

# The new BMW X5. Table of Contents.



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# 1. The original – now even more supreme. The new BMW X5.



More dynamic, efficient and luxurious than ever, the new BMW X5 continues to strengthen its leading position within the competitive environment of four-wheel driven premium vehicles. Selective design modifications authentically express enhanced sporting characteristics and a completely new engine portfolio combines the highest level of driving pleasure with unprecedented efficiency. Optimally enhanced intelligent four-wheel drive technology BMW xDrive ensures superior dynamics both on and off-road. A widened choice of driver assistance systems and BMW ConnectedDrive services underlines the innovative character of the new BMW X5. With these versatile qualities it presents itself as a modern and up-to-date further development of the Sports Activity Vehicle concept, which was established in 1999 with the launch of the first-generation BMW X5.

## **The design: Clear focus on enhanced sporting characteristics.**

The BMW X5's bodywork design is characterised by harmonious proportions expressing both the powerful elegance and agility of the vehicle. The newly interpreted design vocabulary typical of BMW X models comprises above all the structure of the front apron and the position of the standard fog lamps as well as a redesigned rear apron adopting the structure of the front end. An increase in the percentage of front and rear end surfaces painted in body colour emphasises the on-road characteristics of the BMW X5, thereby reflecting the vehicle's higher level of sportiness.

## **The engine range: Increased power output, optimised efficiency.**

A completely revised engine range ensures that the BMW X5 will continue to strengthen its leading role as the most dynamic vehicle in its segment. It comprises a V8 and a straight six-cylinder petrol power unit featuring BMW TwinPower Turbo and direct injection as well as two versions of the latest generation of BMW six-cylinder diesel engines. Power output ranges from 180 kW/245 bhp to 300 kW/407 bhp. In spite of significantly improved performance, fuel consumption and emission levels are up to 10 percent lower compared to their predecessors. An eight-speed automatic transmission contributes additionally towards enhancing the efficiency, dynamics and motoring comfort of the new BMW X5.

The model range is complemented by the BMW X5 M, an extremely performance-oriented exception in its competitive environment. This high M TwinPower Turbo technology. All versions of the new BMW X5 fulfil the EU5 emission standard in Europe and ULEV II in the USA respectively.

### **BMW xDrive: Newly adapted intelligent four-wheel drive technology.**

The intelligent four-wheel drive system BMW xDrive is a guarantee of characteristic driving dynamics on tarmac and supreme off-road traction. The xDrive technology featured in the new BMW X5 assists a dynamic driving style more intensively through the revised distribution of torque. Active Steering and Adaptive Drive with electronically controlled dampers and Dynamic Stability Control are optionally available for the BMW X5.

The MW X5 M is equipped with a M-specific suspension construction including Adaptive Drive. Furthermore, the vehicle is fitted with Dynamic Performance Control as a standard xDrive feature.

### **The interior: Luxurious and variable.**

In addition to the high seating position, the luxurious ambience contributes towards the characteristic driving experience provided by the BMW X5. Moreover, the interior stands out through a high level of variability. The luggage compartment can be extended from a capacity of 620 litres to a maximum of 1,750 litres. Thanks to third-row seats, the BMW X5 can accommodate up to seven persons.

### **Innovative BMW ConnectedDrive driver assistance systems.**

For the new BMW X5, the spectrum of features offered by BMW ConnectedDrive has been extended to comprise the driver assistance systems Active Cruise Control with Stop & Go function, Lane Departure Warning, Speed Limit Info and Side View. In addition, Head-up Display, Adaptive Cornering Headlights, High-beam Assistant, Park Distance Control and reversing camera including Top View are available.

### **Production at the BMW Spartanburg plant.**

The new BMW X5 is produced at the BMW Spartanburg plant. The BMW X6 and X6 ActiveHybrid are also built there. In addition to efficient and environmentally-friendly manufacturing processes, this production facility located in the US Federal State of South Carolina is characterised above all by a high degree of competence with regard to BMW X models.

## 2. Main characteristics.



- With an entirely revised range of engines, concise design modifications and innovate driver assistance systems, the new BMW X5 continues to strengthen its supremacy within the competitive environment. The consistent further development has led to even further improved standards in terms of sporting performance and efficiency, modern aesthetics and exclusivity. With greater supremacy than ever, the new BMW X5 clearly underlines the driving pleasure that is characteristic of a luxurious Sports Activity Vehicle. Consequently, it remains the benchmark and spearhead within this particular vehicle segment, which was initially established by the first generation of the BMW X5.
- Thanks to BMW EfficientDynamics, all versions of the new BMW X5 achieve the optimum ratio between performance and fuel consumption in each of their engine classes. The new top-of-the-range model is the BMW X5 xDrive50i, whose V8 power unit featuring BMW TwinPower Turbo and direct petrol injection (High Precision Injection) has an output of 300 kW/407 bhp. The new BMW X5 xDrive35i is powered by a 225 kW/306 bhp straight six-cylinder engine with BMW TwinPower Turbo, High Precision Injection and VALVETRONIC. The all-aluminium six-cylinder diesel with TwinPower Turbo and Common Rail direct injection featured in the BMW X5 xDrive40d delivers the same output and a maximum torque of 600 Nm. With an average fuel consumption of 7.4 litres/100 km in the EU test cycle, the BMW X5 xDrive30d with 180 kW/245 bhp achieves unprecedented, top-level efficiency values. All engines comply with the EU5 emission standard.
- All versions of the new BMW X5 are equipped with an eight-speed automatic transmission as standard. With its innovative gear set configuration as well as minimum converter slip, it offers a combination of outstanding shifting dynamics, optimised effectiveness and the highest degree of comfort. Consequently, the eight-speed automatic transmission is a further factor contributing towards enhanced road performance and efficiency.
- The BMW X5 M is available as an additional choice for particularly performance-oriented target groups. The high-performance model of the BMW M GmbH featuring four-wheel drive is powered by a 408 kW/555 bhp V8 engine with M TwinPower Turbo and direct fuel

injection, accelerating from 0 to 100 km/h in just 4.7 seconds. The BMW X5 M sets new benchmarks in a number of disciplines related to driving dynamics within the competitive environment of BMW X models. Power transmission is effected via an M Sports six-speed automatic gearbox. The suspension components and the Servotronic steering as well as the xDrive four-wheel drive system, including Dynamic Performance Control, feature M-specific enhancement. The vehicle also comes as standard with pneumatic suspension with automatic self-levelling on the rear axle as well as Adaptive Drive with electronically controlled dampers (EDC) and Dynamic Stability Control.

- The design of the new BMW X5 is characterised by well-balanced proportions that make the vehicle look exquisitely dynamic and elegant. Thanks to specific modifications to the front and rear end, all versions of the BMW X5 clearly visualise a marked increase in driving dynamics. Larger side air intakes at the front and an increased proportion of surfaces painted in body colour within the area of the front and rear end aprons point to an increase in engine output and emphasise the vehicle's orientation to the road. The new BMW X5's athletic character is additionally underlined by the reshaped rear bumper and the tailpipe surrounds.
- In conjunction with the optional Xenon headlights, the dual round headlights incorporate LED corona rings. They provide a particularly superior and effective daytime light function in typical BMW style. The L-shaped, redesigned taillights, each with two homogeneously illuminated LED light banks, reflect the brand-typical nighttime design of the rear end.
- The BMW X5 M is characterised by unique design features, the distinctively athletic styling of which reflect the model's high-performing qualities. The front end design featuring large air intakes corresponds to that of the BMW X6 M. Furthermore, differentiation is achieved, inter alia, through model-specific air vents integrated into the side walls and an extremely muscular looking rear apron surrounding the two twin tailpipes typical of the M concept.
- The interior of the new BMW X5 impresses with a high degree of variability and a luxurious ambience. The high seating position permits an optimum view of the current traffic situation. The standard equipment includes the latest generation of the iDrive control system, which offers additional possibilities for convenient and intuitive control of all standard and optional audio, navigation and telecommunication functions. The flexibly utilisable luggage compartment can be extended from a capacity of 620 litres to a maximum of 1,750 litres. Thanks to third-row seats, the BMW X5 can accommodate up to seven persons.

- The BMW xDrive intelligent four-wheel drive system distributes drive torque between the front and rear axels via an electronically controlled multi-disc clutch. Through joint efforts with the DSC Dynamic Stability Control function, distribution in terms of driving dynamics and traction is adapted directly and according to each particular situation. Optimised xDrive technology featured in the new BMW X5 contributes towards a further enhanced driving experience. Moreover, spring and damper adjustment of the BMW X5 xDrive50i and the BMW X5 xDrive40d have undergone model-specific modifications. The standard equipment of the new BMW X5 also includes the speed-dependent Servotronic steering assistance system. Newly devised Active Steering and Adaptive Drive with increased spread are optionally available. Using the Sport button located on the centre console and included in the range of Adaptive Drive options, it is now also possible to activate, in addition to a firmer damper adjustment, a more sporty power steering control map.
- Within the framework of BMW ConnectedDrive, the new BMW X5 offers a multitude of unique driver assistance systems and services for optimising comfort, safety and for the use of the infotainment functions. In addition to the Head-up Display, Adaptive Cornering Headlights, High-beam Assistant, Park Distance Control and reversing camera with Top View, the functions Active Cruise Control with Stop & Go function, Lane Departure Warning, Speed Limit Info and Side View are all available for the BMW X5.
- In addition to the extremely stiff body structure, standard equipment incorporating front and side airbags, side head airbags for the front and second-row seats, three-point automatic safety belts for all seats, belt tensioners and belt-force limiters as well as crash-active front headrests and the ISOFIX child seat system at the rear contribute towards optimising occupant protection. Furthermore, the new BMW X5 is equipped with dynamic brake lights, runflat safety tyres and a tyre defect indicator.
- High-quality materials, premium finish and a comprehensive range of standard equipment characterise the luxurious style of the new BMW X5. 4-zone automatic climate control is available as an alternative to the 2-zone version. The navigation system Professional features a hard disk storage unit for digital maps and the personal music collection. The audio equipment comprises an MP3-compatible CD player and an AUX-IN connection. Further options include, inter alia, a USB audio connection, the BMW Individual High-End audio system, a DVD changer and a DVD entertainment system. New exterior and interior colours and light-alloy wheels add to the modern look of the car.

Engine variants:

BMW X5 xDrive50i: V8 petrol engine with BMW TwinPower Turbo and direct injection (High Precision Injection),  
Displacement: 4,395 cc, power output:  
300 kW/407 bhp at 5,500 – 6,400 rpm,  
Max. torque: 600 Nm at 1,750 – 4,500 rpm,  
Acceleration [0 – 100 km/h]: 5.5 seconds,  
Top speed: 250 km/h,  
Average fuel consumption according to EU: 12.5 litres/100 kilometres,  
CO<sub>2</sub> emission level according to EU: 292 g/km, emission standard: EU5.

BMW X5 xDrive35i: Straight six-cylinder petrol engine with BMW TwinPower Turbo, direct injection (High Precision Injection) and VALVETRONIC fully variable valve control,  
Displacement: 2,979 cc, power output: 225 kW/306 bhp at 5,800 rpm,  
Max. torque: 400 Nm at 1,200 – 5,000 rpm,  
Acceleration [0 – 100 km/h]: 6.8 seconds,  
Top speed: 235 km/h,  
Average fuel consumption according to EU: 10.1 litres/100 kilometres,  
CO<sub>2</sub> emission level according to EU: 236 g/km, emission standard: EU5.

BMW X5 xDrive40d: Straight six-cylinder diesel engine with aluminium crankcase, BMW TwinPower Turbo and Common Rail direct injection (piezo injectors, max. injection pressure: 2,000 bar),  
Displacement: 2,993 cc, power output: 225 kW/306 bhp at 4,400 rpm,  
Max. torque: 600 Nm at 1,500 – 2,500 rpm,  
Acceleration [0 – 100 km/h]: 6.6 seconds,  
Top speed: 236 km/h,  
Average fuel consumption according to EU: 7.5 litres/100 kilometres,  
CO<sub>2</sub> emission level according to EU: 198 g/km, emission standard: EU5.

BMW X5 xDrive30d: Straight six-cylinder diesel engine with aluminium crankcase, turbocharger with variable turbine geometry and Common Rail direct injection (piezo injectors, max. injection pressure: 1,800 bar),  
Displacement: 2,993 cc, power output: 180 kW/245 bhp at 4,000 rpm,  
Max. torque: 540 Nm at 1,750 – 3,000 rpm,  
Acceleration [0 – 100 km/h]: 7.6 seconds,  
Top speed: 222 km/h,  
Average fuel consumption according to EU: 7.4 litres/100 kilometres,  
CO<sub>2</sub> emission level according to EU: 195 g/km, emission standard: EU5.

BMW X5 M: V8 petrol engine with M TwinPower Turbo and direct injection (High Precision Injection),  
Displacement: 4,395 cc, power output: 408 kW/555 bhp at 6,000 rpm,  
Max. torque: 680 Nm at 1,500 – 5,650 rpm,  
Acceleration [0 – 100 km/h]: 4.7 seconds,  
Top speed: 250 km/h  
(275 km/h with optional M Driver's Package),  
Average fuel consumption according to EU: 13.9 litres/100 kilometres,  
CO<sub>2</sub> emission level according to EU: 325 g/km, emission standard: EU5.



### 3. Design: Supreme sportiness elegantly showcased.



- **Harmoniously balanced proportions reflect elegance, presence and solidity.**
- **Distinctively styled front and rear ends reflecting enhanced sportiness.**
- **Interior with a generous and luxurious ambience.**

The body design of the new BMW X5 is characterised by well-balanced proportions that accentuate both the vehicle's powerful elegance and its agility. A long wheelbase, short front and rear body overhangs and large wheels provide a visual balance of the front and rear section of the vehicle, this serving as an indication of permanent four-wheel drive technology. The angles of all pillars have been designed to sweep upwards to merge at an imaginary vanishing point at the roofline, strengthening the impression of a body powerfully supported by the front and rear wheels.

