optimum conditions for fulfilling future demands and standards in pedestrian safety.

Weighing 185 kg or 410 lb, the new six-cylinder diesel is another 5 kg lighter than its predecessor. Again, this optimisation of weight serves to enhance not only the efficiency of the entire vehicle, but also its agility and dynamic handling on the road: The new BMW 730d accelerates to 100 km/h in 7.2 seconds and reaches a top speed of 245 km/h or 152 mph. Offering average fuel consumption of 7.2 litres/100 kilometres (equal to 39.2 mpg imp) in the EU test cycle, the BMW 730d is at the same time the most economical car in its segment, maximum cruising range of more than 1,100 kilometres or 680 miles likewise setting a new standard.

The CO<sub>2</sub> rating of the new BMW 730d is 192 grams per kilometre, and the new diesel engine naturally also fulfils all the requirements of the EU 5 emission standard.

### **BMW EfficientDynamics: exemplary fuel economy and emission control also in the luxury range.**

Offering a large number of efficiency-enhancing technologies on and around the engine, all versions of the new BMW 7 Series come as standard with a particularly good balance of performance and economy. Brake Energy Regeneration, for example, ensures intelligent management of the flow of energy on all model variants, concentrating the generation of electric power for the car's on-board network on overrun and application of the brakes.

This serves to charge the car's battery without using any power from the engine and, accordingly, without drawing any energy from the fuel required. As long as the engine is pulling the car, on

the other hand, the alternator generally remains disengaged in order to avoid any additional use of power actually required for the car's performance.

Apart from particularly efficient generation of electric power, this also means more drive power and muscle for extra driving dynamics, for example when accelerating.

On-demand control of the cars' ancillaries also serves to further optimise the all-round efficiency of the BMW 7 Series. The uptake of power by the fuel and steering assistance pumps, for example, may be reduced significantly as a function of driving conditions, saving energy in the process. The belt drive on the a/c compressor is fitted with a clutch for the same purpose, the compressor being automatically disengaged as soon as the

driver or passengers switch off the air conditioning. Again, this reduces the drag force of the compressor to an absolute minimum.

Apart from tyres with minimum roll resistance, the BMW 730d also comes with optimised aerodynamic features in the interest of greater efficiency. The cooling air flaps on the BMW 740i and BMW 730d, for example, are controlled actively as required. Since, when closed, the flaps reduce the car's air resistance, they are opened only to meet a greater demand for cooling air.

**Featured as standard: high-precision,  
ultra-fast automatic transmission.**

Power is transmitted on the new BMW 7 Series in standard configuration by a further upgraded six-speed automatic transmission with a particularly sporting gearshift.

A newly developed control unit offering an even higher standard of performance and control functions, as well as modified converter technology, ensure even more precise selection of gears, the automatic transmission shifting from one gear to the other with incomparable spontaneity and efficiency, benefiting not only the high standard of motoring comfort, but also and above all the superior driving dynamics offered by BMW's luxury performance saloon. Thanks to direct access to the respective

gear lane, shifting down more than one gear is just as fast as the standard shift from one gear to the next. So whenever the driver kicks down the gas pedal in the interest of supreme performance and dynamic acceleration, the automatic transmission will shift back immediately by up to four gears. Being directly connected to the engine with minimum converter slip and exact selection of gears, finally, the six-speed automatic transmission ensures particularly economical running conditions.

The automatic transmission is controlled by an electronic gear selector lever using electrical signals instead of mechanical control functions. The parking position is set by pressing the P button on the upper side of the gearshift lever. Then, to activate the manual gearshift mode, all the driver has to do is push the gearshift lever to the left, then shifting gears smoothly

and conveniently by hand in sequential order. A display in the gearshift lever and a telltale light in the instrument cluster clearly present the gear currently in mesh.

**Innovative suspension technology for a unique combination of comfort and dynamism.**

The new BMW 7 Series offers a fascinating driving experience and at the same time meets not only the greatest demands in the world of modern motoring, but also a wide range of different requirements and preferences. The car offers supreme comfort together with maximum power and performance in the luxury class.

Just like the power units combining superior refinement with muscular output and dynamism, the suspension meets a wide range of virtually all demands and wishes, all-new suspension technology guaranteeing excellent body and roll comfort and at the same time giving the new BMW 7 Series a standard of

agility quite unique in the luxury segment. In addition, the driver himself can choose in any time which of these features he wishes to enjoy in a specific situation, influencing the set-up of this car through BMW's unique Dynamic Driving Control.

The new BMW 7 Series is the first BMW Saloon to feature a double-arm front axle. Very light thanks to its aluminium structure, this special configuration with its comfort-enhancing separation of wheel guidance and damping ensures a standard of motoring comfort and smoothness never experienced before.

Almost completely unaffected by lateral forces, the dampers are able to respond to bumps on the road with supreme smoothness and ultimate control. The influence of adverse forces on the steering is also minimised, while the kinematic configuration of

the double-arm axle ensures optimum adjustment of wheel camber to the road, optimising tyre grip on the surface in the interest of enhanced lateral acceleration.

The patented integral V rear axle specially developed for the new BMW 7 Series is likewise made of aluminium. Dynamic and drive forces acting on the wheel suspension are taken up by the wheel mounts, the rear axle subframe, the swinging arm and three track control arms.

The new elastokinematic swinging arm bearings provide interacting features and ride qualities enhancing both driving dynamics and motoring comfort. Effectively disengaging the road and the drivetrain, the axle also ensures a supreme standard of noise and vibration control. Rear axle air suspension

featured as standard on the BMW 750Li and the BMW 740Li maintains the car's ride height and ground clearance under all driving and load conditions. Any change in vehicle load is immediately taken into account and set off individually on each wheel, spring movements on account of bumps on the road and the inclined surface in bends almost completely avoiding the need any additional control action.

The new BMW 730d comes as standard with 17-inch light-alloy wheels. The BMW 750i and the BMW 740i, in turn, feature 18-inch light-alloy wheels. Runflat safety tyres measuring 245/55 R17 and, respectively 245/50 R18, again featured as standard, allow all models to continue for up to 250 kilometres or 155 miles, depending on the load they are carrying, after even a complete loss of air. And as a further point in this context,

the Tyre Defect Indicator permanently monitors air pressure and warns the driver with a loss of pressure of more than 20 per cent.

**Integral Active Steering controlling the steering angle both front and rear.**

The double-arm front axle and the integral V rear axle are also able to interact with innovative suspension and steering systems. Hence, the new BMW 7 Series may be equipped as an option with Integral Active Steering influencing steering forces as a function of road speed by means of Servotronic steering, controlling the steering angle by way of the additional Active Steering transmission on the front axle and, for the first time, changing the steering angle of the rear wheels by up to 3° through spindle drive and a concentrically arranged motor. At the front the Integral Active Steering varies the steering angle via an electric motor using data on wheel rotation speed, steering wheel movement, the yaw rate and lateral acceleration of the body

provided by sensors for optimum control, thus ensuring optimum steering behaviour in all driving situations.

At low speeds the rear wheels are turned against the steering angle on the front wheels to significantly enhance the agility and nimble performance of the BMW 7 Series, making the car's turning circle up to 70 centimetres smaller, depending on road speed. The significant improvement of agility provided in this way comes together with a further increase in motoring comfort thanks to the reduction of steering forces.

At higher speeds the Integral Active Steering ensures extremely comfortable and superior response on the road when changing lanes and in bends. The steering wheel angle on the rear wheels increases in this case in the same direction as the angle and

movement of the front wheels, enabling the BMW 7 Series to follow the driver's commands precisely and smoothly even in an abrupt steering manoeuvre.

The additional effect of Active Steering optimises steering response and reduces the movement of the steering wheel required. An additional advantage of rear-wheel steering comes to bear particularly on the rear seats, where any change in direction under dynamic driving conditions, while building up lateral acceleration, will not result in a similar increase in the yaw rate. And with these two factors being strictly separated and kept apart, the rear-seat passengers will enjoy an even higher standard of driving comfort. This combination of Active Steering on the front axle and rear-wheel steering unique the world over benefits both the motoring comfort and driving agility offered

by the car. In addition to the enhancement of stability in quick direction changes, Active Steering ensures even greater superiority and better handling in brake manoeuvres also in the new BMW 7 Series.

The combination of Active Steering with the DSC Dynamic Stability Control sensors, finally, prevents the car from swerving out of control when applying the brakes on different surfaces (modal split) by directly intervening in the steering.

**Driving dynamics tailored to the driver's requirements:  
Dynamic Damping Control and Dynamic Driving Control.**

The new BMW 7 Series comes as standard with electronic Dynamic Damping Control. The newly developed dampers adjust individually as required both to road surfaces and the driver's style of motoring in order to prevent any undesired movement of the vehicle which might possibly be caused by bumps in the road or a high level of lateral acceleration.

The driver is able to influence the degree of Dynamic Damping Control through BMW's new Dynamic Driving Control, choosing from a comfortable, a normal and a sporting set-up. BMW is indeed the world's first car maker to use a damping system for this purpose in which the inbound and rebound stages are

adjusted infinitely and independently of one another. This offers a unique combination of firm suspension characteristics, on the one hand, and a comfortable response to road bumps, on the other.

As an option the suspension of the new BMW 7 Series may be further enhanced by Dynamic Drive anti-sway control reducing body roll in fast bends and in a sudden change of direction. To do this sensors determine the side sway forces currently acting on the car, swivel motors in the anti-roll bars front and rear quickly and precisely building up appropriate counter-forces to keep the car smooth and stable.

