

The new BMW F 900 GS, F 900 GS Adventure and F 800 GS.



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1. Overall concept. Short version.



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The new BMW F 900 GS, F 900 GS Adventure and F 800 GS: The new premium mid-range touring enduros provide purist riding fun thanks to even more sophisticated off-road, touring and adventure capabilities.

With the new F 900 GS, F 900 GS Adventure and F 800 GS BMW Motorrad is significantly boosting its product range of touring enduros for the mid-range. While the new BMW F 800 GS is the ideal bike, especially for entry-level riders, the BMW F 900 GS Adventure is very well suited for extended adventure trips and for long, demanding tours. All three models have been significantly updated and now offer, among other things, an even higher level of standard equipment in addition to a new drive. The F 900 GS features many far-reaching innovations. The motorcycle's range of uses has been considerably expanded thanks to its enhanced off-road qualities combined with a drastic weight reduction of 14 kg compared to the predecessor model making it a particularly sporty F Series model.

Drive with advanced 2-cylinder in-line engine with greater capacity, more output and engine drag torque control.

In the new F 900 GS, F 900 GS Adventure and F 800 GS the advanced 2-cylinder in-line engine introduced in 2018 with the F 850 GS provides increased riding dynamics. The main reason for this is the increased capacity 895 cc (previously 853 cc). With a 270/450 degree firing interval, the engine generates a particularly emotional sound. In the F 900 GS and F 900 GS Adventure it puts out 77 kW (105 hp) and in the F 800 GS 64 kW (87 hp). In addition to a significant increase in peak power of 10 hp each, the new engines are also characterised by a much fuller torque curve, increased pulling power and faster acceleration.

Two riding modes, ABS Pro and DTC as standard. Riding modes Pro with additional riding modes, riding mode pre-selection and engine drag torque control as optional equipment ex works.

The new GS models in the F series already offer the two riding modes "Rain" and "Road" as standard. Dynamic Traction Control DTC, the cornering-optimised ABS Pro and the dynamic brake light. With "riding modes Pro" available as optional equipment ex works, the dynamic qualities of the new F 900 GS, F 900 GS Adventure and F 800 GS can be exploited even more intensively thanks to additional riding modes, the riding mode pre-selection and the engine drag torque control as well as Dynamic Brake Control DBC.

BMW F 900 GS with new, significantly lighter plastic fuel tank and rear section. New, fully adjustable upside-down telescopic forks on the F 900 GS and F 900 GS Adventure.

The new F 900 GS, F 900 GS Adventure and F 800 GS rely on a bridge-type frame made of deep-drawn sheet steel parts welded together, which integrates the 2-cylinder in-line engine as a supporting element. The 14.5-litre plastic fuel tank of the new F 900 GS is a completely new development saving 4.5 kg of weight compared to the steel tank of the previous model. The F 900 GS features a completely redesigned rear section which makes it look even more dynamic and save around 2.4 kg of weight. A further 1.7 kg are saved thanks to the rear silencer by Akrapovič. The front wheel on the F 900 GS and F 900 GS Adventure is guided by new, fully adjustable upside-down telescopic forks by Showa.

New Enduro Pro package for the new F 900 GS and Dynamic ESA for the new F 900 GS Adventure and the F 800 GS optionally available ex works.

The new F 900 GS can be given even more off-road prowess with the optional equipment ex works Enduro Pro package featuring fully adjustable titanium nitride-coated upside-down telescopic forks, fully adjustable central spring strut as well as handlebar risers and M Endurance chain. The Dynamic ESA (Electronic Suspension Adjustment) electronic suspension is available as optional equipment for the new F 900 GS Adventure and the F 800 GS.

New BMW F 900 GS with ergonomics optimised for off-road use, enduro footrests and aluminium side stand. Optimised adjustable gearshift lever and, on the F 900 GS, a new foot brake lever as well.

The increased off-road qualities of the new F 900 GS are expressed by the ergonomic triangle (handlebar - seat - footrests) optimised for off-road use. Lower footrests in combination with the higher handlebar position and the new design of the fuel tank provide clear advantages, especially when riding standing up on rough terrain.

All three new models already offer an adjustable gearshift lever as standard. In conjunction with an optimised bearing and new gearshift lever kinematics, it was also possible to optimise shifting the six-speed transmission even further. The F 900 GS also features a new foot brake lever in a higher position.

New LED headlight on the BMW F 900 GS. All models feature powerful LED light units.

Compared to the predecessor model, the LED headlight on the new BMW F 900 GS offers a larger low beam opening angle and thus better illumination directly in front of the motorcycle. The new F 900 GS Adventure and the F 800 GS also feature LED headlights as standard. Furthermore, the turn indicator and control lights of all three models also use LED technology.

Connectivity - unrivalled information diversity and functionality in the form of a large, perfectly readable 6.5-inch TFT display. The new BMW F 900 GS comes as standard with multifunction holder to accommodate navigation devices, action cams and more.

The new GS models in the F series already each have a large 6.5-inch TFT display as standard. This applies in particular to the

F 800 GS, which previously had an analogue display. Information diversity, quality of presentation and, last but not least, user-friendliness are unrivalled. Phoning, listening to music and navigating while riding is very comfortable. The new BMW F 900 GS is already equipped with a 12 mm holder as standard, which permits action cams or other devices to be mounted. In order to install the BMW Motorrad Connected Ride Navigator or the BMW Motorrad Connected Ride Cradle, the "navigation preparation" option is also required.

BMW F 900 GS with new body dimensions, clear design and colour scheme highlighting its off-road qualities, sportiness and dynamic performance.

