



Media Information  
16<sup>th</sup> May 2012

## **Technical Data BMW M Cars 1978 to 2005.**

The following datasheets have been taken without modification from the original press documents published at the time.

**BMW M1** (1978-1981): Press kit, 12/1978.

**BMW M635CSi** (1984-1989): Press kit, 05/1984.

**BMW M5** 1st Generation (1984-1987): BMW Programme 1986, 09/1985.

**BMW M3** 1st Generation (1986-1991): Press kit BMW Motorsport 1987, 04/1987.

**BMW M5** 2nd Generation (1988-1995): Press kit, 08/1988.

**BMW M3** 2nd Generation (1992-1995): Press kit, 11/1992.

**BMW M3** 2nd Generation (1995-1999): Press kit, 07/1995.

**BMW M roadster** (1997-2002): Press kit, 1997.

**BMW M coupé** (1998-2002): Press kit, 1998.

**BMW M5** 3rd Generation (1998-2003): Press kit, 10/1998.

**BMW M3** 3rd Generation (2000-2006): Press kit, 09/2000.

**BMW M3 CSL** (2002-2003): Press kit, 03/2003.

**BMW M5** 4th Generation (2004-2010): Press kit, 09/2004.

**BMW M6** (2005-2010): Press kit, 04/2005.

# **BMW AG Presse**

## **SPECIFICATIONS: BMW M1 - PRODUCTION VERSION**

<b>Engine</b>	<b>Water-cooled 6-cylinder inline, 4 valves per cylinder, twin overhead camshafts with duplex roller-chain drive; mounted midship</b>
<b>Displacement, cc/cu in.</b>	<b>3453/211</b>
<b>Bore, mm/in.</b>	<b>93.4/3.71</b>
<b>Stroke, mm/in.</b>	<b>84.0/3.31</b>
<b>Power at rpm, bhp DIN</b>	<b>277 at 6500</b>
kW	<b>204 at 6500</b>
<b>Torque at rpm, lb-ft</b>	<b>239 at 5000</b>
Nm	<b>330 at 5000</b>
<b>Maximum engine speed, rpm</b>	<b>7000</b>
<b>Mean piston speed at maximum power, m/sec / ft/sec</b>	<b>17.4/57.1</b>
<b>Compression ratio</b>	<b>9.0:1</b>
<b>Fuel delivery system</b>	<b>Kugelfischer-Bosch mechanical fuel injection; 3 double intake pipes with 6 throttles, 46-mm diameter each</b>
<b>Fuel octane rating required</b>	<b>98 RON</b>
<b>Fuel-tank capacity, l/Imp. gal.</b>	<b>2 x 58 = 116 / 22.5</b>
<b>Lubrication</b>	<b>full pressure with dry sump; triple suction pump at crankcase, pressure pump in oil reservoir</b>

## **ELECTRICAL SYSTEM**

<b>Battery</b>	<b>12V/55 Ah</b>
<b>Generator</b>	<b>alternator 14V/65A</b>
<b>Ignition</b>	<b>contactless fully electronic digital, Magneti-Marelli; flywheel-determined timing</b>
<b>Sparkplugs</b>	<b>Bosch X 4 CS</b>

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## **CHASSIS**

<b>Frame</b>	separate steel with fiberglass body
<b>Front suspension</b>	unequal-length lateral A-arms, light alloy wheel carriers
<b>Rear suspension</b>	unequal-length lateral A-arms, light alloy wheel carriers
<b>Shock absorbers/springs</b>	Bilstein gas-filled/ concentric coils, adjustable for height
<b>Anti-roll bars</b>	front 23-mm rear 19-mm
<b>Brakes</b>	internally ventilated fixed- caliper; dual hydraulic circuits, booster, pressure limiter for rear wheels
<b>Disc diameter, mm/in.</b>	front 300/11.8 rear 297/11.7
<b>Disc thickness, mm/in.</b>	front 32/1.26 rear 26/1.02
<b>Effective pad area, cm<sup>2</sup>/in.<sup>2</sup></b>	front 96/14.9 per wheel rear 69/10.7 per wheel
<b>Handbrake</b>	mechanically actuated separate calipers on rear discs
<b>Steering</b>	rack & pinion; axially adjustable two-joint column
<b>Wheels</b>	cast light alloy, front 7 x 16 in. rear 8 x 16 in. flat form for low aerodynamic drag
<b>Tires</b>	Pirelli P7, front 205/55VR-16 rear 225/50VR-16

## **POWER TRANSMISSION**

<b>Clutch</b>	<b>F &amp; S hydraulically actuated 2-disc, dry</b>	
<b>Gearbox</b>	<b>ZF 5-speed manual with integrated final drive</b>	
<b>Ratios</b>	1st gear	2.42
	2nd	1.61
	3rd	1.14
	4th	0.846
	5th	0.704
	reserve	2.86
<b>Final drive ratio</b>		4.22
<b>Differential</b>	<b>limited slip, 40%</b>	

## **DIMENSIONS, mm/in.**

<b>Wheelbase</b>	2560/100.8
<b>Track, front</b>	1550/61.0
<b>rear</b>	1576/62.0
<b>Length</b>	4360/171.7
<b>Width</b>	1824/71.8
<b>Height, unloaded</b>	1140/44.9
<b>Ground clearance, load</b>	125/4.9
<b>Turning circle, m/ft</b>	13/42.7

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## **WEIGHT, kg/lb**

Curb weight, DIN	1300/2867
Max. permissible weight	1600/3528

## **PERFORMANCE**

Acceleration time, sec	0 - 100 km/h    5.6
	0 - 200 km/h    20.7
Maximum speed, km/h / mph	262/160
Fuel consumption according to ECE method A70	90 km/h -        8.9 l/100 km
	120 km/h -        10.2 l/100 km
	ECE Cycle -    19.6 l/100 km

## SPECIFICATIONS

### BMW M 635 CSi

#### Body

4-seat, 2-door coupe

All-steel monocoque body with a safety cell torsionally rigid on all planes, front and rear crumple zones with predetermined deformation, integral rollover reinforcements. Hollow-cavity preservation, underfloor protection with 6 years' warranty against rust breaking through the body

#### Engine

24-valve 6-cylinder inline engine fitted longitudinally and at an angle at the front, two-piece light-alloy cylinder head, crossflow principle, spherical combustion chamber, two overhead camshafts, crankshaft with counterweights, two-stage electric fan

Capacity, effective

3453 cc (210.6 cu in)

Bore/stroke

93.4/84 mm (3.68/3.31")

Compression ratio

10.5:1

Fuel

Premium

Max output at rpm

210 kW (286 bhp)/6500 rpm

Max torque at rpm

340 Nm (250 ft/lb)/4500 rpm

Fuel supply

Digital Motor Electronics

#### Electrical system

Alternator output

80 A/1120 W

Battery

90 Ah

#### Transmission

Gearbox ratios

I = 3.51  
II = 2.08  
III = 1.35  
IV = 1.00  
V = 0.81  
R = 3.71

Final drive ratio

3.73

Front suspension

Double-joint spring strut axle, small positive steering roller radius, displaced caster

# **BMW AG Presse**

Rear suspension	Independent suspension on semi-trailing arms swept back at an angle of 13°
Brakes front/rear	4-piston fixed-calliper vented disc brakes (dia 300 mm/11.81", thickness 30 mm/1.18")/fist-calliper disc brakes with extra-large piston, integrated hand-brake drums
<b><u>Weights and dimensions</u></b>	
Tyres/wheels	220/55 VR 390/165 TR 390, aluminium
Turning circle	11.6 m (38 ft)
Wheelbase	2625 mm (103.34")
Track front/rear	1430/1464 mm (56.30/57.64")
Length/width/height	4755/1725/1353 mm (187.20/67.91/53.27")
Weight, empty	1500 kg (3308 lb)
Power-to-weight ratio	7.1 kg/1 kW
Max load	350 kg (772 lb)
Max permissible weight	1850 kg (4079 lb)
Roof load	75 kg (165 lb)
Luggage compartment capacity, absolute/VDA standard	430/335 ltr (15.05/11.73 cu ft)
<b><u>Fuel consumption</u></b>	
at 90 km/h (56 mph)	8.2 ltr (34.4 mpg)
at 120 km/h (75 mph)	10.2 ltr (27.7 mpg)
city cycle	16.5 ltr (17.1 mpg)
<b><u>Acceleration</u></b>	
0 - 100 km/h (62 mph)	6.4 sec
80-120 km/h (50-75 mph) (5th gear)	10.7 sec
Top speed	255 km/h (158 mph)

