

# The new BMW F 900 R and F 900 XR. Table of contents.



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## 1. Overall concept. Short version.



**"With a significantly extended range of standard equipment, fully adjustable upside-down forks, lighter wheels and a weight saving of 3 kilograms, we have been able to make the BMW F 900 R and F 900 XR even more attractive. The new F 900 R also benefits from a sportier riding position and the F 900 XR from optimised aerodynamics."**

Anton Huber, Project Manager



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BMW F 900 R Snapper Rocks Blue metallic.

BMW F 900 XR version Sport.

**The new BMW F 900 R and F 900 XR: Technical and visual upgrades and significantly extended standard equipment for the dynamic roadster and long-distance sports bike in the mid-range segment.**

With the new BMW F 900 R dynamic roadster and the new F 900 XR crossover bike, BMW Motorrad is taking its popular mid-range product range to a new level. Both F-models are designed for sportiness and fun in twisty terrain, with even more agile handling and are suitable for experienced riders as well as newcomers and those returning to motorcycling. While the new F 900 R as a Dynamic Roadster focuses primarily on sporty riding pleasure, the F 900 XR has everything it takes to be a confident partner on longer tours and holiday trips with luggage.

**Powerful two-cylinder in-line engine with Euro 5+ homologation. Dynamic riding mode with sportier set-up, Dynamic Traction Control (DTC) and engine drag torque control now standard. New**

**sports silencer in collaboration with Akrapovič as genuine BMW Motorrad accessories.**

In the new BMW F 900 R and F 900 XR, the tried-and-tested two-cylinder in-line engine with 895 cc capacity and 77 kW (105 bhp) of power output ensures pleasurable riding dynamics. It also delivers a full-bodied torque curve in the current Euro 5+ homologation. With the newly tuned standard "Dynamic" driving mode, the two new F models offer even more riding pleasure and dynamics at a sporty pace. Dynamic Traction Control (DTC) is fitted as standard to ensure the best possible safety during acceleration. The engine drag torque control is also standard. It prevents rear wheel spin or skidding caused by abrupt throttle release or downshifting, for an even higher level of safety.

The sound of the two-cylinder engine, which already has a powerful character due to the 270/450 degree firing interval, is made even throatier by the new sports silencer available as a genuine BMW Motorrad accessory in cooperation with Akrapovič, which also offers a weight saving of approximately 1.2 kg.

**New upside-down telescopic forks with adjustable damping rebound and compression damping and spring preload. New wheels, approx. 1.8 kg lighter. BMW Motorrad ABS Pro and Dynamic Brake Control DBC as standard - for even more safety when braking.**

On both the new BMW F 900 R and the new BMW F 900 XR, the front wheel is guided by new, torsionally rigid, upside-down telescopic forks with 43 mm slider tube diameter. Both rebound and compression damping as well as spring preload are now adjustable. This makes it possible to tailor the forks to suit individual requirements.

The new BMW F 900 R and F 900 XR also feature new 17-inch cast aluminium wheels. They weigh around 1.8 kg less than the previous models, contributing to a total weight reduction of 3 kg.

Another new standard feature on the new F models is BMW Motorrad ABS Pro. In contrast to BMW Motorrad ABS, ABS Pro goes one step further and offers even more safety when braking in bends by enabling ABS-assisted braking at lean angles.

Another new standard safety feature is Dynamic Brake Control (DBC), which provides even greater safety when braking in difficult situations by preventing unintentional acceleration.

**New, 0.8 kg lighter battery as standard and function-integrated turn indicator lights in the new rear end. BMW F 900 XR with Headlight Pro including daytime running light, adaptive headlight, USB-C charging port and heated grips as standard.**

The two new F Series models are equipped with a new battery that is 0.8 kg lighter. They also have a new rear end with function-integrated turn indicator lights (brake and tail light functions are integrated into the turn indicator lights).

The new BMW F 900 XR comes with Headlight Pro as standard, including daytime running light and adaptive headlight for even greater safety when riding at night. Other new standard features of the F 900 XR include the USB-C charging port on the right-hand side of the cockpit with a maximum charging current of 2.4 A and the heated grips.

