

Technical specifications. BMW M5.



BMW
Media
Information

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Page 1

BMW M5		
Body		
No. of doors / seats		4 / 5
Length/width/height (unladen)	mm	5096 / 1970 / 1510
Wheelbase	mm	3006
Track, front/rear	mm	1684 / 1660
Ground clearance	mm	115
Turning circle	m	12.6
Fuel tank capacity	approx. l	60
Engine oil ¹⁾	l	13.2
Weight, unladen, to DIN/EU	kg	2435 / 2510
Max. load to DIN	kg	505
Max. permissible weight	kg	2940
Max. axle load, front/rear	kg	1475 / 1550
Max. trailer load		
braked (12%/unbraked)	kg	2000 / 750
Max. roofload/towbar download	kg	75 / 100
Luggage comp. capacity	l	466
Air resistance	c _x x A	0.32 x 2.55
Drive System		
Drive concept		Full hybrid drive, drive torque from one or both sources (petrol engine/electric motor) sent to all four wheels via M xDrive
Max. system output ²⁾	kW/hp	535 / 727
Max. system torque ²⁾	Nm	1000
System power-to-weight ratio (DIN)	kg/kW	4.6
Petrol Engine		
Config./No. of cyls./valves		V / 8 / 4
Engine technology		M TwinPower Turbo technology with cross-bank exhaust manifold: two M TwinScroll turbochargers, indirect charge air cooling, High Precision Injection (max. injection pressure: 350 bar), VALVETRONIC fully variable valve timing, Double-VANOS variable camshaft timing
Effective capacity	cc	4395
Stroke/bore	mm	88.3 / 89.0
Compression ratio	:1	10.5
Fuel		Min. RON 95
Output	kW/hp	430 / 585
at	rpm	5600 – 6500
Torque	Nm	750
at	rpm	1800 – 5400
Output per litre	kW/l	97.8
Electric Motor		
Motor technology		BMW eDrive technology: permanently excited synchronous electric motor with pre-gearing, integrated into eight-speed M Steptronic transmission; generator function for recuperating energy for the high-voltage battery
Max. output	kW/hp	145 / 197
at	rpm	6000
Torque	Nm	280
at	rpm	1000 – 5000
Effective torque resulting from pre-gearing	Nm	450
High-voltage Battery		
Storage technology / Installation		Lithium-ion / Underfloor
Voltage	V	347.5
Energy capacity (gross / net)	kWh	22.1 / 18.6
Max. charging rate	kW	7.4
Charging time, 0–100% charge		3:15 h at 7.4 kW (32 A / 230 V, 1ph.)

BMW M5

Driving Dynamics and Safety

Suspension, front	Adaptive M suspension with double-wishbone axle in lightweight aluminium construction, M-specific kinematics and elastokinematics
Suspension, rear	Adaptive M suspension with five-link axle in lightweight aluminium/ steel construction, M-specific kinematics and elastokinematics
Brakes, front	Six-piston fixed-calliper disc brakes, vented
Brakes, rear	Single-piston floating-calliper disc brakes, vented
Driving stability systems	Standard: DSC incl. ABS and M Dynamic Mode (MDM), can be switched off; near-actuator wheel slip limitation, CBC (Cornering Brake Control), DBC (Dynamic Brake Control), Performance Control, Dry Braking function, drive-off assistant, M xDrive all-wheel-drive system and Active M Differential networked with DSC
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, Integral Active Steering
Steering ratio, overall	14.2
Tyres, front/rear	285/40 ZR20 111Y XL / 295/35 ZR21 110Y XL
Rims, front/rear	10.5J x 20 light-alloy / 11J x 21 light-alloy

Transmission

Type of transmission	Eight-speed M Steptronic transmission		
Gear ratios	I	:1	5.000
	II	:1	3.200
	III	:1	2.143
	IV	:1	1.720
	V	:1	1.297
	VI	:1	1.000
	VII	:1	0.833
	VIII	:1	0.640
	R	:1	3.968
Final drive		:1	3.308

