The new BMW 760i.
The new BMW 760Li.
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1. Superior Power from Twelve Cylinders for Optimum Refinement: The New BMW 760i. The New BMW 760Li.

The new BMW 7 Series already sets the benchmark in luxury performance motoring – and now BMW is moving up the standard of maximum exclusivity and supremacy in this supreme class to an even higher level, following a completely new definition: The new BMW 760i and the new BMW 760Li are taking over the top position within BMW's model portfolio, representing the highest level of motoring refinement in their segment.

The heart and foundation of this exceptional new standard comes from the twelve-cylinder power unit featured in both top models in the BMW 7 Series. Developed as a completely new engine from the ground up, the V12 is a master-piece of modern engine technology. Superior power of 400 kW/544 hp comes at an engine speed of 5,250 rpm, with maximum torque of 750 Newton-metres (553 lb-ft) from just 1,500 rpm.

Combined with the likewise brand-new eight-speed automatic transmission, this twelve-cylinder offers not only unparalleled motoring refinement, but also supreme driving dynamics through its ability to convert seemingly unlimited power reserves spontaneously and with precise control at all times into supreme driving dynamics.

Once again, BMW's twelve-cylinder power unit is the epitome of refined performance, grand touring comfort, and stylish exclusivity. The new BMW 760i as well as the new BMW 760Li with its wheelbase extended by 14 centimetres or 5.5" for particular comfort – if not to say, luxury – at the rear, provide the clear answer to the question as to what one may expect of a genuine luxury performance saloon, with fascinating new features underscoring BMW's claim to leadership in the luxury segment.

The drivetrain with all its technical features is a masterpiece of supremacy in every respect. This applies both to the 6.0-litre all-aluminium power unit with TwinPower Turbo Technology, High Precision Injection with fuel injected directly into the combustion chambers, and to BMW's infinite double-VANOS camshaft adjustment as well as the eight-speed automatic transmission featured for the first time in a BMW.

Benefiting from all these technologies, the new BMW 760i and the BMW 760Li offer a new standard of motoring refinement, dynamic performance and all-

round efficiency in a vehicle with this kind of power and output. Acceleration to 100 km/h comes in just 4.6*) seconds, average fuel consumption in the EU test cycle is 12.9*) litres/100 kilometres on the new BMW 760i.

In determining the cars' fuel consumption, BMW's engineers have already taken the stricter EU5 emission standard into account, meaning that with the cars' performance improving significantly fuel consumption is down by approximately 4.5 per cent versus the former model.

The new BMW 7 Series: the perfect saloon for supreme motoring refinement.

Boasting superior suspension technology, innovative driver assistance systems and luxurious comfort, as well as a combination of elegance and sporting performance borne out clearly by the car's design, the BMW 7 Series offers all the qualities required to enjoy a truly incomparable driving experience with a new twelve-cylinder power unit of a standard never seen before.

Both the new BMW 760i and the new BMW 760 Li come as standard with Dynamic Damping Control including Dynamic Driving Control operated at the touch of a button on the centre console, speed-related Servotronic steering assistance, and BMW's Dynamic Drive anti-roll stability system.

In addition to these outstanding technologies, the BMW 760Li features air suspension including self-levelling on the rear axle. And as an option both models are available with Integral Active Steering offering speed-related adjustment of the steering angle on the rear wheels. With this enhanced steering function both front and rear, particularly the cars' grand touring comfort on the rear seats reaches an even higher level, above all when changing lanes at high speeds.

The supreme grand touring comfort offered by the new top-of-the-range models in the BMW 7 Series is further underlined by comfort seats, BMW's navigation system Professional, automatic air conditioning with four-zone control, cruise control complete with an automatic brake function, Park Distance Control, and Automatic Soft Close on the doors all featured as standard.

The innovative driver assistance systems available as an option include Lane Change Warning, Lane Departure Warning, Active Cruise Control with Stop-&-Go function, BMW Night Vision with detection of individual persons, the BMW Head-Up Display, a back-up camera and the Side View system. And to supplement the bi-xenon headlights as a further option, BMW offers the High-Beam Assistant and Adaptive Headlights including Bending Lights, variable light

*) Provisional figures.

distribution and adaptive headlight range control, setting new standards for safe driving at night.

Design: discreet signals on the outside, stylish exclusivity inside.
The outstanding looks of the BMW 760i and BMW 760Li benefit from the harmonious combination of elegance, sportiness and natural presence so characteristic of the new BMW 7 Series in its design. Offering 14 centimetres or 5.5" longer wheelbase, the extended version allows particularly comfortable access to the rear seats. And thanks to the unique design of the roofline and C-pillar contours, the side view of the car, despite the extra headroom for the rear-seat passengers, maintains the same overall impression as on the “regular” saloon with its “normal” wheelbase. Both body versions, incidentally, come with the longest wheelbase in their respective segments.

