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# Audi S3 Supreme performance in the compact class

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The equipment and data stated here relate to the model range available in Germany. We reserve the right to make changes. Errors and omissions excepted.

#### Short copy

# Audi S3 Superior performance in the compact class

The S3 is another milestone in the history of Audi's S-type models. It is a continuation of the company's strategy of having a top-of-the-range model offering superior performance in every class. The Audi A3 impresses with its combination of an extremely high-torque turbocharged engine and the superior drive concept, quattro. The S3 offers powerful acceleration whatever the situation and, with its high lateral stability, provides the maximum possible in active safety. Agile handling, a high level of directional stability on corners and large safety margins at the limits under all road conditions are among its most impressive characteristics.

A characteristic of all Audi's S models is their original, sporting yet restrained styling. The strongly shaped wheel arches increase the S3's width to 1,763 mm. Its powerful appearance is further emphasised by the large air intakes in the specially shaped bumpers. The standard xenon headlights behind their clear glass covers and the fog lights integrated into the front skirt emphasise the dynamic qualities of the S3.

The 17-inch "Avus" cast aluminium wheels give the car a unified appearance in side view. The 225/45 R 17 W tyres ensure that the car appears worthy of the "S" range in every respect and, in combination with the quattro drive, provide outstanding traction and braking.

The car's sports suspension, its overall height of 1,415 mm and a roof spoiler that blends perfectly into the car's outlines make the S3 look particularly compact. The tail pipes made of high-grade stainless steel are another striking feature.

In addition to the colours familiar from the A3, there are two new colours with a sporting look for the S3: Absolute red, at no extra charge, and Imola yellow at extra charge.

When you open the doors, you'll notice the aluminium sill plates with their S3 logo opening the way to the exclusive interior. Body-hugging Recaro sports seats are fitted as standard and offer the driver and front-seat passenger optimum lateral support. There is a choice of three different materials, the standard Jacquard Satin or, at extra charge, a combination of Alcantara and silk nappa leather or silk nappa leather alone, plus five different colours for the interior.

Together with the ergonomic, 3-spoke leather-covered sports steering wheel and the high-gloss appliqué trim, the grey dials of the instrument panel lend the interior a special ambience.

The standard equipment list includes the FIS driver information system with Auto-Check Control and on-board computer, an anti-theft alarm system that monitors the interior, remote central locking and illuminated vanity mirrors in both sun visors.

High-quality optional extras include automatic air conditioning, three different audio installations, various telephone systems and a navigation system.

The heart of the S3 is the 1.8-litre four-cylinder turbocharged engine, which provides a maximum torque of 270 Nm at just 2,100 rpm. This is maintained right up to 5,000 rpm and allows powerful acceleration and top-class flexibility in every situation. The Audi S3 accelerates from 0 to 100 km/h in just 6.8 seconds and takes just 11.5 seconds to go from 60 to 120 km/h in fifth gear. Power is delivered without noticeable turbine lag right from the bottom of the engine-speed range, reaching a maximum of 154 kW (210 bhp) at 5,800 rpm. Fuel consumption is 9.1 litres/100 km (overall consumption according to 93/116/EU). The engine meets the EU III D emission limits.

The standard 6-speed gearbox with its short travel and precise changes allows the driver of the Audi S3 to make optimum use of the car's turbo power. As on the Audi TT quattro, power is distributed between the front and rear wheels by a hydraulic multi-plate clutch. Quattro permanent four-wheel drive in combination with an electronic differential lock (EDS) at the front ensures optimum traction under all conditions.

The special, slightly lowered, configuration of the sports suspension so typical of Audi provides the occupants with an unusually comfortable ride for a vehicle set up to give sports performance. At the front there is McPherson-strut suspension with newly developed forged wishbones, new guide joints with thicker pivots, new cast-steel pivot bearings and special suspension geometry for rock-steady wheel alignment. The independent suspension at the rear, with single trailing arms and double wishbones, is a space-saving design with separate springs and shock absorbers, the latter being arranged at an angle to the vertical.

The useful configuration of its load space, which has a volume of 270 litres that can be increased to 1,020 litres by folding down the rear seat back (split 1/3 to 2/3), makes the Audi S3 a particularly practical car.

