

# Power play: The all-new BMW X5 M and all-new BMW X6 M.

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# 1. **Power play: The all-new BMW X5 M and all-new BMW X6 M.**

## **Innovative technology and a powerful presence.**

### **(Short version)**

The all-new BMW X5 M and all-new BMW X6 M (fuel consumption combined for both models: 9 km/l; CO<sub>2</sub> emissions combined for both models: 258 g/km)\* see BMW M GmbH setting the pace once again in the high-performance Sports Activity Vehicle (SAV) and Sports Activity Coupe (SAC) segment. When the previous generation of the two cars arrived in 2009, it was the first time the high-performance character distilled by BMW M GmbH had been transplanted into an all-wheel-drive BMW X model. The result was class-leading dynamics. The all-new BMW X5 M and BMW X6 M pull no punches in writing the next chapter in this success story with another significant step forward in dynamic excellence, emotionally rich M design and outstanding efficiency.

The all-new BMW X5 M and all-new BMW X6 M combine the characteristic features of the successful BMW X family – exclusivity, robustness, agility and everyday usability – with the commitment to high performance that defines an M car. The latter is resoundingly highlighted by the cars' impressive performance figures. Both models complete the sprint from 0 to 100 km/h in 4.2 seconds in conjunction with the standard eight-speed M Steptronic transmission.

### **Innovative engine technology.**

The new M TwinPower Turbo engine for the BMW X5 M and BMW X6 M is the most powerful unit ever developed by BMW for an all-wheel-drive vehicle. Boasting innovative M TwinPower Turbo technology with a pair of TwinScroll turbochargers, cross-bank exhaust manifolds, VALVETRONIC and High Precision Direct Petrol Injection, the 4.4-litre V8 produces maximum output of 423 kW/575 hp between 6,000 and 6,500 rpm. That represents a four per cent increase over the predecessor models. The step up is even clearer when it comes to the power development of the new engine. Peak torque has been boosted by 70 Nm (52 lb-ft), which equates to a rise of 10 per cent. Its 750 Nm (553 lb-ft) can be enjoyed across a broad rev range between 2,200 and 5,000 rpm.

At the same time, fuel consumption of the all-new BMW X5 M and BMW X6 M in the EU cycle has been cut by 20 per cent. CO<sub>2</sub> emissions are likewise down by more than 20 per cent, to 258 g/km. The two models accelerate

\* Fuel consumption figures were calculated on the basis of the ECE test cycle, depending on tyre format.

from 0 to 100 km/h in 4.2 seconds through the standard eight- speed M Steptronic transmission with Drivelogic. Top speed is limited to 250 km/h (electronically limited).

### **Powerful looks and exclusive equipment.**

With their striking use of forms, the all-new BMW X5 M and all-new BMW X6 M clearly flag up their sporting ambitions. With their exteriors painted fully in body colour, both models cut a low-slung figure on the road, while mixed tyres showcase their sporty track width and lend extra credence to their premium perception. Numerous exclusive design elements, moreover, elevate the M models even further than before from the standard BMW X5 and BMW X6. Large air intakes at the front end, the kidney grille with twin slats, side gills with a model badge and Air Breathers, M-specific exterior mirrors in twin-stalk style, a typically M four-tailpipe exhaust system and a rear spoiler (for the BMW X6 M) give them a standalone look M fans will immediately recognise. Setting the seal on this exclusive range of features are M-specific 20-inch light-alloy wheels with mixed tyres or forged 21-inch M light-alloy wheels (optional).

The high-quality interior impresses with its well-thought-through combination of sporty features, exclusive materials and flawless workmanship. Leather trim as standard, the M instrument cluster, M leather steering wheel with aluminium gearshift paddles and M Steptronic transmission with Drivelogic – which works in the same way as the familiar M Double Clutch Transmission – the standard Head-Up Display which, in addition to the standard system, also includes an M-specific display with gear indicator, rev band and shift lights.

New BMW X5 M and BMW X6 M customers also have the choice between various options exclusive to the M models, such as 21-inch M light-alloy wheels (X6 M) , Merino full-leather trim and M multifunction seats.

## 2. A finely balanced overall concept. Flawless interplay of all components.



At BMW M GmbH, high performance is about more than engine output and top speeds alone. Here, high performance means all of a vehicle's components working in perfect harmony and the precise interplay of various details resulting in maximum performance, agility, precision, poise and assurance out on the road. This sense of balance is a defining feature of all the cars produced by BMW M GmbH and is, needless to say, also present in the all-new BMW X5 M and all-new BMW X6 M.

### **Function-led design.**

The function-led design of the all-new BMW X5 M and all-new BMW X6 M is immediately clear with athletic, dynamic looks betraying their high-performance credentials before they so much as turn a wheel. The four large air intakes and flaps at the front end, and the diffuser at the rear, are more than just a case of style for style's sake. Instead, their presence is an essential part of the engineers' drive to optimise aerodynamics and ensure efficient cooling.