The new BMW F 900 GS has been completely redesigned and benefits from a dynamic design that signals increased off-road qualities and sportiness, as well as visually highlighting the 14 kg of lowered weight. One of the key points of the new design is the redesigned plastic fuel tank, which allowed for a much slimmer and ergonomically more favourable design with a capacity of only 0.5 litres less than the previous model. New, close-fitting tank side panels, together with a new radiator trim give the new F 900 GS a sleek, sporty and off-road-oriented look. Off-road qualities, sportiness and dynamic performance are also reflected in the entire rear section, which is significantly narrower and more dynamic than the predecessor model. The dynamic appearance of the new F 900 GS is further enhanced by the sporty rear silencer by Akrapovič. The new F 900 GS is available as a basic version in Blackstorm metallic, as a Passion model version in São Paulo yellow solid paint and as a GS Trophy version in Lightwhite solid paint/Racing Blue metallic.

New attractive model variants and colour schemes for the F 900 GS Adventure and F 800 GS.

The new F 900 GS Adventure is available as a basic variant in Blackstorm metallic and as a Ride Pro model variant in matt White Aluminium. The new F 800 GS is available as a basic variant in Lightwhite solid paint, as a Sport model variant in Racing Blue and as a Triple Black version in Blackstorm metallic.

The new BMW F 900 GS, F 900 GS Adventure and F 800 GS feature the common highlights:

- Advanced 2-cylinder in-line engine with increased capacity of now 895 cc (previously 853 cc).
- Even higher output and torque: F 900 GS and F 900 GS Adventure with 77 kW (105 hp) at 8,500 rpm and 93 Nm at 6,750 rpm. F 800 GS with 64 kW (87 hp) at 6,750 rpm and 91 Nm at 6,750 rpm.
- 35 kW (48 hp) versions for driving licence class A2 (F 800 GS only).
- High refinement due to two counter-rotating counterbalance shafts.
- Two riding modes "Rain" and "Road" as well as ABS Pro and DTC as standard.
- Ride modes Pro with three additional ride modes (Dynamic, Enduro and Enduro Pro) as well as Dynamic Brake Control (DBC) and engine drag torque control as optional equipment ex factory.
- B ridge-type style frame.
- Optimised adjustable gearshift lever.
- Sophisticated ergonomics and numerous seat alternatives.
- Practical wind and weather protection.
- Powerful LED lighting units.
- Large, perfectly readable 6.5-inch TFT display with unrivalled information diversity and functionality.
- Intelligent emergency call for quick help in emergency situations as optional equipment ex works.
- Keyless Ride for convenient activation of the locking functions by radio as an optional extra ex works.
- Powerful paintwork and model variants make for unmistakable Enduro characteristics.

- Extensive range of optional equipment, original BMW Motorrad accessories and rider equipment.

The highlights of the new BMW F 900 GS:

- Weight reduced by 14 kg.
- Significantly lighter plastic fuel tank and rear section.
- New body parts.
- New, fully adjustable upside-down telescopic forks.
- Lighter swinging arm.
- Enduro Pro package as optional equipment ex works.
- Sport rear silencer by Akrapovič.
- Ergonomics optimised for off-road use.
- Enduro footrests.
- Heated grips.
- Hand protectors.
- Aluminium side stand.
- New foot brake lever.
- New LED headlight.
- Multifunction holder.

The highlights of the new BMW F 900 GS Adventure:

- New, fully adjustable upside-down telescopic forks.
- LED headlights.
- New side panels.
- Heated grips
- Aluminium engine guard.

- New Ride Pro optional equipment package.

The highlights of the new BMW F 800 GS:

- TFT display as standard.
- Heated grips.
- LED headlight.
- Hand protectors.
- Variocase carrier.

2. Drive.



"In addition to significantly higher peak output and more torque, the new engine in the GS models of the F series provides noticeably more pulling power and acceleration. This benefits the rider not only on the road, but also off the road."

Christian Geis, Project Manager GS Models F-Series

2-cylinder in-line engine with more capacity, output and torque provides an even more dynamic riding experience.

In the new BMW F 800 GS, F 900 GS and F 900 GS Adventure, the 2-cylinder in-line engine already familiar from the BMW F 900 R and F 900 XR with 895 cc (previously 853 cc) capacity provides even more powerful propulsion thanks to significantly increased output. In the F 900 GS and F 900 GS Adventure it generates 77 kW (105 hp) at 8,500 rpm (previously: 70 kW (95 hp)) and has a maximum torque of 93 Nm at 6,750 rpm (previously: 92 Nm). For the markets in Brazil and China, the output is 66 kW (90 hp) each with identical torque. In the F 800 GS an output of 64 kW (87 hp) is available at 6,750 rpm (previously: 57 kW (77 hp)) as well as 91 Nm at 6,750 rpm (previously: 83 Nm). Compared to the predecessor models, output and torque have been increased and the torque curve is now significantly fuller over the entire speed range. This results in noticeably more pulling power and faster acceleration.

The increase in output and the fuller torque were achieved primarily by raising the engine capacity by enlarging the cylinder bore by 2 mm to 86 mm with a stroke of 77 mm. In addition, the cylinder heads were adapted and new forged pistons (previously cast pistons) were used. The engine, with a compression of 13.1:1, now has a crankshaft with crankshaft journals offset by 90 degrees and a 270/450 degree firing interval. This is accompanied by a particularly powerful, emotional sound, similar to that of a 90-degree V2 engine. This sound experience is rounded off by a stainless steel silencer system. The new F 900 GS also comes with a sportrear silencer by Akrapovič standard which saves 1.7 kg in weight compared to the silencer on the predecessor model.

Smooth running and high refinement thanks to two counterbalance shafts and dry sump lubrication to ensure optimum reliability.

Two counterweight shafts, one in front of and one behind the crankshaft, eliminate unwanted vibrations. To prevent undesirable churning losses and to ensure maximum operational safety, the engine has a dry sump lubrication system that does not require a separate engine oil tank.

Two overhead camshafts, four valves per cylinder operated by cam followers, knock control and anti-hopping clutch.