# BMW AG Presse

	<b>COMPARISON OF TECHNICAL DATA BMW M3 ROAD-GOING AND GROUP A VERSION</b>	<b>M3</b>	<b>M3 Group A</b>
<b>Body Dimensions and weights</b>	No of doors	2	2
	No of seats	4	1
	Length/Width/Height (empty)	mm 4345/1680/1370	mm 4355/1880/1330
	Wheelbase	mm 2565*	mm 2565.5
	Track, front	mm 1412*	mm 1412
	rear	mm 1424	mm 1424
	Turning circle	m 11.1	—
	Fuel tank capacity/range	I/km 70/840	m 110
	Unladen weight	kg 1200	kg 960 min.
	Max. load	kg 400	—
<b>Engine</b>	Max. permissible weight	kg 1600	—
	Max. trailer load	kg —	—
	braked max. gradient 12%	kg —	—
	unbraked	kg 75	—
	Max. roof load	kg —	—
	Max. trailer nose weight	kg —	—
	Luggage capacity/VDA test	I 480/420 <sup>1)</sup>	—
<b>EI.</b>	Layout	Inline	Inline
	No. of cylinders	4	4
	Mixture preparation	ML Motronic 4 valves	Motronic 4 valves
	Displacement, effective	cm <sup>3</sup> 2302	2332
	Bore/stroke	mm 93.4/84	mm 94/84
	Compression/fuel grade	10.5/S	12.0/S
<b>Chassis/power transmission</b>	Max. output – at engine speed	kW/PS 147/200	approx. 220/300
	Max. torque – at engine speed	min <sup>-1</sup> 6750	Nm 240
		min <sup>-1</sup> 4750	8000
			270
<b>EI.</b>	Battery Alternator	Ah 66 <sup>1)</sup> A/W 90/1260	26 65/910
<b>Chassis/power transmission</b>	Front suspension	Single-joint spring strut axle with displaced camber; compensation of transverse forces; anti-squat reduction; small, positive steering roll radius	Single-joint spring strut axle; spring struts made of aluminium with adjustable spring plates for vehicle height adjustment; wheel mounting with central lock nut; adjustable anti-roll bar
	Rear suspension	Independent suspension at semi-trailing arms (sweep angle degrees); separate springs and dampers; anti-dive; sporty chassis	Independent suspension at reinforced semi-trailing arms with joint bearings and camber and toe-in adjustment; adjustable spring struts for vehicle height adjustment; wheel mounting with central lock nut
	Brakes from rear	Single-piston swing-calliper disc brakes, vented, ABS	4-piston alloy swing calliper, inner-vented brake disc, 32 mm thick, 332 mm diameter
		Single-piston swing-calliper disc brakes with integrated drum hand brake, ABS	4-piston alloy swing calliper, inner-vented brake disc, 20.7 mm thick, 280 mm diameter
			2 main brake cylinders with balance bars, brake force distribution adjustable during motion, adjustable hand brake
	Steering	Rack-and-pinion/Servo 19.6:1	Rack-and-pinion 17:1
	Final drive ratio	3.25:1	from 3.25:1 to
	Gear ratios	I 3.72:1 II 2.40:1 III 1.77:1 IV 1.26:1 V 1.00:1 R 4.23:1	5.28:1 2.337:1 1.681:1 1.358:1 1.150:1 1.000:1
	Tyres Wheel	205/55 VR 15 7 J x	235/590-16 or 245/610-17 9x16 or 9x17/LM three-part
<b>Performance characteristics</b>	Power-weight ratio	kg/kW 8.2	4.4
	Torque-weight ratio	kg/Nm 5.0	3.5
	Output per litre	kW/l 63.9	94.2
	Torque per litre	Nm/l 104.3	117.8
	Acceleration 0-100 km/h	s 6.7	4.6 with rear axle ratio 4.44:1
	0-1000 m	s 27.	—
	in 4th gear 80-120 km/h	s 2	—
	Top speed	km/h 7.1 235	281 with rear axle ratio 3.25:1

1) Battery in the boot  
from 1.4.1987

# BMW AG Presse

	SPECIFICATIONS: BMW AUTOMOBILE MODEL RANGE	528 i	535 i	M 535 i	M 5
Body Dimensions and weights	No of doors	4	4	4	4
	No of seats	5	5	5	5
	Length/width/height (unladen)	mm 4620/1700/1415	mm 4620/1710/1397	mm 4604/1710/1397	mm 4620/1700/1397
	Wheelbase	mm 2625	mm 2628	mm 2628	mm 2625
	Track, front	mm 1430	mm 1430	mm 1430	mm 1430
	rear	mm 1460	mm 1460	mm 1460	mm 1465
	Turning circle	m 10.5	m 11.05	m 11.05	m 11.3
	Fuel tank capacity/range <sup>1)</sup>	l/km 70/690	l/km 70/670	l/km 70/670	l/km 70/620
	Unladen weight <sup>2)</sup>	kg 1340 (1360)	kg 1370 (1390)	kg 1390 (1410)	kg 1430 (-)
	Max load	kg 510 (510)	kg 510 (510)	kg 510 (510)	kg 470 (-)
Engine	Max permissible weight	kg 1850 (1870)	kg 1880 (1900)	kg 1900 (1920)	kg 1900 (-)
	Max trailer load <sup>2)</sup>	kg 1500	kg 1500	kg 1500	Towing trailer not permitted
	- braked, max gradient 12%	kg 500	kg 500	kg 500	75
	- unbraked	kg 75	kg 75	kg 75	-
	Max roof load	kg 50	kg 50	kg 50	450
	Max trailer nose weight	kg 460	kg 460	kg 460	
	Luggage capacity, VDA test				
E.I.	Layout	Inline 6	Inline 6	Inline 6	Inline 6
	No of cylinders	L-Jetronic	Motronic	Motronic	Motronic 4 valves per cyl.
	Displacement, effective	cc 2788	cc 3430	cc 3430	cc 3453
	Bore/stroke	mm 86/80	mm 92/86	mm 92/86	mm 93,4/84
	Compression ratio/fuel grade	:1 9.3/regular, unleaded	:1 10.0/regular, unleaded	:1 10.0/regular, unleaded	:1 10.5/regular, unleaded
	Max output	kW/bhp 135/184	kW/bhp 160/218	kW/bhp 160/218	kW/bhp 210/286
	- at engine speed	rpm 5800	rpm 5500	rpm 5500	rpm 6500
	Max torque	Nm 240	Nm 310	Nm 310	Nm 340
	- at engine speed	rpm 4200	rpm 4000	rpm 4000	rpm 4500
	Battery	Ah 55	Ah 66	Ah 66	Ah 90 <sup>4)</sup>
Chassis/power transmission	Alternator	A/W 80/1120	A/W 80/1120	A/W 80/1120	A/W 90/1260
	Front suspension	Double-pivot spring struts with castor angle offset, small positive steering scrub radius, lateral force compensation, brake dive reduction			
	Rear suspension	Independent, with semi-trailing arms (13° trail angle), additional wheel locating link			
	Brakes, front			Single-tube gas-filled shock absorbers	Firm suspension settings with single-tube gas-filled shock absorbers
	rear				
	Steering	Single-piston floating calipers with integrated handbrake drums; antilock braking system (ABS)			
	Final drive ratio	16.2:1	15.2:1	15.1:1	15.1:1
	Gear ratios I	:1 3.46 <sup>3)</sup> (3.46)	:1 3.07 (3.07)	:1 3.07 (3.07)	:1 -/3.73 (-)
	II	:1 3.83 (2.48)	:1 3.83 (2.48)	:1 3.83 (2.48)	:1 -/3.51 (-)
	III	:1 2.20 (1.48)	:1 2.20 (1.48)	:1 2.20 (1.48)	:1 -/2.08 (-)
Performance	IV	:1 1.40 (1.00)	:1 1.40 (1.00)	:1 1.40 (1.00)	:1 -/1.35 (-)
	V	:1 1.00 (0.73)	:1 1.00 (0.73)	:1 1.00 (0.73)	:1 -/1.00 (-)
	Reverse	:1 0.81 (-)	:1 0.81 (-)	:1 0.81 (-)	:1 -/0.81 (-)
	Tyres	200/60 VR 390	220/55 VR 390	220/55 VR 390	220/55 VR 390
	Wheels	165 TR 390/ light-alloy	165 TR 390/ light-alloy	165 TR 390/ light-alloy	165 TR 390/ light-alloy
Fuel consumption	Power-weight ratio	kg/kW 9.9 (10.1)	kg/kW 8.6 (8.7)	kg/kW 8.7 (8.8)	kg/kW 6.8
	Torque-weight ratio	kg/Nm 5.6 (5.7)	kg/Nm 4.4 (4.5)	kg/Nm 4.5 (4.5)	kg/Nm 4.2
	Output per litre	kW 48.4	kW 46.6	kW 46.6	kW 60.8
	Torque per litre	Nm 86.1	Nm 90.4	Nm 90.4	Nm 98.4
	Acceleration, 0-100 km/h	s 8.4 (10.8)	s 7.2 (8.9)	s 7.2 (8.9)	s 6.5 (-)
	0-1000 m	s 29.4 (31.6)	s 28.0 (29.6)	s 28.0 (29.6)	s 26.8 (-)
	80-120 km/h in direct gear	s 10.9	s 9.8	s 9.8	s 7.7
	Top speed	km/h 215 (208)	km/h 225 (219)	km/h 230 (223)	km/h 245 (-)
	5-speed/5-speed sports gearbox				
	- at steady 90 km/h	7.0/7.9	7.3/8.3	7.3/8.3	-/7.8
	- at steady 120 km/h	9.0/9.6	9.3/10.2	9.0/9.9	-/9.7
	- urban cycle	14.7/15.5	15.0/16.0	15.0/16.0	-/16.5
	- average	10.2/11.0	10.5/11.5	10.4/11.4	-/11.3
	4-speed automatic transmission without/with EH control				
	- at steady 90 km/h	6.9/-	-/7.1	-/7.1	-/-
	- at steady 120 km/h	9.0/-	-/9.1	-/8.8	-/-
	- urban cycle	14.9/-	-/15.9	-/15.9	-/-
	- average	10.3/-	-/10.7	-/10.6	-/-