Thanks to a clever aerodynamics concept, the airflow is guided so efficiently around the car that drag is minimised and lift is also reduced. The engine, powertrain and brakes are all kept sufficiently cool, even when placed under extreme loads on the track. Elements which look like pure design accents when they first catch the eye are, in fact, busy fulfilling functional tasks. For example, the M-specific Air Breathers behind the front wheels reduce turbulence in the front wheel arches.

### **Optimum temperature management.**

The high-performance engine under the bonnet of the all-new BMW X5 M and all-new BMW X6 M requires a high-performance cooling system in order to guarantee the optimum operating temperature in all conditions – i.e. normal everyday driving, stop-start traffic and extreme action on the race track. A highly efficient, newly developed combination of low-temperature and high-temperature radiators, which also handles the cooling of the turbochargers, charge air, front axle brake and transmission oil, maintains an optimum temperature, even with all components working flat out.

### **Eight-speed M Steptronic transmission with Drivelogic.**

The all-new BMW X5 M and all-new BMW X6 M send their engine power to the wheels via the newly developed eight-speed M Steptronic transmission with Drivelogic, which mirrors the operating concept of the M Double Clutch

Transmission used by other M models. With its instantaneous responses, rapid gear changes and super-direct reaction to load changes, the torque converter auto links up seamlessly with the new higher-torque turbocharged engine and showcases its talents in hugely impressive style. At the same time, its wider ratio spread allows it to offer a clear drop in fuel consumption over the six-speed transmission of the previous-generation cars, as well as an increase in driving comfort and improved performance. This is also the first torque converter to enable “creep on demand” through the Low Speed Assistant.

The new eight-speed M Steptronic transmission allows drivers to sit back and enjoy automatic shifts or change gear manually using the gearshift paddles on the M leather steering wheel. And for the perfect getaway, the driver can activate the Launch Control system adapted from use in racing cars. Here, the driver keeps their foot on the brakes and pushes the accelerator down almost to the floor, which prompts the system to dial in the ideal getaway rpm. Releasing the brakes prompts Launch Control to let the car off the leash, and it accelerates off the line with maximum propulsion.

The driver can also use the three-stage Drivelogic function to choose whether to prioritise fuel economy, comfort or sports performance. This function is available both in automatic mode and in sequential SPORT mode.

### **Intelligent all-wheel drive.**

BMW xDrive intelligent all-wheel drive and Dynamic Performance Control play a key role in the outstanding dynamics of the all-new BMW X5 M and all-new BMW X6 M. The xDrive system employs an electronically controlled multi-plate clutch to allow fully variable distribution of drive between the front and rear axles – from 100 per cent at the rear to up to 100 per cent at the front. This ensures the best possible traction in all road conditions. In the interests of greater agility, xDrive brings a rear-biased basic set-up to the BMW X5 M and BMW X6 M.

The driving dynamics system Dynamic Performance Control oversees the continuous distribution of drive between the rear wheels – both under load and on the overrun – regardless of engine output. Working in combination with the xDrive all-wheel-drive system, the result is a whole new bracket of dynamic flair, agility and traction. The car follows the course set by the driver far more accurately, whatever the road surface, and the system also reduces the amount of wheel work required of the driver: the steering responds more directly and far fewer corrections are necessary. Moreover, the inherent propensity of conventional all-wheel-drive vehicles to understeer is eliminated. An improvement in traction is also impressively noticeable (on road surfaces

with differing friction levels, in particular), and active safety is markedly enhanced as a result. The driver can see how Dynamic Performance Control is operating on the display, with arrows at all four wheels visualising where the engine power is currently being sent.

### **An open door to controlled drifts.**

Among the other highlights of the overall concept behind the all-new BMW X5 M and all-new BMW X6 M is Dynamic Stability Control (DSC). The control functions of DSC have been optimised over previous versions of the system to improve driving dynamics further still. Added to which, extra functions enhancing active safety (Brake Standby, Brake Drying, Fading Compensation) and comfort (Start-Off Assistant, parking brake with automatic hold function) have also been introduced.

Dynamic Stability Control allows the driver to choose from three modes: DSC on, MDM (M Dynamic Mode), DSC off. While DSC on counteracts understeer and oversteer to great effect with brake inputs, MDM allows greater wheel slip – to give keen drivers the chance to execute some mild drifts. However, the driver aids will also intervene to assist the driver in this mode if a predefined dynamic limit is exceeded. Deactivating DSC (through DSC off) gives the driver the chance to fully explore the car's dynamic limits on the track and nudge the car into power oversteer (i.e. a drift) using the accelerator. In this mode, the system will only introduce brake inputs in extreme situations involving significant shifts in lateral acceleration.

