

The new BMW F 700 GS, F 800 GS and F 800 GS Adventure. Table of contents.



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1. The new BMW F 700 GS, F 800 GS and F 800 GS Adventure. (Short version)



The new BMW F 700 GS, F 800 GS and F 800 GS Adventure – authentic characters featuring optimised functionality.

For years the GS models of the F series have embodied carefree motorcycling pleasure and sporty dynamics on the road, combined with a high level of travel suitability and robust off-road competence. For the model year 2017, BMW Motorrad has now taken the quality of this successful mid-range enduro motorbike a stage further.

As before, the new F 700 GS is mainly aimed at motorcyclists who like the ride feel of an enduro but do not require quite so much off-road competence. Its strengths are a lower seat height, all-round capabilities and more than sufficient power, along with excellent fuel efficiency and everyday qualities.

The new F 800 GS combines road and travel suitability with distinct off-road talents, combining these abilities at a level that is unique within its class.

Based on the F 800 GS, the F 800 GS Adventure particularly offers enhanced travel suitability even in the most remote corners of the planet. For touring motorcyclists with a bent for off-road riding, globetrotters and travel enduro riders it provides a genuine BMW GS Adventure concept in the mid-range segment.

EU4 adaptation and newly designed tailpipe.

The 798 cc engines have been adapted to the EU4 regulations for model year 2017. The visual hallmark here is the newly designed end piece of the stainless steel tailpipe. The HP sports exhaust by Akrapovič has also been redesigned and is available as an Original BMW Motorrad accessory.

Full E-Gas ride-by-wire system for further improved response and the modes “Rain”, “Road”, “Enduro” and “Enduro Pro” to cater for individual rider preferences.

A ride-by-wire system now passes on the rider's commands directly from a sensor on the twist grip to the engine control system and therefore to the throttle valve. The result is even finer controllability and an improved response. At the same time, this also enables the new standard riding modes “Rain” and “Road” to be used for riding on damp or dry surfaces as well as the modes “Enduro” and “Enduro Pro” - available as an ex works option (for the F 800 GS

/ F 800 GS Adventure only) - which are designed for lighter and more intense off-road use respectively.

Instruments with new dials and even more information.

The new F 700 GS, F 800 GS and F 800 GS Adventure are fitted with newly designed and more easily readable dials. An additional Malfunction Indicator Light (MIL) ensures the EU4 norm is met, while the display has been extended to include riding mode information.

Dynamic colours and styles convey the bike's character more distinctly.

Powerful yet distinct character qualities are expressed in three paint finish/style variants for each of the new F 700 GS and F 800 GS, and there are two additional paint finishes for the BMW 800 GS Adventure fitted with new galvanised radiator trim elements, a new intake silencer cover and a new ignition lock casing.

An overview of the highlights:

- Adaptation to EU4 requirements.
- Newly designed end piece of the standard tailpipe and HP sports silencer by Akrapovič available as an Original BMW Motorrad accessory.
- Full E-Gas ride-by-wire system for improved response and controllability.
- Riding modes "Rain" and "Road" as standard. Riding modes "Enduro" and "Enduro Pro" (only F 800 GS / F 800 GS Adventure) as an ex works option.
- Instrument panel with new dials, MIL indicator lamp and riding mode display.
- Dynamic paint finish and style concepts.
- Side reflectors on fork slider tubes and fixed fork tubes.

2. Technology.



Carefree enduro riding fun in further enhanced style.

Ever since BMW Motorrad expanded the BMW enduro family in 2007 with the addition of the F series GS models for the entry-level and mid-range class, these motorcycles have become well established with their excellent all-round qualities: lots of riding fun, simple and secure control on all surfaces and plenty of pushing power and endurance when travelling - even when the journey happens to take the rider off the beaten track. For the new model year 2017, BMW Motorrad has now optimised and honed the qualities of the mid-range segment models once again.

Adaptation of the dynamic engine variants to EU requirements and a newly designed tailpipe.

In all three motorcycles, the distinctive liquid-cooled 4-valve 2-cylinder engine with fuel injection and 6-speed gearbox ensures powerful forward thrust as before. It has now been adjusted to meet the new EU4 regulations, however. The visual hallmark of the adapted engines is the newly designed end piece of the stainless steel tailpipe. Together with the redesigned HP sports silencer by Akrapovič, this fulfils the new R41-4 noise requirement.