Two overhead camshafts driven by a toothed chain rotate in the cylinder head and operate four valves per cylinder via lightweight and therefore speed-resistant cam followers.

To cover a wider range of fuel qualities, the new F 900 GS, F 900 GS Adventure and F 800 GS are equipped with cylinder-selective knock control. The revised oxygen sensor concept, together with the catalytic converter, ensures more efficient and effective exhaust gas control.

The clutch is designed as a self-reinforcing anti-hopping clutch (oil bath clutch). It not only ensures low operating forces on the adjustable clutch lever, but also increases riding safety by reducing the engine drag torque - especially when braking and downshifting at the same time.

For fast up and down-shifting of the six-speed transmission without having to use the clutch, BMW Motorrad also offers the shift assistant Pro as optional equipment ex works for the new models.

"Rain" and "Road" riding modes and DTC provide a high level of riding pleasure and safety as standard.

To adapt to the rider's individual wishes, the new F 900 GS, F 900 GS Adventure and F 800 GS already offer the two riding modes "Rain" and "Road" as standard. Dynamic Traction Control (DTC), which ensures a high level of riding safety, is also included as a standard feature.

Riding modes Pro with additional riding modes, riding mode pre-selection and engine drag torque control available as optional equipment ex works.

The new F models can be equipped with the "riding modes Pro" option ex works. It includes the additional riding modes "Dynamic" and "Enduro" as well as "Enduro Pro" for the F 900 GS and F 900 GS Adventure. Riding modes Pro also allows the rider to pre-select up to four riding modes for the button assignment on the right-hand handlebar controls. Engine drag torque control is a further new component of riding modes Pro. Dynamic Traction Control (DTC) is already fitted as standard.



3. Suspension.

"With the new F 900 GS, we have developed a GS with outstanding off-road qualities, particularly by significantly reducing weight and enhancing chassis technology. The Enduro Pro package with sport suspension is also available for ambitious off-road riding."

Sergio Fossa, Product Manager F-Series

Bridge-type steel frame with bolted-on frame rear for optimum rigidity, robustness and riding precision. BMW F 900 GS with new, significantly lighter plastic fuel tank

The new F 900 GS, F 900 GS Adventure and F 800 GS rely on a bridge-type frame made of deep-drawn sheet steel parts welded together, which integrates the 2-cylinder in-line engine as a supporting element. The bolted-on steel rear frame makes it possible to create a visually short and slim rear end. The 14.5-litre plastic tank of the new F 900 GS is a completely new development saving 4.5 kg of weight compared to the steel fuel tank of the previous model.

BMW F 900 GS with new and lighter rear section and new luggage carrier.

The new F 900 GS features a completely redesigned rear section which makes it look even more dynamic and saves around 2.4 kg of weight. The luggage carrier of the F 900 GS was also adapted in the process in the authentic GS spirit. It allows the customer to attach soft bags, rucksacks or an aluminium case system from the original BMW Motorrad accessories range using various attachment options. The case holder has been designed so that it can be assembled and disassembled with little effort. While the new F 900 GS already offers recessed grips under the rear wheel cover as standard, grab handles are available in combination with the case holder.

Upside-down telescopic forks at the front and aluminium double-sided swinging arm with central spring strut at the rear. New, fully adjustable upsidedown telescopic forks on the BMW F 900 GS and F 900 GS Adventure.

The new F 900 GS and F 900 GS Adventure feature new, fully adjustable, Showa upside-down telescopic forks with a 43 mm fixed fork tube diameter. The suspension travel is 230 mm. Depending on the area of use and individual needs, both the rebound and compression damping as well as the spring base ("spring preload") can be adjusted manually. As before, the F 800 GS uses telescopic forks with a 41 mm fixed fork tube diameter and 170 mm suspension travel.

The rear wheels are guided by a double-sided swinging arm made of aluminium in conjunction with a directly linked central spring strut. The swinging arm has been modified for the new F 900 GS and is 250 g lighter than in the predecessor model. In addition to a hydraulically and thus very comfortably adjustable spring base ("spring preload"), the central spring strut also features adjustable rebound damping. The new BMW F 900 GS, F 900 GS Adventure and F 800 GS:

The suspension travel is 215 mm (F 900 GS and F 900 GS Adventure) and 170 mm (F 800 GS) respectively.

Enduro Pro package for the new BMW F 900 GS with fully adjustable, titanium nitride-coated upside-down telescopic forks, fully adjustable central spring strut as well as handlebar risers and M Endurance chain available as optional equipment ex works.

For even better off-road performance, BMW Motorrad offers the Enduro Pro package as optional equipment ex works for the new F 900 GS. The package includes the sport suspension with gold upside-down telescopic forks from Showa, a suspension strut from ZF Sachs, black tubular handlebars with 24 mm handlebar risers using a forged aluminium part and the particularly wear-resistant M Endurance chain.

The upside-down telescopic forks of the Enduro Pro package are adjustable with regard to damping rebound and compression damping as well as the spring base ("spring preload") and offers even more rigidity than its standard counterpart with a 2 mm larger slider tube diameter. At the same time, it saves 200 g in weight. For the first time, BMW Motorrad offers titanium

nitride-coated slider tubes in "Dark Navy Blue" on these upside-down forks. However, the titanium nitride coating is not only great to look at, but also ensures even more sensitive response behaviour and optimised protection against damage, for example from stone impacts, thanks to the reduced breakaway torque between the slider tube and the fixed tube.

Compared to the standard spring strut, the ZF Sachs central spring strut with reservoir offers a 25 percent wider adjustment range and 20 percent more damping. The wider setting range is accompanied by significantly increased bottoming-out protection as well as increased temperature stability. In this way, a wide spread is achieved between very sporty off-road use with a tight set-up and more leisurely off-road riding with a soft set-up.

The spring strut is manually adjustable. Spring base ("spring preload"), high-speed compression damping and rebound damping are conveniently and easily accessible and can be adjusted without tools. Only adjusting the low-speed compression stage requires a screwdriver.