( ) Figures in brackets: with automatic transmission

1) With standard gearbox, related to average ECE test consumption

2) An increase is possible if certain conditions are satisfied

3) With sports gearbox option, 3.25:1

4) Battery in luggage compartment

# BMW AG Presse

	SPECIFICATIONS BMW CAR RANGE	M5 CAT*			
Body Dimensions and weights	No. of doors	4			
	No. of seats	4			
	Length/width/height (unladen)	mm	4720/1751/1392		
	Wheelbase	mm	2761		
	Track, front	mm	1472		
	rear	mm	1495		
	Turning circle	m	11.0		
	Fuel tank capacity/range <sup>1)</sup>	ltr/km	90/750		
	Unladen weight	kg	1670		
	Max load	kg	430		
Engine	Max permissible weight	kg	2100		
	Max trailer load <sup>2)</sup>	kg	1400		
	– braked, max gradient 12%	kg	700		
	– unbraked	kg	100		
	Max roof load	kg	75		
	Max trailer nose weight <sup>1)</sup>	kg	460		
	Luggage capacity, VDA test	ltr			
	Drag coefficient/front area	Cd × A	0.32 × 2.07		
E1.	Layout	Inline			
	No of cylinders	6			
	Mixture preparation	Motronic: 4 valves			
	Displacement, effective	cc	3535		
	Bore/stroke	mm	93.4/86		
	Compression ratio/fuel grade	:1	10.0/premium unleaded		
	Max output – at engine speed	kW/bhp	232/315		
Chassis/power transmission	Max torque – at engine speed	rpm	6900		
		Nm	360		
		rpm	4750		
	Battery	Ah	85		
	Alternator	A/W	115/1610		
Chassis/power transmission	Front suspension	Double-pivot spring struts with castor angle offset, positive steering scrub radius, lateral force compensation, brake dive reduction			
	Rear suspension	Independent with precision semi-trailing arms (13° trail angle), auxiliary trailing arms, squat and brake dive reduction			
	Brakes, front	Single-piston fist-callipers			
	rear	Single-piston fist-callipers with integrated handbrake drums			
	Steering	Ball and nut, with hydraulic power assistance dependent on engine speed 13.5 : 1			
	Final drive ratio		3.91		
	Gear ratios I	:1	3.51		
Performance	II	:1	2.08		
	III	:1	1.35		
	IV	:1	1.00		
	V	:1	0.81		
	Reverse	:1	3.71		
Fuel consumption	Tyres	235/45 ZR 17			
	Wheels	8 J × 17 Alu			
	Power-weight ratio	kg/kW	7.2		
	Torque-weight ratio	kg/Nm	4.6		
	Output per litre	kW/ltr	65.6		
	Torque per litre	Nm/ltr	101.8		
	Acceleration, 0–100 km/h	sec	6.3		
Fuel consumption	0–1000 m	sec	26.0		
	80–120 km/h in direct gear	sec	7.6		
	Top speed	km/h	250 <sup>3)</sup>		
	5-speed/5-speed sports gearbox – at steady 90 km/h	ltr/100 km	8.2/–		
	– at steady 120 km/h		9.4/–		
Fuel consumption	– urban cycle		18.1/–		
	– average		11.9/–		
	4-speed automatic transmission without/with EH control – at steady 90 km/h	ltr/100 km	–/–		
	– at steady 120 km/h		–/–		
	– urban cycle		–/–		
	– average		–/–		