Furthermore, the sides of the vehicle are elegantly stretched through the dominance of horizontal lines. The surface of the bonnet flows seamlessly into the waistline. The prominent, gently inclined contour line at door handle level extends from the front wheel arches to the rear of the vehicle. Square-shaped, powerfully contoured wheel arches symbolise stability and presence.

The Sports Activity Vehicle boasts a dynamic, robust and elegant appearance, its design reflecting superior sportiness on the road, an excellent off-road potential and the premium character of a luxury-segment vehicle.

#### **Newly conceived, intensely road-oriented front end.**

With its distinctively contoured bonnet, large-sized BMW kidney grille and dual round headlights slightly cut off at the top, the new BMW X5 boasts a strikingly expressive front end that symbolises power and presence. The new interpretation of this look, which is characteristic of BMW X models, comprises in particular the structure of the front apron and the position of the fog lamps featured as standard. Due to an increased number of elements painted in matching body colour, the front end gives the impression of being nearer to the road surface.

At the same time, the increased size of both the inner and the two outer air intakes indicates the boosted engine output.

Hence, the newly conceived front end accentuates the BMW X5's further enhanced sporting performance.

The black plastic trim at the bottom edge of the body is now considerably narrower. A matt-finished silver underride protection extending across the entire width of the middle air intake, thereby emphasising the muscular features of this Sports Activity Vehicle, additionally accentuates the new BMW X5's robust character.

Together with the dual round headlights, the fog lamps, which are now situated higher and closer to the BMW kidney grille, form a triangular design typical of BMW X models. The visual unity of light sources resulting from this configuration serves to symbolise a particularly intensive focus on the road. The new BMW X5's headlight units strongly emphasise the exceptionally high quality. The technology-oriented structure of the cylinder-shaped light sources featured by the optional Xenon headlights is highlighted by a black matt-finished trim. Furthermore, LED corona rings serve as position lights and daytime driving lights. BMW's characteristic daytime driving light design is distinctively enhanced by the bright white beam emitted by these light sources.

### **Rear end with a powerful, sporting charisma.**

Here too, an increased number of surfaces painted in matching body colour give the rear end of the new BMW X5 a particularly elegant and at the same time sporting appearance. The newly conceived rear apron takes up the graphic structure of the front end. The intricately designed surrounds of the tailpipes, which are located far to the side, are painted in body colour, underlining the vehicle's premium character.

In the centre, a matt-finished silver underride protection emphasises the robustness and off-road suitability of the Sports Activity Vehicle.

Above the bumper, the rear of the BMW X5 is divided by parallel horizontal lines. The result is an accentuation of the width, highlighting the vehicle's muscular features.

The L-shaped, redesigned taillights, each with two homogeneously illuminated LED light banks, reflect the brand-typical nighttime design of the rear end. Additionally, the vehicle width is emphasised by the narrowly designed white light-bands of the reversing lights.

A new choice of body colours provides further visual enhancements. The colours Deep Sea Blue, Platinum Grey and Sparkling Bronze have been added to the range of metallic colours available for the BMW X5.

### **Interior: Luxurious ambience, generous amount of space, new leather colours.**

The interior of the BMW X5 is characterised by a generous amount of space and a modern, sophisticated design. Thanks to exceptional variability in a luxurious ambience, the highest demands with regard to functionality

are fulfilled in a particularly exclusive fashion. The horizontal structure of the dashboard and a harmonious match with the door trim underline the generous amount of passenger compartment space. Comfortable seats, high-grade materials and carefully matched colour combinations accentuate the premium character of this modern Sports Activity Vehicle. The optional leather trim Nevada is now also available in the colours Cinnamon Brown and Oyster. The choice of interior options has been complemented by a matt Satin Silver trim strip.

### **BMW X5 M: Typical M features for greater dynamics and exclusiveness.**

The design of the BMW X5 M expresses the extraordinary potential of this model with regard to driving dynamics. The front end design with large air intakes gives indication of the superior power of the V8 engine. Bonnet, front apron and a headlight design derived from the BMW X6 ensure a particularly dynamic appearance.

The proportions of the BMW X5 M reflect the variability of this Sports Activity Vehicle. However, model-specific air vents integrated into the side walls and likewise individually conceived 20-inch light alloys provide distinctive differentiation. Typical M sporting characteristics are also individually interpreted at the rear. The design of the rear apron of the BMW X5 M reflects tremendous power and presence. The two twin exhaust tailpipes surrounded by the rear apron are typical M features. Furthermore, the BMW X5 M now also features restyled LED taillights and particularly narrowly designed white light-bands for the reversing lights.

Compared with the BMW X5, the percentage of black plastic surfaces in the lower section of the body has been reduced on the BMW X5 M. In this way the road-orientation of the BMW X5 M is emphasised even further. Over and above that, all body elements fulfilling critical functions with regard to aerodynamics and the supply of cooling air have been clearly accentuated. With these unmistakable features typical of the M concept, the four-wheel drive, high-performance sports car expresses its very own individual character. At first sight, the BMW X5 M immediately reveals both power and exclusiveness.

The electrically adjustable and heated M seats featured in the BMW X5 M come in leather in BMW Individual Merino quality. The natural grain and the soft surface of this leather quality have a remarkably elegant look and a particularly pleasant feel.

The leather trim, which in addition to the centre console includes the armrest, door mirrors and door grab handles, is available in the colours Black, Silverstone and Bamboo Beige. The seats feature an M-specific seam

pattern. The M logo is additionally imprinted into the front seat headrests. An all-leather interior in Merino quality is also optionally available. This version includes additional leather surfaces on the back of the backrests and on the door panels as well as the leather colours Cinnamon and Sakhir Orange as further options to chose from.



## 4. The powertrain: Increased power, reduced emissions thanks to BMW EfficientDynamics.

- **Completely revised portfolio of petrol and diesel engines: power range from 180 kW/245 bhp to 300 kW/407 bhp.**
- **Eight-speed automatic transmission and comprehensive BMW EfficientDynamics measures as standard.**
- **Four-wheel drive high-performance sports car: BMW X5 M with 408 kW/555 bhp V8 engine and supreme dynamics.**

A completely revised engine range ensures that the BMW X5 will continue to strengthen its leading role as the most dynamic vehicle in its segment. The choice of petrol engines now comprises a V8 and a straight six-cylinder power unit, both of which feature BMW TwinPower Turbo technology and direct fuel injection.

In addition, two variants of the new generation of the BMW straight six-cylinder diesel engines are available. Both all-aluminium power units are turbocharged and utilise the latest Common Rail direct injection technology.

All power units available for the BMW X5 set the benchmark in sporting power development and efficiency in their respective engine class. They comply with the EU5 emission standard in Europe and with ULEV II in the USA respectively. Drive power of each engine is transferred via the standard eight-speed automatic transmission, whose outstanding efficiency also contributes towards a reduction of fuel consumption and emission levels.

All this is supplemented by BMW EfficientDynamics measures, the combination of which is adapted to suit each model. This technology, which also comes as standard, includes brake energy regeneration and demand-controlled ancillary components including the electric coolant pump, the map-controlled oil pump, the disengageable air conditioning compressor as well as a transfer box optimised for efficiency. Furthermore, the measures comprise intelligent lightweight construction, tyres with reduced rolling resistance and optimised aerodynamics including active air vent control. As a result of the comprehensive drive technology innovations and the consistent implementation of BMW EfficientDynamics, all versions of the new BMW X5 offer a ratio between vehicle performance and fuel consumption that is unrivalled in their respective competitive segments.

### **Petrol engines: Significantly increased output thanks to BMW TwinPower Turbo.**

Due to its V8 engine featuring BMW TwinPower Turbo technology and High Precision Injection, output of the new BMW X5 xDrive50i has increased by 39 kW compared with the predecessor model. The unique 4.4-litre engine, the turbochargers of which are located inside the V section between the cylinder banks, develops an output of 300 kW/407 bhp within an engine speed range of 5,500 to 6,400 rpm. Maximum torque is at 600 Nm between 1,750 and 4,500 rpm. The extremely spontaneous and fascinatingly high-revving V8 engine offers outstanding sporting performance and is at the same time the most efficient engine of its kind worldwide.

The BMW X5 xDrive50i accelerates from a standstill to 100 km/h in 5.5 seconds, reaching its top speed at 250 km/h. Average fuel consumption according to the EU test cycle is 12.5 litres/100 km. The CO<sub>2</sub> emission level is 292 grams/km.

Likewise, the second petrol engine variant of the new BMW X5 is characterised by significantly improved performance and impressive efficiency. The BMW X5 xDrive35i features the first straight six-cylinder to combine BMW TwinPower Turbo technology, direct petrol injection (High Precision Injection) and VALVETRONIC variable valve control. Its supercharging system where – adhering to the Twin Scroll principle – the ducts of three cylinders at a time are separated from one another both in the exhaust manifold and the turbocharger, and the further developed VALVETRONIC system lend the 3-litre power unit its fascinatingly spontaneous response behaviour. With 225 kW/306 bhp at 5,800 rpm, the engine surpasses its predecessor's maximum output by 25 kW. Maximum torque of 400 Nm is available between 1,200 and 5,000 rpm. The new BMW X5 xDrive35i sprints from 0 to 100 km/h in 6.8 seconds, top speed being 235 km/h. The significantly increased output is combined with an average fuel consumption reduced to 10.1 litres/100 km in the EU test cycle and a CO<sub>2</sub> emission level of 236 grams/km.

### **New generation of diesel engines in two output categories.**

The diesel engines available for the new BMW X5 also originate from a new generation of power units. An all-aluminium construction, the latest Common Rail direct injection technology with piezo injectors and a turbocharger provide both 3-litre straight six-cylinder engines with impressive power, awesome running refinement and unparalleled efficiency. A further reduction in weight compared to each of their predecessors additionally enhances the agility of the diesel engine variants that are on offer for the BMW X5.

Above all, the new BMW X5 xDrive40d is characterised by exceptionally high performance qualities. Thanks to BMW TwinPower Turbo technology and Common Rail direct injection, its power unit, which was first presented in the BMW 740d luxury saloon, delivers a maximum output of 225 kW/306 bhp

at 4,400 rpm and a maximum torque of 600 Nm available between 1,500 and 2,500 rpm. Torque of 450 Nm is already achieved at an engine speed of 1,000 rpm. More than 90 percent of maximum output is available within a range of 3,500 to 5,000 rpm. The new diesel has a maximum engine speed of 5,600 rpm.

The supercharging technology featured by the new high-performance diesel engine adheres to the Variable Twin Turbo principle. This means that initially, just above idling speed, a small charger is activated, with an additional larger charger being activated when higher torque is required. Spontaneous and consistent accelerating power allows the BMW X5 xDrive40d to sprint from 0 to 100 km/h in 6.6 seconds. Top speed is 236 km/h. Exceptionally sporty development of power is coupled with impressive efficiency. This is mainly due to the Common Rail technology, operating at a maximum pressure of 2,000 bar and guaranteeing an extremely accurately regulated fuel supply. The BMW X5 xDrive40d has an average fuel consumption of 7.5 litres/100 km in the EU test cycle and a CO<sub>2</sub> emission level of 198 g/km.

The second diesel variant in the model range is the new BMW X5 xDrive30d. Its straight six-cylinder engine is supercharged and has a variable turbine geometry and Common Rail direct injection operating at a maximum pressure of 1,800 bar. The engine generates its maximum output of 180 kW/245 bhp at 4,000 rpm, producing its maximum torque of 540 Nm between 1,750 and 3,000 rpm. The new BMW X5 xDrive30d accelerates from 0 to 100 km/h in 7.6 seconds and reaches a top speed of 222 km/h. In spite of having a 7 kW higher output than its predecessor, the vehicle's average fuel consumption in the EU test cycle is now 7.4 litres/100 km, a reduction of 10%. The new BMW X5 xDrive30d achieves a CO<sub>2</sub> emission level of 195 grams/km.

**Fitted as standard: Eight-speed automatic transmission with optimised shifting dynamics and unmatched efficiency.**

All new BMW X5 model variants are equipped as standard with an eight-speed automatic transmission. The new transmission combines shifting comfort, sporting characteristics and efficiency at an unprecedented level. It contributes even more significantly towards a reduction in fuel consumption and emissions than the six-speed automatic transmission featured in previous BMW X5 vehicles. The new eight-speed automatic transmission is characterised by minimum converter slip and an innovative gear set configuration that permits additional drive positions and a greater transmission ratio spread without having negative effects on size, weight and the system's intrinsic efficiency.

**BMW X5 M: Superior dynamics thanks to a V8 engine with M TwinPower Turbo.**

The new V8 high-performance power unit developed for the BMW X5 M offers performance characteristics that have been precisely adapted to the

character of this four-wheel drive high-performance model. The 4,395 cc eight-cylinder engine with M TwinPower Turbo and direct petrol injection delivers a maximum output of 408 kW/555 bhp at 6,000 rpm and a maximum torque of 680 Nm available between 1,500 and 5,650 rpm. The BMW X5 accelerates from 0 to 100 km/h in 4.7 seconds, top speed being 250 km/h (275 km/h with the optional M Driver's Package).

An innovative construction principle ensures development of power typical of the M concept. M TwinPower Turbo with Twin Scroll Twin Turbo technology and patented BMW Cylinder Bank Comprehensive Manifold fascinates through extremely spontaneous response, linear power build-up and a remarkably constant torque curve. Turbocharger and catalytic converters are located in the V section between the cylinder banks. The positioning of intake and exhaust ducts resulting from this facilitates shortened and widened pipes, minimising pressure losses on the exhaust side.

In addition, the cylinder-bank-comprehensive merging of exhaust gas flows from two cylinders at a time ensures optimum gas throughput. Separation of gas flow is continued until the gas reaches the turbine wheel, spooling the two twin-scroll turbochargers without back-pressure. Maximum supercharging pressure of the system is 1.5 bar. The implementation of Twin Scroll Twin Turbo technology with Cylinder Bank Comprehensive Manifold supercharging ensures unique utilisation of potential. The impressive development of power is accompanied by a fascinating engine sound that accentuates the high-revving characteristics and linear power build-up with a dynamic acoustic effect typical of BMW M automobiles.