Dynamic ESA electronic rear suspension adjustment for an optimum suspension set-up on the F 900 GS Adventure and the F 800 GS available as optional equipment ex works.

The dynamic riding experience, ride comfort and touring and passenger suitability of the new F 900 GS Adventure and F 800 GS can be enhanced even further with the BMW Motorrad Dynamic ESA (Electronic Suspension Adjustment) which is available as optional equipment. Dynamic ESA opens up even new dimensions with regard to riding safety, performance and comfort, as the damping of the rear spring strut is automatically adjusted to the conditions depending on riding conditions and manoeuvres. Dynamic ESA does not work as a stand-alone system, but communicates with the other control systems such as ABS Pro and DTC.

BMW Motorrad ABS Pro and dynamic brake light are standard on all models. Dynamic Brake Assistant (DBC) as an element of the optional "riding modes Pro".

On the front wheel, a twin disc brake provides superior, stable deceleration. A single-disc brake is used on the rear wheel. The new models already feature BMW Motorrad ABS Pro and a dynamic brake light as standard (not in all markets).

ABS Pro also offers more safety when braking in bends by enabling ABS-assisted braking when leaning into corners. ABS Pro prevents the wheels from locking even when the brakes are applied quickly and reduces abrupt changes in steering force and thus the bike from returning to the upright position, even during sudden braking. The benefits are increased braking and riding stability combined with the best possible deceleration even when cornering.

The dynamic brake light effectively signals to road-users behind that the motorcycle is braking. This additional brake light function warns following traffic in two stages when the brakes are applied strongly and in the event of an emergency brake manoeuvre.

Dynamic Brake Control DBC increases safety when braking, even in difficult situations, by preventing the throttle from being activated unintentionally. As soon as the sensor cluster supplies a certain deceleration value during braking, any simultaneous desire to accelerate on the part of the rider is detected as implausible and throttle valve opening is suppressed. This keeps the motorcycle stable and shortens the braking distance. After a certain delay, the hazard warning lights are turned on automatically.

New BMW F 900 GS with ergonomics optimised for off-road use, enduro footrests and aluminium side stand. Optimised adjustable gearshift lever and, on the F 900 GS, a new foot brake lever as well.

The new F 800 GS, F 900 GS and F 900 GS Adventure are not just for tall people. Sophisticated ergonomics and numerous available seat heights make them suitable for everyone. For particularly easy accessibility, the suspension can be lowered optionally ex works.

The increased off-road qualities of the new F 900 GS are expressed by the ergonomic triangle (handlebar - seat - footrests) optimised for off-road use. The handlebars of the new F 900 GS, for example, are now positioned 15 mm higher than on the previous model. The height can be increased by a further 24 mm via the Enduro Pro package. In addition, the now standard Enduro footrests are positioned 20 mm lower, which, in conjunction with the higher handlebar position and the new design of the fuel tank, offers particular advantages when riding standing up on rough terrain.

Thanks to their special design, the Enduro footrests ideally combine a sure-footed position and self-cleaning function. At the same time, rounded edges ensure that the soles of the boots are not damaged, especially when riding in a standing position. To save even more weight, the side stand of the new F 900 GS is made of lightweight aluminium. Compared to the predecessor model, this reduces the weight by around 400 g.

All three new models already offer an adjustable gearshift lever as standard. This is adjustable in height and length in two positions by means of a rotating eccentric and thus enables a variable position for road and off-road boots or for standing or seated riding. In conjunction with an optimised bearing and new gearshift lever kinematics, it was also possible to make shifting the six-speed transmission even better.

The F 900 GS also features a new foot brake lever. It is positioned 5 mm higher and is now even easier to reach in conjunction with the lower positioned footrests. In addition, accessibility benefits from a further 20 mm when the folding surface piece is folded down.

4. Electrical system and electronics.



"The new GS models in the F series offer high-quality standard equipment features such as LED headlight and turning indicators and perfectly readable 6.5-inch TFT displays with a wealth of connectivity options." Christian Geis, Project Manager GS Models F-Series

New LED headlight on the BMW F 900 GS. All models feature powerful LED light units.

Compared to the predecessor model, the LED headlight on the new BMW F 900 GS offers a larger low beam opening angle and thus better illumination directly in front of the motorcycle. This increases safety, especially when riding at night at low speeds. In addition, the new headlight is more than 600 g lighter than the previous model.

The new F 900 GS Adventure and the F 800 GS also feature LED headlights as standard. Furthermore, the turn indicator and control lights of all three models also use LED technology.

Connectivity - unrivalled information diversity and functionality in the form of a large, perfectly readable 6.5-inch TFT display.

The new GS models in the F series already each have a large 6.5-inch TFT display as standard. Information diversity, quality of presentation and, last but not least, user-friendliness are unrivalled.

To ensure optimum readability even under difficult lighting conditions - the display was designed to be large and thus easy to decipher. It is linked to the multi-controller on the left-hand handlebar panel and can be operated quickly, safely and conveniently from here. It offers screen displays tailored to the Enduro world as standard. Additional displays are also available in the "riding modes Pro" optional equipment.

Phoning, listening to music and navigating while riding is very comfortable. If, for example, a smartphone and a helmet with BMW Motorrad communication system are connected via the TFT display using Bluetooth, the rider can easily access media

playback and telephone functions. These functions can be used without installing an app. If there is an active Bluetooth connection to a standard smartphone, the rider can listen to music while riding. In addition, the free BMW Motorrad Connected app offers practical arrow navigation directly via the TFT display. The basic navigation is particularly attractive for motorcyclists who want to comfortably manage everyday traffic or short trips without additional equipment.

The new BMW F 900 GS comes as standard with multifunction holder to accommodate navigation devices, action cams and more.