### 3. The new M TwinPower Turbo engine. V8 with even more torque, backed by an emotionally rich soundtrack.



To say the newly developed engine of the all-new BMW X5 M and all-new BMW X6 M has a pounding heartbeat would be something of an understatement. After all, the 4.4-litre V8 uses innovative M TwinPower Turbo technology – consisting of cross-bank exhaust manifolds, a pair of TwinScroll turbochargers, High Precision Direct Petrol Injection, Double-VANOS and VALVETRONIC – to push torque and output to higher levels still. This unrivalled combination ensures that a strong wave of torque is maintained from low revs and allows the engine to impress with its direct and rapid responses, vivacious appetite for revs, linear power delivery and customary M soundtrack.

#### **Maximum performance meets outstanding efficiency.**

The peak output of the new M turbocharged engine powering the BMW X5 M and BMW X6 M is, at 423 kW/575 hp, four per cent higher than that of its predecessor and is available between 6,000 and 6,500 rpm. At the same time, the engine's peak torque has been boosted by around 10 per cent to 750 Nm (553 lb-ft), which can be enjoyed across an extremely broad rev band – from 2,200 to 5,000 rpm. The extraordinary power development of this M turbocharged engine allows the new M versions of the BMW X5 and BMW X6 to sprint from 0 to 100 km/h in a mere 4.2 seconds. The top speed of both is electronically limited to 250 km/h.

The outstanding efficiency of the new M TwinPower Turbo engine is illustrated by its fuel consumption and emissions in the EU cycle: 9km/l\* and 258 g/km CO<sub>2</sub>\* represent an improvement of more than 20 per cent over their predecessors. All of which means that the range of the two cars on a single, identically sized tank of fuel has increased by 26 per cent to 765 kilometres in each case.

#### **Optimised responses.**

The turbocharged V8 engine fitted in the BMW X5 M and BMW X6 M impresses most profoundly with its lightning-fast responsiveness. The key factors here are the engine's High Precision Direct Petrol Injection (200 bar), state-of-the-art VALVETRONIC system and cross-bank exhaust manifolds, which send two converged exhaust gas streams to drive the two TwinScroll turbochargers through four separate exhaust ducts.

\* Fuel consumption figures were calculated on the basis of the ECE test cycle, depending on tyre format.

The new engine features a closed-deck crankcase with an extremely rigid construction. This enables higher cylinder pressures to be achieved, paving the way for improved power output. A forged, torsionally stiff crankshaft is used to transfer the impressive torque, its low weight contributing to a significant reduction in rotating masses and thus a further sharpening of the engine's responses.

### **From race track to road.**

In the development of every model at BMW M GmbH, a familiar maxim applies: it must be "fit for the Nordschleife". The aim in the development of BMW M cars is to master the world's most challenging race track at race speed without a hitch. The extreme lateral and longitudinal acceleration generated when lapping the Ring places huge demands on the engine's oil supply. But sophisticated oil sump and suction snorkel geometry allows the all-new BMW X5 M and BMW X6 M to hit up to 1.2 g without creating a problem.

The cooling systems for the all-new BMW X5 M and BMW X6 M are similarly track-ready, as highlighted the first time you set eyes on the cars by the large air intakes in the front end. A combination of low-temperature and high-temperature radiators ensures that the optimum temperature is maintained for cooling the engine water, charge air, engine oil and transmission oil – even when venturing into high-performance territory.

The exhaust system has been modified to satisfy the sporting ambitions of the new M models. A distinctively familiar BMW M engine note resonates out across the whole rev range via electrically controlled flaps, which open or close according to demand, and sounds even sportier and emotionally richer than that of its predecessor. Selecting one of the preconfigured driving modes, moreover, engages a finely balanced set-up that also provides acoustic feedback on the engine load at any one time.



## 4. The chassis. Hitting the heights of agility, precision, poise and assurance.



The all-new BMW X5 M and BMW X6 M once again set the pace in the high-performance Sports Activity Vehicle and Sports Activity Coupe segments thanks to extensive chassis upgrades. These combine to provide outstanding dynamics together with unbeatable directional stability and excellent traction, along with the type of neutral self-steering typical of M cars, in particular when accelerating out of corners and toying with the dynamic limits.

To this end, the double-wishbone front suspension features revised kinematics. A modified upper wishbone (increase in camber, optimised camber progression and steering pivot axis) allows a further increase in cornering force potential and agility. At the same time, M-specific elastokinematics with more rigid bearings improve wheel guidance and therefore directional stability – both at the front axle and the Integral-IV rear axle (a spatial suspension system with anti-squat and anti-dive). Firmer suspension spring tuning and a 10-millimetre drop in ride height team up with the Dynamic Drive active roll stabilisation system to bring about an effective reduction in body roll and movement. In addition, the BMW X5 M and BMW X6 M come as standard with air suspension with self-levelling at the rear axle. Plus, Dynamic Damper Control with electronically adjustable dampers (X6 M) – the driver can select from three modes (COMFORT, SPORT and SPORT+) at the touch of a button – ensures the perfect balance between dynamic flair and ride comfort.