The low-fade brakes with ventilated discs front and rear provide first-class braking when necessary. The driver also has the assistance of a powerful ABS system with integral Electronic Brake Pressure Distribution (EBD).

Like the A3 - which received the maximum four stars in the demanding Euro NCAP crash test in May 1998 - the Audi S3 meets Audi's high safety standards. In addition to its numerous active safety components, the Audi S3 offers outstanding protection to its occupants, with driver and front-seat passenger airbags and side airbags at the front, pyrotechnical seat belt pre-tensioners for all four lap-and-shoulder belts, belt-force limitation at the front and high-strength side-impact protection bars made of aluminium in the doors.

The Audi S3 will be available in Germany from spring 1999, at a list price starting at 56,800 German Marks.

#### Full copy

#### Audi A3 - Supreme performance in the compact class

The Basic Concept

#### The Audi S Philosophy

The distinctive "S" abbreviation stands for a very special definition of sports performance and style: power in abundance but also visual restraint. This is performance that offers the driver maximum control, dynamic performance and, above all, driving pleasure. Performance in which effortless poise and control count for more than mere maximum power.

The S3 is another milestone in the history of Audi's S-type models. It represents a continuation of the company's strategy of having a top-of-the-range model offering superior performance in every class, including now the compact class. Another example of a unique but typically Audi combination of advanced technical solutions for a memorable driving experience and a high level of safety. The Audi A3 impresses with its combination of an extremely high-torque turbocharged engine and the superior drive concept, quattro.

A glimpse at the history of the S models, which goes back as far as the 1981 rallying season, will be enough to show the potential of this combination. That was when Audi first caused a stir with its concentrated turbo power and permanent four-wheel drive. In 1985 the "S" name first began to attract attention, when the Audi Sport quattro S1 driven by Michèle Mouton stormed to victory in the Pikes Peak Race in Colorado U.S.A. 1986 saw Bobby Unser take first place on the victory rostrum and in 1987 Walter Röhrl set a new track record. The equal superiority of powerful turbocharged engines combined with the quattro permanent four-wheel drive system on fast asphalt roads was demonstrated in the TransAm Championship of 1988. At the first attempt, the Audi 200 quattro TransAm won eight races, the driver's title, the constructors' title and the admiration of its competitors.

Not long after the launch of the first S-Series model in 1990, the abbreviation "S" was already a synonym for sporting road cars with impressive performance figures and a distinctive appearance. But technology was never an end in itself; what counted were the advantages it conferred, especially for the keen driver. For example, the quattro permanent four-wheel drive system. In combination with the continuously available turbo power, it offers maximum acceleration and hence active safety. Top-class straight-line stability, agile handling, a high level of directional stability on corners and large safety margins at the limits under all road conditions are among its most impressive characteristics.

Audi S3 drivers are people with an enthusiasm for technology.

#### The Looks

#### Design

A characteristic of all Audi's S models is their distinctive and sporty yet restrained styling. The differences cater for the wishes of the relevant target groups. Taking the Audi A3's prize-winning design as their starting point, the designers of the S3 have used bold lines to create something completely original and very sporting in character.

The first thing that will strike the admirer is the car's muscular appearance. The strongly profiled wheel arches increase the Audi A3's width to 1,763 mm. The car's powerful aura at the front is further emphasised by the large air intakes in the specially shaped body-coloured bumpers.

It is only at the second glance that you notice the discreet S emblem on the radiator grille. The same distinguishing mark is used at the rear of all S models. The grey-look radiator grille is differentiated by additional vertical bars. Its typical shape and the four chrome-coloured rings are an important part of the brand image, making the S3 immediately recognisable as an Audi.

A particularly striking detail of the Audi A3 are the xenon headlights - fitted as standard - with their clear glass covers. They are complemented by the compulsory headlight washing system and automatic headlight range control, and by fog lights integrated into the front skirt. The bluish light from the xenon headlights corresponds in its colour spectrum to that of daylight and thus ensures safe driving without fatigue even on long journeys at night.

The side view of the Audi A3, which is available only as a two-door version, has impressively clean lines and compact proportions. In addition to the narrow panel gaps and new door handles, the body-coloured sill panels with their clearly defined anthracite grey skirts also serve to strengthen this impression.

