



PORSCHE

Press Information

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Porsche at the 2016 Geneva International Motor Show

Made for cornering: world premiere of 911 R and 718 Boxster

World premiere for two cornering artists: Porsche unveils the 911 R and the 718 Boxster at the 2016 Geneva International Motor Show. Each model interprets the high art of lateral dynamics in its own way: the 911 R as a purist driving machine with a 368 kW (500 hp) naturally aspirated engine in the rear, the Roadster with advanced chassis and turbocharged four-cylinder mid-mounted engine. The 718 Boxster develops 220 kW (300 hp) of power from two litres of engine displacement, while the 718 Boxster S attains 257 kW (350 hp) from 2.5 litres of displacement. By presenting the 911 R, Porsche is staging an almost traditional opening to the European automobile year with an exceptional sports car. In previous years, the 911 GT3, 918 Spyder and 919 hybrid made their debuts in Geneva. The company is thus reaffirming its undiminished commitment to motor racing and sports cars linked to the world of motorsport.

With the genes of a racing car: 911 R

R stands for Racing at Porsche. The appearance of the 911 R is therefore consistently sporty: the 368 kW (500 hp) engine output is combined with a weight of only 1,370 kilograms. This makes the 911 R the lightest model in the current 911 range. Responsible for this is the advanced lightweight design with numerous carbon parts, magnesium roof and weight savings in the equipment. Combined with the exclusive use of six-speed manual transmission, the engine from motorsport delivers thrust in every conceivable situation. In only 3.8 seconds, the 911 R breaks through the 100 km/h barrier, achieving a top speed of 323 km/h. In terms of driving dynamics, the 911 R with rear-axle steering, rear differential lock and PCCB ceramic brakes offers the best 911 equipment available. From the exterior, the 911 R gives a somewhat reserved impression. Characteristic details such as the rear body and nose familiar from the 911 GT3 as well as a special colour styling distinguish the high-performance sports car from a 911 Carrera. The product run of the 911 R is limited: only 991 models will be coming onto the road.

Mid-engine sports car with a turbo at its heart: 718 Boxster

In its 718 Boxster, Porsche is deliberately revisiting the concept of the legendary 718 mid-engine sports car. With its lightweight construction, strong four-cylinder flat engine and precise chassis, it won numerous international races in the 1950s and 1960s. Today the four-cylinder power unit is water-cooled and turbocharged. From its two litres of displacement, the new machine in the 718 Boxster delivers 220 kW (300 hp). The 718 Boxster S with a 2.5 litre four-cylinder engine takes this figure up to 257 kW (350 hp) thanks to its turbocharger with variable turbine geometry. Compared with previous Boxster models, this corresponds to an increase of 26 kW (35 hp) in each case. Redesigned from scratch, the engines also impress with their efficiency: depending on the model and equipment, the consumption figures are up to 13 per cent lower than the respective predecessor models. The completely retuned chassis, more powerful brakes and not least the emotive tone are designed to convert the especially compelling power development into even more driving fun. The new model line has also undergone comprehensive further development in its design. Only luggage compartment lid, windscreen and convertible hood have been left unchanged.

Swiss market: new sales record in 2015

Switzerland has always been a classic Porsche country and one in which the company once again notched up a record year in 2015: with 3,822 vehicles delivered, sales rose by 33 per cent compared with 2014. The Macan continued to maintain its position as bestseller with 1,656 new vehicle registrations.

Swiss customers mainly prefer vehicles with all-wheel drive. This is also reflected in the results for the 911. Among the 941 models of this classic sports car sold, Coupé and Cabriolet of the 911 Carrera 4 GTS were particularly in demand in 2015. The Cayenne with 774 units sold also enjoyed a stable demand. This is a segment in which the Swiss display an open-minded approach to technology: almost one in five Cayenne models sold was a hybrid.