With 55 kW (75 hp) at 7000 rpm and a maximum torque of 77 Nm at 5500 rpm, the new F 700 GS offers punchy engine performance, pulling power and low fuel consumption.

The F 800 GS and F 800 GS Adventure also rely on the 2-cylinder with 798 cc, here generating 63 kW (85 hp) at 7500 rpm and a maximum torque of 83 Nm at 5750 rpm.

Another unique feature in serial production motorcycle manufacture is the mass balance of the 2-cylinder engine by means of an additional connecting rod. It compensates for the first and second order inertia forces, ensuring that the engine runs with a pleasingly low level of vibration.

Further improved response due to full E-Gas ride-by-wire system and the riding modes “Rain” and “Road” as well as “Enduro” and “Enduro Pro” to meet individual rider wishes.

A full E-Gas ride-by-wire system now passes on the rider's commands directly from a sensor on the twist grip to the engine control system, which regulates the opening angle of the throttle valve accordingly. This has enabled controllability and response to be further optimised – especially for off-road use.

The changeover to the ride-by-wire system means that riders of the new F 700 GS, F 800 GS and F 800 GS Adventure now benefit from various riding modes - as are available for most other BMW motorcycles, too. The modes “Rain” and “Road” come as standard and are for riding on damp and dry road surfaces respectively. As part of the ex works special accessory “Riding Modes Pro”, the “Enduro” mode is available for the F 700 GS and the “Enduro Pro” mode in addition for the F 800 GS and F 800 GS Adventure when riding off-road.

“**Rain**” mode guarantees a gentle throttle response, ABS regulation is set for road use and the Automatic Stability Control is configured for road riding with low friction coefficients. In “**Road**” mode, throttle response is set to optimum, ABS is adapted to road use and the ASC is configured for high friction coefficients.

The “**Enduro**” mode is characterised by a gentle throttle response, with ABS and ASC settings oriented towards light off-road use with road tyres. For more dedicated off-road riders, the “**Enduro Pro**” mode is available for the F 800 GS and F 800 GS Adventure: here, optimum throttle response is combined with ABS and ASC regulation geared towards use with off-road tyres. In this mode the rear-wheel ABS is also deactivated, allowing experienced riders to perform so-called brake drifts. Regardless of the various riding modes, both ABS and ASC can be switched off in all three new models.

Instrument panel with newly designed dials for optimum readability and an even wider range of information.

The new F 700 GS, F 800 GS and F 800 GS Adventure have an instrument panel consisting of analog displays for the speedometer and engine speed as before and also a multifunction display including indicator lamps. In the new model year 2017, a so-called MIL (Malfunction Indicator Light) is provided in the cockpit in line with EU4 requirements. There are also newly designed dials which ensure improved readability, and the display has been extended to include riding mode information.

**Tried and test suspension technology, ABS as standard.
Automatic Stability Control ASC and Electronic Suspension
Adjustment ESA as ex works options.**

In terms of suspension, the new models continue to use the established tubular steel frame in which the engine is integrated as a load-bearing element. The rear frame in square steel tubing and the aluminium double-sided swinging arm likewise remain unchanged, as do the wheels and tyres.

To meet the new statutory provisions, the new models are now fitted with side reflectors on the fork slider tubes and fixed fork tubes for better visibility when riding at night.

In line with the "Safety 360°" principle, the new F 700 GS, F 800 GS and F 800 GS Adventure are fitted as standard with the high-performance BMW Motorrad ABS system. Other safety-related features are the optional factory-installed Automatic Stability Control ASC and the Electronic Suspension Adjustment ESA.

3. Design.



The new F 700 GS: great colours for the allrounder.

The F 700 GS Rallye in Light White non-metallic emphasises the athletic side of the 700 cc model.

- Light White non-metallic paint finish.
- Frame in Racing Red non-metallic.
- Red spring strut.
- Grey/black seat.
- Large hand guard.

In Racing Red non-metallic, the new F 700 GS has a strikingly progressive appearance.

- Racing Red non-metallic paint finish.
- Frame in Agate Grey metallic matt.
- White spring strut.
- Black seat.

In Singapore Grey metallic matt, the new F 700 GS expresses a deliberately masculine and mature style.

- Singapore Grey metallic paint finish.
- Frame in Racing Red non-metallic.
- Red spring strut.
- Black seat.

The new F 800 GS: Offroad potential and dynamic looks.

The F 800 GS special model GS Trophy in Light White non-metallic features specifically sporty accentuations.