### **Superior handling thanks to performance brakes and Dynamic Stability Control.**

Performance compound brakes in the new BMW 7 Series guarantee excellent stopping power and deceleration in every situation. Inner-vented brake discs and swing-calliper brake configuration front and rear optimised for maximum efficiency guarantee supreme resistance to fading and maximum brake comfort. On the lightweight brake discs the friction ring is welded on to the aluminium ring cover in a principle patented by BMW and now used also by other car makers serving, together with the aluminium calliper frame design on the front axle, to significantly reduce unsprung masses and prevent deformation of the discs on account of high temperatures even under extremely high brake loads.

The brake system is reinforced by a wide range of functions provided by DSC Dynamic Stability Control. Over and above its stabilising effect, DSC in the new BMW 7 Series comprises further functions in the interest of safe and dynamic motoring.

This include ABS anti-lock brakes, ASC Automatic Stability Control, Trailer Stability Control, CBC Cornering Brake Control, as well as DBC Dynamic Brake Control automatically maximising brake pressure on both axles as soon as it sees that the driver wishes to apply the brakes with full power.

Under extremely high brake temperatures, an appropriate increase in brake pressure generated automatically by the system prevents any decrease in brake power (Fading Compensation), giving the driver virtually the same brake

performance as before. Regular Dry Braking optimises brake performance in the wet, and the Standby Brake function builds up moderate brake pressure as soon as the driver takes his foot off the gas pedal very quickly, ensuring immediate brake response.

The Start-Off Assistant makes it easier to set off on uphill gradients by preventing the car from rolling back for a certain short period defined in advance. Cruise control with its brake function, finally, uses the automatic build-up of brake pressure by DSC to apply the brakes smoothly and comfortably at speed.

The new BMW 7 Series comes with a parking brake operated either electromechanically or hydraulically in the interest of extra safety and comfort. One of the parking brake features is the

Auto-Hold function ensuring additional comfort particularly in stop-and-go traffic: Whenever the car comes to a standstill – also on an uphill gradient – Auto-Hold automatically keeps the car in position by applying the brakes consistently until the driver presses the gas pedal again.

Pressing the DSC-Off button on the new BMW 7 Series, the driver also has the option to choose DTC Dynamic Traction Control as a special mode of DSC. DTC raises the DSC responds thresholds, making it easier to start off on snow or loose sand in the TRACTION mode. Yet a further option is to activate DTC via Dynamic Driving Control as part of the SPORTS+ mode for a particularly sporting and active style of motoring. If he wishes, the driver is also able to deactivate DSC completely. In the DSC-Off mode an electronic locking

function is activated on the rear axle differential through the rear-wheel brakes for a particularly sporting and ambitious style of motoring, for example when accelerating out of bends and sharp turns. To optimise traction, a drive wheel spinning in tight bends while accelerating is slowed down specifically as required, allowing the opposite wheel on the same axle to maintain its drive power and pulling force.

**Driving dynamics with intelligent control:  
Integrated Chassis Management and  
FlexRay technology.**

Interaction of the chassis and suspension systems is optimised by ICM Integrated Chassis Management networking the various functions with one another. High-performance electronic management analysing the behaviour of the car by evaluating numerous sensor signals provides an exact balance of drive and chassis functions within fractions of a second, ensuring maximum stability under all driving conditions.

And even when conditions suddenly change – for example on changing surfaces, when suddenly steering in another direction, when abruptly accelerating or applying the brakes –

ICM responds by precisely intervening in DSC, Dynamic Damping Control and, where fitted as an option, Integral Active Steering and Dynamic Drive.

Another feature unique the world over is the way chassis control systems and the drivetrain are networked in the new BMW 7 Series. This is done by the FlexRay high-speed data transmission system for quick and reliable coordination of all individual functions. Developed by a consortium of high-tech companies under the leadership of BMW, FlexRay offers a level of data transfer quite unprecedented in the past. Indeed, its transmission rate is 20 times higher than that of a conventional transmission system. On the new BMW 7 Series up to 16 control units are able to communicate with one another via FlexRay, ensuring extremely fast, precise and perfectly

coordinated operation of control units for the drive, suspension, damping, steering and brake systems in the BMW 7 Series. Longitudinal, lateral and vertical movements are controlled with a level of accuracy not to be found in any other car. BMW is the first car maker in the world to introduce FlexRay technology in its production models.

**Maximum agility, efficiency and solidity ensured by intelligent lightweight construction.**

The body of the BMW 7 Series offers an exceptionally good balance of optimised weight and all-round solidity. This is ensured by intelligent lightweight construction, appropriate use of high- and ultra-high-strength steel making the entire body structure extremely stable and the use of aluminium on numerous other components serving to enhance passive safety on reduced overall weight.

Compared with the former model, the bodyshell of the new BMW 7 Series offers an increase in torsional stability by approximately 20 per cent, again setting the foundation for outstanding driving dynamics.

The lightweight construction quality factor, as it is called, that is torsional stiffness versus the footprint and weight of the car, has also been improved significantly once again.

The combination of an aluminium roof with a steel body is absolutely unique in the 7 Series' luxury performance segment. The weight advantage provided by this solution as opposed to a conventional steel roof is approximately 7 kilos, the change in the centre of gravity obtained in this way making a significant contribution to the car's agility. The engine compartment lid, the doors, the front side panels and the front spring supports on the body are likewise made of aluminium. Together with the use of aluminium doors for the first time in a large-scale production vehicle, BMW is able in this way to reduce the overall weight of the car by another 22 kilos.



### **Exemplary protection of the occupants on all seats.**

High-load support structures, large and exactly defined deformation zones and highly efficient restraint systems coordinated by high-performance electronic control set the foundation for a high standard of passive safety in the new BMW 7 Series. The car is designed and built consistently to score the best grades in all crash tests applied the world over.

Forces acting on the body in the event of a head-on collision are fed along several load paths into the floorpan, the side frame, the bulkhead and the roof, being absorbed in the deformation zones and therefore kept away from the passenger cell. The load-bearing structures forming these load paths are made largely of multi-phase steel as well as a new generation of heat-moulded

steel. The use of these materials at all appropriate points makes an additional contribution in optimising the weight of the car. Inside, the new BMW 7 Series features not only frontal and hip/thorax airbags, but also curtain head airbags at the side – naturally all fitted as standard.

Three-point inertia-reel seat belts are likewise standard on all seats, and the restraint systems come with belt force limiters as well as a belt tightening function on the front seats. To prevent cervical spine injury in the event of an impact from behind, the front seats come as standard with crash-activated headrests, and ISOFIX child seat fastenings are featured as standard on the rear seats. All restraint systems are controlled and masterminded by a central electronic safety unit monitoring the type and severity of a collision and activating the most effective safety and

protection units in each case. To avoid collisions from behind, the new BMW 7 Series is also equipped with a warning system for motorists following the car.

This is an upgraded, enhanced version of the Adaptive Brake Lights introduced by BMW as the first car maker in the world: Whenever the driver applies the brakes particularly hard and whenever the ABS function is activated, drivers following from behind are warned by a higher level of brake light intensity on the new BMW 7 Series, prompting them to brake hard too.

With other manufacturers following BMW's example in the meantime and introducing comparable systems, legislation has now been passed for the design and operation of such Adaptive Brake Lights. Taking this legislation into account,

the extra-intense brake signal on the new BMW 7 Series is supplemented by a brake light flashing function. Yet a further point is that the hazard warning flashers are automatically switched on after applying the brakes particularly hard as soon as the car comes to a standstill.



**Optimum visibility: bi-xenon headlights featured as standard, Adaptive Headlights and variable light distribution as an option.**

Featured as standard on the new BMW 7 Series, bi-xenon dual headlights ensure not only optimum illumination of the road in the dark, but also, through their corona rings, offer an attractive and highly effective daytime lights function making the car much easier to recognise also from a distance.

The new BMW 7 Series comes as standard with a light sensor automatically activating the low-beam headlights as a function of ambient light. Yet another feature fitted as standard is the rain sensor registering the intensity of precipitation and automatically adjusting the operation of the windscreen wipers.

The optional Headlight Assistant ensures additional comfort when driving at night. Depending on the distance from approaching vehicles and vehicles driving ahead of the car, as well as ambient brightness, the Headlight Assistant automatically switches the high-beam headlights on and off.

The Adaptive Headlights likewise available as an option ensure appropriate illumination of the road ahead in bends and on winding roads, the swivelling motion of the headlights following the steering angle, the yaw rate, and the speed of the car.

The Bending Light function integrated in the headlights switches on an additional light beam whenever the driver bends into another road, illuminating the area ahead in the new direction. Adaptive Headlight Range Control featured for the

first time in the new BMW 7 Series also takes the vertical contours of the road into account, lowering and, respectively, raising the light beam when driving over crests, through tunnels or on steep ramps in order to illuminate the road ahead with optimum intensity but without dazzling oncoming traffic.

Variable light distribution is a yet further function of the Adaptive Headlights providing optimum illumination of the road ahead also on a straight stretch. Geared to the speed of the car, this innovative control system automatically increases the area of visibility by enlarging the light beam, making it easier, say, to recognise objects on the left-hand side of the road in the City Light mode at speeds below 50 km/h by broadening the distribution of light. In the Motorway Light mode, on the other hand, the driver's area of visibility is enlarged by increasing the

headlight range and intensifying the degree of illumination on the left-hand side. Whenever the driver switches on the foglamps, variable light distribution broadens the light footprint once again and brightens up the nearby area in front of the car at speeds up to 70 km/h. And at higher speeds this broader light pattern is further enhanced by an increase in headlight range.

