

Phil Hawksley's BM Bikes

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BMW R100S Specifications

Start of Production	1976
End of Production	1980
Numbers Produced	11,762
Price	10,190 DM



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	65 hp (48 KW) at 6,600 rpm. 1978: 70 hp (51 Kw) at 7,250 rpm
Max Torque	75 Nm / 55 ft lb at 5,500 rpm 1978: 77 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 94/40/103 - 94/40/104 or 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: 2.91 or 1 : 3.0
Bevel/Crownwheel	11 / 32 teeth or 11 / 33 teeth

Electrical System

Ignition System	Battery ignition
Alternator	Bosch 12V/240 W
Starter	Bosch 0.6 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	2.15 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
Brakes, Rear	Simplex drum brake 200 mm / 7.87 in diameter. 1978: single disc brake 260 mm / 10.23 in diameter

Dimensions/Weights

Length x Width x Height	2130 x 746 x 1210 mm (83.85 x 29.37 x 47.63 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	220 Kg / 484 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)	65 hp 5.45 litres / 51 mpg / 43 mpg US and 70 hp 5.75 litres per 100 Km / 49 mpg / 40 mpg US
Top Speed	200 Kph / 124 mph
Acceleration 0 - 100 Kph / 62 mph	65 hp: 4.7 seconds. 70 hp: 4.6 seconds