



Media Information
27 August 2019

Uncompromising protection and superiority: The new BMW X5 Protection VR6.

Munich. With the latest generation of the security vehicle built on the basis of a Sports Activity Vehicle (SAV) for the luxury class segment, the premium carmaker BMW now meets the increased need for individual protection and superiority in any situation. The new BMW X5 Protection VR6 (combined fuel consumption: 13.0 l/100 km; combined CO₂ emissions: 298 g/km*) offers private individuals and persons at risk customised protection against violent attacks, kidnapping or organised crime. This is often a decisive criterion, especially in regions like South America, Africa or Russia.

The integration of series components and additional safety-related equipment of the BMW X5 Protection VR6 into the vehicle architecture was already taken account of during development. Production is carried out according to the stringent production standards defined by the BMW Group. Thus the BMW X5 Protection VR6 combines a standard range of integrated protective equipment with the driving dynamics, comfort and advanced technology of the BMW X5. This is complemented by the equally supreme and discreet appearance of the new security vehicle, which is almost identical to the production model in terms of driving characteristics, high-grade interior and design.

The new BMW X5 Protection VR6 fulfils the requirements of resistance class VR6 in accordance with the internationally recognised official test criteria of the VPAM (Prüfstellen für Angriffshemmende Materialien und Konstruktionen; Associations of Testing Institutes for Attack Resistant Materials and Constructions). The official certification was carried out according to the Guidelines for Bullet Resistant Vehicles (BRV 2009), Explosive Resistant Vehicles (ERV 2010) and PAS 300, which define the bullet and explosive force resistance of security vehicles.

Maximum protection thanks to a holistic safety concept.

The integration of the protective equipment rendering the new BMW X5 a security vehicle of the resistance class VR6 was already taken into account during the development of the SAV. In this way, it was possible to implement a

Company
Bayerische
Motoren Werke
Aktiengesellschaft

Postal address
BMW AG
80788 Munich

Telephone
+49-89-382-56097

Internet
www.bmwgroup.com

* All figures relating to the performance, fuel/electric power consumption and CO₂ emissions are provisional.

The figures for fuel consumption, CO₂ emissions and power consumption are calculated based on the measurement methods stipulated in the current version of Regulation (EU) 2007/715. The figures are calculated using a vehicle fitted with basic equipment in Germany, the ranges stated take into account differences in selected wheel and tyre sizes as well as the optional equipment. They may change during configuration. The figures have already been calculated based on the new WLTP test cycle and adapted to NEDC for comparison purposes. In these vehicles, different figures than those published here may apply for the assessment of taxes and other vehicle-related duties which are (also) based on CO₂ emissions.

For further details of the official fuel consumption figures and official specific CO₂ emissions of new cars, please refer to the "Manual on fuel consumption, CO₂ emissions and power consumption of new cars", available free of charge at all sales outlets, from Deutsche Automobil Treuhand GmbH (DAT), Hellmuth-Hirth-Str. 1, 73760 Ostfildern-Schramhausen and at <https://www.dat.de/co2/>.



Media information

Date 27 August 2019

Subject **Uncompromising protection and superiority: The new BMW X5 Protection VR6.**

Page 2

holistic safety concept comprising all areas of passive and active passenger protection. The moulded armour-plating components and the security glazing were developed exclusively for each model. They blend in harmoniously with the overall vehicle concept in terms of function and design. Therefore, both outside and inside, the new BMW X5 Protection VR6 is barely distinguishable from a conventional production vehicle. The anonymity resulting from this constitutes an additional safety aspect.

In contrast to retro-fitted armouring, there are also decisive advantages with respect to the effectiveness of the protective equipment and handling characteristics. The holistic safety concept of the new BMW X5 Protection VR6 makes it possible to already identify during the development stage potential weaknesses such as body joints and transitions between metal and glazing and to integrate effective protective measures. Certification includes the complete vehicle and not just the materials used. This is the only way to make a realistic assessment of the effectiveness of the model-specific protective cell. Likewise, the suspension and brakes on the new BMW X5 Protection VR6 are aligned to the increased weight vs. the production vehicle in order to ensure hallmark BMW agility also in critical driving situations.

Protected space: armoured passenger compartment and security glazing.

