

Technical specifications.

BMW M2.



BMW
Media
information

06/2024
Page 1

BMW M2		
Body		
No of doors/seats		2 / 4
Length/width/height (unladen)	mm	4580 / 1887 / 1403
Wheelbase	mm	2747
Track, front/rear	mm	1617 / 1605
Ground clearance	mm	123
Turning circle	m	11.9
Fuel tank capacity	approx. l	52
Engine oil ¹⁾	l	7.0
Weight, unladen, to DIN/EU	kg	1730 / 1805 (1705 / 1780)
Max. load to DIN	kg	425 (450)
Max. permissible weight	kg	2155 (2155)
Max. axle load, front/rear	kg	1075 / 1135
Max. trailer load, braked (12%/unbraked)	kg	- / -
Max. roofload/towbar download	kg	75 / -
Luggage comp. capacity	l	390
Air resistance	c _d x A	0.34 x 2.28
Power Unit		
Config./No. of cyls./valves		In-line / 6 / 4
Engine technology		M TwinPower Turbo technology with two mono-scroll turbochargers, indirect charge air cooling, High Precision Injection (maximum injection pressure: 350 bar), VALVETRONIC fully variable valve timing and Double-VANOS variable camshaft timing
Effective capacity	cc	2993
Stroke/bore	mm	90.0 / 84.0
Compression ratio	:1	9.3
Fuel		RON 98 (min. RON 95)
Max. output	kW/hp	353 / 480
at	rpm	6250
Max. torque	Nm	600 (550)
at	rpm	2650 – 6130
Electrical System		
Battery/installation	Ah/-	92 / luggage compartment
Driving Dynamics and Safety		
Suspension, front		Adaptive M suspension with double-joint spring strut axle in lightweight aluminium construction, M-specific kinematics and elastokinematics
Suspension, rear		Adaptive M suspension with five-link axle in lightweight aluminium/steel construction, rear-axle subframe with rigid bolted connection to the body, M-specific kinematics and elastokinematics
Brakes, front		M Compound brakes, vented, with six-piston fixed callipers
Brakes, rear		M Compound brakes, vented, with single-piston floating callipers
Driving stability systems		Standard: DSC incl. ABS, ASC and M Dynamic Mode (MDM), can be switched off, integrated wheel slip limitation, CBC (Cornering Brake Control), DBC (Dynamic Brake Control), Dry Braking function, drive-off assistant, Active M Differential
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 stopper, belt tensioner and belt force limiter in the front, crash sensors, tyre pressure indicator
Steering		Electric Power Steering (EPS) with M-specific Servotronic function and variable sport ratio
Steering ratio, overall	:1	15,0
Tyres, front/rear		275/35 ZR19 100Y XL 285/30 ZR20 99Y XL
Rims, front/rear		9.5J x 19 light-alloy 10.5J x 20 light-alloy

BMW M2

Transmission

Type of transmission	Eight-speed M Steptronic transmission with Drivelogic (six-speed manual)		
Gear ratios	I	:1	5.000 (4.110)
	II	:1	3.200 (2.315)
	III	:1	2.143 (1.542)
	IV	:1	1.720 (1.179)
	V	:1	1.313 (1.000)
	VI	:1	1.000 (0.846)
	VII	:1	0.823 (-)
	VIII	:1	0.640 (-)
	R	:1	3.478 (3.727)
Final drive		:1	3.154 (3.462)

Performance

Power-to-weight ratio (DIN)	kg/kW	4.9 (4.8)	
Output per litre	kW/l	117.9	
Acceleration	0–100 km/h	s	4.0 (4.2)
Acceleration	0–200 km/h	s	12.9 (13.7)
Acceleration	80–120 km/h	s	
in 5th gear			3.6 (5.6)
Top speed	km/h	250 / 285 ²⁾	

BMW EfficientDynamics

BMW EfficientDynamics standard features	Brake Energy Regeneration, Electric Power Steering, Automatic Start/Stop function, Optimum Shift Indicator (M Steptronic: in manual shift mode), BMW EfficientLightweight, on-demand operation of ancillary units, map-regulated oil pump, differential with optimised efficiency, optimised aerodynamic attributes
---	---