**BMW F 900 R with optimised ergonomics thanks to a redefined position of the handlebars and footrests for a more sporty riding position. New headlight side trim painted in body colour.**

The handlebars, footrests and foot levers of the ergonomic triangle between the handlebars, seat and footrests of the new BMW F 900 R have been redesigned. This has made it possible to create a riding position that is significantly more sporty and closer to the front wheel.

The new F 900 R's increased sporting ambitions are emphasised by the headlamp side trim painted in body colour.

**BMW F 900 XR with optimised aerodynamics and hand protectors as standard.**

The new BMW F 900 XR offers even more touring capability and long-distance comfort thanks to optimised aerodynamics in the front fairing. The redesigned wind deflector reduces wind pressure on the rider, resulting in significantly less helmet vibration and even greater riding comfort. The hand protectors, which are standard for all equipment variants, also provides improved protection from the wind and weather.

### **Equipment variants and colours.**

The new **BMW F 900 R** is available in three attractive colours. The **basic variant** is available in Snapper Rocks Blue metallic, the **Triple Black** version in Blackstorm metallic and the version **Sport** in Lightwhite with Racingblue metallic.

The new **BMW F 900 XR** will also be available in three variants and colours for the coming motorcycle season. The **basic variant** is available in Racing Red, the **Triple Black** version in Blackstorm metallic and the version **Sport** in Lightwhite with Racingblue metallic.

### **New optional equipment and genuine BMW Motorrad accessories for the new BMW R 900 and R 900 XR.**

The already extensive range of optional equipment and genuine BMW Motorrad accessories has been further expanded for the new model year:

#### **BMW F 900 R and F 900 XR.**

- Sports silencer in collaboration with Akrapovič.
- Milled footrests and foot levers.
- Axle protectors.
- Lockable soft cases.
- Mengine spoiler and passenger seat cover in new colours.

#### **BMW F 900 R.**

- Sport seat (+ 25 mm).

#### **BMW F 900 XR.**

- High seat (+ 25 mm).
- High windshield (+ 30 mm).

### **All standard innovations as well as new genuine BMW Motorrad accessories and optional equipment at a glance:**

#### **BMW F 900 R.**

- Complies with Euro 5+ emission standards.
- New ergonomics with optimised handlebar and footrest position for improved riding position.

- New upside-down telescopic forks with adjustable damping rebound and compression damping and spring preload.
- New wheels, approx. 1.8 kg lighter.
- New battery, approx. 0.8 kg lighter.
- Dynamic Traction Control DTC, engine drag torque control, BMW Motorrad ABS Pro and Dynamic Brake Control DBC.
- "Dynamic" riding mode with new settings.
- Slim rear end with integrated turn indicator lights.
- New colours.
- New genuine BMW Motorrad accessories such as sports silencer in collaboration with Akrapovič, milled footrests and foot levers as well as axle protectors and lockable soft cases.
- New Sport seat (+ 25 mm seat height) available as optional equipment ex works.

### **BMW F 900 XR.**

- Complies with Euro 5+ emission standards.
- Increased wind and weather protection thanks to optimised wind deflector.
- Hand protectors.
- Heated grips.
- New upside-down telescopic forks with adjustable damping rebound and compression damping and spring preload.
- New wheels, approx. 1.8 kg lighter.
- New battery, approx. 0.8 kg lighter.
- Dynamic Traction Control DTC, engine drag torque control, BMW Motorrad ABS Pro and Dynamic Brake Control DBC.
- "Dynamic" riding mode with new settings.

- Headlight Pro (daytime running light and adaptive headlight).
- USB charging port.
- Slim rear end with integrated turn indicator lights.
- New colours.
- New genuine BMW Motorrad accessories such as sports silencer in collaboration with Akrapovič, milled footrests and foot levers as well as axle protectors and lockable soft cases.
- New high seat (+ 25 mm seat height) available as optional equipment ex works.
- New high windshield (+ 30 mm seat height) available as optional equipment ex works.

## **2. Drive.**

The new F 900 R and F 900 XR are even more dynamic and safer thanks to the new "Dynamic" riding mode and Dynamic Traction Control (DTC), now fitted as standard.

### **Powerful two-cylinder in-line engine with Euro 5+ homologation. New Akrapovič Sport rear silencer as Original BMW Motorrad Accessory.**

In the new BMW F 900 R and F 900 XR, the tried-and-tested two-cylinder in-line engine with 895 cm<sup>3</sup> capacity and 77 kW (105 hp) output, as well as a full-bodied torque curve in the current Euro 5+ homologation, ensures pleasurable riding dynamics. With a 270/450 degree firing interval, the engine generates a particularly emotional sound. The new sports silencer, available as a genuine BMW Motorrad Accessory in collaboration with Akrapovič, provides an even more expressive sound.