The interior of the new BMW X5 Protection VR6 offers passengers an extremely high level of protection against attacks with firearms and/or explosive devices. The key element of the protective equipment is the armoured passenger compartment of the SAV. Moulded components made from high-strength steel adapt perfectly to the contour of the body within the area of the doors, side frame, roof and front wall. Furthermore, an aluminium underbody splinter shield, the likewise armoured luggage compartment partition and security glazing are all standard and contribute towards a comprehensive protection of the interior. Multilayered safety glass with a thickness of approx. 33 mm for the windscreen, doors and luggage compartment partition wall also withstands attacks by impact weapons and is fitted with an internal polycarbonate layer as additional splinter protection. Moreover, penetration by bullets or fragments is prevented by tightly sealed protection and overlapping amour-plating, e.g. within the sensitive areas



Media information

Date 27 August 2019

Subject **Uncompromising protection and superiority: The new BMW X5 Protection VR6.**

Page 3

of door gaps and bodywork joints as well as the transitions between body panels and glazing.

The combination of amour-plated bodywork and security glazing facilitates effective protection against attacks by handguns and long firearms using ammunition up to a calibre of 7.62 × 39 FeC or 7.62 × 39 SC respectively, as used in weapons of the type AK-47, a most commonly used weapon in the world. Furthermore, the armoured passenger compartment withstands lateral blasts of up to 15 kilograms of TNT from a distance of four metres. Innovative so-called Post Blast Protective Technology for the security glazing ensures particularly effective protection against secondary attacks. Even following a blast, all windows remain firmly in position, thus eliminating any formation of gaps between glazing and body.

The armour-plated floor offers protection against hand grenades of the type DM51. Enhanced underbody reinforcement comprising fibre composite materials, which also withstands attack by hand grenades of the type HG85, is optionally available. A particularly extensively armoured roof is available as a further special option. The additional reinforcement comprising security steel and fibre composite materials offers certified protection against drone attacks with explosive charges of the category DTG5, which, inter alia, includes up to 200 grams of C4 and over 500 fragments.

A further model-specific, integral component of the standard equipment for the new BMW X5 Protection VR6 is the self-sealing fuel tank. A special sheathing ensures that the tank closes automatically following an attack in order to prevent fuel spillage. Standard runflat tyres with reinforced sidewalls allow the driver to continue the journey even after a complete loss of tyre pressure. Optional model-specific post crash functions also serve to retain mobility in extreme situations. They ensure that the engine of the new BMW X5 Protection VR6 is not switched off after a collision and that the energy supply is not interrupted.

Superior engines, model-specific suspension.

Not only in terms of design is the new BMW X5 Protection VR6 almost indistinguishable from the corresponding production model. A high degree of agility on the road and impressive off-road performance provides perfect



Media information

Date 27 August 2019

Subject **Uncompromising protection and superiority: The new BMW X5 Protection VR6.**

Page 4

conditions for safely mastering any situation. The necessary power comes from an extremely efficient V8 petrol engine featuring BMW TwinPower Turbo technology. The technology package comprises two turbo chargers located within the V space between the cylinder banks, one operating at an increased maximum pressure of 350 bar and the latest versions of the fully variable valve control system VALVETRONIC as well as variable twin VANOS camshaft control.

Spontaneous response and superior power development characterise the new eight-cylinder in the engine portfolio for the BMW X5. From a 4.4-litre displacement it mobilises a maximum power output of 390 kW/530 hp within a speed range of between 5,500 and 6,000 rpm. The power unit delivers a maximum torque of 750 Nm at 1,800 rpm, which remains available up to 4,600 rpm. Therefore, the new BMW X5 Protection VR6 is by far the most powerful vehicle within the competitive environment. The supreme pulling power of its V8 engine facilitates acceleration from 0 to 100 km/h in just 5.9 seconds. Top speed of the new BMW X5 Protection VR6 is electronically limited to 210 km/h.

Design and tuning of the suspension for the new BMW X5 Protection VR6 are both oriented towards the outstanding engine performance and the model-specific weight of the security vehicle. The components and systems, which have been precisely aligned and combined into a harmonious overall package, guarantee maximum agility as well as an outstanding level of comfort. The construction of the suspension comprises a double wishbone front axle and a five-arm rear axle as well as a specifically reinforced steel spring system and electronically controlled dampers with independent characteristic diagrams. 20-inch light alloy wheels with mixed tyres permit enhanced lateral acceleration and maximum track stability during dynamic cornering. The sports brake system also guarantees constantly high braking performance even under extreme conditions.

