

# The new BMW M2 Coupe. Contents.



1. <b>Highlights.</b> .....	2
2. <b>The new BMW M2 Coupe.</b> High-performance sports machine with intoxicating performance. (Short version) .....	3
3. <b>The drivetrain.</b> Powered by M for unbeatable driving pleasure. ....	5
4. <b>Dynamic performance.</b> Motor sport technology for the road. ....	10
5. <b>Design.</b> The visual expression of power-in-waiting. ....	14
6. <b>Equipment.</b> Dynamism, exclusivity and entertainment. ....	17
7. <b>Heritage.</b> Sporting talent runs in the family. ....	19
8. <b>Specifications.</b> .....	22
9. <b>Output and torque diagrams.</b> .....	24
10. <b>Exterior and interior dimensions.</b> .....	25



# 1. Highlights.

- The new BMW M2 Coupe sets a fresh benchmark for dynamic potency and agility in the compact high-performance sports car segment.
- New six-cylinder in-line engine with M TwinPower Turbo technology and three-litre displacement, 272 kW/370 hp, peak torque: 465 Nm / 343 lb-ft. (Fuel consumption combined, with six-speed manual gearbox: 8.5 l/100 km [33.2 mpg imp]; CO<sub>2</sub> emissions combined: 199 g/km; with optional M Double Clutch transmission [M DCT]: 7.9 l/100 km [35.8 mpg imp]; CO<sub>2</sub> emissions combined: 185 g/km)\*.
- 0–100 km/h (62 mph) in 4.3 s (with six-speed manual gearbox: 4.5 s), top speed: 250 km/h / 155 mph (governed), with M Driver's Package 270 km/h / 168 mph (governed).
- Track ability tested on the Nürburgring-Nordschleife circuit.
- Stylistic showcase for dynamic excellence: muscular, dynamic lines, exclusive 19-inch aluminium forged wheels, sports exhaust system with twin tailpipes.
- Interior with hallmark M features – including sports seats, an M sports steering wheel and M gearshift lever – signals the car's ambitions in terms of dynamic leadership.
- Motor sport technology for the road and the race track: lightweight M Sport suspension made from aluminium, optional seven-speed M Double Clutch Transmission (M DCT), Active M Differential, M compound brakes and M Dynamic Mode.



## 2. The new BMW M2 Coupe. High-performance sports machine with intoxicating performance. (Short version)

A compact high-performance BMW sports car was already causing heads to turn and hearts to flutter over 40 years ago. Indeed, the BMW 2002 turbo perfectly encapsulated BMW's resolution to deliver outstanding dynamics, exceptional agility and optimum car control. As if to demonstrate in similarly resounding style that this commitment is alive and well, BMW M GmbH can now unveil the new BMW M2. With its high-performance six-cylinder in-line engine, rear-wheel-drive agility, lightweight aluminium M Sport suspension and extrovert styling, the new BMW M2 Coupe has all the ingredients to deliver the last word in driving pleasure.

### **Characteristic M design.**

A single glance is all it takes to pick the new BMW M2 Coupe out as a member of the BMW M family, with its styling also keen to advertise its dynamic attributes. Inspired by models from the history of BMW in motor racing, the new M2 Coupe makes no secret of its extraordinary performance potential. The low front apron with large air intakes, muscular flanks with characteristic M gills, 19-inch aluminium wheels in familiar M double-spoke design and low, wide rear with M-specific twin-tailpipe exhaust system all play impressive roles here. The time-honoured character of BMW M cars is also present and correct in the design of the interior. The Alcantara of the door cards and centre console together with porous carbon fibre creates an ambience of rare quality and heady sporting ambition further underlined by blue contrast stitching and M embossing on selected details. Sports seats, an M sports steering wheel and an M gearshift lever ensure BMW M2 drivers are in perfect command of their car at all times.

### **Explosive performance.**

The newly developed, three-litre six-cylinder in-line engine in the new BMW M2 deploys cutting-edge M TwinPower Turbo technology to develop 272 kW/370 hp at 6,500 rpm (fuel consumption combined: 8.5 l/100 km [33.2 mpg imp]; CO<sub>2</sub> emissions combined: 199 g/km)\* and, in so doing, lays down a marker in the high-performance compact sports car segment. The same applies to power delivery. Peak torque of 465 Nm (343 lb-ft) can be increased to as much as 500 Nm (369 lb-ft) in short bursts under overboost. All of which enables the new BMW M2 Coupe with optional seven-speed M Double Clutch Transmission (M DCT) and Launch Control to accelerate from 0 to 100 km/h (62 mph) in just 4.3 seconds. Top speed is electronically

\* Fuel consumption figures based on the EU test cycle, may vary depending on the tyre format specified. .

limited to 250 km/h (155 mph). Yet, with its M DCT transmission, fuel consumption of just 7.9 litres\* per 100 km (35.8 mpg imp) and CO<sub>2</sub> emissions of just 185 g/km\*, the car is also keen to emphasise its outstanding efficiency.

### **Motor sport expertise.**

With the lightweight aluminium front and rear axles from the BMW M3/M4 models, forged 19-inch aluminium wheels with mixed-size tyres, M Servotronic steering with two settings and suitably effective M compound brakes, the new BMW M2 Coupe has raised the bar once again in the compact high-performance sports car segment when it comes to driving dynamics. The electronically controlled Active M Differential, which optimises traction and directional stability, also plays a significant role here. And even greater driving pleasure is on the cards when the Dynamic Stability Control system's M Dynamic Mode (MDM) is activated. MDM allows wheel slip and therefore moderate, controlled drifts on the track.

