BMW Media Information

6/2012

Valid from 7/2012

Specifications. The new BMW 6 Series Coupé. 640i, 650i



		BMW 640i Coupe	BMW 650i Coupe		
Body					
Number of doors/seats		2/4	2/4		
Length/Width/Height (unladen)	mm	4894 / 1894 / 1369	4894 / 1894 / 1369		
Wheelbase	mm	2855	2855		
Track front/rear	mm	1600 / 1665	1600 / 1665		
Ground clearance	mm	124	124		
Turning circle	m	11.7	11.7		
Tank capacity	appr l	70	70		
Cooling system incl. heating		10.2	14.4		
Engine oil ¹⁾	I	6.5	9.0		
Weight, unladen, to DIN/EU	kg	1685 / 1760	1795 / 1870		
Max, load to DIN	kg	450	450		
Max. perm. weight, overall	kg	2180	2290		
Max perm axle load front/rear	kg	1090 / 1180	1165 / 1220		
Max perm trailer load (12%)	kg	-/-	-/-		
braked/unbraked	···9				
Perm roof load/trail download	kg	75 / –	75/-		
Luggage capacity	l	460	460		
Air resistance	cd x A	0.30 x 2.23	0.30 x 2.23		
Engine		DICIA	V00 10 14		
Configuration/No. of cyls. /valves	D. 4). 4 / T	R/6/4	V90 / 8 / 4		
Engine technology	BIVIVV I	winPower Turbo technology with twin-scroll charging,	BMW TwinPower Turbo technology with two turbo chargers,		
	High Pre	ecision Injection direct petrol	High Precision Injection direct petrol		
		tion, Valvetronic fully variable	injection, Valvetronic fully variable		
		control, double-VANOS fully	valve control, double-VANOS fully		
		variable camshaft control	variable camshaft control		
Capacity	CC	2979	4395		
Stroke/bore	mm	89.6 / 84.0	88.3 / 89.0		
Compression ratio	:1	10.2	10.0		
Fuel grade		At least RON 91	At least RON 91		
Max output	kW/hp	235 / 320	330 / 450		
at	rpm	5800 - 6000	5500		
Max torque	Nm	450	650		
at	rpm	1300 – 4500	2000 – 4500		
Electrical system		00.11	405.11		
Battery/installation	Ah/-	90 / luggage comp	105 / luggage comp		
Alternator	A/W	210 / 2940	210 / 2940		
Driving dynamics and safety					
Suspension, front		Double track control arm wit	h separate lower track arm level,		
a superiority in one	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		· · · · · · · · · · · · · · · · · · ·	calliper disc brakes in frame structure		
Brakes, rear		<u> </u>	floating-calliper disc brakes		
Driving stability systems			SC and DTC (Dynamic Traction		
Driving stability systems			Brake Control), DBC (Dynamic		
			function, Fading Compensation,		
		Start-Off Assistant;	optional: Adaptive Drive		
Safety features	Standard: airbags for driver and front passenger, side airbags				
•	for driver and front passenger, head airbags for front and rear seats,				
			belts on all seats with belt latch		
	tensioner and belt force limiter integrated in the front seats, crash-activated head restraints at the front, crash sensors,				
			ints at the front, crash sensors, re Defect Indicator		
Steering					
Steering		Electric Power Steering (EPS) with Servotronic; optional: Integral Active Steering			
Overall steering transmission	:1	17.2	17.2		
Tyres front/rear		225/55 R17 97Y RSC	245/45 R18 96Y RSC		
Wheels front/rear		8J x 17 LM	8J x 18 LM		
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			BMW 640i Coupe	BMW 650i Coupe		
D1414 0						
BMW Connec	ctedDrive		Optional: BMW Assist incl. Enquiry Serv	ion romata control		
Comion		functions, Real Time Traffic Information, BMW TeleServices, integration of mobile devices				
Infotainment			Optional: Internet access, BMW Onlin			
ii ii Otali ii ii Oi it		National Info, Google Local Search, News, Realtime Weather,				