Active Roll Stabilisation contributes additionally to the supreme handling characteristics of the new BMW X5 Protection VR6. The vehicle's electric swivel motors ensure fast and precise compensation of body roll during dynamic cornering. Furthermore, they actively counter the vibrations triggered by unevenness on one side of the road. As a result, the vehicle's self-steering and



Media information

Date 27 August 2019

Subject **Uncompromising protection and superiority: The new BMW X5 Protection VR6.**

Page 5

load change behaviour are both noticeably optimised. Therefore, Active Roll Stabilisation enhances the comfort, agility and stability of the new BMW X5 Protection VR6.

Moreover, the standard equipment of the security vehicle also includes Integral Active Steering. The front and rear wheels steer in opposing directions or turn in the same direction depending on the current speed. Thus, agility during cornering and stability during lane change are enhanced, as are the manoeuvrability of the vehicle in city traffic and parking.

Comprehensive comfort and safety features, individual options.

Thanks to its integrated safety concept, the new BMW X5 Protection VR6 is equipped to cope with every-day traffic conditions as well as those situations requiring special protection and flexible reactions. At the same time, it offers the degree of sportiness, versatility and comfort that is characteristic of the BMW X5. There are four seats available in the generously sized interior. Due to the holistic development concept, convenient entry and exit as well as all-round visibility offered by the production vehicle are fully retained.

The windscreen and front section of the side windows come as standard with heating function. The security glazing features electric windows on the driver's side. Optionally, electric windows can also be installed at the passenger's side. In addition, the opening height of the windows at the front can be limited to around ten centimetres to enable communication with the outside world and the exchange of documents while preventing larger objects from entering the vehicle.

Standard model-specific features of the BMW X5 Protection VR6 include an intercom and an attack alarm system. The intercom facilitates communication with persons outside the vehicle without the need to open doors or windows. For this purpose, exterior mirror-integrated microphones, an external loudspeaker and a hands-free microphone, which is installed in the roof liner, as well as additional internal loudspeakers, are used. The attack alarm function ensures at the push of a button that the doors are automatically locked and the windows on the driver's and passenger's side are closed. Furthermore, audible



Media information

Date 27 August 2019

Subject **Uncompromising protection and superiority: The new BMW X5 Protection VR6.**

Page 6

and visual alarms are activated. Control elements for the system as well as further model-specific functions are installed in an additional switch panel in front of the gear selector lever.

Standard equipment features include, inter alia, 4-zone automatic climate control, a hi-fi loudspeaker system, Ambient Light, Automatic Soft Close for the doors and the M leather steering wheel. Additional standard features are the BMW Live Cockpit Professional, the multi-display set-up of which comprises a fully digital instrument cluster and a 12.3-inch control display enabling the driver of the BMW X5 Protection VR6 to use the diverse online-based services from BMW Connected and BMW ConnectedDrive. This also includes the BMW Intelligent Personal Assistant, a system that facilitates the operation of numerous functions by means of natural voice commands.

The range of optional equipment also includes, inter alia, comfort seats, Active Seat Ventilation and a massage function, Rear Seat Entertainment Professional and glass applications for selected control elements. Furthermore, all exterior colours, seat upholsteries and interior trim strips available for the SAV can be chosen for individualising the BMW X5 Protection VR6. Additional ease of manoeuvrability is provided by a reversing camera and Surround View, including the Remote 3D View function, which transmits a live image of the vehicle and its surroundings to the customer's smartphone. BMW Laser Light with Selective Beam, which increases the high beam range to more than 500 metres, is also available for the security vehicle as an alternative to the standard LED headlights.

Moreover, additional optional features designed to suit each model are available for each desired purpose. Therefore, the new BMW X5 Protection VR6 can be additionally equipped, for example, with LED front flashers in the radiator grille, rear flashers, roof-mounted light beacons including signal tone system, a roof antenna with additional receiver for digital radio as well as armour-plating for the vehicle batteries. A pennant holder is also available for representation purposes.

BMW offers customers discreet and confidential advice from experienced experts. A high degree of flexibility with regard to customer needs leads to individual solutions. A further network of qualified BMW service partners



Media information

Date 27 August 2019

Subject **Uncompromising protection and superiority: The new BMW X5 Protection VR6.**

Page 7

guarantees reliable support with regard to maintenance, repair and supply of parts. Special driver training is also offered.