The new BMW F 900 GS is already equipped with a 12 mm holder as standard, which permits action cam or other devices to be mounted. The holder has been designed to provide optimum readability in both seated and standing riding positions and to provide good weather protection with both small and large windshields. In order to install the BMW Motorrad ConnectedRide Navigator or the BMW Motorrad ConnectedRide Cradle, the "navigation preparation" option is also required.

Quick help in emergency situations - Intelligent Emergency Call as optional equipment ex works.

For the new GS models in the F series, an eCall system is also available in the Enduro mid-range with the "Intelligent Emergency Call" optional equipment, which aims to get help to the scene of the incident as quickly as possible. After being automatically or manually activated, the intelligent emergency call sends the position data and thus the coordinates of the accident location from the motorcycle in the event of an emergency situation or accident and activates the rescue chain via the qualified BMW Call Centre. The accident victim can speak to the BMW Call Centre in his or her language. eCall requires a mobile phone connection to activate the emergency chain.

Keyless Ride for conveniently activating the locking functions by radio as optional equipment ex works.

As is already the case with other BMW Motorrad models, the Keyless Ride System, available as optional equipment ex works, replaces the conventional ignition-steering lock. This makes using the previously standard key superfluous. The steering lock, ignition,

fuel filler flap and anti-theft alarm system are controlled by means of a transponder integrated in the motorcycle key, which transmits a radio signal with a vehicle-specific frequency. The key can therefore remain in the rider's jacket, for example.

5. Design and colour concept.



"With the new F 900 GS, we have not only achieved a very good result with regard to functionality, but also in terms of designing an athletic and sporty BMW GS. Pure GS, so to speak, and reduced to the original genes with powerful off-road qualities."

Edgar Heinrich, Head of Design BMW Motorrad

The new body design of the BMW F 900 GS sends out a clear signal: Off-road expertise, sportiness and dynamics.

The new BMW F 900 GS has been completely redesigned and benefits from a dynamic design that signals increased off-road qualities and sportiness, as well as visually highlighting the 14 kg of lowered weight. One of the key points of the new design is the redesigned plastic fuel tank, which allowed for a much slimmer and ergonomically more favourable design with a capacity of only 0.5 litres less than the previous model.

New, close-fitting tank side panels, together with a new radiator trim, give the new F 900 GS a sleek, sporty and off-road-oriented look. At the same time, new frame trims (featuring the GS logo) help the rider maintain optimum leg contact with the new F 900 GS, especially when riding off-road in a standing position. In typical GS style, the new F 900 GS features the short GS beak underneath the new, compact headlight and the typical GS flyline that stretches over the tank and the sporty seat to the rear.

Off-road qualities, sportiness and dynamic performance are also reflected in the entire rear section, which is significantly narrower and more dynamic than the predecessor model. The dynamic appearance of the new F 900 GS is further enhanced by the sporty rear silencer by Akrapovič.

The off-road ambitions of the new F 900 GS are also highlighted by the standard-equipment hand protectors. In the GS Trophy model variant, an additional metal bracket and a newly designed plastic panel ensure significantly improved protection for the rider's hands and the controls in the event of impacts or falls, especially in off-road use. The front section features an enduro-style windshield.

With a reduced shape, it provides sufficient wind and weather protection and prevents annoying helmet turbulence when riding in the seated position and offers protection from dirt and dust for the rider and controls when riding standing off-road. A higher Dakar-style windshield for even better wind and weather protection with even less helmet noise is available as optional equipment ex-works or as an original BMW Motorrad accessory.

The new BMW F 900 GS: Available as a basic version in Blackstorm metallic, as a Passion model version in São Paulo yellow solid paint and as a GS Trophy version in Lightwhite solid paint/Racing Blue metallic.

The new F 900 GS is delivered in the base colour Blackstorm metallic with the fuel tank cover also painted in Mineral Grey matt metallic. The black-coated fixed fork tubes, black rear frame, black wheel rims and a black seat with red contrasting elements harmonise with this. The radiator panels in Blackstorm with GS logo provide a contrasting accent.

The new F 900 GS makes a sporty statement in São Paulo Yellow solid paint. Black-coated engine (not in the Passion model variant), wheels and forks give it a robust and masculine touch. The bike's dynamic look is enhanced by the red rear frame as well as radiator trims, fuel tank side parts and slider tube cover in vehicle colour with black/red tapes.

In the sportiest "GS Trophy" version in the colour combination Lightwhite solid paint/Racingblue matt metallic, the new F 900 GS emphasises its off-road character with the hand protectors with aluminium bracket, the aluminium engine guard, the black fork tubes and the black seat (also with red contrasts). Sporty touches are provided by a tinted windshield (not for the US), the gold wheel rims and the white rear frame. The fuel tank side surfaces and radiator trim in Lightwhite solid paint as well as the front wheel cover are highlighted with tapes in the typical BMW colours of blue/red on a white background.

The new BMW F 900 GS Adventure: Available as a basic variant in Blackstorm metallic and as a Ride Pro version in White aluminium matt.

The new F 900 GS Adventure shows that is ready for adventure, off-road tours and long-distance travel in the basic variant in Blackstorm metallic (also for the fuel tank centre cover) and newly designed radiator trims with GS logo in white aluminium. Black components such as the engine, fixed fork tubes, wheel rims and a black-grey comfort seat blend in harmoniously.

The new F 900 G Adventure in the Ride Pro model variant in White Aluminium matt signals a spirit of adventure and long-distance travel qualities. Together with new radiator trims with GS logo in White Aluminium (also for the fuel tank centre cover) as well as a black-grey comfort seat, the new F 900 GS Adventure looks sporty and stylish at the same time. This model variant is only available with the optional Ride Pro package.

The new BMW F 800 GS: Available as a basic variant in Lightwhite solid paint, as a Sport model variant in Racing Blue and as a Triple Black version in Blackstorm metallic.