A closer look at the car from the side will reveal why designers prefer large wheels in their sketches. Because they fill out the wheel arches, the 17-inch Avus wheels give the car a highly unified appearance in side view and suggest the Audi A3's performance potential even when it's stationary. The 225/45 R 17 W tyres give the car an appearance worthy of the designation "S" in every way and in combination with the quattro drive system ensure outstanding traction and agile handling.

The distinctive character of the Audi S3 is also evident at the rear. The roof spoiler, which blends smoothly into the car's outlines, sets a sporty tone and optimises air flow at higher speeds.

The carefully configured aerodynamics of the Audi S3 with its excellent  $c_D$  value of 0.335 improve the car's performance, lower fuel consumption and reduce interior noise at high speed.

With its sports suspension, the slight lowering of the body in comparison with the A3, and its large wheels, the Audi S3 with an overall height of 1,415 millimetres has a low-slung look on the road.

All this is rounded off by the striking tail pipes, which are made from high-grade stainless steel and are another clear visual indication of the S3's performance potential.

As a new colour for the S3 at no extra charge there is Absolute red, a colour that really lives up to its name. In addition to the familiar choice of colours for the Audi A3 there is also Imola yellow, a colour familiar from the S4, available at extra charge.

#### The Feeling

#### Interior

When the doors are opened, the first thing that meets the eye are the aluminium sills with their S3 logo, forming the threshold to the exclusive interior.

There is a choice of three different materials: Jacquard Satin, fitted as standard, the optional combination of Alcantara and silk nappa leather or, for the same price, silk nappa leather alone. Common to all three options is their elegant appearance and pleasant feel. Perfect workmanship goes without saying.

There is a further choice of five colours for the interior — onyx and silver in combination with Jacquard Satin or silk nappa leather or the combinations blue/onyx, silver/onyx and yellow/onyx with the Alcantara/silk nappa leather option. Silver is a bright alternative to the familiar onyx and has a mineral effect. Blue has a more forceful character, corresponding to the blue used on the Audi RS2, and yellow is the perfect match for the exterior colour Imola yellow. In addition, each colour option can be combined with a lighter or darker shade of grey for the headliner.

Body-hugging Recaro sports seats are fitted as standard and provide the driver and front-seat passenger with optimum lateral support, to ensure they arrive fresh at their destination, even after a long journey. Both front seats are electrically adjustable for height, backrest angle and lumbar support. The thigh support can be extended manually.

In combination with the height- and rake-adjustable steering wheel, an optimum seat position can be obtained by people of almost any size.

Once the seat has been adjusted to the right position, the eye falls naturally on the high-gloss appliqué trim. This has a new and unique visual fascination. But it calls for accurate and skilled workmanship: only perfectly flat surfaces which are perfectly painted achieve such an appearance. Even the slightest irregularity would spoil the overall effect.

Together with the ergonomic, 3-spoke leather-covered sports steering wheel and the high-gloss appliqué trim, the grey dials of the instrument panel give the interior a special ambience. The non-proportional speedometer dial allows the driver to read off his speed with particularly high accuracy in the 0 to 100 km/h range, a sensible aid to responsible driving given the performance potential of the Audi S3 with its impressive acceleration figures.

The driver information system FIS in conjunction with Auto-Check Control of the most important functions, and the exterior temperature display are part of standard equipment. The integral on-board computer shows the car's average speed, journey time, instantaneous and average fuel consumption and theoretical range on a display in the centre of the driver's field of view. An anti-theft alarm which monitors the interior and the latest generation of electronic immobiliser help to make sure that the Audi S3's charms don't encourage too much unwelcome attention. A pocket-friendly folding key with an inner-track locking system and the standard remote central locking system raise the standard of luxury, as do the two illuminated make-up mirrors in the sun visors.

High-quality optional extras include automatic air conditioning which takes account of the position of the sun, an electric slide/tilt sunroof with glass panel, which for convenient closing is integrated into the central locking system, and the three radio systems chorus, concert and concert BOSE with the facility for controlling the 6-CD changer in the boot. The list also includes mobile or handsfree car phone systems, cruise control and a navigation system that issues acoustic and optical instructions from the central display in the cockpit.

