

Adaptive air suspension for the maximum bandwidth

10/09/2026 Adaptive air suspension for the maximum bandwidth

The Porsche Cayenne S E-Hybrid **Cayenne S E-Hybrid (WLTP)*:** Fuel consumption weighted combined: 4.5 – 4.0 l/100 km; Fuel consumption with depleted battery combined: 10,6 – 9,8 l/100 km; Electrical consumption weighted combined: 19.9 – 19.1 kWh/100 km; CO_2 emissions weighted combined: 103 – 90 g/km; CO_2 class weighted combined: C – B; CO_2 class with depleted battery: G and the Cayenne Turbo E-Hybrid **Cayenne Turbo E-Hybrid (WLTP)*:** Fuel consumption weighted combined: 5.2 – 4.7 l/100 km; Fuel consumption with depleted battery combined: 11,9 – 11,2 l/100 km; Electrical consumption weighted combined: 20.4 – 20.0 kWh/100 km; CO_2 emissions weighted combined: 119 – 108 g/km; CO_2 class weighted combined: D – C; CO_2 class with depleted battery: G come as standard with adaptive air suspension in all variants, equipped with the new two-chamber, two-valve technology. The controlled vibration dampers on the front and rear axles of the Porsche Active Suspension Management (PASM) system now feature two valves for damping the body and wheel movements instead of one, which makes it possible to change the rebound and compression stages of the dampers independently of each other. The advantage of the new technology is a significant increase in comfort

and in driving safety, thereby achieving an even broader range between the Comfort and Sport Plus characteristics.

Compression and rebound when driving make different demands of the dampers positioned between the wheel and body. This means that any movements by the body must remain as smooth and comfortable for the passengers as possible. The wheel, which in contrast is considerably lighter in weight, still needs to exhibit good damping characteristics in even the worst road conditions to guarantee traction. The new two-valve technology goes a long way to resolving the conflict between the goals of comfort for the passengers and optimal wheel suspension without compromising driving safety. Depending on the situation, the valve for the compression stage can set variable damping forces independently of the valve for the rebound stage, and vice versa. This enables the new Cayenne to offer a clearly noticeable increase in comfort with a smoother vehicle body, better handling performance and improved support for rolling and pitching movements as standard.

The new adaptive air suspension further enhances the driving experience. In combination with the new two-valve technology, a variable spring rate noticeably outperforms the previous air suspension. The variable spring rate is implemented by means of two air chambers that can be connected or disconnected by a valve. When driving slowly and overcoming obstacles, it impresses with a particularly comfortable spring and damper characteristic and enables the new Cayenne to effectively glide over the road surface. At the same time, the more dynamic spring rate of the air suspension and the new two-valve technology significantly improves driving performance and precision while noticeably reducing body movements. Compared to the previous model, the developers of the new two-chamber air suspension have also increased the spread of the spring rates. This allows both the firmly tuned spring rate of the Turbo GT and the most comfortable spring rate of the previous model to be implemented in every new Cayenne with air suspension.

The standard equipment in the Cayenne S E-Hybrid and Cayenne Turbo E-Hybrid also includes the speed-dependent Porsche Power Steering Plus (Cayenne S E-Hybrid: Coupé only). The Porsche Cayenne Turbo E-Hybrid also comes standard with Porsche Torque Vectoring Plus (PTV) with an electronically controlled, fully variable differential lock. Its further enhanced coordination reduces the number of agile braking interventions while maintaining a high yaw response. The Turbo E-Hybrid also comes with 10-piston callipers on the front axle. Porsche Dynamic Chassis Control and rear-axle steering are available as options in all variants, further improving the Cayenne's manoeuvrability. In addition, the Porsche Ceramic Composite Brake (PCCB) is available as an option for both model variants, as well as newly developed 22-inch performance tyres.