Limited special model with naturally aspirated engine and manual transmission

Wolf in sheep's clothing – the new Porsche 911 R

With its new 911 R, Porsche is unveiling a puristic sports car in classical design at the 2016 Geneva International Motor Show. Its 368 kW (500 hp) four-litre naturally aspirated flat engine and six-speed manual sports transmission places the 911 R firmly in the tradition of its historic role model: a road-homologated racing car from 1967. Produced as part of a limited production series, the 911 R (R for Racing) performed in rallies, in the Targa Florio and in world record runs. Like its legendary predecessor, the new 911 R relies on systematic lightweight construction, maximum performance and an unfiltered driving experience: this special limited-edition model of 991 units has an overall weight of 1,370 kilograms and is currently the lightest version of the 911. With the high-revving six-cylinder naturally aspirated engine and manual sports transmission, Porsche is once again displaying its commitment to especially emotional high-performance sports cars. Developed in the motorsport workshop, the 911 R extends the spectrum of high-performance naturally aspirated engines alongside the motor racing models 911 GT3 and 911 GT3 RS.

At work in the rear of the 911 R is the six-cylinder flat engine with a displacement of four litres, familiar from the 911 GT3 RS. The racing engine delivers 500 hp at 8,500 rpm and generates 460 Nm at a speed of 6,250 rpm. From a standing start, the rear-engined car breaks through the 100 km/h barrier in 3.8 seconds. In keeping with the puristic character of the vehicle, the 911 with its lightweight design is available exclusively with a six-speed sports transmission. Short gearshift travel underlines the active driving experience. The forward thrust of the 911 R continues to a speed of 323 km/h. Combined fuel consumption in the NEDC is 13.3 l/100 km.

A thoroughbred driving machine: technology from the race track

The 911 R could almost have been made for tight corners. The specially tuned standard rear-axle steering guarantees especially direct turn-in characteristics and precise handling while maintaining high stability. The mechanical rear differential lock builds up maximum traction. Ensuring the greatest possible deceleration is the Porsche Ceramic Composite

Brake (PCCB) as a standard feature. It measures a generous 410 millimetres on the front axle and 390 millimetres on the rear. Ultra High Performance Tyres of size 245 millimetres at the front and 305 millimetres at the rear are responsible for contact to the road. They are mounted on forged 20-inch lightweight wheels with central lock in matt aluminium.

Motorsport development has specially adapted the control systems of the Porsche Stability Management (PSM) for the 911 R. A double-declutch function activated by pressing a button for perfect gearshifts when changing down is also part of the repertoire of the 911 R as is the optional single-mass flywheel. The result is a significant improvement in spontaneity and high-revving dynamics of the engine. For unrestricted practicality in everyday use, a lift system can also be ordered: it raises ground clearance of the front axle by approximately 30 millimetres at the touch of a button.

With its overall weight of 1,370 kilograms, the 911 R undercuts the 911 GT3 RS by 50 kilograms. Bonnet and wings are made of carbon and the roof of magnesium. This reduces the centre of gravity for the vehicle. Rear windscreen and rear side windows consist of lightweight plastic. Additional factors are the reduced insulation in the interior and the omission of a rear bench seat. The optional air conditioning system and the radio including audio system also fell victim to the slimming cure.

Wolf in sheep's clothing: classic 911 look with GT motor racing technology

From the exterior, the 911 R gives a reserved impression. At first sight, the body resembles that of the Carrera. Merely the nose and rear body familiar from the 911 GT3 hint at the birthplace of the 911 R: namely the motorsport department in Flacht. In technical terms therefore, the 911 R has a lot to show under the bonnet: the drive technology comes from the GT3 RS. All the lightweight components of the body and the complete chassis originate from the 911 GT3. However, with a view to road use, the body manages without the fixed rear wing. Instead, a retractable rear spoiler, familiar from the Carrera models, and a rear underbody diffuser specific to R models provide the necessary downforce. Front and rear apron come from the 911 GT3. The centrally positioned sports exhaust system consists of the lightweight construction material titanium. A redesigned spoiler lip is installed at the front. Porsche logos on the sides of the vehicle and continuous colour stripes in red or green over the entire mid-section of the vehicle show the relationship to its legendary predecessor.

