

## THE 1935 BMW MOTORCYCLE RANGE

In 1923 BMW placed their first machine on the market, the "R 32". Compared to other makes this machine showed so many fundamentally novel features that the "German school" in motorcycle construction became synonymous with the name BMW.

The chief features of this new conception are: **duplex tubular frame** of triangular shape, **two cylinders** lying transversely to the travelling direction, **transmission** by shaft drive, **completely enclosed power unit** and therefore absolute protection against dirt inwardly and outwardly. The BMW was the first machine with a shaft drive to make it possible to carry through from the motor to the rear wheel a transmission of power which was enclosed everywhere. Contrary to other motorcycles, no moving part is therefore exposed to road dirt and also will not be splashed with mud.

This principle of design with a test of twelve years has proved to be absolutely correct and exemplarily and has been maintained by the BMW also in their programme of 1935. Naturally, the experience achieved in the course of those twelve years have led to alterations of the machine but the great fundamental line was preserved.

In 1935 BMW are placing five models on the market. With these five machines BMW possesses a programme which can provide the right machine for every purpose, from the small machine to the sports machine of high efficiency.

The "R 2" is the smallest BMW machine but of course with all particularities of this BMW type. It is a light and handy machine, inexpensive in service. Although designed mainly for the various tasks of the small machine — for transportation into and in the city and for small tours — the high power of the engine and the stable construction of the frame render it capable of meeting also higher demands such as to perform larger tours and holiday trips. The machine may also be ridden with pillion-rider. Like all the BMW machines the "R 2" has likewise a pressed steel frame and a completely encased power unit from engine to rear wheel. The engine is a single-cylinder of 200 c.c. with O.H.V. valves developing a continuous power of 8 HP. This small motor possesses also an extraordinary durability and reliability.

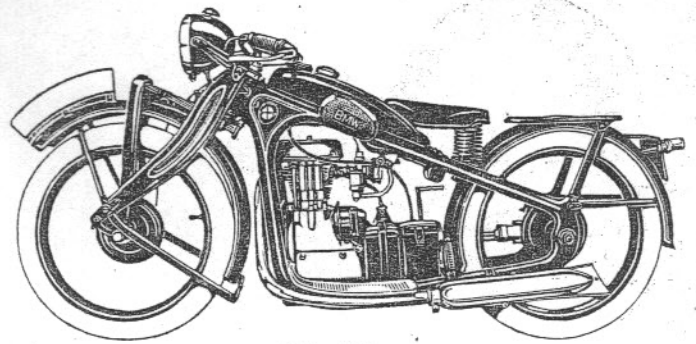
The machine ranking next in the BMW-programme is a single cylinder machine. The "R 4" possesses a 400 c.c. O.H.V. engine. This machine which has a pressed steel frame and pressed steel fork with special laminated spring is fitted also with a four-speed gearbox.

The four-speed gearbox enables the rider to have the full benefit of the engine output even when riding cross country for which purpose the machine is particularly suitable owing to its flexibility and handiness, which are above the average.

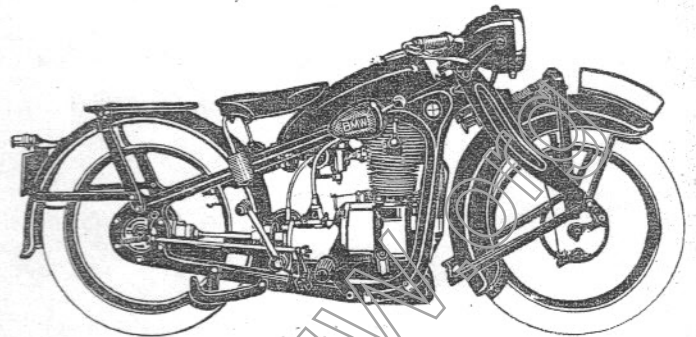
The properties indispensable for cross country riding are naturally also of the greatest advantage for using the machine on the road, on trips or in the city. Although designed mainly as a strong SOLO-machine and machine with pillion, the "R 4" may also be used with a light sidecar, even then it runs to the greatest satisfaction of the motorist.

The remaining three models of BMW are equipped with 750 c. c. flat-twins. In comparison with the models of former years, the most striking feature is the novel elastic telescope fork. The effect of this new spring-device is a shock-absorption that has been attained so far in exceptional cases only and therefore this motorcycle holds the road in an exemplary manner. This latter property is necessary if the power of the BMW 750 c. c. engine is really to be utilised to the fullest extent and the motorist wants to have the full benefit of this strong machine.

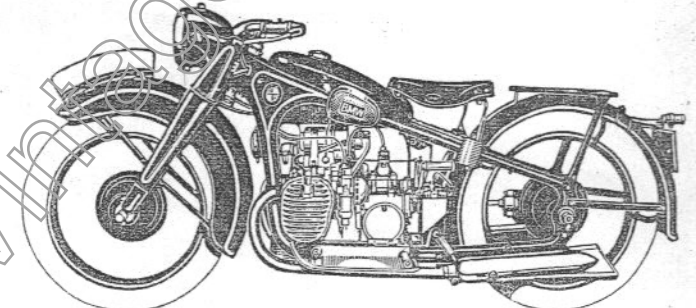
The "R 12" dual carburetter is fitted with a 750 c. c. side valve engine which can keep up a continuous power of 20 HP even over the longest stretches. The power of the motor is transmitted to the shaft and thereby to the rear wheel over a four-speed gearbox. The switching and the clever arrangement of its operation renders the switching very easy and therefore makes it possible to adapt the transmission ratio immediately to the conditions of the ground. This machine which, thanks to its extremely low consumption of fuel, can be ridden economically as a solo machine, is also highly suitable for use with a sidecar in view of the great power of the engine. The "R 12" single-carburetter differs from the machine just discussed merely by having but one carburetter instead of two and further by possessing a 35/50 lighting and ignition magneto, instead of a 45/70 Watt coil lighting and ignition. The top speed and the acceleration are a little less. The "R 17" the 750 c. c. sports machine with an engine output of 33 HP is the crown of the BMW programme. This machine won the first prize in the International Six Days Trial and competed with great success in the 2000 km Trial. It is a machine one has to concede the denomination "sports machine" without any limitation. But it is not a sports machine where penalties for the sake of the great power minor inconvenience has to be put up with; on the contrary, this machine gives pleasure also in touring. The 750 c. c. engine which develops the continuous power of 33 HP is neither rough nor sensitive in treatment.



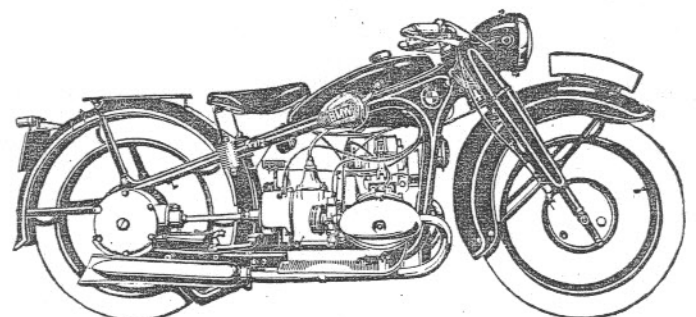
R 2 200 c.c.



R 4 400 c.c.



R 12 750 c.c.



R 17 750 c.c.