### **Intelligent connectivity when you want it.**

The new BMW M2 Coupe comes with an extensive list of standard equipment in keeping with its performance-focused set-up. The seven-speed M Double Clutch Transmission (M DCT) with Drivelogic, available as an option, changes gears with extraordinary speed but no interruption in the flow of power. A wide selection of driver assistance systems and mobility services from BMW ConnectedDrive is also available. The ConnectedDrive Services provide the basis for extensive vehicle connectivity, and this option also enables the use of innovative apps, which are integrated seamlessly into the car using BMW ConnectedDrive technology. For example, the GoPro app allows the driver to record fast laps of the track with a dashboard-mounted action camera, using the iDrive Controller and Control Display. Meanwhile, the driver's individual style at the wheel can be analysed as desired with the M Laptimer app. Information on speeds and braking points can be shared easily via e-mail or Facebook.

### **From powerful stock.**

The new BMW M2 Coupe is not only the direct heir to the successful BMW 1 Series M Coupe, but also – in its underlying philosophy – a descendant of the original E30 BMW M3 and the BMW 2002 turbo. The latter caused a sensation over 40 years ago, anticipating the commitment of what is now BMW M GmbH to outstanding dynamics, unbeatable agility and optimal car control.

Further information on official fuel consumption figures, specific CO<sub>2</sub> emission values and the electric power consumption of new passenger cars is included in the following guideline: "Leitfaden über Kraftstoffverbrauch, die CO<sub>2</sub>-Emissionen und den Stromverbrauch neuer Personenkraftwagen" (Guideline for fuel consumption, CO<sub>2</sub> emissions and electric power consumption of new passenger cars), which can be obtained from all dealerships, from Deutsche Automobil Treuhand GmbH (DAT), Hellmuth-Hirth-Str. 1, 73760 Ostfildern-Scharnhausen and at <http://www.dat.de/en/offers/publications/guideline-for-fuel-consumption.html>. Leitfaden CO<sub>2</sub> (Guideline CO<sub>2</sub>) (PDF – 2.7 MB).

\* Fuel consumption figures based on the EU test cycle, may vary depending on the tyre format specified.

### 3. Drivetrain. Powered by M for unbeatable driving pleasure.



The six-cylinder engine under the bonnet of the new compact BMW M2 is in keeping with the finest BMW M tradition, ensuring unbeatable driving fun on the race track yet at the same time doing everything you need it to in everyday use. It promises an insatiable appetite for revs for a turbocharged engine, offers exceptionally linear power delivery across a broad rev range and raises pulses with its distinctive engine sound. Add to the mix outstanding torque, available across a wide rev band, and – thanks to innovative M TwinPower Turbo technology – rapid responses and excellent efficiency.

#### **High revs and turbo power.**

With an output of 272 kW/370 hp at 6,500 rpm and maximum revs of 7,000 rpm, the three-litre straight-six engine in the new BMW M2 sends out a clear message in the high-performance compact sports car segment. (Fuel consumption combined, with six-speed manual gearbox: 8.5 l/100 km [33.2 mpg imp]; CO<sub>2</sub> emissions combined: 199 g/km; with optional M Double Clutch transmission [M DCT]: 7.9 l/100 km [35.8 mpg imp]; CO<sub>2</sub> emissions combined: 185 g/km)\*. The engine's peak torque also leads the way in this segment; a full 465 Nm (343 lb-ft) is on tap between 1,400 and 5,560 rpm, with the overboost function raising this figure by 35 Nm (26 lb-ft) to 500 Nm (369 lb-ft) between 1,450 and 4,750 rpm.

With the optional M Double Clutch Transmission (M DCT) in place and Launch Control activated, the new BMW M2 Coupe completes the sprint from rest to 100 km/h (62 mph) in 4.3 seconds (4.5 s with the six-speed manual gearbox). The top speed of the new BMW M2 is electronically limited to 250 km/h (155 mph). If the M Driver's Package – which includes a BMW Driving Experience voucher for a track training course – is specified, this cut-off point doesn't arrive until 270 km/h (168 mph). The excellent efficiency of the M TwinPower Turbo engine which, needless to say, meets the EU6 exhaust standard, is backed up by fuel consumption figures of just 7.9 l/100 km [35.8 mpg imp]\* with M DCT and CO<sub>2</sub> emissions of just 185 g/km\*.

#### **Lightweight construction and rigidity.**

The new BMW M2's newly developed, three-litre six-cylinder engine represents a symbiosis of exceptional output and outstanding economy. The lightweight, thermodynamically optimised, all-aluminium unit is low in weight yet at the same time very rigid in design. This enables higher cylinder

\* Fuel consumption figures based on the EU test cycle, may vary depending on the tyre format specified.

pressures, which play their part in the improved power output and impressive efficiency of the BMW M2 Coupe.

### **State-of-the-art M TwinPower Turbo technology.**

The engine in the new BMW M2 comes with the latest generation of the trailblazing M TwinPower Turbo technology. In the new six-cylinder in-line petrol engine, this comprises a TwinScroll turbocharger, High Precision Injection, variable camshaft timing (Double-VANOS) and VALVETRONIC variable valve control. The valve and camshaft timing work in tandem to seamlessly control intake valve lift. Razor-sharp responses, optimal power delivery, and therefore reduced fuel consumption and CO<sub>2</sub> emissions, are the result.

The integration of the turbocharger into the exhaust manifold plays a major role in the ability of the new three-litre six-cylinder engine in the new BMW M2 to optimise its performance efficiently. The warm-up phase after a cold start is noticeably shorter, which helps to cut internal friction more quickly and significantly reduce fuel consumption and CO<sub>2</sub> emissions. The electrically operated boost pressure control valve and close-coupled arrangement of the catalytic converter further improve the engine's emissions rating.

The standard-fitted Auto Start Stop function and the Brake Energy Regeneration system provide additional potential for fuel savings in the new BMW M2, while the intelligent energy management of ancillary components enables a further reduction in fuel consumption. For example, the coolant pump operates only as required and the oil pump is map-controlled. The air conditioning compressor, which is disconnected whenever it is not being used, and the Electric Power Steering, which requires no electric energy when driving straight ahead, make a considerable contribution to the laudable fuel consumption and emissions figures of the new BMW M2.