Fuel Consumption ECE

Combined (WLTP)	l/100 km	9.8 – 9.6 (10.2 – 10.0)
CO ₂ (WLTP)	g/km	223 – 218 (231 – 226)
Emission rating		Euro 6e
CO ₂ class(es)		G

Specifications apply to ACEA markets/data relevant to homologation applies in part only to Germany (weight)

All figures are provisional

Figures in brackets refer to cars with the manual gearbox

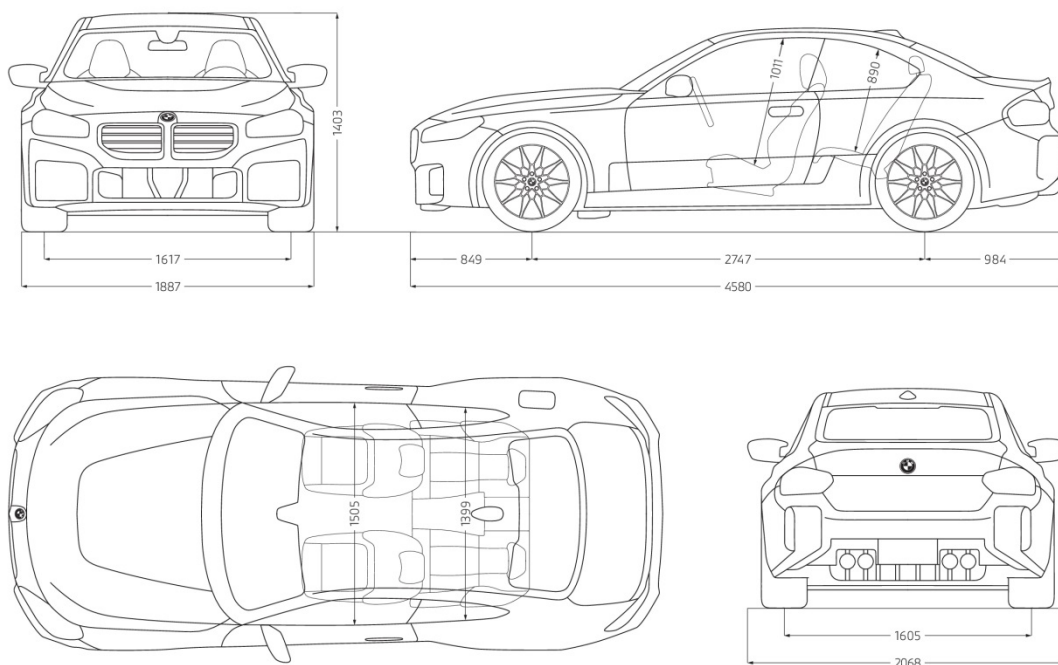
¹⁾ Oil change with filter

²⁾ Limited / with optional M Driver's Package

Official fuel consumption, CO₂ emissions, electric power consumption and electric range figures were determined based on the prescribed measurement procedure in accordance with European Regulation (EC) 2007/715 in the version applicable. They refer to vehicles in the German market. Where a range is shown, NEDC figures consider the different sizes of the selected wheels/tyres, while WLTP figures take into account the impact of any optional extras.

WLTP values are used for determining vehicle-related taxes or other duties based (at least inter alia) on CO₂ emissions as well as eligibility for any applicable vehicle-specific subsidies. Any NEDC values that are shown were calculated based on the new WLTP measurement procedure where appropriate and translated back into equivalent NEDC measurements in order to ensure comparability between the vehicles. Only official figures based on the WLTP procedure are available for new models that have been type tested since 01.01.2021. Further information on the WLTP and NEDC measurement procedures can also be found at www.bmw.de/wltp.

Exterior and interior dimensions. BMW M2.



The dimensions of the technical drawing are in millimetres and may vary depending on the model and optional equipment specified.

The new BMW M2.