### **Newly tuned "Dynamic" riding mode and Dynamic Traction Control (DTC) for even greater dynamics and safety now come as standard.**

The F 900 R and F 900 XR previously offered two riding modes as standard, "Rain" and "Road", to suit the rider's individual preferences. The "Dynamic" riding mode has received new settings. It has a throttle response curve that is particularly direct, making it ideal for emotional, sporty country road riding.

The Dynamic Traction Control DTC, which ensures a high level of riding safety, is also a new standard feature on both models. It contributes significantly to the high riding dynamics and exemplary riding safety of the two new models. DTC provides valuable support and a significant safety advantage, especially in changing riding conditions, on surfaces with less grip and surfaces with changing friction.

The engine control unit detects a spinning rear wheel by comparing the speeds of the front and rear wheels via the ABS sensors with data from the lean angle sensor box. In this case, it reduces drive torque within milliseconds by reducing the ignition



angle, intervening in the fuel injection system and influencing the throttle position.

The DTC also uses a sensor cluster to measure the lean angle and takes this into account in its control behaviour. The DTC is individually combined with the different riding modes to ensure maximum riding safety.

DTC provides valuable assistance and an enormous safety advantage when accelerating. However, it cannot redefine the physical limits of riding. It is still possible to exceed these limits through misjudgement or riding errors. However, DTC helps to make the most of the bike's dynamic capabilities in a much safer manner. The DTC can be switched off separately for special requirements, such as riding on the racetrack.

**Engine drag torque control now standard.**

In addition to the anti-hopping clutch, the new BMW F 900 R and F 900 XR now also feature engine drag torque control as standard. It prevents rear wheel spin or skidding caused by abrupt throttle release or downshifting, for an even higher level of safety.

### 3. Chassis/suspension.



New fully adjustable upside-down forks allow the chassis to be specifically adapted to individual requirements and wheels that are around 1.8 kg lighter offer significant gains in handling, acceleration and braking behaviour. The now standard BMW Motorrad ABS Pro ensures even greater safety when braking.

**New upside-down telescopic forks with adjustable damping rebound and compression damping and adjustable spring preload. New wheels, approx. 1.8 kg lighter.**

On both the new BMW F 900 R and the new BMW F 900 XR, the front wheel is guided by new, torsionally rigid, upside-down telescopic forks with 43 mm slider tube diameter. In contrast to the previous models, the damping rebound and compression damping as well as the spring preload are adjustable. This makes it possible to tailor the forks to suit individual requirements, operating conditions and load conditions. The spring travel is 135 mm (F 900 R) and 170 mm (F 900 XR).

The new F 900 R and F 900 XR also feature new 17-inch cast aluminium wheels. In total, they weigh around 1.8 kg less than the previous wheels. The reduced rotational mass is reflected in improved acceleration, braking and handling. The wheel rim dimensions are 3.5 x 17" at the front and 5.5 x 17" at the rear. As a result, tyres in the sizes 120/70 ZR 17 and 180/55 ZR 17 are fitted.

**BMW Motorrad ABS Pro and Dynamic Brake Control DBC as standard - for even more safety when braking.**

Another new standard feature on the new F 900 R and F 900 XR is BMW Motorrad ABS Pro. In contrast to BMW Motorrad ABS, ABS Pro goes one step further and offers even more safety when braking in bends by enabling ABS-assisted braking at lean angles. 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.

ABS Pro is designed for road use, with medium to low friction values and optimum braking stability in the Rain and Road riding modes. Regulation takes place at an early stage. In Dynamic mode, ABS Pro assumes that the road surface has very high grip and has a high coefficient of friction. Accordingly, ABS Pro is designed for optimum deceleration, control is late and rear wheel lift detection is reduced.

Another new standard safety feature is Dynamic Brake Control (DBC), which provides even greater safety when braking in difficult situations by preventing unintentional acceleration. 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.