#### The Heart

# Turbocharged 1.8-litre engine with five valves per cylinder developing 154 kW (210 bhp)

Audi engineers have been using advanced turbocharging systems on diesel and petrol engines for many years to achieve an overall package that regularly impresses the experts. A striking example of this is the 2.2-litre engine with five valves per cylinder, which ensured superior performance for the Audi 200, developing 162 kW (220 bhp), and later for the S6 and S2 Coupé, where its power output was 169 kW (230 bhp). In the Avant RS2 in particular, with an output of 232 kW (315 bhp), it revolutionised the reputation of turbocharged engines.

But there are also many more recent examples, such as the 81 kW (110 bhp) 1.9 litre TDI, the 110 kW (150 bhp) V6 TDI or the new, 2.7 litre V6 twin turbo in the Audi S4. This shows the enormous potential of turbocharged engines, a potential that is also used to good effect on the Audi S3 to provide the driver with exceptional performance.

The maximum torque of 270 Nm, which is available from just 2,100 rpm, provides the Audi S3 with sustained forward thrust. It is maintained right up to 5,000 rpm and allows powerful acceleration and top-class flexibility in all situations. The Audi S3 accelerates from 0 to 100 km/h in just 6.8 seconds and, in fifth gear, needs just 11.5 seconds to accelerate from 60 to 120 km/h. The car always has plenty of power in reserve, making driving a relaxed and pleasurable experience however long the journey.

Power is delivered smoothly even at low engine speeds. The free-revving four-cylinder turbocharged unit reaches its maximum output of 154 kW (210 bhp) at just 5,800 rpm and continues unabated up to 6,800 rpm, when it is gently limited by the engine management system.

Given the performance available, fuel consumption is modest, at just 9.1 litres/100 km (overall figure according to 93/116/EU), and the positive overall impression in this respect is rounded off by the car's compliance with the exhaust emission limits of EU III D.

Right from the start, the driver will be accompanied by the sonorous music of the engine. Though unobtrusive, it emphatically underlines the capabilities of the turbocharged engine: a full-bodied sound that perfectly matches the performance and design of the Audi S3.

The five valves per cylinder of the 1.8 litre turbocharged engine make an important contribution to the car's high performance. The number and arrangement of the valves and the geometry of the combustion chamber are a measure of the engine's charge-cycle efficiency. The main factor here is the flow cross-section through the valves. The larger this figure, the more freely the engine can breathe. The advantages for the customer are an increase in torque and power and hence in driving pleasure, and the increase in efficiency also reduces fuel consumption and exhaust emissions. With five valves it is possible to achieve the maximum flow cross-section, which is calculated from the valve lift and the sum of the valve areas.

As on the powerful Audi TT with its power output of 165 kW, a Type K04 turbocharger produces a high boost pressure even at low engine speeds, giving spontaneous and agile performance. Since air density is greatest when it is cold, and more oxygen in the combustion chamber improves efficiency, there are two intercoolers to cool the combustion air. Before it enters the engine, the air compressed and thus heated by the turbocharger is efficiently cooled down, with the result that even at top speed it is only about 20 degrees warmer than the surrounding air. This is an important requirement if maximum power is to be achieved with the lowest possible fuel consumption.

The intake ports are shaped so that the air entering the combustion chamber produces a tumbling effect. By increasing the speed of combustion, this tumble enhances the quality of the entire combustion process and its efficiency. The customer benefits from an increase in the performance and efficiency of the engine combined with low exhaust emissions and fuel consumption.

The throttle is controlled electronically by a state-of-the-art digital engine management system. The driver's torque requirement at any time is determined from the position of the accelerator and its rate of change.

Using information taken from other microprocessors on the vehicle, the control unit calculates the fastest and most economical way of meeting the driver's requirements and adjusts the boost pressure, ignition timing, quantity of fuel and the throttle angle accordingly: an important contribution to the agility and spontaneity that marks out the Audi S3 at all times.

Thanks to the management system's ability to "learn", the engine operating characteristics can be adjusted to match the grade of fuel in the tank in order to obtain the most favourable compromise between boost pressure, throttle angle, amount of fuel injected, ignition point and torque requirement.