		BMW Routes, Office functions, Bluetooth Audio Streaming,				
0.6.1			Online Update Music Tracks			
Safety		Optional: Adaptive Headlights with cornering lights, variable light distribution and adaptive headlight range control,				
			High Beam Assistant, Park Distance Contr			
			Surround View incl. Top View and Side View,	BMW Night Vision with		
			pedestrian recognition, Head-Up Display			
			Active Cruise Control including rear-end collis function, Lane Change Warning, Lane D			
		Ç	Speed Limit Info incl. No Passing Info, Automatic			
			pood Emme mo momento i doomig imo; i datomado	,, lavarioca Erriorgorio, can		
Transmission	n					
Туре			Eight-speed automatic with St	teptronic		
Gear ratios	I	:1	4.714	4.714		
	II	:1	3.143	3.143		
	III	:1	2.106	2.106		
	IV	:1	1.667	1.667		
	V	:1	1.285	1.285		
	VI	:1	1.000	1.000		
	VII	:1	0.839	0.839		
	VIII	:1	0.667	0.667		
	R	:1	3.295	3.317		
Final drive		:1	3.231	2.813		
Performance	<u> </u>					
Power-to-weig	ht ratio (DIN)	kg/kW	7.2	5.4		
Output per litre	Э	kW/ltr	78.9	75.1		
Acceleration	0–100 km/h	S	5.3	4.6		
	0–1000 m	S	24.8	22.6		
Tananaad		km/h	250	250		
Top speed						
	ntDvnamics					
BMW Efficier BMW Efficient			Brake Energy Regeneration with recu	peration display,		
BMW Efficier	Dynamics	Αι	Brake Energy Regeneration with recu uto Start-Stop function, ECO PRO mode, intellig on-demand operation of ancillary units, air fla Electric Power Steering (EPS), detachab tyres with reduced rolling res	ent lightweight construction, ap control (BMW 640i), ole a/c compressor,		
BMW Efficier BMW Efficient measures as st	Dynamics tandard	Αι	uto Start-Stop function, ECO PRO mode, intellig on-demand operation of ancillary units, air fla Electric Power Steering (EPS), detachab	ent lightweight construction, ap control (BMW 640i), ble a/c compressor,		
BMW Efficier BMW Efficient measures as st	Dynamics tandard ption EU ²⁾	Au	uto Start-Stop function, ECO PRO mode, intellig on-demand operation of ancillary units, air fla Electric Power Steering (EPS), detachab	ent lightweight construction, ap control (BMW 640i), ble a/c compressor,		
BMW Efficiers BMW Efficients measures as st Fuel consum With standard	Dynamics tandard ption EU ²⁾ wheels and tyres		uto Start-Stop function, ECO PRO mode, intellig on-demand operation of ancillary units, air fla Electric Power Steering (EPS), detachab tyres with reduced rolling res	ent lightweight construction, ap control (BMW 640i), ale a/c compressor, sistance		
BMW Efficiers BMW Efficients measures as st Fuel consum With standard	Dynamics tandard ption EU ²⁾ wheels and tyres	5/55 R17 tyre	uto Start-Stop function, ECO PRO mode, intellig on-demand operation of ancillary units, air fla Electric Power Steering (EPS), detachab	ent lightweight construction, ap control (BMW 640i), ap control (BMW 640i), ale a/c compressor, sistance		
BMW Efficier BMW Efficient measures as st Fuel consum With standard BMW 640i: 8J Urban	Dynamics tandard ption EU ²⁾ wheels and tyres	5/55 R17 tyre I/100km	uto Start-Stop function, ECO PRO mode, intellig on-demand operation of ancillary units, air fla Electric Power Steering (EPS), detachab tyres with reduced rolling res	ent lightweight construction, ap control (BMW 640i), ole a/c compressor, sistance R18 tyres (SA 2SR)		