The M TwinPower Turbo offers outstanding performance coupled with a high level of efficiency. In addition to direct fuel injection (High Precision Injection), the BMW X5 M is equipped with numerous BMW EfficientDynamics technologies. Apart from brake energy regeneration, these also include on-demand control of the electric fuel pump and the disengageable a/c compressor as well as flow-controlled supply of hydraulic fuel for the Dynamic Stability Control system. The BMW X5 M achieves an average fuel consumption of 13.9 litres/100 km in an EU test cycle and CO<sub>2</sub> emission level is 325 grams per kilometre. The car fulfils not only the requirements of the US LEV II emission standard, but also the EU5 requirements in Europe.

### **M Sports Automatic with electronic gearshift selector and shifting paddles on the steering wheel.**

The six-speed automatic transmission featured for the first time on a BMW M model enhances the high-performance character of the BMW X5 M through spontaneous response, direct connection to the engine and a high level of shifting comfort. The new M Sports Automatic is commanded by an



electronic gearshift selector on the centre console. In addition to the D drive mode, the driver has a choice of the S and M modes, each of which offer even sportier shifting characteristics.

Manual gear shifting is effected via aluminium M-style shifting paddles located on the steering wheel. In manual mode, shifting is significantly quicker thanks to a new technology that reduces torque in the transmission through deactivation of individual cylinders, thereby accentuating the athletic character of the vehicle. In the M mode, each selected gear is held up to redline in order to give the driver perfect control of the vehicle under the most demanding driving conditions. Therefore, there is no automatic upshifting in this mode. A further option in the M mode is the activation of the Launch Control function, which enables the driver to accelerate from standstill with maximum performance. When the accelerator pedal is fully depressed, the M Sports Automatic automatically shifts up at the ideal time and with optimally controlled slip.



## 5. Suspension and driving experience: Unrivalled dynamics, uncompromising supremacy.

- **Double-track control arm front axle and lightweight integral rear axle.**
- **Intelligent BMW xDrive four-wheel drive with new configuration for supreme dynamic performance.**
- **Servotronic steering as standard, Active Steering and rear-axle pneumatic suspension optionally available.**

The suspension technology used on the new BMW X5 is the ideal prerequisite for supreme driving dynamics on tarmac. The suspension of the Sports Activity Vehicle features a double-track control arm front axle and a lightweight integral rear axle. The additionally available rear-axle air suspension, including automatic self-levelling, ensures a consistent ride height and unaltered driving characteristics at all times, regardless of load conditions.

The new BMW X5's rack-and-pinion steering comes as standard with the Servotronic function for speed-dependent power steering. Furthermore, an active steering function is available, which additionally varies steering transmission according to speed. Therefore, less steering wheel movement and effort are required when parking, whilst at high speeds a more indirect behaviour is achieved and the effect of power steering reduced in order to enhance directional stability and ride comfort.

### **Optimum supremacy with revised Adaptive Drive.**

A combination of active body-roll stabilisation and variable damping control incorporated into the revised Adaptive Drive system with increased spreading is the guarantee of unparalleled supremacy within the BMW X5 competitive environment. With the aid of sensors, Adaptive Drive permanently monitors and calculates data on the road speed, steering angle, lateral and longitudinal acceleration, body and wheel velocity as well as height levels. This information is used to control the swivel motors on the anti-roll bars and the electro-magnetic shock-absorber valves. In this way, body roll is reduced and damping is constantly regulated according to the current driving situation. The FlexRay high-speed data transmission system is used for fast and reliable coordination. In addition to selecting a firmer damper configuration, the driver can now even activate a more sporting control map of the steering assistance using the sport button on the centre console.

### **High-performance brake system and tyres with emergency running properties.**

The BMW X5's high performance brake system guarantees outstanding stopping power. Newly conceived lightweight brakes with 385 mm discs at the front and an aluminium floating-calliper construction on the front and rear axles of the top-of-the-range BMW X5 xDrive50i ensure extreme stability and maximum braking comfort.

Standard features on the new BMW X5 also include 19-inch light-alloy wheels on the BMW X5 xDrive50i and 18-inch light alloys on all other variants. The range of optionally available light-alloys for the new BMW X5 is complemented by three variants with a Y-spoke design and 19- and 20-inch wheels respectively. Runflat safety tyres, also supplied as standard, allow the driver to continue his journey and reach a garage even in the event of a total loss of tyre pressure. Depending on the load condition, it is possible to continue driving for a distance of between 50 and 250 kilometres. Furthermore, the tyre defect indicator permanently monitors the tyre pressure.

### **Intelligent BMW xDrive four-wheel drive technology: Fast response and precision for enhanced driving dynamics and optimised traction.**

Permanent four-wheel drive with electronically-controlled variable torque distribution between front and rear axles not only gives the new BMW X5 supreme traction on off-road terrain, but also superior driving dynamics on tarmac.

BMW xDrive technology was initially featured in the first-generation BMW X5 and has since then been constantly refined. It is an intelligent four-wheel drive system that uses a transfer box with an electronically controlled multi-disc clutch to constantly feed power as required to the axle that has the best contact with the road surface. As a result, xDrive also enhances driving stability when taking bends at higher speeds as it anticipates any tendency to oversteer or understeer and counteracts these forces effectively.

In normal driving situations, BMW xDrive distributes drive forces to the front and rear axles in a 40:60 split. Sensors constantly monitor slip on all wheels. Within a fraction of a second, the system is able to vary the power distribution ratio.

As opposed to previous four-wheel drive systems, BMW xDrive also acts anticipatorily and does not wait until a wheel begins to spin. Therefore, the vehicle is stabilised before the driver even notices the need to take action. Thanks to a new basic configuration, BMW xDrive featured in the new

BMW X5 contributes even more significantly towards an increase in driving dynamics. During cornering, driver power is increasingly shifted to the rear axle. After cornering, the system returns to the normal setting to ensure optimum traction and stability.

### **Precisely controlled coordination of xDrive and DSC.**

Fast and precise adjustment of drive power distribution is guaranteed by the combined efforts of xDrive, DSC (Dynamic Stability Control) and the Integrated Chassis Management (ICM). This combination is also complemented by the optionally available, revised Active Steering system.

The stabilising effect of the variable distribution of power reduces the necessity for the DSC system to intervene. The selective braking of individual wheels and a reduction in engine output are not required until the threshold is reached. Additional DSC functions include the ABS antilock braking system, Automatic Stability Control (ASC), a trailer stability control system, Hill Descent Control (HDC), Automatic Differential Brake (ADB-X), Dynamic Brake Control (DBC) and Cornering Brake Control (CBC). Moreover, the system comprises brake drying in wet conditions, the hill-start assistant, fading compensation as well as the standard cruise control system with braking function. The special mode Dynamic Traction Control (DTC) raises the tolerance of DSC, thereby facilitating an exceptionally sporting and active style of driving as well as the setting off in deep snow or loose sand with controlled drive wheel spin.

The new BMW X5 is also equipped with a parking brake that uses both an electro-mechanical and a hydraulic function activated or released at the push of a button. The parking brake features an Auto-Hold function that enhances comfort above all in stop-and-go traffic situations. As soon as the car comes to a standstill, Auto-Hold automatically holds the car in position by exerting constant pressure on the brakes also on a gradient until the driver presses down the gas pedal. The driver is not required to keep the brake pedal pressed down while the car is at a hold. The Auto-Hold function is activated and deactivated by a separate button on the centre console.

### **BMW X5 M: M suspension with Adaptive Drive as standard.**

The suspension developed specifically for the BMW X5 M and BMW X6 M with its double-track control arm front axle and integral rear axle offers M-specific geometry and damping. This is accomplished through optimised control-arm mounts and trailing arm hydrobushings at the front, as well as stiffer axle support mounts at the rear. The standard features also include a pneumatic suspension with self-levelling on the rear axle as well as Adaptive Drive with Electronic Damping Control (EDC) and Dynamic Stability Control.

The special version of Adaptive Drive also serves to lower the entire vehicle by 10 mm versus the regular BMW X5 and incorporates stiffer carrier springs, modified auxiliary springs, three-way support mounts and a damper control with reinforced connection to the body.

The Servotronic feature provides speed-dependent power steering, the degree of which is defined by two control maps. Apart from the standard configuration, the driver is able, using the Adaptive Drive button or the M Drive button, to call up the Sports mode. This activates an uncompromisingly sporting control map with higher control forces for particularly dynamic driving conditions.

When changing from Normal to Sports mode, the system alters not only the Servotronic control map, but also the damper setting, with the connection of the dampers to the body of the vehicle being significantly reinforced in the Sports mode. In conjunction with Dynamic Stability Control, this allows an exceptionally high level of linear lateral forces in fast bends.

Outstanding stopping power with fade reduced to a minimum is guaranteed by the high-performance braking system, combining four-piston fixed callipers at the front and floating callipers at the rear and featuring in each case large, internally-ventilated lightweight brake discs. The BMW X5 M comes as standard with a model-specific configuration of mixed tyres on 20-inch light alloys. The choice of tyres sized 275/40 R 20 at the front and 315/35 R 20 at the rear is a further result of the characteristic vehicle tuning with an emphasis on rear-wheel drive. The choice of this combination of tyre sizes, which is ideally suited to dynamic handling, promotes exceptionally good transmission of power to the rear axle as well as precise and razor-sharp steering behaviour.

**Dynamic performance at the touch of a button:  
M Drive button on the steering wheel.**

In addition to the DSC mode and the specific setup of the dampers and the steering, the driver may also configure the setup of the drivetrain on the BMW X5 M. Activating the Power mode influences both engine and transmission behaviour, and the driver can choose between the Sports and Efficiency driving programmes. The Sports programme allows precise control of engine power under the most dynamic driving conditions and ensures a linear build-up of power delivery. The Efficiency programme upshifts at earlier points not only to significantly reduce fuel consumption under normal driving conditions, but also to allow a relaxed style of driving by taking advantage of the power available at low engine speeds. As a result, efficient motoring is simultaneously coupled with supremacy.

The Power mode and the DSC and EDC settings can be preconfigured using the M Drive menu. With this combination of selected settings, the driver is able to obtain his own personalised vehicle setup. This can be saved and subsequently accessed by pushing the M Drive button on the steering wheel.

**BMW xDrive and Dynamic Performance Control with optimised dynamic performance settings.**

The intelligent four-wheel drive system xDrive featured by the BMW X5 M comes as standard in conjunction with Dynamic Performance Control. Through variable distribution of motive force between front and rear axles and between the right and left rear wheels, steering precision and track stability are noticeably further improved in all speed ranges. This means that stabilising DSC intervention is only required in the case of higher lateral acceleration. The driver experiences an unparalleled level of dynamics, agility and traction that redefine the benchmark in drivetrain and suspension technology.

The BMW X5 M utilises the potential of both systems in a way that is exclusive to the M concept. Using the DSC button on the centre console, the driver can activate the M Dynamic Mode (MDM). This mode raises the DSC control thresholds for brake intervention and engine power reduction and ensures the steering behaviour typical of BMW M by shifting the xDrive control features more to the rear wheels and interacting with Dynamic Performance Control in the process. MDM permits maximum possible speed in bends with significantly delayed control intervention when the vehicle is taken to its physical limits. Even under maximum load in the apex of a bend, the vehicle follows steering inputs with the highest precision, permitting outstandingly high speeds when exiting a bend. Moreover, the DSC Off mode can be activated at the push of a button.

## 6. Body and safety: Fascinating variability, uncompromising solidity.



- **Highly rigid body structure, comprehensive safety features.**
- **Highly variable interior space with optional third seat row.**
- **Adaptive Headlights with cornering lights as an option.**

Like all BMW X models, the new BMW X5 has an extremely rigid body that – despite of its high degree of torsional stiffness – has an optimum weight thanks to intelligent lightweight construction. For the benefit of passive safety, the forces acting on the vehicle during an accident are passed on via the engine supports and chassis along various load paths, keeping them away from the stable passenger cell.

In addition to front and hip/thorax airbags, the interior of the new BMW X5 comes as standard with side curtain head airbags. It also features three-point automatic seat belts for all seats, belt force limiters, belt tensioners and crash-active headrests at the front as well as the ISOFIX child seat system for the second-row seats. All occupant restraint systems are centrally and electronically controlled. In the event of an imminent roll-over, roll-over sensors ensure that the curtain airbags and the belt tensioners are activated.

### **High degree of variability in the interior, optional third-row seats.**

The BMW X5 offers driving pleasure on the most diverse terrain. The manifold possibilities of use also include a high degree of variability in the interior. The three seats in the back offer a generous amount of legroom and headway and guarantee an outstanding level of comfort even during long journeys. The luggage compartment offers a storage capacity of 620 litres. If more space is needed, the 40:60 split rear seats can be either partially or completely folded down. This function provides a totally flat loading area and a maximum storage capacity of 1,750 litres. The wide, horizontally split tailgate, the elements of which open in opposite directions, facilitates convenient loading. The lower section can be used as a platform and carries a load of 250 kilograms.

Third-row seats are optionally available for the BMW X5. These two seats are provided with headrests and three-point automatic seat belts. The seats can be individually stowed into the vehicle floor. Even when seven seats are in use, the new BMW X5 still has a luggage compartment volume of 200 litres.

### **Bi-Xenon headlights and Adaptive Headlights as an option.**

The dual round headlights of the BMW X5 so typical of the brand ensure excellent illumination of the road. Further standard features are the fog lamps and the light sensor, which automatically activates the low beam according to ambient brightness. Likewise fitted as standard is a rain sensor that determines the intensity of precipitation, thus facilitating automatic adjustment of the windscreen wipers.

