

The XL1



Das Auto.



The XL1

The fuel consumption and emission figures listed here have been determined in accordance with the measuring method prescribed by law. These figures do not refer to a specific vehicle and do not constitute part of the offer but are purely for comparison purposes between the various types of vehicles. In addition to the fuel efficiency of a car, driving behavior as well as other non-technical factors (e.g., environmental conditions) play a role in determining a car's fuel consumption and CO₂ emissions.

Additional equipment features and accessories (attachment parts, tires, etc.) can alter the relevant vehicle parameters – for example, weight, rolling resistance and aerodynamics – and, together with weather and traffic conditions, influence fuel consumption and performance figures.

Note in accordance with the current version of Directive 1999/94/EC: further information on official fuel consumption and official specific CO₂ emissions of new passenger cars is given in the "Guidelines on the fuel consumption, CO₂ emissions and power consumption of new passenger cars." It is available free of charge at every point of sale or from DAT Deutsche Automobil Treuhand GmbH, Hellmuth-Hirth-Strasse 1, 73760 Ostfildern, Germany, or at www.dat.de.

Efficiency classes assess vehicles on the basis of CO₂ emissions taking the vehicle's unladen weight into account. Vehicles equivalent to the average are in class D. Vehicles better than the current average are placed in class A+, A, B or C, while vehicles below this average are described as class E, F or G.

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Vision becomes reality.

It all began with a vision.

In 2002, Prof. Dr. Ferdinand Piëch, who is today Chairman of the Supervisory Board of Volkswagen AG, formulated the goal of bringing a production car to market that was practical for everyday use yet offered a low fuel consumption of one liter per 100 km.

This vision has now become reality.

Volkswagen is building a limited run of only 200 XL1 vehicles using handcrafting-like production methods at the former Karmann plants in Osnabrück, Germany.

Conceptually, the XL1 represents the third evolutionary stage of the 1-liter-car strategy by Volkswagen and also redefines what is technically feasible in car manufacturing. High-tech lightweight design, perfect aerodynamics and a Plug-in Hybrid system – consisting of a two-cylinder TDI engine, e-motor, 7-speed dual clutch gearbox (DSG) and lithium-ion battery – all make it possible for the new XL1 to defy the laws of physics and achieve Volkswagen's overall goal – the combination of fuel efficiency and driving pleasure.

**The technology of the
future on the road today.**



Plug-in Hybrid Drive

The XL1 combines optimal aerodynamics with innovative drive concepts to achieve the highest efficiency possible today. No other Plug-in Hybrid car powered by an e-motor/internal combustion engine combination delivers such remarkable fuel economy and such a dynamic driving performance at the same time. To travel at a constant speed of 100 km/h, the XL1 only needs 6.2 kW/8.4 PS – a fraction of what today's production cars require. The two-seater can cover a distance of up to 50 km in all-electric mode and therefore with zero local emissions.



The lithium-ion battery that is integrated in the front section supplies the e-motor with energy. Operating at 220 V, the power electronics manage the flow of high voltage energy from and to the battery or e-motor and converts direct current to alternating current. The body electrical system of the XL1 is supplied with the necessary 12 V via a DC/DC converter and a small auxiliary battery.

Featuring direct injection and turbocharging, this diesel-powered engine is characterized by exceptional fuel economy, low emissions, high traction and outstanding power efficiency. A turbocharger supplies the engine with fresh air, thereby providing optimum cylinder charging. After compression, the diesel fuel is injected directly into the cylinders at very high pressure. The combination of internal engine measures and exhaust treatment ensures excellent emission figures.



One of the most striking features of the Plug-in Hybrid car: the XL1 has two fuel filler flaps. Behind one is the conventional diesel tank, while the other covers the DC power connection. Ten liters of fuel and a battery with an energy content of 5.5 kWh enable a driving range of up to 500 km.



The hybrid module with e-motor and clutch is positioned between the 0.8 l two-cylinder TDI engine and the 7-speed DSG gearbox. The interplay of e-motor and TDI engine ensures optimal engine efficiency at all times.



Great design is all about continuity.

The futuristic design of the XL1 embodies the two-seater's innovative character – not only does it elegantly house the revolutionary technology, it is also a testament to the visionary thinking behind the car.

