#### 04/2013 Page 1

## The BMW M6 Gran Coupe. Contents.



1.	A supreme combination of high performance and luxury:	
	The BMW M6 Gran Coupe	2
2.	Technical specifications.	6
3.	Output and torque diagram.	8
1	Exterior and interior dimensions	Ω

Page 2

# 1. A supreme combination of high performance and luxury: The BMW M6 Gran Coupe.

The scene is now set for the BMW M car driving experience at its most exclusive. The BMW M6 Gran Coupe high-performance sports car is a vision of poise and assurance, combining supreme performance with captivating aesthetics and luxurious elegance. The new BMW M GmbH flagship is powered by a high-revving V8 engine that boasts M TwinPower Turbo technology, develops 412 kW/560 hp and propels the BMW M6 Gran Coupe from 0 to 100 km/h (62 mph) in 4.2 seconds. The performance characteristics of the car's engine, its chassis technology, aerodynamic properties and weight balance – which the carbon fibre-reinforced plastic (CFRP) roof helps to optimise – are intertwined with hallmark M precision. The BMW M6 Gran Coupe therefore represents not only a new experience of luxury in an M car, but also the ultimate expression of the dynamic potential embedded in the BMW 6 Series.

The company's foray into this new segment of high-performance luxury four-door coupes provides a window into the passion of the engineers and designers at BMW M GmbH for creating extraordinary driving experiences out of the top drawer. The BMW M6 Gran Coupe presents the finest balance of inspirational design, sports-oriented performance and luxurious ambience in its class. Its extra interior space allows two rear passengers to enjoy generous levels of long-distance comfort, while the rear compartment of the BMW M6 Gran Coupe also offers a third rear seat suitable for use over shorter journeys.

#### Design: the beauty of majestic power delivery.

Hallmark M design features influenced directly by technical considerations – such as cooling air requirements, chassis geometry, weight balance and aerodynamics – open a clear window into the performance capability of the BMW M6 Gran Coupe. The front of the car is dominated by its large air intakes, standard Adaptive LED Headlights and an M kidney grille designed especially for this model. From the side, the first four-door Coupe in the BMW M GmbH ranks is clearly distinguishable from the BMW M6 Coupe thanks to its rear doors and 113-millimetre longer wheelbase. The low roofline flowing smoothly into the rear, the swage line – which takes in the

04/2013 Page 3

door openers – and side windows extending well into the C-pillars accentuate the dynamically stretched silhouette.

Prominently flared wheel arches draw the eye to a track width specific to the BMW M6 Gran Coupe. The characteristic M gills, aerodynamically optimised exterior mirrors, standard BMW Individual High-gloss Shadow Line package and exclusive 20-inch M light-alloy wheels in double-spoke design underline the car's distinctive appearance, as does another M signature – twin exhaust tailpipes positioned on the outer edges of the rear apron. Also integrated into the rear apron, and charged with the task of optimising airflow along the car's underbody, is a diffuser made from CFRP.

This extremely lightweight, impressively strong high-tech material is used in the construction of the roof as well. Here, the visible carbon structure provides an eye-catching feature, as does a dynamic recess in the centre of the roof. This recess is referenced stylistically inside the car, the anthracite-coloured Alcantara roof liner gaining a central section in leather.

Emulating the harmonious blend of athletic prowess and elegance embodied by the exterior design, the distinctively M cockpit fuses sports car style with generous levels of space and a luxurious ambience. The driver and front passenger can look forward to M sports seats with integral belt guides. And the BMW M6 Gran Coupe's standard specification also includes Merino leather upholstery with extended features. The rear compartment offers two or three seats, the backrests of which can split and fold down in a ratio of 40:60 to increase boot capacity from 460 to as much as 1,265 litres.

## V8 engine with M TwinPower Turbo technology, seven-speed M Double Clutch Transmission with Drivelogic, Active M Differential.

The powertrain technology under the skin of the BMW M6 Gran Coupe guarantees the performance characteristics for which M Automobiles are renowned. The V8 engine with M TwinPower Turbo technology produces 412 kW/560 hp. Its technical wizardry includes a pair of twin-scroll turbochargers, a cross-bank exhaust manifold, High Precision Direct Petrol Injection, VALVETRONIC variable valve timing and Double-Vanos continuously variable camshaft control. The 4,395 cc unit keeps peak torque of 680 Newton metres (502 lb-ft) on tap between 1,500 and 5,750 rpm, while maximum output is developed between 6,000 and 7,000 rpm. The engine

04/2013 Page 4

revs to a maximum of 7,200 rpm. The BMW M6 Gran Coupe sprints from 0 to 100 km/h (62 mph) in 4.2 seconds on the way to an electronically governed top speed of 250 km/h/155 mph (305 km/h/189 mph if the optional M Driver's Package is specified). Average fuel consumption in the EU test cycle stands at 9.9 litres per 100 kilometres (28.5 mpg imp) and CO<sub>2</sub> emissions are 232 grams per kilometre.

