



Press release  
15 September 2014

**Setting the pace, showing the way: The BMW 5 Series builds further on its efficiency lead in the executive class.**

**New generation of four-cylinder diesel engines with BMW TwinPower Turbo technology increase the driving pleasure offered by the worldwide bestseller and achieve further reductions in fuel consumption and emissions – The new BMW 520d outclasses its segment rivals in the efficiency race: engine output rises to 140 kW/190 hp, average fuel consumption drops to as little as 4.1 l/100 km [68.9 mpg imp] and CO<sub>2</sub> emissions to 109 g/km.**

**Munich.** It may not be its only strength – far from it – but outstanding efficiency is undoubtedly a BMW 5 Series speciality. Indeed, the model series' achievements in this area have played a major role in securing its global bestselling status at the premium end of the executive class. And now the BMW 5 Series Sedan and BMW 5 Series Touring have set about extending their lead in the efficiency stakes once again. The introduction of a new generation of four-cylinder diesel engines improves further on what was already an exceptional balance between performance and fuel economy. The new 2.0-litre units with BMW TwinPower Turbo technology boost the output of the new BMW 518d and new BMW 520d by another 5 kW apiece. At the same time, fuel consumption and CO<sub>2</sub> emissions in the EU test cycle have been reduced by as much as 0.4 litres per 100 kilometres / 10 grams per kilometre. For example, the new BMW 520d Sedan – which now produces 140 kW/190 hp – burns just 4.7–4.3 litres of fuel per 100 kilometres (60.1–65.7 mpg imp) with CO<sub>2</sub> emissions of 114–124 g/km. If the optional eight-speed Steptronic transmission is specified, these figures improve further to 4.5–4.1 l/100 km (62.8–68.9 mpg imp) with CO<sub>2</sub> emissions of 109–119 g/km, depending on the tyre format fitted.

The new entry-level diesel models – the BMW 518d Sedan and BMW 518d Touring – now offer output of 110 kW/150 hp and peak torque of 360 Newton metres (266 lb-ft). The 140 kW/190 hp variant of the new four-cylinder power unit, meanwhile, boosts peak torque by 20 Newton metres (15 lb-ft) to 400 Nm (295 lb-ft). This version of the engine is fitted in the BMW 520d Sedan and BMW 520d Touring as well as the

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BMW 520d xDrive Sedan and BMW 520d xDrive Touring models with intelligent all-wheel drive. The likewise updated eight-speed Steptronic transmission is available for the rear-wheel-drive models as an option in place of the standard six-speed manual gearbox, and included as standard on the all-wheel-drive models.

These new gains in fuel economy represent further evidence of the effectiveness of the ongoing development work – focusing on the optimisation of combustion engines and other components – under the BMW EfficientDynamics banner. The current (sixth) generation of the BMW 5 Series has set the pace in its class in terms of economy and driving pleasure from day one, thanks to extensive use of BMW EfficientDynamics innovations, such as BMW TwinPower Turbo technology, the eight-speed Steptronic transmission, Electric Power Steering, Brake Energy Regeneration and numerous other measures. The exemplary levels of efficiency achieved as a result underline the trailblazing character of the BMW 5 Series, as do its elegantly sporty design defined by harmoniously flowing lines, the modern functionality of the interior – with innovative display and control elements – plus driver assistance systems from BMW ConnectedDrive and superior chassis technology. Additional innovations like ECO PRO mode and the Auto Start Stop function (also available with the automatic transmission) are now likewise fuelling this commitment to building on its leading position.

### **New engine generation, new efficiency benchmark.**

The introduction of the new four-cylinder diesel engines represents the next stage in the process. Both units are members of the BMW Group's new modular engine family and offer top-level BMW TwinPower Turbo technology. They feature an aluminium crankcase with thermally joined cylinder liners (to reduce internal friction) and integrated balancer shafts, turbochargers with variable intake geometry and optimised efficiency, and further developed common rail direct injection systems. The extra output, more instantaneous power delivery and high-revving character that these measures provide go hand in hand with not only greater fuel economy but also a reduction in weight of around two kilograms over the outgoing engines. In addition, fresh advances have been made in the area of acoustic comfort.



