

# The BMW 5 Series – new engines. Contents.



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# 1. The BMW 5 Series. (Short version)



## **BMW 5 Series range: even more efficient thanks to BMW TwinPower Turbo.**

The BMW 5 Series range builds on its leading position in the areas of design, sporting capability, comfort and efficiency with an extended range of engines. The BMW 520d EfficientDynamics Edition, for example, represents the epitome of efficiency in a premium executive class car. The Sedan is powered by a 135 kW/184 hp four-cylinder diesel engine, yet its average fuel consumption in the EU test cycle is just 4.5 litres per 100 kilometres (62.8 mpg imp). New four-cylinder engines with BMW TwinPower Turbo technology add further talent to the line-up of petrol and diesel powerplants. The eight-cylinder engine under its bonnet makes the BMW 550i Touring the flagship five-door variant of the 5 Series family. A new highlight from BMW ConnectedDrive, meanwhile, is the hands-free tailgate/rear window opening function – an additional string to the Comfort Access option's bow.

In addition, the BMW 5 Series Gran Turismo can be ordered with an M Sport package from autumn 2011, and new options from the BMW Individual range are also available for this model.



## 2. The BMW 5 Series range: New diversity extends leadership on efficiency and driving enjoyment. (Long version)

Further highly efficient engines, more standard-fitted BMW EfficientDynamics measures and attractive additions to the optional equipment range reaffirm the BMW 5 Series' benchmark position on efficiency and driving enjoyment at the premium end of the upper mid-range segment. From autumn 2011, both the BMW 5 Series Sedan and the BMW 5 Series Touring ranges will for the first time feature two newly developed four-cylinder petrol engines with BMW TwinPower Turbo technology. More diesel engines will get this technology too. Also from autumn, the BMW 5 Series Touring line-up will be joined by a new top-of-the-line model, the BMW 550i Touring with V8 engine. All these measures will help the BMW 5 Series extend its segment leadership as the model range with the best balance of driving enjoyment and fuel economy. The most fuel-efficient model of all is the BMW 520d EfficientDynamics Edition, which achieves average fuel consumption in the EU test cycle of 4.5 litres per 100 km (62.7 mpg imp) and CO<sub>2</sub> emissions of 119 grams per kilometre.

From autumn 2011, a Driving Experience Control switch will be standard specification on the BMW 5 Series Sedan and the BMW 5 Series Touring. On all four- and six-cylinder models, this switch also allows the driver to select ECO PRO mode. At the same time, further model versions will be fitted with the Auto Start-Stop function as standard. New optional equipment features will include innovative functions from BMW ConnectedDrive, including the new-generation BMW Head-Up Display, Real-Time Traffic Information and hands-free opening of the tailgate or rear window. The BMW 5 Series is also confirming its position as a safety leader with the new Active Protection function.

Autumn 2011 will also see the launch of an M Sport package for the BMW 5 Series Gran Turismo, which was developed specifically for this model. New options from the BMW Individual range for this model, comprising additional exterior paint finishes, alloy wheels and interior trim, all highlight the exclusive character of the BMW 5 Series Gran Turismo.

## **New four-cylinder petrol engines with BMW TwinPower Turbo technology.**

With the launch of a new generation of four-cylinder engines with BMW TwinPower Turbo technology, the BMW 5 Series engines for the upper mid-range market now lead the way on efficiency and sporty power delivery in the petrol segment too. This world-exclusive technology equips the two 2.0-litre engines with twin-scroll turbocharging, High Precision Injection direct injection, VALVETRONIC variable valve timing and Double-Vanos variable camshaft timing. This combination of features is inspired by the technology package used on the multi-award-winning 225 kW/306 hp six-cylinder in-line BMW TwinPower Turbo engine of the BMW 535i. Now BMW has adopted this highly efficient performance-boosting technology in the four-cylinder engines as well. The system, which delivers the exhaust gases from each pair of cylinders to the turbine via two separate channels, both in the exhaust manifold and in the turbocharger itself, provides more responsive performance. The fuel supply is precisely metered by the direct-injection system with solenoid injectors, while the latest version of the VALVETRONIC system provides even more precise air mass control and, in combination with Double-Vanos variable intake and exhaust camshaft timing, optimises both efficiency and response.

As fitted in the new BMW 520i, the four-cylinder engine develops maximum power of 135 kW/184 hp at 5,000 rpm and peak torque of 270 Newton metres (199 lb-ft), which is available between 1,250 and 4,500 rpm. Instantaneous power response helps the BMW 520i Sedan perform the 0 to 100 km/h (62 mph) sprint in 7.9 seconds (automatic: 8.0 seconds), while the BMW 520i Touring accomplishes the same task in 8.3 seconds (automatic: 8.4 seconds). Top speeds are 227 km/h (141 mph) (automatic: 226 km/h / 140.4 mph) for the Sedan and 220 km/h (36.7 mph) (manual and automatic) for the Touring model. Simultaneous efficiency improvements are reflected in average fuel consumption (as per EU test cycle, depending on tyre format) of 6.8 – 7.0 l/100 km (40.3 – 41.5 mpg imp) (automatic: 6.5 – 6.7 litres / 42.2 – 43.5 mpg imp) and CO<sub>2</sub> emissions of 157 – 163 grams (149 – 155 grams) per kilometre. For the BMW 520i Touring, the corresponding figures are 7.0 – 7.3 l/100 km (38.7 – 42.2 mpg imp) (automatic: 6.7 – 7.0 litres / 40.3 – 42.2 mpg imp) and 163 – 170 grams (automatic: 156 – 163 grams) per kilometre.

In the new BMW 528i, with modified turbocharging and injection technology, the four-cylinder engine develops maximum power of 180 kW/245 hp at 5,000 through 6,500 rpm, and peak torque of 350 Newton metres (258 lb-ft), which is available between 1,250 and 4,800 rpm. 0 to 100 km/h (62 mph) is accomplished in 6.2 seconds for the new BMW 528i Sedan (automatic: 6.3 seconds), and 6.4 seconds for the BMW 528i Touring (automatic: 6.6 seconds). Top speeds are 250 km/h (155 mph) for the Sedan and 244 km/h (151.6 mph) for the Touring model (in both cases the figures are the same for both manual and automatic versions). The new BMW 528i Sedan achieves average fuel consumption (as per EU test cycle, depending on tyre format) of 6.8 – 7.1 l/100 km (39.8 – 41.5 mpg imp) (automatic: 6.5 – 6.8 litres / 41.5 – 43.5 mpg imp), and CO<sub>2</sub> emissions of 159 – 165 grams (automatic: 152 – 158 grams) per kilometre. For the new BMW 528i Touring, the corresponding figures are 7.1 – 7.4 l/100 km (38.3 – 39.8 mpg imp) (automatic: 6.8 – 7.1 litres / 39.8 – 41.5 mpg imp) and 165 – 172 grams (automatic: 159 – 166 grams) per kilometre.

