

# Phil Hawksley's BM Bikes

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## BMW R100RS Specifications

<b>Start of Production</b>	<b>1976</b>
<b>End of Production</b>	<b>1984</b>
<b>Numbers Produced</b>	<b>33,648</b>
<b>Price</b>	<b>11,210 DM</b>



### Engine

Motor Type	Four-stroke two cylinder horizontally opposed "Boxer" engine, air cooled
Bore x Stroke	94 x 70.6 mm (3.70 x 2.78 in)
Displacement	980 cc
Max Power	70 hp (51 KW) at 7,250 rpm
Max Torque	76 Nm / 56 ft lb at 5,500 rpm
Compression Ratio	9.5 : 1
Valves Per Cylinder	2
Valve Control	OHV, using push rod and rocker arm
Carburation System	2 constant depression carburetors, Bing 94/40/105 - 94/40/106
Engine Lubricating System	Wet sump

### Power Transmission

Clutch	Dry single plate, with diaphragm spring
Number of Gears	5
Gear Selection	Dog type gearbox (ratchet foot lever)
Gearbox Ratios	4.4 / 2.86 / 2.07 / 1.67 / 1.50 : 1 (Optional sport version: 3.38 / 2.43 / 1.93 / 1.67 / 1.50
Rear Wheel Ratio	1 : 3.0 or 1 : 2.91
Bevel/Crownwheel	11 / 33 teeth or 11 / 32 teeth

### Electrical System

Ignition System	Battery ignition. From Sept 1980: contact free electronic ignition (Bosch)
Alternator	Bosch 12V/240 W
Starter	Bosch 0.6 hp (from 1978: 0.7 Kw)
Spark Plugs	Bosch W 225 T 30 / Beru 230/14/3 A / Champion N6Y

### Chassis

Type of Frame	Double loop tubular frame with bolt on rear section
Front wheel suspension	Telescopic fork with hydraulic shock absorber
Rear wheel suspension	Long swinging arm with adjustable strut
Spring Travel Front/Rear	200 / 125 mm (7.87 x 4.92 in)
Wheel Rims, Front	1.85 B 19
Wheel Rims, Rear	2.50 B 18
Tyres, Front	3.25 H 19
Tyres, Rear	4.00 H 18
Brakes, Front	Dual disc brake 260 mm / 10.23 in diameter. ATE 1 piston caliper up to 1981. 1981 models Brembo 2 piston caliper
Brakes, Rear	Simplex drum brake 200 mm / 7.87 in diameter (from 1978: single disc brake 260 mm / 10.23 in diameter)

### **Dimensions/Weights**

Length x Width x Height	2130 (from 1978: 2210) x 746 x 1300 mm (83.85 (or 87) x 29.37 x 51.18 in)
Wheel Base	1465 mm / 57.67 in
Fuel Tank Capacity	24 litres / 5.27 gal / 6.34 gal US
Unladen Weight with Full Tank	230 Kg / 506 lb
Max. Permissible Weight	398 Kg / 876 lb
Ground Clearance	165 mm / 6.49 in
Seat Height (Unladen)	820 mm (32.3 inches)
Fuel Consumption (at constant 90 Kph)	5.75 litres 100 Km / / 49 mpg / 40 mpg US
Top Speed	200 Kph / 124 mph
Acceleration 0 - 100 Kph / 62 mph	4.6 seconds