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The effectiveness of the turbochargers has been enhanced by a new roller bearing and extremely effective and need-based exhaust gas recirculation. The newly designed heat exchangers for the exhaust gas flow have a compact construction and optimised cooling performance, which leads to an effective reduction in maximum combustion temperatures. Another special feature is the vacuum-operated bypass valve, which allows a higher proportion of uncooled exhaust gas to be fed into the engine while it is warming up, for example.

The common rail direct injection system's new solenoid valve injectors ensure the engine uses even more precise quantities of fuel. They now allow increased injection pressure of up to 2,000 bar, which paves the way for extremely economical and, at the same time, clean combustion.

Furthermore, the thermodynamic efficiency around the core engine has been optimised, as have the starting characteristics of the diesel engines with the Auto Start Stop function. The new four-cylinder diesel engines are also equipped with map-controlled oil pumps. The new fully variable vane-type pumps enable continuously adjustable control of the volume flow and therefore the oil pressure in response to the operating status of the engine at any given time. The result is a significant reduction in the energy required by the oil pumps which – as with all the need-based ancillary components – means a greater proportion of the engine's output is available to drive the vehicle.

**More driving pleasure, lower fuel consumption: 0.2 seconds shaved off the 0 to 100 km/h (62 mph) sprint, up to 0.4 litres of fuel saved per 100 kilometres.**

The new four-cylinder diesel engines generate their respective maximum outputs of 110 kW/150 hp and 140 kW/190 hp at 4,000 rpm, and their peak torque of 360 / 400 Newton metres (266 / 295 lb-ft) is on tap between 1,750 and 2,500 rpm. The increase in output and torque has a noticeable effect on the sporty driving characteristics of the BMW 518d, BMW 520d and BMW 520d xDrive. All the model variants – in both Sedan and Touring guise – accelerate from 0 to 100 km/h (62 mph) 0.2 seconds more quickly than their respective predecessors. With the standard six-speed manual gearbox fitted, the new figures are 9.5 seconds for the BMW 518d Sedan (BMW 518d Touring:



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9.9 seconds), 7.9 seconds for the BMW 520d Sedan (BMW 520d Touring: 8.1 seconds) and 7.9 seconds for the BMW 520d xDrive Sedan (BMW 520d xDrive Touring: 8.2 seconds).

The advances made in efficiency alongside the optimised power delivery are reflected in fuel economy and emissions unparalleled at the premium end of the executive class. The average fuel consumption of the new BMW 518d Sedan has been reduced to 4.7–4.3 litres per 100 kilometres [60.1–65.7 mpg imp] (BMW 518d Touring: 5.0–4.7 l/100 km [56.5–60.1 mpg imp]). CO<sub>2</sub> emissions now stand at 114–124 grams (122–132 grams) per kilometre. The figures for the new BMW 520d Sedan and the new BMW 520d Touring are virtually identical: 4.7–4.3 litres per 100 kilometres (60.1–65.7 mpg imp) and 114–124 grams per kilometre for the Sedan, and 5.0–4.6 litres per 100 kilometres (56.5–61.4 mpg imp) and 122–132 grams per kilometre for the Touring model (as per EU test cycle, depending on tyre format).

### **Further development of the eight-speed Steptronic transmission for improved efficiency, raised comfort levels and enhanced dynamics.**

Another common theme of the new diesel-engined BMW 5 Series variants is the positive influence of the eight-speed Steptronic transmission on performance and fuel economy. The latest update of the automatic transmission has been tuned precisely to the performance characteristics of the new-generation power units. Further improvements to internal efficiency and longer gear ratios open up additional efficiency potential. An rpm-linked vibration damper with engine-specific tuning allows economical driving at low revs to be combined with increased driving and acoustic comfort. In addition, converter slip during gear changes has been further reduced. The updated eight-speed Steptronic transmission also offers a predictive shift strategy, which works in conjunction with the car's navigation system – even when the route guidance is not active – to ensure that gear changes are timed precisely according to the driving situation at hand. Based on navigation data, the gearbox identifies and takes into account an approaching corner, intersection, roundabout or motorway slip road. If the vehicle is approaching an intersection or a bend, for example, it changes down early to the most appropriate gear, making optimum use of the engine braking effect. The gearbox then shifts to the optimal gear to accelerate dynamically out



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of the bend. Furthermore, interaction with the navigation system allows unnecessary gear changes between two successive bends to be avoided.

