

# The new BMW K 1600 B. Table of contents.



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# 1. The new BMW K 1600 B. (Short version)



## **The new K 1600 B: emotion and fascination with 6 cylinders in the exclusive Bagger style.**

The presentation of the “Concept 101” concept study as part of the Concorso d’Eleganza Villa d’Este in spring 2015 was an impressive new chapter for BMW Motorrad in the history of BMW Motorrad Concept Bikes. This BMW Motorrad interpretation of motorcycling on endless highways, the dream of freedom and independence and the embodiment of “Grand American Touring” in the form of a series version of the new K 1600 B bagger.

As a high-performance, highly emotional and exclusive motorcycle, the new K 1600 B with the familiar 6-cylinder in-line engine and supreme 118 kW (160 hp) output, like the “Concept 101” study that preceded it, already embodies the motto of the “Spirit of the Open Road”. It is synonymous with elegance, power and luxury on two wheels and transforms every road, every tour and every moment into a particularly intense experience.

## **The characteristic streamlining with a low rear section and masculine colour scheme make for relaxed dynamic elegance.**

In design terms, the new all-black (Blackstorm metallic / black for chassis parts and drivetrain) K 1600 B takes the form of a bagger, an exclusive custom bike type that is particularly popular in the USA. The characteristic properties of the bagger are its drop-shaped silhouette, whose highest point is the front fairing, the stretched drop-like silhouette in a “streamlining” style and the deep-set side cases with integrated US American style rear lights. New fully chrome-plated silencers run parallel to the road and are an organic fit for the visual appeal of the bagger.

Largely based on the technology used in the BMW 6-cylinder tourer K 1600 GT, the new K 1600 B implements its spectacular backward sloping linear design with a completely reconstructed rear section. This not only makes the bagger look particularly low-lying and slender, but also, thanks to the new rear frame, significantly reduces the height of the passenger seat.

### **Side cases with newly redesigned compartments and folding rear mudguard for easy dismantling of the wheel.**

A re-design of the compartments in the side cases with slimmer covers and deeper body allows for particularly comfortable and effective loading of luggage. The rear mudguard has been designed to fold upward to make it easier to remove the rear wheel.

### **High visual impact and effective wind and weather protection.**

The fairing of the new K 1600 B with its closely tailored dynamic windscreen makes the motorcycle look particularly powerful and impressive. For especially effective wind and weather protection, the side sections of the wind deflectors are stretched further back. Wind deflectors protect the rider's hands. The two mirrors also match the design concept, ensuring a particularly good view of the following traffic thanks to the large mirror surfaces with an aspherical element.

### **Electronic suspension Dynamic ESA with automatic damping adaptation as standard.**

With the electronically controlled Dynamic ESA chassis and its "Road" and "Cruise" modes, the new K 1600 B combines riding comfort, stability and dynamic performance ensuring an incomparable riding experience. In the standard "Road" setting, damping adaptation is fully automated, offering the very highest level of comfort and ultimate traction on virtually all surfaces. In contrast, the new K 1600 B offers very gentle damping in "Cruise" damping mode, ensuring a very high level of comfort at low speeds.

### **New reverse assist feature for comfortable manoeuvring and Shift Assistant Pro for shifting up and down without activating the clutch.**

The new K 1600 B is particularly easy to manoeuvre thanks to the reverse assist feature. This is activated conveniently at the press of a button on the left-hand handlebar panel. Pressing the starter button initiates movement. The Shift Assistant Pro available as an option allows the rider to shift up and down without activating the clutch in a large number of cases.

### **Comfortable foot rests for a "feet forward" position and optional exclusive forged wheels for individualisation.**

A wide range of Original BMW Motorrad Accessories and options available ex works means that nothing is left to be desired in terms of the individualisation of the new K 1600 B. This includes the provision of comfortable foot rests for the passenger, while these elements can also be fitted to offer the rider a particularly relaxed "feet forward" position. Redesigned forged wheels with eleven double spokes each further enhance the exclusivity of the new K 1600 B.