## 4. Electrical system.



A new, 0.8 kg lighter battery contributes to the weight reduction of the new BMW F 900 R and F 900 XR, while function-integrated turn indicator lights make for an even more striking rear end. The touring qualities of the new F 900 XR have been further enhanced with the addition of Headlight Pro, USB-C charging port and heated grips as standard.

### **F 900 R and F 900 XR with new, 0.8 kg lighter battery as standard and function-integrated turn indicator lights in the new rear end.**

The two new F Series models are equipped with a new battery that is 0.8 kg lighter. The new F 900 R and F 900 XR also have a new rear end with function-integrated turn indicator lights. In keeping with the "all in one" concept, the short, lightweight number plate holder and the rear turn indicator and number plate lights form a single unit, while the brake and tail light functions are integrated into the turn indicator lights.

### **F 900 XR with Headlight Pro including daytime running light, adaptive headlight, USB-C charging port and heated grips as standard.**

The new F 900 XR features Headlight Pro with daytime running light and adaptive headlight as standard. Other new standard features include the USB-C charging port on the right-hand side of the cockpit with a maximum charging current of 2.4 A and the heated grips.

The adaptive headlight, part of Headlight Pro, offers even more safety when riding at night. This adds additional LED modules. And this, in turn, allows for better illumination of the road in bends, ensuring a safer night-time ride. The adaptive headlight, which is unique in these two motorcycle classes, works by activating these additional LED elements in the main headlights, which are equipped with their own reflectors, depending on the lean angle. The adaptive headlight turns on when the motorcycle leans by more than 10 degrees and is travelling at a speed of more than 10 km/h. The additional lighting effect functions optimally up to a lean angle of approx. 25°.

Headlight Pro also features iconic light guides with country-specific daytime running light function. The F 900 XR has distinctive LED

light guides to the left and right of the lower headlamp edge, indicating that it is part of the BMW Motorrad XR family.

## 5. Ergonomics, design and equipment range.



**BMW  
MOTORRAD**

**"We have made the riding position on the new F 900 R even more sporty and dynamic with an optimised ergonomic triangle. The new F 900 XR benefits from optimised front fairing aerodynamics, which is reflected in a significant reduction in helmet shake."**

Dominik Menzel, Product Manager

**Both models with new rear end including function-integrated turn indicator lights.**

The new F 900 R and F 900 XR also have a new rear end with function-integrated turn indicator lights. The short, compact design gives the two new F-Series models an even more sporty and dynamic look and also offers practical benefits thanks to improved splash protection.

**BMW F 900 R with optimised ergonomics thanks to a redefined position of the handlebars and footrests for a more sporty riding position. New headlight side trim painted in body colour.**

The handlebars, footrests and foot levers of the ergonomic triangle between the handlebars, seat and footrests of the new BMW F 900 R have been redesigned. The handlebars are positioned further forwards than on the previous model. A more sporty, front-focused riding position has been achieved by moving the footrests further back and optimising the foot lever positions.

The new F 900 R's increased sporting ambitions are emphasised by the headlamp side trim painted in body colour.

**BMW F 900 XR with optimised aerodynamics and hand protectors as standard. High windshield available as optional equipment ex works.**

The new F 900 XR offers even more touring capability and long-distance comfort thanks to optimised aerodynamics in the front fairing. The redesigned wind deflector reduces wind pressure on the rider, resulting in significantly less helmet vibration and even greater riding comfort.

The hand protectors, which are standard for all equipment variants, also provides improved protection from the wind and weather. The new F 900 XR can also be fitted with a new, 30 mm higher

windscreen as an ex-factory option for even more comfort on long journeys.

### **Equipment variants and colours.**

The new **BMW F 900 R** is available in three attractive colours. As **base variant** in the body colour Snapper Rocks Blue metallic with black drivetrain, black seat and black wheels. The fuel filler cap in Snapper Rocks Blue metallic and the radiator grille in Mineralgrey matt are painted to match.

In the **Triple Black** version, the Black Storm metallic body colour, together with black for the powertrain, seat and wheels, defines the dynamic appearance of the F 900 R. The fuel filler cap is also in Black Storm metallic. The radiator grille in matt Mineral grey metallic blends in harmoniously.

The new F 900 R is available as a **Sport** version in Lightwhite with Racingblue metallic. The black drivetrain and black seat provide a striking contrast. Complemented by handlebar end mirrors, a Racing Blue metallic engine spoiler and red-painted wheels, the F 900 R has a decidedly sporty and aggressive appearance.