**BMW 520d EfficientDynamics Edition: unique in the upper mid-range segment – a premium sedan with CO<sub>2</sub> emissions of 119 g/km.**

From autumn 2011, in parallel with the regular BMW 520d, an ultra-fuel-efficient version of this sedan will be offered: the BMW 520d EfficientDynamics Edition. With unchanged maximum power (135 kW/184 hp) and torque (380 Newton metres / 280 lb-ft), this model records average fuel consumption in the EU test cycle of 4.5 l/100 km (62.8 mpg imp) and CO<sub>2</sub> emissions of 119 grams per kilometre. This is around ten per cent better consumption than the most fuel-efficient segment competitors, despite the fact that the BMW 520d EfficientDynamics Edition is more powerful than the competitor models.

With a 0-100 km/h (62 mph) acceleration time of 8.2 seconds and a top speed of 231 km/h (143.5 mph), even this most fuel-efficient model in the BMW 5 Series boasts typical sporty BMW performance. Its extra-efficient 2.0-litre diesel engine is, like that of the familiar BMW 520d, equipped with a centrifugal pendulum absorber which reduces irregular running at low engine speeds for greater refinement. It is also combined with a range of other efficiency-enhancing measures. These include Auto Start-Stop, an Optimum Shift Indicator, Brake Energy Regeneration and active cooling flap control, plus a longer final drive ratio and special aero rims with “Streamline” styling.

**New diesel engines for the BMW 5 Series: more power and efficiency, courtesy of BMW TwinPower Turbo technology.**

For the other diesel engines in the BMW 5 Series, autumn 2011 will bring further improvements in power, and further reductions in fuel consumption, in line with the twofold goal of BMW EfficientDynamics. The BMW 525d will get a new four-cylinder diesel engine with BMW TwinPower Turbo technology. This 2.0-litre all-aluminium unit features Variable Twin Turbo two-stage turbocharging and common-rail diesel injection with piezoelectric injectors. The new unit features reduced weight and, thanks to the VNT technology of the small turbocharger, instantaneous response. The small turbocharger comes on stream at low engine speeds, while the contribution from the larger turbocharger varies in precise response to throttle requirements.

The new BMW 525d offers a 10 kW power increase over the previous model, developing 160 kW/218 hp at 4,400 rpm. Peak torque of 450 Newton metres (332 lb-ft) is now available between 1,500 and 2,500 rpm. The extra agility and sprinting power is reflected in a further improvement in 0-100 km/h (62 mph) acceleration times, which now stand at 7.0 seconds for the Sedan and 7.2 seconds for the Touring model. Top speeds are 243 km/h (150.9 mph) (automatic: 239 km/h / 148.5 mph) for the new BMW 525d Sedan and 236 km/h (146.6 mph) (automatic: 233 km/h / 144.8 mph) for the BMW 525d Touring. Average fuel consumption (as per EU test cycle, depending on tyre format) is 5.0 – 5.3 l/100 km (51.4 – 53.3 mpg imp) (automatic: 4.8 – 5.0 litres / 56.5 – 58.8 mpg imp) for the Sedan and 5.3 – 5.5 litres (51.4 – 53.3 mpg imp) (automatic: 5.1 – 5.4 litres / 52.3 – 55.4 mpg imp) for the Touring model – a 20 per cent reduction over the previous models. The corresponding CO<sub>2</sub> emissions are 132 – 138 grams (automatic: 126 – 132 grams) per kilometre for the Sedan and 138 – 145 grams (automatic: 135 – 142 grams) for the Touring model.

The new 5 Series in-line six-cylinder diesel engines with BMW TwinPower Turbo due for launch in autumn 2011 again offer more power and a further reduction in fuel consumption and emissions. Extensive modifications to the 3.0-litre engine in the new BMW 530d results in a 10 kW power increase to 190 kW/258 hp at 4,000 rpm. Equipped with VNT turbocharging and common-rail injection with solenoid injectors, its peak

torque of 540 Newton metres (398 lb-ft) (560 Nm / 413 lb-ft) with automatic transmission) is on stream between 1,500 and 3,000 rpm.

The BMW 530d Sedan and Touring models accelerate from 0 to 100 km/h (62 mph) in 6.1 and 6.2 seconds respectively (automatic: 6.0 and 6.1 seconds). The Sedan has a governed top speed of 250 km/h (155 mph), while the Touring model tops out at 247 km/h (153.5 mph) (automatic: 248 km/h / 154.1 mph). Average fuel consumption (as per EU test cycle, depending on tyre format) has been reduced by approximately 13 per cent compared with the previous models, to 5.7 – 5.9 l/100 km (47.9 – 49.6 mpg imp) (automatic: 5.3 – 5.5 litres / 51.4 – 53.3 mpg imp) for the Sedan and 5.9 – 6.2 litres (45.6 – 47.9 mpg imp) (automatic: 5.5 – 5.8 litres / 48.7 – 51.4 mpg imp) for the Touring model. CO<sub>2</sub> emissions are 149 – 155 grams (automatic: 139 – 145 grams) per kilometre for the BMW 530d Sedan and 155 – 162 grams (automatic: 145 – 152 grams) per km for the BMW 530d Touring.

Moving on to the BMW 535d, the world's sportiest six-cylinder diesel engine offers further gains in performance and efficiency. The new version of the BMW 535d's 3.0-litre engine features a modified two-stage Variable Twin Turbo system and common-rail injection with piezoelectric injectors. These modifications increase maximum power to 230 kW/313 hp at 4,400 rpm, and deliver peak torque of 630 Newton metres (465 lb-ft) at between 1,500 and 2,500 rpm. The awesome torque accelerates the BMW 535d – which is standard-equipped with an eight-speed automatic transmission – from 0 to 100 km/h (62 mph) in 5.5 seconds. These times are identical for both the Sedan and the Touring model. Both models have a governed top speed of 250 km/h (155 mph). Equally impressive are an average fuel consumption (as per EU test cycle, depending on tyre format) of 5.4 – 5.6 l/100 km (50.4 – 52.3 mpg imp) (Touring: 5.6 – 5.9 litres / 47.9 – 50.4 mpg imp) and CO<sub>2</sub> emissions of 142 – 148 grams (148 – 155 grams) per kilometre.

**BMW 5 Series Sedan: international bestseller is now even more attractive.**

The BMW 5 Series Sedan is a worldwide success. It has won a host of awards and comparison tests and earned top marks on quality, safety and value retention. Demand in car markets all over the world is steadily growing. With its seductive styling, its unrivalled balance between sporty performance and

comfort, and an extensive range of innovative equipment features, this series quickly established itself as the world market leader in its segment. Now, new engine versions and specification upgrades will lend this model range even greater variety and appeal.

From autumn 2011, the BMW 5 Series Sedan range will consist of five petrol and four diesel models. The petrol versions comprise the two new four-cylinder models, the six-cylinder in-line BMW 530i with lean-burn High Precision Injection, whose output has been upgraded to 200 kW/272 hp, the BMW 535i, and the range-topping V8 BMW 550i. The diesel versions comprise two four- and two six-cylinder units. At the same time, further xDrive versions will be offered. This intelligent all-wheel-drive system, which provides optimised driving dynamics, traction and stability, will in future be fitted in the BMW 528i xDrive, BMW 535i xDrive, BMW 550i xDrive, BMW 525d xDrive, BMW 530d xDrive and BMW 535d xDrive.