### **Optimised to meet the highest standards.**

In order to satisfy the high expectations of sporty drivers who like to push the limits on the track, the BMW M GmbH development engineers have introduced further upgrades to the engine powering the new BMW M2. To this end, it has gained selected components from the high-performance unit used in the BMW M3 and BMW M4 presented in 2014. Components including the pistons, with their top ring optimised for the use of grey-cast iron liners, are sourced from the BMW M3/M4 engine, as are the crankshaft main bearing shells. The new engine in the BMW M2 also gets the requisite high-performance spark plugs with an elevated heat rating.

### **Secure oil supply, even during a race.**

The many years of motor racing experience built up by the BMW M engineers are also reflected in the oil supply for the new BMW M2 engine. In order to ensure oil reaches all engine components at all times under the kind of heavy lateral acceleration, limit-pushing acceleration and extreme braking manoeuvres the car has to withstand on the race track, the six-cylinder in-line engine benefits from a modified oil sump.

For example, an additional oil sump cover helps to limit the movement of oil under powerful acceleration. At the same time, an extra oil suction pump sends the oil back to the rear part of the oil sump when the driver brakes heavily. A special suction system, furthermore, is employed for the oil supply to the turbocharger under higher vehicle acceleration. This measure ensures that the oil supply to the engine remains secure at all times, both in normal everyday driving and when lateral dynamics reach the upper end of the scale.

The same also applies to the heat balance of all engine components. In order to deal with extreme cooling requirements under hard driving, the BMW M2 engine benefits from an additional oil cooler for the transmission oil (only applies to cars fitted with M DCT) and a further water cooler for the engine.

### **Perfectly composed M soundtrack.**

One of the main contributors to the extraordinary dynamic experience on board the new BMW M2 is the optimised exhaust with special flap system. With its four tailpipes, the exhaust system immediately marks the BMW M2 out as a BMW M model and its minimal exhaust back-pressure ensures perfect engine cycles. Added to which, the electrically controlled flap delivers the distinctive BMW M engine soundtrack across the entire rev range without pushing volume levels to their stipulated limits. In addition, drivers can use the Driving Experience Control switch to select a driving mode and a preconfigured sound to go with it.

### **Manual gearbox with automatic throttle blipping.**

The new BMW M2 Coupe comes as standard with a six-speed manual gearbox, which stands out with its compact design and low weight. The use of a new type of carbon-fibre friction lining enhances shift comfort. Dry-sump lubrication prevents any sloshing of the transmission oil and ensures all components benefit from an efficient supply of oil. An engagement speed control function, which blips the throttle on downshifts and lowers the engine's revs on upshifts, makes gear changes even smoother and lends the car additional stability during hard driving on the track.

### **Flawless shifts in a split-second.**

The new BMW M2 can be ordered as an option with the latest generation of the seven-speed M Double Clutch Transmissions (M DCT with Drivelogic). This system, which effectively combines two gearboxes, each with its own clutch, is specially designed to work with the customary engine dynamics of M cars and the engine's high torque and output. Depending on the driving mode activated, it enables either extremely fast gear changes with no interruption in the flow of power or ultra-smooth shifts. The extra gear of the M DCT transmission over the six-speed manual gearbox allows very small increases in rpm between gear changes when accelerating and reduces fuel consumption thanks to its longer gear ratios.

The driver can change gear either in automated mode or manually using the M gearshift lever on the centre console or shift paddles on the M leather steering wheel. The Drivelogic function tuned to the M Double Clutch Transmission offers a choice of six driving programs (three in automatic mode and three in manual mode). The COMFORT, SPORT and SPORT+ settings can be activated using the Driving Experience Control switch. In automatic mode and the COMFORT setting, the transmission shifts up and down through the gears early and less intensely. In SPORT and SPORT+ the gear changes are sharper and arrive at higher revs. The automatic throttle blipping function on downshifts makes them even more dynamic and the position of the accelerator also influences the timing of the gearshift and its intensity.

Moving between the transmission's manual modes alters the shift dynamics, but it is the driver who determines the timing of a gear change. The system detects which gear the driver will choose next on the basis of the engine's revs, the accelerator position, the level of acceleration and the driving mode, and engages it before the driver has actually moved the shift paddle. As a result, the clutches now only need to open or close for the gear-change process to be completed. The change of gear is therefore executed in fractions of a second and enhances the dynamic driving experience in a very palpable way.

### **Optimal acceleration in all conditions.**

The integrated Launch Control function ensures the best possible acceleration off the line in all conditions. To this end, the ideal getaway rpm is automatically dialled in and the clutches primed to deliver maximum propulsion. Once under way, upshifts are timed with optimal rev matching. This allows the BMW M2 with innovative M DCT to outperform the already outstanding acceleration achievable with the six-speed manual gearbox.



### **Innovative Drivelogic functions.**

The optional M Double Clutch Transmission with Drivelogic offers further specific M functions. For example, Stability Clutch Control (SCC) disengages the clutches when necessary to prevent oversteer and so stabilise the vehicle. The “creep on demand” function allows the driver to prompt the creep effect familiar from conventional automatic transmissions by nudging the accelerator while at a standstill – to manoeuvre out of tight parking spaces, for example. Another integrated feature is the Smokey Burnout function, which invites the driver to indulge in a degree of rear wheel spin while the car is moving at low speeds.

## 4. Dynamic performance. Motor sport technology for the road.



The roots of BMW M GmbH lie in motor racing, as is highlighted in no small measure by the dynamic talent of all BMW M models. And the new BMW M2 also sets the pace in its segment when it comes to agility, driving feeling, directional stability, steering precision and controllability at the limit, without short-changing the driver in everyday use.

### **Lightweight design and precise wheel location.**

The basic requirement for top-level driving dynamics is a high level of rigidity and a low axle system weight. That's why the BMW M GmbH engineers have referred back to the lightweight aluminium front and rear axles of the BMW M3/M4 models for the new BMW M2 Coupe. For example, just the control arms, wheel carriers, axle subframes and stiffening plate of the double-joint spring-strut front axle weigh five kilograms less than would be the case with a conventional steel construction. Further weight savings are provided by the aluminium suspension struts and tubular anti-roll bar.