1) With standard gearbox, related to average ECE consumption

2) May be increased under certain conditions

3) Governed

\* Also with preparation for catalytic converter installation as an option

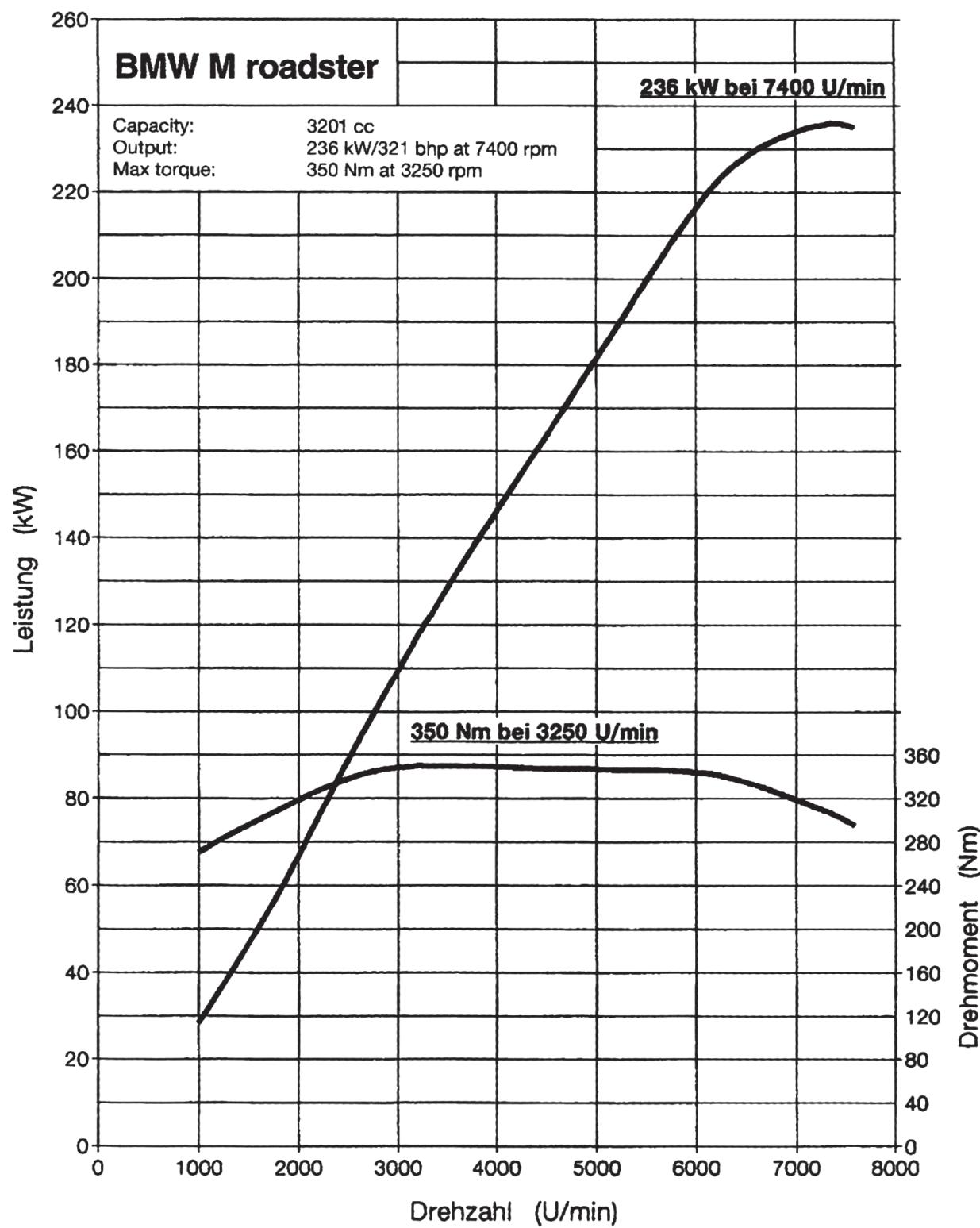
# BMW AG Presse

		COUPÉ			
	SPECIFICATIONS: BMW CAR RANGE	318is	320i	325i	M3
Body  Dimensions and weights	No of doors	2	2	2	2
	No of seats	5	5	5	5
	Length/width/height (unladen)	mm 4433/1710/1366	mm 4433/1710/1366	mm 4433/1710/1366	mm 4433/1710/1365
	Wheelbase	mm 2700	mm 2700	mm 2700	mm 2700
	Track, front	mm 1408	mm 1408	mm 1408	mm 1422
	rear	mm 1421	mm 1421	mm 1421	mm 1444
	Turning circle	m 10.4	m 10.4	m 10.4	m 10.7
	Fuel tank capacity/range <sup>1)</sup>	l/km 65/785 (765)	l/km 65/740 (755)	l/km 65/740 (755)	l/km 65/710
	Unladen weight	kg 1240 (1280)	kg 1315 (1350)	kg 1330 (1365)	kg 1460
	Max load	kg 460 (460)	kg 460	kg 460	kg 470
	Max permissible weight	kg 1700 (1740)	kg 1775 (1810)	kg 1790 (1825)	kg 1930
Engine	Max trailer load <sup>2)</sup>	kg – braked, max gradient 12% kg – unbraked	kg 1300 kg 600	kg 1400 kg 600	kg 1400 kg –
	Max roof load	kg 75	kg 75	kg 75	kg 75
	Max trailer nose weight	kg 50/75*	kg 50/75*	kg 50/75*	kg –
	Luggage capacity, VDA test	l 405	l 405	l 405	l 405
	Drag coefficient/front area	Cd x A 0.31 x 1.91	Cd x A 0.31 x 1.91	Cd x A 0.31 x 1.91	Cd x A 0.32 x 1.88
	Layout	Inline 4/4	Inline 6/4	Inline 6/4	Inline 6/4
El.	No of cylinders/valves	Digital Motor Electronics	Digital Motor Electronics	Digital Motor Electronics	Digital Motor Electronics
	Displacement, effective	cc 1796	cc 1991	cc 2494	cc 2990
	Bore/stroke	mm 84/81	mm 80/66	mm 84/75	mm 86/85.8
	Compression ratio/fuel grade	:1 10.0/prem. unleaded	:1 11.0/prem. unleaded	:1 10.5/prem. unleaded	:1 10.8/98 ROZ
	Max output	kW/bhp 103/140	kW/bhp 110/150	kW/bhp 141/192	kW/bhp 210/286
	– at engine speed	rpm 6000	rpm 5900	rpm 5900	rpm 7000
Chassis/power transmission	Max torque	Nm 175	Nm 190	Nm 245	Nm 320
	– at engine speed	rpm 4500	rpm 4200	rpm 4200	rpm 3600
	Battery/location	Ah 50/engine comp	Ah 65/luggage comp	Ah 65/luggage comp	Ah 65/luggage comp
	Alternator	A/W 70/980 (80/1120)	A/W 80/1120	A/W 80/1120	A/W 90/1260
	Front suspension	Single-joint spring strut axle with displaced camber; small, positive steering roll radius; compensation of transverse forces; anti-dive			
	Rear suspension	Central-arm axle with longitudinal control arm and double track control arm; anti-squat and anti-dive			
Performance	Brakes, front	Single-piston swing-caliper disc brakes, vented, ABS			
	rear	Single-piston swing-caliper disc brakes, (M3: vented) ABS			
	Steering/overall ratio	Rack-and-pinion, 16.8 : 1, (M3: variable) power-assisted			
	Final drive ratio	3.45 (4.45)	3.45 (3.45)	3.15 (3.15)	3.15
	Gear ratios I	:1 4.23 (2.40)	:1 4.23 (3.67)	:1 4.23 (3.67)	:1 4.20
	II	:1 2.52 (1.47)	:1 2.52 (2.00)	:1 2.52 (2.00)	:1 2.49
Fuel consumption	III	:1 1.67 (1.00)	:1 1.67 (1.41)	:1 1.67 (1.41)	:1 1.66
	IV	:1 1.22 (0.72)	:1 1.22 (1.00)	:1 1.22 (1.00)	:1 1.24
	V	:1 1.00 (–)	:1 1.00 (0.74)	:1 1.00 (0.74)	:1 1.00
	Reverse	:1 4.04 (2.00)	:1 4.04 (4.08)	:1 4.04 (4.08)	:1 3.89
	Tyres	205/60 R 15 91 V	205/60 R 15 91 V	205/60 VR 15	235/40 ZR 17
	Wheels	7 J x 15/alu	7 J x 15/alu	7 J x 15/alu	7½ J x 15/alu
Performance	Power-weight ratio	kg/kW 12.0 (11.9)	kg/kW 12.0 (12.3)	kg/kW 9.4 (9.7)	kg/kW 7.0
	Torque-weight ratio	kg/Nm 7.1 (7.0)	kg/Nm 6.9 (7.1)	kg/Nm 5.4 (5.6)	kg/Nm 6.4
	Output per litre	kW/l 57.3 (57.3)	kW/l 55.2	kW/l 56.5	kW/l 71.0
	Torque per litre	Nm/l 97.4 (97.4)	Nm/l 95.4	Nm/l 98.2	Nm/l 107.0
	Acceleration, 0-100 km/h	sec 10.2 (11.6)	sec 10.0 (10.9)	sec 8.0 (8.8)	sec 6.0
	0-1000 m	sec 31.1 (32.7)	sec 30.9 (32.1)	sec 28.4 (29.65)	sec 25.6
Fuel consumption	80-120 km/h 4 <sup>th</sup> gear	sec 10.7 (–)	sec 10.2 (–)	sec 9.0 (8.4)	sec 6.4
	Top speed	km/h 213 (207)	km/h 214 (214)	km/h 233 (231)	km/h 250 <sup>4)</sup>
	5-speed gearbox				
	– at constant 90 km/h	Itr/100 km 6.4 (6.4)	Itr/100 km 6.8 (6.1)	Itr/100 km 6.6 (6.0)	Itr/100 km 6.5
	– at constant 120 km/h	Itr/100 km 7.7 (7.9)	Itr/100 km 8.3 (7.7)	Itr/100 km 8.0 (7.4)	Itr/100 km 7.9
	– urban cycle	Itr/100 km 10.9 (11.3)	Itr/100 km 11.4 (12.1)	Itr/100 km 11.9 (12.3)	Itr/100 km 13.0
( ) Figures in brackets: with automatic transmission • 75kg (165 lb) in conjunction with special rear axle springs for towing a trailer		1) With standard gearbox, related to average ECE test consumption 2) May be increased under certain conditions 4) Cut off electronically (Not all footnotes are used on each data sheet)			