In conjunction with the optional bi-Xenon headlights, the daytime driving lights and positioning lights incorporate LED light rings. BMW's characteristic daytime driving light design is distinctively enhanced by the bright white beam emitted by these light sources.

In conjunction with the optional bi-Xenon headlights, the new BMW X5 can be equipped with the latest generation of Adaptive Headlights with cornering lights, variable light distribution and adaptive headlight range control. Adaptive Headlights ensure that the road is sufficiently illuminated when taking bends. Each turning direction of the headlights is effected in relation to steering angle, yaw rate and vehicle speed. The cornering light function is integrated into the Adaptive Headlights. When cornering, an additional light cone is produced in order to illuminate the road in the direction the vehicle is moving.

The adaptive headlight range control function also takes vertical road contours into account. When driving over hillcrests, through tunnels or on steep ramps, the light cone is lowered or raised accordingly in order to ensure optimum illumination of the road without dazzling oncoming traffic. Adaptive Headlights also feature variable light distribution, a function that also guarantees an optimized illumination of the carriageway on straight roads. The innovative control system automatically facilitates according to speed an amplification of the field of vision through adequate widening of the light cone.

To avoid collisions from behind, the BMW X5 and the BMW X5 M are equipped with a special warning system for motorists behind. This is a further development of the Adaptive Brake Lights introduced by BMW as the world's first manufacturer to offer such a feature. When applying the brakes particularly hard and when ABS is activated, drivers following from behind are immediately alerted by the brake lights conspicuously flashing on and off, prompting drivers behind to brake equally as hard. After the car has come to a standstill following particularly powerful application of the brakes, the hazard warning flashers are automatically activated.





## 7. **BMW ConnectedDrive in the new BMW X5: Increased driving pleasure through intelligent networking.**

- **BMW-exclusive driver assistance systems and mobility services.**
- **New options: Active Cruise Control with Stop & Go function, Lane Departure Warning, Speed Limit Info, Side View.**
- **Unique in the competitive environment: Head-up Display and reversing camera with Top View.**

As part of BMW ConnectedDrive, the new BMW X5 offers a multitude of unique driver assistance systems and services for optimising comfort, the use of infotainment functions as well as safety. To meet all these requirements, the exchange of information between the driver, the car itself and the surrounding world is coordinated by BMW ConnectedDrive in a particularly intelligent, target-oriented manner. The task of selecting information and acting appropriately is intentionally left to the driver as the commander in control of all activities. Benefiting from BMW ConnectedDrive and the innovative driver assistance systems offered in this way, the driver gains greater competence, supremacy and safety in virtually all driving situations.

The Sports Activity Vehicle is the only vehicle in its competitive environment which can be equipped with a Head-up Display and a reversing camera including Top View. Further features now available for the new BMW X5 include Active Cruise Control with Stop & Go function and Lane Departure Warning. For the first time, customers of the BMW X5 and BMW X5 M can opt for the systems Speed Limit Info and Side View. Also, the selection of services in areas such as traffic information, emergency call functions, vehicle enquiry and office services, travel and leisure time planning as well as the Internet has been further enhanced.

### **Reversing camera with Top View: Perfect overview when manoeuvring the car.**

For comfortable parking and manoeuvring, the new BMW X5 is also available with Park Distance Control incorporating sensors at the front and rear of the vehicle as well as a reversing camera, which provides images presented in colour and in an optimum perspective on the control display. Interactive tracking lines show the driver the optimum steering wheel angle for parking as well as the tightest turning circle. The rear-view camera is particularly helpful when hooking up a trailer, a zoom function serving to enlarge the size

of the image around the towbar. Special static lines in the image help the driver correctly assess the distance to another vehicle or object while an interactive docking line geared to the angle of the steering wheel enables the driver to back up precisely to the trailer towbar.

Moreover, the reversing camera available for the BMW X5 is combined with the Top View system. In addition to the back-up camera and the PDC sensors, Top View uses two cameras in the side mirror, the data obtained in this way on the car and its surroundings being processed by a central computer. This serves to provide an overall picture presented on the control display and showing both the car and its surroundings from a bird's eye perspective. This clear overview then enables the driver to manoeuvre precisely even in confined space.

As a further option, the driver of the new BMW X5 can use Side View for assistance in appropriate situations. Side View uses two cameras integrated in the front wings of the car and serving to monitor traffic moving crosswise to the vehicle. The images obtained in this way are likewise transmitted to the control display and not only ensure additional comfort in manoeuvring but also provide an early overview of traffic conditions to the left and right of the car, particularly when driving out of a narrow and unclear driveway or car park.

### **Innovative services offered by BMW ConnectedDrive.**

The optional services provided by BMW ConnectedDrive for the benefit of the driver of the new BMW X5 are unique in their function the world over and truly fascinating. Through BMW Assist, BMW ConnectedDrive offers the driver a wide range of helpful and user-oriented support in many situations before setting off, while driving and at his destination. In all, BMW Assist offers an Enhanced Emergency Call function automatically locating the current position of the car, enhanced traffic information, a comprehensive Enquiry Service and the interactive My Info communication channel including the Google Send-to-Car function.

BMW TeleServices enable the driver, for example, to automatically arrange a service appointment for his car, data determined by the On-Board Condition Based Service diagnostic system on the current condition of components subject to wear and tear being transmitted by telephone to the customer's BMW Service Partner. And last but not least, the new remote control functions offered by BMW ConnectedDrive enable the driver to lock and unlock the doors to his car and identify its current location down to the last metre by telephone, covering the entire world as a global service.

Customers using the BMW Assist mobility service can directly access local information provided by the world's most widely known online search engine

from within the car via the Google business directory search function. Location and destination of the vehicle are automatically identified and the results within the area, i.e. the address, telephone number and distance, are then displayed. Optimised utilisation of telecommunication and entertainment systems is guaranteed, inter alia, by the full integration of external cell phones and music players. The BMW ConnectedDrive service "My Info" offers the additional possibility to directly transfer complete address datasets and short messages from a PC to the vehicle via the BMW Assist Internet portal. This can be done either by the driver himself or by an authorised person.

### **Innovation for increased safety:**

#### **Active Cruise Control with Stop & Go function.**

The new BMW X5 comes as standard with cruise control incorporating an independent brake function. This system controls both the engine and the brakes in order to maintain a specific speed pre-selected by the driver. Cruise control consistently identifies longitudinal and lateral acceleration of the car and, where required, reduces the speed of the vehicle by intervening in engine management and the brake system in order to avoid any impairment of comfort in a bend. In addition, the controlled downhill driving system incorporates a wheel-brake reduction through drive torque shifting and power reduction, which counteracts brake overheating particularly when towing a trailer.

Active Cruise Control complete with a Stop & Go function available as an option gives the driver even greater support and assistance. This sophisticated system also comprises an automatic distance control function for cruising smoothly in flowing traffic on the autobahn or a country road and maintaining the distance chosen from the vehicle ahead in stop-and-go traffic at a very low speed. As soon as the distance from the vehicle ahead pre-set by the driver is no longer maintained, Active Cruise Control adjusts the speed of the car by intervening in engine management and building up brake pressure, thus consistently maintaining the right speed in accordance with traffic conditions. As a result, the vehicle is decelerated and even brought to a halt whenever required.

The maximum stopping power generated by Active Cruise Control with Stop & Go function is  $4 \text{ m/s}^2$ , which is limited at higher speeds to a more comfortable  $2.5 \text{ m/s}^2$ . Should the system not be able to compensate in the interest of enhanced comfort due to high relative speeds, the driver is required to intervene. He will be prompted to do so by appropriate optical and acoustic signals. Also with the system deactivated, the Brake Standby function will be activated and the release thresholds for the hydraulic Brake Assistant will be lowered, should the relative speeds reach a critical level, all this significantly increasing the effects of the driver braking.

After coming to a halt for more than three seconds, the driver is required when setting off again to briefly press down the gas pedal or press the Resume button on the column-mounted control in order to accelerate the car. A further point is that with the system active, the driver is able to control the speed himself at any time by pressing down the accelerator or brake pedal, thus retaining his responsibility at all times.

Active Cruise Control with Stop & Go available throughout the road speed range from 30 – 180 km/h (19 – 112 mph) uses the latest generation of radar sensor technology, a full range radar, to perform its function. This innovative radar sensor, which is integrated inconspicuously into the front air dam of the car, does not require any adjustment to the basic housing and is extremely reliable in the detection of dirt. The measuring beam emitted by the system is sufficiently broad at short distances of up to approximately 50 metres or 165 feet in order to recognise vehicles on adjacent lanes within certain limits. Whenever another vehicle moves over to the same lane as the driver's car, Active Cruise Control with Stop & Go adjusts the speed of the BMW X5 smoothly and softly to the speed of the new car now ahead.

### **Lane Departure Warning and Speed Limit Info.**

Likewise available as an option, Lane Departure Warning detects unintended departure from the appropriate lane at a speed of at least 70 km/h or 43 mph. The system consists of a camera, which is installed on the windscreen in the vicinity of the rear-view mirror, a control unit for data synchronisation and a pulse emitter that activates a vibration on the steering wheel. Lane Departure Warning operates as a function of road speed. At high speeds, the system interacts quickly as soon as the car draws close to the side of the road. It does not send out a warning signal, however, if the driver has indicated his intention to change lanes or direction by setting the direction indicator.

The system's camera detects the markings on at least one lane. A control unit calculates the position of the vehicle in relation to these markings. The system also works in bends, on narrow lanes and in the dark as soon as the headlights are switched on.

The camera fitted in the interior mirror also allows the installation of another driver assistance system for extra comfort on the road. Combined with the Professional navigation system, Speed Limit Info helps the driver to keep informed on the speed limit on the route he is currently taking. The camera permanently monitors road signs as well as variable overhead gantry signs on motorways. The data obtained in this way are compared with the data saved in the navigation system. The camera is indeed even able to consider additional road signs applicable, for example, only in rainy weather, as well as temporary speed limits, for example at construction sites.

The speed limit determined is presented by way of a symbolic speed sign in the instrument cluster or, as an option, on the Head-up Display until the speed limit changes or is lifted altogether. Relieving the driver of an important chore through its function, Speed Limit Info increases motoring comfort particularly on long distances.

**Head-up Display: Important information right in front of the driver.**

The Head-up Display is a further unique optional feature within the competitive environment of the BMW X5. Information relevant to the driver such as his current speed, warnings provided by the driver assistance systems and navigation data is presented by the Head-up Display directly in the driver's line of vision, in an ergonomically particularly good and clear position on the windscreen. The driver is able to take in and use this information without re-focusing his line of vision or taking his eyes off the road.

The intensity of this projection is automatically adjusted to surrounding light conditions, with the additional option to adjust the level of brightness through the iDrive menu. The driver is also able to choose the information he would like to receive on the windscreen in addition to road speed and warnings from the driver assistance systems.

The BMW X5 M can be optionally equipped with an M-specific Head-up Display. If the driver opts for this system, he can use the M Drive menu to set the type and scope of data to be displayed. By pressing the M Drive button, he can activate an M-specific representation of data. In this case, the Head-up Display highlights the variable pre-warning field of the rev counter and signals the optimum shifting point using the shift light function. In addition, the display informs the driver of the gear engaged and the speed he is currently travelling at.

**Just in case: Emergency call function automatically locating the current position of the car.**

Part of the optional BMW Assist telematics service, the BMW ConnectedDrive Enhanced Emergency Call function makes sure that in the event of a collision the rescue services are informed in detail on the type of collision and the risk of injury in good time before arriving at the scene of an accident. This allows them to prepare appropriate medical treatment of the persons injured well in advance.

Information transmitted to the BMW Call Center by the Enhanced Emergency Call function automatically locating the vehicle specifies not only the exact location but also the mobile telephone number connected to the car, the chassis number, type of vehicle, its colour as well as data compiled by

sensors in the car indicating the type and intensity of the collision.

Activation of restraint systems as well as the occupancy and belt status on the front seats are also identified. The system is even able to detect head-on, rear-end, side-on or multiple collisions, distinguishing them from one another. Apart from sending out an automatic emergency call, the Enhanced Emergency Call function enables the driver or passenger to manually activate an emergency call going straight to the BMW Call Center.

## 8. Equipment and accessories: Modern functionality in a luxurious ambience.



- **iDrive control system with direct selection and preference buttons as standard.**
- **Luxury-class options: 4-zone automatic climate control, active seat, hard disk navigation, rear-compartment entertainment system.**
- **M Sport Package for an even more dynamic driving experience.**

With its comprehensive range of standard equipment, which includes, among other features, automatic climate control, an audio system with CD drive and AUX-In connection, a multifunction steering wheel, electrically operated front seat height and backrest adjustment, a rain sensor with integrated automatic headlight control and the iDrive control system, the new BMW X5 offers the driving and travelling comfort of a luxury-class premium vehicle. The comfort features also underline the high-quality and exclusive character of this Sports Activity Vehicle.

Moreover, the high seating position in conjunction with the centre console, which is inclined towards the driver, contributes towards the characteristic driving experience and permits an optimum view of each traffic situation, thereby enhancing the impression of having absolute control over the vehicle. Ergonomically ideally positioned control elements and spacious storage compartments additionally enhance the state-of-the-art functionality of the BMW X5.

In addition, the BMW X5 M has an M-specific cockpit, the instrument cluster of which comprises a variable pre-warning field in the rev counter, an oil temperature gauge, specific vehicle function indicators and white display illumination. Also, the BMW X5 M features as standard M seats and an M steering wheel as well as knee pads on the centre console, which give the driver and front seat passenger additional stability in highly-dynamic driving situations.

### **Intuitive operation with standard iDrive.**

The new BMW X5 is equipped as standard with the latest generation of the iDrive control system, whose 6.5-inch control display (or 8.8-inch display when ordered in conjunction with the navigation system Professional) is harmoniously integrated into the dashboard and ideally positioned for the driver. The onboard computer and the audio system as well as the navigation

and communication functions are activated by tilting, turning and pressing the Controller, which is located in the middle of the centre console.