**BMW 5 Series Touring: the perfect combination of attractive styling, dynamism and adaptability.**

The BMW 5 Series Touring range, too, now offers even more choice. From autumn 2011 this model range, which provides the world's most attractive combination of driving enjoyment, adaptability and upscale styling, will likewise be available in nine different engine versions. The new top-of-the-range model will be the BMW 550i Touring, whose V8 engine with BMW TwinPower Turbo technology develops maximum power of 300 kW/407 hp and peak torque of 600 Newton metres (442 lb-ft). A 0-100 km/h (62 mph) sprint time of 5.1 seconds puts this model on a par with top-class sports cars. Average fuel consumption (as per EU test cycle, depending on tyre format) is 10.7 litres/100 km (26.4 mpg imp), with CO<sub>2</sub> emissions of 249 – 250 grams per kilometre.

At the same time, with its high standards of long-distance ride comfort and its adaptable load space, the BMW 5 Series Touring is the epitome of an ideal touring vehicle. With the rear backrest partially or fully lowered, using the levers in the luggage compartment, load space can be increased from 560 to as much as 1,670 litres. For even bigger transport jobs, a trailer hitch with a towing capacity of two tonnes is available. To add another dimension to the driving enjoyment, and to provide even more confidence and control when towing a trailer, xDrive intelligent all-wheel-drive versions are also available. This system, which electronically controls the drive power distribution,

will be available from autumn 2011 in the BMW 528i xDrive Touring, BMW 535i xDrive Touring, BMW 525d xDrive Touring, BMW 530d xDrive Touring and BMW 535d xDrive Touring.

**Auto Start-Stop function and Driving Experience Control including ECO PRO mode set new standards of efficiency.**

From autumn 2011, a Driving Experience Control switch will be fitted as standard on the BMW 5 Series Sedan and BMW 5 Series Touring models. This rocker switch on the centre console allows the driver to customise accelerator response characteristics, engine response, the power steering characteristics, the Dynamic Stability Control (DSC) thresholds and, on automatic models, the shift characteristics of the transmission. Drivers can choose between "COMFORT", "SPORT" or "SPORT+" modes. All the four- and six-cylinder models also feature ECO PRO mode, which supports a relaxed, extra-fuel-efficient, low-rpm driving style. At the same time, ECO PRO mode also programs electrically powered convenience functions like the heated seats and exterior mirrors and the air conditioning to operate at optimum efficiency. A special display in the instrument cluster lets the driver know by how much the driving range is being extended when using ECO PRO mode (see chapter 2.6: BMW EfficientDynamics).

Auto Start-Stop, which from autumn 2011 will be specified as standard on even more BMW 5 Series models, makes another big contribution to efficiency. This system, which automatically shuts the engine off when the vehicle is stopped in a traffic queue or at intersections, can be used on both manual and automatic models. In future it will form part of the BMW EfficientDynamics technology package on all diesel models as well as on the BMW 520i, BMW 528i and BMW 535i. On the BMW 535i, the Auto Start-Stop function in combination with an optimised drive train cuts fuel consumption by up to 9 per cent despite a further improvement in performance, while the Sedan and Touring versions now both achieve a 0 to 100 km/h (62 mph) time of 5.8 seconds (automatic: 5.9 seconds). The average fuel consumption of the BMW 535i Sedan (as per EU test cycle, depending on tyre format) has been improved to 8.1 – 8.3 l/100 km (34 – 34.9 mpg imp) (automatic: 7.6 – 7.9 litres / 35.8 – 37.2 mpg imp), and CO<sub>2</sub> emissions to 188 – 194 grams per kilometre (automatic: 177 – 183 grams), while the BMW 535i Touring achieves an average of 8.2 – 8.5 l/100 km (33.2 – 34.4 mpg imp) (automatic: 7.7 – 8.0 litres /

35.3 – 30.5 mpg imp) and CO<sub>2</sub> emissions of 190 – 197 grams per kilometre (automatic: 179 – 186 grams).

### **Enhanced safety, comfort and infotainment with new BMW ConnectedDrive functions.**

The BMW 5 Series leads its segment in another important area too: active and passive safety. Euro NCAP, US NCAP and the Australasian NCAP are among the crash tests in which the 5 Series Sedan achieved the maximum rating of five stars. From autumn 2011, the range of safety equipment will be extended to include the innovative Active Protection system. If an accident risk is detected, the central safety electronics will automatically close the side windows and the sunroof (if fitted). At the same time, the front seatbelts are pre-tensioned and, if the optional comfort seats are fitted, their backrests are adjusted to an upright position. In this way the Active Protection system helps to mitigate the risk of occupant injuries.

Elsewhere, the optional Comfort Access system has been upgraded with a new function – the hands-free tailgate opener, which provides increased convenience when loading the luggage compartment of both the Sedan and the Touring model. This innovative function allows drivers to open the boot or tailgate automatically simply by moving their foot under the rear apron (see chapter 2.7: BMW ConnectedDrive). On the BMW 5 Series Touring, this opens and raises either the independently opening tailgate window or, if the optional electric opening and closing function is fitted, the entire tailgate.

In future, 5 Series models with the optional Professional navigation system will also be available with Real-Time Traffic Information. This new BMW ConnectedDrive function provides drivers with more precise and more up-to-date information about traffic conditions on motorways and main roads, and on selected urban roads (see chapter 2.7: BMW ConnectedDrive).

A further innovative system that improves driver concentration, and ultimately safety, is the optional BMW Head-Up-Display. This system projects relevant information onto the windscreen directly in the driver's line of sight. From autumn 2011, the BMW 5 Series Sedan, the BMW 5 Series Touring and the BMW 5 Series Gran Turismo will be available with the new-generation version of the BMW Head-Up-Display, which for the first time offers full-colour display of symbols and graphics, making road signs etc. look even more realistic.

The functionality of the optional BMW Night Vision system with pedestrian

recognition has now been extended to include an acute warning comprising visual and audible signals.

**BMW 5 Series Gran Turismo: more sporty and exclusive than ever.**

The BMW 5 Series Gran Turismo provides a unique blend of adaptability, touring comfort and effortless driving enjoyment. From autumn 2011, it will for the first time be available with an M Sport package which accentuates and intensifies the most dynamic facets of this model. The package comprises a range of aerodynamics, suspension and interior components which were developed specifically for this model and which heighten both the sporty driving qualities and the brawny appearance of the BMW 5 Series Gran Turismo.

The specification includes an M aerodynamics package, dark chrome tailpipes, lowered M Sport suspension and 19-inch V-spoke M alloy wheels with mixed tyres. Alternatively, 20-inch twin-spoke M alloy wheels with mixed tyres are available as an option.

A typical M feel in the interior is provided by sports seats upholstered in fabric/alcantara (Dakota leather for the BMW 550i Gran Turismo), an M leather steering wheel, M driver's footrest, M door sill finishers, Palladium Grey interior trim strips and a BMW Individual roof lining in anthracite. In conjunction with the M Sport package, seven exterior paint finishes are available for the BMW 5 Series Gran Turismo, including M-exclusive Carbon Black metallic.