# BMW AG Presse

	SPECIFICATIONS: BMW CAR RANGE		M3 Saloon		M3 Coupé		M3 Convertible		
Body Dimensions and weights	No of doors		4		2		2		
	No of seats		5		5		4		
	Length/width/height (unladen)		mm 4433/1710/1365		mm 4433/1710/1335		mm 4433/1710/1340		
	Wheelbase		mm 2710		mm 2710		mm 2710		
	Track, front		mm 1422		mm 1422		mm 1422		
	rear		mm 1438		mm 1438		mm 1438		
	Turning circle		m 11.6		m 11.6		m 11.6		
	Fuel tank capacity/range 1)		litr/km 65/740		litr/km 65/740		litr/km 65/730		
	Unladen weight (DIN)		kg 1460		kg 1440		kg 1560		
	Unladen weight (EC) °		kg 1535		kg 1515		kg 1635		
	Max load		kg 490		kg 490		kg 420		
Engine	Max permissible weight		kg 1950		kg 1930		kg 1980		
	Max permissible axle load front/rear		kg 910/1120		kg 910/1120		kg 910/1130		
	Max trailer load 2)		kg –		kg –		kg –		
	– braked, max gradient 12%		kg –		kg –		kg –		
	– unbraked		kg –		kg –		kg –		
	Max roof load		kg 75		kg 75		kg 40		
	Max trailer nose weight		kg –		kg –		kg –		
	Luggage capacity, VDA test		litr 435		litr 405		litr 230		
	Drag coefficient/front area		Cd x A 0.32 x 1.96		Cd x A 0.32 x 1.91		Cd x A 0.32 x 1.91		
El.	Layout		Inline						
	No of cylinders/valves		6/4						
	Mixture preparation		Digital						
	Motor Electronics MSS50								
	Displacement, effective		cc 3201						
Engine	Bore/stroke		mm 86.4/91						
	Compression ratio/fuel grade		:1 11.3/ROM						
	Max output		kW/bhp 236/321						
	– at engine speed		rpm 7400						
	Max torque		Nm 350						
E1.	– at engine speed		Npm 3250						
	Battery/location		Ah 65/luggage comp		Ah 65/luggage comp		Ah 65/luggage comp		
	Alternator		A/W 90/1260		A/W 90/1260		A/W 90/1260		
	Front suspension		Single-joint spring strut axle with displaced camber; small, positive steering roll radius; compensation of transverse forces; anti-dive						
	Rear suspension		Central-arm axle with longitudinal control arm and double track control arm; anti-squat and anti-dive						
Chassis/power transmission	Brakes, front		Single-piston swing-caliper disc brakes, vented, ABS						
	vented, ABS								
	rear		Single-piston swing-caliper disc brakes, vented, ABS						
	Steering/overall ratio		Rack-and-pinion, 17.8 power-assisted						
Performance	Final drive ratio		:1 3.23						
	Gear ratios		:1 4.23						
	I		:1 2.51						
	II		:1 1.67						
	III		:1 1.23						
Fuel consumption	IV		:1 1.00						
	V		:1 0.83						
	VI		:1 3.75						
	Reverse								
	Tyres		VA: 225/45 ZR 17 on 7½ J x 17						
Performance	Wheels		HA: 245/40 ZR 17 on 8½ J x 17						
	Power-weight ratio		kg/kW 6.2		kg/kW 6.1		kg/kW 6.6		
	Torque-weight ratio		kg/Nm 4.2		kg/Nm 4.1		kg/Nm 4.5		
	Output per litre		kW/ltr 73.7		kW/ltr 73.7		kW/ltr 73.7		
	Torque per litre		Nm/ltr 109.3		Nm/ltr 109.3		Nm/ltr 109.3		
Fuel consumption	Acceleration, 0-100 km/h		sec 5.5		sec 5.5		sec 5.6		
	0-1000 m		sec 24.7		sec 24.7		sec 25.0		
	80-120 km/h 4 <sup>th</sup> gear		sec 5.7		sec 5.7		sec 6.1		
	Top speed		km/h 250 <sup>a</sup>		km/h 250 <sup>a</sup>		km/h 250 <sup>a</sup>		
<p>( ) Figures in brackets: with automatic transmission      ° Weight, unladen, including 75 kg for driver</p>									
<p>1) With standard gearbox, related to average ECE test consumption      2) May be increased under certain conditions      3) Permissible roof load with hardtop: 30 kg      4) Cut off electronically      (Not all footnotes are used on each data sheet)      (The copy and specifications apply to vehicles for the German market.      Deviations from the model variants described here are possible in various countries.)</p>									

**BMW M roadster 6-cylinder four-valve engine (1997 model year)**  
Output and torque diagram



	Z3 roadster				
	Specifications: BMW car range	Z3 1.8	Z3 1.9	Z3 2.8	M roadster
<b>Body, dimensions and weights</b>	No of doors/seats	2/2	2/2	2/2	2/2
	Length/width/height (unladen)	mm 4025/1692/1288	4025/1692/1288	4025/1740/1293	4025/1740/1266
	Wheelbase	mm 2446	2446	2446	2459
	Track, front/rear	mm 1411/1427	1411/1427	1413/1494	1422/1492
	Turning circle	m 10.0	10.0	10.0	10.4
	Fuel tank capacity	ltr 51	51	51	51
	Cooling system incl heater	ltr 6.4	6.6	10.5	10.75
	Engine oil	ltr 4.0	5.0	6.5	5.5
	Transmission fluid	ltr 1.1	1.0 *	1.2 *	1.2
	Final drive fluid	ltr 1.1	1.0	1.7	1.4
	Weight, unladen (DIN)	kg 1160	1185 (1225)	1260 (1300)	1350
	Weight, unladen (EC) *	kg 1235	1260 (1300)	1335 (1375)	1425
	Max load	kg 250	250	250	250
	Vehicle gross weight	kg 1410	1435 (1475)	1510 (1550)	1600
	Max permissible axle load, front/rear	kg 730/775	750/780	790/830	850/870
	Max trailer load <sup>1)</sup>	kg 1200/600	1200/600	1200/600	
	braked 12%, unbraked	kg 35/75	35/75	35/75	35/0
<b>E.</b>	Max roof load, trailer nose weight	kg 165	165	165	165
	Luggage comp. capacity, VDA test	ltr 165	165	165	165
<b>Engine</b>	Drag coefficient/front area	Cd x A 0.40 x 1.77	0.41 x 1.77	0.42 x 1.83	0.41 x 1.84
	Layout/ No of cylinders/valves	Inline / 4 / 2	Inline / 4 / 4	Inline / 6 / 4	Inline / 6 / 4
	Engine management	BMS 43	M 5.2	Siemens MS41.0	MS S50
	Displacement, effective	cc 1796	1895	2793	3201
	Bore/stroke	mm 84.0/81.0	85.0/83.5	84.0/84.0	86.4/91.0
	Compression ratio/fuel grade	:1 9.7/RON 91-98 <sup>2)</sup>	10.0/RON 91-98 <sup>2)</sup>	10.2/RON 91-98 <sup>2)</sup>	11.3/RON 98
	Max output at	kW/bhp 85/115	103/140	141/192	236/321
	Max torque at	rpm 5500	6000	5300	7400
	Max torque at	Nm 168	180	275	350
		rpm 3900	4300	3950	3250
<b>E.</b>	Battery/location	Ah/-	70/luggage comp.	70/luggage comp.	70/luggage comp.
	Alternator	A/W 80/1120	80/1120	80/1120	115/1610
<b>Chassis/power transmission</b>	Front suspension		Single-joint spring strut axle with displaced camber; small, positive steering roll radius; compensation of transverse forces; anti-dive		
	Rear suspension		Independent suspension on semi-trailing arms (swept back by 15°); separate springs and dampers; anti-squat, and anti-dive		
	Brakes, front		Single-piston floating-calliper disc brakes		
	Diameter	mm 286	286	286, vented	315, vented
	Brakes, rear		Single-piston floating-calliper disc brakes		
	Diameter	mm 272			312, vented
	Driving stability system		ABS		
	Steering/overall ratio		Rack-and-pinion, power-assisted, 15.4:1		17.8:1
	Transmission ratio I	:1 4.23	4.23 (2.86)	4.20 (2.86)	4.2
	II	:1 2.52	2.52 (1.62)	2.49 (1.62)	2.49
	III	:1 1.66	1.66 (1.00)	1.66 (1.00)	1.66
	IV	:1 1.22	1.22 (0.72)	1.24 (0.72)	1.24
	V	:1 1.00	1.00 (-)	1.00 (-)	1.00
	VI	:1 -	-	-	-
	R	:1 4.04	4.04 (2.00)	3.89 (2.00)	3.89
<b>Performance</b>	Rear axle ratio	3.45	3.45 (4.44)	3.15 (4.10)	3.15
	Tyres	205/60 R 15 91H	205/60 R 15 91 V	225/50 ZR 16	VA 225/45 ZR 17
	Wheels	6.5 J x 15 steel	7 J x 15 alu	7 J x 16 alu	7.5 J x 17 alu HA 245/40 ZR 17 9 J x 17 alu
<b>Fuel con- sumption</b>	Power-weight ratio	kg/kW 13.6	11.5 (11.9)	8.8 (9.1)	5.7
	Output per litre	kW/ltr 47.3	54.4	50.5	73.7
	Acceleration 0-100 km/h	sec 10.5	9.5 (10.5)	7.1 (7.4)	5.4
	0-1000 m	sec 31.8	30.6 (31.9)	27.5 (28.3)	24.4
	in 4 <sup>th</sup> gear 80-120 km/h	sec 9.7	9.6 (-)	6.5 (-)	5.3
	Top speed	km/h 194	205 (196)	218 (216)	250
	EC cycle (ltr/100 km)				
	EC, in town	10.9	11.4 (12.7)	13.9 (14.9)	16.6
	EC, out of town	5.9	6.0 (6.5)	7.3 (8.1)	7.9
	EC, overall	7.8	8.0 (8.7)	9.7 (10.6)	11.1
	CO <sub>2</sub> , g/cm	184	189 (207)	231 (252)	268