Direct selection buttons on the Controller enable fast changing between CD, radio, telephone and navigation functions. The choice of direct selection buttons is supplemented by the three command buttons "MENU", "BACK" and "OPTION". In addition, the eight "favourite" buttons located on the centre console can be used to store and select radio stations, telephone numbers and navigation destinations or other menu items accessible via iDrive.

### **Navigation system Professional with hard disk memory and full-screen display.**

BMW iDrive also offers its full benefits when the car is fitted with the optional navigation system. On the Professional navigation system, maps in high resolution are combined with arrows guiding the driver to his destination. Full-screen map presentation furthermore offers an incomparably detailed overview of the region through which the driver is currently travelling. Both maps and individual symbols may be displayed as three-dimensional graphics. The system is also able to display an elevation map showing the various levels of altitude. Selected sights along the route are highlighted as true-to-life photo graphics with a pre-view map helping the driver choose his destination.

As an alternative to full-screen presentation, the driver may activate an assistance window on the control display, presenting either further images/graphics, information from the on-board computer or data relating to the entertainment programme. A special map function serving to highlight traffic conditions offers a clear visual impression of the latest traffic jam and congestion reports.

Besides a hard disk storage unit for digital maps and the personal music collection, the navigation system Professional also comprises multi-mode control of functions by voice entry and by the Controller. The driver can choose between both forms of entry even while handling a specific task or operation, with voice entry as well as the Controller remaining active at the same time for simultaneous use. Voice entry also facilitates direct access to stored music and the verbal entry of entire addresses.

Yet a further function offered by BMW ConnectedDrive is BMW Routes. Before setting off, the driver and his passengers are able to put together their personal routes with the help of a route planner on the Internet, then conveniently transmitting such routes via BMW Online directly into the car or using a USB stick for direct entry into the navigation system, which will then guide the driver to his destination along the chosen route and offer additional information on interesting sights while following the route selected.



**For luxurious travel comfort: 4-zone automatic climate control, active seat, active seat ventilation.**

The new BMW X5 features a separate control panel on the centre console for the activation and control of the automatic air conditioning, heating and ventilation. When purchasing a BMW X5, drivers have a choice of automatic climate control with 2-zone function and separate temperature control for the driver and front seat passenger, as well as 4-zone automatic climate control with rear compartment fan, air vents on the B-pillar and a separate control unit for the rear compartment.

The BMW X5 features an optional active seat that effectively helps the driver to relax on long journeys. Through alternate raising and lowering of the seat surface, the pelvic muscles and the lumbar spine are mobilised in order to prevent tension and tiredness.

Longer journeys become a particularly pleasant experience thanks to an active seat ventilation system both for driver and front seat passenger. As soon as it is activated, the seat and backrest are supplied with cool air through a fine perforation in the surface. Cool air is drawn from the interior of the car, hence the system operates fully independently of regional climatic conditions.

The audio system available as standard for the BMW X5 comprises a CD player with MP3 decoder, six loudspeakers (12 loudspeakers in the BMW X5 M) and an AUX-In connection. Optional features include a CD and DVD changer, a TV function for analogue and digital television reception as well as a rear compartment entertainment system with a fold-away 8-inch monitor on the centre console and remote control. If desired, the BMW Individual High End Audio System, which has been adapted exclusively for the BMW X5, offers an exceptionally dynamic sound experience. 16 high-end loudspeakers with neodymium magnetic drive and exceptionally stiff HEXACONE diaphragms, a digital 9-channel power amplifier with a maximum output of 825 Watts and a highly responsive crossover guarantee the unmatched sound quality of this system.

**Panorama sunroof offers as much light and air as needed.**

The panorama sunroof available as an option for the BMW X5 gives all occupants that very special feeling of freedom, its size conveying an unprecedented perception of spaciousness to front seat and rear seat passengers alike. The inside-sliding sunroof featuring two glass panels and two sliding headliners has an exceptionally large opening. Operation of glass panels, headliners and air deflector is all-electric and effected via a switch located on the control panel above the rear-view mirror. The supply of fresh air to the driver and front and rear seat passengers can be adjusted exactly as

desired. The speed-controlled air deflector features two height adjustments, counteracting any possible noise while travelling at lower and higher speeds.

The BMW X5 can be optionally equipped with an automatic opening and closing function for the tailgate and automatic soft closing for the doors. The comfort access option facilitates keyless entry/locking and starting. It is sufficient for the key to be in the driver's jacket pocket or briefcase.

A model-specific roof rail is available for the BMW X5 in the versions matt black or aluminium satin finish. The tow coupling available for the new BMW X5 can be equipped – in conjunction with the M Sport package – with a removable and electrically pivotable ball head. Maximum trailer load of the new BMW X5 is 3,500 kg.

### **Selective individualisation with original BMW accessories.**

The Original BMW Accessories Programme is an attractive supplementation of the extensive standard equipment and options available right from the beginning. The unique character of the new BMW X5 can, among other things, be accentuated even stronger with an individual look. For this purpose, there is a choice of exclusive 21-inch light alloy wheels, a distinctive underride protection as well as an aerodynamics package.

In addition to illuminated, stainless steel doorsill trims, there is a varied choice of transportation and luggage compartment solutions, including a precision-fit luggage compartment mat, luggage compartment straps and a folding box. The multifunctional roof luggage rack system developed for the new BMW X5 has a maximum bearing load of 100 kg. The rack can be fitted with a multitude of attachments, permitting, for instance, the transportation of bicycles, surfboards, skis snowboards and roof boxes.

### **M Sport Package for the new BMW X5.**

Simultaneously with the market launch of the new BMW X5, an M Sport Package is available that has been exclusively adapted to the requirements of the Sports Activity Vehicle. High-class and perfectly matched exterior/interior features and an enhanced suspension offer the ideal preconditions to experience the optimised sporting characteristics of the BMW X5 even more intensely and accentuate its design in an authentic manner. Larger air intakes in the front apron give the vehicle an exceptionally muscular appearance. High-performance tuning and a sports suspension emphasise the vehicle's dynamic character, as do the 19-inch M light alloy wheels sporting a V-spoke design. Alternatively, 20-inch M light alloys are optionally available in a bi-colour version or, if desired, in a high-gloss turned finish. In both cases, mixed tyre sizes are used at the front and the rear which have been exclusively

configured for the BMW X5. The exhaust tailpipes featured on the six-cylinder variants sport a design which is characteristic of V8 engines.

In addition to the M aerodynamics package and M doorsills, the BMW Individual Exterior Line feature with side window surrounds in satin-finish aluminium and the BMW Individual roof rail in High Gloss Shadow give the vehicle an unmistakable appearance. In the interior, sport seats for driver and front seat passenger, the M leather-clad steering wheel, M driver footrest, interior trim in finely brushed aluminium look and the anthracite BMW Individual roof liner optimise the experience of driving the BMW X5.

## 9. The BMW X5 as a security and emergency vehicle: Prepared for any situation.



- **Optional equipment is already taken into consideration during vehicle development.**
- **Superior expertise through decades of experience.**
- **BMW X5 Security and BMW X5 Security Plus with unique customised protection concept implemented right from the beginning.**

With its security and emergency rescue vehicles based on the BMW X5, the German premium car manufacturer proves that an automobile such as the successful Sports Activity Vehicle, which is characterised by fascination and the joy of driving, is also capable of coping with complex and demanding requirements reaching beyond everyday traffic situations. These specially made versions of the BMW X5 combine brand-typical versatility, quality and driving pleasure with emergency/security features developed exclusively for each specific model.

Preliminary setups for the special equipment featured in the emergency and security vehicles offered by BMW are already taken into consideration during the product development process. As a result, all aspects of active and passive safety are sensibly combined into an integral whole. Moreover, BMW ensures that all special vehicles undergo stringent tests going far beyond each required standard. These include crash and roll-over tests as well as hot and cold climate testing to ensure that the vehicles remain fully functional and ready for use even in extreme climatic conditions.

### **BMW X5 Emergency Vehicle: Fully integrated technologies guarantee the highest level of functionality and occupant protection.**

For more than 50 years now and in collaboration with international authorities, BMW has developed state-of-the-art emergency vehicles which, modified to comply with respective local regulations and requirements, offer the highest degree of protection, economy and innovation. The latest product that has emerged from these cooperations is an emergency vehicle based on the BMW X5 xDrive30d. The new BMW X5 is the most spacious of all BMW emergency vehicles. It offers the greatest amount of passenger space and ample room for storing additional equipment in a 620-litre luggage compartment. The vehicle is driven by a both powerful and efficient straight

six-cylinder turbodiesel engine. The intelligent four-wheel drive system BMW xDrive ensures a high level of road stability and optimum traction on and off-road.

The light-signal system comprises a roof-mounted LED alarm system, LED front flashing lights in blue and white, mirror, side and rear flashing lights below the roof spoiler and quadruple rear flashing lights integrated into the luggage compartment lid. The front flashing lights can be mounted behind the radiator grille. A stopping signal device integrated into the alarm system is also available. If required, a second battery, complete with central degassing, cut-off relay and an additional power supply line, can be installed in the luggage compartment as an additional power supply source. Furthermore, the BMW X5 emergency vehicle is fitted with an AEG TX9 preliminary radio setup as well as an oxygen supply.

With the help of the BMW iDrive system, the operation of all basic and special functions featured by the BMW X5 emergency vehicle is very simple. Integrated ergonomically into the centre console, the driver can operate the iDrive Controller without being distracted from what is happening on the road ahead. Additional functions such as acoustic and visual alarm signals, signalling devices, additional lights, exterior loudspeaker system or radio equipment are fully integrated into the iDrive system via an upstream context menu. Retrofitting of control elements is therefore unnecessary. Via BMW ConnectedDrive, addresses can be downloaded from the Internet to the navigation system to be used as destinations when needed.

The in-car PC opens up new possibilities for mobile communication using state-of-the-art transmission and interface technology that is far superior to conventional radio technology. Services developed exclusively for use by the police such as the complete transfer of data pertaining to searches, spot-checks or ownership verification as well as a synchronisation of information regarding foreign vehicles all enhance comfort and safety for the law enforcement personnel involved.

Thanks to fully integrated technologies managing active and passive safety, risks to personnel travelling inside the BMW X5 are reduced to a minimum, even in borderline situations. All installations undergo crash tests, and a roll-over test is carried out with the alarm system mounted on the roof of the vehicle. BMW EfficientDynamics technologies and aerodynamically optimised roof fittings reduce both fuel consumption and emissions and guarantee sustainable and responsible use of resources. BMW Conditioned Based Service extends servicing intervals depending on how the vehicle is used. In addition, Original BMW Service, BMW spare parts and the BMW long-term

warranty for emergency installations minimise the cost of operating a BMW X5 emergency rescue vehicle.

**BMW X5 Security and BMW X5 Security Plus:  
Customised protection against criminal assault.**

BMW has more than 30 years of experience in the field of enhanced vehicle and occupant protection, the fundament of which is formed by the safety concept F.I.R.S.T. (Fully Integrated Road Safety Technology) applicable to all BMW vehicles. Building on this, the protective measures featured by BMW security vehicles facilitate an optimisation of the level of safety according to customers' individual needs.

The models BMW X5 Security and BMW X5 Security Plus also guarantee customised protection against criminal assault and/or attacks combined with brand-typical driving dynamics, outstanding travel comfort and functionality suitable for everyday use. At the same time, both vehicles excel in each of their protection categories through exceptionally effective and technologically advanced security components. The BMW X5 Security is the only security vehicle in the VR4 ballistic protection class to offer protected interior space for up to five persons and their luggage. The BMW X5 Security Plus sets standards in the bullet resistance class 6 (APR 2006), in which protection against attacks with widely used AK47 automatic handguns is taken into consideration. BMW X5 security vehicles are built together with the production model at the BMW Spartanburg plant in South Carolina/USA. The installation of protective features is carried out at the Toluca plant (Mexico) in accordance with BMW processes. As opposed to the subsequent fitting of amour plating, this eliminates any security flaws in the vehicle's structure. A further advantage of a customised protection concept implemented right from the beginning is the integration of neutrally designed security features.

### **Perfectly coordinated security devices.**

The main focus of the security concept implemented for the BMW X5 Security Plus is on the amour-plated occupant compartment. It guarantees excellent protection, inter alia, through high-performance steel moulded components and panels. The bodywork features sealed joints, which offer protection in critical areas – e.g. between doors and frames as well as between side panels and pillars – thus preventing bullet or fragment penetration, as well as security glass conceived exclusively for this bullet resistance class. Furthermore, the windows resist attack using clubs, crowbars etc. and feature a polycarbonate coating that protects the interior from glass shatter.

The security equipment featured by the BMW X5 Security includes an amour-plated occupant compartment and boot as well as security glass. The area behind the back seats is also fully protected, so that the luggage compartment can be used as a safe storage area. The split tailgate is entirely steel-plated. Maximum permissible load exceeds the 500 kg mark. First-class protection is also guaranteed through moulded components and panels made of a special high-grade fibre composite. They are used for the side walls, the roof, in the front footwell and at the rear of the car. This protection is complemented on several parts of the vehicle by ballistic resistant steel. 22 mm thick security glass all round also resists attacks using clubs, crowbars etc. The BMW X5 Security also features windows with a polycarbonate coating that serves to protect the interior from glass shatter.

Both the BMW X5 Security and the BMW X5 Security Plus are equipped with an intercom and an attack alarm system, meaning that it is possible to communicate with persons outside the vehicle without having to open doors or windows. With the help of the reversing camera, with which images are transferred to the iDrive control display on the instrument panel, the driver can, for example, estimate the distance from obstacles when reversing without having to look behind. The cameras featured by the Side View function and which are integrated into the front bumper, permit a detailed overview of what is happening in front of the vehicle. This image is also shown on the control display.

### **Supreme engine performance and enhanced suspension.**

Both security vehicles, which are based on the BMW X5, are powered by an eight-cylinder petrol engine that is mated to the intelligent four-wheel drive system BMW xDrive. The suspension featured on each vehicle is perfectly tuned to cope with the increased weight. This has been achieved, inter alia, through the use of reinforced suspension components such as springs and

dampers and by adapting the suspension management software to the specific demands of a security vehicle.