With the updated eight-speed Steptronic transmission fitted, the new BMW 518d Sedan accelerates from 0 to 100 km/h (62 mph) in 9.4 seconds (BMW 518d Touring: 9.8 seconds). The new BMW 520d Sedan needs just 7.7 seconds for the same sprint (BMW 520d Touring: 8.0 seconds). The models fitted as standard with the eight-speed Steptronic transmission – the BMW 520d xDrive Sedan and BMW 520d xDrive Touring – post 0 to 100 km/h (62 mph) acceleration figures of 7.9 / 8.2 seconds. New fuel consumption and emissions benchmarks in the executive class are also set with the eight-speed Steptronic transmission. The new BMW 518d Sedan records figures of 4.6–4.2 litres per 100 kilometres (61.4–67.3 mpg imp) and 110–120 grams per kilometre (BMW 518d Touring: 4.9–4.5 l/100 km [57.7–62.8 mpg imp], 118–128 g/km). The new BMW 520d Sedan improves this performance to 4.5–4.1 litres per 100 kilometres (62.8–68.9 mpg imp) and 109–119 grams per kilometre (BMW 520d Touring: 4.9–4.5 l/100 km [57.7–62.8 mpg imp], 118–128 g/km). The average fuel consumption of the new BMW 520d xDrive Sedan is 5.1–4.7 litres per 100 kilometres [55.4–60.1 mpg imp] (BMW 520d xDrive Touring: 5.4–5.1 l/100 km [52.3–55.4 mpg imp]), and CO<sub>2</sub> emissions are 124–134 grams (Sedan) and 133–143 grams per kilometre (Touring; all as per EU test cycle, depending on tyre format).

This latest round of engine updates sees the BMW 5 Series underlining once again its status as a fertile breeding ground for innovation in the brand's model-line up. The latest advances made under the banner of BMW EfficientDynamics – such as the ongoing process of optimisation in the areas of comfort-enhancing equipment, functionality and intelligent connectivity courtesy of driver assistance systems and mobility services from BMW ConnectedDrive – help ensure the BMW 5 Series represents the leading edge of technology. The BMW 5 Series has therefore laid the ideal foundations to further increase its popularity and maintain its global market leadership at the premium end of the executive class into the future. It is an approach that has enabled the current model to become the leading light in the successful history of the BMW 5 Series, which dates back



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to 1972. With sales now topping 1.5 million units, the current BMW 5 Series has already outstripped the previous most successful generation.

Further information on official fuel consumption figures, specific CO<sub>2</sub> emission values and the electric power consumption of new passenger cars is included in the following guideline: "Leitfaden über Kraftstoffverbrauch, die CO<sub>2</sub> emissions und den Stromverbrauch neuer Personenkraftwagen" (Guideline for fuel consumption, CO<sub>2</sub> emissions and electric power consumption of new passenger cars), which can be obtained from all dealerships, from Deutsche Automobil Treuhand GmbH (DAT), Hellmuth-Hirth-Str. 1, 73760 Ostfildern-Scharnhausen and at <http://www.dat.de/en/offers/publications/guideline-for-fuel-consumption.html>. LeitfadenCO<sub>2</sub> (GuidelineCO<sub>2</sub>) (PDF – 2.7 MB)



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### Specifications BMW 5 Series Sedan.

#### 518d, 520d.

		BMW 518d	BMW 520d
<b>Body</b>			
No of doors/seats		4 / 5	4 / 5
Length/width/height <sup>1)</sup> (unladen)	mm	4907 / 1860 / 1464	4907 / 1860 / 1464
Wheelbase	mm	2968	2968
Track, front/rear	mm	1600 / 1627	1600 / 1627
Ground clearance	mm	141	141
Turning circle	m	12.0	12.0
Tank capacity	app ltr	70	70
Cooling system incl heater	ltr	7.0	7.0
Engine oil <sup>2)</sup>	Ltr	5.0	5.0
Weight, unladen, to DIN/EU	kg	1615 / 1690 (1625 / 1700)	1620 / 1695 (1630 / 1705)
Max load to DIN	kg	610	610
Max permissible weight	kg	2225 (2235)	2230 (2240)
Max axle load, front/rear	kg	1060 / 1275	1060 / 1275
Max trailer load (12%), braked/unbraked	kg	1800 (2000) / 750	1800 (2000) / 750
Max roofload/max towbar download	kg	100 / 90	100 / 90
Luggage comp capacity	ltr	520	520
Air resistance	C <sub>d</sub> x A	0.26 x 2.35	0.25 x 2.35
<b>Power Unit</b>			
<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 solenoid valve injectors (max. injection pressure: 2000 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	110 / 150	140 / 190
at	rpm	4000	4000
Max torque	Nm	360	400
at	rpm	1750 – 2500	1750 – 2500
<b>Electrical System</b>			
Battery/installation	Ah–	90 / luggage comp	90 / luggage comp
Alternator	AW	180 / 2520	180 / 2520