In order to ensure extremely precise wheel location, play-free ball joints are used to transmit transverse forces. The stiffening plate and additional bolted connection between the axle subframe and the body sills, which increases the stiffness of the front-end structure, also has a positive influence here. The longitudinal forces passing through the suspension are transmitted into the torque struts directly via special elastomer bearings, and this delivers the desired rolling comfort at the same time.

All the control arms and wheel carriers of the new BMW M2's five-link rear axle are made from forged aluminium, which reduces the unsprung masses of the wheel-locating components by around three kilograms compared to a steel construction. In addition, a racing-derived rigid connection, dispensing with rubber bushings, is used to fix the lightweight steel grid-type rear axle subframe to the body. This further improves wheel location and tracking stability. The axle kinematics – which govern the movement of the wheels under compression according to the arrangement of the control arms – are likewise tuned to deliver the precise wheel location familiar from M cars.

### **Made-to-measure wheels and tyres.**

In order to transfer the car's dynamic potential to the road as effectively as possible, the development of specific tyres for the new BMW M2 was

incorporated into the axle construction from the outset. A certain set of factors take priority here – especially when dealing with a high-performance sports car. For example, a great deal is asked of the front wheels in terms of lateral stability, directional stability, steering feel and steering precision, while the rear wheels are called on to deliver optimal traction, lateral stability and directional stability. With this in mind, the BMW M development engineers decided to fit the new BMW M2 with aluminium wheels and mixed-size tyres.

The lightweight 19-inch forged wheels (front axle: 9J x 19, rear axle 10J x 19) substantially reduce rotating and unsprung masses. Together with the 19-inch tyres (front axle: 245/35 ZR 19, rear axle: 265/35 ZR 19), they make a considerable contribution to the outstanding dynamic properties of the new BMW M2 and, at the same time, ensure impressive ride comfort.

### **High-performance brakes born in motor sport.**

The high-performance brakes of the new BMW M2 are also a product of motor sport and can be quickly identified by their brake callipers (front axle: four-piston fixed callipers, rear axle: two-piston fixed callipers), which are painted in a blue metallic finish and display the M logo at the front axle. In these M compound brakes, fitted as standard on the new BMW M2, the heavily loaded, perforated and inner-vented brake disc ring is made from grey-cast iron (front axle: 380 mm in diameter, rear axle: 370 mm in diameter), while the brake disc hub is manufactured from aluminium, thus saving weight.

M compound brakes guarantee excellent deceleration in all conditions and impress with their resistance to fade and heat. They are also significantly lighter than conventional braking systems as they reduce unsprung and rotating masses, which means they play a major role in further enhancing the dynamic ability of the new BMW M2.

### **Two settings for the Electric Power Steering.**

The standard-fitted Electric Power Steering of the new BMW M2 also helps to imbue it with the unique BMW M driving feeling. The development of the system prioritised hallmark M attributes, such as direct steering feel, precise feedback on the driving situation and driving at the limit. The integrated Servotronic function with M-specific characteristics controls the level of steering assistance electronically according to the car's speed. Added to which, the steering of the new BMW M2 also offers two settings – COMFORT and SPORT/SPORT+ – which can be selected by pressing the Driving Experience Control switch. This allows drivers to adjust the steering's power assistance at any time to the task at hand or to their personal preferences. SPORT mode can be configured via iDrive. The engine and

steering settings can be stored in SPORT mode either as a combination or individually.

Unlike conventional hydraulic steering systems, the new BMW M2's Electric Power Steering does not require any energy when the car is being driven in a straight line or standing still with the engine running. This enables a reduction in fuel consumption of 0.3 l/100 km.

### **Permanent, fully variable differential control.**

The Active M Differential in the new BMW M2 optimises traction and maximises directional stability. This electronically controlled multi-plate limited-slip differential takes traction and directional stability to a new level. The multi-plate limited-slip differential is proactively controlled with extremely high precision and speed. The locking effect can be varied between 0 and 100 per cent according to the driving situation. Sensors including those of the DSC (Dynamic Stability Control) system determine the car's steering angle, accelerator position, brake pressure, engine torque, wheel speed and yaw rate. The control unit uses this analysis of the driving situation to detect the threat of traction loss on one side of the car and calculates the required locking effect, which is engaged by an electric motor. Full locking power of 2,500 Nm (1,843 lb-ft) is available within 150 ms. This allows the system to prevent a wheel from spinning in extreme conditions on slippery road surfaces or when the two rear wheels are experiencing significant differences in friction coefficient.

In certain situations the Active M Differential even works proactively. When pulling away on slippery surfaces, the lock is closed by a defined percentage even before a wheel can start to spin, to ensure that both wheels develop equal slip at the same time. This optimises traction and stability. The lock is also closed by the required percentage through enthusiastically driven corners, according to the levels of lateral acceleration and drive at work. This prevents the low-traction inside wheel from starting to turn too quickly.

This permanent and infinitely variable differential control also increases agility, avoids understeer on the way into corners and improves directional stability under braking and load changes.

### **Drifts on the race track.**

M Dynamic Mode (MDM) also enables the new BMW M2 to satisfy the demands of drivers looking for a little extra on the dynamic front. MDM is a sub-function of Dynamic Stability Control (DSC). DSC effectively counteracts incipient oversteer or understeer or a loss of traction by taking steps (reducing engine power, braking individual wheels) to stabilise the car. However, in

certain situations – e.g. sporty and dynamic driving on the race track – a greater degree of wheel spin can be an advantage.