The 6-speed gearbox fitted as standard to the Audi S3 allows the driver to make optimum use of its turbocharged engine's power. Gear lever travel is short and precise: a positive invitation to make fast gear changes. The gearbox uses the three-shaft design familiar from the Audi TT quattro. The third shaft is used for 5<sup>th</sup> and 6<sup>th</sup> gear and reverse and has a higher final drive ratio. The gearbox is compact, has an ultra-light magnesium casing and can transmit high torques at low engine speeds. The gears are selected by cable to prevent troublesome vibration from being transmitted to the gear lever or the car's interior.

The extremely direct, short-travel clutch provides the sports car feel so typical of Audi S series. The diameter of the clutch plate is a generous 240 mm to allow for the high power of the engine.

#### The Mind

#### **Drive Concept**

Who would buy a car with just two braked wheels nowadays? Nobody; because four brakes can slow a vehicle much better than two. This point is particularly clear when it comes to high-performance cars.

However, braking and acceleration are - physically speaking - just two sides of the same coin: the forces merely act in opposite directions. So it is only common sense that the driver should have all four wheels available for acceleration as well. Here too, optimum performance and maximum control of the vehicle are achieved by intelligent distribution of the forces involved between all four wheels. And it is precisely this continuous distribution of power between all four wheels to match the situation that the quattro drive system uses to provide maximum traction and hence optimum acceleration. At the same time, the system has plenty in reserve for the transmission of cornering forces, thus ensuring excellent tracking and safe cornering.

The more powerful the engine, the clearer the advantages of permanent four-wheel drive in terms of traction. Although electronic traction control systems on two-wheel drive vehicles can prevent complete loss of traction under less than ideal road conditions, their action is limited to braking individual wheels or reducing torque via the engine management system. In both cases, the tractive effort and the engine torque that would otherwise be available are cut back artificially. On an Audi quattro by contrast, the power is distributed between all four wheels, giving excellent traction whatever the road surface.

Over and above its acceleration capabilities, however, an Audi quattro offers the driver many other advantages that are available at all times. Particularly prominent among these are its high safety margins when cornering, excellent directional stability and high stability in cross-winds.

All these advantages are the result of a simple physical law: In any given situation, taking into account the quality of the tyres and the condition of the road surface, each wheel can only transmit a certain amount of power. The total power that can be transmitted is given by the tractive or drive force and the lateral locating or cornering force. In the case of a vehicle with four-wheel drive, each wheel has to transmit only half as much drive force as on a two-wheel drive vehicle. This means that the Audi quattro has all the more available for building up lateral locating force.

The car's slightly higher fuel consumption and the additional weight of this more complex system are more than compensated for by these advantages, by the extra comfort and better handling and by the driving pleasure and permanent mobility available. Quattro offers the ultimate in dynamic performance, safety and driving pleasure. Throughout the world, Audi quattro has become a synonym for reliability, dynamic performance and technical excellence.

A view shared by ever-greater numbers of drivers: since 1993, the proportion of Audis fitted with the quattro system worldwide has risen from 7.6 percent to almost 20 percent. On high-performance vehicles, the proportion is even higher. Audi's strategy of offering a large number of models with quattro is finding increasing acceptance. All Audi S models are fitted with the quattro permanent four-wheel drive system.

On the Audi S3, as on the Audi TT quattro, power is distributed variably between the front and rear wheels by a hydraulic multi-plate clutch, a technical solution that has all the well-known advantages of the quattro system and is particularly suitable for use with transverse engines. At the heart of the system is the multi-plate clutch, which is fitted between the propshaft and the rear differential. The casing contains a set of plates running in an oil bath. These are pressed together by a hydraulic pressure controlled to give a variable locking action between the front and rear wheels.

The higher the pressure in the clutch, the more drive torque can be transmitted to the rear wheels. The electronically controlled system responds with lightning speed to changes in traction conditions. Thanks to the fact that it has its own oil supply and two axial-piston pumps for rapid pressure build-up, this clutch is capable of responding to differences of only 45 degrees in the angle of rotation of the shafts from the front and rear wheels. Power is not distributed according to a predetermined characteristic but is varied both hydraulically and electronically according to operating conditions. The electronic control unit receives a large amount of data from other control units via a CAN bus. It evaluates this data and electronically varies the clutch pressure and hence the torque transmitted to match the situation by means of a control valve. To do this, the control unit uses a wide variety of information, including the wheel speeds, engine speed, road speed and engine torque. At the same time, the system "learns" the situation and the driver's current requirements.