Visual reference to the V12 power unit on the outside of the BMW 760i and the BMW 760Li is similarly stylish and discreet. The kidney grille for the radiator boasts an extra-wide chrome frame in slightly concave design as well as bars extending powerfully to the front. From the side, 19-inch light-alloy wheels available exclusively on these models as well as the V12 model designation on the chrome-plated gills with their integrated side direction indicators at the transition point between the front side panel and the driver’s and, respectively, front passenger’s door likewise serve to identify these very special models.

An additional chrome bar between the unique dual tailpipes on the exhaust system provides a special sign of distinction at the rear of both models. The exhaust tailpipes integrated in the rear air dam at the right and left, in turn, are made up of two adjacent, rectangular pipe units embellished with chrome trim and cut at a slight angle, flush to their surrounds.

Inside the BMW 760i and the BMW 760Li the luxurious ambience is supplemented by various design features tailored specifically to these two models and matched in perfect harmony, again expressing the exclusive character of the V12 models. Stainless-steel door entry trim with an illuminated V12 cover, the instrument panel finished in nappa leather and surrounded by elegant seams, the roof lining and sun visors in alcantara as well as top-quality wood trim in exclusive burr walnut with individual inlays help to give the BMW 760i and the BMW 760Li a further stylish sign of distinction versus the other models in the BMW 7 Series.

The new V12 power unit: perfection as the underlying principle, innovation as the driving power.

The twelve-cylinder power unit in a BMW 7 Series Luxury Performance Saloon guarantees a driving and travel experience quite unique in every respect. No other engine offers such an outstanding combination of power and refinement, no other power unit provides the same supreme standard of prestige.

Now these features come out even more clearly, with BMW's new V12 offering significantly more power and torque compared with their predecessors, optimising engine response and the ongoing surge of power, and further refining the engine's acoustics. The progress achieved in this way is clearly recognisable right from the start.

These features also stand out clearly from the BMW 750i which, with its modern V8 featuring TwinPower Turbo Technology and High Precision Injection, as such already offers the power and performance of a conventional twelve-cylinder.

Hence, the new V12 maintains the outstanding position of BMW's twelve-cylinder models also in the new generation of the BMW 7 Series, giving the driver of a BMW 760i and, respectively, a BMW 760Li all the assurance of absolute supremacy in the luxury class. Yet a further point is that the new engines combine the outstanding qualities of a V12 with up-to-date efficiency, offering a level of fuel economy and emission management even better than eight-cylinder models in the same segment as the BMW 7 Series.

By tradition, the twelve-cylinder enjoys a special status worldwide unmatched by other engines of different design and configuration. The twelve-cylinder represents the highest level of competence in engine technology and justifies its outstanding position through qualities only this drive concept is able to offer.

The unique status of the twelve-cylinder as an incomparably powerful and, at the same time, refined power unit is based on a construction and design principle which offers perfect conditions for supreme power and performance achieved without the slightest effort. Benefiting from an angle of 60° between the two rows of cylinders, the V12, in its supreme elimination of vibrations, comes closer to the highest standard conceivable in physics than any other engine.

All components and design features on the all-aluminium engine block are built and constructed for supreme stiffness on minimum weight. Using a closed-deck structure combined with bolts holding the cylinder head down on the floor plate

of the crankcase, the engine, to mention just one example, ensures maximum stability on the cylinder liners. Double bolts on the main bearings with an additional connection to the side panels through threaded support bushes and bolts reduce the influence of lateral forces from the crankdrive on the crankcase.

Further components of the engine block serving in typical BMW twelve-cylinder style to reduce vibrations to an absolute minimum are iron-coated aluminium pistons, forged connecting rods assembled through the cracking process, as well as the crankshaft also forged for absolute perfection. This also makes the sound of the engine when idling a very special experience where the driver first has to look at the rev counter to see whether the engine is running at all.

The new V12 power unit comes with 5,972 cc maintaining exactly the same cylinder volume as on the former engine. Displacing 497.7 cubic centimetres per cylinder, the engine therefore offers exactly the right size and dimensions acknowledged by engine specialists as absolutely ideal. Bore of 89 mm/3.50" and stroke of 80 mm/3.15" provides a ratio between these two parameters of 0.9, while the compression ratio is a remarkably high 10.0 : 1 quite unusual on a turbocharged power unit.

Introduction of TwinPower Turbo Technology
on the twelve-cylinder.

BMW's new twelve-cylinder comes with a number of special technical features serving to capitalise on the potential it offers through its design principle and basic structure. In particular, this includes the first-ever use on a twelve-cylinder of TwinPower Turbo Technology and High Precision Injection with gasoline injected directly into the combustion chambers.

Featuring this combination of superior technologies already to be admired on BMW's six- and eight-cylinders, responding sensitively and directly even to small movements of the gas pedal, maintaining a consistent torque curve and offering a level of fuel economy and emission management quite unusual for an engine of this calibre, the new twelve-cylinder again stands out from the competition in every respect.