The driver sits in a carbon full bucket seat with fabric centre panels in Pepita tartan design, recalling the first 911 in the 1960s. An “R-specific” GT sport steering wheel with a diameter of 360 millimetres receives steering commands from the driver. Gearshifts take place in traditional manner via an R-specific short gearshift lever and the clutch pedal. Carbon trim strips in the interior with an embedded aluminium badge on the front passenger’s side indicate the limited number of the 911 R. A typical feature of GT vehicles are the pull straps as door openers.

35 hp more power – 13 per cent better fuel economy

The new mid-engine roadster with four-cylinder engines: Porsche 718 Boxster

Twenty years after the first Boxster made its debut, Porsche is also altering the model designation to mark the generation change. The designation for the new generation is 718 Boxster and 718 Boxster S. The two-seat convertibles are now more powerful, lighter and more fuel efficient. Porsche is thus continuing the tradition of four-cylinder flat engines in the 718 mid-engine sports cars. In the 1950s and 1960s, Porsche won numerous races with the cars, including the legendary Targa Florio, the 24 Hours of Le Mans and the European Hill Climb Championship.

At the heart of the model series are the newly developed four-cylinder flat engines with turbocharging. The 718 Boxster develops 220 kW (300 hp) of power from two litres of engine displacement, while the 718 Boxster S attains 257 kW (350 hp) from 2.5 litres of displacement. In the S-model, Porsche also uses a turbocharger with variable turbine geometry (VTG). The 718 Boxster S thus joins the 911 Turbo to demonstrate that Porsche is the only manufacturer to offer VTG technology in production models with a petrol engine. Impressive features here are the power gain of 26 kW (35 hp) compared to the previous Boxster models and the efficiency of the new turbo engines. Fuel economy has been improved by up to 13 per cent in the new 718 Boxster models.

The completely new chassis tuning and stronger brakes provide for passionate and sporty driving pleasure. The design of the new model line has also been comprehensively advanced – apart from the luggage compartment lids and windscreen, everything is new. Inside, a newly designed instrument panel distinguishes the cockpit. In addition, the latest generation of Porsche Communication Management (PCM) with a state-of-the-art touchscreen is included as standard. The navigation module is available as an option.

Efficient turbo power from four cylinders

For the first time since the end of the 1960s, Porsche is returning to sports cars with four-cylinder flat engines with the new generation of 718 Boxsters. Turbocharging significantly boosts torque. The two-litre engine of the 718 Boxster has a maximum torque of 380 Nm (gain of 100 Nm), which is available from 1,950 rpm to 4,500 rpm. The 2.5-litre engine of the 718 Boxster S even attains 420 Nm (60 Nm more) over a speed range from 1,900 rpm to 4,500 rpm.

Thus, the new 718 Boxster models sprint even faster. The 718 Boxster – with PDK and the Sport Chrono Package – darts from zero to 100 km/h in 4.7 seconds (0.8 seconds faster). The 718 Boxster S with the same equipment completes this discipline in 4.2 seconds (0.6 seconds faster). The top speed of the 718 Boxster is 275 km/h, and the 718 Boxster S has a top speed of 285 km/h.

The Porsche turbo concept is boosting driving performance while improving fuel economy. In the 718 Boxster, the four-cylinder engine with PDK has an NEDC fuel consumption figure of 6.9 l/100 km (1.0 l/100 km less). In the 718 Boxster S, the 2.5-litre turbo flat engine with PDK consumes just 7.3 l/100 km (0.9 l/100 km less).

The 718 models come with a six-speed manual transmission as standard. The Porsche Doppelkupplung (PDK) is available as an option.