### **An overview of highlights of the new BMW K 1600 B:**

- 6-cylinder in-line engine according to EU4 regulations with an output of 118 kW (160 hp) at 7 750 rpm and a maximum torque of 175 Nm at 5 250 rpm.
- Bagger design with eye-catching stretched streamline-style silhouette and low rear section.
- Low rear frame for reduced vehicle height, dropped passenger seat height and typical bagger look.
- Fixed side cases with a new compartment design, rear central cover and integrated light units in US-American styling.
- Chrome-plated parallel silencers with ribbed end caps.
- Folding rear mudguard for easy wheel removal.
- Effective wind and weather protection with wind deflectors stretched further back.
- Typical short bagger-style electrically adjustable windscreen.
- Electronic suspension Dynamic ESA with automatic damping adaptation and “Road” and “Cruise” damping modes as standard.
- Reverse assist for even simpler manoeuvrability as an optional equipment item ex works.
- Shift Assistant Pro for shifting up and down without clutch as an ex-works option.
- Intelligent Emergency Call as an ex works option for rapid assistance in the event of an accident or in emergency situations (only in European markets where ConnectedDrive is available).
- High level of standard equipment (ABS Pro, dynamic brake light, Dynamic Traction Control DTC, xenon headlamp, heated grips and seat heating, multi-controller, three ride modes, cruise control etc.).
- Broad scope of tried-and-tested optional equipment (Adaptive Headlight, daytime running light, Keyless Ride, Hill Start Control, central locking etc.).
- Wide range of original BMW Motorrad Accessories (forged wheels, foot rests for rider and passenger, engine crash bar etc.).

## 2. Motorcycle technology and design.



### **The new K 1600 B: luxury cruising and pure traveling pleasure in the all-American bagger style.**

The new K 1600 B unites luxury, comfort and touring qualities with the unique design language of a bagger. Starting from the highest point on the front cladding, the flyline typically stretches downward to create a stretched drop-like silhouette in a “streamlining” style. The two side cases mounted on the vehicle form an integrated whole with the rear light units, which echo the style of US automobiles.

Whether on a relaxed ride after a hard day’s work, an enjoyable weekend cruise for two, or an extended holiday trip, the new K 1600 B unites supreme 6-cylinder performance and comfortable touring qualities with the casual relaxation and unique riding style of a bagger.

### **The characteristic streamlining with a low rear section and masculine colour scheme make for relaxed dynamic elegance.**

The new all-black (Blackstorm metallic / black for chassis components and the drivetrain) finish of the K 1600 B is largely based on the K 1600 GT Tourer. While long-distance riders will benefit from the superior comfort and consistent touring-style design of the K 1600 GT, the new K 1600 B sets completely new standards with regard to “Grand American Touring”.

Thus, the rear section of the new K 1600 B has been completely redesigned in order to significantly reduce the seat height for even more comfort and for even greater ease of access for passengers. With this special bagger style design, the passenger benefits from a rear section that is a full 70 millimetres lower than the 6-cylinder tourer, resulting in a correspondingly lower seat height. Two attractively shaped passenger seat handles ensure that passengers feel secure on the authentic backward sloping seat.

At the same time, the new rear frame allowed the deep recesses in the body design required for consistency with the design principles, so that the new K 1600 B looks particularly low, stretched and extraordinarily elegant and dynamic. Also redesigned are the fully chrome-plated silencers with additional chrome covers in the area of the catalytic converters, which consciously follow the parallelism of the design concept, fitting in organically with the bagger look.

### **Side cases with newly redesigned compartments for easy loading and folding rear mudguard for easy dismantling of the wheel.**

The standard side cases are bolted to the redesigned rear frame. In addition, the rear light units, consisting of a reverse light, side indicators and brake lights, are integrated in the side cases in the style of US "road cruisers". All lights use LED technology and are therefore particularly economical and long-lived, as well as offering top-quality details.

The redesign of the side cases of the K 1600 GT tourer with slimmer covers and deeper body allows for particularly comfortable and effective loading of luggage on the K 1600 B. Two luggage nets in the lower part of the case provide practical storage for smaller travel equipment. The optional audio connection in the right hand case has an inner pocket that can also hold larger terminal devices, such as a tablet computer. The switch for the passenger seat heater has been handily positioned on the right hand case. The keyless seat bench release is easily accessible, not exposed to dirt and integrated in the left side case.

As part of this redesign of the rear section, the new K 1600 B has an additional rear middle cover. The rear mudguard has been designed to fold upward to make it easier to remove the rear wheel when changing the tire.