- Light White non-metallic paint finish.
- Frame in Racing Red non-metallic.
- GS Trophy Tapes.
- Red spring strut.
- Grey/black seat.
- Large hand guard.
- Crash bars.
- Enduro aluminium engine protector.

The F 800 GS Exclusive in Blackstorm metallic has a specially powerful, masculine character.

- Blackstorm metallic paint finish.
- Frame in Agate Grey metallic matt.
- White spring strut.
- Grey/black seat.
- Large hand guard.
- Tinted windshield.
- LED turn indicators.

In Ostra Grey metallic matt, the new F 800 GS expresses a deliberately fresh, dynamic style.

- Ostra Grey metallic matt paint finish.
- Frame in Racing Red non-metallic.
- Red spring strut.
- Grey/black seat.

The new F 800 GS Adventure: Styled for adventure.

For model year 2017 the new F 800 GS Adventure has been fitted with new galvanised radiator trim and integrated GS emblem. The windshield also features a GS emblem. The airbox cover has also been redesigned as well as housing of the ignition lock.

The F 800 GS Adventure Rallye in Racing Red Matt accentuates the adventure character and offroad capability

- Racing Red matt paint finish.
- Frame in Light White non-metallic.
- White spring strut.
- Red/black seat.

In Catalano Grey, the new F 800 GS Adventure expresses a deliberately masculine and self-confident style.

- Catalano Grey paint finish.
- Frame in Black
- White spring strut.
- Grey/black seat.

4. Equipment program.



The familiar extensive BMW Motorrad range of optional equipment and original BMW Motorrad accessories is available for the new F 700 GS, F 800 GS and F 800 GS Adventure.

Optional equipment is supplied directly ex works and is integrated in the production process. Optional accessories are installed by the BMW Motorrad dealer or by customers themselves. These are features which can be retrofitted, too.

Optional equipment.

- **Comfort Package F 700 GS and F 800 GS:** Heated grips, on-board computer, centre stand, case holder.
 - **Comfort Package F 800 GS Adventure:** Heated grips, on-board computer, centre stand.
 - **Dynamic Package F 700 GS:** ESA, ASC, RDC, Riding Modes Pro.
 - **Dynamic Package F 800 GS and F 800 GS Adventure:** ESA, ASC, Riding Modes Pro.
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- Heated grips.
 - Tyre pressure control RDC (F 700 GS).
 - On-board computer.
 - LED white direction indicators.
 - LED auxiliary headlights.
 - Alarm system (DWA).
 - Electronic Suspension Adjustment ESA.
 - Automatic Stability Control ASC.
 - Seat, low.
 - Comfort seat.
 - Output reduction 35 kW.
 - Off-road tyres (F 800 GS and F 800 GS Adv.).
 - Centre stand.
 - Case holder.
 - Program map adaptation for RON 91 (F 800 GS and F 800 GS Adv.).
 - Lowered suspension for F 700 GS and F 800 GS.

Original BMW Motorrad Accessories.

HP Parts.

- HP sports silencer by Akrapovič.

Storage program.

- Vario case, black (F 700 GS, F 800 GS).
- Vario topcase, black (F 700 GS, F 800 GS).
- Liners for Vario case and topcase (F 700 GS, F 800 GS).
- Back pad for Vario topcase (F 700 GS, F 800 GS).
- Case holder for Vario case (F 700 GS, F 800 GS).
- Luggage support, large, for Vario topcase incl. adapter plate (F 700 GS, F 800 GS).
- Aluminium case (F 800 GS, F 800 GS Adv.).
- Aluminium topcase (F 800 GS, F 800 GS Adv.).
- Functional liners for aluminium case and topcase (F 800 GS, F 800 GS Adv.).
- Carry handle for aluminium case or topcase (F 800 GS, F 800 GS Adv.).
- Back pad for aluminium topcase (F 800 GS, F 800 GS Adv.).
- Case holder for aluminium case (F 800 GS, F 800 GS Adv.).
- Topcase holder for aluminium topcase (F 800 GS, F 800 GS Adv.).
- Luggage bridge, small (standard in F 800 GS Adv.).
- Tank rucksack, waterproof.
- Vario insert for tank rucksack.
- Enduro rear bag.
- Softbag, small, 30 l – 35 l.
- Luggage roll, 50 l.

Design program.

- Splash guard extension, rear (standard in F 800 GS Adv.).
- LED turn indicators.

Ergonomics and comfort program.