New design emphasises sharpened profile

The 718 model line can be made out at first glance. The nose of the new roadster has a much sharper profile, while the front appears wider. The larger cooling air intakes at the front are a distinct exterior expression of the new turbo engine concept. Rounding off the front end of the 718 Boxster, are the bi-xenon headlights in their new design with integrated LED daytime running lights. LED headlights with four-point daytime running lights are available as a new option.

From a side view, identifying features of the new model line include independently styled wings and side sills. Larger air inlet panels with two fins emphasise the car's dynamic character. The doors are now designed without door handle recess covers. New 19-inch wheels are standard on the 718 Boxster S. 20-inch diameter wheels are available as an option.

The restyled rear body of the 718 Boxster has a much wider look – especially due to the accent strip with integrated Porsche badge between the tail lights. The completely redesigned lights stand out thanks to their three-dimensional LED technology and the four-point brake light.

Sportier chassis tuning for greater agility

In its driving dynamics, the new roadster follows in the tracks of its ancestor, the original 718. The car's completely retuned chassis enhances handling and cornering performance. The electromechanical steering system is configured to be ten per cent more direct. This makes the 718 Boxster even more agile and easier to steer, both on circuit tracks and in everyday traffic.

Minus ten and minus 20: Porsche Active Suspension Management

Available at extra charge for the roadsters is Porsche Active Suspension Management (PASM), which lowers ride height by ten millimetres. For the first time, the PASM sport chassis with a 20 millimetre lower ride height is available as an option for the 718 Boxster S. The active chassis, which has also been retuned, offers an even broader spread between long-distance touring comfort and dynamic sporty stiffness.

Extensive Sport Chrono Package for dynamic driving experience

As in the 911, the optional Sport Chrono Package now comprises the Individual programme in addition to the three settings "Normal", "Sport" and "Sport Plus". The Sport Response Button has been added in combination with PDK. It is located in the middle of the driving programme switch. Inspired by motor racing, it permits an even more direct configuration of the engine responsiveness and PDK.

Interior has new Porsche Communication Management as standard

Awaiting the driver in the cockpit of the 718 Boxster is the familiar Porsche interior environment, now upgraded with new elements such as the dashboard. Another central element of the new interior layout is the Porsche Communication Management (PCM) unit with mobile phone preparation, audio interfaces and the Sound Package Plus with 110 watts of audio power. The PCM can be extended with optional modules to adapt it to personal requirements. One example is the navigation module with voice control, which makes it easy to input driving destinations. In addition, the Connect Plus module is available as an extension of the navigation module; it provides extended online services.

	911 R
Engine	
Type	Flat engine
No. of cylinders	6
Valves/cylinder	4
Displacement	3,996 cm ³
Bore	102.0 mm
Stroke	81.5 mm
Max. power output	368 kW (500 hp)
at engine speed	8,250 rpm
Max. torque	460 Nm
at engine speed	6,250 rpm
Max. output per litre	92.1 kW/l (125 hp/l)
Compression ratio	12.9:1
Maximum engine speed	8,800 rpm
Cooling system	Water cooling with thermal management
Valve control	Variable valve timing (VarioCam)
Oil supply	Dry sump lubrication with separate oil reservoir and demand-controlled oil pump
Exhaust system	Dual-branch exhaust system with two central titanium tailpipes
Emission control system	Two three-way catalytic converters and on-board diagnostics for monitoring the emission control system
Fuel management	Direct petrol injection (Direct Fuel Injection – DFI)
Drive system	Rear-engine, rear wheel drive

Specifications may vary in individual markets

911 R	
Power transmission	
Transmission	Six-speed manual transmission with single-disc clutch
Clutch diameter	228 mm
Gear ratios	
1 st gear	3.75
2 nd gear	2.38
3 rd gear	1.72
4 th gear	1.34
5 th gear	1.08
6 th gear	0.88
Reverse gear	3.42
Rear axle	3.09
Rear differential lock	Porsche Torque Vectoring (PTV) with mechanical rear differential lock
Chassis	
Front axle	Lightweight spring-strut suspension (McPherson type)
Rear axle	Lightweight multi-link suspension
Steering	Electromechanical power steering with variable steering ratio; rear axle steering
Steering ratio	17.5:1
Steering wheel diameter	360 mm
Turning circle diameter	11.1 m
Driving stability system	Porsche Stability Management (PSM) incl. ABS that can be deactivated in two stages