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BMW 518d			BMW 520d
<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 floating-calliper disc brakes in frame structure	
Diameter	mm	330 x 24 / inner-vented	330 x 24 / inner-vented
Brakes, rear		Single-piston aluminium floating-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>Transmission</b>			
Type of gearbox		6-speed manual (optional: 8-speed Steptronic)	
Gear ratios	I	:1 4.110 (5.000)	4.110 (5.000)
	II	:1 2.248 (3.200)	2.248 (3.200)
	III	:1 1.403 (2.143)	1.403 (2.143)
	IV	:1 1.000 (1.720)	1.000 (1.720)
	V	:1 0.802 (1.314)	0.802 (1.314)
	VI	:1 0.659 (1.000)	0.659 (1.000)
	VII	:1 – (0.822)	– (0.822)
	VIII	:1 – (0.640)	– (0.640)
	R	:1 3.727 (3.456)	3.727 (3.456)
Final drive	:1	3.231 (2.929)	3.077 (2.929)
<b>Performance</b>			
Power-to-weight ratio (DIN)		kg/kW 14.7 (14.8)	11.6 (11.6)
Output per litre		kW 55.1	70.2
Acceleration	0–100 km/h	sec 9.5 (9.4)	7.9 (7.7)
	0–1000 m	sec 30.3 (30.6)	28.4 (28.4)
in 5th gear	80–120 km/h	sec 9.9 (–)	8.9 (–)
Top speed	km/h	218 (216)	236 (233)
<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 with coasting function (on automatic models), 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, BMW BluePerformance technology	





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BMW 518d		BMW 520d
<b>Fuel Consumption EU<sup>3)</sup></b>		
With standard wheels and tyres: 8J x 17 wheels, 225/55 R17 tyres		
Urban	ltr/100 km	5.1 (4.9)
Extra-urban	ltr/100 km	3.9 (3.7)
Combined	ltr/100 km	4.3 (4.1)
CO <sub>2</sub>	g/km	114 (110)
With 8J x 18 wheels and 245/45 R18 tyres and with winter tyres		
Urban	ltr/100 km	5.3 (5.1)
Extra-urban	ltr/100 km	4.1 (3.9)
Combined	ltr/100 km	4.5 (4.3)
CO <sub>2</sub>	g/km	119 (115)
With 8J x 18 wheels at front, 9J x 18 at rear and 245/45 R18 tyres at front, 275/40 R18 at rear		
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		
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		
Urban	ltr/100 km	5.6 (5.2)
Extra-urban	ltr/100 km	4.2 (4.1)
Combined	ltr/100 km	4.7 (4.5)
CO <sub>2</sub>	g/km	124 (119)
Emission rating	EU6	EU6

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



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### Specifications BMW 5 Series Sedan.

#### 520d xDrive.

BMW 520d xDrive		
<b>Body</b>		
No of doors/seats		4 / 5
Length/width/height <sup>1)</sup> (unladen)	mm	4907 / 1860 / 1464
Wheelbase	mm	2968
Track, front/rear	mm	1600 / 1627
Ground clearance	mm	141
Turning circle	m	12.0
Tank capacity	app ltr	70
Cooling system incl heater	ltr	7.0
Engine oil <sup>2)</sup>	ltr	5.0
Weight, unladen, to DIN/EU	kg	1730 / 1805
Max load to DIN	kg	600
Max permissible weight	kg	2330
Max axle load, front/rear	kg	1170 / 1300
Max trailer load (12%), braked/unbraked	kg	2000 / 750
Max roofload/max towbar download	kg	100 / 90
Luggage comp capacity	ltr	520
Air resistance	C <sub>d</sub> x A	0.25 x 2.35
<b>Power Unit</b>		
<b>Engine</b>		
Config/No of cyls/valves		Straight-four / 4
Engine technology		BMW TwinPower Turbo technology: variable-geometry turbocharger, Common Rail direct injection with solenoid valve injectors (max. injection pressure: 2000 bar)
Capacity, effective	cc	1995
Stroke / bore	mm	90.0 / 84.0
Compression ratio	:1	16.5
Fuel grade		Diesel
Max output	kW/hp	140 / 190
at	rpm	4000
Max torque	Nm	400
at	rpm	1750 – 2500
<b>Electrical System</b>		
Battery/installation	Ah/–	90 / luggage comp
Alternator	AW	180 / 2520