In order to further increase supremacy in demanding driving situations, the standard equipment featured by the BMW X5 Security and the BMW X5 Security Plus also includes a high-performance braking system, speed-dependent Active Steering and the Adaptive Drive system comprising Dynamic Stability Control and variable damper adjustment. Furthermore, the tyres have emergency running characteristics, meaning that they permit the driver to continue his or her journey for around 150 kilometres at a speed of up to 80 km/h – even in the case of total air pressure loss resulting, for example, from being under fire or when driving over sharp objects.

BMW offers a comprehensive global support service for security vehicles. Furthermore, new BMW X5 Security and the new BMW X5 Security Plus have been conceived in such a way as to allow them to be serviced and repaired in normal BMW service centres. Drivers of security vehicles are prepared for their demanding task at training courses held by BMW all over the world.





## 10. Production: Efficient, sustainable and incorporating the highest level of expertise in the production of BMW X models.

- **BMW Spartanburg plant produces the BMW X5 for the global market.**
- **Joint production of BMW X6 and BMW ActiveHybrid X6.**
- **Efficient and sustainable production in accordance with internationally applicable BMW Group quality standards.**

Like the BMW X6, the BMW ActiveHybrid X6 and – in future – the new BMW X3, the latest BMW X5 is produced at the BMW Spartanburg plant for the entire international market. With this commitment, the production facility, which has operated in the US Federal State of South Carolina since 1994, has again strengthened its significance within the global BMW Group production network as a centre of expertise for BMW X models. Thanks to cutting-edge technology, the facility is able to flexibly and efficiently produce several different model series on one single assembly line according to customer requirements. Precision and quality are guaranteed, as the plant works in adherence to the stringent, internationally applicable BMW Group standards.

The success stories of the BMW X5 and the BMW Spartanburg plant are closely linked. The first BMW X5 came off the assembly line there in 1999, with the 500,000th BMW X5 being delivered in June 2005. Meanwhile, this internationally successful Sports Activity Vehicle is exported to more than 120 countries.

### **Targeted automation increases efficiency and quality.**

More than 350 robots are involved in building the body of the BMW X5. The welding process in particular is almost 100 percent automated. Robot technology guarantees a high level of precision, particularly in the processing of ultra high-strength steel used for most of the bodywork. Furthermore, optical monitoring systems control the use of adhesive required to ensure maximum stability. In order to guarantee a consistently high quality, the dimensional accuracy of the body is monitored by inline laser and measuring cameras.

During the automated integration of the engine, transmission and suspension into the body of the BMW X5, ten optical testing systems directly integrated into the process cycle ensure permanent quality control. Assembly of the

windscreen and rear window of the BMW X5 is carried out at two robot workstations and incorporates a camera-controlled, high-precision measuring system. Only the side windows are finally installed by hand. All this results in a more than 50 percent reduction in process time.

The production workplaces are constantly improved under consideration of ergonomic aspects. Extensive measures to swivel each vehicle to obtain the best possible working position simplify the installation of various components.

**Sustainable production: Significantly lower CO<sub>2</sub> emissions.**

The BMW production facility is also exemplary with regard to the conservation of resources. The BMW X5 is built at a plant which has been environmentally certified according to ISO 14001 and which obtains more than 60 percent of its energy sustainably from methane gained from the biological degradation of waste materials at a disposal site located approximately 16 kilometres away.

In the year 2009, the production of energy from methane gas was extended further. Two new and highly efficient gas turbine generators with a power output of 11,000 kW now account for almost 30 percent of the plant's electricity supply.

According to calculations made by the American Environmental Protection Agency EPA, the reduction in CO<sub>2</sub> emissions achieved through sustainable energy production is equal to the planting of more than 9,300 hectares of forest – around thirty times the ground area of New York's Central Park. Thanks to this environmental initiative, the BMW Spartanburg plant has already won several national and federal state prizes, including the EPA's "Green Power" award.

**Continuing growth thanks to successful models.**

The ongoing success of BMW X models has also resulted in continuing growth at the Spartanburg location. The BMW Spartanburg plant is undergoing extension work at a cost of 750 million US dollars. The objective of this extension – the fifth in all since commencement of production – is to increase production capacity from 160,000 to 200,000 units a year by the year 2012. Thanks to the extension the facility will grow from its present size of around 232,000 sq.m. to a total area of 370,000 sq.m. To date, the BMW Group has invested the equivalent of around three billion Euros in the South Carolina location.

# Technical Specifications.

## BMW X5 xDrive35i, BMW X5 xDrive50i.



	Engine Torque [Nm]		BMW X5 xDrive50i
<b>Body</b>			
Number of doors/seats		5 / 5 (7) <sup>1)</sup>	5 / 5 (7) <sup>1)</sup>
Length/Width/Height (unladen)	mm	4857 / 1933 / 1776 <sup>2)</sup>	4857 / 1933 / 1776 <sup>2)</sup>
Wheelbase	mm	2933	2933
Track front/rear	mm	1644 / 1650	1640 / 1646
Turning cycle	m	12.8	12.8
Tank capacity	appr ltr	85	85
Cooling system incl. heating	ltr	10.9	17.2
Engine oil <sup>3)</sup>	ltr	6.5	8.5
Weight, unladen, to DIN/EU	kg	2070 / 2145	2190 / 2265
Max load to DIN	kg	680 (890) <sup>1)</sup>	680 (835) <sup>1)</sup>
Max perm weight, overall	kg	2750 (2960) <sup>1)</sup>	2870 (3025) <sup>1)</sup>
Max perm axle load front/rear	kg	1265 / 1550 (1270 / 1755) <sup>1)</sup>	1365 / 1570 (1370 / 1740) <sup>1)</sup>
Max perm trailer load (12 %) braked/unbraked	kg	3500 / 750	3500 / 750
Perm roof load/trail download	kg	100/140	100/140
Luggage capacity	ltr	620-1750	620-1750
Air resistance	cd x A	0.33 x 2.87	0.35 x 2.87
<b>Engine</b>			
Config/no of cyls/valves		R / 6 / 4	V / 8 / 4
Engine technology		BMW TwinPower Turbo, direct injection (High Precision Injection), fully variable valve control (VALVETRONIC)	BMW TwinPower Turbo, direct injection (High Precision Injection)
Capacity	cc	2979	4395
Stroke/bore	mm	89.6 / 84.0	88.3 / 89.0
Compression ratio	:1	10.2	10.0
Fuel grade		at least RON 91	at least RON 91
Max output	kW/bhp	225 / 306	300 / 407
at	rpm	5800	5500-6400
Max torque	Nm	400	600
at	rpm	1200-5000	1750-4500
<b>Electrical system</b>			
Battery/installation	Ah/-	90 / luggage comp	90 / luggage comp
Alternator	A/W	210 / 2940	210 / 2940
<b>Driving dynamics and safety</b>			
Suspension, front		Double-track control arm front axle, small, negative steering offset, anti-dive	
Suspension, rear		Integral-IV rear axle, multi-dimensional suspension with anti-squat and anti-dive	
Brakes, front		Single-piston floating-calliper disc brakes	
Diameter	mm	348 x 30 / vented	385 x 36 / vented
Brakes, rear		Single-piston floating-calliper disc brakes	
Diameter	mm	320 x 20 / vented	345 x 24 / vented
Driving stability systems		Fitted as standard: DSC incl. ABS and DTC (Dynamic Traction Control), CBC Cornering Brake Control, DBC Dynamic Brake Control, rain brake support, fading compensation, hill-start assistant; DSC networked with xDrive four-wheel drive, adaptive brake compensation, HDC Hill Descent Control, optional: Adaptive Drive	
Safety features		Fitted as standard: Airbags for driver and front seat passenger, side airbags for driver and front seat passenger, head airbags for the first and second seat row, crash-active headrests at the front, three-point automatic belts on all seats, on the front seats with pretensioners, belt-force limiters and belt stoppers, crash sensors, roll-over sensors, tyre defect indicator	
Steering		Rack-and-pinion power steering with Servotronic function, optional: Active	
Overall steering transmission	:1	19.5	19.5
Tyres front/rear		255/55 R18 109 VXL RSC	255/50 R19 107WXL RSC
Wheels front/rear		8.5J x 18 LM	9J x 19 LM

		<b>BMW X5 xDrive35i</b>	<b>BMW X5 xDrive50i</b>
<b>BMW ConnectedDrive</b>			
Comfort	Optional extras: BMW Assist featuring, inter alia, information service, remote functions and traffic info+, BMW TeleServices, integration of mobile devices		
Infotainment	Optional extras: Internet access, BMW Online featuring, inter alia, parking info, country-relevant info, Google search by type of business, news, weather, realtime, office functions, BMW Routes and online update of music tracks		
Safety	Optional extras: Adaptive Cornering Headlights, High-beam Assistant, Park Distance Control, Side View, reversing camera with Surround View, Head-up Display, Cruise Control with Stop & Go function, Lane Departure Warning, Speed Limit Info, automatic/advanced emergency call		
<b>Transmission</b>			
Type	8-speed automatic transmission with Steptronic		
Gear ratios	I	:1	4.714
	II	:1	3.143
	III	:1	2.105
	IV	:1	1.667
	V	:1	1.285
	VI	:1	1.000
	VII	:1	0.839
	VIII	:1	0.667
	R	:1	3.295
Final drive		:1	3.154
<b>Performance</b>			
Power-to-weight ratio	kg/kW	9.2	7.3
Output per litre	kW/ltr	75.5	68.3
Acceleration	0–100 km/h	s	6.8
	0–1000 m	s	27.0
	in 4th/5th gear 80–120 km/h	s	-
Top speed	km/h	235	240 (250) <sup>4)</sup>
<b>Off-road characteristics</b>			
Overhang angle	front/rear	°	25.5/22.7
		°	25.5/22.7
Ramp angle		°	19.8
Ground-clearance when		mm	222
Wading depth (at 7 km/h)		mm	500
<b>BMW EfficientDynamics</b>			
BMW EfficientDynamics measures as standard	Brake Energy Regeneration, demand-controlled ancillary components, map-controlled oil pump (BMW X5 xDrive35i) intelligent lightweight construction, air vent control (BMW X5 xDrive35i), disengageable a/c compressor, transfer box with optimized efficiency, tyres with reduced rolling resistance		
<b>Fuel con in the EU cycle</b>			
Urban	ltr/100	13.2	17.5
Extra-urban	ltr/100	8.3	9.6
Composite	ltr/100	10.1	12.5
CO <sub>2</sub>	g/km	236	292
Emission classification		EU5	EU5
<b>Insurance category</b>			
KH / VK / TK		23 / 26 / 30	23 / 29 / 30

Technical data valid for ACEA markets/Part of registration-specific data only apply to Germany (weights, top speed)

- 1) With optional third seat row
- 2) Height without roof aerial: 1,739 mm
- 3) Oil filling quantity
- 4) With optional high-speed tuning (market-specific)

# BMW X5 xDrive30d, BMW X5 xDrive40d.

	BMW X5 xDrive30d		BMW X5 xDrive40d	
<b>Body</b>				
Number of doors/seats		5 / 5 (7) <sup>1)</sup>		5 / 5 (7) <sup>1)</sup>
Length/Width/Height (unladen)	mm	4857 / 1933 / 1776 <sup>2)</sup>		4857 / 1933 / 1776 <sup>2)</sup>
Wheelbase	mm	2933		2933
Track front/rear	mm	1644 / 1650		1644 / 1650
Turning cycle	m	12.8		12.8
Tank capacity	appr ltr	85		85
Cooling system incl. heating	ltr	10.4		10.4
Engine oil <sup>3)</sup>	ltr	7.5		7.5
Weight, unladen, to DIN/EU	kg	2075 / 2150		2110 / 2185
Max load to DIN	kg	680 (890) <sup>1)</sup>		680 (890) <sup>1)</sup>
Max perm weight, overall	kg	2755 (2965) <sup>1)</sup>		2790 (3000) <sup>1)</sup>
Max perm axle load front/rear	kg	1275 / 1545 (1280 / 1745) <sup>1)</sup>		1300 / 1555 (1305 / 1755) <sup>1)</sup>
Max perm trailer load (12 %) braked/unbraked	kg	3500 / 750		3500 / 750
Perm roof load/trail download	kg	100/140		100/140
Luggage capacity	ltr	620-1750		620-1750
Air resistance	cd x A	0.34 x 2.87		0.34 x 2.87
<b>Engine</b>				
Config/no of cyls/valves		R / 6 / 4		R / 6 / 4
Engine technology		Turbocharger with variable intake geometry, Common Rail direct injection with piezo injectors (max. injection pressure: 1800 bar)		BMW TwinPower Turbo (Variable Twin Turbo), Common Rail direct injection with piezo injectors (max. injection pressure: 2000 bar)
Capacity	cc	2993		2993
Stroke/bore	mm	90.0 / 84.0		90.0 / 84.0
Compression ratio	:1	16.5		16.5
Fuel grade		Diesel		Diesel
Max output	kW/bhp	180 / 245		225 / 306
at	rpm	4000		4400
Max torque	Nm	540		600
at	rpm	1750-3000		1500-2500
<b>Electrical system</b>				
Battery/installation	Ah/-	90 / luggage comp		90 / luggage comp
Alternator	A/W	170 / 2380		170 / 2380
<b>Driving dynamics and safety</b>				
Suspension, front		Double-track control arm, small, negative steering offset, anti-dive		
Suspension, rear		Integral-IV rear axle, multi-dimensional suspension with anti-squat and anti-dive		
Brakes, front		Single-piston floating-calliper disc brakes		
Diameter	mm	332 x 30 / vented		348 x 30 / vented
Brakes, rear		Single-piston floating-calliper disc brakes		
Diameter	mm	320 x 20 / vented		320 x 20 / vented
Driving stability systems		Fitted as standard: DSC incl. ABS and DTC (Dynamic Traction Control), CBC Cornering Brake Control, DBC Dynamic Brake Control, rain brake support, fading compensation, hill-start assistant; DSC networked with xDrive four-wheel drive, adaptive brake compensation, HDC Hill Descent Control, optional: Adaptive Drive		
Safety features		Fitted as standard: Airbags for driver and front seat passenger, side airbags for driver and front seat passenger, head airbags for the first and second seat row, crash-active headrests at the front, three-point automatic belts on all seats, on the front seats with pretensioners, belt-force limiters and belt stoppers, crash sensors, roll-over sensors, tyre defect indicator		
Steering		Rack-and-pinion power steering with Servotronic function, optional: Active		
Overall steering transmission	:1	19.5		19.5
Tyres front/rear		255/55 R18 109 H XL RSC		255/55 R18 109 V XL RSC
Wheels front/rear		8.5J x 18 LM		8.5J x 18 LM