In the basic version, the new F 800 GS is delivered in Lightwhite solid paint with radiator trims painted in Lightwhite solid paint and a fuel tank centre cover painted in the vehicle colour. Black handlebars and a black/blue seat with embroidered GS lettering provide an exciting contrast with embroidered GS lettering.

The new F 800 GS skilfully showcases its dynamic qualities in the Sport model variant in Racing Blue with radiator trims in Lightwhite solid paint and a fuel tank centre cover painted in the vehicle colour. A tinted windshield adds a sporty touch, while silver handlebars and a black and red seat with embroidered GS lettering add to the sporty GS feeling.

In the Triple Black model version and in Blackstorm metallic (also for the fuel tank centre cover) and radiator trims in Mineral Grey metallic matt, the new F 900 GS emphasises its masculine look. Dynamic touches are the silver handlebars and a black-grey seat with embroidered GS lettering.

6. Equipment program.



New and modified optional equipment as well as new original BMW Motorrad accessories for the new BMW F 900 GS, F 900 GS Adventure and F 800 GS.

In order for customers to be able to customise the new BMW F 900 GS, F 900 GS Adventure and F 800 GS, a comprehensive range of optional equipment and accessories as well as the BMW Motorrad Gear & Garment Collection are available as before. Optional equipment items are supplied ex works and are integrated in the production process. Optional BMW Accessories are installed by the BMW Motorrad dealer or by customers themselves. These items can also be retrofitted.

Optional equipment BMW F 900 GS.

- **Dynamics package:** Riding modes Pro, shift assistant Pro.
- **Enduro Pro package:** Sport suspension, black handlebars with handlebar risers, M Endurance chain.

Individual optional equipment BMW F 900 GS.

- Keyless Ride.
- RDC (only in conjunction with Keyless Ride).
- Intelligent emergency call (incl. teleservices).
- Anti-theft alarm.
- Lowered suspension (815 mm (- 55 mm), only in conjunction with Rallye seat low, not in conjunction with Enduro Pro package).
- Off-road tyres.
- Cruise control.
- Rallye seat low (835 mm (-35 mm)).
- Rallye seat high (890 mm (+20 mm)).
- Navigation preparation.
- Windshield high (+51 mm).

Optional equipment BMW F 900 GS Adventure.

- **Ride Pro package:** Riding modes Pro, Dynamic ESA, shift assist Pro, cruise control, Keyless Ride, navigation preparation, LED additional headlight, case holder for aluminium case, M Endurance chain, centre stand.

Individual optional equipment BMW F 900 GS Adventure.

- TPM (only in conjunction with Keyless Ride).
- Intelligent emergency call (incl. teleservices).
- Anti-theft alarm.
- Lowered suspension (805 mm (- 70 mm), in conjunction with extra low seat, not in conjunction with Ride Pro package).
- Off-road tyres.
- Sport rear silencer.
- Extra low seat (825 mm (-50 mm)).

Optional equipment BMW F 800 GS.

- **Dynamics package:** Riding modes Pro, Dynamic ESA, Shift Assistant Pro.

- **Comfort package:** Cruise control, Keyless Ride, navigation preparation, M Endurance chain, luggage carrier.

Individual optional equipment BMW F 800 GS.

- TPM (only in conjunction with Keyless Ride).
- Intelligent emergency call (incl. teleservices).
- Anti-theft alarm.
- Lowered suspension (760 mm (- 55 mm), in conjunction with extra low seat).
- Extra low seat (780 mm (-35 mm)).
- Comfort seat (high seat) (830 mm (+15 mm)).
- Power reduction 35 kW (only type code ECE A2).
- Centre stand (not in conjunction with lowered suspension).

New optional accessories.

Original BMW Motorrad accessories.

Storage.

- Case holder for aluminium case (F 900 GS and Adventure).

Design.

- Single seat bench sport black (F 900 GS).
- Passenger footrest (All GS Models F-Series).

Ergonomics and comfort.

- Foot lever adjustable black (All GS Models F-Series).
- Hand levers adjustable black (All GS Models F-Series).
- Side stand Enduro (All GS Models F-Series).
- Rear frame protection (F 900 GS).

Safety.

- Engine protection bar black (F 900 GS).
- Enduro hand protectors large.
- LED additional headlight black (F 900 GS).
- Side stand Enduro silver (F 900 GS and Adventure).