Exterior

The XL1's design rigorously obeys the laws of aerodynamics and reaches new dimensions in drag coefficient: electrically controlled louvres for the air intake system, small spoilers in front of and behind the wheels and small cameras that send images of the surroundings behind the car to display screens inside the vehicle are just a few examples.



The wing doors extend far into the roof. They do not just swivel upward, but slightly forward as well – which creates an exceptionally large amount of entry and exit space.



The revolutionary look is carried through to the elegantly rounded shape of the XL1's front end. For aerodynamic purposes the headlights are integrated in a well-thought-out design.



E-mirrors: Outside mirrors are replaced by small cameras on the wing doors that relay what is happening behind the car as well as smooth the air flow better than traditional mirrors. The images from the cameras are sent to display screens inside the vehicle without any time delay.

The XL1 is 1,665mm wide and just 1,153mm high. This gives the car a small frontal area (1.50m²) as well as a very low aerodynamic drag summarized in a drag coefficient (Cd) figure of 0.189.



The trailing edges have been optimized in the wind tunnel to assist with the smooth air flow at the rear of the car, thus helping to achieve the outstanding Cd figure.



The rear wheel housing provides uniform air flow even around the rear section of the car, resulting in less turbulence and stalls.

**Focusing on
the essential:
driving fun.**



Interior

Minimalist, alluring and sleek, the streamlined design of the XL1 is carried through the car's interior and mirrors the cutting-edge look of the exterior. Reducing everything to a minimum brings the joy of driving to the fore.



Elegant, restrained and consistent design characterizes the entire interior of the vehicle.



Timeless elegance meets futuristic minimalism. The push of a button is all that is needed to start the Volkswagen XL1.



A return to the original driving experience. By forgoing power steering, driving the XL1 is more like gliding down the road.



Forward looking, yet familiar. Volkswagen adheres to the same styling lines in the tachometer design, while still achieving technological precision.



When it comes to everyday amenities, the XL1 gets high marks for efficiency: radio and air conditioning plus a navigation system and an on-board computer are included. The portable navigation and infotainment device maps + more provides all important information at a glance, such as multifunction trip data, visual warning signals of the parking guidance system and the "Think Blue." fuel-saving trainer.



maps + more in detail

maps + more is an innovative portable infotainment device that offers a host of advanced features, including voice-activated navigation and Bluetooth telephone functions, all displayed on a 5-inch color touch screen.

The heart of maps + more is its integrated navigation system, preloaded with European navigational data, including sightseeing favorites, pedestrian and cycling routes, and over two million special destinations all over Europe. Utilizing the user's existing smartphone data plan, maps + more live provides crucial real-time information, such as traffic, weather and local search. All users need to do is connect their smartphone to the device via Bluetooth.

01. Vehicle: Important information about your journey such as fuel consumption, range, or maneuvering space when parking are all relayed via maps + more.

02. "Think Blue.": maps + more has been designed to make a practical contribution to sustainable motoring, analyzing your journey and advising on a more energy-efficient style of driving.

03. Media: Thanks to a micro SD card reader, MP3 playback function and Bluetooth hands free interface, maps + more enables you to enjoy a whole world of music and in-car entertainment.

04. Telephone: A voice-activated Bluetooth hands-free telephone connection enables you to communicate safely and comfortably during your journey and even allows you to connect two phones at one time.

**Safety
was never
this brilliant.**



Safety

The Volkswagen XL1 features a high-strength CFRP safety cell (monocoque) that is also extremely lightweight. It fulfills all safety requirements and provides a high level of protection in the event of an impact. During a front impact, the driver airbag, crash tubes with front crossmember and cant rail offer effective safety protection.

Collision protection elements and cant rails in the doors plus a CFRP crash element in the floor area protect the car's occupants in case of a side impact. During rear impact, crash tubes with rear crossmember and cant rail actively protect the passengers. Anti-roll protection is, of course, integrated in the CFRP monocoque.



The XL1's rear is equipped with a Park Distance Control (PDC) system that warns you about obstacles at the rear of your car. As your car gets closer to an obstacle, the warning signal increases in frequency. Additionally, the display supports the driver by accurately showing the distance to obstacles.