(\*) Figures apply to car with automatic transmission

\* Weight, unladen, including 75 kg for driver

\* Level held constant

1) May be increased under certain conditions

2) Performance and economy figures are based on ROM 95

These specifications are for the German market. Deviations from the model variants described here are possible in various countries.

**BMW M5 V8 5,0 l**

Leistungs- und Drehmomentdiagramm

A 99/169



			SALOON		
	<b>Specifications: BMW car range</b>	<b>M5</b>			
<b>Body, dimensions and weights</b>	No of doors/seats	4/5			
	Length/width/height (unladen)	mm 4784/1800/1432			
	Wheelbase	mm 2830			
	Track, front/rear	mm 1515/1527			
	Turning circle	m 11.6			
	Fuel tank capacity	litr 70			
	Cooling system incl heater	litr 11.45			
	Engine oil	litr 7.5			
	Transmission fluid	litr 1.8			
	Final drive fluid	litr 1.2			
	Weight, unladen (DIN)	kg 1720			
	Weight, unladen (EU) °	kg 1795			
	Max load	kg 570			
	Max permissible weight	kg 2290			
	Max permissible axle load, front/rear	kg 1105/1225			
	Max trailer load braked 12%, unbraked	kg 1800/750			
	Max roof load, trailer nose weight	kg 100/90			
	Luggage comp. capacity, VDA test	litr 460			
	Drag coefficient/front area	Cd x A 0.31 x 2.17			
<b>Engine</b>	Layout/ No of cylinders/valves	V / 8 / 4			
	Engine management	MSS 52			
	Displacement, effective	cc 4941			
	Bore/stroke	mm 94.0/89.0			
	Compression ratio/fuel grade	:1 11.0/ROM 98			
	Max output at engine speed	kW/bhp 294/400			
	Max torque at engine speed	rpm 6600			
<b>EI.</b>	Battery/location	Ah/- 110/luggage comp.			
	Alternator	A/W 120/1680			
<b>Chassis/power transmission</b>	Front suspension	Tie-bar double-joint spring-strut axle, small, positive steering scrub; compensation of transverse forces; anti-dive			
	Rear suspension	Aluminium integral axle; multi-dimensional suspension with anti-squat and anti-dive			
	Brakes, front	Single-piston swing-caliper disc brakes			
	Diameter	mm 345, vented			
	Brakes, rear	Single-piston swing-caliper disc brakes			
	Diameter	mm 328, vented			
	Driving stability system	ABS, DSC			
	Steering, overall ratio	Hydraulic rack-and-pinion, 14.7:1			
	Type of transmission	6-sp man gearbox			
	Transmission ratio I	:1 4.227			
	II	:1 2.528			
	III	:1 1.669			
	IV	:1 1.226			
	V	:1 1.000			
	VI	:1 0.828			
	R	:1 3.746			
<b>Performance</b>	Final drive ratio	3.150			
	Tyres	front 245/40 ZR 18 rear 275/35 ZR 18			
	Wheels	front 8 J x 18 la rear 9.5 J x 18 la			
<b>Fuel consumption</b>	Power-weight ratio	kg/kW 5.848			
	Output per litre	kW/ltr 59.5			
	Acceleration 0-100 km/h	sec 5.3			
	0-1000 m	sec 24.1			
	in 4 <sup>th</sup> gear 80-120 km/h	sec 4.8			
	Top speed	km/h 250			
	EU cycle	(litr/100 km)	21.1		
	EU, urban		9.8		
	EU, extra-urban		13.9		
	EU, composite		336		
	CO <sub>2</sub> g/cm				

° Weight, unladen, including 75 kg for driver

These specifications are for the German market. Deviations from the model variants described here are possible in various countries.