Here, M Dynamic Mode, which is activated automatically in the recommended track mode (SPORT+) or can be engaged with a short dab of the DSC button, allows greater slip. The stabilising measures familiar from DSC mode now intervene later, increasing the freedom available to drivers at the dynamic limit. The extra wheel slip enhances traction and therefore propulsion. More significant oversteer and understeer are possible, as are moderate, controlled drifts, but the Dynamic Stability Control active safety aids can still be relied on in critical situations. In any event, responsibility for stabilising the car always lies with the driver.

## 5. Design. The visual expression of power-in-waiting.



Concentrated power and a casual, youthful charm on the one hand, an unadulterated focus on sporting achievement and credible everyday ability on the other: the new BMW M2 Coupe is the perfect gateway into the illustrious world of BMW M cars. The new BMW M2 Coupe makes all the running in the compact high-performance sports car segment with its outstanding driving dynamics and agility that combine to deliver an extraordinary driving experience, allied with precise driver feedback and consummate car control.

What the new BMW M2 Coupe has in store in practice is instantly clear from the way it looks. The follow-up to the BMW 1 Series M Coupe showcases its impressive on-the-road presence from every angle. Its M-specific exterior features send out a whole-hearted statement of dynamics and agility, promising both a superior performance on the Nürburgring-Nordschleife and convincing abilities on urban roads. In the grand tradition of BMW sport coupes, the new BMW M2 Coupe contains stylistic references to highlights from its forebears in BMW's motor sport back-catalogue – such as the BMW 2002 turbo and legendary BMW 3.0 CSL.

### **Inspired by motor sport history.**

A glance at the front end of the new BMW M2 reveals characteristic M design features. The signature BMW kidney grille, with its black-painted double bars replicating the design of the M double-spoke wheels, carries the BMW M logo. And the three-dimensional design of the grille has a “shark nose” feel to it. The modern take on the BMW twin circular headlights (here in xenon form) underlines the car's forward-surging look and establishes a close stylistic connection with the grille. This further sharpens the focus of the new BMW M2 on the road ahead.

The large front apron with trapezoidal blades and the Air Curtains in the outer air intakes recall the type of protruding spoilers that have been a familiar sight in motor sport down the years. For the BMW M2 they were inspired in particular by the BMW 3.0 CSL touring car racer. However, the large blades are not only a nod to the past. Form follows function is the message here, so as well as underlining the wide track of the new BMW M2 they divert part of the airflow through the wheel arches, while the Air Curtains guide the air effectively past the wheels. These two features work together to reduce air turbulence around the front wheel arches, cutting drag in the process.

Moreover, the large air intakes cover the immense cooling air requirements of the high-performance engine. Thanks to the careful channelling of the airflow around and through elements of the car, drag has been reduced by five per cent compared with the BMW 2 Series Coupe, despite the M2's stronger cooling performance. The aerodynamic measures have also reduced lift by 35 per cent and significantly improved aerodynamic balance at higher speeds.

### **Hallmark BMW proportions.**

Looking at the new BMW M2 Coupe from the side, it is immediately identifiable as a fully-fledged member of the BMW M family. Compact dimensions and hallmark BMW proportions – i.e. a short front overhang, sweeping bonnet, long wheelbase and set-back greenhouse with classic BMW Hofmeister kink – are the starting point, with signature M design elements strengthening the dynamic expression. For example, the newly interpreted BMW gills rearwards of the front wheel arches reference a feature first seen on the BMW 3.0 CSL. They send out a visual statement and set the swage line on its way towards the rear.

### **Muscular athlete.**

The side swage line – which begins rearwards of the front axle on the new BMW M2, then rises dynamically towards the tail and links the flanks of the car with its rear end – is a classical BMW design feature; in the case of the BMW 2002, for instance, it extended around the whole car. Other typical elements of the new BMW M2's powerful appearance are the sculptural wing extensions at the front and rear axle, which immediately bring to mind the image of a muscular athlete with broad shoulders in a figure-hugging race suit and visually enhance the car's standout dynamic abilities. However, these significant bodywork extensions (front: 55 mm, rear: 80 mm) are again not only a stylistic statement, but necessary to accommodate the wider track and wheels – in this case 19-inch aluminium forged rims in familiar BMW M double-spoke design.

### **Admire it as it flashes by.**

The broad rear end of the new BMW M2 highlights its firm grip on the asphalt, a quality further reinforced by the horizontal lines in the boot lid and rear apron. The M rear spoiler on the boot lid also accentuates the elevated dynamic aspirations of the new BMW M2.

The vertical reflectors at the outer extremes of the rear apron form a stylistic connection with the trapezoidal blades at the front end and once again emphasise the powerful appearance of the new BMW M2. This feeling is additionally strengthened by the L-shaped rear lights which have become a

fixture of BMW models. Their horizontally arranged LEDs also underscore the broad-set and imposing impression created by the new BMW M2.

The looks of the rear end are rounded off by another classical BMW M feature. The diffuser integrated into the rear apron is a clear reference to the racing abilities of the new BMW M2 and offers a nod to its optimised aerodynamics. Likewise integrated into the rear apron are the familiar quartet of hallmark BMW M exhaust tailpipes in high-gloss chrome, which draw renewed attention to the low visual centre of gravity and point clearly to the dynamic performance of the new BMW M2.

### **A sporty driver focus wherever you look.**

As with all BMW M models, the interior architecture of the new BMW M2 also stands out with its pervasive driver focus and flawless ergonomics. The car is fitted with a host of BMW M-specific equipment details to reflect its prominent dynamic leaning. The sports seats, in black Dakota leather with blue contrast stitching and an M logo in the backrests, have adjustable side bolsters to give the driver and front passenger optimum support through fast corners. An M footrest and knee pad on the centre console for the driver continue the theme.

Instruments with BMW M2-specific dials and needles, a speedometer scale reaching round to 300 km/h (186 mph) and a rev counter reading up to 8,000 rpm provide an indication of the car's extraordinary performance potential as soon as you climb aboard. Added to which, when M Dynamic Mode is engaged, a DSC skidding symbol and "Traction" alert are flashed up. Familiar M equipment items in the new BMW M2 Coupe also include M logos on the rev counter, gearshift lever, door sill plates and M leather steering wheel with shift paddles. Other highlights of the interior are the new BMW M2 trim strip with surfacing in porous carbon fibre – an extremely light and robust high-tech material – and Alcantara for the door cards and parking brake lever gaiter.