MEDIA ENQUIRIES



Ben Weinberger

Spokesperson Cayenne und Macan
+49 (0) 170 / 911 2097
ben.weinberger@porsche.de

Consumption data

Cayenne S E-Hybrid Coupé (WLTP)*: Fuel consumption weighted combined: 4.5 – 4.0 l/100 km; Fuel consumption with depleted battery combined: 10,6 – 9,8 l/100 km; Electrical consumption weighted combined: 19.9 – 19.1 kWh/100 km; CO_2 emissions weighted combined: 103 – 90 g/km; CO_2 class weighted combined: C – B; CO_2 class with depleted battery: G

Cayenne E-Hybrid (WLTP)*: Fuel consumption weighted combined: 4.4 – 3.9 l/100 km; Fuel consumption with depleted battery combined: 10,5 – 9,8 l/100 km; Electrical consumption weighted combined: 19.7 – 19.1 kWh/100 km; CO_2 emissions weighted combined: 101 – 90 g/km; CO_2 class weighted combined: C – B; CO_2 class with depleted battery: G

Cayenne E-Hybrid Coupé (WLTP)*: Fuel consumption weighted combined: 4.4 – 3.9 l/100 km; Fuel consumption with depleted battery combined: 10,5 – 9,8 l/100 km; Electrical consumption weighted combined: 19.7 – 19.0 kWh/100 km; CO_2 emissions weighted combined: 101 – 89 g/km; CO_2 class weighted combined: C – B; CO_2 class with depleted battery: G

Cayenne Turbo E-Hybrid (WLTP)*: Fuel consumption weighted combined: 5.2 – 4.7 l/100 km; Fuel consumption with depleted battery combined: 11,9 – 11,2 l/100 km; Electrical consumption weighted combined: 20.4 – 20.0 kWh/100 km; CO_2 emissions weighted combined: 119 – 108 g/km; CO_2 class weighted combined: D – C; CO_2 class with depleted battery: G

Cayenne Turbo E-Hybrid Coupé with GT Package (WLTP)*: Fuel consumption weighted combined: 5.1 – 4.9 l/100 km; Fuel consumption with depleted battery combined: 11,7 – 11,5 l/100 km; Electrical consumption weighted combined: 20.3 – 20.2 kWh/100 km; CO_2 emissions weighted combined: 116 – 112 g/km; CO_2 class weighted combined: D – C; CO_2 class with depleted battery: G

Cayenne Turbo E-Hybrid Coupé (WLTP)*: Fuel consumption weighted combined: 5.3 – 4.8 l/100 km; Fuel consumption with depleted battery combined: 11,9 – 11,3 l/100 km; Electrical consumption weighted combined: 20.4 – 20.0 kWh/100 km; CO_2 emissions weighted combined: 120 – 109 g/km; CO_2 class weighted combined: D – C; CO_2 class with depleted battery: G

Cayenne S E-Hybrid (WLTP)*: Fuel consumption weighted combined: 4.5 – 4.0 l/100 km; Fuel consumption with depleted battery combined: 10,6 – 9,8 l/100 km; Electrical consumption weighted combined: 19.9 – 19.1 kWh/100 km; CO_2 emissions weighted combined: 103 – 90 g/km; CO_2 class weighted combined: C – B; CO_2 class with depleted battery: G

*Further information on the official fuel consumption and the official specific CO_2 emissions of new passenger cars can be found in the "Leitfaden über den Kraftstoffverbrauch, die CO_2-Emissionen und den Stromverbrauch neuer Personenkraftwagen" (Fuel Consumption, CO_2Emissions and Electricity Consumption Guide for New Passenger Cars), which is available free of charge at all sales outlets and from DAT (Deutsche Automobil Treuhand GmbH, Helmuth-Hirth-Str. 1, 73760 Ostfildern-Scharnhausen, www.dat.de).

Link Collection

Link to this article
https://newsroom.porsche.com/en/press-kits/Media-Drive-Cayenne-E-Performance/Die-Fahrwerk-Technik-der-neuen-Cayenne-E-Hybrid-Modelle.html

Media Package
https://pmdb.porsche.de/newsroomzips/72f62bfb-243d-43ef-a76c-3b6c15463139.zip

Dr. Ing. h.c. F. Porsche Aktiengesellschaft
Porscheplatz 1
70435 Stuttgart