Taking care of power transfer is a seven-speed M Double Clutch Transmission with Drivelogic. The transmission's electronic management system ensures the right gear is selected for optimum traction. It also offers the driver a Launch Control function for maximum acceleration, Low Speed Assistance for extra comfort and the Auto Start-Stop function to enhance efficiency.

Under particularly dynamic acceleration out of corners, as well as in tricky road and weather conditions, the Active M Differential at the rear axle distributes the engine's power between the individual wheels to maximum traction-enhancing effect. Its electronically controlled multi-disc limited-slip differential works hand-in-hand with the DSC (Dynamic Stability Control) system and splits drive between the right and left rear wheels quickly and precisely according to the situation at hand.

#### Chassis technology developed to M specification.

The chassis technology of the BMW M6 Gran Coupe is also geared to harnessing the car's sporting potential in the cause of supreme performance. Like the integral rear axle, the double-wishbone front axle has specific kinematics and components made from forged aluminium. Chassis mountings using large panels ensure dynamic forces are passed evenly through to the body. The BMW M6 Gran Coupe comes as standard with an M-specific version of the Dynamic Damper Control system and hydraulic variable-ratio rack-and-pinion steering with the M Servotronic function.

As an alternative to the standard high-performance compound braking system, the BMW M6 Gran Coupe can also be ordered with M carbonceramic brakes. Made from a new type of carbon-fibre compound ceramic, the discs boast even greater resistance to heat, lower weight and exceptional resistance to wear.

04/2013 Page 5

Arranged around the gearshift lever on the centre console of the BMW M6 Gran Coupe are the buttons used to configure all the adjustable powertrain and chassis functions to personal tastes. The DSC mode, engine performance characteristics, Dynamic Damper Control mapping, M Servotronic responses and M DCT Drivelogicshift program can be selected independently of each other. All of which means the driver can put together a detailed set-up and store those settings on one of the two M Drive buttons on the multifunction steering wheel.

#### Exclusive and individual: high-quality range of equipment.

The standard equipment fitted on the BMW M6 Gran Coupe includes 20-inch M light-alloy wheels, leather trim, heated driver and front passenger seats, automatically dimming rear-view and exterior mirrors, an alarm system and the BMW Professional radio with hi-fi loudspeakers. Available as an alternative to the standard 2-zone automatic climate control is a 4-zone system with a control panel in the rear compartment. Among the other highlights of the options list are M multifunction seats, heated rear seats, Comfort Access, a heated steering wheel, the Soft Close Automatic function for the doors, electrically operated sun blinds, the new generation of the Professional navigation system and a Bang & Olufsen High End Surround Sound System.

The BMW M6 Gran Coupe also comes with a variety of BMW ConnectedDrive features, such as an M-specific BMW Head-Up Display, Park Distance Control, a rear-view camera, High Beam Assistant, Speed Limit Info, Lane Change Warning, Lane Departure Warning, Surround View and BMW Night Vision with pedestrian recognition. Customers can also integrate their Apple iPhone or other smartphones into the car and make use of internet-based services while on board.

## 2. Technical specifications.



04/2013 Page 6

		BMW M6 Gran Coupe
Body		
		4/5
Number of doors/seats	20.00	5011/1899/1393
Length/Width/Height (unladen)	mm	
Wheelbase	mm	2964
Track front/rear	mm	1631/1612
Ground clearance	mm	107
Turning circle	m	12.5
Tank capacity	appr. l	80
Cooling system incl. heating		18.5
Engine oil <sup>1)</sup>	I	8.4
Weight, unladen, to DIN/EU	kg	1875/1950
Max. load to DIN	kg	535
Max. perm. weight, overall	kg	2410
Max. perm. axle load front/rear	kg	1180/1260
Max. perm. trailer load (12%) braked/unbraked	kg	- <del>-</del> -
Perm. roof load/trail download	kg	
Luggage capacity	Ng_	460
Air resistance	c <sub>d</sub> x A	0.33 x 2.30
All Tesistance	C <sub>d</sub> X A	0.00 X 2.00
Engine		
Configuration/No. of cyls./valves		V90/8/4
Engine technology		M TwinPower Turbo technology with cross-bank exhaust manifold, Twin Scroll Twin Turbo technology, High Precision Direct Petrol Injection, VALVETRONIC and Double-Vanos
Capacity	CC	4395
Stroke/bore	mm	88.3/89.0
Compression ratio	:1	10.0
Fuel grade		RON 98 (min. 95)
Max output	kW/hp	412/560
at	rpm	6000 x 7000
Torque	Nm	680
at	rpm	1500 – 5750
Electrical system		
Battery/installation	Ah/-	105/luggage comp
Alternator	A/W	209/2926
Driving dynamics and safety		
Suspension, front		Double track control arm with M-specific elastokinematics, small, negative
Suspension, rear		steering roll radius, anti-dive Integral-V multi-arm axle with M-specific elastokinematics, spatial suspension
		with anti-squat and anti-dive
Brakes, front		Six-piston fixed-calliper compound disc brakes
Diameter	mm	400 x 36/vented
Brakes, rear		Single-piston floating-calliper compound disc brakes
Diameter	mm	396 x 24/vented
Driving stability systems		Standard: DSC incl. ABS, ASC and MDM (M Dynamic Mode), CBC (Cornering Brake Control), DBC (Dynamic Brake Control), Dry Braking function, Start-Off Assistant, M Dynamic Damper Control, Active M Differential, linked to ICM (Integrated Chassis Management)
Safety features		Standard: airbags for driver and front passenger, side airbags for driver and front passenger, head airbags for front and rear seats, three-point inertia-reel seatbelts on all seats with integrated belt latch tensioner and belt force limiter at the front, crash-activated head restraints at the front, crash sensors, Tyre Defect Indicator
Steering		Hydraulic rack-and-pinion steering with M-specific Servotronic function
Overall steering transmission	:1	13.1
Tyres front/		265/35 R20 102Y 295/30 R20 104Y
Wheels front/		9.5J x 20 light-alloy
rear		10.5J x 20 light-alloy