## 6. Equipment.

### Dynamic appeal, exclusivity and entertainment.



The new BMW M2 Coupe comes with an extensive range of equipment from the factory that marks it out as a dynamically adept sports car. Customers can also add further individual touches to their car with a hand-picked range of options.

#### **Dynamic excellence as standard.**

The standard equipment of the new BMW M2 already features all the essential elements of seriously performance-oriented design. They include lightweight M Sport suspension and the six-speed manual gearbox with throttle-blipping function, as well as the Active M Differential at the rear axle, which optimises traction and maximises directional stability. Likewise supplied from the factory are the electromechanical M Servotronic steering with two settings and the light and extremely efficient M compound brakes. Another highlight is the Dynamic Stability Control's M Dynamic Mode (MDM), which allows keen drivers to execute moderate, controlled drifts on the track.

The seven-speed M Double Clutch Transmission (M DCT) with Drivelogic is also available as an option, allowing gear changes with no interruption in the flow of power and optimal acceleration off the line courtesy of the integrated Launch Control function. Customers can also specify the M Driver's Package, which raises the limit on the top speed of the new BMW M2 to 270 km/h (168 mph) and comes with a BMW Driving Experience voucher for a track training course.

#### **Exclusivity guaranteed.**

The standard equipment list for the new BMW M2, which is available in four exterior paint finishes (Long Beach Blue metallic, Alpine White, Black Sapphire and Mineral Grey), also includes M sports seats, an M leather steering wheel, an M footrest and a knee pad on the centre console, trim strips in porous carbon fibre, instruments in M2-specific design and the M logo on the door sill plates, gearshift lever, steering wheel and rev counter.

#### **BMW ConnectedDrive enhances safety, comfort and entertainment.**

New BMW M2 customers can also make use of innovative driver assistance systems and mobility services from BMW ConnectedDrive.

The range of optional driver assistance systems available for the BMW M2 includes the Driving Assistant, which comprises features such as Collision Warning and Pedestrian Warning with City Braking function, and Lane Departure Warning. The system warns the driver of potential collisions with pedestrians or other vehicles in urban areas and brakes the car automatically. Furthermore, it uses steering wheel vibrations to alert drivers if they stray from their lane unintentionally. Speed Limit Info flashes up traffic signs and the permitted top speed, and the driver is warned if overtaking is not allowed. The rear-view camera teams up with rear Park Distance Control to assist drivers with reverse parking and manoeuvring. Plus, the optional Navigation Professional offers an ultra-sharp map display and the iDrive Touch Controller ensures the various functions are even easier to use.

### **Analyse your own driving style, film racing laps.**

The optional ConnectedDrive Services open up the world of vehicle connectivity to customers, revealing intelligent services and features as well as an extensive range of apps. The GoPro app is a case in point, likewise the M Laptimer app from BMW M GmbH, which drivers can use to improve their driving style on the track precisely as required. This application records the car's speed, longitudinal and lateral acceleration, engine speed, the gear engaged at any one time, the steering angle, the accelerator position and fuel consumption. All this allows drivers to subsequently analyse their responses precisely corner by corner, gives them the option of comparing their laps with those of other drivers and enables them to share the data by e-mail or Facebook.

The GoPro app allows drivers to use a GoPro camera to film fast laps of the race track, for example. BMW ConnectedDrive paves the way for all applications to be integrated seamlessly into the car. They can be operated using the iDrive Touch Controller and viewed in the Control Display.

### **Other services from BMW ConnectedDrive.**

Access to e-mail, weather information and news is possible via the car's integrated SIM card. Online Entertainment opens up access to more than 22 million music titles and over 200 internet radio channels. With features such as the Concierge Service (a personal digital assistant), Real Time Traffic Information (RTTI) and Intelligent Emergency Call available to BMW M2 owners, BMW once again underlines its leading role in the link-up of drivers, their vehicles and the outside world.

## 7. Heritage. Sporting talent runs in the family.



The new BMW M2 sees BMW M GmbH building on the success of the BMW 1 Series M Coupe. Like its forebear, the BMW M2 also sets the benchmark in the compact high-performance sports car segment. Not that the M2 has just the one direct predecessor. Indeed, it continues the tradition of the legendary original BMW M3 – the E30 from 1985. And it is also a close descendant of a car from 40 years ago that anticipated the focus of BMW M GmbH on stand-out dynamic talent, unbeatable agility and unshakable car control no matter what the situation: the BMW 2002 turbo.

### **Head-turning ancestor.**

When the BMW 2002 turbo was unveiled at the Frankfurt Motor Show in autumn 1973 as the new flagship model of the BMW 02 Series, the first Oil Crisis was just beginning. This backdrop was a major factor behind the growth of the BMW 2002 turbo into one of the most emotionally rich cars of its time. Today, it is a hugely coveted classic.

Its impact on automotive history alone provides sound reasons for this current status. After all, the BMW 2002 turbo was the first series-produced European car to feature a turbocharger. Only available in Polaris metallic and Chamonix paint finishes, it was soon thrilling drivers with its stunning dynamic repertoire. The BMW engineers employed a Kugelfischer fuel injection system and KKK turbocharger to extract a tidy 125 kW/170 hp at 5,800 rpm from the two-litre four-cylinder engine. And torque of 245 Nm (181 lb-ft) at 4,000 rpm was also more than impressive. That was enough to power the super-light BMW 2002 turbo (weighing in at just 1,080 kilograms) from 0 to 100 km/h (62 mph) in just 6.9 seconds and on to a top speed of 211 km/h (131 mph). The BMW 2002 turbo was therefore one of the fastest-moving sights on German roads at the time.