BMW Efficier BMW Efficient measures as st Fuel consum With standard BMW 640i: 8J Urban Extra-urban	Dynamics tandard ption EU ²⁾ wheels and tyres	5/55 R17 tyre /100km /100km	uto Start-Stop function, ECO PRO mode, intellig on-demand operation of ancillary units, air flat Electric Power Steering (EPS), detachab tyres with reduced rolling res s (SA 2K1), BMW 650i: 8J x 18 wheels, 245/45	ent lightweight construction, ap control (BMW 640i), ole a/c compressor, sistance R18 tyres (SA 2SR) 11.9		
BMW Efficier BMW Efficient measures as st Fuel consum With standard BMW 640i: 8J Urban Extra-urban Composite	Dynamics tandard ption EU ²⁾ wheels and tyres	5/55 R17 tyre 1/100km 1/100km 1/100km	uto Start-Stop function, ECO PRO mode, intellig on-demand operation of ancillary units, air flat Electric Power Steering (EPS), detachab tyres with reduced rolling res s (SA 2K1), BMW 650i: 8J x 18 wheels, 245/45 10.3 6.0	ent lightweight construction, ap control (BMW 640i), sle a/c compressor, sistance R18 tyres (SA 2SR) 11.9 6.6 8.6		
BMW Efficient measures as st Fuel consum With standard BMW 640i: 8J Urban Extra-urban Composite CO2	Dynamics tandard ption EU ²⁾ wheels and tyres x 17 wheels, 225	5/55 R17 tyre I/100km I/100km I/100km g/km	uto Start-Stop function, ECO PRO mode, intellig on-demand operation of ancillary units, air fla Electric Power Steering (EPS), detachab tyres with reduced rolling res s (SA 2K1), BMW 650i: 8J x 18 wheels, 245/45 10.3 6.0 7.6 177	ent lightweight construction, ap control (BMW 640i), sle a/c compressor, sistance R18 tyres (SA 2SR) 11.9 6.6 8.6		
BMW Efficient measures as st Fuel consum With standard BMW 640i: 8J Urban Extra-urban Composite CO ₂ With 8J x 18 w	Dynamics tandard ption EU ²⁾ wheels and tyres x 17 wheels, 225	5/55 R17 tyre 1/100km 1/100km 1/100km 1/100km g/km 5 R18 tyres a	uto Start-Stop function, ECO PRO mode, intellig on-demand operation of ancillary units, air flat Electric Power Steering (EPS), detachab tyres with reduced rolling res s (SA 2K1), BMW 650i: 8J x 18 wheels, 245/45 10.3 6.0 7.6 177 nd with winter tyres (SA 2SR, 9WR, 931)	ent lightweight construction, ap control (BMW 640i), sle a/c compressor, sistance R18 tyres (SA 2SR) 11.9 6.6 8.6		
Fuel consum With standard BMW 640i: 8J Urban Extra-urban Composite CO ₂ With 8J x 18 w Urban	Dynamics tandard ption EU ²⁾ wheels and tyres x 17 wheels, 225	5/55 R17 tyre 1/100km 1/100km 1/100km g/km 5 R18 tyres a 1/100km	uto Start-Stop function, ECO PRO mode, intellig on-demand operation of ancillary units, air fla Electric Power Steering (EPS), detachab tyres with reduced rolling res s (SA 2K1), BMW 650i: 8J x 18 wheels, 245/45 10.3 6.0 7.6 177	ent lightweight construction, ap control (BMW 640i), sle a/c compressor, sistance R18 tyres (SA 2SR) 11.9 6.6 8.6		
BMW Efficier BMW Efficient measures as st Fuel consum With standard of BMW 640i: 8J Urban Extra-urban Composite CO2 With 8J x 18 w Urban Extra-urban Extra-urban Extra-urban	Dynamics tandard ption EU ²⁾ wheels and tyres x 17 wheels, 225	5/55 R17 tyre 1/100km 1/100km 1/100km g/km 5 R18 tyres a 1/100km 1/100km	uto Start-Stop function, ECO PRO mode, intellig on-demand operation of ancillary units, air fla Electric Power Steering (EPS), detachab tyres with reduced rolling res s (SA 2K1), BMW 650i: 8J x 18 wheels, 245/45 10.3 6.0 7.6 177 nd with winter tyres (SA 2SR, 9WR, 931) 10.4	ent lightweight construction, ap control (BMW 640i), sle a/c compressor, sistance R18 tyres (SA 2SR) 11.9 6.6 8.6		