### **Dynamically designed fairing sections for effective wind and weather protection and an impressive visual presence.**

The lines of the front section of the new K 1600 B slope downward to the front and meet at a point in front of the front wheel. Together with the redesigned rear section and its backward sloping lines, the K 1600 B creates very low, stretched impression, signalling its close ties to the road.

For the ultimate touring experience, the K 1600 B offers excellent wind and weather protection. To this end, the side sections of the fairing sweep downward and backward from the efficiently designed slipstream deflectors. Wind deflectors not only provide for even better protection for the riders hands, but also give the front section of the new K 1600 B even more presence. The two mirrors fit in perfectly with the overall design, the interchangeable mirror caps also offering an opportunity to individualise the bagger. The generously proportioned mirrors include an aspherical element and offer the best possible view of the following traffic.

The new K 1600 B also features an electrically adjustable, redesigned short windscreen with memory function. This not only effectively protects the rider from wind pressure and eddies, but also returns to home position as soon as the ignition is switched off. In this way it also functions as an anti-theft device

for the navigation system, which is available as an Original BMW Motorrad Accessory.

As you'd expect from the elegant look of the K 1600 B, the chrome-plated mounts for the BMW emblem and insignia and the stretched radiator fit perfectly with the overall design. An additional skid protector in the side area of the engine is intended to prevent damage.

**Foot rests for a relaxed “feet forward” position available as an option.**

As part of the new design, the new K 1600 B follows the bagger look by doing away with the storage compartments on the left and right in the lower part of the engine in the series configuration. This means that it is an easy matter to equip the bagger with extremely comfortable foot rests that allow the rider to adopt a “feet forward” position. However, the storage compartments are available as an ex works option.

The passenger position can also be upgraded respectively. Because the passenger foot rests close upwards rather than folding back, it is possible to install particularly comfortable foot rests for passengers from the Original BMW Motorrad Accessories Range.

**Supreme engine expertise with 6 cylinders.**

With its 6-cylinder in-line engine, the new K 1600 B likewise conveys a particular fascination, offering not just perfect running smoothness but also supreme performance and abundant torque. Still the most compact 6-cylinder in-line power unit in motorcycle series production, the engine has an output of 118 kW (160 hp) at 7 750 rpm, generates a maximum torque of 175 Nm at 5 250 rpm and thus offers supreme forward thrust in all conditions.

With an engine weight of 102.6 kilograms, the 6-cylinder engine of the K 1600 B remains to this day not just the lightest series-production 6-cylinder engine for motorcycles in the category over 1000 cc: due its very narrow cylinder spacing, it is also significantly slimmer than all other serial production 6-cylinder in-line engines to date. Both are major contributing factors in creating the active riding character of the K 1600 B.

The new K 1600 B has been designed to meet the requirements of the EU4 pollutant class. Among other things it has corresponding engine mapping, a fuel system with carbon canister for fuel tank ventilation and an exhaust system with altered catalytic converters as well as more dynamically designed end pieces whose horizontal ribbing lends great emphasis to the 6-cylinder theme.

**Even more manoeuvring convenience due to the new reverse assist as an optional equipment item ex works.**

The bagger also makes a nod to luxury, relaxed motorcycling in the form of a reverse assist option. This is activated conveniently as required at the press of a button on the left-hand handlebar panel. As a result the forward gear is blocked and the reverse gear is engaged. Movement itself is initiated by the rider pressing on the starter motor button, which establishes propulsion via a bendable shaft.

**Three riding modes and Dynamic Traction Control DTC for maximum safety when accelerating as standard.**

Riders of the new K 1600 B have the riding modes "Rain", "Road" and "Dynamic" directly available to them at the press of a button at the right-hand end of the handlebars so as to be able to adapt to different purposes such as road touring, riding on wet surfaces and sporty, dynamic riding. The traction control function DTC is combined individually with each of the different modes and is fully harmonised with them so as to ensure maximum riding safety.

**Shift Assistant Pro for shifting up and down without clutch operation as an ex-works option.**

The Shift Assistant Pro is also available for the K 1600 B, enabling the rider to shift up and down without activating the clutch in the relevant load and engine speed ranges, which gives the rider not just greater comfort but also a bonus in terms of dynamic performance. Most shifting can be carried out using the shift assistant.

When accelerating, the throttle valve (throttle grip) no longer has to be closed for shifts using the throttle hand, so propulsion power is virtually constant without torque interrupt. When decelerating and shifting down (throttle grip/throttle valve closed), the engine speed is automatically adapted by means of double-declutching. Gears are engaged as usual by means of the gear pedal.