		<b>BMW X5 xDrive30d</b>	<b>BMW X5 xDrive40d</b>
<b>BMW ConnectedDrive</b>			
Comfort	Optional extras: BMW Assist featuring, inter alia, information service, remote functions and traffic info+, BMW TeleServices, integration of mobile devices		
Infotainment	Optional extras: Internet access, BMW Online featuring, inter alia, parking info, country-relevant info, Google search by type of business, news, weather, realtime, office functions, BMW Routes and online update of music tracks		
Safety	Optional extras: Adaptive Cornering Headlights, High-beam Assistant, Park Distance Control, Side View, reversing camera with Surround View, Head-up Display, cruise control with Stop & Go function, Lane Departure Warning, Speed Limit Info, automatic/advanced emergency call		
<b>Transmission</b>			
Type	8-speed automatic transmission with Steptronic		
Gear ratios	I	:1	4.714
	II	:1	3.143
	III	:1	2.105
	IV	:1	1.667
	V	:1	1.285
	VI	:1	1.000
	VII	:1	0.839
	VIII	:1	0.667
	R	:1	3.317
Final drive		:1	3.154
<b>Performance</b>			
Power-to-weight ratio	kg/kW		11.5
Output per litre	kW/ltr		60.1
Acceleration	0–100 km/h	s	7.6
	0–1000 m	s	28.5
in 4th/5th gear	80–120 km/h	s	-
Top speed	km/h		210 (222) <sup>4)</sup>
<b>Off-road characteristics</b>			
Overhang angle			
front/rear	°	25.5/22.7	25.5/22.7
Ramp angle	°	19.8	19.8
Ground-clearance when	mm	222	222
Wading depth (at 7 km/h)	mm	500	500
<b>BMW EfficientDynamics</b>			
BMW EfficientDynamics measures as standard	Brake Energy Regeneration, demand-controlled ancillary components, map-controlled oil pump (BMW X5 xDrive35i) intelligent lightweight construction, air vent control (BMW X5 xDrive35i), disengageable a/c compressor, transfer box		
<b>Fuel con in the EU cycle</b>			
Urban	ltr/100		8.7
Extra-urban	ltr/100		6.7
Composite	ltr/100		7.4
CO <sub>2</sub>	g/km		195
Emission classification			EU5
<b>Insurance category</b>			
KH / VK / TK		24 / 29 / 30	24 / 29 / 30

Technical data valid for ACEA markets/Part of registration-specific data only apply to Germany (weights, top speed)

- 1) With optional third seat row
- 2) Height without roof aerial: 1,739 mm
- 3) Oil filling quantity
- 4) With optional high-speed tuning (market-specific)

BMW X5 M		
<b>Body</b>		
Number of doors/seats		5 / 5
Length/Width/Height (unladen)	mm	4851 / 1994 / 1764 <sup>1)</sup>
Wheelbase	mm	2933
Track front/rear	mm	1660 / 1672
Turning cycle	m	12.8
Tank capacity	appr ltr	85
Cooling system incl. heating	ltr	17.0
Engine oil <sup>3)</sup>	ltr	8.5
Weight, unladen, to DIN/EU	kg	2305 / 2380
Max load to DIN	kg	600
Max perm weight, overall	kg	2905
Max perm axle load front/rear	kg	1400 / 1560
Max perm trailer load (12 %) braked/unbraked	kg	3000 / 750
Perm roof load/trail download	kg	100/120
Luggage capacity	ltr	620 – 1750
Air resistance	cd x A	0.38 x 2.90
<b>Engine</b>		
Config/no. of cyls/valves		V90/ 8 / 4
Engine technology		M TwinPower Turbo with Cylinder-bank Comprehensive Manifold and Twin Scroll Twin Turbo technology, petrol direct injection (High Precision Injection), Double Vanos
Capacity	cc	4395
Stroke/bore	mm	88.3 / 89.0
Compression ratio	:1	9.3
Fuel grade		at least RON 95
Max power	kW/bhp	408 / 555
at	rpm	6000
Max torque	Nm	680
at	rpm	1500 – 5650
<b>Electrical system</b>		
Battery/installation	Ah/-	90 / luggage comp
Alternator	A/W	210 / 2940
<b>Driving dynamics and safety</b>		
Suspension, front		Double-track control arm front axle with M specific elasto-kinematics, small, negative steering roll radius, anti-dive
Suspension, rear		Integral-IV rear axle with M specific elasto-kinematics, multi-dimensional suspension, anti-squat and anti-dive, self-levelling air suspension
Brakes, front		Four-piston fixed-calliper disk brakes
Diameter	mm	395 x 36 / vented
Brakes, rear		One-piston floating-calliper disk brakes
Diameter	mm	385 x 24 / vented
Driving stability systems		Fitted as standard: DSC incl. ABS and M Dynamic Mode, CBC Cornering Brake Control, DBC Dynamic Brake Control, ADB-X Automatic Differential Brake, rain brake support, fading compensation, hill-start assistant; DSC networked with xDrive four-wheel drive, Dynamic Performance Control, HDC Hill Descent Control, Adaptive Drive
Safety features		Fitted as standard: Airbags for driver and front seat passenger, side airbags for driver and front seat passenger, head airbags for the first and second seat row, crash-active headrests at the front, three-point automatic belts on all seats, on the front seats with pretensioners, belt-force limiters and belt stoppers, crash sensors, roll-over sensors, tyre defect indicator
Steering		Rack-and-pinion power steering with M specific Servotronic function
Overall steering transmission	:1	19.5
Tyres front/rear		275/40 R20 106Y XL RSC / 315/35 R20 110Y XL RSC
Wheels front/rear		10J x 20 LM / 11J x 20 LM

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**BMW X5 M**

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**BMW ConnectedDrive**

Comfort	Optional extras: BMW Assist featuring, inter alia, information service, remote functions and traffic info+, BMW TeleServices, integration of mobile devices
Infotainment	Optional extras: Internet access, BMW Online featuring, inter alia, parking info, country-relevant info, Google search by type of business, news, weather, realtime, office functions, BMW Routes and online update of music tracks
Safety	Fitted as standard: Adaptive Cornering Headlights, Park Distance Control, Head-Up-Display, Cruise Control with brake function, optional: reversing camera with Top View, Side View, High-beam assistant, Speed Limit Info, automatic/advanced emergency call

**Transmission**

Type	M Sport six-speed automatic gearbox with Steptronic, electronic gearshift selector and shift paddles on the steering wheel		
Gear ratios	I	:1	4.171
	II	:1	2.340
	III	:1	1.521
	IV	:1	1.143
	V	:1	0.867
	VI	:1	0.691
	R	:1	3.403
Final drive	:1	3.909	

**Performance**

Power-to-weight-ratio	kg/kW	5.6	
Output per litre	kW/ltr	92.8	
Acceleration	0–100 km/h	s	4.7
	0–200 km/h	s	16.9
	0–1000 m	s	23.5
in 4th/5th gear	80–120 km/h	s	4.3 / 5.1
Top speed	km/h	250 (275) <sup>3)</sup>	

**Off-road characteristics**

Overhang angle front/rear	°	22 / 21.5
Ramp angle	°	18.6
Ground-clearance when	mm	207

**BMW EfficientDynamics**

BMW EfficientDynamics measures as standard	Brake Energy Regeneration, demand-controlled ancillary components, intelligent lightweight construction, disengageable air-conditioning compressor, Dynamic Stability Control with demand-responsive pump control
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**Fuel con in the EU cycle**

Urban	ltr/100km	19.3
Extra-urban	ltr/100km	10.8
Composite	ltr/100km	13.9
CO <sub>2</sub>	g/km	325
Emission classification		EU5

**Insurance category**

	24 / 32 / 31
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KH / VK / TK

Technical data valid for ACEA markets/Part of registration-specific data only apply to Germany (weights, top speed)

<sup>1)</sup> Height without roof aerial: 1,726 mm

<sup>2)</sup> Oil filling quantity

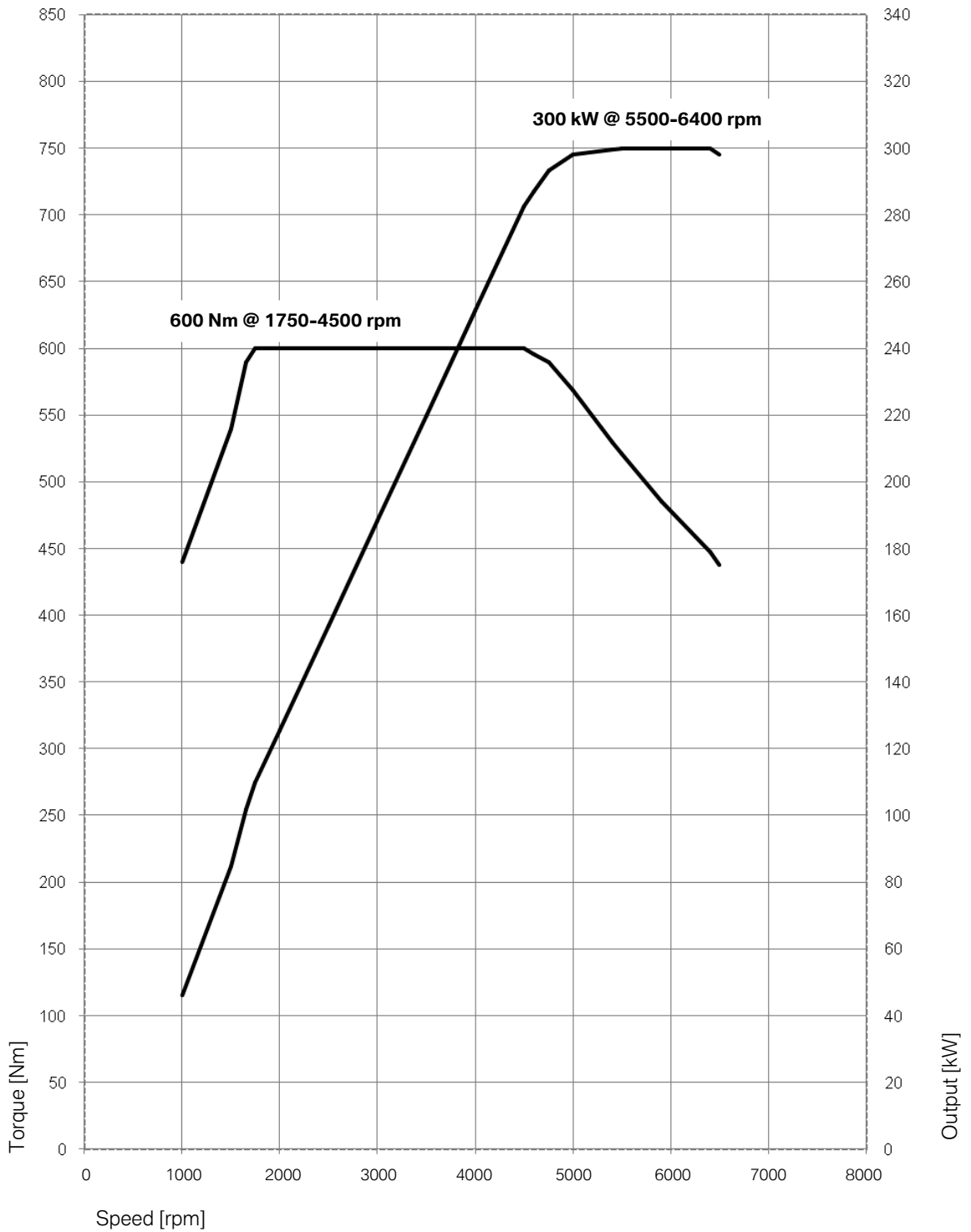
<sup>3)</sup> In conjunction with optional M Driver's Package