### 3. Specifications. BMW 5 Series Sedan. 520d, 525d



	BMW 520d	BMW 525d
<b>Body</b>		
No of doors/seats	4 / 5	4 / 5
Length/width/height <sup>1)</sup> (unladen)	mm 4899 / 1860 / 1464	4899 / 1860 / 1464
Wheelbase	mm 2968	2968
Track, front/rear	mm 1600 / 1627	1600 / 1627
Ground clearance	mm 141	141
Turning circle	m 11.95	11.95
Tank capacity	app ltr 70	70
Cooling system incl heater	ltr 7.0	8.0
Engine oil <sup>2)</sup>	ltr 5.2	5.2
Weight, unladen, to DIN/EU	kg 1620 / 1695 (1625 / 1700)	1645 / 1720 (1650 / 1725)
Max load to DIN	kg 610	610
Max permissible	kg 2230 (2235)	2255 (2260)
Max axle load, front/rear	kg 1060 / 1275	1100 / 1280
Max trailer load (12%), braked/unbraked	kg 2000 / 750	2000 / 750
Max roofload/max towbar dwl	kg 100 / 90	100 / 90
Luggage comp capacity	ltr 520	520
Air resistance	Cd x A 0.28 x 2.35	0.28 x 2.35
<b>Engine</b>		
Config/No of cyls/valves	Straight-four / 4	Straight-four / 4
Engine technology	BMW TwinPower Turbo technology with variable-geometry turbocharger, Common Rail direct injection with piezo injectors (max. injection pressure: 1800 bar)	BMW TwinPower Turbo technology with two turbochargers (Variable Twin Turbo), Common Rail direct injection with piezo injectors (max. injection pressure: 1800 bar)
Capacity, effective	cc 1995	1995
Stroke / bore	mm 90.0 / 84.0	90.0 / 84.0
Compression ratio	:1 16.5	16.5
Fuel grade	Diesel	Diesel
Max output	kW/hp 135 / 184	160 / 218
at	rpm 4000	4400
Max torque	Nm 380	450
at	rpm 1750-2750	1500-2500
<b>Electrical System</b>		
Battery/installation	Ah/- 90 / luggage comp	90 / luggage comp
Alternator	A/W 180 / 2520	180 / 2520
<b>Driving Dynamics and Safety</b>		
Suspension, front	Double track control arm axle with separate lower track arm level, aluminium, small steering roll radius, anti-dive	
Suspension, rear	Integral-V multi-arm axle, aluminium, with steering function, anti-squat and anti-dive, double acoustic separation	
Brakes, front	Single-piston aluminium swing-calliper disc brakes in frame structure	
Diameter	mm 330 x 24 / inner-vented	348 x 30 / inner-vented
Brakes, rear	Single-piston swing-calliper disc brakes	
Diameter	mm 330 x 20 / inner-vented	330 x 20 / inner-vented
Driving stability systems	Standard: DSC incl ABS and DTC Dynamic Traction Control, CBC Cornering Brake Control, DBC Dynamic Brake Control, Dry Braking function, Fading Compensation, Start-Off Assistant; optional: Dynamic Damper Control	
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 belts on all seats with belt stopper, belt tightener and belt force limiter at the front, crash-activated headrests at the front, crash sensors, Tyre Defect Indicator	
Steering	Electric Power Steering (EPS) with Servotronic; optional: Integral Active Steering	
Steering transmission, overall	:1 17.1	17.1
Tyres, front/rear	225/55 R17 97W	225/55 R17 97W
Rims, front/rear	8J x 17 light-alloy	8J x 17 light-alloy

		<b>BMW 520d</b>	<b>BMW 525d</b>
<b>BMW ConnectedDrive</b>			
Comfort	Opt: BMW Assist including Enquiry Service, remote-control functions, Real-Time Traffic Information, BMW TeleServices, integration of mobile terminals		
Infotainment	Opt: Internet, BMW Online incl Parkinfo, National Info, Google Local Search, News, Realtime Weather, BMW Routes, Office Functions, Bluetooth Audio Streaming, Online Update Music Tracks, Apps		
Safety	Optional: Adaptive Headlights with Bending Lights, variable light distribution and adaptive headlight range control, High-Beam Assistant, Park Distance Control, back-up camera, Surround View including Side View and Top View, BMW Night Vision with detection of persons, Head-Up Display, Parking Assistant, collision warning with brake activation function in combination with Active Cruise Control with Stop & Go, Lane Change Warning, Lane Departure Warning, Speed Limit Info, Active Protection, Automatic/Enhanced Emergency Call		
<b>Transmission</b>			
Type of gearbox	Six-speed manual (optional: eight-speed automatic with Steptronic)		
Gear ratios	I	:1	4.110 (4.714)
	II	:1	2.248 (3.143)
	III	:1	1.403 (2.106)
	IV	:1	1.000 (1.667)
	V	:1	0.802 (1.285)
	VI	:1	0.659 (1.000)
	VII	:1	– (0.839)
	VIII	:1	– (0.667)
	R	:1	3.727 (3.295)
Final drive		:1	3.385 (2.929)
<b>Performance</b>			
Power-to-weight ratio	kg/kW	12.0 (12.0)	10.3 (10.3)
Output per litre	kW	67.7	80.2
Acceleration	0–100 km/h	sec	8.1 (8.1)
	Standing-start	sec	28.8 (28.8)
	80–120 km/h	sec	6.9 (–)
Top speed	km/h	227 (225)	243 (239)
<b>BMW EfficientDynamics</b>			
BMW EfficientDynamics, standard features	Brake Energy Regeneration with recuperation display, Auto Start Stop function, gearshift point indicator (on manual gearbox models), ECO PRO mode, intelligent lightweight construction, on-demand operation of ancillary units, air flap control, Electric Power Steering (EPS), detachable a/c compressor, tyres with reduced roll resistance		
<b>Fuel consumption EU<sup>3)</sup></b>			
With standard wheels and tyres: 8J x 17 wheels, 225/55 R17 tyres (2K1)			
Urban	ltr/100 km	5.7 (5.7)	6.2 (5.6)
Extra-urban	ltr/100 km	4.2 (4.1)	4.3 (4.3)
Combined	ltr/100 km	4.8 (4.7)	5.0 (4.8)
CO <sub>2</sub>	g/km	125 (123)	132 (126)
With 8J x 18 wheels and 245/45 R18 tyres and with winter tyres (2HM, 2K2, 931)			
Urban	ltr/100 km	5.8 (5.8)	6.4 (5.8)
Extra-urban	ltr/100 km	4.3 (4.3)	4.5 (4.4)
Combined	ltr/100 km	4.9 (4.8)	5.2 (4.9)
CO <sub>2</sub>	g/km	128 (127)	136 (130)
With 8J x 18 wheels at front, 9J x 18 at rear and 245/45 R18 tyres at front, 275/40 R18 at rear (2AH, 2DC, 2NC), With 8.5J x 19 wheels at front, 9J x 19 at rear and 245/40 R19 tyres at front, 275/35 R19 at rear (2K3, 2WC, 2MZ, 2ND), With 8.5J x 20 wheels at front, 9J x 20 at rear and 245/35 R20 tyres at front, 275/30 R20 at rear (2H9)			
Urban	ltr/100 km	5.9 (5.9)	6.6 (5.9)
Extra-urban	ltr/100 km	4.4 (4.3)	4.5 (4.5)
Combined	ltr/100 km	4.9 (4.9)	5.3 (5.0)
CO <sub>2</sub>	g/km	130 (129)	138 (132)
Emission rating		EU5	EU5