**World debut:  
BMW Night Vision with detection of individual persons.**

BMW is the world's first car maker to offer a Night Vision system even able to detect and warn individual persons in the new BMW 7 Series. Indeed, this new generation of BMW Night Vision sets standards in avoiding accidents when driving at night.

The primary unit featured by the system is a thermal imaging camera transmitting a moving video picture enabling the driver to recognise people, animals and other objects also outside of the headlight footprint in a high-resolution image presented on the Control Display. And now this system is being supplemented for the first time by the detection and recognition of individual persons and their behaviour. This is done by a control unit

analysing video data and using intelligent algorithms to look specifically for pedestrians shown in yellow in the video. Should the system detect any danger to individual persons, the driver receives an additional warning.

To minimise the number of warnings and to restrict the system to pedestrians genuinely at risk, the control unit conducts a complex situation analysis, restricting the warning function to pedestrians in a warning corridor determined as a function of speed, steering angle and yaw rate. Whenever, for example, the system detects a person at the edge of the road, moving towards the road or already on the road, the driver is warned in good time by an appropriate symbol in the Control Display. And if the car is equipped with a Head-Up Display, the warning is also projected on to the windscreen right in front of the driver's

eyes. A number of other driver assistance systems likewise enhance both motoring comfort and active safety in the new BMW 7 Series. These systems support the driver in uncomfortable situations – for example traffic jams or when approaching unclear road signs – help him assess traffic conditions, and promote his awareness in demanding driving manoeuvres. As a result, the driver enjoys an even higher standard of Sheer Driving Pleasure in his new BMW 7 Series, without giving up control and responsibility for his car.

**Cruise control with a brake function featured as standard, Active Cruise Control with Stop & Go as an option.**

“Regular” cruise control with its braking function acts on engine management, the choice of gears and the brakes in order to keep the car at a specific speed determined by the driver in advance. The system permanently registers the car’s lateral acceleration and, if necessary, reduces road speed by intervening in engine management and the brake system, thus avoiding any loss of comfort or unpleasant behaviour in bends. It also helps the driver on downhill gradients – particularly when towing a trailer – by intervening in the brakes whenever necessary. Active Cruise Control with Stop & Go gives the driver even greater support and further benefits. Available as an option, this

system also features automatic distance control allowing the driver to comfortably cruise along on the motorway or country roads in stop-and-go traffic at very low speeds while consistently keeping an appropriate distance from the vehicle ahead. Particularly in slow-moving traffic, this sophisticated control system offers the driver a significantly higher standard of motoring comfort under otherwise unpleasant conditions.

The driver nevertheless retains his responsibility and remains in control of the car, intentionally being required after stopping for more than 3 seconds to briefly push down the gas pedal or press the Resume button in order to accelerate again. And the driver is also able to influence Active Cruise Control at any time, increasing or reducing the speed of the car by giving gas or applying the brakes.

Active Cruise Control with Stop & Go uses the latest generation of radar sensors, enabling the driver to choose from four different distance levels. As soon as the distance he has set to the vehicle ahead is no longer maintained, the system corrects the speed of the car by intervening in drivetrain management and applying the brakes. Indeed, the system is even able to bring the car to a standstill whenever required, again without requiring any intervention on the part of the driver, holding the car back as long as required.

The maximum stopping power generated by Active Cruise Control with Stop & Go is 4 metres/sec<sup>2</sup>, and is limited at higher speeds to a more comfortable level of 2.5 metres/sec<sup>2</sup>. Should intervention by the driver be required because the driver ahead is applying the brakes particularly hard, the driver will

be alerted by optical and acoustic signals to act accordingly, the activation thresholds of the Brake Assistant are lowered, and DSC Dynamic Stability Control is set to its Brake Standby function. This enables the driver, by responding quickly, to reduce the risk of a bumper-to-bumper collision.

The front-to-rear collision warning system is readily available independently of Active Cruise Control with Stop & Go.

**Always remaining precisely on course:  
Lane Change Warning and Lane Departure Warning.**

For the first time, the driver of the new BMW 7 Series has the choice of Lane Departure Warning helping him to remain alert at the wheel. The system detects any deviation from the right track and gives the driver a discreet but clear signal by generating vibrations on the steering wheel.

Lane Departure Warning is made up of a camera installed near the interior mirror on the windscreen, a control unit serving to compare data, and a signal processor generating discreet but clear vibrations on the steering wheel. Whenever the driver has indicated his intention to change the lane or his direction by setting the direction indicator, there is no warning signal.



The camera in the windscreen monitors road markings at least on one side of the road and their position versus the car, as well as the edge of the road/lane. It is able to look ahead about 50 metres or 165 feet and also operates at night whenever the headlights are switched on, thus making Lane Departure Warning a very practical feature in many situations on the road.

Lane Change Warning available for the first time in a BMW helps the driver overtake with extra safety and in greater style. Radar sensors at the rear of the car monitor traffic conditions on the adjacent lanes, covering an area extending from the blind angle on the lane directly next to the car up to a distance of 60 metres or almost 200 feet behind the vehicle. A triangular symbol lighting up permanently on the base of the exterior mirror shows the driver that there is another vehicle in this critical area.

As soon as the driver sets the direction indicator with the intention to change to another lane, he will be warned in such a situation by this LED signal flashing on and off. An additional warning comes from the steering wheel starting to vibrate, like the signal generated by the Lane Departure function.

**World debut in the new BMW 7 Series:  
Speed Limit Display.**

In combination with a navigation system and Lane Change Warning, the BMW 7 Series offers yet another exclusive function: the Speed Limit Display informs the driver at all times of the speed limit allowed on the route he is currently taking. This function enhances driving comfort particularly on long distances, always informing the driver of the current speed limit without requiring him to constantly watch out for traffic signs. Instead, a camera fitted near the interior mirror permanently monitors the signs by the road as well as variable speed limit signs on overhead displays (for example on the motorway), comparing this data with the data already saved in the navigation system.

Even when the speed limit has changed on account of temporary conditions – for example in the case of roadworks – priority is given to the data recorded by the camera. Other, individual factors are likewise taken into account: The speed allowed is presented to the driver in the instrument cluster or, as an option, in the Head-Up Display, thus significantly reducing the risk of breaking the speed limit by mistake.

### **Hard disc memory for audio files and the navigation system.**

To make the audio and navigation systems particularly convenient and easy to use, the new BMW 7 Series comes as standard with a hard disc memory. With its capacity of 40 GB, this memory provides exceptionally fast access to digital maps for the purpose of convenient navigation and may also be used for a large collection of music files.

The system gives the user the option to transfer music files from a CD, an MP3 player or a USB stick to the hard disc, thus keeping these music titles at the driver's disposal while on the road even if the CD, for example, is no longer in the car. This obviously offers a new level of versatility in enjoying the audio

programmes on board the car. Using iDrive, the driver or passenger may access either his personal collection of music, a CD he has brought along, another external player, or the radio programme.

The memory capacity available for music files is roughly the same as that of 100 music CDs. The individual titles are saved in the car's database, together with information on the artist and the title, and may easily be retrieved by alphabetical lists in the iDrive menu of the audio system.

And should such information on the titles and artists of a CD not yet be covered by the car's database, such data may be downloaded into the car free of charge by BMW ConnectedDrive using the mobile communication card installed in the vehicle.

The audio system in the new BMW 7 Series comes as standard with a DVD player, an AUX-In and a USB port. A six-DVD changer, a TV module and a receiver for Digital Audio Broadcasting (DAB) are also available.

The use of two DAB tuners in the car as an absolutely unique technology the world over guarantees a consistent level of quality in the reception of signals and also allows the user to receive both the audio programme and traffic information transmitted digitally by the same station at the same time.

And as soon as the car leaves the digital reception area of a given DAB station, the system automatically switches over to the reception of analogue FM signals from the same station. Multi-channel audio formats ensure additional audio quality

with the optional Professional HiFi system, providing a fascinating multi-dimensional sound effect with ideal clarity and in top quality. The new BMW 7 Series is also available as an option with the BMW Individual High End audio system, 16 high-performance loudspeakers with Neodym magnetic drive and extremely stiff Hexacone membranes, a digital nine-channel amplifier with maximum output of 825 W, and ultra-precise frequency switches guaranteeing unparalleled quality of sound.

Another feature quite unique in the automobile is Dirac Live technology processing sound signals and correcting the impulse response from the loudspeaker for linear and time-phased replay within the interior of the car. The entertainment systems available on the rear seats of the new BMW 7 Series likewise set new standards in comfortable and entertaining travelling.

These include two screens integrated in the front seat backrests, two headsets and two AUX-In plugs for a DVD player. In addition, all audio and video sources in the car may be used from the rear seats.

Enjoying the Rear Seat Entertainment Mid System, the occupants are able to operate the entertainment programme by remote control, presenting the programmes fed in via the respective AUX-In port on either of the two 8-inch monitors.

The Rear Seat Entertainment High System, in turn, features 9.2-inch monitors and a Controller on the centre console at the rear offering the same functions as the Controller on the centre console at the front and enabling users to operate both the navigation system and telephone functions. This allows

them, for example, to surf the net while travelling without the sites selected being presented on the front Display.

### **Navigation of the highest standard.**

The fundamentally optimised navigation system with excellent display resolution, ultra-modern 3D map images and numerous useful innovations is one of the highlights within the new BMW 7 Series. The system is truly fascinating not only through the new style and presentation of images, but also and above all through its highly efficient operation. Graphic presentation of the Controller on the screen, for example, facilitates the selection of functions and settings. Routes are presented on a split-screen on the left, while the appropriate preview map is shown on the right for quick orientation, presenting not only towns and streets, but also traffic information relevant to the route selected. Another unique feature is full-screen presentation on the extra-large Control Display clearly

illustrating even small details at very first sight. And as an option an assistance window offers further views and perspectives independently of the main map.