			BMW M6 Gran Coupe
BMW Connec	tod Drivo		
Convenience	teabrive		Optional: BMW Assist incl. Enquiry Service, remote-control functions Real Time Traffic Information, BMW TeleServices integration of mobile devices
Infotainment			Optional: internet access, BMW Online incl. Park Info, National Info, Google Local Search, News, Realtime Weather, BMW Routes, Office functions Bluetooth Audio Streaming, Online Update Music Tracks, Apps
Safety			Optional: High Beam Assistant, Adaptive LED Headlight (standard Park Distance Control, rear-view camera, Surround View incl. Top View and Side View, BMW Night Vision with pedestrian recognition, Head-Up Display (standard in Germany), Lane Change Warning, Lane Departure Warning incl Collision Warning, Speed Limit Info with No Passing Info, Advanced eCal
Transmission			
Type			Seven-speed M Double Clutch Transmission with Drivelogic
Gear ratios	I	:1	4.806
	II	:1	2.593
	III	:1	1.701
	IV	:1	1.277
	V	:1	1.000
	VI	:1	0.844
	VII	:1	0.671
	R	:1	4.172
Final drive		:1	3.154
Performance			
Power-to-weigh	nt ratio	kg/kW	4.6
Output per litre		kW/l	93.7
Acceleration	0–100 km/h	S	4.2
	0–1000 m	S	21.8
In 4th/5th gear	80-120 km/h	S	3.6/4.5
Top speed		km/h	250/305 <sup>2</sup>
BMW Efficient	tDynamics		
BMW EfficientDynamics measures as standard			Brake Energy Regeneration with recuperation display.  Auto Start-Stop function, intelligent lightweight construction, on-demand operation of ancillary units, flow rate-controlled power steering pump, tyres with reduced rolling resistance.
Fuel consump	tion EU		
Urban		l/100km	14.0
Extra-urban		l/100km	7.6
Composite		l/100km	9.9
CO <sub>2</sub>		g/km	232
Emission classif	ication		EUS
Insurance cate	egory		
(German) KH/VK/TK			19/25/26

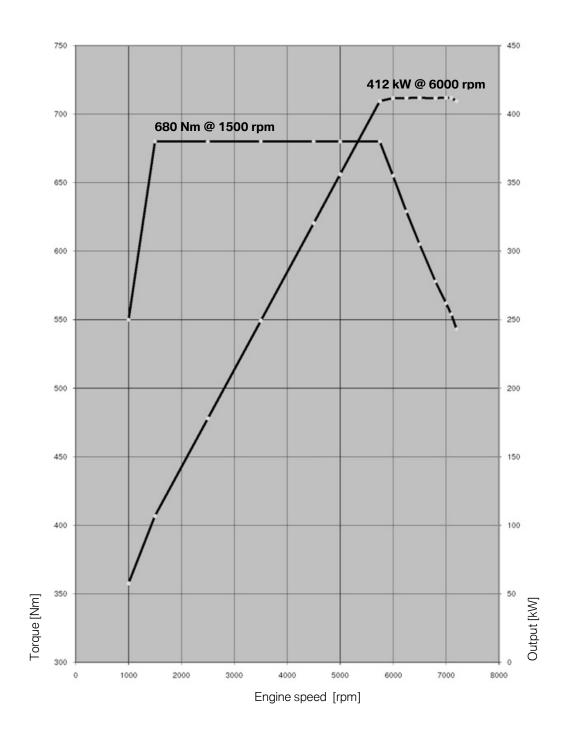
Technical specifications valid for ACEA markets; data relevant to homologation only apply to Germany (weights) All technical specifications are provisional

<sup>&</sup>lt;sup>1)</sup> Oil change quantity <sup>2)</sup> In conjunction with optional M Driver's Package

04/2013 Page 8

## 3. Output and torque diagram.





## 4. Exterior and interior dimensions.



04/2013 Page 9