Specifications applicable to ACEA markets, data relevant to homologation applicable in part only to Germany (weight)  
Figures in brackets apply to automatic transmission models

<sup>1)</sup> Height with roof aerial: 1475 mm

<sup>2)</sup> Oil change

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

# BMW 5 Series Sedan.

## 520d EfficientDynamics Edition

<b>BMW 520d EfficientDynamics Edition</b>		
<b>Body</b>		
No of doors/seats		4 / 5
Length/width/height <sup>1)</sup> (unladen)	mm	4899 / 1860 / 1464
Wheelbase	mm	2968
Track, front/rear	mm	1600 / 1627
Ground clearance	mm	141
Turning circle	m	11.95
Tank capacity	app ltr	70
Cooling system incl heater	ltr	7.0
Engine oil <sup>2)</sup>	ltr	5.2
Weight, unladen, to DIN/EU	kg	1620 / 1695
Max load to DIN	kg	610
Max permissible	kg	2230
Max axle load, front/rear	kg	1060 / 1275
Max trailer load (12%), braked/unbraked	kg	2000 / 750
Max roofload/max towbar dwl	kg	100 / 90
Luggage comp capacity	ltr	520
Air resistance	Cd x A	0.27 x 2.35
<b>Engine</b>		
Config/No of cyls/valves		Straight-four / 4
Engine technology		BMW TwinPower Turbo technology with variable-geometry turbocharger, Common Rail direct injection with piezo injectors (max. injection pressure: 1800 bar)
Capacity, effective	cc	1995
Stroke / bore	mm	90.0 / 84.0
Compression ratio	:1	16.5
Fuel grade		Diesel
Max output	kW/hp	135 / 184
at	rpm	4000
Max torque	Nm	380
at	rpm	1750-2750
<b>Electrical System</b>		
Battery/installation	Ah/-	80 / luggage comp
Alternator	AW	180 / 2520
<b>Driving Dynamics and Safety</b>		
Suspension, front		Double track control arm axle with separate lower track arm level, aluminium, small steering roll radius, anti-dive
Suspension, rear		Integral-V multi-arm axle, aluminium, with steering function, anti-squat and anti-dive, double acoustic separation
Brakes, front		Single-piston aluminium swing-calliper disc brakes in frame structure
Diameter	mm	330 x 24 / inner-vented
Brakes, rear		Single-piston swing-calliper disc brakes
Diameter	mm	330 x 20 / inner-vented
Driving stability systems		Standard: DSC incl ABS and DTC Dynamic Traction Control, CBC Cornering Brake Control, DBC Dynamic Brake Control, Dry Braking function, Fading Compensation, Start-Off Assistant; optional: Dynamic Damper Control
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 belts on all seats with belt stopper, belt tightener and belt force limiter at the front, crash-activated headrests at the front, crash sensors, Tyre Defect Indicator
Steering		Electric Power Steering (EPS) with Servotronic; optional: Integral Active Steering
Steering transmission, overall	:1	17.1
Tyres, front/rear		225/55 R17 97W
Rims, front/rear		8J x 17 light-alloy

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**BMW 520d EfficientDynamics Edition**

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**BMW ConnectedDrive**

Comfort	Opt: BMW Assist including Enquiry Service, remote-control functions, Real-Time Traffic Information, BMW TeleServices, integration of mobile terminals
Infotainment	Opt: Internet, BMW Online incl Parkinfo, National Info, Google Local Search, News, Realtime Weather, BMW Routes, Office Functions, Bluetooth Audio Streaming, Online Update Music Tracks, Apps
Safety	Optional: Adaptive Headlights with Bending Lights, variable light distribution and adaptive headlight range control, High-Beam Assistant, Park Distance Control, back-up camera, Surround View including Side View and Top View, BMW Night Vision with detection of persons, Head-Up Display, Parking Assistant, Lane Change Warning, Lane Departure Warning, Speed Limit Info, Active Protection, Automatic/Enhanced Emergency Call

**Transmission**

Type of gearbox	Six-speed manual		
Gear ratios	I	:1	4.110
	II	:1	2.248
	III	:1	1.403
	IV	:1	1.000
	V	:1	0.802
	VI	:1	0.659
	R	:1	3.727
Final drive		:1	3.077

**Performance**

Power-to-weight ratio	kg/kW	12.0	
Output per litre	kW	67.7	
Acceleration	0–100 km/h	sec	8.2
	Standing-start	sec	28.8
in 4th gear	80–120 km/h	sec	7.5
Top speed	km/h	231	

**BMW EfficientDynamics**

BMW EfficientDynamics, standard features	Brake Energy Regeneration with recuperation display, Auto Start Stop function, gearshift point indicator (on manual gearbox models), ECO PRO mode, intelligent lightweight construction, on-demand operation of ancillary units, air flap control, Electric Power Steering (EPS), detachable a/c compressor, optimized aerodynamics, optimized final drive, tyres with reduced roll resistance
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**Fuel consumption EU**

Urban	litr/100 km	5.6
Extra-urban	litr/100 km	3.9
Combined	litr/100 km	4.5
CO <sub>2</sub>	g/km	119
Emission rating		EU5

Specifications applicable to ACEA markets, data relevant to homologation applicable in part only to Germany (weight)  
Figures in brackets apply to automatic transmission models