The special map perspective provided in the Highlight Traffic Conditions menu offers additional comfort not only in city traffic, with current congestion reports presented as road sections marked red. On the motorway this system gives the driver full orientation at all times, even when he is required to change his route on account of traffic congestion.

The new High Guiding function with integrated traffic lane recommendations likewise enhances the efficiency and ease of control offered by the new navigation system in the new BMW 7 Series. High Guiding transfers specific views and

perspectives such as turning rules at a complex road junction from the screen directly to the instrument cluster and, as an option, to the Head-Up Display. 3D map displays with high resolution make the new navigation system in the BMW 7 Series a unique and extremely pleasant experience.

Realistic presentation of elevation maps when driving through mountain and hilly areas, for example, makes route recommendations even clearer and more helpful. On smaller map scales down to 25 metres, the integrated, three-dimensional presentation of surrounding buildings provides additional orientation particularly in large towns and cities.

Presentation of outstanding buildings or landmarks on country roads provides further orientation, and the 3D presentation of

particular sights or points of interest by the new navigation system makes it easier for the user to determine whether he will soon be reaching a point where he would like to stop.

The Travel Planner with its Guided Tours function likewise offers optimum travel comfort, combining various destinations to form a personalised route with the desired stopping points called up automatically along the way. Supported by this virtual travel guide, the system is furthermore able on request to choose the most beautiful routes of particular interest. And should the driver wish to enjoy another favourite route, he is able to choose stopover points of his own preference.

The user wishing to plan his route at home or elsewhere on his PC is able to put together individual routes with any desired

number of stopovers via the new internet option, using BMW ConnectedDrive and the Route Planner, and to download the route chosen by a USB stick or mobile transmission into the car's navigation system.

### **World debut for full-scale use of the internet in the car.**

BMW is the world's first car maker to allow unrestricted use of the internet in the car by means of BMW ConnectedDrive. Access to the internet in the new BMW 7 Series is available as an option at particularly attractive flat rate terms.

As was already the case with the BMW Online internet service, BMW is therefore once again taking on a leading role in offering online services in the car.

Data transmission is based on the EDGE (Enhanced Data Rates for GSM Evolution) technology available on a broad scale (as opposed to third-generation UMTS technology) and operating at three to four times the speed of the GPRS mobile

transmission standard. BMW's iDrive system enhanced to an even higher level of perfection serves as the basis for using the internet in the car, the Controller taking on the function of a conventional computer mouse. Pushing the Controller in various directions, the user is able to move the internet site shown in the Control Display in the desired direction. Pressing the Controller activates the same function as clicking the mouse on a PC and serves to select links or menu items. Turning the Controller, finally, serves to scroll up or down to the internet site required.

Internet sites may be presented in high resolution on the Display. An additional function enables the user to enlarge the screen presentation by a factor of 1.5 or 2, and for reasons of safety internet sites may be shown on the Display only when the car is at a standstill.



**Automatic air conditioning:  
maximum comfort on all seats.**

The new BMW 7 Series offers excellent climate control and comfort in all situations, even in standard trim, automatic air conditioning giving the occupants front and rear their own, individual ambience. The driver and front passenger are able to choose their own individual temperature, air volume and distribution via the air conditioning control unit individually for the right- and left-hand side of the car according to their personal wishes and preferences.

The specific characteristics of fully-automatic control can then be set directly on the a/c control panel in five different levels of intensity. And last but not least the optimum climate control

chosen by the driver may be conveyed consistently and smoothly to all seats simply by pressing a button. The air conditioning in the new BMW 7 Series also offers highly effective cooling capacity.

Air vents in the B-pillars, auxiliary ventilation with a timer function and direct operation, fresh air and air recirculation filters, Automatic Air Recirculation, solar compensation and the use of residual heat all come as standard.

And as an exclusive feature on the new BMW 7 Series, BMW ConnectedDrive gives the user the option to control the auxiliary heating and ventilation also from a distance through his mobile telephone. Four-zone automatic air conditioning is available as an option, with individual temperature, air volume

and distribution control on the left- and right-hand side at the rear. This four-zone automatic air conditioning also comprises a separate control unit on the rear centre console as well as an additional electrical heater in the rear footwells.

The central comfort vent integrated in the dashboard at the front, finally, allows infinite variation of air supply, ranging from a discreet flow of air free of draughts to a very direct air flow for maximum cooling whenever required.

Enhancing four-zone automatic air conditioning to an even higher level in the long-wheelbase BMW 7 Series, a roof vent with additional controls is available in the rear passenger area, with air supplied by an air conditioner housed in the luggage compartment offer even greater comfort. In comparison with

a conventional system, this optimised air supply ensures a particularly well-balanced and gentle flow of air, perfectly supplementing the four-zone automatic air conditioning.

### **Innovative seat venting and massage seats at the rear.**

The new climate seats at the rear make long journeys in the car or trips in very hot weather even more pleasant. The climate seats are equipped with vents feeding cool air into the seat and backrest surface. And with this cool air being drawn out of the cool interior, the system is able to operate quite independently of regional climate conditions. To ensure extra relaxation on the rear seats – for example in between business meetings or on long journeys – the new BMW 7 Series is available with a special massage seat function. Twelve massage bubbles integrated in the seat backrest and six rotation bubbles moving in waves help to relax the occupant's thorax, shoulder and lumbar spine, with the additional option to repeat this very pleasant massage cycle several times in a row.

Active seats are available for both the driver and front passenger, again providing greater relaxation on long distances. With the seat bottom moving up and down intermittently, the occupant's muscles around the hips and lumbar spine are mobilised at regular intervals in order to prevent any feeling of cramp or fatigue.



**Special-effect interior lights,  
innovative contour sliding roof.**

Elegant light bars on the door openers, door frames, map pockets and door linings in the BMW 7 Series set additional highlights. A new feature is the emission of smooth and consistent light beams from a special light prism distributor. The ambient illumination available as an optional extra bathes appropriate parts of the interior in a soft and glowing light, such harmonious illumination not only offering better and even easier orientation within the interior, but also highlighting the particular style and sophisticated character of the car. Available as an option, the contour sliding roof raises the pleasure of travelling in the new BMW 7 Series to an even higher standard with its controlled feed of sunlight and fresh air. With its glass

panel measuring 60 x 92 centimetres or 23.6 x 36.2", the contour sliding roof gives the interior an even brighter and more generous look, a contour line at the front running parallel to the front edge of the roof optimising the looks of this special feature from outside. Within the car the sliding roof offers a very well-balanced and homogeneous appearance, electric operation of the roof eliminating the need for the usual recess with its grab handle, as is to be found on a conventional sliding roof. Both the glass roof and inner lining drive motors come complete with a trap release, while an innovative, multi-purpose wind deflector optimises the acoustic effect of the contour roof. With the roof open, the deflector is moved up to the appropriate position, effectively suppressing the low-frequency humming noise at medium speeds and the high-frequency noise otherwise experienced at high speeds.

**Everything in good sight: PDC Park Distance Control, back-up camera and Side View.**

The new BMW 7 Series comes as standard with PDC Park Distance Control at the rear, with the same function available as an option at the front. In both cases sensors measure the distance of the car from possible objects, acoustic signals varying in frequency as the distance decreases providing information on the space still available for manoeuvring. PDC is supplemented on the BMW 7 Series by a back-up camera, a video system facilitating the process of parking and manoeuvring in confined spaces or with poor visibility. The high-resolution images provided by the camera with its wide angle lens are presented in colour in an optimised perspective on the Control Display. At the same time interactive track lines show the optimum steering

wheel angle and the narrowest turn circle required for parking. Yet another Original BMW Accessory is the Side View system incorporating two additional front-end cameras integrated in the front bumper for better observation of traffic coming from the side. The image obtained in this way, which is also transmitted to the Control Display, offers not only additional comfort when manoeuvring, but also gives the driver an immediate overview of traffic conditions around the car when driving through a narrow gate or, say, leaving a car park.

**BMW ConnectedDrive with enhanced  
BMW Assist emergency call and BMW TeleServices.**

The innovative character of the new BMW 7 Series is further enhanced by the car's telecommunication systems and by the Online, Assistance and Service systems all comprised within BMW ConnectedDrive. A telephone preparation kit including a Bluetooth interface is also available as an option, serving to integrate numerous mobile telephones.

A further possibility is to integrate an Apple iPhone and other Smartphones, with parallel use of both telephone and music functions and a reliable supply of power to these systems at all times. The new BMW 7 Series is available as an option with the BMW Assist telematics service, yet another

BMW ConnectedDrive amenity with a wide range of individual functions. Apart from a personal enquiry service and the latest traffic information, BMW Assist now also offers an enhanced automatic emergency call function: In the event of a collision as of a certain severity the system automatically transmits data on the position of the vehicle and its specifications as well as measurements recorded by the car's sensors, providing information on the type of collision and the occupants' injury risk to a BMW Call Centre.

From here this information is passed on immediately to the nearest rescue service and at the same time the Call Centre will try to establish a voice connection to the car. BMW TeleServices are also available as part of BMW ConnectedDrive in the new BMW 7 Series, with a wide range of functions extending

from the Automatic BMW Tele-service Call through the Manual BMW Teleservice Call all the way to BMW Teleservice Diagnosis including BMW Teleservice Assistance.

The Automatic BMW Teleservice Call serves to automatically determine the type of service required next and an appropriate service date by means of the on-board Condition Based Service (CBS) diagnostic system. Then, as soon as the sensors determine the need for service involving, say, one of the car's operating fluids or components subject to wear such as engine oil or the brake pads, the car will send out an Automatic BMW Teleservice Call.