### **Mixed tyres for optimised handling.**

Another central element in the driving characteristics of the all-new BMW X5 M and BMW X6 M are the special tyres, whose development closely followed that of the chassis construction. In the high-performance segment, tyre choice for the front axle focuses – alongside lateral stability and brake forces – primarily on steering precision and feel. By contrast, the engineers' attention in the development of the rear tyres centred on traction, lateral stability and directional stability. In order to meet these part-contradictory, part-complementary demands, the BMW M GmbH engineers have developed two sets of mixed tyres for the all-new BMW X5 M and all-new BMW X6 M. The interconnected development of tyres, steering and axles endows the new cars with assured handling properties and good rolling comfort. Both models are fitted as standard with low-weight 20-inch light-alloy wheels (front: 10 J x 20, rear: 11.5 J x 20) (front: 285/40 R20 Y, rear: 325/35 R20 Y), while low-weight 21-inch forged wheels (front: 10 J x 21, rear: 11.5 J x 21) (front: 285/35 R21 Y, rear: 325/30 R21 Y) can be ordered as an option.

### **M Servotronic steering with individual adjustment.**

One of the most important interfaces between driver and vehicle is the steering. Here, BMW M GmbH's high-performance models have set the benchmark from day one when it comes to providing a direct steering feel, precise feedback on the driving conditions and a finely-tuned balance when exploring the dynamic limits. Continuing this tradition, the M Servotronic steering in the all-new BMW X5 M and BMW X6 M – with its M-specific gear ratios and intelligently composed overall set-up – likewise scales these lofty heights. This rack-and-pinion system with electric power assistance uses no energy when the car is travelling straight ahead, and so saves 0.3 litres of petrol per 100 kilometres compared to hydraulic systems. The Servotronic function familiar from hydraulic systems, which controls the degree of steering assistance according to the car's speed, is another integral element. Furthermore, drivers can choose from three steering settings (COMFORT, SPORT, SPORT+) – at the touch of a button in the centre console or by storing their preferred settings in the M Drive buttons – to adjust the steering characteristics to personal tastes or the situation at hand.

### **High-performance brakes borrowed from motor sport.**

The remarkable dynamic potential of the BMW X5 M and BMW X6 M is backed up by the standard high-performance compound brakes with large six-piston fixed callipers at the front and single-piston floating callipers at the rear. Excellent stopping power, precise feel, low weight and increased resistance to heat are their headline features. The brake discs in compound systems – which were originally developed for racing – are made up of different parts and materials. The surface of the brake linings at the front axle is 50 per cent larger compared with those on the predecessor models. At the same time weight is down by 1.6 kilograms, helping to reduce unsprung and rotating masses. This also feeds into improvements in the acceleration, responsiveness and handling of the BMW X5 M and BMW X6 M. And the compound brakes waste no time in signalling their performance capability visually as well. All the brake discs are perforated and inner-vented, and the brake callipers are painted in Dark Blue metallic, in typical M fashion, and marked at the front wheels with the M logo.

## 5. The design. Excellent dynamics before a wheel has turned.



The outstanding driving dynamics of the all-new BMW X5 M and all-new BMW X6 M also come to the fore through their M design signatures. The close ties between the two models – they have identical performance and equally strong dynamic potential – are reflected particularly clearly in the shared design of the front end with its large air intakes. However, the individual characters of the two high-performance sports models are still very distinct, as is clear the first time they come into view. The proportions of the BMW X5 M provide an instant showcase of its muscular power and exclusivity, not to mention its impressive versatility. The flowing lines of the BMW X6 M, meanwhile, accentuate the prominent dynamics and sporting athleticism of the BMW Sports Activity Coupe.

The all-new BMW X5 M and all-new BMW X6 M have been designed for use on the road. Both of these elite sports machines combine the raised seating position of an all-wheel-drive BMW X model with the outstanding overall concept balance of a BMW M car. In order to visually reinforce the further improved on-road attributes of the new M models, the whole body is painted the same colour. In combination with a 10-millimetre reduction in ride height and the wider track created by the use of mixed-size tyres, the cars have a lower, more powerful stance, cut an even more dynamic figure even when stationary, and as a result enjoy a far superior status to their BMW X5/BMW X6 siblings.