Shift time is significantly reduced as compared to a gearshift using the clutch. There is no shift support when the clutch is activated, when shifting up with the throttle grip closed (coasting) or when decelerating.

**Ideal concentration of masses, proven suspension technology for dynamic riding properties.**

The essential chassis elements of the new BMW K 1600 B are the light alloy bridge-type frame familiar from the K 1600 GT and the well-proven BMW Motorrad Duolever and Paralever systems for wheel control at front and rear. The new K 1600 B also benefits from a low overall centre of gravity with



a very favourable concentration of masses and a balanced wheel load distribution for excellent riding properties.

**Electronic suspension adaptation Dynamic ESA with automatic damping adaptation as standard.**

The new K 1600 B offers a supreme combination of riding stability, dynamics and light handling in all riding and load states. The electronic suspension Dynamic ESA with its “Road” and “Cruise” damping modes as standard safeguards a particularly active riding experience with the greatest possible comfort.

In the standard “Road” setting, damping adaptation is fully automated across the entire range, thereby offering the very highest level of comfort and traction over virtually all surfaces. This ensures the optimum damping force in all riding states and regardless of load.

Depending on customer preference, the spring preload can be adapted to the load state at the press of a button and independently of the damping. It is possible to switch to “Cruise” damping mode and thus to more gentle damping at lower speeds at the press of a button.

Using various parameters, the different riding states such as acceleration and deceleration of the new K 1600 B are precisely identified so that the damping forces on the front and rear spring strut can be adapted within milliseconds. As a result, superior damping comfort and a very stable ride response are ensured even in banking position.

**Intelligent Emergency Call as an ex works option for swift assistance in the event of an accident or in emergency situations.**

Ensuring the fastest possible assistance in the event of an accident or in situations of emergency and danger can save people’s lives - something that particularly affects motorcyclists. For this reason, the new K 1600 B can be fitted with the e-call system “Intelligent Emergency Call” as part of an optional equipment item available ex works.

If an emergency situation or an accident occurs, the intelligent emergency call is activated automatically or manually, sending the position data of the motorcycle, and therefore the coordinates of the scene of the accident, setting the rescue chain in motion via the qualified BMW Call Center. However, the emergency call is not automatically triggered in situations which are not emergencies such as when the bike falls over when stationary, after single-vehicle accidents at low speeds, on impact caused by a pot-hole in the road or when passing over an obstacle.

Sensors on the motorcycle identify what event has occurred. A crash sensor detects events such as collisions with another vehicle or crashing into an obstruction. A banking angle sensor detects high and low-siders, i.e. which position the motorcycle is in.

The operating unit of the optional equipment item “Intelligent Emergency Call” is located on the right-hand side of the handlebars and is compact and ergonomic in design. In addition to the cover-protected SOS button for triggering or interrupting the emergency call, there is also an integrated microphone and speaker.

The optional “Intelligent Emergency Call” function will be available in several European markets for the first time in 2018. It must be remembered that the functionality will only be available in ConnectedDrive enabled markets to start with.

**Multifunctional instrument combination and integrated control concept with multi-controller and TUFT display.**

The instrument cluster of the new K 1600 B has two classic circular instruments for the speedometer and engine speed display. The information display on the 5.7-inch TFT colour screen allows attractive visualisation of text fields and graphics, among other things. Elements of the integrated operating concept include the multi-controller and a menu guidance system for controlling the comfort functions and the on-board computer.

**Comprehensive standard equipment for pure bagger-style pleasure.**

The new K 1600 B has a very extensive range of standard equipment. This includes xenon headlamps, ABS Pro, heated grips and seat heating, a cruise control and the Multi-Controller.

### 3. Equipment program.



#### **Optional equipment and Original BMW Motorrad Accessories – perfect BMW Motorrad customisation.**

A wide range of Original BMW Motorrad Accessories and options available ex works means that nothing is left to be desired in terms of the individualisation of the new K 1600 B. This includes the provision of comfortable foot rests for the passenger, while these elements can also be fitted to offer the rider a particularly relaxed “feet forward” position. Redesigned forged wheels with eleven double spokes each further enhance the exclusivity of the new K 1600 B.

Options are supplied directly ex works and are integrated in the production process. Original BMW Motorrad Accessories are installed by the BMW Motorrad dealer. These are features which can be retrofitted, too.

