

BMW Motorrad  
USAMotorcycles  
since 1923

## BMW F 650 GS



### Engine

Type	Water-cooled, single-cylinder 4-stroke engine, four valves, two overhead camshafts, dry sump lubrication
Bore x stroke	100 mm x 83 mm
Capacity	652 cc
Rated output	35 kW (48 hp) at 6,500 rpm (output reduction to 25 kW (34 hp) at 6,500 rpm possible)
Max. torque	60 Nm at 5,000 rpm (with output reduction: 47 Nm at 4,500 rpm)
Compression ratio	11.5 : 1
Mixture control / engine management	Electronic intake pipe injection / BMW engine management, twin-spark ignition
Emission control	Closed-loop 3-way catalytic converter, emission standard EU-3

### Performance / fuel consumption

Maximum speed	approx. 170 km/h (with output reduction: approx. 145 km/h)
Fuel consumption per 100 km at constant 90 km/h	3.2 l
Fuel consumption per 100 km at constant 120 km/h	4.3 l
Fuel type	Unleaded regular, minimum octane rating 91

(RON)

**Electrical system**

Alternator	three-phase alternator 400 W
Battery	12 V / 12 Ah

**Power transmission**

Clutch	Multiple-disc clutch in oil bath, mechanically operated
Gearbox	Constant mesh 5-speed gearbox integrated into crankcase
Drive	Endless O-ring chain with shock damping in rear wheel hub

**Chassis / brakes**

Frame	Bridge-type steel section frame with bolted-on rear section
Front wheel location / suspension	Telescopic fork, Ø 41 mm, fork stabiliser
Rear wheel location / suspension	Box-section steel dual swing arm, central spring strut operated by lever system, spring pre-load hydraulically adjustable (continuously variable) at handwheel, rebound damping adjustable
Suspension travel front / rear	170 mm / 165 mm (lowered suspension 140 mm / 130 mm)
Wheelbase	1,477 mm
Castor	113 mm
Steering head angle	61.9°
Wheels	Cast aluminium
Rim, front	2,50 x 19"
Rim, rear	3.50 x 17"
Tyres, front	110/80 R19 59V
Tyres, rear	140/80 R17 69V
Brake, front	Single disc, diameter 300 mm, double-piston floating caliper
Brake, rear	Single disc, diameter 240 mm, single-piston floating caliper
ABS	Optional extra: BMW Motorrad ABS (can be switched off)

**Dimensions / weights**

Length	2,165 mm
Width (incl. mirrors)	920 mm
Height (excl. mirrors)	1,390 mm
Seat height, unladen weight	780 mm (lowered suspension 750 mm; high seat: 820 mm)
Inner leg curve, unladen weight	1,770 mm (lowered suspension 1,710 mm; high seat: 1,850 mm)
Unladen weight, road ready, fully	192 kg

fuelled 1)	
Dry weight 2)	175 kg
Permitted total weight	380 kg
Payload (with standard equipment)	188 kg
Usable tank volume	14.0 l
Reserve	approx. 4.0 l

Technical data relate to the unladen weight (DIN)

1) According to guideline 93/93/EWG with all fluids, fuelled with at least 90% of usable tank volume

2) Unladen weight without fluids