Performance

Acceleration	0–100 km/h	s	3.5
Acceleration	0–200 km/h	s	10.9
Acceleration	80–120 km/h	s	
	in 4th/5th gear		2.2 / 2.9
Top speed		km/h	250 / 305 ³⁾
Top speed on electric power		km/h	140
Electric range (WLTP)		km	67 – 69

BMW EfficientDynamics

BMW EfficientDynamics standard features	BMW eDrive technology, Electric Power Steering, hybrid-specific Automatic Start/Stop function, Proactive Driving Assistant, BMW EfficientLightweight, optimised aerodynamic attributes, active air flap control, on-demand operation of ancillary units, map-regulated oil pump, efficiency-optimised all-wheel drive
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Petrol/Electric Power Consumption ECE

Petrol cons., weighted combined (WLTP)	l/100 km	1.7 – 1.6
CO ₂ emissions from petrol (WLTP)	g/km	39 – 37
Electric power consumption, weighted combined (WLTP)	kWh/100 km	25.5 – 25.0
Petrol cons. w. discharged batt. (WLTP)	l/100 km	10.3 – 10.2
Emission rating		Euro 6e
CO ₂ class(es) weighted combined		B
CO ₂ class(es) w. discharged batt.		G

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

All figures are provisional

¹⁾ Oil change with filter

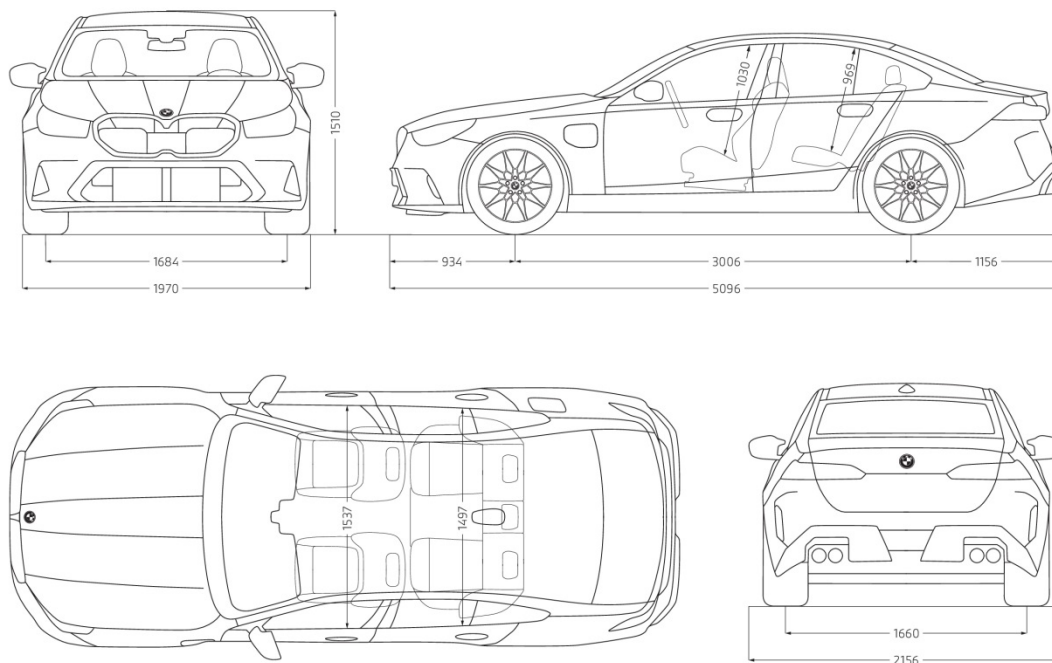
²⁾ Developed by the combination of the combustion engine (stated nominal figure) and the electric motor (up to stated nominal figure)

³⁾ Limited / with optional M Driver's Package

Fuel consumption, CO₂ emission figures and power consumption as well as electric range were measured using the methods required according to Regulation VO (EC) 715/2007 as amended. Where a range is shown, the WLTP figures take into account the impact of any optional extras.

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

Exterior and interior dimensions. BMW M5.



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