<sup>1)</sup> Height with roof aerial: 1475 mm  
<sup>2)</sup> Oil change

# BMW 5 Series Sedan.

## 520i, 528i

		BMW 520i	BMW 528i
<b>Body</b>			
No of doors/seats		4 / 5	4 / 5
Length/width/height <sup>1)</sup> (unladen)	mm	4899 / 1860 / 1464	4899 / 1860 / 1464
Wheelbase	mm	2968	2968
Track, front/rear	mm	1600 / 1627	1600 / 1627
Ground clearance	mm	141	141
Turning circle	m	11.95	11.95
Tank capacity	app ltr	70	70
Cooling system incl heater	ltr	9.1 (9.9)	9.1 (9.9)
Engine oil <sup>2)</sup>	ltr	5.75	5.75
Weight, unladen, to DIN/EU	kg	1595 / 1670 (1610 / 1685)	1610 / 1685 (1620 / 1695)
Max load to DIN	kg	610	610
Max permissible	kg	2205 (2220)	2220 (2230)
Max axle load, front/rear	kg	1070 / 1280	1070 / 1280
Max trailer load (12%), braked/unbraked	kg	1900 (2000) / 750	2000 / 750
Max roofload/max towbar dwl	kg	100 / 90	100 / 90
Luggage comp capacity	ltr	520	520
Air resistance	Cd x A	0.29 x 2.35	0.29 x 2.35
<b>Engine</b>			
Config/No of cyls/valves		Straight-four / 4	Straight-four / 4
Engine technology		BMW TwinPower Turbo with Twin-Scroll turbocharger, direct injection and fully variable valve control (VALVETRONIC)	BMW TwinPower Turbo with Twin-Scroll turbocharger, direct injection and fully variable valve control (VALVETRONIC)
Capacity, effective	cc	1997	1997
Stroke / bore	mm	90.1 / 84.0	90.1 / 84.0
Compression ratio	:1	11.0	10.3
Fuel grade		at least RON 91	at least RON 91
Max output	kW/hp	135 / 184	180 / 245
at	rpm	5000-6250	5000-6500
Max torque	Nm	270	350
at	rpm	1250-4500	1250-4800
<b>Electrical System</b>			
Battery/installation	Ah/-	90 / luggage comp	90 / luggage comp
Alternator	A/W	170 / 2380	170 / 2380
<b>Driving Dynamics and Safety</b>			
Suspension, front		Double track control arm axle with separate lower track arm level, aluminium, small steering roll radius, anti-dive	
Suspension, rear		Integral-V multi-arm axle, aluminium, with steering function, anti-squat and anti-dive, double acoustic separation	
Brakes, front		Single-piston aluminium swing-calliper disc brakes in frame structure	
Diameter	mm	330 x 24 / inner-vented	348 x 30 / inner-vented
Brakes, rear		Single-piston swing-calliper disc brakes	
Diameter	mm	330 x 20 / inner-vented	330 x 20 / inner-vented
Driving stability systems		Standard: DSC incl ABS and DTC Dynamic Traction Control, CBC Cornering Brake Control, DBC Dynamic Brake Control, Dry Braking function, Fading Compensation, Start-Off Assistant; optional: Dynamic Damper Control	
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 belts on all seats with belt stopper, belt tightener and belt force limiter at the front, crash-activated headrests at the front, crash sensors, Tyre Defect Indicator	
Steering		Electric Power Steering (EPS) with Servotronic; optional: Integral Active Steering	
Steering transmission, overall	:1	17.1	17.1
Tyres, front/rear		225/55 R17 97W	225/55 R17 97W
Rims, front/rear		8J x 17 light-alloy	8J x 17 light-alloy

# BMW 5 Series Sedan.

		BMW 520i	BMW 528i	
<b>BMW ConnectedDrive</b>				
Comfort		Opt: BMW Assist including Enquiry Service, remote-control functions, Real-Time Traffic Information, BMW TeleServices, integration of mobile terminals		
Infotainment		Opt: Internet, BMW Online incl Parkinfo, National Info, Google Local Search, News, Realtime Weather, BMW Routes, Office Functions, Bluetooth Audio Streaming, Online Update Music Tracks, Apps		
Safety		Optional: Adaptive Headlights with Bending Lights, variable light distribution and adaptive headlight range control, High-Beam Assistant, Park Distance Control, back-up camera, Surround View including Side View and Top View, BMW Night Vision with detection of persons, Head-Up Display, Parking Assistant, collision warning with brake activation function in combination with Active Cruise Control with Stop & Go, Lane Change Warning, Lane Departure Warning, Speed Limit Info, Active Protection, Automatic/Enhanced Emergency Call		
<b>Transmission</b>				
Type of gearbox		Six-speed manual (optional: eight-speed automatic with Steptronic)		
Gear ratios	I	:1	3.683 (4.714)	
	II	:1	2.062 (3.143)	
	III	:1	1.313 (2.106)	
	IV	:1	1.000 (1.667)	
	V	:1	0.809 (1.285)	
	VI	:1	0.677 (1.000)	
	VII	:1	– (0.839)	
	VIII	:1	– (0.667)	
	R	:1	3.348 (3.295)	
Final drive		:1	3.909 (3.231)	
<b>Performance</b>				
Power-to-weight ratio	kg/kW	11.8 (11.9)	8.9 (9.0)	
Output per litre	kW	67.6	90.1	
Acceleration	0–100 km/h	sec	7.9 (8.0)	
	Standing-start	sec	29.1 (29.2)	
	in 4th gear	80–120 km/h	sec	7.5 (–)
	Top speed	km/h	227 (226)	
			250 (250)	
<b>BMW EfficientDynamics</b>				
BMW EfficientDynamics, standard features		Brake Energy Regeneration with recuperation display, Auto Start Stop function, gearshift point indicator (on manual gearbox models), ECO PRO mode, intelligent lightweight construction, on-demand operation of ancillary units, air flap control, Electric Power Steering (EPS), map-controlled oil pump, detachable a/c compressor, tyres with reduced roll resistance		
<b>Fuel consumption EU<sup>3)</sup></b>				
With standard wheels and tyres: 8J x 17 wheels, 225/55 R17 tyres (2K1)				
Urban	ltr/100 km	8.9 (8.3)	9.1 (8.6)	
Extra-urban	ltr/100 km	5.5 (5.3)	5.5 (5.3)	
Combined	ltr/100 km	6.8 (6.4)	6.8 (6.5)	
CO <sub>2</sub>	g/km	157 (149)	159 (152)	
With 8J x 18 wheels and 245/45 R18 tyres and with winter tyres (2HM, 2K2, 931)				
Urban	ltr/100 km	9.1 (8.5)	9.3 (8.8)	
Extra-urban	ltr/100 km	5.6 (5.4)	5.7 (5.5)	
Combined	ltr/100 km	6.9 (6.6)	7.0 (6.7)	
CO <sub>2</sub>	g/km	161 (153)	163 (156)	
With 8J x 18 wheels at front, 9J x 18 at rear and 245/45 R18 tyres at front, 275/40 R18 at rear (2AH, 2DC, 2NC), With 8.5J x 19 wheels at front, 9J x 19 at rear and 245/40 R19 tyres at front, 275/35 R19 at rear (2K3, 2WC, 2MZ, 2ND), With 8.5J x 20 wheels at front, 9J x 20 at rear and 245/35 R20 tyres at front, 275/30 R20 at rear (2H9)				
Urban	ltr/100 km	9.2 (8.6)	9.4 (8.9)	
Extra-urban	ltr/100 km	5.7 (5.5)	5.8 (5.5)	
Combined	ltr/100 km	7.0 (6.7)	7.1 (6.8)	
CO <sub>2</sub>	g/km	163 (155)	165 (158)	
Emission rating		EU5	EU5	

Specifications applicable to ACEA markets, data relevant to homologation applicable in part only to Germany (weight)  
Figures in brackets apply to automatic transmission models