Setting out its stall as a textbook purveyor of driving pleasure for the purist, the new BMW M2 (fuel consumption, combined: 9.8 – 9.6 l/100 km [28.8 – 29.4 mpg imp]; CO₂ emissions, combined: 223 – 218 g/km in the WLTP cycle, CO₂ class: G) raises the bar for compact high-performance sports cars in the premium segment. Indeed, it elevates the performance experience in this vehicle class to a whole new level. The new BMW M2 lines up with even more power, greater visual impact than ever and innovative equipment features. Front and centre of this fresh round of updates to the car is the 15 kW/20 hp added to its output: the high-revving six-cylinder in-line petrol engine with M TwinPower Turbo technology now tops out at 353 kW/480 hp. And then there are the new design accents for the exterior, an updated interior and the introduction of BMW Operating System 8.5 to underpin the latest generation of BMW iDrive.

The package of updates for the elite compact sports car makes the first step into the world of high-performance models at BMW M GmbH even more attractive. The new BMW M2 takes its drive concept of a straight-six engine, six-speed manual gearbox (optional) and classical rear-wheel drive – a unique proposition among its rivals – to a new stage of evolution. In combination with its compact dimensions, chassis technology tuned perfectly for both everyday road driving and track use, and a state-of-the-art operating concept allowing individualisation of the car setup, this makes the new M2 ideally equipped to write the next chapter in the BMW M brand's history of success in this segment.

The new BMW M2 will be built alongside the new BMW 2 Series Coupé at BMW Group Plant San Luis Potosí in Mexico. It will be launched worldwide with a production phase-in from August 2024. More than 40 per cent of total sales will be recorded in Europe. The most important single market will be the USA, followed by Germany, China, Great Britain and Japan.

Six-cylinder in-line engine with extra output and torque.

As well as the raw power itself, the inimitable way in which the six-cylinder in-line engine delivers that power also plays a key role in the performance experience offered by the new BMW M2. The upgraded

version of the engine for the new edition of the high-performance sports car shines an even more vivid spotlight on the linear delivery of power, sustained into the higher reaches of the rev range, that is such a hallmark feature of M models. Its maximum torque is on tap across a wide rev band between 2,650 and 6,130 rpm. In examples of the new BMW M2 with the optional six-speed manual gearbox (fuel consumption, combined: 10.2 – 10.0 l/100 km [27.7 – 28.2 mpg imp]; CO₂ emissions, combined: 231 – 226 g/km in the WLTP cycle, CO₂ class: G), peak torque remains 550 Nm (405 lb-ft). And when power is channelled via the standard eight-speed M Steptronic transmission with Drivelogic, the figure rises to 600 Nm (442 lb-ft). The engine produces its increased maximum output of 353 kW/480 hp at 6,250 rpm, with revs topping out at 7,200 rpm.

So that drivers can explore the engine's upgraded performance characteristics with an even greater degree of intensity, further advances have been made with the accelerator mapping and response in all the drive modes selectable via the M Setup menu. As a result, the new BMW M2 offers noticeably more rapid reactions to the driver's requests for acceleration – both when specified with the eight-speed M Steptronic transmission and with the optional six-speed manual gearbox.

The ability of the new BMW M2 to offer further improved power delivery is rooted in an exceptionally strong technological base. Its 3.0-litre engine differs from the unit in the BMW M3/BMW M4 range in a few details only. The increased peak output figure of the new BMW M2 lends further weight to its leadership claims in the compact high-performance car segment. In addition, it now achieves parity with the manual variants of the new BMW M3 Sedan (fuel consumption, combined: 10.1 – 10.0 l/100 km [28.0 – 28.3 mpg imp]; CO₂ emissions, combined: 230 – 227 g/km in the WLTP cycle, CO₂ class: G) and new BMW M4 Coupé (fuel consumption, combined: 10.1 – 10.0 l/100 km [28.0 – 28.3 mpg imp]; CO₂ emissions, combined: 230 – 226 g/km in the WLTP cycle, CO₂ class: G).

Racing expertise delivers smile-inducing performance.

As well as its pair of mono-scroll turbochargers, an indirect intercooler and an electronically controlled wastegate, the M TwinPower Turbo technology of the straight-six engine also includes High Precision Injection, VALVETRONIC variable valve timing and Double-VANOS fully variable camshaft timing. The engine also has an array of details borrowed directly from racing car design and whose impact is most clearly evident in its lightning-fast response, appetite for revs and high

performance capability in track use. These details include an extremely rigid crankcase with a sleeve-free, closed-deck construction, a forged crankshaft with lightweight design, cylinder bores with a wire-arc sprayed iron coating and a 3D-printed core for the cylinder head.