And it wasn't afraid to shout about it. A large front spoiler, bolted-on plastic wing extensions and a spoiler lip on the boot lid signalled the impressive dynamic potential of the BMW 2002 turbo without the need for a second glance. The interior likewise upped its game to reflect the requirements of keen drivers. Sports seats offered maximum lateral support through quickly taken corners, the grippy leather steering wheel enabled silky-smooth car control and there was a gauge above the centre console to keep the driver up to speed on charge pressure.

With its cutting-edge suspension featuring a MacPherson front axle, a semi-trailing arm rear axle, anti-roll bars front and rear and inner-vented front disc brakes, the BMW 2002 turbo led the way in the 1970s in terms of driving dynamics.

A total of 1,672 units of the BMW 2002 turbo were built between October 1973 and June 1975.

### **A legend of motor sport.**

The original BMW M3 (E30), the sports version of the compact BMW 3 Series range, was presented at the 1985 Frankfurt Motor Show. The 4.36-metre-long, two-door sedan was conceived as a homologation model for the German Touring Car Championship and wore its ambitious sporting intentions proudly on its sleeve. With its brawny wing extensions, a large front spoiler, side skirts, a lowered rear apron and a prominent spoiler rising up from the rear end, the first BMW M3 had the exterior presence of a finely-tuned athlete. A more heavily raked rear window than that of a standard BMW 3 Series and a raised boot lid made from glass-fibre-reinforced plastic brought further aerodynamic gains.

The BMW M3 was powered by a 2.3-litre four-cylinder engine featuring four-valve technology, which developed 147 kW/200 hp at 6,750 rpm and served up peak torque of 240 Nm (177 lb-ft) at 4,750 rpm. It sent this power to the rear wheels via a five-speed manual gearbox with the first gear down and to the left. The BMW M3 took just 6.7 seconds to race from 0 to 100 km/h (62 mph) and recorded a top speed of 235 km/h (146 mph).

These enviable statistics underpinned the ascent of the original BMW M3 to legendary status in motor racing circles. It won the touring car world championship in its first season on the race track, while many more championship titles and countless individual wins mean the E30 BMW M3 Group A remains the world's most successful touring car racer to this day. Four wins in a row in the 24-hour race at the Nürburgring-Nordschleife, for example, stand as testament to this.

By mid-1991 around 18,000 units of the original BMW M3, which was also available in convertible form from 1988, had been built.

### **Powerful predecessor.**

The first M car based on the BMW 1 Series arrived in 2011 in the form of the BMW 1 Series M Coupe, so called to avoid confusion with the legendary BMW M1 mid-engined super-sports car.

The BMW 1 Series M Coupe was powered by a three-litre six-cylinder in-line engine with M TwinPower Turbo technology and developed output of 250 kW/340 hp at 5,900 rpm. The BMW 1 Series M Coupe made its peak torque of 450 Nm (332 lb-ft) available between 1,500 and 4,500 rpm. The 0 to 100 km/h (62 mph) sprint was all over in just 4.9 seconds and top speed was an electronically limited 250 km/h (155 mph).

The BMW 1 Series M Coupe came as standard with lightweight M Sport suspension, a mechanical differential lock with up to 100 per cent locking effect, M compound brakes and 19-inch aluminium wheels with mixed-size tyres. Track width was increased over the standard BMW 1 Series Coupe by 60 millimetres at the front and 40 millimetres at the rear.

Stylistic changes to the BMW 1 Series M Coupe included a new front apron with larger air intakes in response to the car's increased cooling requirement, as well as wing extensions and a new rear apron. The interior was upgraded in familiar M style with leather-covered M sports seats, an M sports steering wheel, interior trim strips in Alcantara and BMW M logos.

## 8. Specifications.



<b>BMW M2 Coupe</b>		
<b>Body</b>		
No of doors/seats		2/4
Length/width/height (unladen)	mm	4468/1854/1410
Wheelbase	mm	2693
Track, front/rear	mm	1579/1601
Ground clearance	mm	123
Turning circle	m	11.7
Fuel tank capacity	app ltr	52
Cooling system incl heater	ltr	10.3
Engine oil <sup>1)</sup>	ltr	6.5
Weight, unladen, to DIN/EU	kg	1495/1570 (1520/1595)
Max load to DIN	kg	515 (490)
Max permissible weight	kg	2010
Max axle load, front/rear	kg	970/1080
Max trailer load, Braked (12%/unbraked	kg	---/---
Max roofload/max towbar download	kg	75/---
Luggage comp capacity	ltr	390
Air resistance	c <sub>d</sub> x A	0.35 x 2.21
<b>Power Unit</b>		
Config/No of cyls/valves		In-line/6/4
Engine technology		M TwinPower Turbo technology: TwinScroll turbocharger, High Precision Injection, VALVETRONIC fully variable valve control, Double-VANOS variable camshaft timing
Effective capacity	cc	2979
Stroke/bore	mm	89.6/84.0
Compression ratio	:1	10.2
Fuel		min. RON 95
Max output	kW/hp	272/370
at	rpm	6500
Max torque	Nm/lb-ft	465/343
at	rpm	1400–5560
<b>Electrical System</b>		
Battery/installation	Ah/–	80/Luggage compartment
Alternator	A/W	209/2926
<b>Driving Dynamics and Safety</b>		
Suspension, front		Aluminium double-joint spring strut axle in lightweight construction with M-specific elastokinematics
Suspension, rear		Aluminium five-link axle in lightweight construction with M-specific elastokinematics
Brakes, front		Four-piston floating-calliper disc brakes / vented
Brakes, rear		Double-piston floating-calliper disc brakes / vented
Driving stability systems		Standard: DSC incl ABS and M Dynamic Mode, CBC (Cornering Brake Control), DBC (Dynamic Brake Control), Dry Braking function, Fading Compensation, Start-Off Assistant, Active M Differential linked to Integrated Chassis Management (ICM)
Safety equipment		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 belt latch tensioner and belt force limiter at the front seats
Steering		Electric Power Steering (EPS) with M-specific Servotronic function
Steering ratio, overall	:1	15.0
Tyres, front/rear		245/35 ZR19 93Y 265/35 ZR19 98Y
Rims, front/rear		9.0J x 19 Light Alloy 10.0J x 19 Light Alloy