The arrangement with the engine at the front and the multi-plate four-wheel drive clutch at the rear is an advantage in terms of axle-load distribution, which is 60:40 between the front and rear. It contributes significantly to the Audi S3's outstanding directional stability and excellent handling.

#### The End Result

#### **Dynamic Performance and Safety**

Thanks to quattro, sports suspension and very accurate, direct and responsive steering, the Audi S3 offers exceptional agility and excellent feedback from the road. Drivers will be particularly impressed by its vital handling characteristics, superb road holding and convincing tracking on fast corners, even at high speeds.

The steering configuration is exceptionally direct. With just 2.75 turns of the wheel from lock to lock, the driver can steer the Audi S3 accurately through every bend.

The typical Audi configuration with slightly lowered sports suspension provides the occupants with ride comfort of an unusually high standard for a sports model. Common sense and controllability were the watchwords rather than uncompromising severity and extreme lowering.

As on the Audi TT, the McPherson-strut front suspension with newly developed forged wishbones, new guide joints, cast-steel pivot bearings and special geometry ensure rock-steady wheel alignment.

The independent suspension at the rear, with single trailing arms and double wishbones, is a space-saving design with separate springs and shock absorbers, the latter being arranged at an angle to the vertical. The spring is mounted on the trailing arm and its top end is in direct contact with the car's longitudinal member. One benefit of this is a usefully dimensioned boot with a capacity of 270 litres. The rear seat back is split 1/3 to 2/3 as a standard feature, allowing flexible use of the available space according to individual requirements. Its volume can be increased to 1,020 litres when required.

The low-fade brakes provide first-class stopping power when necessary. Both front and rear brake discs are ventilated. Those at the front measure 312 mm in diameter, while those at the rear have a diameter of 256 mm. Unsprung masses are reduced by the use of aluminium brake calipers at the rear.

The driver is assisted by a powerful anti-lock brake system with electronic braking-pressure distribution (EBD) to ensure that the rear wheels participate fully in the braking process and by an electronic differential lock (EDL) at the rear. This reduces the differences in rotational speed between the wheels on the left and right of the vehicle by activating the appropriate wheel brake; its action may be compared with that of a mechanical differential used to make driving away easier.

The 7.5J x 17-inch cast-aluminium "Avus" wheels and the 225/45 R 17 W tyres transmit this braking effort reliably to the road.

In addition to its numerous active safety components, Audi's high-level safety specification for the S3 includes four airbags, with driver and front passenger airbags and side airbags at the front, pyrotechnical seat belt pre-tensioners for all four lap-and-shoulder belts, belt-force limitation at the front and, of course, high-strength side-intrusion protection bars made of aluminium in the doors.

In May 1998, an Audi A3 with this safety specification passed the demanding Euro NCAP crash test with four stars, the highest possible rating. The Euro NCAP (New Car Assessment Program) has established itself in Europe as a new standard for passive vehicle safety. In this test, vehicles are subjected to a front impact and a side impact to enable consumers to find out about the passive safety of different models. The maximum rating is four stars. The Euro NCAP test differs from the official EC crash test programme in that the frontal impact takes place at a higher speed (64 rather than 56 km/h) and that it includes an additional child-seat test and a test to evaluate pedestrian safety.

Repair costs have not been forgotten either. As with the Audi A3, the cost of repairing minor knocks has been kept within reason, a popular feature with our customers. In Germany, the car's insurance rating is 28 for fully comprehensive cover, 33 for partial coverage and 20 for third party only, a considerable achievement for a car in this class.

