

# Phil Hawksley's BM Bikes

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

## BMW R4 Series 4 Specifications

|                            |                 |
|----------------------------|-----------------|
| <b>Start of Production</b> | <b>1935</b>     |
| <b>End of Production</b>   | <b>1935</b>     |
| <b>Number Produced:</b>    | <b>3,651</b>    |
| <b>Price:</b>              | <b>1,150 RM</b> |



### Engine

|                           |                                      |
|---------------------------|--------------------------------------|
| Internal Designation      | M 69 S 4                             |
| Motor Type                | Four Stroke single cylinder vertical |
| Bore x Stroke             | 84 x 78 mm (3.30 x 3.07 in)          |
| Displacement              | 398 cc                               |
| Maximum Power             | 14hp at 4,000 rpm                    |
| Compression Ratio         | 5.7 : 1                              |
| Valves                    | OHV                                  |
| Carburation System        | 1 x carburettor type SUM CK 3/500 Fr |
| Engine Lubricating System | Forced Feed Lubrication              |
| Oil Pump                  | Gear Pump                            |

### Power Transmission

|                    |                                    |
|--------------------|------------------------------------|
| Clutch             | Single plate dry clutch            |
| Number of Gears    | 4                                  |
| Gear Shift         | Manual tank shift gate             |
| Gearbox Ratios     | 3.6 / 2.18 / 1.35 / 1.1            |
| Rear Wheel Ratio   | 1 : 5.11 (1 : 5.63 with sidecar)   |
| Bevel / Crownwheel | 9 / 46 teeth (8 / 45 with sidecar) |

### Electrical System

|                 |                  |
|-----------------|------------------|
| Ignition System | Battery ignition |
| Generator       | Bosch 6V/45W     |
| Spark Plugs     | Bosch DM 175/1   |

### Chassis

|                  |   |
|------------------|---|
| Designation      | F 69 S 4  |
| Frame            | Pressed steel duplex frame                              |
| Front Suspension | Plate spring, 9 laminae with 2 friction shock absorbers |
| Rear Suspension  | Rigid   |
| Wheel Rims       | 26 x 3.5  |
| Front Tyre       | 26 x 3.5 SS   |

|              |                                      |
|--------------|--------------------------------------|
| Rear Tyre    | 26 x 3.5 SS                          |
| Front Brakes | Drum brake 180 mm / 7.08 in diameter |
| Rear Brake   | Drum brake 180 mm / 7.08 in diameter |

### **Dimensions/Weights**

|                               |   |
|-------------------------------|---|
| Length x Width x Height       | 1980 x 850 x 950 mm (77.95 x 33.46 x 37.40 in)            |
| Wheel Base                    | 1300 mm / 5.11 in   |
| Fuel Tank Capacity            | 12 litres / 2.63 gal / 3.17 gal US                        |
| Unladen Weight with full tank | 137 kg / 301 lb   |
| Permitted Weight Limit        | 200 kg / 440 lb   |
| Fuel Consumption              | 3.5 litres per 100 kilometres approx / 80 mpg / 67 mpg US |
| Oil Consumption               | 1 - 2 litres per 1,000 kilometres                         |
| Top Speed                     | 100 kph / 62 mph  |