### **Visually striking front end with a functional task.**

The shared front-end design of the BMW X5 M and BMW X6 M is likewise a clear departure from that of the respective standard models and follows the classic “form follows function” maxim. The large air intakes and voluminous “kidneys” of the radiator grille, with their customary M double-bar look, are a response to the high cooling air requirements of the powerful engine, transmission and high-performance front brakes. Despite the large amount of cooling and more stringent pedestrian protection requirements, the designers have managed to integrate foglamps into the front end of the cars. Both new M models borrow their headlights from the BMW X6, complete with washer system. Elsewhere, the special flaps low down in the outer air intakes – adapted from those on racing cars – reduce lift and emphasise the optimised aerodynamics of the two new models.

### **Same genes, distinctive looks.**

The differences in the character of the BMW X5 M and BMW X6 M are particularly evident when the two models are viewed from the side. The BMW X5 M reinforces its presence and functionality with its upright stature, long roofline and large window surfaces. By contrast, the BMW X6 M displays the unmistakable, dynamic lines of a BMW Sports Activity Coupe through its gently curved glasshouse, sloping roofline and pronounced wedge shape. M-specific features of both models include the familiar twin-stalk exterior mirrors with integral side indicators and optional display for the lane change assistant. Another signature element of models from BMW M GmbH are the gills in the front side panels featuring chrome trim that includes a model badge and Air Breather.

### **Powerful rear end with racing accents.**

The rear ends of the BMW X5 M and BMW X6 M also differ significantly from their standard siblings, exuding a more exclusive aura and majoring on bold, sporty accents. This approach is underlined in particular by the wide rear tyres (which are a different size from the fronts), the distinctive M rear aprons painted in body colour and the hallmark M four-tailpipe exhaust. The diffuser element (likewise in body colour) adapted from racing cars helps to ensure aerodynamically optimised airflow at the lower edge of the rear bumper moulding, allowing the new M models to highlight once again the impressive functionality of their design features. A rear spoiler painted in body colour on the BMW X6 M reduces rear-axle lift.

### **Sporting ambience and flawless ergonomics.**

As with all cars from the BMW brand, the design of the interior prioritises intuitive, quick and error-free usability. And M GmbH also makes its own distinctive mark here. For example, the BMW X5 M and BMW X6 M come with a newly developed, ergonomically optimised M leather steering wheel with gearshift paddles, while the M gearshift lever has an equally distinctive design. The instrument cluster, M Drive menu in the information display, displays in the optional Head-Up Display and special multifunction switch with M Drive buttons on the steering wheel also fit the M template.

The sporting ambience on board the all-new BMW X5 M and BMW X6 M is accentuated particularly strongly by the exclusive fine-grain Merino leather with contrast stitching and embossed M logo in the backrests – and by the leather-covered BMW Individual instrument panel. Door sill strips with model lettering, aluminium interior trim strips and the anthracite-coloured BMW Individual roof liner lend the interior an additional touch of exclusivity. Customers can take the interior of their cars to an even more exalted level by

specifying the optional full leather trim with roof liner in Alcantara and fully electric M multifunction seats with integral head restraint.

## 6. The equipment.

### High-quality standard equipment and exclusive options.



The all-new BMW X5 M and all-new BMW X6 M come with an extensive range of exclusive equipment from the factory which illustrates their character as high-performance sports machines that can be used every day. Customers can also dip into a large selection of optional equipment with which to make their car even sportier, for example, or to satisfy the most exacting requirements in terms of comfort. And the BMW Individual range of, leather appointments and interior trim strips means the BMW X5 M and BMW X6 M can be treated to even greater personalisation over and above those possibilities in order to meet customer desires.

Standard-fitted exterior features painted in body colour and fitting the classic M profile are a key factor in the striking appearance of the all-new BMW X5 M and all-new BMW X6 M. These include a front apron with large air intakes, a double-bar kidney grille, familiar M twin-stalk exterior mirrors, side gills with the M logo and Air Breathers, a rear apron with integrated diffuser and a four-tailpipe exhaust system in chrome. Both models are fitted as standard with polished 20-inch BMW M light-alloy wheels in Orbit Grey and with mixed tyres. Likewise polished, forged 21-inch BMW M light-alloy wheels in Orbit Grey and with mixed tyres are available as an option.

#### **High-quality interior with an exclusive allure.**

Exclusivity and impressive functionality are also defining features of the interior of the all-new BMW X5 M and all-new BMW X6 M. As well as the new M leather steering wheel with integrated aluminium gearshift paddles, the M-specific standard equipment of both models also includes a leather-covered BMW Individual instrument panel, the anthracite-coloured BMW Individual roof liner, aluminium interior trim strips, door sill finishers with model lettering, knee pads on the centre console.

Likewise included in standard specification for the all-new BMW X5 M and all-new BMW X6 M are an alarm system, automatic tailgate operation, automatically dimming rear-view and exterior mirrors, a headlight washer system, automatic climate control, a Harman Kardon Surround Sound speaker system, Park Distance Control (front and rear), with rear-view camera. Adaptive LED Headlights with BMW Selective Beam, an anti-dazzle high-beam function and the active cornering function are also part of the standard equipment for the BMW X5 M and BMW X6 M.