Thanks to the small cylinder angle of just 60°, the two exhaust gas turbo-chargers developed specifically for the new V12 fit in compact arrangement on the outside of the two rows of cylinders, each supplying six cylinders with compressed air.

The turbochargers stand out in particular through their unusually good compressor and turbine efficiency – and through their particular position they provide ideal conditions for keeping the pipes between the exhaust manifold and the turbochargers short and straight for ideal flow conditions. Central supply of turbocharger air into the air collector, in turn, helps to optimise both the engine's acoustics and charge cycle. The exhaust gas manifolds identical on each row of cylinders come in each case with two three-in-one connections geared to the engine's firing sequence. In combination with the catalytic converters optimised for minimum counter-pressure, this special configuration of the exhaust gas manifolds sets the foundation for outstanding spontaneity in following the gas pedal as well as supreme power and torque coming from the twelve-cylinder.

Peak torque now increased to 750 Newton-metres or 553 lb-ft comes at just 1,500 rpm and is maintained consistently all the way to 5,000 rpm. Compared with the former engine, this means an increase in torque by 25 per cent now developed at an engine speed approximately 2,300 rpm lower.

Engine power is also built up more quickly than on the previous engine, as is borne out by the much steeper power curve leading up to maximum output of 400 kW/544 hp at just 5,250 rpm.

Intelligent solution for even more power and supremacy.
The introduction of TwinPower Turbo Technology raises the twelve-cylinder to a level of output and torque a naturally-aspirated power unit would achieve only with much larger displacement. The increase in engine size and weight inevitable in such a case, together with negative effects on the centre of gravity, fuel consumption and the agility of the car, are all avoided most efficiently and intelligently through turbocharger technology.

A further point is that TwinPower Turbo Technology gives the new V12 its unparalleled power and performance characteristics borne out in particular by the superior development of full power and torque right from the start just above idling speed and then maintained over a wide load range.

To ensure sensitive and precise dosage of power at all times, the compressed turbocharger air is cooled by a technically very demanding and elaborate indirect intercooler. This serves to minimise the overall volume of air required and shorten any delay times, again enabling the engine to respond ideally to the driver's foot on the gas pedal. An additional coolant pump feeds the separate coolant circuit required for this purpose with its air/coolant heat exchanger positioned directly on the intake unit.

The catalytic converters on the new twelve-cylinder come with the most advanced and sophisticated exhaust gas sensors and quickly reach their optimum operating temperature thanks to their special position close to the engine. Efficient treatment of exhaust gases ensures full maintenance of all international emission standards, the BMW 760i and the BMW 760Li fulfilling the EU5 emission standard in Europe and the ULEV II standard in the USA.

To reduce counter-pressure the exhaust system comes on the underfloor with largely straight pipes and manifolds increased in size to the largest possible diameter. Exhaust flaps around the silencer masterminded by the electronic control unit as a function of engine maps provide exactly the right engine sound precisely geared to current driving conditions. When idling, therefore, the V12 remains absolutely silent, not emitting any noise at all. The same applies to cruising conditions, with only very discreet sound from the engine being emitted to the outside. So it is only at higher engine speeds that the driver receives appropriate acoustic feedback on the development of power, with the engine providing its muscular V12 sound when accelerating fast and under full power. Again, this special sound effect under such dynamic conditions authentically reflects both the capacity of the engine and the intensity of power coming from within the engine compartment, characterising the dynamic qualities of BMW's twelve-cylinder.

Optimised combustion and maximum efficiency ensured by - High Precision Injection.

BMW High Precision Injection is a second-generation direct injection technology serving to optimise the combustion process and use the energy contained in the fuel with maximum efficiency. Piezo-injectors positioned in the middle of the cylinder head allow particularly precise dosage of the fuel injected into the combustion chambers.

In combination with TwinPower Turbo Technology, High Precision Injection is featured in all gasoline engines in the BMW 7 Series. And now, in the new V12 power unit, this technology ensures particularly efficient and clean combustion as the starting point for a level of fuel economy and - emission management quite unparalleled in this class of performance.

Opening up to the outside, the piezo-injectors are positioned in the cylinder head between the valves and, as a result, directly next to the spark plugs. They are supplied with fuel through stainless-steel pipes, fuel then being injected into the combustion chambers in finely atomised form at a pressure of up to 200 bar. This system pressure is generated by single-plunge fuel pumps on each row of cylinders and is maintained reliably at all times by short pipes and fuel travel.

The fuel injected in this process spreads out in conical form, thus burning in a particularly smooth and clean process. This, in turn, has a positive effect on engine emissions and sound, the cooling effect of the fuel/air mixture provided by direct fuel injection helping in addition to achieve a higher compression ratio than on a turbocharged engine with manifold injection. The bottom line, therefore, is an even higher degree of engine efficiency generating more power on less fuel.