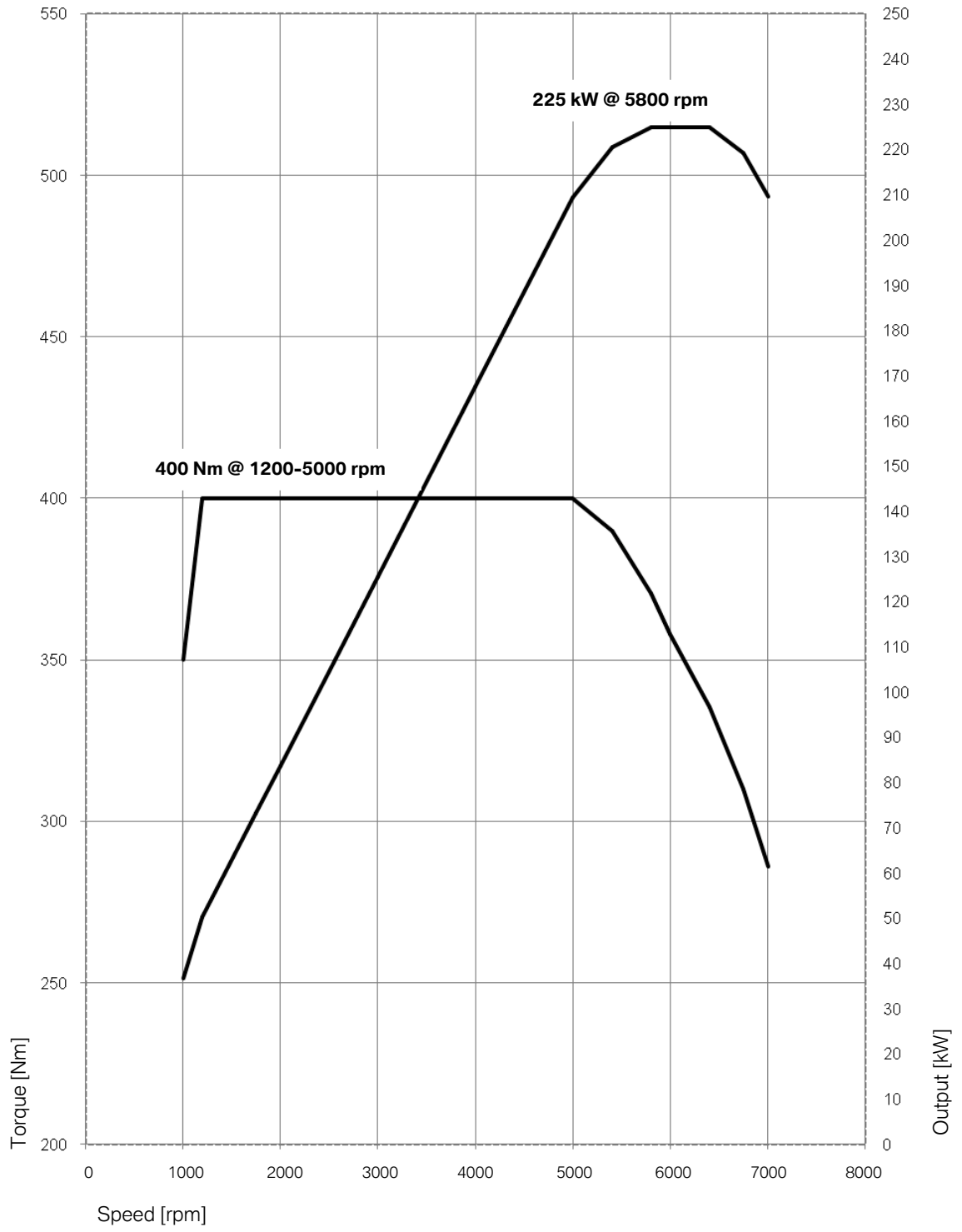
# 12. Output and torque diagrams.



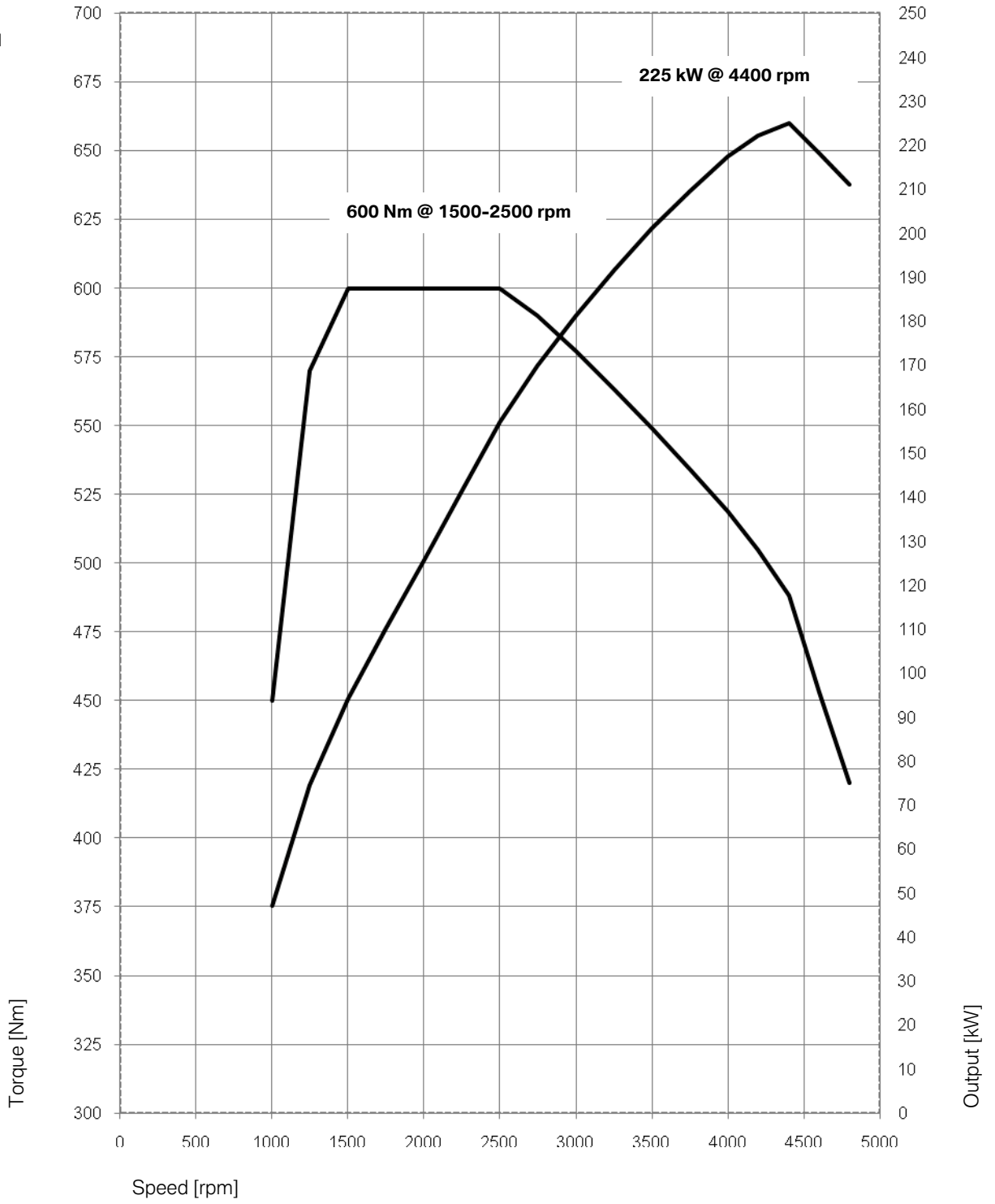
**BMW X5 xDrive50i**



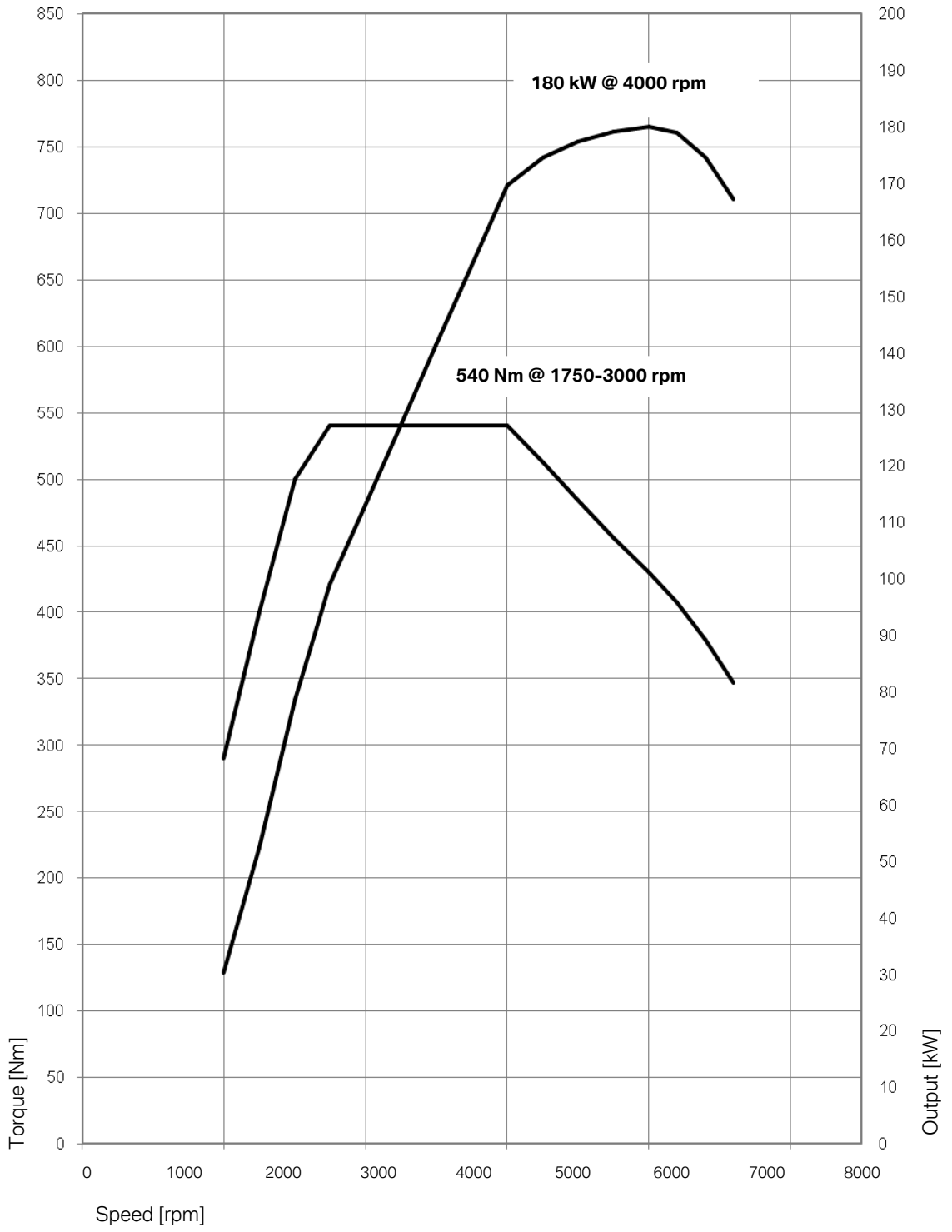
### BMW X5 xDrive35i



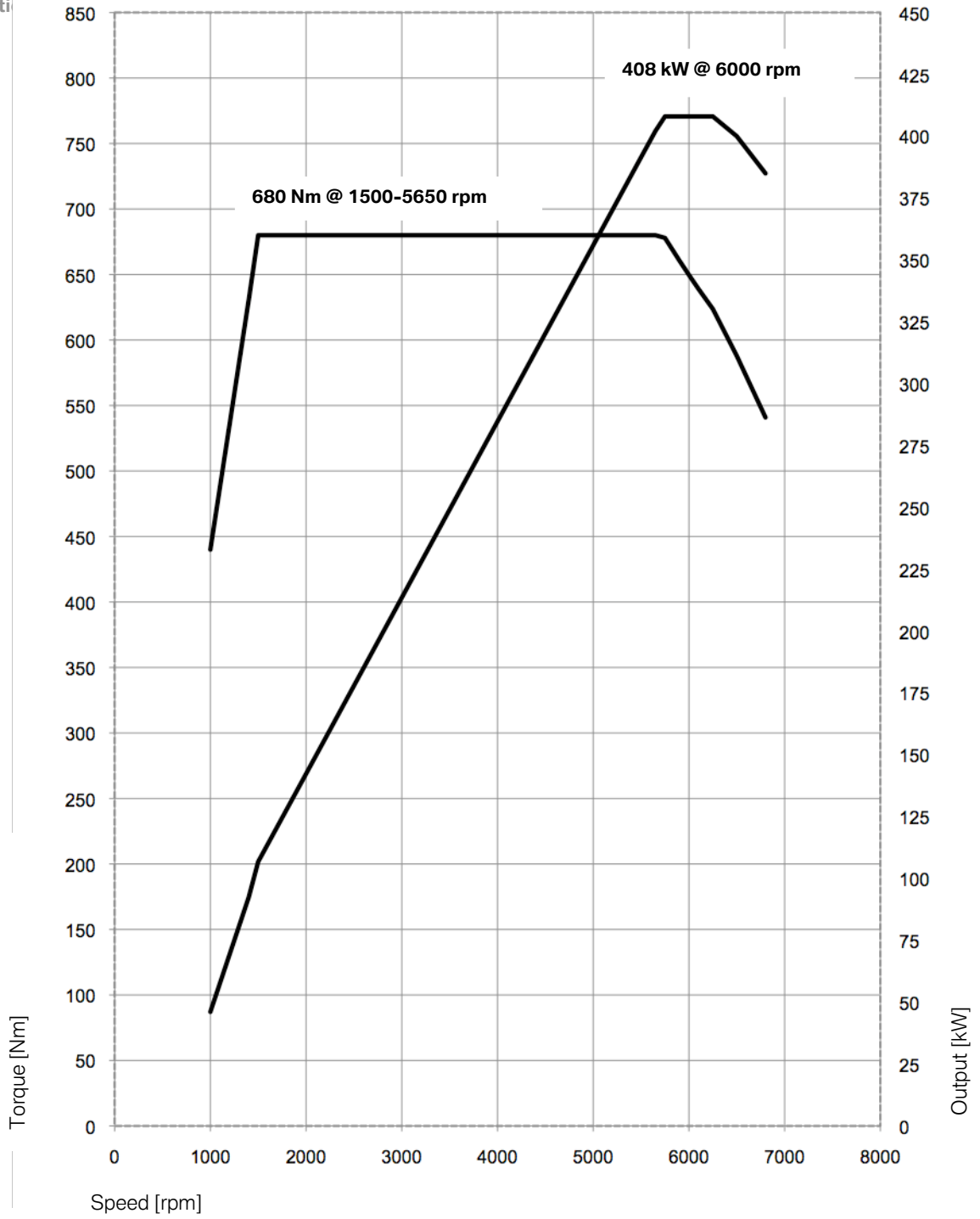
### BMW X5 xDrive40d



### BMW X5 xDrive30d



# BMW X5 M



# 13. Exterior and interior dimensions.