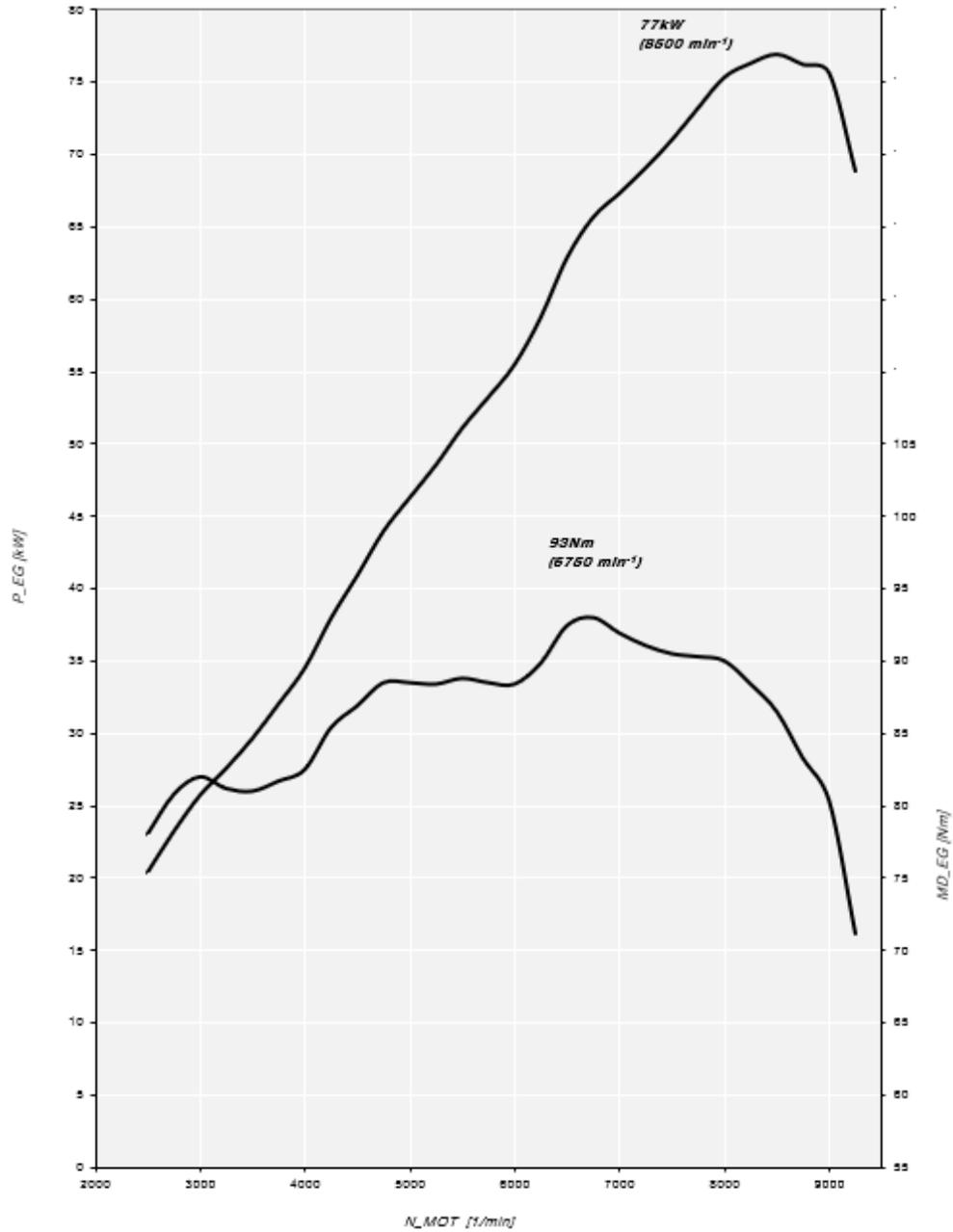
Navigation and communication.

- Connected Ride Navigator (all models).

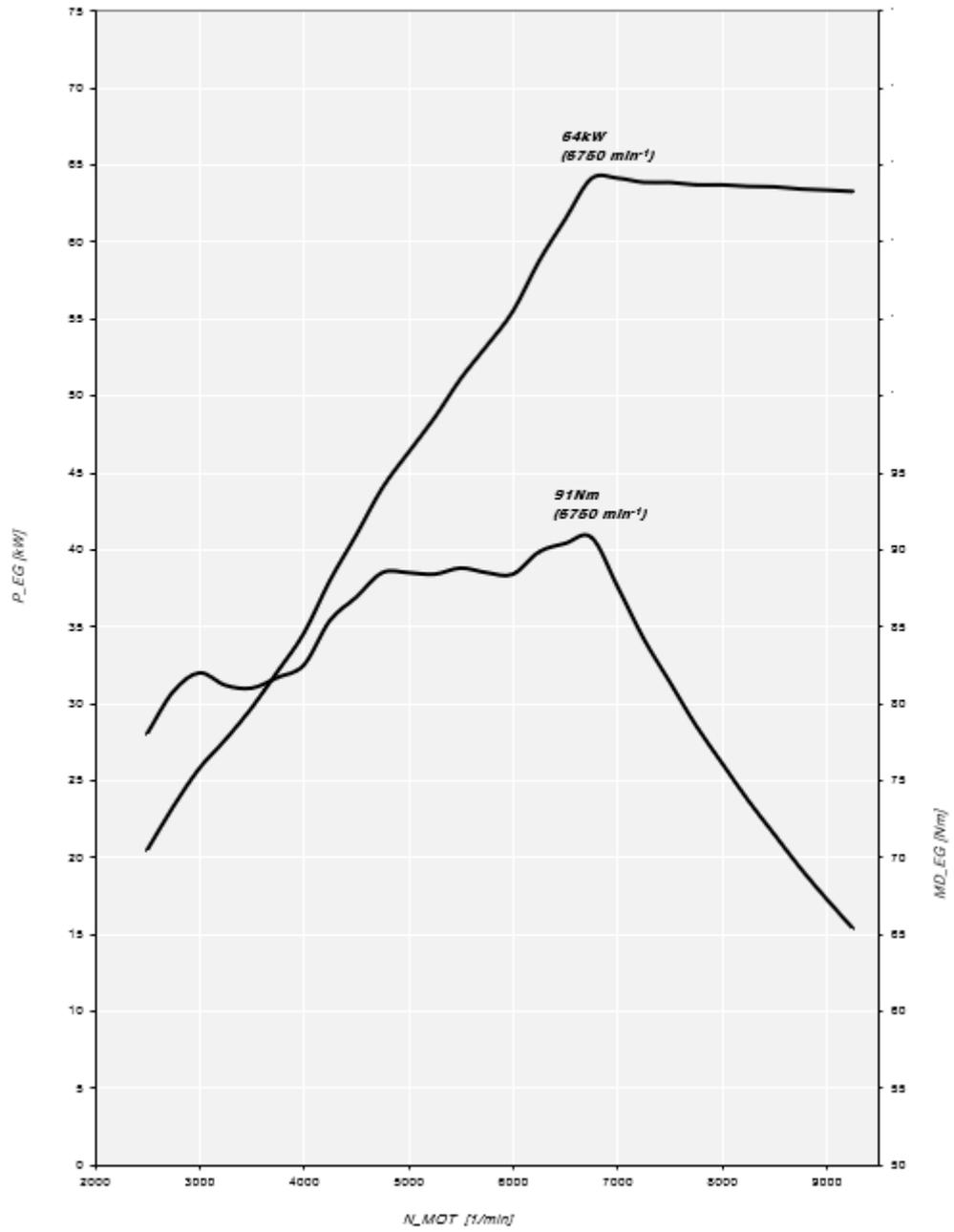
7. Engine output and torque.