These items are in addition to the driver assistance systems familiar from the regular BMW X5 and BMW X6 and the mobility services from BMW ConnectedDrive. Among the highlights here is the new-generation Navigation system Professional, which boasts even greater capability and sharper graphics and incorporates 3D elements into its map display.

In keeping with their high-performance pretensions, the two new M models also come as standard with an M-specific instrument cluster – complete with displays showing the gear selected, system status (engine dynamics, Dynamic Damper Control, M Servotronic), M Drive mode and a compass, the M Drive menu in the information display and M-specific buttons on the M leather steering wheel. Over and above the information projected by the standard system, the standard Head-Up Display for the all-new BMW X5 M and all-new BMW X6 M also features a special M display including a digital speed display, gear display, rev band and Shift Lights.

### **More sport, more comfort.**

The list of exclusive M options includes a fully electric M multifunction seat in Merino leather. This seat variant stands out with its integral head restraint and specially formed bolsters around the seat cushion and shoulders to further improve lateral support.

The new M models can be treated to yet a further upgrade in the form of optional Merino full-leather appointments, standard carbon-fibre interior trim strips and two new and exclusive M paint finishes (Long Beach Blue metallic and Donington Grey metallic) which are offered as standard equipment.

The high-performance character of the all-new BMW X5 M and all-new BMW X6 M is further emphasised by the standard Launch Control feature adapted from its application in racing cars.

## 7. Technical specifications.

### The all-new BMW X5 M.



BMW X5 M		
<b>Body</b>		
No of doors/seats		5/5
Length/width/height (unladen)	mm	4880/1985/1754
Wheelbase	mm	2933
Track, front/rear	mm	1666/1667
Ground clearance		195
Turning circle	m	12.8
Tank capacity	app ltr	85
Cooling system incl. heater	ltr	16.8
Engine oil <sup>1)</sup>	ltr	9.5
Weight, unladen, to DIN/EU	kg	2275/2350
Max load to DIN	kg	695
Max permissible weight	kg	2970
Max axle load, front/rear	kg	1420/1630
Max trailer load (12%) braked/unbraked	kg	2970/750
Max roofload/ max towbar download	kg	100/140
Luggage comp capacity	ltr	650–1870
Air resistance	$C_d \times A$	0.38 x 2.93
<b>Engine</b>		
Config/No of cyls/valves		V/8/4
Engine technology	BMW M TwinPower Turbo technology, TwinScroll biturbo charging, High Precision Petrol Direct Injection, Double-VANOS, VALVETRONIC	
Capacity, effective	cm <sup>3</sup>	4395
Stroke/bore	mm	88.3/89.0
Compression ratio	:1	10.0
Max output	kW/hp	423/575
at	rpm	6000–6500
Torque	Nm	750
at	rpm	2200–5000
<b>Electrical system</b>		
Battery/installation	Ah/–	105/luggage comp
Alternator	A/W	209/n.b.
<b>Driving Dynamics and Safety</b>		
Suspension, front	Double-joint spring strut axle with M-specific elastokinematics, small, negative steering roll radius, anti-dive	
Suspension, rear	Integral-IV rear axle with M-specific elastokinematics, spatially-acting suspension with anti-squat and anti-dive, air suspension with automatic self-levelling	
Brakes, front	Six-piston fixed-calliper disc brakes, vented	
Brakes, rear	Single-piston floating-calliper disc brakes, vented	
Driving stability systems	Standard: DSC incl. ABS and M Dynamic Mode, Cornering Brake Control (CBC), Dynamic Brake Control (DBC), Electronic Differential Lock ADB-X, Dry Braking function, Fading Compensation, Start-Off Assistant; DSC cross-linked with xDrive all-wheel drive, Dynamic Performance Control, Hill Descent Control (HDC), Adaptive Drive	
Safety equipment	Standard: airbags for driver and front passenger, side airbags for driver and front passenger, head airbags for front and rear seats, crash-activated head restraints at the front, three-point inertia-reel seatbelts on all seats with belt stopper, belt latch tensioner and belt force limiter at the front, crash sensors, rollover sensors, tyre defect indicator	
Steering	Electric Power Steering (EPS) with M-specific Servotronic function	
Steering transmission, overall	:1	17.9
Tyres, front/rear	285/40 R20 104Y / 325/35 R20 108Y	
Rims, front/rear	10.0J x 20 / 11.5J x 20 light alloy	



**BMW X5 M**

**Transmission**

Type of gearbox	8-speed Steptronic		
Gear ratios	I	:1	5.000
	II	:1	3.200
	III	:1	2.143
	IV	:1	1.720
	V	:1	1.313
	VI	:1	1.000
	VII	:1	0.823
	VIII	:1	0.640
	R	:1	3.478
Final drive		:1	3.154

