

2013 M5 technical data

Selected dimensional and specification comparison between the new 2013 M5 Sedan and the last available predecessor model 2010 M5, with their respective standard-equipment transmissions:

		2013 M5	2010 M5
Engine platform		S63Tü	S85B50
Transmission		7-speed M-DCT (Motorsport double-clutch with Drivelogic)	7-speed SMG (sequential manual gearbox)
Number of doors/seats	-	4/5	4/5
Vehicle length	mm/inch	4916/193.5	4863/191.5
Vehicle width (excluding mirrors)	mm/inch	1891/74.4	1846/72.7
Vehicle height, unloaded	mm/inch	1456/57.3	1469/57.8
Wheelbase	mm/inch	2964/116.7	2889/113.7
Turning circle	ft	12.6/41.3	12.4/40.7
Track, front	mm/inch	1627/64.1	1580/62.2
Track, rear	mm/inch	1582/62.3	1566/61.7
Shoulder width, front	mm/inch	1480/58.3	1456/57.3
Shoulder width, rear	mm/inch	1427/56.2	1452/57.2
Effective leg room, front	mm/inch	1052/41.4	1054 41.5
Effective leg room, rear	mm/inch	918/36.1	914/36
Effective head room, front	mm/inch	1028/40.5	993/39.1
Effective head room, rear	mm/inch	973/38.3	967/38.1
Trunk volume per SAE J1100	ft ³	18.4	17.7
Approx. fuel tank capacity	gal.	21.1	18.5
Overall weight	lbs	1990/4387	1820/4012
Weight distribution, front/rear	%	47.5	52.2/47.8
Engine configuration		90 degree V8, dual overhead cams, 4 valves/cylinder	V10 DOHC. 4 valves/cylinder
Fuel management		MSD 17	BMW MS S65
Air intake		Air-to-liquid intake charge cooling	Naturally aspirated
Engine displacement	liters/ cm ³ / inch ³	Two turbochargers of twin- scroll design, connected to short exhaust manifolds and main catalyts	
Bore	mm/inch	4395/268	4999/305.1
Stroke	mm/inch	89.0/3.50	92/3.62
Rated power output/Engine speed	SAE hp/ rpm	88.3/3.48	75.2/2.96
Max. torque/engine speed	ft lbs(Nm)/ rpm	552/6000-7000	500 7750
		502 (680)/1500-5750	383 (520)/6100

		2013 M5	2010 M5
Compression ratio	:1	10.0	12.0
Emissions classification		LEV2	LEV2
Transmission supplier; designation		GS7D36BG	SMG III 247
Final drive ratio	:1	3.16	3.62
Steering type/ratio		rack-and-pinion/13.1	Rack-and-pinion/12.4
Brake type front/diameter	mm / inch	ventilated disc /400 15.7	vent. disc/374/14.7
Brake type rear/diameter	mm / inch	ventilated disc /396/15.6	vent. disc/370/14.6
Wheel size, front/rear	in.	9.0J x 19/10.0J x 19	8.5J x 19/9.5J x 19
Tire size, front & rear		265/40 ZR19 295/35 ZR19	255/40 ZR19 285/35 ZR19
Drag coefficient	Cd	0.33	0.31
Total aerodynamic drag (Cd x frontal area)	ft ²	8.53	7.54
Acceleration 0-60 mph	sec.	4.2 (preliminary)	4.5
¼ mile acceleration; elapsed time	sec.	To be provided	12.9
EPA fuel consumption city	mpg	To be provided	11
EPA fuel consumption highway	mpg	To be provided	17