#### **Options.**

- **Safety package:** adaptive Headlight, daytime running light, tyre pressure control TPC, Hill Start Control.
  - **Comfort package:** Shift Assistant Pro, central locking, alarm system DWA, Keyless Ride, LED additional headlight.
  - **Touring Package:** reverse assist, audio system and preparation for navigation unit.
- 
- Shift Assistant Pro.
  - Reverse assist.
  - Intelligent Emergency Call.
  - Adaptive Headlight.
  - Keyless ride.
  - Hill Start Control.
  - Tyre pressure control TPC.
  - Central locking (only in conjunction with optional alarm system).
  - Alarm system DWA (only in conjunction with central locking).
  - LED additional headlight.
  - Audio system and preparation for navigation unit.
  - Preparation for audio system and navigation unit.
  - Preparation for navigation unit.
  - Storage compartment.
  - Engine crash bar.

- Front foot rests (only in conjunction with engine crash bar).
- Forged handlebars.
- Centre stand.

### **Original BMW Motorrad Accessories.**

#### **Storage.**

- Liners for case.
- Impact protection for case.
- Fuel tank bag, waterproof.
- Vario insert for tank rucksack.

#### **Design.**

- Wind deflector, chrome plated.
- Slipstream deflectors, chrome-plated.
- Mirror caps, chrome-plated.
- Case strips, chrome-plated.
- Forged wheels.

#### **Ergonomics and comfort.**

- Passenger foot rests.
- Heat sink.
- Seat, low (seat height: 750 mm).

#### **Navigation and communication.**

- Navigator V.
- Dual USB charger with cable for 12 V socket.