- Windshield, large, tinted (F 700 GS, F 800 GS).
- Windshield, large, clear (F 700 GS).
- Windshield, small, tinted (F 700 GS).
- Touring windshield (F 800 GS).
- Windshield, small, clear (F 800 GS).
- Windshield, tinted (F 800 GS Adv.).
- Centre stand.
- Various seat variants (low/comfort/etc.).
- Heated grips.
- Enduro footrests, wide (standard in F 800 GS Adv.).

Navigation and communication components.

- BMW Motorrad Navigator V.
- BMW Motorrad Navigator Street.
- BMW Motorrad Smartphone Cradle.
- Holder for BMW Motorrad navigation systems.

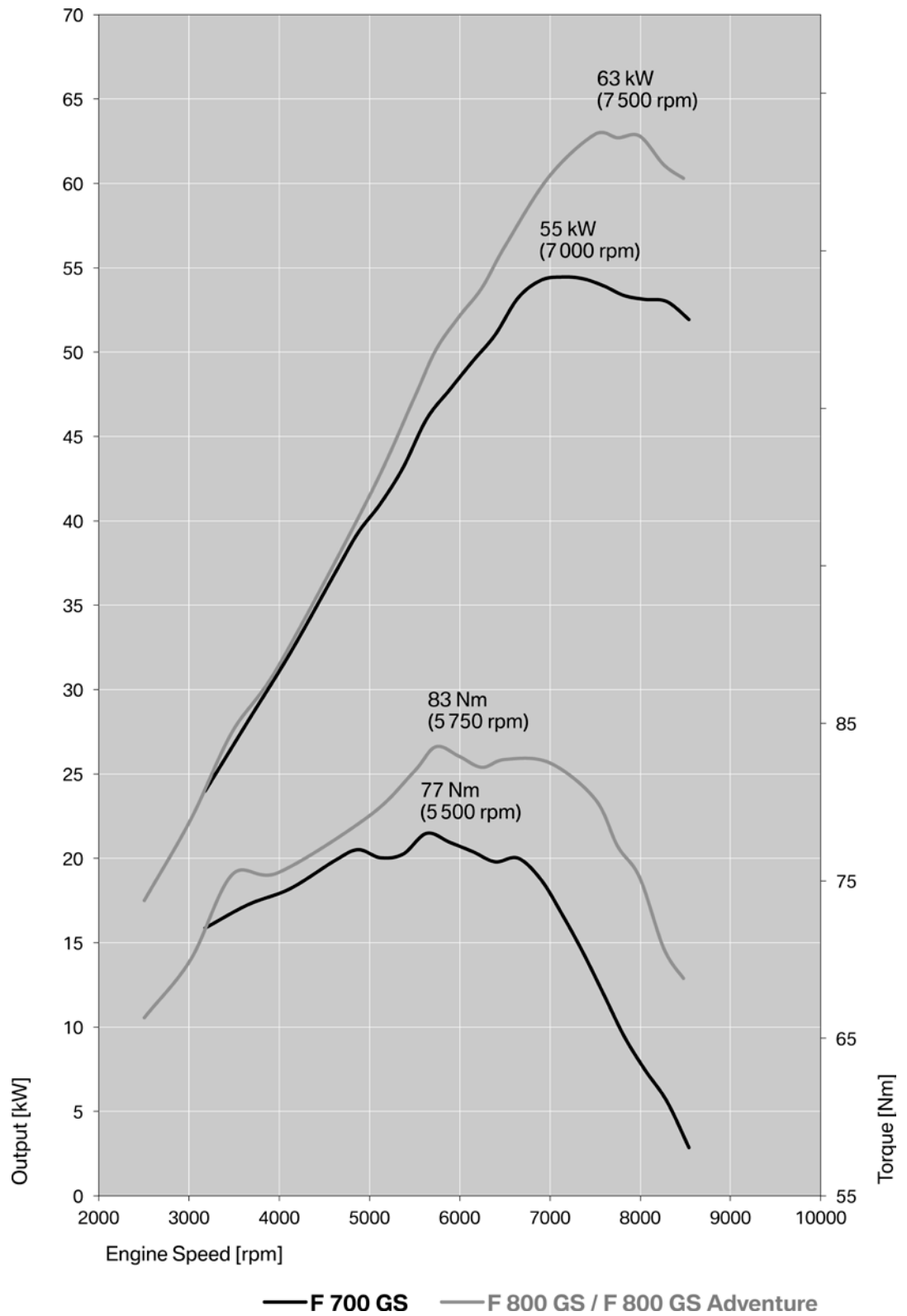
Safety program.