Fuel consum With standard BMW 640i: 8J Urban Extra-urban Composite CO ₂ With 8J x 18 w Urban Extra-urban Composite COoposite COoposite	Dynamics tandard ption EU ²⁾ wheels and tyres x 17 wheels, 225	6/55 R17 tyre 1/100km 1/100km 1/100km g/km 5 R18 tyres a 1/100km 1/100km	uto Start-Stop function, ECO PRO mode, intellig on-demand operation of ancillary units, air flat Electric Power Steering (EPS), detachab tyres with reduced rolling res s (SA 2K1), BMW 650i: 8J x 18 wheels, 245/45 10.3 6.0 7.6 177 nd with winter tyres (SA 2SR, 9WR, 931) 10.4 6.1	ent lightweight construction, ap control (BMW 640i), sle a/c compressor, sistance R18 tyres (SA 2SR) 11.9 6.6 8.6		
Fuel consum With standard BMW 640i: 8J Urban Extra-urban Composite CO2 With 8J x 18 w Urban Extra-urban Composite CO2 Composite CO2 Composite CO2 Composite CO2 Composite CO2	Dynamics tandard ption EU ²⁾ wheels and tyres x 17 wheels, 225	6/55 R17 tyre 1/100km 1/100km 1/100km g/km 5 R18 tyres a 1/100km 1/100km 1/100km	uto Start-Stop function, ECO PRO mode, intellig on-demand operation of ancillary units, air flat Electric Power Steering (EPS), detachab tyres with reduced rolling res s (SA 2K1), BMW 650i: 8J x 18 wheels, 245/45 10.3 6.0 7.6 177 nd with winter tyres (SA 2SR, 9WR, 931) 10.4 6.1 7.7	ent lightweight construction, ap control (BMW 640i), let alc compressor, sistance R18 tyres (SA 2SR) 11.9 6.6 8.6		
Fuel consum With standard BMW 640i: 8J Urban Extra-urban COnposite CO ₂ With 8J x 18 w Urban Extra-urban Composite CO ₂ With 8J x 18 w Urban Extra-urban Composite CO ₂ With 8J x 18 w	Dynamics tandard ption EU ²⁾ wheels and tyres x 17 wheels, 225 /heels and 245/45	6/55 R17 tyre 1/100km 1/100km 1/100km g/km 5 R18 tyres a 1/100km 1/100km 1/100km g/km x 18 at the re	uto Start-Stop function, ECO PRO mode, intellig on-demand operation of ancillary units, air flat Electric Power Steering (EPS), detachab tyres with reduced rolling res s (SA 2K1), BMW 650i: 8J x 18 wheels, 245/45 10.3 6.0 7.6 177 nd with winter tyres (SA 2SR, 9WR, 931) 10.4 6.1 7.7	ent lightweight construction, ap control (BMW 640i), ap control (BMW		
Fuel consum With standard BMW 640i: 8J Urban Extra-urban Composite CO ₂ With 8J x 18 w Urban Extra-urban Composite CO ₂ With 8J x 18 w With 8J x 18 w With 8J x 18 w	Dynamics tandard ption EU ²⁾ wheels and tyres x 17 wheels, 225 wheels and 245/45 wheels at front, 9J wheels at front, 9J wheels at front, 9J	6/55 R17 tyre 1/100km 1/100km 1/100km g/km 5 R18 tyres a 1/100km 1/100km 1/100km g/km x 18 at the re 0J x 19 at the	uto Start-Stop function, ECO PRO mode, intellig on-demand operation of ancillary units, air fla Electric Power Steering (EPS), detachab tyres with reduced rolling res s (SA 2K1), BMW 650i: 8J x 18 wheels, 245/45 10.3 6.0 7.6 177 nd with winter tyres (SA 2SR, 9WR, 931) 10.4 6.1 7.7 179 ear and 245/45 R18 tyres at front, 275/45 R18 a	ent lightweight construction, ap control (BMW 640i), ap control (BMW 640i), ale a/c compressor, sistance R18 tyres (SA 2SR) 11.9 6.6 8.6 199		