911 R	
Brakes	
Brake system	Six-piston aluminium monobloc fixed calliper brakes, front; four-piston aluminium monobloc fixed calliper brakes, rear; yellow brake callipers
Brake discs, front axle	Porsche Ceramic Composite Brakes (PCCB), internally vented and perforated
Diameter	410 mm
Thickness	36 mm
Brake discs, rear axle	Porsche Ceramic Composite Brakes (PCCB), internally vented and perforated
Diameter	390 mm
Thickness	32 mm
Wheels and tyres	
Wheels with tyres, front	9 J x 20 ET 55 with 245/35 ZR 20 tyres
Wheels with tyres, rear	12 J x 20 ET 47 with 305/30 ZR 20 tyres
Dimensions	
Length	4,532 mm
Width (with door mirrors)	1,852 mm (1,978 mm)
Height	1,276 mm
Wheelbase	2,475 mm
Track width, front	1,551 mm
Track width, rear	1,555 mm
Luggage volume and weights	
Luggage volume	125 l
Unladen weight per DIN	1,370 kg
Allowable gross weight	1,660 kg
Weight-to-power ratio	3.7 kg/kW (2.7 kg/hp)

911 R	
Driving performance	
Top speed	323 km/h (201 mph)
Acceleration	
0-60 mph	3.7 s
0-100 km/h	3.8 s
0-160 km/h	7.7 s
0-200 km/h	11.6 s
Fuel and emissions	
Emissions standard	EURO 6
Fuel type	Super Plus (98 RON)
Fuel consumption	
Urban	20.1 l/100 km
Extra-urban	9.3 l/100 km
Combined	13.3 l/100 km
CO₂ emissions	
Combined	308 g/km
Efficiency class in Germany	G
Fuel tank capacity	64 l
Aerodynamics	
Drag coefficient c_d	0.32
Frontal area A	2.03 m ²
$c_d \times A$	0.65

	718 Boxster	718 Boxster S
Engine		
Type	Flat engine with turbocharging	
No. of cylinders	4	
Valves/cylinder	4	
Displacement	1,988 cm ³	2,497 cm ³
Bore	91.0 mm	102.0 mm
Stroke	76.4 mm	
Max. power output	220 kW (300 hp)	257 kW (350 hp)
at engine speed	6,500 rpm	
Max. torque	380 Nm	420 Nm
at engine speed	1,950 – 4,500 rpm	1,900 – 4,500 rpm
Max. output per litre	111 kW/l (151 hp/l)	103 kW/l (140 hp/l)
Compression ratio	9.5:1	
Maximum engine speed	7,500 rpm	
Cooling system	Water cooling with thermal management and switchable water pump	
Valve control	Camshaft adjustment and VarioCam Plus valve stroke switching for intake and exhaust	
Oil supply	Integrated dry sump lubrication and demand-controlled oil pump	
Engine charging	Mono turbocharging	Mono turbocharging with VTG
Intercooling	Indirect intercooling (two low-temperature air-water radiators and a water intercooler)	
Exhaust system	Dual-branch exhaust system with central stainless steel tailpipe	Dual-branch exhaust system with central stainless steel dual tailpipes
Emission control system	Two three-way catalytic converters and on-board diagnostics for monitoring the emission control system	
Fuel management	Petrol Direct Fuel Injection (DFI)	
Drive system	Mid-engine, rear-wheel drive	