In their configuration and structure, the cylinder heads largely follow the particular position of the injectors and spark plugs as well as the combustion process provided by High Precision Injection. Short combustion phases optimised for maximum efficiency build up a high level of pressure and temperature requiring optimised cylinder head geometry and an effective flow of coolant. The cylinder head components cast in a gravity process stand out in particular through their very high level of stiffness, while the cylinder head covers are made of aluminium and come with rubber profile seals.

Double-VANOS and volume flow-controlled oil pump for maximum efficiency.

Again in typical BMW style, the new twelve-cylinder comes with double-VANOS for infinite adjustment of camshaft control timing. This ensures part load running conditions with a high level of residual gas and reduced throttle loss for maximum fuel efficiency.

A further advantage of double-VANOS is its support in giving the engine a particularly direct response. Joined in a thermal process, the camshafts come with forged cams, additional triple cams on the intake side serving to drive the high-pressure fuel pumps. The valves on the exhaust side, in turn, are filled with sodium for optimum cooling and come with chrome-plated shafts.

The supply of oil to the new twelve-cylinder has also been optimised, the volume flow-controlled oil pump operating on individual demand with maximum efficiency: The six-chamber pendulum-slide pump delivers only as much oil as the engine requires at any given point in time under specific driving conditions.

An oil level sensor is integrated in the oil sump made of pressure-cast aluminium. And instead of a manual oil dipstick, an oil level indicator in the instrument cluster also operating while driving informs the driver of the oil level whenever required.

The new twelve-cylinder models in the BMW 7 Series again feature a wide range of technologies for minimum fuel consumption and emissions based on BMW's strategy of EfficientDynamics. These include Brake Energy Regeneration, electric coolant pumps operating on demand, and the volume flow-controlled oil pump further optimising the balance of load performance and fuel consumption.

With an increase in engine output versus the former models by 22 and an increase in maximum torque by 25 per cent, the average fuel consumption determined in the EU test cycle has been reduced to 12.9*) litres/100 kilometres. The emission rating of the BMW 760i is 299*) grams per kilometre.

The engine coolant system on the new twelve-cylinder excels through consistent integration of all pipes in the crankcase, optimised cross-sections and the surface structure ensuring a maximum heat exchanger function helping to warm up the engine far more quickly than before on the former power unit.

The arrangement of the coolant inlet immediately next to the main inlet duct for supplying oil serves in addition to connect the two media in thermal terms, again helping to warm up engine oil and maintain the ideal temperature at all times.

The flow of coolant is separated on the two rows of cylinders, in each case running diagonally from the rear outside to the front inside. And last but not least, the arrangement of the outlets again helps to consistently spread out and maintain the temperature level over a wide range of engine speed.

BMW's outstanding competence in twelve-cylinder technology: a long tradition of supreme performance.

This is the fourth time that a twelve-cylinder power unit marks the top end of the engine portfolio featured in the BMW 7 Series. And indeed, every new generation has further reinforced BMW's position as the leading manufacturer of luxury performance saloons. A BMW 7 Series with a twelve-cylinder power unit stands for exclusivity, supremacy and, not least, genuine innovation, the top-of-the-range engines providing the highest standard also on account of the maximum demands they are expected to meet right from the start in the development process.

BMW's outstanding competence in the development and production of twelve-cylinder power units is based on a long tradition extending all the way back to the year 1925 when the Company for the first time hit the headlines by building an aircraft engine with twelve cylinders. Back then BMW's V12 developed

*) Provisional figures.

maximum output of 750 hp, with two BMW twelve-cylinders powering the Dornier Wal seaplane just five years later in its record flight across the Atlantic.

In the second half of the 20th century BMW became the pioneer in introducing the twelve-cylinder in the most outstanding luxury cars. The BMW 750i launched in 1987, for example, was the first German twelve-cylinder saloon after the war. In the years to follow a long story of success in motorsport likewise contributed to the exceptional reputation of BMW's twelve-cylinders. The BMW V12 LMR, for example, dominated the racing scene right from the start in its very first race in 1999, the 12 Hours of Sebring, and in the same season clinched overall victory in the 24 Hours of Le Mans.

World debut: eight-speed automatic transmission in the new BMW 760i and the new BMW 760Li.

The unique qualities of the new V12 power unit with TwinPower Turbo Technology and High Precision Injection are combined in the new BMW 760i and the new BMW 760Li with an equally innovative concept for the transmission of power: the newly developed eight-speed automatic transmission making its world debut in a BMW production car. Ideally tailored to the power and performance characteristics of the twelve-cylinder power unit, the eight-speed automatic transmission combines supreme gearshift comfort, sportiness and efficiency at a level never achieved before.

The new eight-speed automatic transmission excels through the innovative configuration of gears and gearsets allowing the use of additional gears and a larger range of gear increments than on the former six-speed automatic transmission, without any negative effects on the size of the transmission, its weight, and the inner efficiency of the system.