Data relevant to service is transmitted to the driver's BMW Service Partner, who will then contact the customer in order to

arrange an appointment at the workshop. In the event of an electronic defect, BMW Teleservice Diagnosis will transmit the appropriate defect codes to BMW Breakdown Assistance. Should there be the option to remedy the defect by re-setting the software on the respective control unit, the BMW Breakdown Assistance Service is able to send an appropriate command directly to the car, avoiding the need to go to the workshop.

### **World-first achievement: the Integrated Owner's Manual.**

The wide range of new features offered by the new BMW 7 Series is rounded off by the Integrated Owner's Manual installed in the car itself. Like conventional computer programs, this new feature offers the driver information on all of his car's functions and items of equipment conveniently within seconds via the iDrive system. Information required for control purposes is presented clearly and very understandably by means of animations with additional sound information and slide-shows. Short and simple text messages as well as interactive graphics promote the quick uptake of information. Introducing the Integrated Owner's Manual, BMW is setting a new milestone for convenient access to information on board the car. BMW is therefore becoming the first manufacturer to offer the customer

an information system providing control messages as part of the electronic control system in text, sound and pictures. The Integrated Owner's Manual is tailored individually to each model, even taking the car's specific equipment and options into account. Various access modes – short instructions, picture search, key terms, and context access – allow appropriate, individualised access to all information required. Particularly important information may be saved on the freely available favourite buttons, as with the reading signs provided by a browser on a computer. Full integration of the Owner's Manual in the car ensures permanent and rapid access to all data and provides the technical foundation for subsequently updating the car's documentation during the period of ownership. Once again, therefore, this very special feature highlights BMW's strategy of the future-oriented vehicle able to explain and present its own functions and features.





# Specifications.

## BMW 740i, BMW 750i, BMW 730d.



		BMW 740i Saloon	BMW 750i Saloon	BMW 730d Saloon
<b>Body</b>				
No of doors/seats		4/5	4/5	4/5
Length/width/height (unladen) <sup>1)</sup>	mm	5,072/1,902/1,479	5,072/1,902/1,479	5,072/1,902/1,479
Wheelbase	mm	3,070	3,070	3,070
Track, front/rear	mm	1,611/1,650	1,611/1,650	1,611/1,650
Turning circle	m	12.2	12.2	12.2
Tank capacity	approx ltr	82	82	80
Cooling system incl heating	ltr	9.0	13.5	8.9
Engine oil	ltr	6.5	8.5	7.2
Weight, unladen, to DIN/EU <sup>2)</sup>	kg	1,860/1,935	1,945/2,020	1,865/1,940
Max load to DIN	kg	645	630	640
Max permissible, overall	kg	2,505	2,575	2,505
Max axle loads, front/rear	kg	1,200/1,365	1,270/1,365	1,210/1,355
Max trailer load <sup>3)</sup> braked (12%)/unbraked	kg	2,100/750	2,100/750	2,100/750
Max roofload/max towbar download	kg	100/100	100/100	100/100
Luggage comp. capacity	ltr	500	500	500
Air drag	c <sub>x</sub> x A	0.30 x 2.41	0.31 x 2.41	0.29 x 2.41

		<b>BMW 740i Saloon</b>	<b>BMW 750i Saloon</b>	<b>BMW 730d Saloon</b>
<b>Power Unit</b>				
Configuration/No of cyls/valves		R/6/4	V/8/4	R/6/4
Engine management		MSD87	MSD85	DDE7.3
Capacity	cc	2,979	4,395	2,993
Stroke/bore	mm	89.6/84.0	88.3/89.0	90.0/84.0
Compression ratio	:1	10.2	10.0	16.5
Fuel grade <sup>4)</sup>	RON	min. RON 95	min. RON 91	Diesel
Max output	kW (hp)	240 (326)	300 (407)	180 (245)
at	rpm	5,800	5,500–6,400	4,000
Max torque	Nm/lb-ft	450	600	540
at	rpm	1,500–4,500	1,750–4,500	1,750–3,000
<b>Electrical System</b>				
Battery/location	Ah/–	90/luggage comp	90/luggage comp	90/luggage comp
Alternator	A/W	180/2,520	210/2,940	180/2,520
<b>Chassis and Suspension</b>				
Suspension, front		Double track control arm strut axle with separate lower track level, aluminium; small steering roll radius; anti-dive		
Suspension, rear		Integral V-multi-arm axle with steering function, aluminium; double acoustic insulation, with anti-squat and anti-dive		
Driving stability systems		DSC (incl ABS, CBC, DBC, ASC); VDC2 (Electronic Damper Adjustment) all featured as standard Dynamic Drive (roll stability system) as an option		

		<b>BMW 740i Saloon</b>	<b>BMW 750i Saloon</b>	<b>BMW 730d Saloon</b>
Brakes, front		Single-piston swing-calliper disc brakes (inner-vented)		
Diameter	mm	374 x 36, vented	374 x 36, vented	348 x 36, vented
Brakes, rear		Single-piston swing-calliper disc brakes (inner-vented)		
Diameter	mm	345 x 24, vented	370 x 24, vented	345 x 24, vented
Steering		Rack-and-pinion hydraulic steering with speed-related power assistance (Servotronic) and CO <sub>2</sub> optimised pump; 3.1 turns from lock to lock		
Steering trans ratio, overall	:1	19.1	19.1	19.1
Type of transmission		6HP19 TŪ	6HP26 TŪ	6HP26 TŪ
Gear ratios	I	:1	4.17	4.17
	II	:1	2.34	2.34
	III	:1	1.52	1.52
	IV	:1	1.14	1.14
	V	:1	0.87	0.87
	VI	:1	0.69	0.69
	R	:1	3.40	3.40
Final drive ratio	:1	3.73	3.46	2.81
Tyres		245/50R18 100Y RSC	245/50R18 100Y RSC	245/55R17 102W RSC
Rims		8 J x 18 EH2 + IS30	8 J x 18 EH2 + IS30	8 J x 17 EH2 + IS30

		<b>BMW 740i Saloon</b>	<b>BMW 750i Saloon</b>	<b>BMW 730d Saloon</b>
<b>Performance</b>				
Power-to-weight ratio, to DIN	kg/kW	7.8	6.5	10.4
Output per litre	kW/ltr	80.6	68.3	60.1
Acceleration 0–100 km/h	s	5.9	5.2	7.2
Top speed	km/h	250	250	245
<b>Fuel Consumption in EU Cycle</b>				
Urban	ltr/100 km	13.8	16.4	9.5
Extra-urban	ltr/100 km	7.6	8.5	5.9
Combined	ltr/100 km	9.9	11.4	7.2
CO <sub>2</sub> emissions, EU	g/km	232	266	192
<b>Miscellaneous</b>				
Emission rating		EU 5	EU 5	EU 5

<sup>1)</sup> Weight of car in road trim (DIN), plus 75 kg for driver and luggage. Height with roof aerial: 1,488 mm

<sup>2)</sup> For category II trailers only

<sup>3)</sup> May be increased under certain conditions

<sup>4)</sup> Engine output and consumption figures are on RON 98 fuel

# BMW 740Li, BMW 750Li.

		<b>BMW 740Li Saloon</b>	<b>BMW 750Li Saloon</b>
<b>Body</b>			
No of doors/seats		4/5	4/5
Length/width/height (unladen) <sup>1)</sup>	mm	5,212/1,902/1,478	5,212/1,902/1,478
Wheelbase	mm	3,210	3,210
Track, front/rear	mm	1,611/1,650	1,611/1,650
Turning circle	m	12.7	12.7
Tank capacity	approx ltr	82	82
Cooling system incl heating	ltr	9.0	13.4
Engine oil	ltr	6.5	8.5
Weight, unladen, to DIN/EU <sup>2)</sup>	kg	1,895/1,970	1,980/2,055
Max load to DIN	kg	630	630
Max permissible, overall	kg	2,525	2,610
Max axle loads, front/rear	kg	1,200/1,375	1,280/1,390
Max trailer load <sup>3)</sup> braked (12 %)/unbraked	kg	2,100/750	2,100/750
Max roofload/max towbar download	kg	100/100	100/100
Luggage comp. capacity	ltr	500	500
Air drag	c <sub>x</sub> x A	0.30 x 2.41	0.31 x 2.41

		<b>BMW 740Li Saloon</b>	<b>BMW 750Li Saloon</b>
<b>Power Unit</b>			
Config/No of cyls/valves		R/6/4	V/8/4
Engine management		MSD87	MSD85
Capacity	cc	2,979	4,395
Stroke/bore	mm	89.6/84.0	88.3/89.0
Compression ratio	:1	10.2	10.0
Fuel grade <sup>4)</sup>	RON	min. RON 95	min. RON 91
Max output	kW (hp)	240 (326)	300 (407)
at	rpm	5,800	5,500–6,400
Max torque	Nm/lb-ft	450	600
at	rpm	1,500–4,500	1,750–4,500
<b>Electrical System</b>			
Battery/location	Ah/–	90/luggage comp	90/luggage comp
Alternator	A/W	180/2,520	210/2,940
<b>Chassis and Suspension</b>			
Suspension, front		Double-joint tiebar spring-strut axle, aluminium; compensation of lateral forces, anti-dive	
Suspension, rear		Integral-IV-multi-arm axle, aluminium; Multi-dimensional suspension with anti-squat and anti-dive (air suspension with self-levelling standard on LWB version)	
Driving stability systems		DSC (incl ABS, CBC, DBC, ASC); VDC2 (Electronic Damper Adjustment) Dynamic Drive (roll stability system) as an option	