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BMW 520d xDrive		
Driving Dynamics and Safety		
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, anti-squat and anti-dive, double acoustic separation
Brakes, front		Single-piston aluminium floating-calliper disc brakes in frame structure
Diameter	mm	330 x 24 / inner-vented
Brakes, rear		Single-piston aluminium floating-calliper disc brakes
Diameter	mm	330 x 20 / inner-vented
Driving stability systems		Standard: DSC incl ABS and Dynamic Traction Control (DTC), Cornering Brake Control (CBC), Dynamic Brake Control (DBC), Dry Braking function, Fading Compensation, Start-Off Assistant, linked to xDrive all-wheel-drive system in Integrated Chassis Management (ICM); 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		Hydraulic rack-and-pinion power steering with Servotronic
Steering transmission, overall		:1 17.9
Tyres, front/rear		225/55 R17 97W
Rims, front/rear		8J x 17 light-alloy
Transmission		
Type of gearbox		8-speed Steptronic
Gear ratios	:1	5.000
	:1	3.200
	:1	2.143
	:1	1.720
	:1	1.314
	:1	1.000
	:1	0.822
	:1	0.640
	:1	3.456
Final drive	:1	2.929
Performance		
Power-to-weight ratio (DIN)	kg/kW	12.4
Output per litre	kW	70.2
Acceleration	sec	7.9
	sec	28.8
in 5th gear	sec	–
Top speed	km/h	230
BMW EfficientDynamics		
BMW EfficientDynamics, standard features		Brake Energy Regeneration with recuperation display, Auto Start Stop function, ECO PRO mode with coasting function, intelligent lightweight construction, on-demand operation of ancillary units, air flap control, detachable a/c compressor, efficiency-optimised rear differential and power divider, tyres with reduced roll resistance, BMW BluePerformance technology



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BMW 520d xDrive		
<b>Fuel consumption EU<sup>3)</sup></b>		
With standard wheels and tyres: 8J x 17 wheels, 225/55 R17 tyres		
Urban	ltr/100 km	5.6
Extra-urban	ltr/100 km	4.2
Combined	ltr/100 km	4.7
CO <sub>2</sub>	g/km	124
With 8J x 18 wheels and 245/45 R18 tyres and with winter tyres		
Urban	ltr/100 km	5.8
Extra-urban	ltr/100 km	4.4
Combined	ltr/100 km	4.9
CO <sub>2</sub>	g/km	129
With 8J x 18 wheels at front, 9J x 18 at rear and 245/45 R18 tyres at front, 275/40 R18 at rear		
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		
With 8.5J x 20 wheels at front, 9J x 20 at the rear and 245/35 R20 tyres at front, 275/30 R20 at the rear		
Urban	ltr/100 km	6.1
Extra-urban	ltr/100 km	4.5
Combined	ltr/100 km	5.1
CO <sub>2</sub>	g/km	134
Emission rating		EU6

Specifications applicable to ACEA markets. data relevant to homologation applicable in part only to Germany (weight)

<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



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### Specifications BMW 5 Series Touring. 518d, 520d.

		BMW 518d Touring	BMW 520d 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	12.0	12.0
Tank capacity	app ltr	70	70
Cooling system incl heater	ltr	7.0	7.0
Engine oil <sup>2)</sup>	ltr	5.0	5.0
Weight, unladen, to DIN/EU	kg	1720 / 1795 (1730 / 1805)	1725 / 1800 (1735 / 1810)
Max load to DIN	kg	650	650
Max permissible weight	kg	2370 (2380)	2375 (2385)
Max axle load, front/rear	kg	1060 / 1420	1060 / 1420
Max trailer load (12%), braked/unbraked	kg	2000 / 750	1800 (2000) / 750
Max roofload/max towbar download	kg	100 / 90	100 / 90
Luggage comp capacity	ltr	560 – 1670	560 – 1670
Air resistance	C <sub>d</sub> x A	0,29 x 2.35	0,28 x 2.35
<b>Power Unit</b>			
<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 solenoid valve injectors (max. injection pressure: 2000 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	110 / 150	140 / 190
at	rpm	4000	4000
Max torque	Nm	360	400
at	rpm	1750 – 2500	1750 – 2500
<b>Electrical System</b>			
Battery/installation	Ah/–	90 / luggage comp	90 / luggage comp
Alternator	A/W	180 / 2520	180 / 2520