The eight forward gears and the reverse gear all incorporate four simple gearsets and five gearshift elements. The innovative arrangement of these components seen for the first time on an eight-speed automatic transmission ensures that only two clutches are open in each gear at any given point in time, significantly reducing frictional losses under all driving conditions to an absolute minimum.

Over and above the wider range of gear increments and the high degree of internal efficiency, this is a further factor contributing to the outstanding overall efficiency of the new transmission system. So again, the intelligent concept of this new eight-speed automatic transmission harmonises perfectly with the BMW EfficientDynamics development strategy.

Introduction of the first eight-speed automatic transmission in the BMW 760i and the BMW 760Li marks the starting point to a generation change in the area of power transmission systems. The six-speed automatic transmissions currently featured in all BMW model series already set the standard in terms of shift comfort, reaction time, gearshift speed, and efficiency and, through their compact design and configuration as well as their universal use in various vehicle segments and power classes, already offer unparalleled all-round qualities. The first and foremost objective in developing the new generation of automatic transmissions, therefore, was to retain all the design features of the six-speed automatic transmission and add new potentials in terms of motoring comfort, performance and efficiency.

Optimum gearset configuration as the result of scientific research.
To achieve significant progress over BMW's proven six-speed automatic transmissions, BMW's engineers right from the start initiated an in-depth development process providing the basis for the new transmission. The initial consideration was that particularly the improvement of efficiency as desired was only possible with a transmission system offering an even larger number of gears and a wider range of gear increments versus a six-speed automatic transmission. A further objective was to keep the number of additional components to a minimum in order to optimise the inner efficiency of the system.

Apart from BMW itself, a number of specialised partners in development such as ZF Friedrichshafen AG participated in the search for an optimum concept fulfilling all these requirements. Working together closely, the complete team developed analytical methods serving to establish and balance the pros and cons of all theoretically conceivable variants of a planetary gear system. To begin with, both the number of gears was open as was the structure of the new transmission system with its underlying concept. The fundamental objectives, therefore, were to achieve the highest conceivable standard of efficiency and to keep the new transmission compact and light.

Studies jointly conducted by engineers and scientists eventually led to a solution offering the best balance of internal efficiency and overall running qualities: the new eight-speed automatic transmission with two additional gears and a gear increment range increased from six to seven gear units, with the number of gearsets being increased by only one to a total of four and the number of clutches remaining unchanged.

Triple progress with two additional gears: gearshift dynamics improved, comfort optimised, efficiency maximised.
Thanks to the larger range of gear increments now offered by the new transmission, the driver is able to use the highest gear at significantly reduced engine speed far more often than before. In the BMW 760i and the BMW 760Li, this not only optimises the car's economy also at higher speeds, but also enhances the smoothness and refinement of the twelve-cylinder.

With the number of gears being increased to eight, the individual steps between gears are smaller than before, despite the overall range of gear increments. Clearly, this benefits the sporting character of the transmission and, as a result, the dynamic nature of the car again in typical BMW style.

While accelerating the harmonious balance of gear ratios provides a very smooth and consistent increase in road speed, a feature corresponding ideally with the ongoing surge of power from the new V12 and again confirming the unparalleled supremacy of the BMW 760i and the BMW 760Li.

A further advantage of the small gear increments is the enhancement of gearshift comfort in BMW's most outstanding Luxury Performance Saloon, with only a slight change in engine speed when shifting from one gear to another.

The reaction and gearshift times even shorter than with the former six-speed automatic transmission benefit both motoring comfort and driving dynamics, with only one clutch having to be disengaged when shifting up or down either one or two gears. At the same time direct gear detection enables the driver to shift up or down by more than two gears, again with extremely short reaction and gearshift times. And last but not least, the downshift from eighth to second gear particularly important for spontaneous acceleration also takes place as a direct gear change requiring the system to open only one clutch.

This particular configuration is of great significance for supreme driving pleasure in the BMW 760i and the BMW 760Li, enabling the driver to use the higher gears for perfect efficiency and motoring refinement particularly often while enjoying the car's maximum performance spontaneously at all times.

Flexible, up-to-date, oriented to the future.
With the number of transmission components being increased only slightly over the former six-speed automatic transmission, the new eight-speed automatic offers an unusually high level of internal efficiency. So-called gear-mesh efficiency, for example, is more than 98 per cent in each gear. And being configured as a direct gear, sixth gear reduces frictional losses to zero.

The low weight of the new transmission virtually identical to that of the former six-speed automatic likewise benefits the overall efficiency of the car, with the integration of an additional gearset being compensated by the optimisation of weight in other areas.

In all the minimum converter slip, the high degree of internal efficiency, low frictional losses with only two clutches open at a time, the longer transmission ratios on the higher gears and the transmission management giving preference to low engine speeds at all times offer a reduction of fuel consumption versus the former six-speed automatic by approximately 6 per cent.