---



---

**BMW M2 Coupe**

---

**Transmission**

Type of transmission	6-speed manual (7-speed M Double Clutch Transmission with Drivelogic)		
Gear ratios	I	:1	4.110 (4.806)
	II	:1	2.315 (2.593)
	III	:1	1.542 (1.701)
	IV	:1	1.179 (1.277)
	V	:1	1.000 (1.000)
	VI	:1	0.846 (0.844)
	VII	:1	----- (0.671)
	R	:1	3.727 (4.172)
Final drive		:1	3.462 (3.462)

**Performance**

Power-to-weight ratio	kg/kW	5.5 (5.6)
Output per litre	kW/ltr	91.3
Acceleration 0–100 km/h	sec	4.5 (4.3)
In 5th gear 80–120 km/h	sec	4.4
Top speed	km/h	250/270 <sup>2)</sup>

**BMW EfficientDynamics**

BMW EfficientDynamics standard features	Brake Energy Regeneration, electromechanical power steering, Automatic Start/Stop function, intelligent lightweight construction, on-demand operation of ancillary units, differential with optimised-warm-up behaviour, map-regulated oil pump
---	---

**Fuel Consumption ECE<sup>3)</sup>**

With standard tyres		
Urban	ltr/100 km	11.6 (10.5)
Extra-urban	ltr/100 km	6.7 (6.4)
Combined	ltr/100 km	8.5 (7.9)
CO <sub>2</sub>	g/km	199 (185)
Emission rating		EU6

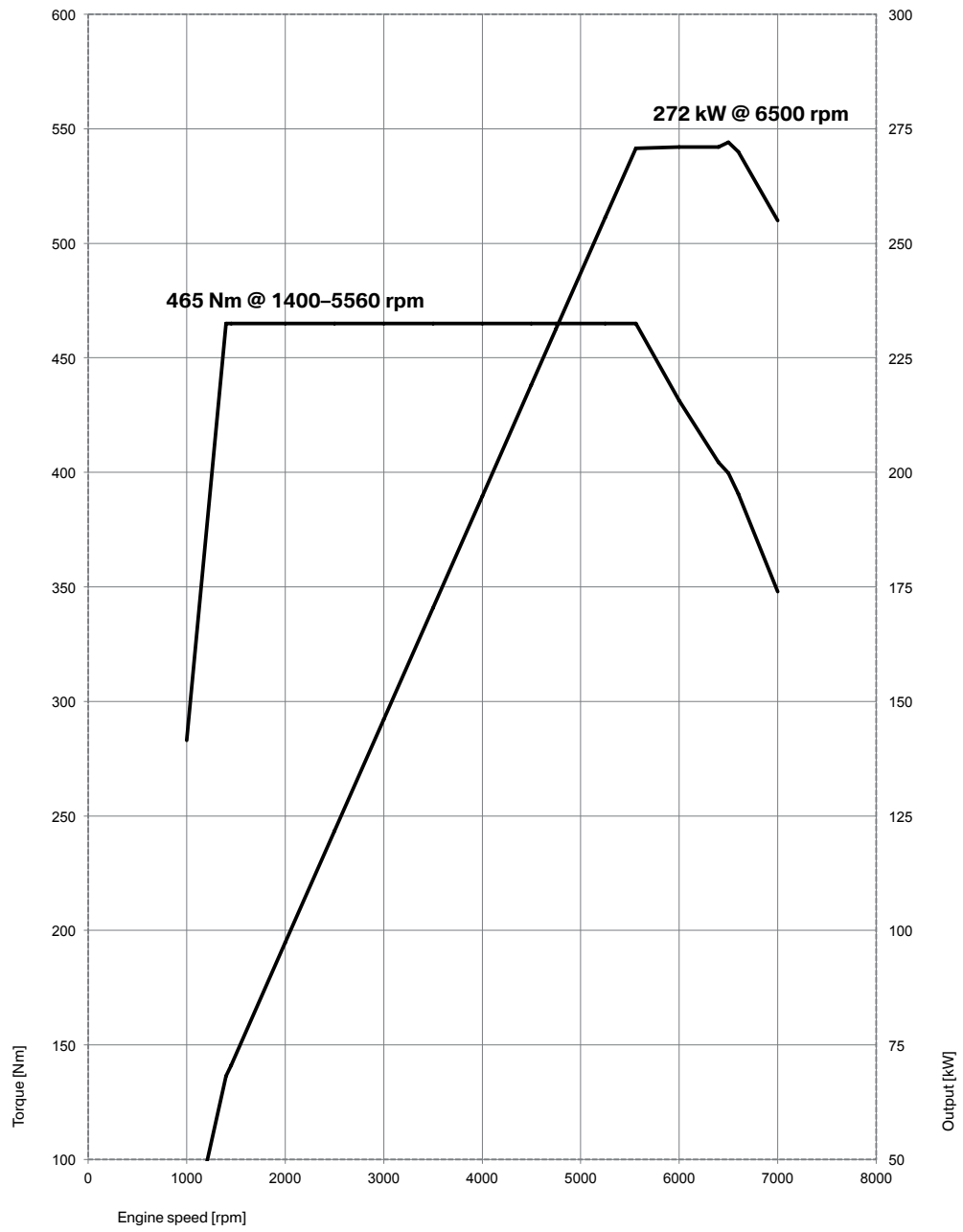
Specifications apply to ACEA markets/data relevant to homologation apply in part only to Germany (weight)  
Figures in brackets apply to models with M DCT

<sup>1)</sup> Oil change

<sup>2)</sup> In conjunction with the optional M Driver's Package

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

## 9. Output and torque diagrams.





# 10. Exterior and interior dimensions.