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BMW 518d Touring			BMW 520d Touring
Driving Dynamics and Safety			
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 floating-calliper disc brakes in frame structure	
Diameter	mm	330 x 24 / inner-vented	330 x 24 / inner-vented
Brakes, rear		Single-piston aluminium floating-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
Transmission			
Type of gearbox		6-speed manual (optional: 8-speed Steptronic)	
Gear ratios	I	:1 4.110 (5.000)	4.110 (5.000)
	II	:1 2.248 (3.200)	2.248 (3.200)
	III	:1 1.403 (2.143)	1.403 (2.143)
	IV	:1 1.000 (1.720)	1.000 (1.720)
	V	:1 0.802 (1.314)	0.802 (1.314)
	VI	:1 0.659 (1.000)	0.659 (1.000)
	VII	:1 – (0.822)	– (0.822)
	VIII	:1 – (0.640)	– (0.640)
	R	:1 3.727 (3.456)	3.727 (3.456)
Final drive	:1	3.385 (3.077)	3.460 (3.077)
Performance			
Power-to-weight ratio (DIN)		kg/kW 15.6 (15.7)	12.3 (12.4)
Output per litre		kW 55.1	70.2
Acceleration	0–100 km/h	sec 9.9 (9.8)	8.1 (8.0)
	0–1000 m	sec 30.9 (31.2)	28.9 (28.9)
in 5th gear	80–120 km/h	sec 10.2 (–)	8.7 (–)
Top speed	km/h	210 (209)	229 (226)
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 with coasting function (on automatic models), 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, BMW BluePerformance technology	



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BMW 518d Touring			BMW 520d Touring
Fuel Consumption EU <sup>3)</sup>			
With standard wheels and tyres: 8J x 17 wheels, 225/55 R17 tyres			
Urban	ltr/100 km	5,6 (5,2)	5,5 (5,2)
Extra-urban	ltr/100 km	4,1 (4,1)	4,1 (4,1)
Combined	ltr/100 km	4,7 (4,5)	4,6 (4,5)
CO <sub>2</sub>	g/km	122 (118)	122 (118)
With 8J x 18 wheels and 245/45 R18 tyres and with winter tyres			
Urban	ltr/100 km	5.7 (5.5)	5.7 (5.5)
Extra-urban	ltr/100 km	4.3 (4.2)	4.3 (4.2)
Combined	ltr/100 km	4.8 (4.7)	4.8 (4.7)
CO <sub>2</sub>	g/km	127 (123)	127 (123)
With 8,5J x 19 wheels and 245/40 R19 tyres			
Urban	ltr/100 km	5.9 (5.7)	5.9 (5.7)
Extra-urban	ltr/100 km	4.5 (4.4)	4.5 (4.4)
Combined	ltr/100 km	5.0 (4.9)	5.0 (4.9)
CO <sub>2</sub>	g/km	132 (128)	132 (128)
Emission rating	EU6		EU6

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



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### Specifications BMW 5 Series Touring.

#### 520d xDrive.

BMW 520d xDrive Touring		
<b>Body</b>		
No of doors/seats		5 / 5
Length/width/height <sup>1)</sup> (unladen)	mm	4907 / 1860 / 1462
Wheelbase	mm	2968
Track, front/rear	mm	1600 / 1626
Ground clearance	mm	141
Turning circle	m	12.0
Tank capacity	app ltr	70
Cooling system incl heater	ltr	7.0
Engine oil <sup>2)</sup>	ltr	5.0
Weight, unladen, to DIN/EU	kg	1840 / 1915
Max load to DIN	kg	640
Max permissible weight	kg	2480
Max axle load, front/rear	kg	1170 / 1420
Max trailer load (12%), braked/unbraked	kg	2000 / 750
Max roofload/max towbar download	kg	100 / 90
Luggage comp capacity	ltr	560 – 1670
Air resistance	C <sub>d</sub> x A	0,28 x 2.35
<b>Power Unit</b>		
<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 solenoid valve injectors (max. injection pressure: 2000 bar)
Capacity, effective	cc	1995
Stroke / bore	mm	90.0 / 84.0
Compression ratio	:1	16.5
Fuel grade		Diesel
Max output	kW/hp	140 / 190
at	rpm	4000
Max torque	Nm	400
at	rpm	1750 – 2500
<b>Electrical System</b>		
Battery/installation	Ah/–	90 / luggage comp
Alternator	AW	180 / 2520