Fuel consum With standard BMW 640i: 8J Urban Extra-urban Composite CO ₂ With 8J x 18 w Urban Extra-urban Composite CO ₂ With 8J x 18 w With 8J x 18 w With 8J x 18 w	Dynamics tandard ption EU ²⁾ wheels and tyres x 17 wheels, 225 wheels and 245/45 wheels at front, 9J wheels at front, 9J wheels at front, 9J	6/55 R17 tyre 1/100km 1/100km 1/100km g/km 5 R18 tyres a 1/100km 1/100km 1/100km g/km x 18 at the re 0J x 19 at the	uto Start-Stop function, ECO PRO mode, intellige on-demand operation of ancillary units, air flat Electric Power Steering (EPS), detachabet tyres with reduced rolling resides (SA 2K1), BMW 650i: 8J x 18 wheels, 245/45 10.3 6.0 7.6 177 179 10.4 6.1 7.7 179 10.4 6.1 7.7 179 179 179 179 179 179 175/45 R18 tyres at front, 275/45 R18 arear and 245/40 R19 tyres at front, 275/35 R18 arear and 245/40 R19 tyres at front, 275/35 R18 arear and 245/40 R19 tyres at front, 275/35 R18 arear and 245/40 R19 tyres at front, 275/35 R18 arear and 245/40 R19 tyres at front, 275/35 R18 arear and 245/40 R19 tyres at front, 275/35 R19	ent lightweight construction, ap control (BMW 640i), ap control (BMW 640i), ale alc compressor, sistance R18 tyres (SA 2SR) 11.9 6.6 8.6 199		
Fuel consum With standard BMW 640i: 8J Urban Extra-urban Composite CO ₂ With 8J x 18 w Urban Composite CO ₂ With 8J x 18 w	Dynamics tandard ption EU ²⁾ wheels and tyres x 17 wheels, 225 wheels and 245/45 wheels at front, 9J wheels at front, 9J wheels at front, 9J	6/55 R17 tyre 1/100km 1/100km 1/100km g/km 5 R18 tyres a 1/100km 1/100km 1/100km g/km x 18 at the ro 3J x 19 at the	uto Start-Stop function, ECO PRO mode, intellige on-demand operation of ancillary units, air flat Electric Power Steering (EPS), detachabet tyres with reduced rolling residues (SA 2K1), BMW 650i: 8J x 18 wheels, 245/45 10.3 6.0 7.6 177 10.4 6.1 7.7 179 10.4 6.1 7.7 179 10.4 10.4 6.1 17.7 179 179 179 179 179 179 179 179 179 17	ent lightweight construction, ap control (BMW 640i), ap control (BMW 640i), all carbon compressor, sistance R18 tyres (SA 2SR) 11.9 6.6 8.6 199		
Fuel consum With standard BMW 640i: 8J Urban Extra-urban Composite CO ₂ With 8J x 18 w Urban Extra-urban Composite CO ₂ With 8J x 18 w	Dynamics tandard ption EU ²⁾ wheels and tyres x 17 wheels, 225 wheels and 245/45 wheels at front, 9J wheels at front, 9J wheels at front, 9J	6/55 R17 tyre 1/100km 1/100km 1/100km g/km 5 R18 tyres a 1/100km 1/100km g/km x 18 at the ro 3J x 19 at the 3J x 20 at the 1/100km	uto Start-Stop function, ECO PRO mode, intellige on-demand operation of ancillary units, air file Electric Power Steering (EPS), detachabityres with reduced rolling resides (SA 2K1), BMW 650i: 8J x 18 wheels, 245/45 10.3 6.0 7.6 177 179 10.4 6.1 7.7 179 10.4 6.1 7.7 179 179 179 179 179 179 179 179 179 17	ent lightweight construction, ap control (BMW 640i), ap control (BMW 640i), ale a/c compressor, sistance R18 tyres (SA 2SR) 11.9 6.6 8.6 199		
Fuel consum With standard BMW 640i: 8J Urban Extra-urban Composite CO ₂ With 8J x 18 w Urban Extra-urban Composite CO ₂ With 8J x 18 w	Dynamics tandard ption EU ²⁾ wheels and tyres x 17 wheels, 225 wheels and 245/45 wheels at front, 9J wheels at front, 9J wheels at front, 9J	5/55 R17 tyre 1/100km 1/100km 1/100km g/km 5 R18 tyres a 1/100km 1/100km g/km x 18 at the re 3/ x 19 at the 1/100km 1/100km	s (SA 2K1), BMW 650i: 8J x 18 wheels, 245/45 10.3 6.0 7.6 177 Ind with winter tyres (SA 2SR, 9WR, 931) 10.4 6.1 7.7 179 pear and 245/45 R18 tyres at front, 275/35 R18 at rear and 245/45 R20 tyres at front, 275/30 R20 10.5 6.2	ent lightweight construction, ap control (BMW 640i), ap control (BMW 640i), all carbon compressor, sistance R18 tyres (SA 2SR) 11.9 6.6 8.6 199		

Technical data valid for ACEA markets/part of data relevant to homologation only apply to Germany (weight)

 $^{^{1)}}$ Oil change quantity $^{2)}$ Fuel consumption and CO_2 emissions depend on the selected tyre format