BMW F 900 GS / Adventure



BMW F 800 GS



8. Technical specifications.



	F 900 GS	F 900 GS Adventure
Engine		
Capacity	cc	895
Bore/stroke	mm	86 x 77
Output	kW/hp	77/105
at engine speed	rpm	8,500
Torque	Nm	93
at engine speed	rpm	6,750
Type	Water-cooled, 2-cylinder, four-stroke in-line engine with four valves per cylinder operated by cam followers, two overhead camshafts and dry sump lubrication	
Compression		13.1/1
Fuel		Premium unleaded 95 RON
Valves per cylinder		4
Ø intake/outlet	mm	33.5/27.2
Ø throttle valve	mm	48
Engine control		BMS-ME
Emission control	Closed-loop three-way catalytic converter, exhaust emission standard EU-5+	
Electrical system		
Generator	W	416
Battery	V/Ah	12/9 maintenance-free
Headlight		LED
Turn indicators		LED
Starter	W	900
Power transmission		
Clutch	Wet clutch with anti-hopping function, mechanically activated	
Gearbox	Claw-shift 6-speed gearbox	
Primary ratio		1.821
Transmission ratios	I	2.833
	II	2.067
	III	1.600
	IV	1.308
	V	1.103
	VI	0.968
Secondary drive	Endless O-ring chain with drive-train vibration damping in the rear wheel hub	
Secondary ratio	2.765	2.588

		F 900 GS	F 900 GS Adventure
Chassis			
Frame construction type	Bridge-type steel frame in shell construction, load-bearing engine		
Front wheel suspension	USD telescopic forks, spring base, rebound and compression damping adjustable Ø 43 mm		
Rear wheel suspension	Aluminium double-sided swinging arm, directly linked WAD central spring strut, spring base and rebound damping adjustable (Optional equipment: sport suspension) (Option: Dynamic ESA)		
Spring travel, front/rear	mm		230/215
Wheel castor	mm	119.78	119.99
Wheelbase	mm	1,590	1,585
Steering head angle	°		62
Brakes	front	Twin disc brake, floating brake discs, Ø 305 mm, 2-piston floating calipers	
	rear	Single disc brake, Ø 265 mm, 1-piston floating caliper	
ABS			Standard equipment BMW Motorrad ABS Pro (banking angle optimised)
Wheels	Cross-spoke wheels		
	front	"	2.15 x 21"
	rear		4.25 x 17"
Tyres	front	90/90-21	
	rear	150/70 R 17	
Dimensions and weights			
Total length	mm	2,270	2,300
Total width incl.hand protectors	mm	943	939
Seat height	mm	870	875
DIN unladen weight, road ready	kg	219	246
Permitted total weight	kg	445	455
Fuel tank capacity	l	14.5	23
Performance figures			
Fuel consumption (WMTC)	l/100 km		4.4
CO2	g/km		103
Acceleration	0-100 km/h	s	3.8
Top speed	km/h		>200

F 800 GS**Engine**

Capacity	cc	895
Bore/stroke	mm	86 x 77
Output	kW/hp	64/87
at engine speed	rpm	6,750
Torque	Nm	91
at engine speed	rpm	6,750
Type	Water-cooled, 2-cylinder, four-stroke in-line engine with four valves per cylinder operated by cam followers, two overhead camshafts and dry sump lubrication	
Compression		13.1/1
Fuel		Premium unleaded 95 RON
Valves per cylinder		4
Ø intake/outlet	mm	33.5/27.2
Ø throttle valve	mm	48
Engine control		BMS-X
Emission control	Closed-loop three-way catalytic converter, exhaust standard EU-5	

Electrical system

Generator	W	416
Battery	V/Ah	12/9 maintenance-free
Headlight		LED
Turn indicators		LED
Starter	W	900

Power transmission

Clutch	Wet clutch with anti-hopping function, mechanically activated	
Gearbox	Claw-shift 6-speed gearbox	
Primary ratio		1.821
Transmission ratios	I	2.833
	II	2.067
	III	1.600
	IV	1.308
	V	1.103
	VI	0.968
Secondary drive	Endless O-ring chain with drive-train vibration damping in the rear wheel hub	
Secondary ratio		2.588

Chassis

Frame construction type	Bridge-type steel frame in shell construction, load-bearing engine		
Front wheel suspension	Telescopic forks Ø 41 mm		
Rear wheel suspension	Aluminium double-sided swinging arm, directly linked WAD central spring strut, Rebound damping adjustable (Option: Dynamic ESA)		
Spring travel, front/rear	mm		170/170
Wheel castor	mm		106.1
Wheelbase	mm		1,556
Steering head angle	°		63
Brakes	front	Twin disc brake, floating brake discs, Ø 305 mm, 2-piston floating calipers	
	rear	Single disc brake, Ø 265 mm, 1-piston floating caliper	
ABS	Standard equipment BMW Motorrad ABS Pro (banking angle optimised)		
Wheels	Aluminium cast wheels		
	front	"	2.50 x 19"
	rear		4.25 x 17"
Tyres	front		110/80 R 19
	rear		150/70 R 17

Dimensions and weights

Total length	mm		2,296
Total width	mm		910
Seat height	mm		815
DIN unladen weight, road ready	kg		227
Permitted total weight	kg		440
Fuel tank capacity	l		15

Performance figures

Fuel consumption (WMTC)	l/100 km		4.3
CO2	g/km		99
Acceleration	0-100 km/h	s	4.2
Top speed	km/h		190