		<b>BMW 740Li Saloon</b>	<b>BMW 750Li Saloon</b>
Brakes, front		Single-piston swing-calliper disc brakes (inner-vented)	
Diameter	mm	374 x 36, vented	374 x 36, vented
Brakes, rear		Single-piston swing-calliper disc brakes (inner-vented)	
Diameter	mm	345 x 24, vented	370 x 24, vented
Steering		Rack-and-pinion hydraulic steering with speed-related power assistance (Servotronic) and CO <sub>2</sub> optimised pump; 3.1 turns from lock to lock	
Steering trans ratio, overall	:1	19.1	19.1
Type of transmission		6HP19 TÜ	6HP26 TÜ
Gear ratios	I	:1	4.17
	II	:1	2.34
	III	:1	1.52
	IV	:1	1.14
	V	:1	0.87
	VI	:1	0.69
	R	:1	3.40
Final drive ratio	:1	3.73	3.46
Tyres		245/50R18 100Y RSC	245/50R18 100Y RSC

		<b>BMW 740Li Saloon</b>	<b>BMW 750Li Saloon</b>
Rims		8 J x 18 EH2 + IS30	8 J x 18 EH2 + IS30
<b>Performance</b>			
Power-to-weight ratio, to DIN	kg/kW	7.9	6.6
Output per litre	kW/ltr	80.6	68.3
Acceleration 0–100 km/h	s	6.0	5.3
Top speed	km/h	250	250
<b>Fuel Consumption in EU Cycle</b>			
Urban	ltr/100 km	14.0	16.4
Extra-urban	ltr/100 km	7.7	8.5
Combined	ltr/100 km	10.0	11.4
CO <sub>2</sub> emission, EU	g/km	235	266
<b>Miscellaneous</b>			
Emission rating		EU 5	EU 5

<sup>1)</sup> Weight of car in road trim (DIN), plus 75 kg for driver and luggage. Height with roof aerial: 1,487 mm

<sup>2)</sup> For category II trailers only

<sup>3)</sup> May be increased under certain conditions

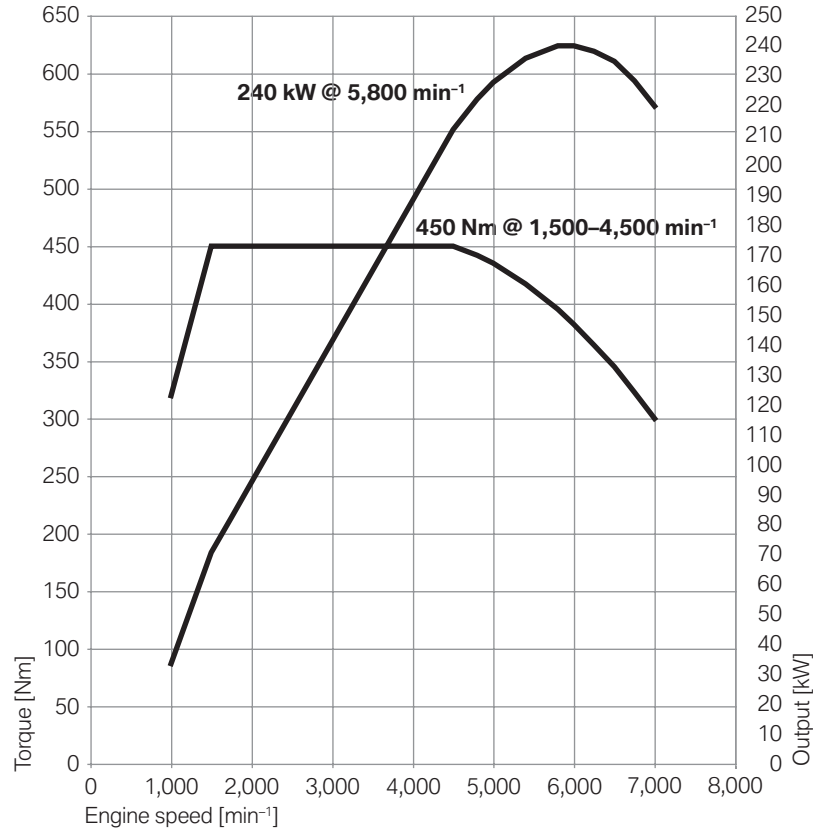
<sup>4)</sup> Engine output and consumption figures are on RON 98 fuel



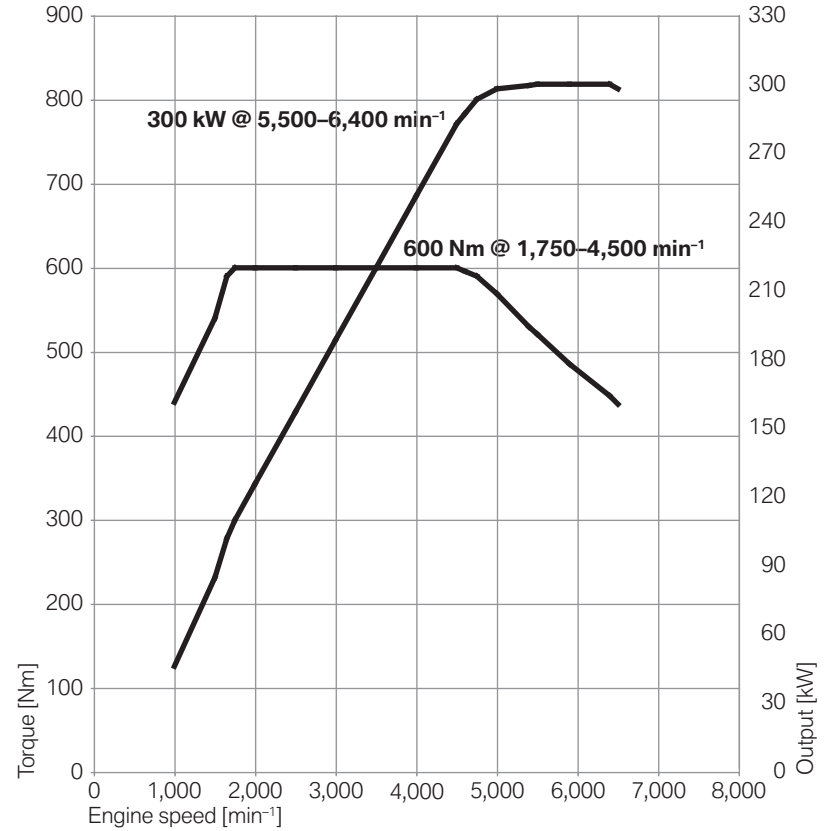
# Power and Torque Diagrams.



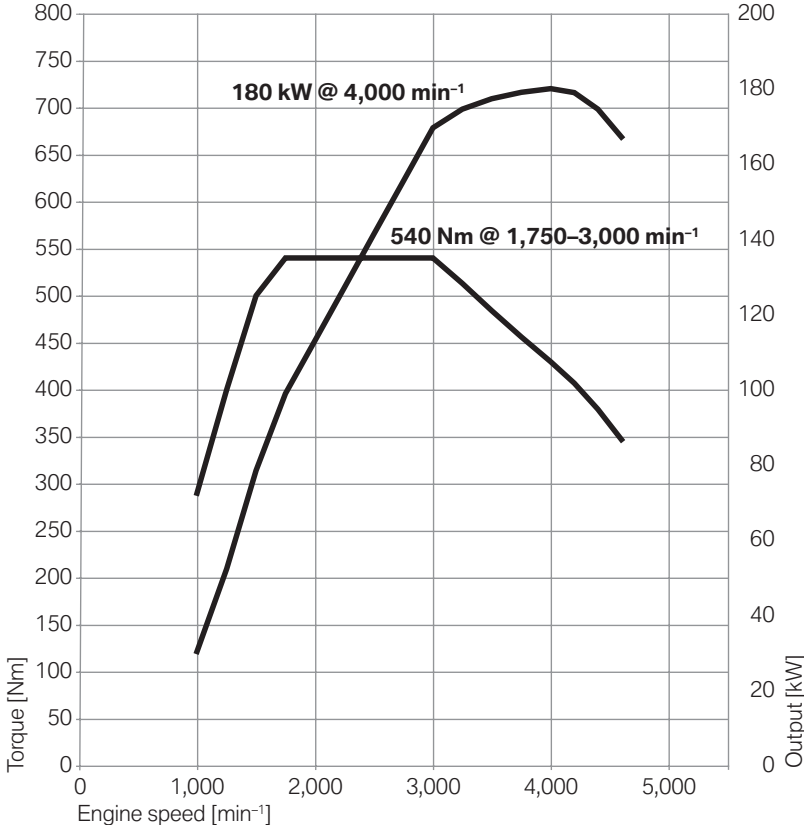
### BMW 740i.



