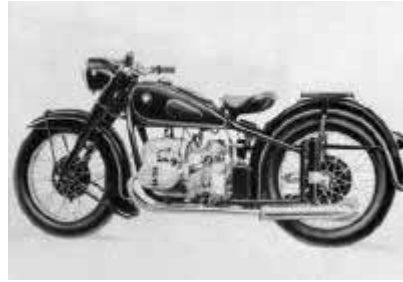


Phil Hawksley's BM Bikes

www.bmbikes.co.uk

BMW R51/3 Specifications

Start of Production	1951
End of Production	1954
Numbers Produced	18,420
Price	2,750 DM



Engine

Internal Designation	252/1
Motor Type	Four-stroke two cylinder flat twin
Bore x Stroke	68 x 68 mm (2.67 x 2.67 in)
Displacement	494 cc
Max Power	24 hp at 5,800 rpm
Compression Ratio	6.3 : 1
Valves	OHV
Carburation System	2 x carburettor type Bing 1/22/41 - 1/22/42 or 1/22/61 - 1/22/62
Engine Lubricating System	Forced feed lubrication
Oil Pump	Gear pump

Power Transmission

Clutch	Single plate, dry
Number of Gears	4
Shifting	Foot shifting (+ auxiliary manual lever on the gear block)
Gearbox Ratios	4.0 / 2.28 / 1.7 / 1.3 ('till the end of 1951: 3.6 / 2.28 / 1.7 / 1.3)
Rear Wheel Ratio	1 : 3.89 (1 : 4.75 with sidecar)
Bevel/Crownwheel	9 / 35 teeth (7 / 32 with sidecar)

Electrical System

Ignition System	Magneto ignition
Generator	Noris 6 V L 45/60 L
Spark Plugs	Bosch W 240 T1

Chassis

Designation	251/3 (1951), 251/4 (1952/53), 251/4 (1954)
Frame	Double loop steel tubular frame
Front wheel suspension	Telescopic fork

Rear wheel suspension	Telescopic suspension
Wheel rims	3 x 19 deep bed
Tyres, Front	3.5 x 19
Tyres, Rear	3.5 x 19
Brakes, Front	Drum brake 200 mm / 7.87 in diameter (1952:duplex, 1954: full hub)
Brakes, Rear	Drum brake 200 mm / 7.87 in diameter (1954: full hub)

Dimensions/Weights

Length x Width x Height	2130 x 790 x 985 mm (83.85 x 31.10 x 38.77 in)
Wheel Base	1400 mm / 55.11 in
Fuel Tank Capacity	17 litres / 3.73 gal / 4.49 gal US
Unladen Weight with Full Tank	190 Kg / 418 lb (with original sidecar, 320Kg / 704 lb)
Idle/Riding Noise	84 / 94 phon (from 7/7/1953: 81 / 85 phon)
Load Rating	355 Kg / 781 lb (with original sidecar, 600 Kg / 1321 lb)
Fuel Consumption	4.5 litres 100Km approx. / 62 mpg / 52 mpg US
Oil Consumption	0.7 litre per 1,000 Km approx.
Top Speed	135 Kph / 83 mph (95 Kph / 59 mph with original sidecar)