The M-specific cooling system ensures the powertrain components maintain an optimal operating temperature even under heavy loads. The oil circuit is also designed to handle extremely dynamic driving situations. A map-controlled oil pump ensures reliable oil supply even under extreme longitudinal and lateral acceleration.

The engine sends its drive power through an eight-speed M Steptronic transmission with Drivelogic as standard. The Drivelogic button integrated into the selector lever makes it possible to alter the transmission's shift characteristics, with a choice of three clearly distinguishable settings. Both the selector lever in the latest M design and the gearshift paddles on the steering wheel enable sequential interventions in the gear selection process at any time.

Drivers keen to blend an intensely engaging performance experience with even more direct interaction with the powertrain can specify the six-speed manual gearbox as an option. This links up with the Gear Shift Assistant, which uses engagement speed control to ensure slip-free operation when downshifting under braking into corners.

Whichever form of power transfer the customer chooses for their BMW M2, the increased engine output shaves 0.1 seconds off its 0 to 100 km/h (62 mph) acceleration time: the new BMW M2 records a figure of 4.0 seconds with the standard transmission or 4.2 seconds if specified with the optional six-speed manual gearbox. The increase in power also makes its presence felt over the 0 to 200 km/h (124 mph) sprint, delivering an improvement of 0.6 seconds in the case of the BMW M2 with eight-speed M Steptronic transmission (now 12.9 seconds) and also lowering the time posted by cars with the optional manual gearbox by 0.6 seconds (to 13.7 seconds). Top speed is 250 km/h (155 mph), but can be increased to 285 km/h (177 mph) with the optional M Driver's Package. The dynamic power delivery is backed by an emotionally rich engine note conjured by the M-specific exhaust system with electrically controlled flaps.

Visually impactful exterior design with fresh accents.

Powerfully chiselled surfaces and athletic proportions mark out the pure-bred performance character of the new BMW M2, whose compact

dimensions and wide tracks showcase it to visually dramatic effect. M-specific design features geared to the functional requirements of cooling air routing and aerodynamic balance accentuate the eye-catching appearance of the two-door car. A large, horizontal BMW kidney grille and the three-section split lower air intake optimise cooling of the powertrain components and brakes.

The model-specific LED headlights are positioned towards the outer edges of the front end. In a tribute to the iconic BMW 02 models, they each have a single circular headlight that generates both low beam and high beam. U-shaped light guides at the lower edge of the headlights serve as both the daytime driving lights and turn indicators. Available as options are Adaptive LED Headlights with BMW Selective Beam non-dazzling High Beam Assistant and M lights Shadowline with dark inlays.

The high-performance model's profile is shaped by the elegant lines which have become a signature feature of the brand's coupés. In combination with prominent side sill extensions and muscular wheel arches, this creates a compact two-door form with a richly sporting character. The new BMW M2 can also be ordered as an option with an M Carbon roof that not only reduces the car's weight by around six kilograms, but also increases agility by lowering its centre of gravity.

The rear apron of the new BMW M2 features a powerfully sculpted race-car-style diffuser. The exhaust system feeds into two pairs of exhaust tailpipes, which are positioned a significant distance from the edges of the rear end and also channel the racing genes of the M2 visually. The trims for the twin tailpipes are now finished in black as standard. The likewise black model lettering on the boot lid and radiator grille creates a particularly classy impression with its silver-coloured bordering.

Significantly expanded range of exterior paint finishes; light-alloy wheels with a new design.

Customers can order their new BMW M2 in a choice of three solid colours, five metallic shades and six BMW Individual paint finishes. The significantly expanded range includes the new Sao Paulo Yellow solid, Fire Red metallic, Portimao Blue metallic and Skyscraper Grey metallic variants. Plus, the selection of BMW Individual paint finishes for the new BMW M2 now also features Java Green, Voodoo Blue, Grigio Telesto and Twilight Purple.

The new BMW M2 is fitted as standard with M light-alloy wheels in double-spoke design and with a Jet Black finish. Dimensions are

19 inches at the front axle and 20 inches at the rear axle. A new addition to the options list are M light-alloy wheels in double-spoke design and with the same dimensions, but finished in the colour Silver. They can be combined with track tyres if the optional M Race Track package is specified.