As a result of these improvements and highlights in technology, the new eight-speed automatic transmission is not only the optimum system currently available, but also a future-oriented solution for the transmission of power in a premium car.

The new transmission may be combined with all kinds of engines and levels of performance, and may be integrated not only in cars with rear-wheel drive, but also in all-wheel-drive models. At the same time the eight-speed automatic transmission may be combined with hybrid drive, making it part of BMW's Active Hybrid technology combining an eight-cylinder gasoline engine with an electric motor. This innovative drive concept will be reaching production standard in the first hybrid model in the BMW 7 Series in the course of 2009.

Setting the new standard in motoring supremacy:
the new BMW 7 Series with twelve-cylinder power unit and
eight-speed automatic transmission.
Twelve cylinders and eight speeds – this combination re-defines the most supreme standard of exclusivity and refinement in the luxury class. The drive technology featured in the new BMW 760i and the new BMW 760Li makes a significant contribution to the significant innovation of power technology ensured by the BMW brand, the unique power and performance characteristics of the new V12 power unit and the innovative concept of eight-speed automatic transmission joining forces to provide a truly fascinating driving experience.

Superior power is thus converted into equally superior driving dynamics with an exceptionally high standard of motoring refinement. Offering supreme smoothness and full availability of enormous power reserves at all times, the twelve-cylinder simply begs the driver and passengers to enjoy a most comfortable driving experience wherever they go, experiencing sporting performance of the highest calibre as an unparalleled asset in luxury performance motoring.

The eight-speed automatic transmission perfectly supplements both the supremacy and the dynamic character of the power unit. At the same time the exceptional efficiency of both top models in the BMW 7 Series results not just from the V12 power unit, but also from the transmission. Innovations developed in the context of BMW EfficientDynamics allow this luxury saloon to combine acceleration to 100 km/h in 4.6*) seconds with average fuel consumption in the EU test cycle of 12.9*) litres/100 kilometres.

The outstanding position of the new BMW 760i and the new BMW 760Li is further underlined by suspension technology specially developed for this Luxury Saloon, combining innovative driver assistance systems partly exclusive to BMW with a wide range of comfort amenities all featured as standard. More than ever before, therefore, both models meet the demands and requirements of the most discerning motorist seeking individual mobility of the highest calibre as part of his or her lifestyle dedicated to absolute perfection.

*) Provisional figures.

2nd Specifications. (provisional ECE figures)
760i, 760Li.

Body		**760i Saloon**	**760Li Saloon**
No of doors/seats		4/5	4/4
Length/width/height (unladen)[1)]	mm	5,072/1,902/1,473	5,212/1,902/1,484
Wheelbase	mm	3,070	3,210
Track, front/rear	mm	1,611/1,650	1,611/1,650
Turning circle	m	12.2	12.7
Tank capacity	approx ltr	82	82
Cooling system incl heater	ltr	15.1	15.1
Engine oil	ltr	10.5	10.5
Weight, unladen, to DIN/EU[2)]	kg	2,105/2,180	2,175/2,250
Max load to DIN	kg	590	590
Max permissible weight	kg	2,695	2,765
Max axle load, front/rear	kg	1,365/1,440	1,365/1,450
Max trailer load[3)]		750	750
braked (12%)/unbraked	kg	2,100/750	2,100/750
Max roof load/max download	kg	100/100	100/100
Luggage compartment	ltr	500	500
Air drag	cd x A	0.32 x 2.42	0.32 x 2.42

Power Unit			
Configuration/No of cyls/valves		V/12/4	V/12/4
Engine management		MSD87-12	MSD87-12
Capacity	cc	5,972	5,972
Stroke/bore	mm	80.0/89.0	80.0/89.0
Compression ratio	:1	10.0	10.0
Fuel grade[4)]	RON	RON 91–98	RON 91–98
Max output	kW/hp	400/544	400/544
at	rpm	5,250	5,250
Max torque	Nm/lb-ft	750/553	750/553
at	rpm	1,500–5,000	1,500–5,000

Electrical System			
Battery/installation	Ah/–	90/luggage compartment	90/luggage compartment
Alternator	A/W	210/2,940	210/2,940

Chassis and Suspension

Suspension, front	Double track control arm axle with separated lower track levers, aluminium; small steering roll radius; anti-dive
Suspension, rear	Integral-Vmulti-arm axle, aluminium, separate steering, with anti-squat and anti-dive, dual accoustic separation (air suspension with self-levelling featured as standard)
Driving stability systems	DSC (incl ABS, CBC, DBC, ASC); VDC2 (Electronic Damper Control) featured as standard Dynamic Drive (anti-roll stability system), optional