<sup>1)</sup> Height with roof aerial: 1475 mm

<sup>2)</sup> Oil change

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

# BMW 5 Series Touring.

## 520d, 525d

	BMW 520d Touring		BMW 525d Touring	
<b>Body</b>				
No of doors/seats		5 / 5		5 / 5
Length/width/height <sup>1)</sup> (unladen)	mm	4907 / 1860 / 1462		4907 / 1860 / 1462
Wheelbase	mm	2968		2968
Track, front/rear	mm	1600 / 1626		1600 / 1626
Ground clearance	mm	141		141
Turning circle	m	11.95		11.95
Tank capacity	app ltr	70		70
Cooling system incl heater	ltr	7.0		9.0
Engine oil <sup>2)</sup>	ltr	5.2		5.2
Weight, unladen, to DIN/EU	kg	1710 / 1785 (1715 / 1790)		1745 / 1820 (1750 / 1825)
Max load to DIN	kg	650		650
Max permissible	kg	2360 (2365)		2395 (2400)
Max axle load, front/rear	kg	1060 / 1400		1100 / 1410
Max trailer load (12%), braked/unbraked	kg	2000 / 750		2000 / 750
Max roofload/max towbar downl	kg	100 / 90		100 / 90
Luggage comp capacity	ltr	560-1670		560-1670
Air resistance	Cd x A	0.31 x 2.35		0.31 x 2.35
<b>Engine</b>				
Config/No of cyls/valves		Straight-four / 4		Straight-four / 4
Engine technology		BMW TwinPower Turbo technology with variable-geometry turbocharger, Common Rail direct injection with piezo injectors (max. injection pressure: 1800 bar)		BMW TwinPower Turbo technology with two turbochargers (Variable Twin Turbo), Common Rail direct injection with piezo injectors (max. injection pressure: 1800 bar)
Capacity, effective	cc	1995		1995
Stroke / bore	mm	90.0 / 84.0		90.0 / 84.0
Compression ratio	:1	16.5		16.5
Fuel grade		Diesel		Diesel
Max output	kW/hp	135 / 184		160 / 218
at	rpm	4000		4400
Max torque	Nm	380		450
at	rpm	1750-2750		1500-2500
<b>Electrical System</b>				
Battery/installation	Ah/-	90 / luggage comp		90 / luggage comp
Alternator	A/W	180 / 2520		180 / 2520
<b>Driving Dynamics and Safety</b>				
Suspension, front		Double track control arm axle with separate lower track arm level, aluminium, small steering roll radius, anti-dive		
Suspension, rear		Integral-V multi-arm axle, aluminium, with steering function, anti-squat and anti-dive, double acoustic separation, air suspension with automatic self-levelling		
Brakes, front		Single-piston aluminium swing-calliper disc brakes in frame structure		
Diameter	mm	330 x 24 / inner-vented		348 x 30 / inner-vented
Brakes, rear		Single-piston swing-calliper disc brakes		
Diameter	mm	330 x 20 / inner-vented		330 x 20 / inner-vented
Driving stability systems		Standard: DSC incl ABS and DTC Dynamic Traction Control, CBC Cornering Brake Control, DBC Dynamic Brake Control, Dry Braking function, Fading Compensation, Start-Off Assistant; optional: Dynamic Damper Control		
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 belts on all seats with belt stopper, belt tightener and belt force limiter at the front, crash-activated headrests at the front, crash sensors, Tyre Defect Indicator		
Steering		Electric Power Steering (EPS) with Servotronic; optional: Integral Active Steering		
Steering transmission, overall	:1	17.1		17.1
Tyres, front/rear		225/55 R17 97W		225/55 R17 97W
Rims, front/rear		8J x 17 light-alloy		8J x 17 light-alloy

# BMW 5 Series Touring.

	BMW 520d Touring	BMW 525d Touring
<b>BMW ConnectedDrive</b>		
Comfort	Opt: BMW Assist including Enquiry Service, remote-control functions, Real-Time Traffic Information, BMW TeleServices, integration of mobile terminals	
Infotainment	Opt: Internet, BMW Online incl Parkinfo, National Info, Google Local Search, News, Realtime Weather, BMW Routes, Office Functions, Bluetooth Audio Streaming, Online Update Music Tracks, Apps	
Safety	Optional: Adaptive Headlights with Bending Lights, variable light distribution and adaptive headlight range control, High-Beam Assistant, Park Distance Control, back-up camera, Surround View including Side View and Top View, BMW Night Vision with detection of persons, Head-Up Display, Parking Assistant, collision warning with brake activation function in combination with Active Cruise Control with Stop & Go, Lane Change Warning, Lane Departure Warning, Speed Limit Info, Active Protection, Automatic/Enhanced Emergency Call	
<b>Transmission</b>		
Type of gearbox	Six-speed manual (optional: eight-speed automatic with Steptronic)	
Gear ratios	I :1	4.110 (4.714)
	II :1	2.248 (3.143)
	III :1	1.403 (2.106)
	IV :1	1.000 (1.667)
	V :1	0.802 (1.285)
	VI :1	0.659 (1.000)
	VII :1	– (0.839)
	VIII :1	– (0.667)
	R :1	3.727 (3.295)
Final drive	:1	3.462 (3.077)
<b>Performance</b>		
Power-to-weight ratio	kg/kW	12.7 (12.7)
Output per litre	kW	67.7
Acceleration 0–100 km/h	sec	8.3 (8.3)
Standing-start	sec	29.3 (29.4)
in 4th gear 80–120 km/h	sec	7.1 (–)
Top speed	km/h	222 (220)
<b>BMW EfficientDynamics</b>		
BMW EfficientDynamics, standard features	Brake Energy Regeneration with recuperation display, Auto Start Stop function, gearshift point indicator (on manual gearbox models), ECO PRO mode, intelligent lightweight construction, on-demand operation of ancillary units, air flap control, Electric Power Steering (EPS), detachable a/c compressor, tyres with reduced roll resistance	
<b>Fuel consumption EU<sup>3)</sup></b>		
With standard wheels and tyres: 8J x 17 wheels, 225/55 R17 tyres (2K1)		
Urban	ltr/100 km	5.9 (5.9)
Extra-urban	ltr/100 km	4.4 (4.3)
Combined	ltr/100 km	4.9 (4.9)
CO <sub>2</sub>	g/km	130 (129)
With 8J x 18 wheels and 245/45 R18 tyres and with winter tyres (2HM, 2K2, 2DD, 2AK, 2NA, 931)		
Urban	ltr/100 km	6.0 (6.1)
Extra-urban	ltr/100 km	4.5 (4.4)
Combined	ltr/100 km	5.1 (5.1)
CO <sub>2</sub>	g/km	134 (133)
With 8,5J x 19 wheels and 245/40 R19 tyres (2K4, 2WD, 2M3, 2NB)		
Urban	ltr/100 km	6.2 (6.3)
Extra-urban	ltr/100 km	4.6 (4.5)
Combined	ltr/100 km	5.2 (5.2)
CO <sub>2</sub>	g/km	137 (136)
Emission rating		EU5

Specifications applicable to ACEA markets, data relevant to homologation applicable in part only to Germany (weight)  
Figures in brackets apply to automatic transmission models