New steering wheels and seat surfaces, M Carbon bucket seats now also available as an individual option.

The most important interface between the driver and car – the steering wheel – has been newly designed, bringing a fresh look to the interior of the compact high-performance model. The standard-fitted M leather steering wheel of the new BMW M2 now has a flat-bottomed rim and precisely modified spokes. A red centre marker in the 12 o'clock position, gearshift paddles and the two M buttons for selecting individually configured vehicle setups project an intense racing car feel. An M Alcantara steering wheel is now also available as an option in the same design. A heating function is offered as an option for both steering wheel variants.

The optional M Sport seats in Vernasca leather can now also be ordered in a red/black bi-colour variant. Added to which, the weight-minimized M Carbon bucket seats for the new BMW M2 are not only available in conjunction with the M Race Track package, but now also as an individual option. With surfaces in Merino leather, multi-way electric adjustment, removable head restraints and a facility for adding a multi-point harness, they optimise both the car's comfort levels and its racing credentials.

BMW Operating System 8.5, digital control for the climate functions.

The M-specific content in the BMW Curved Display and optional BMW Head-Up Display enhances the cockpit's progressive sports car aura. The fully digital screen grouping, made up of a 12.3-inch information display and a 14.9-inch control display, now provides the stage for the latest evolution of the BMW iDrive control/operation system based on BMW Operating System 8.5. The functions of the climate control system are now also operated digitally. The temperature and ventilation settings as well as the seat heating and – if specified – steering wheel heating in the new BMW M2 can be controlled either by touch using a special menu option in the lower area of the control display or by voice command with the help of the BMW Intelligent Personal Assistant.

This broad adoption of digitalisation leads to a further reduction in the number of buttons and controls in the cockpit and is accompanied by a

redesign of the instrument panel. New adjustment controls for the air vent grilles in the centre of the instrument panel and on the driver's and front passenger side of the cockpit allow the airflow direction to be adjusted using rotating and tilting movements.

The interior trim elements in the instrument panel and centre console of the new BMW M2 come as standard in Dark Graphite matt. Interior trim elements in Aluminium Rhombicle Anthracite, M Carbon Fibre or new Fine Brushed Aluminium are available as an option.

M-specific operating concept, extensive standard equipment.

At the heart of the M-specific operating concept is the Setup button on the centre console. This provides direct access to the settings options for the engine, the standard adaptive M suspension, the M Servotronic steering, the integrated braking system working in conjunction with the M Compound brakes, and the M Traction Control function, which allows drivers to set individual intervention thresholds for wheel slip limitation. The Gear Shift Assistant of the optional manual gearbox is also activated and deactivated via the M Setup menu.

Standard equipment for the new BMW M2 also includes three-zone automatic climate control, ambient lighting, a HiFi speaker system, a wireless charging tray and the BMW Live Cockpit Plus with BMW Maps navigation system. The likewise standard smartphone integration enables use of Apple CarPlay® and Android Auto™. Semi-automated driving and parking systems that come as standard include front collision warning, Cruise Control with brake function, Speed Limit Info function with no-overtaking indicator, Lane Departure Warning and Park Distance Control with sensors at the front and rear of the car. Among the optional items available are the Driving Assistant, Active Cruise Control with Stop&Go function and the Parking Assistant with Reversing Assistant.

Also on the options list are Comfort Access, an electrically operated slide/tilt sunroof and the Harman Kardon Surround Sound System. As well as the BMW Head-Up Display, the optional BMW Live Cockpit Professional in the new BMW M2 now also includes Augmented View on the control display.

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

All of the stated model variants, equipment features, technical data and fuel/electric power consumption and

Official fuel consumption, CO₂ emissions, electric power consumption and electric range figures were determined based on the prescribed measurement procedure in accordance with European Regulation (EC) 2007/715 in the version applicable. Where a range is shown, the WLTP figures take into account the impact of any optional extras.

Further information on the WLTP and NEDC measurement procedures can also be found at www.bmw.de/wltp.

emissions figures relate to the offering in the German market, if the respective vehicle is available there. These may vary for other markets. Dimensions and measurements refer to vehicles with basic configuration in Germany. These may vary depending on the wheel/tyre size and items of optional equipment selected.