**Performance**

Power-to-weight ratio (DIN)	kg/kW	5.4
Output per litre	kW/ltr	96.2
Acceleration	0–100 km/h	s
	0–1000 m	s
		4.2
		22.6
in 4th/5th gear	80–120 km/h	s
		–/–
Top speed	km/h	250

**BMW EfficientDynamics**

BMW EfficientDynamics, standard features	Brake Energy Regeneration, Electric Power Steering (EPS), Auto Start Stop function, ECO PRO mode, intelligent lightweight construction, on-demand operation of ancillary units, detachable a/c compressor
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**Fuel Consumption EU<sup>3)</sup>**

With standard tyres:		
Combined	km/l	9.0
CO <sub>2</sub>	g/km	258
Emission rating		EU6

Specifications applicable to ACEA markets, data relevant to homologation applicable in part only to Germany (weight)  
Figures in brackets refer to automatic transmission

<sup>1)</sup> Oil change

<sup>3)</sup> Fuel consumption and CO<sub>2</sub> emissions depend on the selected tyre format

# The all-new BMW X6 M.

BMW X6 M		
<b>Body</b>		
No of doors/seats		5/5
Length/width/height (unladen)	mm	4909/1989/1689
Wheelbase	mm	2933
Track, front/rear	mm	1666/1667
Ground clearance		195
Turning circle	m	12.8
Tank capacity	app. ltr	85
Cooling system incl. heater	ltr	16.8
Engine oil <sup>1)</sup>	ltr	9.5
Weight, unladen, to DIN/EU	kg	2265/2340
Max load to DIN	kg	685
Max permissible weight	kg	2950
Max axle load, front/rear	kg	1420/1610
Max trailer load (12 %) braked/unbraked	kg	2950/750
Max roofload/ max towbar download	kg	100/140
Luggage comp capacity	ltr	550–1525
Air resistance	c <sub>d</sub> x A	0.37 x 2.89
<b>Engine</b>		
Config/No of cyls/valves		V/8/4
Engine technology	BMW M TwinPower Turbo technology, TwinScroll biturbo charging, High Precision Petrol Direct Injection, Double-VANOS, VALVETRONIC	
Capacity, effective	cm <sup>3</sup>	4395
Stroke/bore	mm	88.3/89.0
Compression ratio	:1	10.0
Max output	kW/hp	423/575
at	rpm	6000–6500
Torque	Nm	750
at	rpm	2200–5000
<b>Electrical system</b>		
Battery/installation	Ah/–	105/luggage comp
Alternator	A/W	209/n.b.
<b>Driving Dynamics and Safety</b>		
Suspension, front	Double-joint spring strut axle with M-specific elastokinematics, small, negative steering roll radius, anti-dive	
Suspension, rear	Integral-IV rear axle with M-specific elastokinematics, spatially-acting suspension with anti-squat and anti-dive, air suspension with automatic self-levelling	
Brakes, front	Six-piston fixed-calliper disc brakes, vented	
Brakes, rear	Single-piston floating-calliper disc brakes, vented	
Driving stability systems	Standard: DSC incl. ABS and M Dynamic Mode, Cornering Brake Control (CBC), Dynamic Brake Control (DBC), Electronic Differential Lock ADB-X, Dry Braking function, Fading Compensation, Start-Off Assistant; DSC cross-linked with xDrive all-wheel drive, Dynamic Performance Control, Hill Descent Control (HDC), Adaptive Drive	
Safety equipment	Standard: airbags for driver and front passenger, side airbags for driver and front passenger, head airbags for front and rear seats, crash-activated head restraints at the front, three-point inertia-reel seatbelts on all seats with belt stopper, belt latch tensioner and belt force limiter at the front, crash sensors, rollover sensors, tyre defect indicator	
Steering	Electric Power Steering (EPS) with M-specific Servotronic function	
Steering transmission, overall	:1	17.9
Tyres, front/rear	285/40 R20 104Y / 325/35 R20 108Y	
Rims, front/rear	10.0J x 20 / 11.5J x 20 light alloy	

			<b>BMW X6 M</b>
<b>Transmission</b>			
Type of gearbox	8-speed Steptronic		
Gear ratios	I	:1	5.000
	II	:1	3.200
	III	:1	2.143
	IV	:1	1.720
	V	:1	1.313
	VI	:1	1.000
	VII	:1	0.823
	VIII	:1	0.640
	R	:1	3.478
Final drive		:1	3.154
<b>Performance</b>			
Power-to-weight ratio (DIN)	kg/kW		5.4
Output per litre	kW/ltr		96.2
Acceleration	0–100 km/h	s	4.2
	0–1000 m	s	22.6
in 4th/5th gear	80–120 km/h	s	–/–
Top speed	km/h		250
<b>BMWEfficientDynamics</b>			
BMW EfficientDynamics, standard features		Brake Energy Regeneration, Electric Power Steering (EPS), Auto Start Stop function, ECO PRO mode, intelligent lightweight construction, on-demand operation of ancillary units, detachable a/c compressor	
<b>Fuel Consumption EU<sup>3)</sup></b>			
With standard tyres:			
Combined	km/l		9.0
CO <sub>2</sub>	g/km		258
Emission rating			EU6