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BMW 520d xDrive Touring		
<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, anti-squat and anti-dive, double acoustic separation, air suspension with automatic self-levelling	
Brakes, front	Single-piston aluminium floating-calliper disc brakes in frame structure	
Diameter	mm	330 x 24 / inner-vented
Brakes, rear	Single-piston aluminium floating-calliper disc brakes	
Diameter	mm	330 x 20 / inner-vented
Driving stability systems	Standard: DSC incl ABS and Dynamic Traction Control (DTC), Cornering Brake Control (CBC), Dynamic Brake Control (DBC), Dry Braking function, Fading Compensation, Start-Off Assistant, linked to xDrive all-wheel-drive system in Integrated Chassis Management (ICM); 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	Hydraulic rack-and-pinion power steering with Servotronic	
Steering transmission, overall	:1	17.9
Tyres, front/rear	225/55 R17 97W	
Rims, front/rear	8J x 17 light-alloy	
BMW 520d xDrive Touring		
<b>Transmission</b>		
Type of gearbox	8-speed Steptronic	
Gear ratios	:1	5.000
	:1	3.200
	:1	2.143
	:1	1.720
	:1	1.314
	:1	1.000
	:1	0.822
	:1	0.640
	:1	3.456
Final drive	:1	3.077
<b>Performance</b>		
Power-to-weight ratio (DIN)	kg/kW	13.1
Output per litre	kW	70.2
Acceleration	sec	8.2
	sec	29.4
in 5th gear	sec	–
Top speed	km/h	220
<b>BMW EfficientDynamics</b>		
BMW EfficientDynamics, standard features	Brake Energy Regeneration with recuperation display, Auto Start Stop function, ECO PRO mode with coasting function, intelligent lightweight construction, on-demand operation of ancillary units, air flap control, detachable a/c compressor, efficiency-optimised rear differential and power divider, tyres with reduced roll resistance, BMW BluePerformance technology	



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BMW 520d xDrive Touring		
<b>Fuel Consumption EU<sup>3)</sup></b>		
With standard wheels and tyres: 8J x 17 wheels, 225/55 R17 tyres		
Urban	ltr/100 km	6.1
Extra-urban	ltr/100 km	4.5
Combined	ltr/100 km	5.1
CO <sub>2</sub>	g/km	133
With 8J x 18 wheels and 245/45 R18 tyres and with winter tyres		
Urban	ltr/100 km	6.3
Extra-urban	ltr/100 km	4.7
Combined	ltr/100 km	5.3
CO <sub>2</sub>	g/km	138
With 8,5J x 19 wheels and 245/40 R19 tyres		
Urban	ltr/100 km	6.5
Extra-urban	ltr/100 km	4.8
Combined	ltr/100 km	5.4
CO <sub>2</sub>	g/km	143
Emission rating		EU6

Specifications applicable to ACEA markets, data relevant to homologation applicable in part only to Germany (weight)

<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



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### The BMW Group

With its three brands BMW, MINI and Rolls-Royce, the BMW Group is the world's leading premium manufacturer of automobiles and motorcycles and also provides premium financial and mobility services. As a global company, the BMW Group operates 29 production and assembly facilities in 14 countries and has a global sales network in more than 140 countries.

In 2013, the BMW Group sold approximately 1.963 million cars and 115,215 motorcycles worldwide. The profit before tax for the financial year 2013 was € 7.91 billion on revenues amounting to approximately € 76.06 billion. As of 31 December 2013, the BMW Group had a workforce of 110,351 employees.

The success of the BMW Group has always been based on long-term thinking and responsible action. The company has therefore established ecological and social sustainability throughout the value chain, comprehensive product responsibility and a clear commitment to conserving resources as an integral part of its strategy.

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