### BMW 750i.

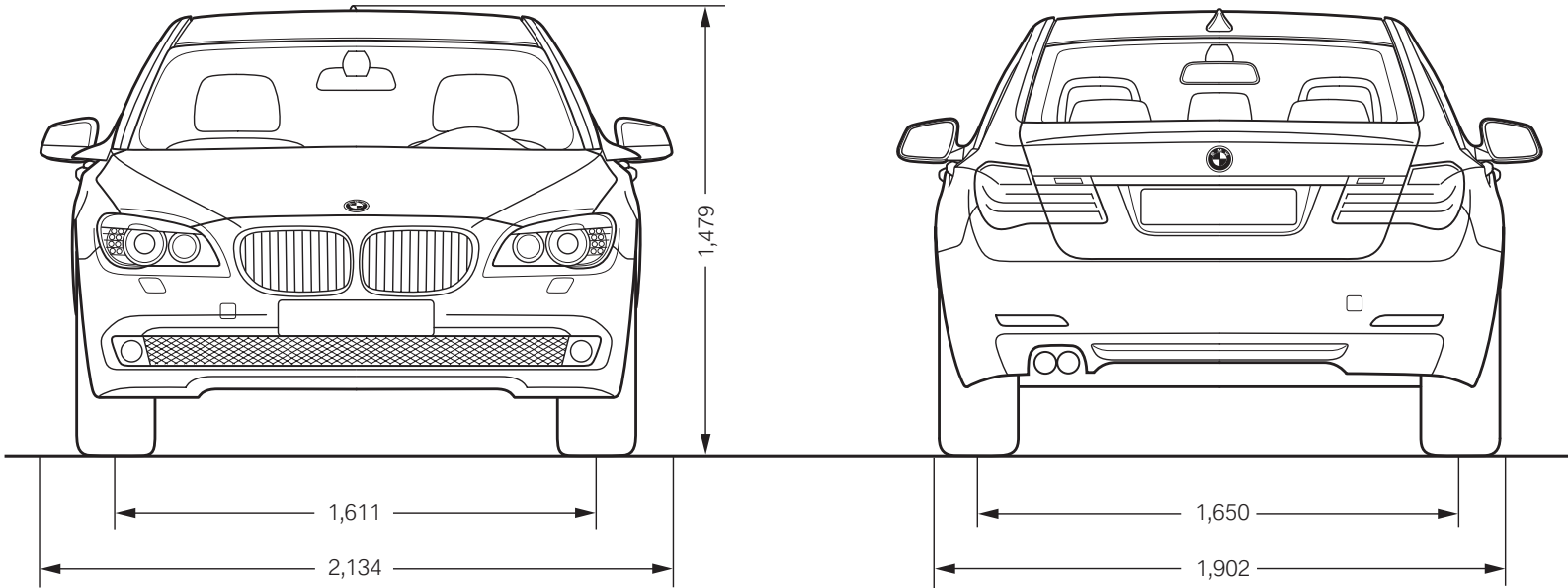


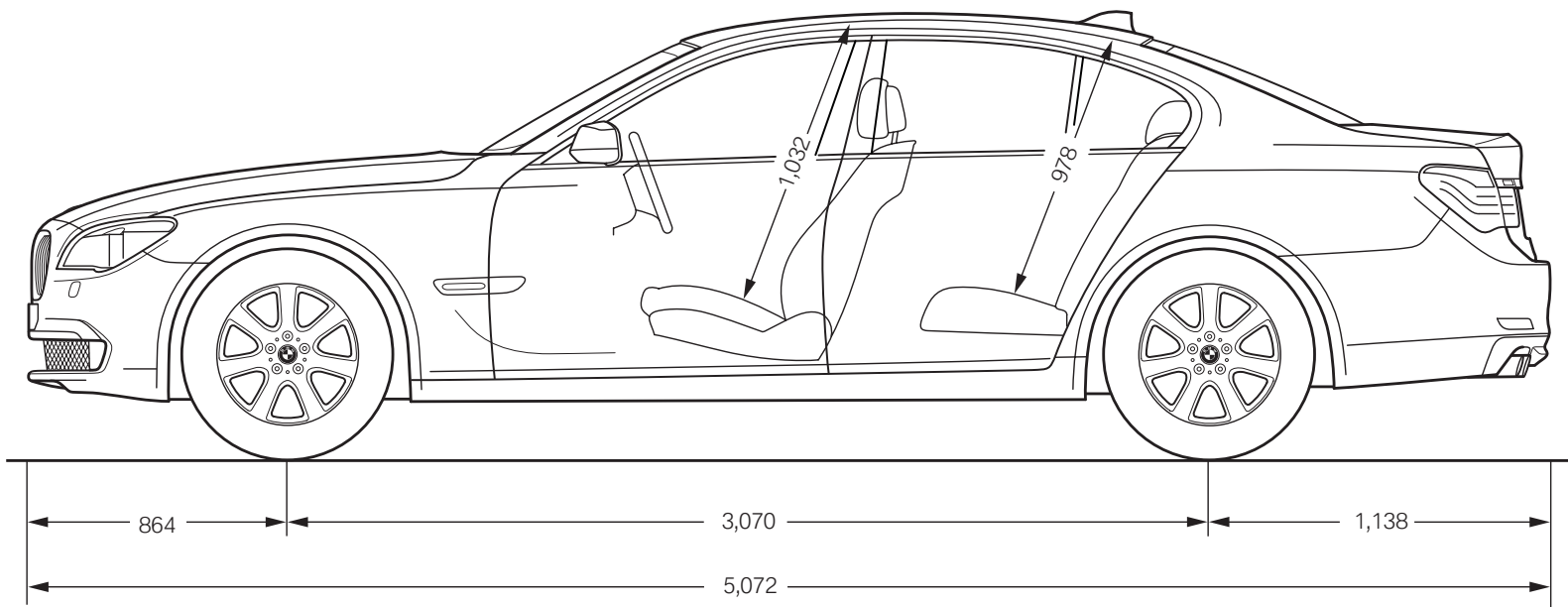
**BMW 730d.**

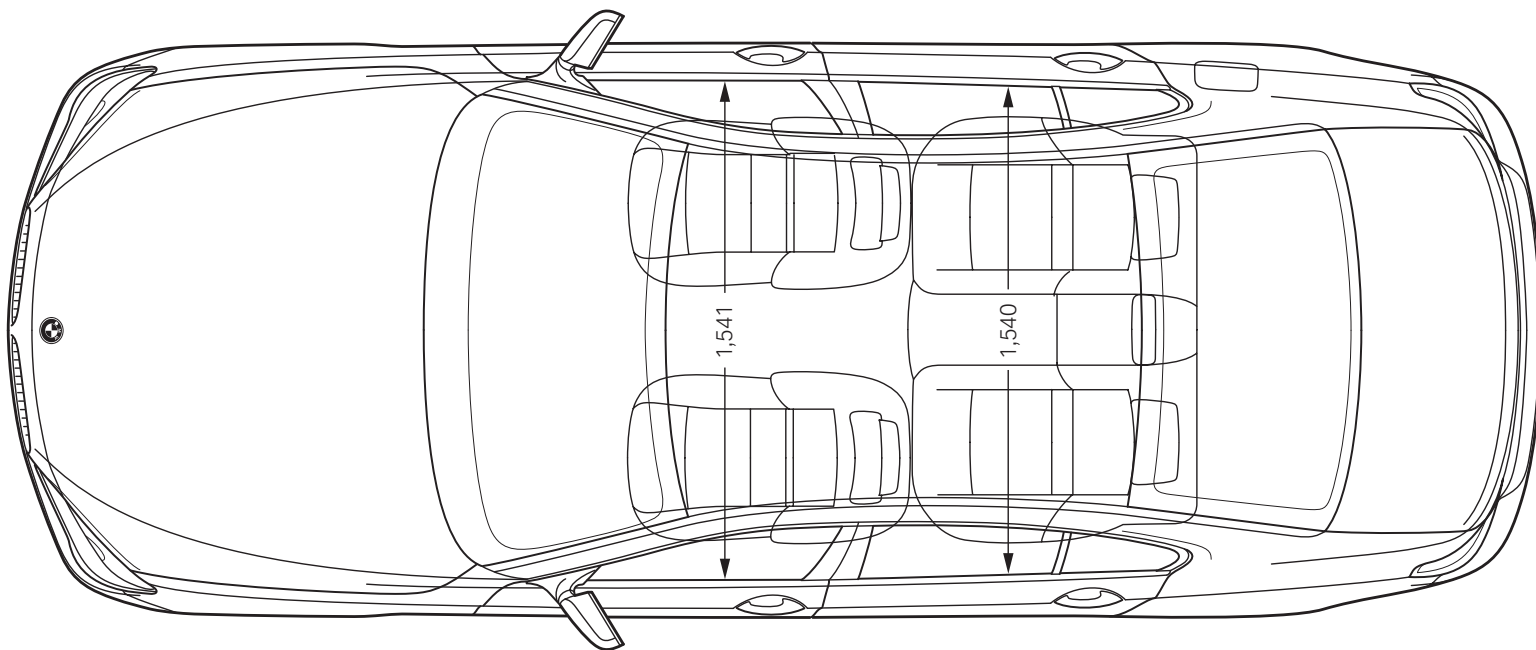




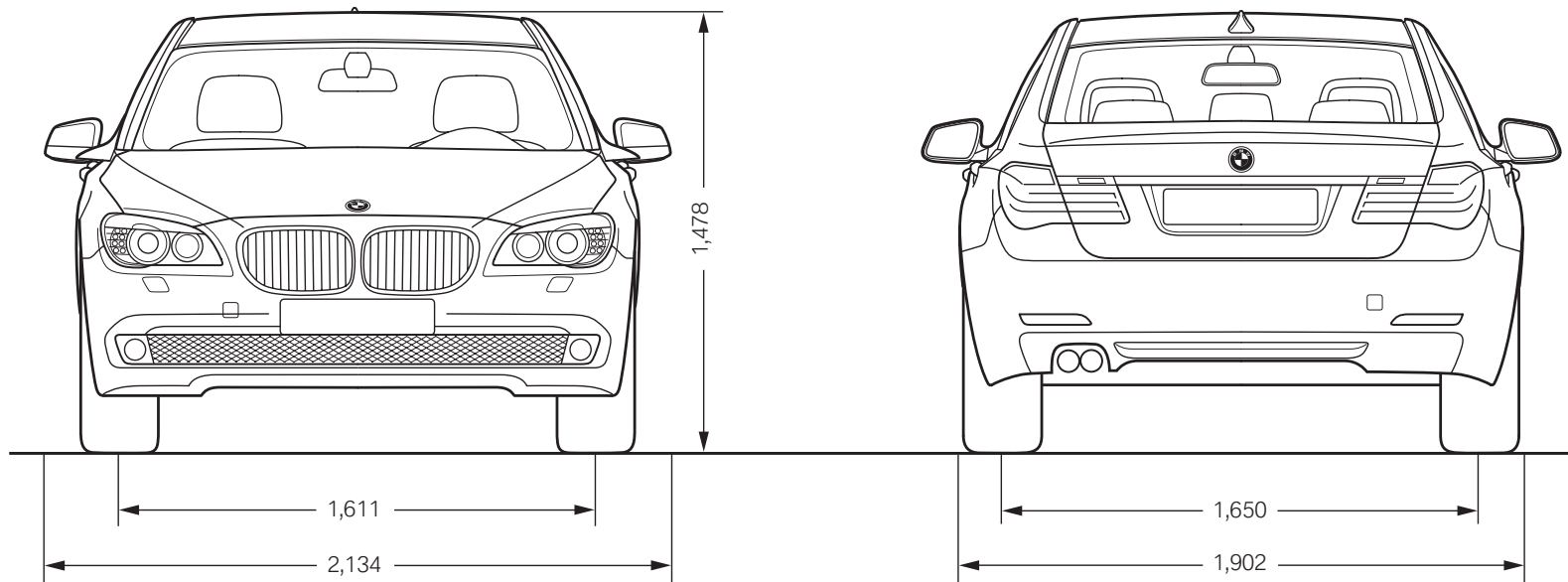
# Exterior and Interior Dimensions. BMW 740i, BMW 750i, BMW 730d.

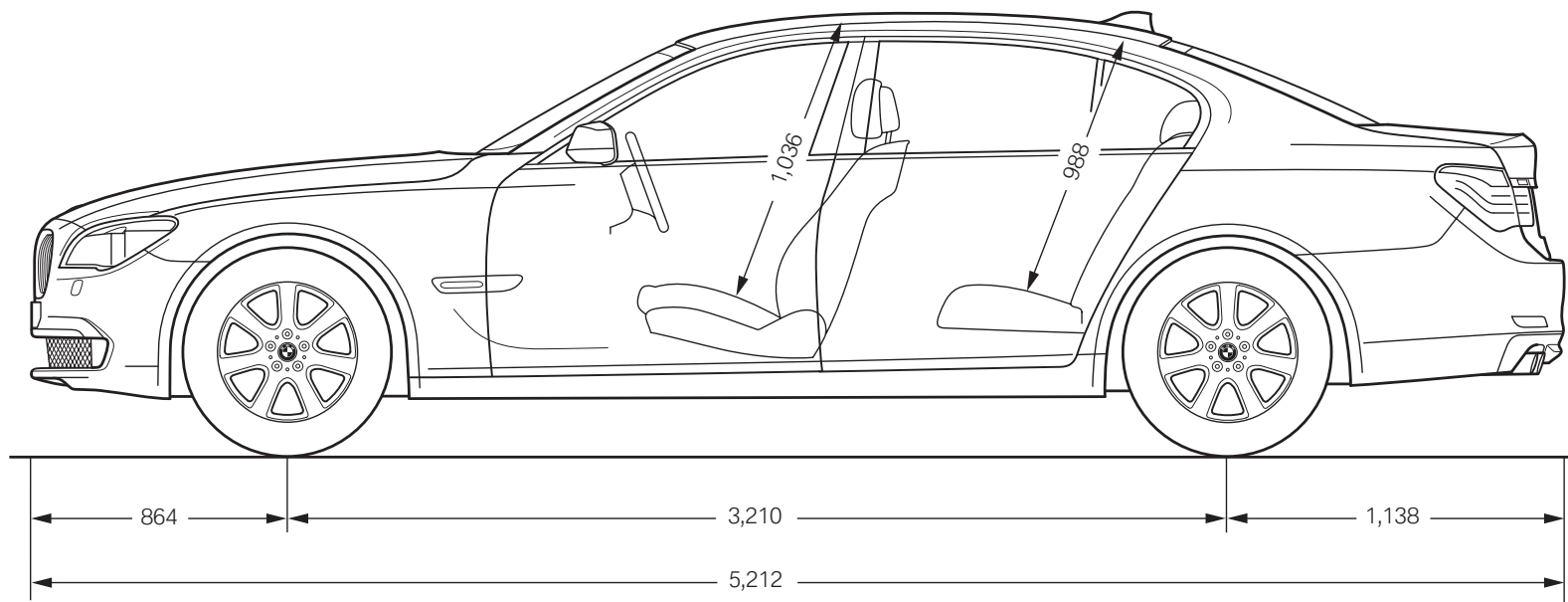


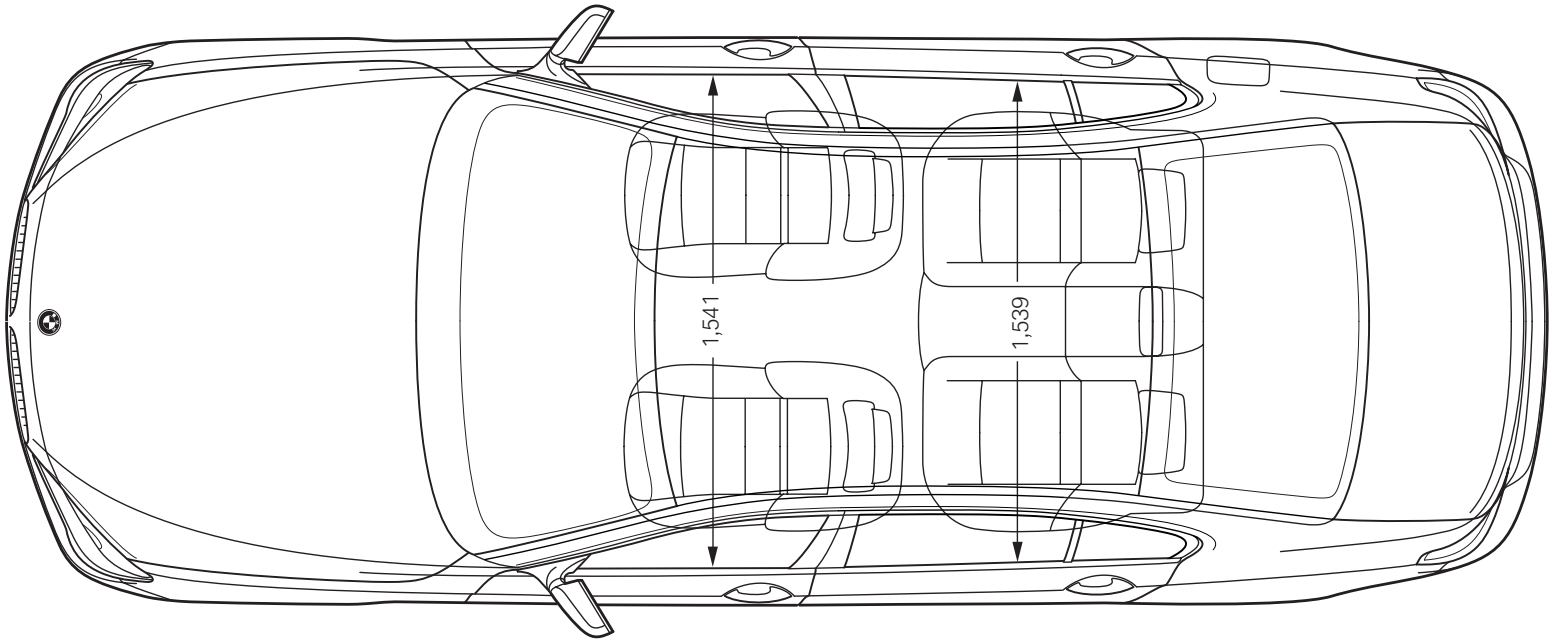




# BMW 740Li, BMW 750Li.









## Legend.

Page	Number	Captions
Title	P0044071	The new BMW 7 Series, BMW 730d
09	P0044042	The new BMW 7 Series, 750Li
10	P0044064	The new BMW 7 Series, 730d
17	P0044063	The new BMW 7 Series, 730d
20	P0044041	The new BMW 7 Series, 750Li
23	P0044037	The new BMW 7 Series, 750Li
28	P0044045	The new BMW 7 Series (Interior)
33	P0044051	The new BMW 7 Series, BMW iDrive with new Interaction Concept
43	P0044082	The new BMW 7 Series, BMW 750Li, BMW V8 gasoline engine with Twin Turbo and High Precision Injection
45	P0042406	BMW V8 gasoline engine with Twin Turbo and High Precision Injection
49	P0024576	BMW 6-cylinder petrol engine with Twin Turbo and High Precision Injection

Page	Number	Captions
51	P0044022	BMW 6-cylinder diesel engine with Aluminium Crankcase and 1,800 bar Piezo Injection
67	P0044033	The new BMW 7 Series, 750Li
70	P0044073	The new BMW 7 Series, BMW 730d, LED Headlights
76	P0044069	The new BMW 7 Series, 730d
85	P0044046	The new BMW 7 Series, Free Access to the Internet with BMW ConnectedDrive
89	P0044048	The new BMW 7 Series long wheel base
95	P0044039	The new BMW 7 Series, 750Li
117	P0044072	The new BMW 7 Series, BMW 730d