The new BMW X5 Protection VR6: a genuine BMW for customised protection.

Like all of the Bavarian brand's security vehicles, the new BMW X5 Protection VR6 was subjected to a comprehensive testing regime. This includes test and calibration drives within the framework of the serial development process, which guarantee reliable performance and function also under extreme conditions.

The security vehicle is already fitted with its unique suspension technology at the BMW Spartanburg plant in the US federal state of South Carolina, where the new BMW X5 Protection VR6 is produced alongside the production model variants of the SAV. The subsequent integration of protective equipment and further model-specific safety features by highly qualified experts at the manufacturer's special plant in Toluca, Mexico, offers uncompromising implementation of the holistic safety concept. As opposed to retro-fitted armoured vehicles, which may compromise security or have components subjected to excessive loads, production is carried out according to stringent BMW quality standards.

Ballistic testing is carried out by an independent state testing authority to verify the resistance effect of the armouring and security glazing in accordance with internationally recognised guidelines. However, the ballistic tests exceed by far the usual requirements. In addition to the required 90 and 45-degree ballistic tests, the test scenario is supplemented by gunfire from additional angles in order to best reflect realistic conditions. The official testing and certification of the entire vehicle provides evidence of the reliability of the safety concept as a whole.

Unique experience: the first BMW security vehicle was built more than 40 years ago.

All over the world, private individuals, officials and celebrities alike rely on security vehicles from BMW. The high reputation is built not least on a unique tradition. The BMW Group has more than 40 years of experience in the development and production of security vehicles with model-specific protective



Media information

Date 27 August 2019

Subject **Uncompromising protection and superiority: The new BMW X5 Protection VR6.**

Page 8

equipment. As early as in 1978, BMW presented the first security vehicle based on a BMW 7 Series sedan. Even then, the BMW 733i High Security offered a holistic security concept and hence considerable advantages compared to retro-fitted security vehicles. For each of the following generations, a high security version of the luxury sedan was also produced.

Further security vehicles were built based on the BMW 3 Series and the BMW 5 Series. In 2004, the BMW X5 Security was the first Sports Activity Vehicle with model-specific protective equipment to arrive on the market. In 2009, the BMW X5 Security Plus was the first vehicle of its kind to comply with the requirements of resistance class 6. With the new BMW X5 Protection VR6, the fourth generation of the SAV is now offered as a security vehicle. The equipment features designed to offer protection against attacks and other hazards have been consistently further developed during the course of time. Thus, once again, the new BMW X5 Protection VR6 sets benchmarks in the protection of persons at risk.



Media information

Date 27 August 2019

Subject **Uncompromising protection and superiority: The new BMW X5 Protection VR6.**

Page 9

In the event of enquiries please contact:

Corporate Communications

Christophe Koenig, Product Communications BMW X models, Original BMW Accessories, xDrive

Telephone: +49-89-382-56097

E-mail: Christophe.Koenig@bmwgroup.com

Eckhard Wannieck, Head of Product and Brand Communications BMW

Telephone: +49-89-382-28042

E-mail: Eckhard.Wannieck@bmwgroup.com

Internet: www.press.bmwgroup.com

E-mail: presse@bmw.de

The BMW Group

With its four brands BMW, MINI, Rolls-Royce and BMW Motorrad, the BMW Group is the world's leading premium manufacturer of automobiles and motorcycles and also provides premium financial and mobility services. The BMW Group production network comprises 31 production and assembly facilities in 15 countries; the company has a global sales network in more than 140 countries.

In 2018, the BMW Group sold over 2,490,000 passenger vehicles and more than 165,000 motorcycles worldwide. The profit before tax in the financial year 2018 was € 9.815 billion on revenues amounting to € 97.480 billion. As of 31 December 2018, the BMW Group had a workforce of 134,682 employees.

The success of the BMW Group has always been based on long-term thinking and responsible action. The company has therefore established ecological and social sustainability throughout the value chain, comprehensive product responsibility and a clear commitment to conserving resources as an integral part of its strategy.

www.bmwgroup.com

Facebook: <http://www.facebook.com/BMWGroup>

Twitter: <http://twitter.com/BMWGroup>

YouTube: <http://www.youtube.com/BMWGroupView>

Instagram: <https://www.instagram.com/bmwgroup>

LinkedIn: <https://www.linkedin.com/company/bmwgroup/>