Large parts of the new XL1's body are constructed with carbon fiber reinforced polymer (CFRP) – which is as lightweight as it is strong. The result is an unladen weight (without driver) of only 795 kg.

The weight of the body, including wing doors and front windscreen in thin-glass technology, is only 230 kg. The entire drive unit weighs 227 kg, the running gear 153 kg and the equipment and the electrical system 185 kg.



**Groundbreaking technology
and design.**



The XL1 at a glance

2 CYLINDER, 0.8L, 35 KW, 120 NM
TDI ENGINE

20 KW, 140 NM
E-MOTOR

7-SPEED DSG
GEARBOX

0.9L/100 KM
COMBINED, AS PER NEDC

UP TO 50 KM
ALL-ELECTRIC DRIVE

21 G/KM
CO2 EMISSIONS

1,153 MM
HEIGHT

795 KG
UNLADEN WEIGHT (WITHOUT DRIVER)

160 KM/H (ELECTRONICALLY LIMITED)
TOP SPEED

UP TO 500 KM
TOTAL DRIVING RANGE

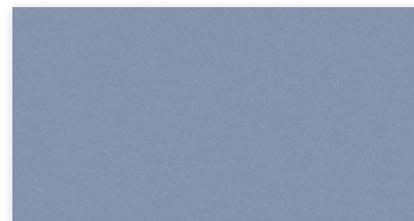
45%
LIGHTWEIGHT MATERIAL

0.189
DRAG COEFFICIENT

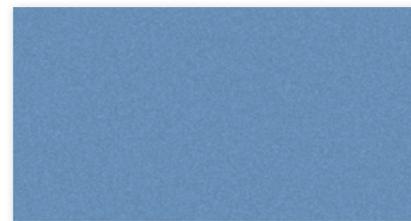


Paint and upholstery

Exterior colors



Reflex silver
Metallic
Standard



Clearwater blue
Metallic
Optional



Sunset red
Metallic
Optional



Oryx white
Pearl
Optional

Upholstery



Cloth Fonzie titan black
Border/Door insert: Fonzie titan black
Inner sides of side bolsters: Catch Up silver
Seat center section: Fonzie titan black (embossed)
Standard



Alcantara titan black
Border/Door insert: Fonzie titan black
Inner sides of side bolsters: Ceramique (perforated artificial leather)
Seat center section: Alcantara titan black (quilted)
Optional



Alcantara desert beige
Border/Door insert: Fonzie titan black
Inner sides of side bolsters: Ceramique (perforated artificial leather)
Seat center section: Alcantara desert beige (quilted)
Optional



Alcantara sunset red
Border/Door insert: Fonzie titan black
Inner sides of side bolsters: Ceramique (perforated artificial leather)
Seat center section: Alcantara sunset red (quilted)
Optional

Combinations

Upholstery	Cloth	Alcantara		
Border/Door insert	Fonzie titan black	Fonzie titan black	Fonzie titan black	Fonzie titan black
Inner sides of side bolsters	Catch Up silver	Ceramique (perforated artificial leather)	Ceramique (perforated artificial leather)	Ceramique (perforated artificial leather)
Seat center section	Fonzie titan black (embossed)	Alcantara titan black (quilted)	Alcantara desert beige (quilted)	Alcantara sunset red (quilted)

Exterior colors

Metallic

Reflex silver	●	○	○	○
Clearwater blue	○	○	—	○
Sunset red	○	○	○	○

Pearl

Oryx white	○	○	○	○
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● Standard ○ Optional — Not available

"Die Gläserne Manufaktur" experience

Visit Volkswagen's "Die Gläserne Manufaktur" (The Transparent Factory) in Dresden and discover the Volkswagen XL1 for yourself. Here at the heart of one of the most innovative yet also culturally significant regions of Europe, we have reimagined the great tradition of manufacturing, adding classical concerts, a variety of exhibitions with, above all, a daily performance found nowhere else in the world: the assembly of exclusive automobiles. Handcrafted using the most advanced techniques. Right in the heart of the city.

Further information is also available at:
www.glaesernemanufaktur.de



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