Brakes, front		Single-piston swing-calliper disc brakes (inner-vented)	
Diameter	mm	374 x 36	374 x 36
Brakes, rear		Single-piston swing-calliper disc brakes (inner-vented)	
Diameter	mm	370 x24	370 x24
Steering		Rack-and-pinion hydraulic steering with speed-related power assistance (Servotronic) and CO_2-optimised pump 3.1 revolutions of the steering wheel	
Steering transmission, overall	:1	19.1	19.1
Type of transmission		Eight-speed automatic	
		8HP90	8HP90
Gear ratios I	:1	4.70	4.70
II	:1	3.13	3.13
III	:1	2.10	2.10
IV	:1	1.67	1.67
V	:1	1.29	1.29
VI	:1	1.00	1.00
VII	:1	0.84	0.84
Vlll	:1	0.67	0.67
R	:1	3.30	3.30
Final driv	:1	2.81	2.81
Tyres front		245/45 R19 98Y RSC	245/45 R19 98Y RSC
Tyres rear		275/40 R19 101Y RSC	275/40 R19 101Y RSC
Rims front		8.5 J x 19 light-alloy	8.5 J x 19 light-alloy
Rims rear		9.5 J x 19 light-alloy	9.5 J x 19 light-alloy

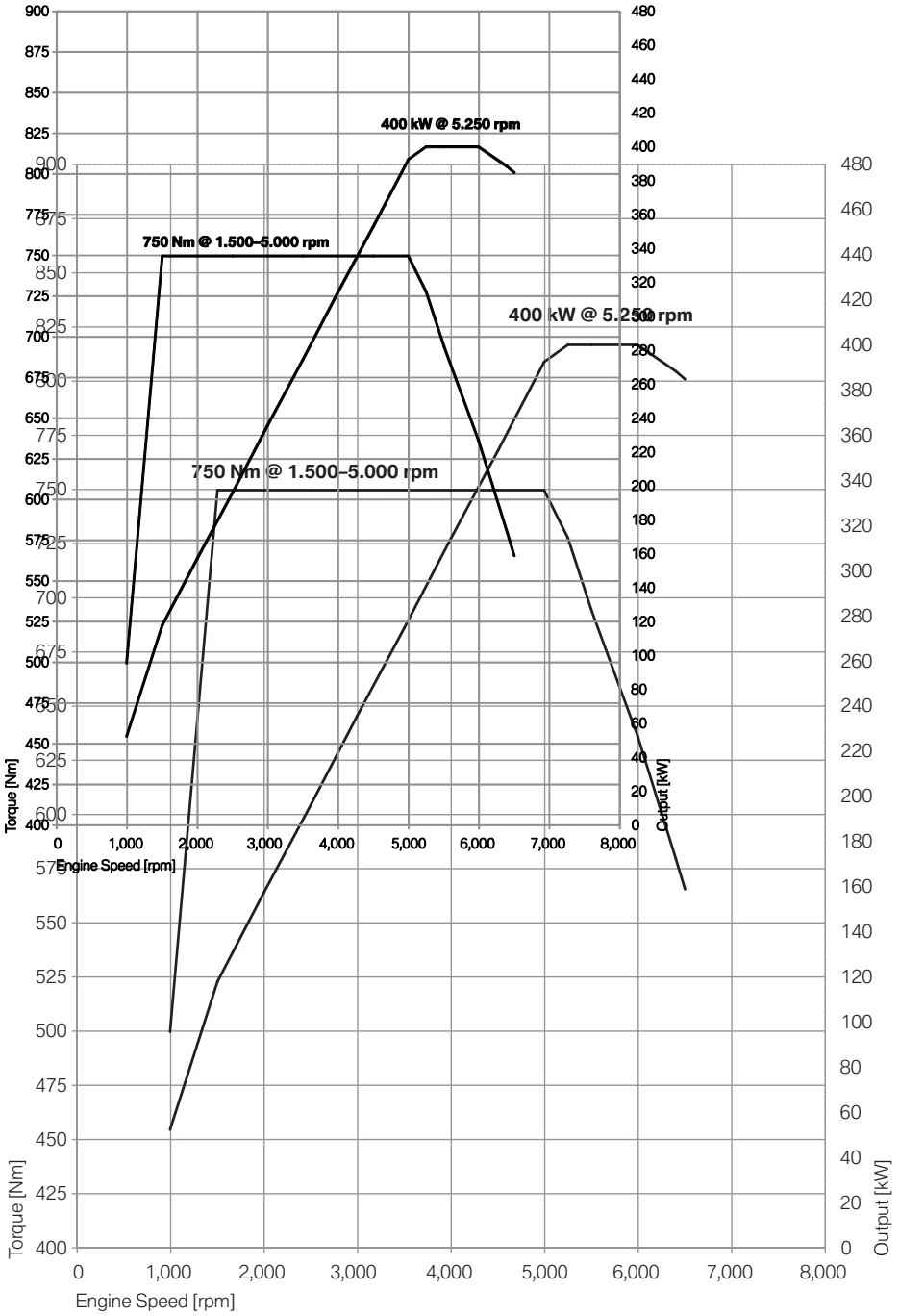
Performance			
Power-to-weight ratio, DIN	kg/kW	5.45	5.6
Output per litre	kW/hp	67.0/91.1	67.0/91.1
Acceleration 0–100 km/h	sec	4.6	4.6
Top speed	km/h	250	250