- Alarm system DWA with remote control.
- ASC (Automatic Stability Control), disengageable.
- LED auxiliary headlights.
- Headlamp guard for off-road use (F 700 GS, F 800 GS).
- Hand protector bar (F 700 GS, F 800 GS.).
- Hand protector, small (F 700 GS, F 800 GS).
- Hand protector, large (F 700 GS, F 800 GS).
- Top spoiler for hand protector, large (F 700 GS, F 800 GS).
- Engine protection bar (standard in F 800 GS Adv.).
- Enduro aluminium engine protector.
- Engine protector, plastic (standard in F 800 GS and F 800 GS Adv.).

Maintenance and technology.

- Automatic chain lubrication system.
- On-board toolkit service set.
- Power reduction to 35 kW (48 hp).
- Indoor cover, large (usable with cases).
- Indoor cover.
- Motorcycle cover.
- Mini foot pump.

5. Engine output and torque.



6. Technical specifications.



		F 700 GS	F 800 GS	F 800 GS Adv
Engine				
Capacity	cc			798
Bore/stroke	mm			82/75.6
Output	kW/hp	55/75	63/85	63/85
at engine speed	rpm	7,000	7,500	7,500
Torque	Nm	77	83	83
at engine speed	rpm	5,500	5,750	5,750
Type			Water-cooled 2-cylinder 4-stroke engine	
Compression/fuel		12.0: 1; premium, unleaded (95 RON)	95 RON (option: 91 (RON))	95 RON (option: 91 (RON))
Valve control			DOHC (double overhead camshaft) rocker arms	
Valves per cylinder				4
Ø intake/outlet	mm			32/27.5
Ø Throttle valves	mm			46
Engine control				BMS-KP
Emission control			Closed-loop 3-way catalytic converter	
Electrical system				
Alternator	W			400
Battery	V/Ah			12/12
Headlamp			High beam/low beam: 12 V/55 W Halogen	
Rear light			LED brake light/rear light	
Starter	kW			0.9
Power transmission - gearbox				
Clutch			Mulit-plate wet clutch, mechanically operated	
Gearbox			Constant-mesh 6-speed gearbox	
Primary ratio				1.943
Transmission ratios	I			2.462
	II			1.750
	III			1.381
	IV			1.174
	V			1.042
	VI			0.960
Rear wheel drive				Chain
Transmission ratio		2.471	2.625	2.625
Suspension				
Frame construction type			Tubular steel frame, Engine self-supporting	
Front wheel suspension		USD telescopic fork Ø 41 mm	Ø 43 mm	Ø 43 mm
Rear wheel suspension			One-piece cast double-sided aluminium swinging arm	
Spring travel, front/rear	mm	170/170	230/215	230/215
Wheel castor	mm	95.3	117	117
Wheelbase	mm	1,557	1,573	1,573
Steering head angle	°	64	64	64

		F 700 GS	F 800 GS	F 800 GS Adv
Brakes	front		Hydraulically activated twin disc brake, Ø 300 mm, 2-piston floating caliper	
	Rear		Hydraulically activated single disc brake Ø 265 mm, 1-piston floating caliper	
ABS			BMW Motorrad ABS as standard, disengageable	
Wheels		Die-cast aluminium wheels	Spoke wheels	Spoke wheels
	Front	2.50 x 19"	2.15 x 21"	2.15 x 21"
	Rear	3.5 x 17"	4.25 x 17"	4.25 x 17"
Tyres	Front	110/80 R19	90/90 R21	90/90 R21
	Rear	140/80 R17	150/70 R17	150/70 R17
Dimensions and weights				
Total length	mm	2,280	2,300	2,305
Total width with/without mirrors	mm	880/855	945/890	925/895
Seat height	mm	820 (Lowered suspension option 765) (option comfort SB 835) (Rallye accessory SB 860)	880 (Low. susp. option 820) (Rallye acc. SB 920)	890 (Low SB option 860)
DIN unladen weight, road ready	kg	212	217	232
Permitted total weight	kg	436	444	454
Fuel tank capacity	l	16	16	24
Performance figures				
Fuel consumption (WMTC)	l/100 km	4.3	4.3	4.3
Acceleration 0-100 km/h	s	4.1	4.3	4.4
Top speed	km/h	192	200	193