	Z3 coupé (1999 model year)			
	Specifications: BMW car range	Z3 2.8	M coupé	
<b>Body, dimensions and weights</b>	No of doors/seats	2/2	2/2	
	Length/width/height (unladen)	mm 4025/1740/1306	4025/1740/1280	
	Wheelbase	mm 2446	2459	
	Track, front/rear	mm 1413/1494	1422/1492	
	Turning circle	m 10.0	10.4	
	Fuel tank capacity	litr 51	51	
	Cooling system incl heater	litr 10.5	10.75	
	Engine oil	litr 6.5	5.5	
	Transmission fluid	litr level held const.	level held const.	
	Final drive fluid	litr 1.1	1.1	
	Weight, unladen (DIN)	kg 1300 (1340)	1390	
	Weight, unladen (EU) °	kg 1375 (1415)	1465	
	Max load	kg 270	270	
	Max permissible weight	kg 1570 (1610)	1660	
	Max permissible axle load, front/rear	kg 830/870	850/890	
	Max trailer load <sup>1)</sup> braked 12%, unbraked	kg 1200/600	-	
	Max roof load, trailer nose weight	kg 75/75	75/0	
<b>Engine</b>	Luggage comp. capacity, VDA test	litr 210-410	210-410	
	Drag coefficient/front area	Cd x A 0.37 x 1.83	0.37 x 1.84	
<b>EI.</b>	Layout/ No of cylinders/valves	Inline / 6 / 4	Inline / 6 / 4	
	Engine management	Siemens MS41.0	MS S50	
	Displacement, effective	cc 2793	3201	
	Bore/stroke	mm 84.0/84.0	86.4/91.0	
	Compression ratio/fuel grade	:1 10.2/RON 91-98 <sup>2)</sup>	11.3/RON 98	
	Max output	kW/bhp 141/193	236/321	
	at	rpm 5500	7400	
	Max torque	Nm 280	350	
	at	rpm 3500	3250	
<b>Chassis/power transmission</b>	Battery/location	Ah/-	70/luggage comp.	
	Alternator	A/W 80/1120	115/1610	
	Front suspension		Single-joint spring-strut axle with displaced camber; small, positive steering roll radius; compensation of transverse forces; anti-dive	
	Rear suspension		Independent suspension on semi-trailing arms (swept back by 15°); separate springs and dampers; anti-squat, and anti-dive	
	Brakes, front		Single-piston floating-calliper disc brakes	
	Diameter	mm 286, vented	315, vented	
	Brakes, rear		Single-piston floating-calliper disc brakes	
	Diameter	mm 272	312, vented	
	Driving stability system	ABS, ASC+T	ABS	
	Steering, overall ratio		Rack-and-pinion, power-assisted	
		15.4:1	17.8:1	
	Transmission ratio I	:1 4.21 (2.86)	4.21	
	II	:1 2.49 (1.62)	2.49	
	III	:1 1.66 (1.00)	1.66	
	IV	:1 1.24 (0.72)	1.24	
	V	:1 1.00 (-)	1.00	
	VI	:1 -	-	
	R	:1 3.89 (2.00) 3.15 (4.10)	3.85 3.15	
	Rear axle ratio	225/50 ZR 16	VA 225/45 ZR 17	
	Tyres	7 J x 16 alu	7.5 J x 17 alu	
	Wheels		HA 245/40 ZR 17 9 J x 17 alu	
<b>Performance</b>	Power-weight ratio	kg/kW 9.2 (9.4)	5.8	
	Output per litre	kW/litr 50.8	73.7	
	Acceleration 0-100 km/h	sec 6.8 (7.1)	5.4	
	0-1000 m	sec 27.3 (28.1)	24.4	
	in 4 <sup>th</sup> gear 80-120 km/h	sec 6.3 (-)	5.3	
	Top speed	km/h 231 (229)	250	
<b>Fuel consumption</b>	EU cycle	(litr/100 km)		
	EU, in town	12.9 (14.4)	16.6	
	EU, out of town	7.4 (8.1)	7.9	
	EU, overall	9.4 (10.4)	11.1	
	CO <sub>2</sub> g/cm	225 (249)	268	

( ) Figures apply to car with automatic transmission

° Weight, unladen, including 75 kg for driver

1) May be increased under certain conditions

2) Performance and economy figures are based on ROM 95

These specifications are for the German market. Deviations from the model variants described here are possible in various countries.

# Specifications BMW 3 Series coupé. M3.

<b>Body</b>		<b>M3</b>
No. of doors/seats		2/5
Length/width/height (unladen)	mm	4492/1780/1372
Wheelbase	mm	2731
Track, front/rear	mm	1508/1525
Turning circle	m	11.0
Fuel tank capacity/range	ca. ltr	63
Cooling system incl. heating	ltr	10.7
Engine oil	ltr	7
Transmission fluid	ltr	1.9
Final drive fluid	ltr	1.2
Weight, unladen (EU) <sup>1</sup>	kg	1570
Max. load (DIN)	kg	505
Max. permissible weight (DIN)	kg	2000
Max. permissible axle load, front/rear	kg	970/1140
Max. trailer load braked (12%)/unbraked	kg	-
Max. roof load/trailer nose weight	kg	75/-
Luggage compartment capacity, (VDA)	ltr	410
Drag coefficient	c <sub>x</sub> x A	0.29 x 2.06
<b>Engine</b>		
Layout/No. of cylinders/valves		Inline/6/4
Engine management		MSS 54
Displacement	cc	3246
Bore/stroke	mm	87.0/91.0
Compression ratio/fuel grade		11.5:1 / ROM/98
Max. output	kW/bhp	252/343
At engine speed	rpm	7900
Max. torque	Nm/lb·ft	365/269
At engine speed	rpm	4900
<b>Electric</b>		
Battery/location	Ah/-	70/luggage compartment
Alternator	A/W	70
<b>Chassis</b>		
Front suspension		Single-joint spring-strut axle with displaced camber; small positive steering scrub Radius; compensation of traverse forces; anti-dive
Rear suspension		Central-arm axle with longitudinal control arm and double track control arm; anti-squat; anti-dive
Brakes, front		Single-piston floating-caliper disc brakes
Diameter	mm	325, vented
Brakes, rear		Single-piston floating-caliper disc brakes
Diameter	mm	328, vented
Driving stability systems		ABS, CBC, DSC; M differential lock
Steering		Rack-and-pinion, power assisted
Overall ratio		15.4
Type of transmission		6-sp man gearbox
Transmission ratio I		4.227
II		2.528
III		1.669
IV		1.226
V		1.000
VI		0.828
R		3.746
Final drive ratio		3.620
Tyres front/rear		225/45 ZR18 / 255/40 ZR18
Wheels front/rear		8J x 18 Alu / 9J x 18 Alu
<b>Performance</b>		
Power to weight ratio	kg/kW	5.9
Output per litre	ltr/kW	77.6
Acceleration 0–100 km/h	s	5.2
0–1000 m	s	24.2
In 4 <sup>th</sup> gear 80–120 km/h	s	5.3
Top speed	km/h	250 <sup>2</sup>
<b>Fuel consumption (EU-cycle)</b>		
urban	ltr/100km	17.8
extra-urban	ltr/100km	8.4
composite	ltr/100km	11.9
CO <sub>2</sub>	g/km	287

<sup>1</sup> May be increased under certain conditions

<sup>2</sup> Performance and fuel consumption figures relate to ROM 98 fuel

# Specifications. BMW 3 M3 CSL.

## Body

No. of doors/seats		2/4
Length/width/height (unladen)	mm	4,492/1,780/1,365
Wheelbase	mm	2,729
Track, front/rear	mm	1,518/1,525
Turning circle	m	11.0
Tank capacity	approx. ltr	63
Cooling system incl. heater	ltr	10.7
Engine oil	ltr	7.0
Transmission fluid	ltr	1.9
Final drive fluid	ltr	1.2
Unladen weight, EU <sup>1</sup>	kg	1,385
Max. load to DIN standard	kg	415
Max. permissible weight to DIN	kg	1,800
Max. axle load, front/rear	kg	880/1,020
Max. trailer load <sup>2</sup>		
Braked (12%)/unbraked	kg	—
Max. roof load/max towbar download	kg	—/—
Luggage compartment to VDA st.	ltr	410
Air drag	C <sub>x</sub> x A	0.683

## Power unit

Configuration/cylinders/valves		Straight/6/4
Engine management		MSS 54HP
Capacity	cc	3,246
Bore/stroke	mm	87.0/91.0
Compression ratio	:1	11.5
Fuel	RON	98
Output at	kW/bhp rpm	265/360 7,900
Torque at	Nm (lb·ft) rpm	370 (273) 4,900

## Electrical system

Battery/location	Ah/—	55/luggage comp
Alternator	AW	120/1,680

## Suspension

Front	Single-joint spring strut axle with displaced castor; small positive steering roll radius, compensation of transverse forces, anti-dive	
Rear	Central-arm axle with longitudinal control arms and double track control arms, anti-squat and anti-dive	
Brakes, front	Single-piston swing-calliper disc brakes	
Diameter	mm	345 x 28, vented
Brakes, rear	Single-piston swing-calliper disc brakes	
Diameter	mm	328 x 20, vented
Driving stability systems	ABS, CBC, DSC; M differential lock	
Steering	Rack-and-pinion	
Overall steering transmission	:1	14.5
Transmission	Six-speed manual	
Transmission ratios	1 <sup>st</sup>	:1 4.227
	2 <sup>nd</sup>	:1 2.528
	3 <sup>rd</sup>	:1 1.669
	4 <sup>th</sup>	:1 1.226
	5 <sup>th</sup>	:1 1.000
	6 <sup>th</sup>	:1 0.828
	Rev	:1 3.746
Final drive ratio	:1	3.620

Tyres, front/rear 235/35 ZR19 / 265/30 ZR19

Rims, front/rear 8.5J x 19 EH 2 IS 44 alu / 9.5J x 19 EH 2 IS 27 alu

## Performance

Power-to-weight ratio to DIN stand	kg/kW	5.2
Output per litre	kW/bhp	81.6/111.0
Acceleration 0–100 km/h	sec	4.9
Stand-start km	sec	23.5
In 4 <sup>th</sup> gear 80–120 km/h	sec	5.0
Top speed	km/h	250 <sup>3</sup>

## Fuel consumption (EU cycle)

Urban	ltr/100km	17.8
Extra-urban	ltr/100 km	8.4
Composite	ltr/100 km	11.9
CO <sub>2</sub>	g/km	287

## Other data

Emission category EU3

<sup>1</sup>Weight of car in road trim (DIN) plus 75 kg for driver and luggage.