<sup>1)</sup> Height with roof aerial: 1488 mm

<sup>2)</sup> Oil change

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

# BMW 5 Series Touring.

## 520i, 528i

	BMW 520i Touring		BMW 528i Touring	
<b>Body</b>				
No of doors/seats		5 / 5		5 / 5
Length/width/height <sup>1)</sup> (unladen)	mm	4907 / 1860 / 1462		4907 / 1860 / 1462
Wheelbase	mm	2968		2968
Track, front/rear	mm	1600 / 1626		1600 / 1626
Ground clearance	mm	141		141
Turning circle	m	11.95		11.95
Tank capacity	app ltr	70		70
Cooling system incl heater	ltr	9.1 (9.9)		9.1 (9.9)
Engine oil <sup>2)</sup>	ltr	5.75		5.75
Weight, unladen, to DIN/EU	kg	1705 / 1780 (1715 / 1790)		1715 / 1790 (1725 / 1800)
Max load to DIN	kg	640		640
Max permissible	kg	2345 (2355)		2355 (2365)
Max axle load, front/rear	kg	1070 / 1410		1070 / 1410
Max trailer load (12%), braked/unbraked	kg	1900 (2000) / 750		2000 / 750
Max roofload/max towbar downl	kg	100 / 90		100 / 90
Luggage comp capacity	ltr	560-1670		560-1670
Air resistance	Cd x A	0.32 x 2.35		0.32 x 2.35
<b>Engine</b>				
Config/No of cyls/valves		Straight-four / 4		Straight-four / 4
Engine technology		BMW TwinPower Turbo with Twin-Scroll turbocharger, direct injection and fully variable valve control (VALVETRONIC)		BMW TwinPower Turbo with Twin-Scroll turbocharger, direct injection and fully variable valve control (VALVETRONIC)
Capacity, effective	cc	1997		1997
Stroke / bore	mm	90.1 / 84.0		90.1 / 84.0
Compression ratio	:1	11.0		10.3
Fuel grade		at least RON 91		at least RON 91
Max output	kW/hp	135 / 184		180 / 245
at	rpm	5000-6250		5000-6500
Max torque	Nm	270		350
at	rpm	1250-4500		1250-4800
<b>Electrical System</b>				
Battery/installation	Ah/-	90 / luggage comp		90 / luggage comp
Alternator	A/W	170 / 2380		170 / 2380
<b>Driving Dynamics and Safety</b>				
Suspension, front		Double track control arm axle with separate lower track arm level, aluminium, small steering roll radius, anti-dive		
Suspension, rear		Integral-V multi-arm axle, aluminium, with steering function, anti-squat and anti-dive, double acoustic separation, air suspension with automatic self-levelling		
Brakes, front		Single-piston aluminium swing-calliper disc brakes in frame structure		
Diameter	mm	330 x 24 / inner-vented		348 x 30 / inner-vented
Brakes, rear		Single-piston swing-calliper disc brakes		
Diameter	mm	330 x 20 / inner-vented		330 x 20 / inner-vented
Driving stability systems		Standard: DSC incl ABS and DTC Dynamic Traction Control, CBC Cornering Brake Control, DBC Dynamic Brake Control, Dry Braking function, Fading Compensation, Start-Off Assistant; optional: Dynamic Damper Control		
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 belts on all seats with belt stopper, belt tightener and belt force limiter at the front, crash-activated headrests at the front, crash sensors, Tyre Defect Indicator		
Steering		Electric Power Steering (EPS) with Servotronic; optional: Integral Active Steering		
Steering transmission, overall	:1	17.1		17.1
Tyres, front/rear		225/55 R17 97W		225/55 R17 97Y
Rims, front/rear		8J x 17 light-alloy		8J x 17 light-alloy

# BMW 5 Series Touring.

		BMW 520i Touring	BMW 528i Touring	
<b>BMW ConnectedDrive</b>				
Comfort		Opt: BMW Assist including Enquiry Service, remote-control functions, Real-Time Traffic Information, BMW TeleServices, integration of mobile terminals		
Infotainment		Opt: Internet, BMW Online incl Parkinfo, National Info, Google Local Search, News, Realtime Weather, BMW Routes, Office Functions, Bluetooth Audio Streaming, Online Update Music Tracks, Apps		
Safety		Optional: Adaptive Headlights with Bending Lights, variable light distribution and adaptive headlight range control, High-Beam Assistant, Park Distance Control, back-up camera, Surround View including Side View and Top View, BMW Night Vision with detection of persons, Head-Up Display, Parking Assistant, collision warning with brake activation function in combination with Active Cruise Control with Stop & Go, Lane Change Warning, Lane Departure Warning, Speed Limit Info, Active Protection, Automatic/Enhanced Emergency Call		
<b>Transmission</b>				
Type of gearbox		Six-speed manual (optional: eight-speed automatic with Steptronic)		
Gear ratios	I	:1	3.683 (4.714)	
	II	:1	2.062 (3.143)	
	III	:1	1.313 (2.106)	
	IV	:1	1.000 (1.667)	
	V	:1	0.809 (1.285)	
	VI	:1	0.677 (1.000)	
	VII	:1	– (0.839)	
	VIII	:1	– (0.667)	
	R	:1	3.348 (3.295)	
Final drive		:1	3.909 (3.231)	
<b>Performance</b>				
Power-to-weight ratio	kg/kW	12.6 (12.7)	9.5 (9.6)	
Output per litre	kW	67.6	90.1	
Acceleration	0–100 km/h	sec	8.3 (8.4)	
	Standing-start	sec	29.6 (29.7)	
	in 4th gear	80–120 km/h	sec	8.1 (–)
Top speed	km/h	220 (220)	244 (244)	
<b>BMW EfficientDynamics</b>				
BMW EfficientDynamics, standard features		Brake Energy Regeneration with recuperation display, Auto Start Stop function, gearshift point indicator (on manual gearbox models), ECO PRO mode, intelligent lightweight construction, on-demand operation of ancillary units, air flap control, Electric Power Steering (EPS), map-controlled oil pump, detachable a/c compressor, tyres with reduced roll resistance		
<b>Fuel consumption EU<sup>3)</sup></b>				
With standard wheels and tyres: 8J x 17 wheels, 225/55 R17 tyres (2K1)				
Urban	ltr/100 km	9.2 (8.7)	9.4 (9.0)	
Extra-urban	ltr/100 km	5.7 (5.5)	5.8 (5.5)	
Combined	ltr/100 km	7.0 (6.7)	7.1 (6.8)	
CO <sub>2</sub>	g/km	163 (156)	165 (159)	
With 8J x 18 wheels and 245/45 R18 tyres and with winter tyres (2HM, 2K2, 2DD, 2AK, 2NA, 931)				
Urban	ltr/100 km	9.4 (8.9)	9.6 (9.2)	
Extra-urban	ltr/100 km	5.9 (5.7)	5.9 (5.7)	
Combined	ltr/100 km	7.2 (6.9)	7.3 (7.0)	
CO <sub>2</sub>	g/km	167 (160)	169 (163)	
With 8,5J x 19 wheels and 245/40 R19 tyres (2K4, 2WD, 2M3, 2NB)				
Urban	ltr/100 km	9.6 (9.1)	9.7 (9.4)	
Extra-urban	ltr/100 km	6.0 (5.8)	6.0 (5.8)	
Combined	ltr/100 km	7.3 (7.0)	7.4 (7.1)	
CO <sub>2</sub>	g/km	170 (163)	172 (166)	
Emission rating		EU5	EU5	

Specifications applicable to ACEA markets, data relevant to homologation applicable in part only to Germany (weight)  
Figures in brackets apply to automatic transmission models

<sup>1)</sup> Height with roof aerial: 1488 mm

<sup>2)</sup> Oil change

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