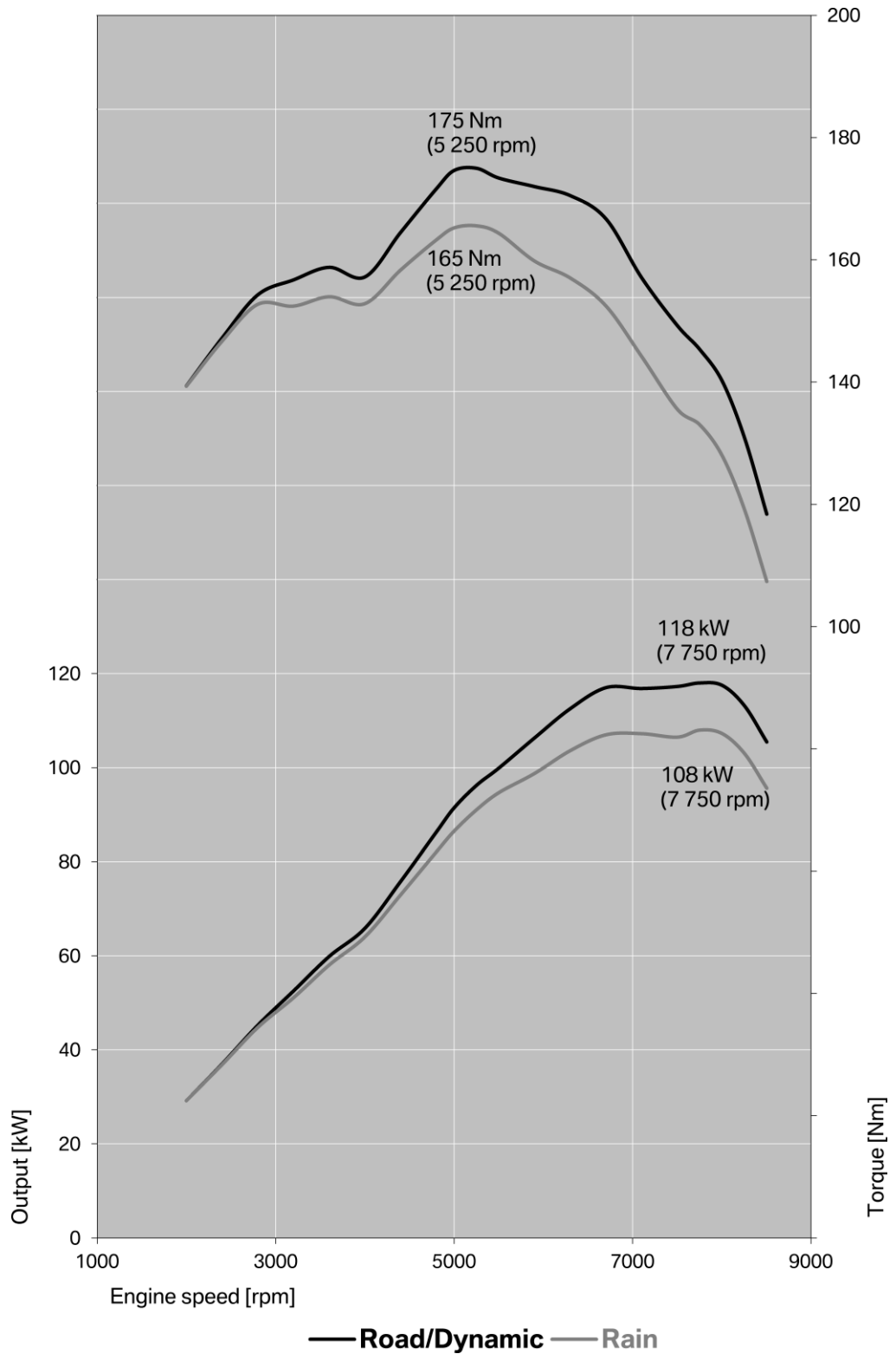
#### **Safety.**

- Ground lighting (only in conjunction with central locking; only for certain countries (not ECE)).
- Alarm system without central locking.
- Brake disc lock with integrated alarm system.
- BMW Motorrad warning triangle.
- First aid kit, large.
- First aid kit, small.

#### **Maintenance and technology.**

- BMW Motorrad battery charger 230 V.
- BMW Motorrad battery charger 110 V.
- BMW Motorrad battery charger for UK.
- Multifunction tool.
- Mini foot pump.
- Repair set for tubeless tires.

## 4. Engine output and torque.



## 5. Technical specifications.



<b>BMW K 1600 B</b>		
<b>Engine</b>		
Capacity	cc	1649
Bore/stroke	mm	72/67.5
Output	kW/hp	118/160
at engine speed	rpm	7 750
Torque	Nm	175
at engine speed	rpm	5 250
Type		Series
No. of cylinders		6
Compression/fuel		12.2:1 / Premium unleaded (95 RON)
Valve control		Bucket tappets
Valves per cylinder		4
Ø intake/outlet	mm	29/24.8
Throttle valve diameter	mm	52
Engine control		BMS-X
Homologation standard		EU4
<b>Electrical system</b>		
Alternator	W	700
Battery	V/Ah	12/19
Headlight		Xenon low-beam headlamp Halogen high-beam headlamp
Starter	kW	0.7
<b>Power transmission - gearbox</b>		
Clutch		Multi-plate wet clutch, hydraulically activated
Gearbox		Constant-mesh 6speed gearbox, helical cut
Primary ratio		1.617
Transmission ratios	I	2.230
	II	1.641
	III	1.319
	IV	1.101
	V	0.926
	VI	0.788
Rear wheel drive		Bevel gear
Transmission ratio		2.75
<b>Suspension</b>		
Frame construction type		Aluminium bridge frame, load-bearing engine
Front wheel control		BMW Motorrad Duolever
Rear wheel control		BMW Motorrad Paralever, central spring strut
Spring travel, front/rear	mm	115/125
Wheel castor	mm	106.4
Wheelbase	mm	1618
Steering head angle	°	62.2

<b>BMW K 1600 B</b>		
Brakes	front	Twin disc brake, Ø 320 mm, 4-piston fixed callipers
	rear	Single disc brake, Ø 320 mm, 2-piston floating calliper
ABS		BMW Motorrad ABS (partial integral)
Traction control		Optional BMW Motorrad DTC
Wheels		Aluminium cast wheels
	front	3.50 x 17"
	rear	6.00 x 17"
Tires	front	120/70 ZR 17
	rear	190/55 ZR 17
<b>Dimensions and weights</b>		
Total length	mm	2324
Total width with/without mirrors	mm	1000/980
Seat height (without rider)	mm	780
Unladen weight according to DIN, road ready, fully fuelled	kg	336
Permitted total weight	kg	560
Fuel tank capacity	l	26.5
<b>Performance figures</b>		
Fuel consumption (WMTC)	l/100 km	5.7
Acceleration 0-100 km/h	s	3.2
Top speed	km/h	> 200