The new **BMW F 900 XR** will also be available in three equipment variants and colours for the coming motorcycle season. The **basic version** in Racing Red with black for the engine, seat and wheels and a matt Mineral Grey radiator grille emphasises the dynamic character of the F 900 XR.

The **Triple Black** variant features Blackstorm metallic with black for the engine, seat and wheels. The radiator grille in Mineralgrey metallic matt adds a subtle accent.

The **Sport** version of the F 900 XR is an expression of its sporting prowess. The Lightwhite with Racingblue metallic paint finish is complemented by the black drivetrain and black seat. The engine spoiler and radiator grille in Racing Blue metallic blend in harmoniously.

### **New optional equipment and genuine BMW Motorrad accessories for the new BMW F 900 R and R 900 XR.**

The already extensive range of optional equipment and genuine BMW Motorrad accessories has been further expanded for the new model year. For example, a sports silencer in collaboration with Akrapovič, milled footrests and foot levers as well as axle

protectors and lockable soft cases are now available for both models.

In addition, the **BMW F 900 R** can be fully customised to individual ergonomic requirements with the 25 mm higher Sport seat.

For the **BMW F 900 XR**, the genuine BMW Motorrad accessories range has also been extended to include a 25 mm higher version of the high seat. The new, 30 mm higher windscreen is also available as an ex-works option for even more comfort on long journeys.

**BMW F 900 R and F 900 XR.**

- Sports silencer in collaboration with Akrapovič.
- Milled footrests and foot levers.
- Axle protectors.
- Lockable soft cases.

**BMW F 900 R.**

- Sport seat (+ 25 mm).

**BMW F 900 XR.**

- High seat (+ 25 mm).
- High windshield (+ 30 mm).



## 6. Technical specifications.



	F 900 R	F 900 XR
<b>Engine</b>		
Capacity	cc	895
Bore/stroke	mm	86/77
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)
Valve control	DOHC (double overhead camshaft), cam followers	
Valves per cylinder		4
Ø intake/outlet	mm	33.5/27.3
Ø throttle valve	mm	48
Engine control		BMS-ME
Emission control	Closed-loop three-way catalytic converter, exhaust standard EU-5+	
<b>Electrical system</b>		
Alternator	W	420
Battery	V/Ah	12/9, maintenance-free
Headlight		LED headlight Headlight Pro
Rear light		Functionally integrated LED turn indicator lights at the rear
Turn indicator lights		LED turn indicator lights
Starter	kW	0.9
<b>Power transmission</b>		
Clutch	Multi-disc clutch in oil bath (anti-hopping), mechanically operated	
Transmission	Constant-mesh 6-speed transmission, integrated in the engine housing	
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
<b>Chassis</b>		

Frame construction type		Bridge-type steel frame in shell construction, load-bearing engine	
Front wheel suspension		USD telescopic forks with adjustable damping rebound and compression damping as well as adjustable spring preload. Ø 43 mm	
Rear wheel suspension		Aluminium double-sided swing arm, directly linked central spring strut, hydraulically adjustable spring preload, adjustable rebound damping (Optional equipment: Dynamic ESA)	
Spring travel, front/rear	mm	135/142	170/172
Wheel castor	mm	114	105
Wheelbase	mm	1,514	1,535
Steering head angle	°		64
Brakes	Front	Hydraulically operated twin disc brake, floating brake discs, Ø 320 mm, 4-piston radial calipers	
	Rear	Hydraulically operated single disc brake, Ø 265 mm, 1-piston floating caliper	
ABS		as standard BMW Motorrad ABS Pro	
Wheels		Die-cast aluminium wheels	
	Front	3.5 x 17"	
	Rear	5.5 x 17"	
Tyres	Front	120/70 ZR 17	
	Rear	180/55 ZR 17	
<b>Dimensions and weights</b>			
Total length	mm	2,140	2,160
Total width including mirrors	mm	870	920
Seat height	mm	760/835	775/845
DIN unladen weight, road ready	kg	208	216
Permitted total weight	kg	430	438
Fuel tank capacity	l	13	15.5
<b>Performance figures</b>			
Fuel consumption (WMTC)	l/100 km		4.2
CO2	g/km		99
Acceleration 0-100 km/h	s	3.7	3.6
Top speed	km/h		>200