<sup>2</sup>May be increased under certain conditions.

<sup>3</sup>Electronically limited.

## Technical Specifications. BMW M5.

<b>Body</b>		
No. of doors/seats		4/5
Length/width/height (unladen)	mm	4,855/1,846/1,469
Wheelbase	mm	2,889
Track, front/rear	mm	1,580/1,566
Turning circle	m	12,4
Fuel tank capacity	approx. ltr	70
Cooling system incl. heating	ltr	15
Engine oil	ltr	13
Transmission fluid	ltr	2,6
Final drive fluid	ltr	1,2
Weight, unladen (EU <sup>1</sup> )	kg	1,830
Max. load (DIN)	kg	545
Max. permissible weight (DIN)	kg	2,300
Permissible axle load front/rear	kg	1,090/1,270
Max. trailer load <sup>2</sup>		
braked (12%)/unbraked	kg	2,100/750
Max. roof load/trailer nose weight	kg	100/90
Luggage comp. capacity	ltr	500
Drag coefficient	c <sub>x</sub> x A	0,701
<b>Engine</b>		
Layout/No. of cylinders/Valves		V/10/4
Engine management		MS S65
Displacement	cc	4,999
Bore/Stroke	mm	92,0/75,2
Compression ratio	:1	12,0:1
Fuel grade	RON	98
Max. output	kW/bhp	373/507
At engine speed	rpm	7,750
Torque	Nm	520
At engine speed	rpm	6,100
<b>Electrics</b>		
Battery/Location	Ah/-	90/boot
Alternator	A/W	170/2,380
<b>Chassis</b>		
Front suspension	Double-joint tension rod spring-strut suspension with displaced camber; small positive steering scrub radius; traverse force compensation; anti-dive	
Rear suspension	Integral axle (aluminium), wheel suspension with special effect anti-squat/anti-dive	
Brakes, front	Double-piston floating-caliper Compound disc brakes	
Diameter	mm	374 x 36, vented and punched
Brakes, rear	Single-piston floating-caliper Compound disc brakes	
Diameter	mm	370 x 24, vented and punched
Driving Stability Systems	ABS, CBC, DSC, variable M differential lock	
Steering	rack-and-pinion steering, hydraulically assisted steering and Servotronic	
Overall ratio	:1	12.4
Type of transmission		SMG III
Transmission ratio I	:1	3,985
II	:1	2,652
III	:1	1,806
IV	:1	1,392
V	:1	1,159
VI	:1	1
VII	:1	0,833
R	:1	3,985
Final drive ratio	:1	3,620
Tyres	255/40 ZR 19/285/35 ZR 19	
Wheels	8,5 J x 19 EH 2 IS 12 Alloy/9,5 J x 19 EH 2 IS 28 Alloy	
<b>Performance</b>		
Power to weight ratio (DIN)	kg/kW	4.7
Output per litre	kW/ltr	74.6
Acceleration 0–62 mph	sec	4.7
0–1000 m	sec	22.7
50–75 mph in 4 <sup>th</sup> gear	sec	–
Top speed <sup>3</sup>	km/h	250
<b>Fuel consumption (EU cycle)</b>		
In town	ltr/100 km	22.7
Out of town	ltr/100 km	10.2
Overall	ltr/100 km	14.8
CO <sub>2</sub>	g/km	357
<b>Miscellaneous</b>		
Emission classification		EU4

<sup>1</sup>Weight of the car in road trim (DIN) plus 75 kg for driver and luggage.

<sup>2</sup>Deviations are possible under certain conditions.

<sup>3</sup>Electrically limited.

## Specifications.

<b>Body</b>			<b>M6</b>
No. of doors/seats			2/2 + 2
Length/width/height (unladen)	mm	4,871/1,855/1,377	
Wheelbase	mm	2,781	
Track, front/rear	mm	1,567/1,584	
Turning circle	m	12.5	
Fuel tank capacity/range	approx. ltr	70	
Cooling system incl. heater	ltr	15.0	
Engine oil	ltr	13.0	
Transmission fluid	ltr	1.2	
Final drive fluid	ltr	2.6	
Weight, unladen (EU) <sup>1</sup>	kg	1,710	
Max. load (DIN)	kg	415	
Max. permissible weight (DIN)	kg	2,200	
Max. permissible axle load front/rear	kg	1,090/1,200	
Max. trailer load <sup>2</sup>			
braked (12%)/unbraked	kg	—	
Max. roof load/trailer nose weight	kg	—	
Luggage comp. capacity, VDA	ltr	450	
Drag coefficient	c <sub>x</sub> x A	0.32 x 2.15	
<b>Engine</b>			
Layout/No. of cylinders/valves		V 90/10/4	
Engine management		MS S65	
Displacement	cc	4,999	
Bore/stroke	mm	92.0/75.2	
Compression	:1	12.0	
Fuel grade <sup>3</sup>	RON	95–98	
Max. output	kW/bhp	373/507	
At engine speed	rpm	7,750	
Max. torque	Nm	520	
At engine speed	rpm	6,100	
<b>Electronic</b>			
Battery/location	Ah/–	90/Boot	
Alternator	A/W	1,70/2,380	
<b>Chassis</b>			
Front suspension	Double-joint thrust-rod spring strut axle in aluminium; compensation of transverse forces; anti-dive.		
Rear suspension	Integral axle (aluminium), wheel suspension with special effect anti-squat/anti-dive		
Brakes, front	Single-piston floating-caliper disc brakes		
Diameter	mm	348, vented	
Brakes, rear	Single-piston floating-caliper disc brakes		
Diameter	mm	345, vented	
Driving stability system	ABS, DSC, CBC		
Steering	Rack-and-pinion, power-assisted		
Overall ratio	:1	12.4	
Type of transmission		SMGIII	
Transmission ratio	I	3.985	3.985
	II	2.652	2.652
	III	1.806	1.806
	IV	1.392	1.392
	V	1.159	1.159
	VI	1	1
	VII	0.833	0.833
	R	3.985	3.985
Final drive ratio	:1	3.62	
Tyres, front	255/40 ZR19		
Tyres, rear	285/35 ZR19		
Wheels, front	8,5J x 19 EH 2 IS 12 Alu		
Wheels, rear	9,5J x 19 EH 2 IS 28 Alu		
<b>Performance</b>			
Power to weight ratio (DIN)	kg/kW	4.6	
Output per litre	ltr/kW	74.6	
Acceleration	0–100 km/h	s	4.6
In 4 <sup>th</sup> /5 <sup>th</sup> gear	80–120 km/h		4.4/5.8
Top speed	Km/h	250 <sup>2</sup>	
<b>Fuel consumption (EU cycle)</b>			
urban	ltr/100 km	22.7	
extra-urban	ltr/100 km	10.2	
composite	ltr/100 km	14.8	
CO <sub>2</sub>	g/km	357	
<b>Miscellaneous</b>			
Emission classification			

The values given in parenthesis apply to the automatic transmission.

<sup>1</sup>Weight of the car in road trim (DIN) plus 75 kg for driver and luggage.

<sup>2</sup>Deviations are possible under certain conditions.

<sup>3</sup>Performance and consumption figures relate to RON 98.