# Unternehmensarchiv AUDI AG Technical Data - Audi S3

Programme for Germany - Status: February 1999

Model	Audi S3
Engine / electrics	
Engine type	4-cyl. spark ignition engine with turbocharger and 2 intercoolers, DOHC
Valve gear / number of valves per cylinder	Hydraulic bucket tappets /5
Displacement in cc / bore x stroke in mm / compression ratio	1781 / 81.0 x 86.4 / 9.0
Max. power output in kW (bhp) / at rpm (acc. to 80/1269/EEC)	154 (210) / 5800
Max. torque in Nm / at rpm (acc. to 80/1269/EEC)	270 / 2100-5000
Engine management	Motronic ME 7.5: fully electronic sequential injection with adaptive idle-charge
	control, acceleration enrichment, overrun fuel cut-off, adaptive oxygen sensor
	control; mapped ignition with solid-state high-voltage distribution; cylinder-selective
	adaptive knock control; air mass measurement, integr. boost pressure control;
	coordinated engine-torque control
Exhaust emission control	Heated lambda sensor, activated charcoal filter, 3-way catalytic converter
Emission category	EU III D
Alternator in A / battery in A/Ah	120 / 280/60
Drive / transmission	
Drive layout	Permanent all-wheel drive via Haldex coupling, EDL at front
Clutch	Hydr. operated single-plate dry clutch with asbestos-free lining
Gearbox type	6-speed manual gearbox
Gear ratio in 1st gear / 2nd gear	3.417 / 2.105
Gear ratio in 3rd gear / 4th gear	1.429 / 1.088
Gear ratio in 5th gear / 6th gear	1.097 " / 0.912 "
Gear ratio in reverse gear	4.630 11
Final drive ratio / Final drive ratio II <sup>2)</sup>	4.200 / 3.316
Running gear / steering / brakes	
Front suspension	McPherson strut suspension with lower triangulated wishbones, sub-frame, anti-roll
TOTAL GROUP OF THE STATE OF THE	bar
Rear suspension	Trailing arm and double wishbone at rear, sub-frame, anti-roll bar, gas-pressure
Trock Supprison	shock absorbers
Steering / steering ratio / turning circle in m (D102)	Maintenance-free power-assisted rack-and-pinion steering / 15.6 / 10.9 approx.
Brake system front/rear	Dual-circuit brake system with diagonal split, ABS/EBD, brake servo,
Brake system from treat	Front and rear: ventilated discs
Wheels / tyres	"Avus" 7.5 J x 17 cast alloy wheels/ 225/45 R 17 W
Performance / fuel consumption / acoustics	THE THE STATE OF T
	200
Maximum speed in km/h	238
Acceleration, 0-80 km/h / 0-100 km/h, s	4.8 / 6.8
Fuel grade	Super Plus unleaded, at least 98 RON
Fuel consumption, urban/extra-urban/total, I/100 km 1)	12.2/7.2/9.1
CO₂ emissions, g/100 km <sup>1</sup> )	218
Standing / drive-past exterior noise level in dB (A)	85 / 74
Domestic servicing / warranty	
Oil change every km / inspection every km	15,000 / 30,000 (maximum of 1 year)
Vehicle / paint / rust penetration warranty	1 year unlimited distance / 3 years / 12 years
Insurance classification in Germany	28 (fully comprehensive) / 33 (partial) / 20 (third party)
Weights / loads	
<del>-</del>	1075 / 1005
Unladen weight in kg (excl. driver) / gross weight limit in kg	1375 / 1935
Axle load limit at front / rear in kg	1035 / 1050
Trailer load limit, unbraked, kg	720
Trailer load limit at 8% / 12% gradient, braked, kg	1600 / 1600
Roof load limit in kg / nose weight in kg	75/75
Capacities	**
Cooling system volume (incl. heating) in I	7
Engine oil capacity (incl. filter) in I	4.5
Fuel tank capacity in I approx.	62
Body / dimensions	
Body type	Self-supporting, fully galvanised, steel, aluminium bonnet
Number of seats	5
	0.33 / 2.06
Drag coefficient c <sub>D</sub> / frontal area A in m <sup>2</sup>	4159 / 1763 / 1415
Length (L103) / width excl. mirrors (W103) /	4108/1/03/1410
height (H100) in mm	2519 / 1527 / 1503
Wheelbase (L101) / track at front / rear (W101/W102) in mm	2519 / 1527 / 1503 654
Height of loading lip in mm (H195)	270 (1020 with rear seat folded down)
Luggage capacity in I, acc. to VDA block method (V210)	L 270 (1020 Will real Seat folded down)

<sup>1)</sup> According to 93/116/EU

<sup>2)</sup> Final drive ratio, three-shaft gearbox