Fuel Consumption in the EU Cycle			
Combined	ltr/100 km	12.9	13.0
CO_2 emissions, EU	g/km	299	303

Miscellaneous		
Emission rating	EU5	EU5

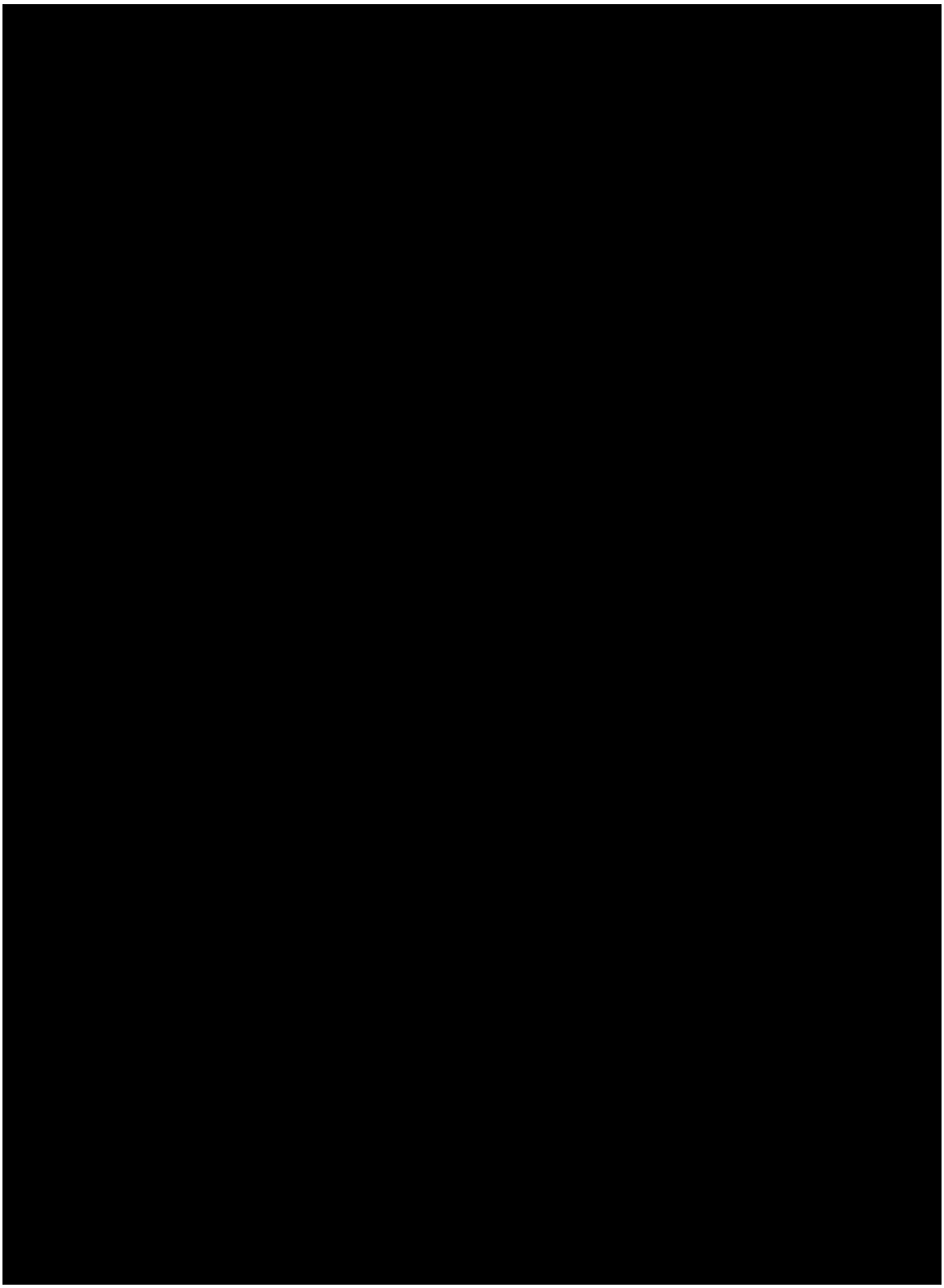
[1] Height with roof aerial: 760i: 1,479mm; 760Li: 1,490mm.
[2] Weight of car in road trim (DIN) plus 75 kg for driver and luggage.
[3] May be increased under certain conditions.
[4] Performance and consumption data for RON 98 fuel.

3. Output and Tourque Diagrams.
760i, 760Li.



4. Exterior and Interior Dimensions.
760i, 760Li.

BMW 760i.



BMW 760Li.