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

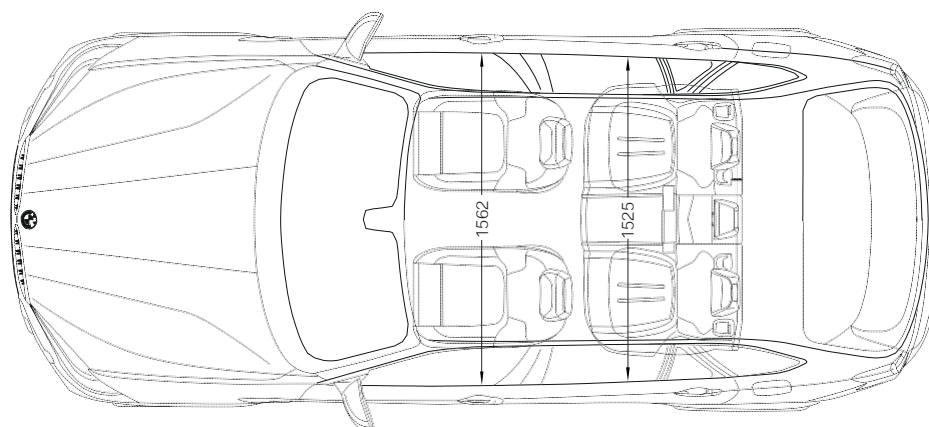
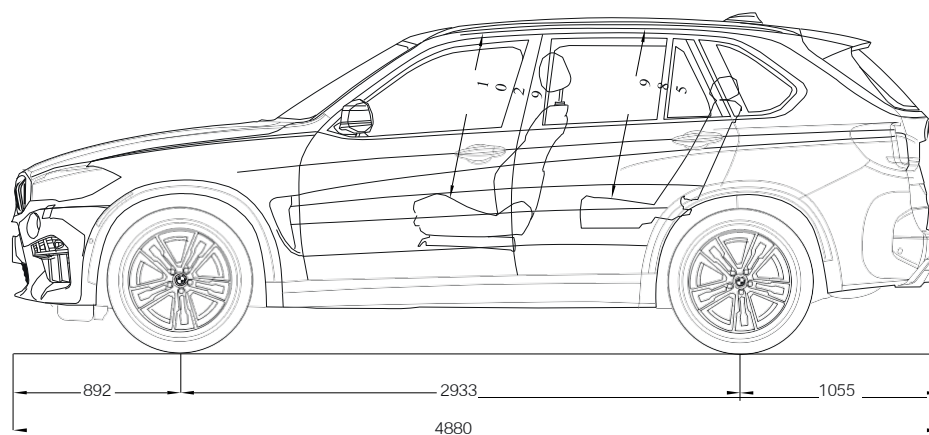
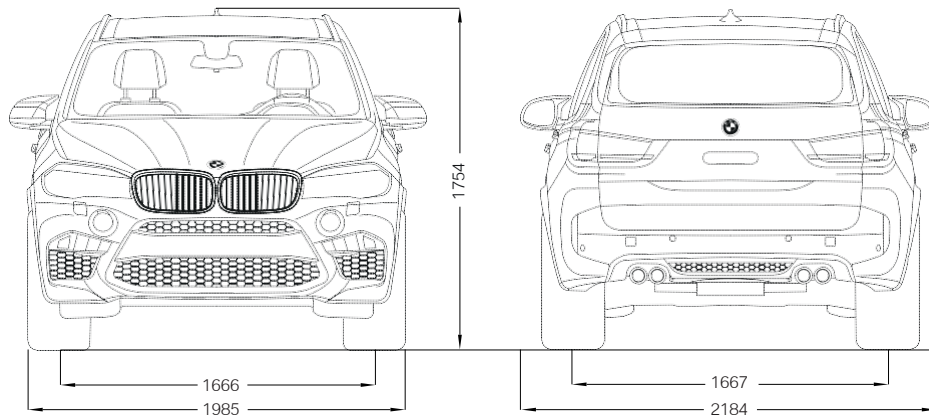
<sup>1)</sup> Oil change

<sup>3)</sup> Fuel consumption and CO<sub>2</sub> emissions depend on the selected tyre format

## 8. Output and torque diagram. The all-new BMW X5 M and the all-new BMW X6 M.



## 9. Exterior and interior dimensions. The all-new BMW X5 M.



# The all-new BMW X6 M.

