

# Phil Hawksley's BM Bikes

[www.bmbikes.co.uk](http://www.bmbikes.co.uk)

## BMW R100R Mystic Specifications

**Start of Production** 1993  
**End of Production** 1995  
**Numbers Produced** Approx 3,700  
(included in R100R)  
**Price** 14,950 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	60 hp (44 KW) at 6,500 rpm
Max Torque	76 Nm / 56 ft lb at 3,750 rpm
Compression Ratio	8.5 : 1
Valves Per Cylinder	2
Valve Control	OHV, using push rod and rocker arm
Carburation System	2 constant depression carburetors, Bing 94/40/123 - 94/40/124
Engine Lubricating System	Wet sump

### Power Transmission

Clutch	Dry single plate, with lever action 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
Rear Wheel Ratio	1 : 3.09
Bevel/Crownwheel	11 / 34 teeth

### Electrical System

Ignition System	Contact free electronic ignition (Bosch)
Alternator	Bosch 240 W
Starter	Bosch 0.7 Kw
Spark Plugs	Bosch W 7 DC / Beru 14-7 DU

### Chassis

Type of Frame	Double loop tubular frame with bolt on rear section
Front wheel suspension	Telescopic fork with hydraulic shock

Rear wheel suspension	absorber
Spring Travel Front/Rear	BMW Paralever swinging arm
Wheel Rims, Front	135 / 135 mm (5.31 x 5.31 in)
Wheel Rims, Rear	2.50 x 18 MTH 2
Tyres, Front	2.50 x 17 MTH 2
Tyres, Rear	110 / 80 V18
Brakes, Front	140 / 80 V 17
Brakes, Rear	Single disc brake 285 mm / 11.22 in diameter (optional dual disc 285 mm / 11.22 in diameter). Brembo 4 piston caliper
	Simplex drum brake 200 mm / 7.87 in diameter

### **Dimensions/Weights**

Length x Width x Height	2210 x 1000 x 1190 mm (87 x 39.37 x 46.85 in)
Wheel Base	1495 mm / 58.85 in
Fuel Tank Capacity	24 litres / 5.27 gal / 6.34 gal US
Unladen Weight with Full Tank	215 Kg / 8.46 in
Max. Permissible Weight	420 Kg / 925 lb
Ground Clearance	200 mm / 7.87 in
Seat Height (Unladen)	
Fuel Consumption (at constant 90 Kph)	4.9 litres 100 Km / 57 mpg / 48 mpg US
Top Speed	181 Kph / 112 mph
Acceleration 0 - 100 Kph / 62 mph	4.8 seconds