Specifications may vary in individual markets

	718 Boxster	718 Boxster S
Power transmission		
Transmission	Six-speed manual transmission with single-disc clutch and dual-mass flywheel; optional seven-speed Doppelkupplungsgetriebe (PDK)	
Clutch diameter	Manual 240 mm; PDK 202/153 mm	
Gear ratios	Manual / PDK	
1 st gear	3.31/3.91	
2 nd gear	1.95/2.29	
3 rd gear	1.41/1.65	
4 th gear	1.13/1.30	
5 th gear	0.95/1.08	
6 th gear	0.81/0.88	
7 th gear	- /0.62	
Reverse gear	3.00/3.55	
Rear axle	3.89/3.62	
Chassis		
Front axle	Lightweight spring-strut suspension (McPherson type)	
Rear axle	Lightweight MacPherson suspension	
Steering	Electromechanical power steering with variable steering ratio and steering pulse input	
Steering ratio	15.0:1 (centre position) to 12.4:1	
Steering wheel diameter	375 mm	
Turning circle diameter	10.98 m	
Driving stability system	Porsche Stability Management (PSM) incl. ABS with extended brake functions	

	718 Boxster	718 Boxster S
Brakes		
Brake system	Four-piston aluminium monoblock fixed calliper brakes, front and rear	Four-piston aluminium monoblock fixed calliper brakes, front and rear
Brake discs, front axle	Grey cast iron; internally vented and perforated	
Diameter	330 mm	
Thickness	28 mm	34 mm
Brake discs, rear axle	Grey cast iron; internally vented and perforated	
Diameter	299 mm	
Thickness	20 mm	
Wheels and tyres		
Wheels with tyres, front	8 J x 18 ET 57 with 235/35 ZR 18 tyres	8 J x 19 ET 57 with 235/40 ZR 19 tyres
Wheels with tyres, rear	9.5 J x 18 ET 49 with 265/45 ZR 18 tyres	10 J x 19 ET 45 with 265/40 ZR 19 tyres
Dimensions		
Length	4,379 mm	
Width (with door mirrors)	1,801 mm (1,994 mm)	
Height	1,281 mm	1,280 mm
Wheelbase	2,475 mm	
Track width, front (for wheel size)	1,515 mm (18")	1,515 mm (19")
Track width, rear (for wheel size)	1,532 mm (18")	1,540 mm (19")
Luggage volumes and weights		
	Manual/PDK	
Luggage volumes	275 l (front 150 l, rear 125 l)	
Unladen weight (DIN)	1,335/1,365 kg	1,355/1,385 kg
Allowable gross weight	1,655/1,685 kg	1,665/1,695 kg
Weight-to-power ratio	4.5/4.6 kg/hp	3.9/4.0 kg/hp

	718 Boxster	718 Boxster S
Performance		
	Manual/PDK	
Top speed	275/275 km/h 171/171 mph	285/285 km/h 177/177 mph
Acceleration		
0-60 mph	4.9/4.7 s	4.4/4.2 s
0-60 mph with Sport+	- /4.5 s	- /4.0 s
0-100 km/h	5.1/4.9 s	4.6/4.4 s
0-100 km/h with Sport+	- /4.7 s	- /4.2 s
0-160 km/h	11.3/11.1 s	9.7/9.5 s
0-160 km/h with Sport+	- /10.8 s	- /9.2 s
0-200 km/h	18.3/18.1 s	15.2/15.0 s
0-200 km/h with Sport+	- /17.8 s	- /14.7 s
Fuel and emissions		
	Manual/PDK	
Emissions standard	EURO 6	
Fuel type	Super Plus (98 RON)	
Fuel consumption		
Urban	9.9/9.0 l/100 km	10.7/9.5 l/100 km
Extra-urban	6.0/5.7 l/100 km	6.5/6.0 l/100 km
Combined	7.4/6.9 l/100 km	8.1/7.3 l/100 km
CO₂-emissions		
Combined	168/158 g/km	184/167 g/km
Efficiency class in Germany	E/D	F/E
Fuel tank capacity	54 l	64 l
Aerodynamics		
Drag coefficient c_d	0.31	0.32
Frontal area A	1.99 m ²	
$c_d \times A$:	0.62	0.64