

# The new BMW R nineT. Contents.



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# 1. Overall concept. Short version.



## **BMW R nineT – the essence of 90 thrilling years of BMW Motorrad.**

The BMW R nineT, which has been created to mark “90 years of BMW Motorrad”, radiates purism and power in undisguised form. It skilfully blends the boxer engine’s rugged character and the design traits of various motorcycle eras with cutting-edge technology and a modular concept that offers the rider maximum scope for personalisation. Strictly reduced to the essentials, the BMW R nineT – or just nineT for short – is made all the more alluring by its hand-built feel and strong emotional appeal.

The classic roadster bike is built to cater to the many motorcycle enthusiasts who yearn for unadulterated, stress-free riding pleasure. When it came to developing the design of the nineT in particular, terms such as “puristic simplicity”, “emotion” and “authentic, traditional materials” were also high on the list of priorities. Styling cues from old-school motorcycle manufacture are thus united with the very latest drive and chassis components on the nineT to produce a sensational motorcycle that is just as adept at cruising along serenely as it is at powering down country roads.

## **Powered by a classic boxer engine.**

Like the first ever BMW motorcycle from 1923 – the legendary BMW R 32 – the new BMW R nineT is driven by the classic flat twin boxer engine with its punchy response from standstill. This construction principle has been synonymous with unmistakable design, abundant torque delivery and inimitable acoustics for 90 years now. The nineT employs the 1,170 cc air/oil-cooled boxer unit. It produces 81 kW (110 hp) at 7,750 rpm and musters up a maximum torque of 119 Nm (88 lb-ft) at 6,000 rpm.

## **Conceived for maximum customisation.**

The nineT pools together the genes from 90 years of BMW Motorrad and its unique concept has been designed to keep customisation fans happy. During each stage of the puristic roadster’s development, the focus was very much placed on enabling riders to tailor it to their personal preferences in a variety of ways. The choice of modifications ranges from BMW Motorrad genuine accessories to custom-made add-on or accessory parts from specialist customisers, making it possible to create a truly unique machine.

The high scope for customisation offered by the nineT is down in no small part to its special frame concept. The tubular steel spaceframe that was specially developed for the nineT incorporates the boxer engine as a load-bearing element. The frame's basic construction consists of a front frame section with integral steering head and a rear section with swingarm mounting.

The removable pillion frame allows the nineT to carry a passenger or to be set up for just a solo rider, when it cuts a truly stylish figure. Together with the aluminium tail cover available as a special accessory, this injects the nineT with a striking solo character that is reminiscent of the early café racers.

### **Exhaust positioned on left with twin silencers and personalisation options.**

The exhaust system that runs down the left-hand side with two silencers placed one above the other is fully in keeping with the concept of a classic sporty roadster. There is room for customisation here too, courtesy of the BMW Motorrad accessory range. Adding a real touch of technical finesse to the nineT, for instance, is the Akrapović unit made of titanium. By fitting a short or long connecting pipe, the silencer can furthermore be mounted in either a lowered or a raised position, radically altering the appearance and character of the nineT.

### **Traditional chassis design combined with high-performance technology.**

The telelever usually fitted on the boxer models from BMW Motorrad has been replaced on the BMW R nineT by an upside-down telescopic fork borrowed from the S 1000 RR superbike, resulting in a distinctly classic look paired with absolutely top-class engineering. The rear suspension employs the paralever single-sided swingarm in conjunction with a central spring strut.

The housing for the rear axle drive includes three mounting points that can be used to attach a bracket for positioning the licence plate and light unit on one side, for instance. What's more, the swingarm on the nineT is designed in such a way that a 17-inch wheel with a width of 6 inches can be fitted instead of the standard 5.5-inch-wide version and submitted for individual approval if applicable.

Designed as an out-and-out roadster, the nineT follows in the tyre tracks of role models from the past by featuring wire-spoke wheels with black anodised alloy, non-flanged rims, black aluminium hubs and stainless steel spokes. Radial 4-piston monoblock brake callipers work in unison with floating 320 millimetre brake discs and BMW Motorrad ABS to provide sure stopping power.

### **Pared-down design and hand-built feel.**

One of the overriding design objectives was to reduce the bodywork as far as possible in order to achieve a puristic look. The attention to detail that consistently infused the work of the designers and engineers on the nineT is a further attribute that shines through over and over again.

The sides of the 18-litre aluminium tank have been painstakingly brushed by hand and then coated. The aluminium plate with embossed nineT lettering on the right above the air intake duct is likewise befitting of the bike's hand-built feel.

The surfaces of many forged aluminium parts, including the yokes and the handlebar clamp bracket with BMW Motorrad lettering, have been glass bead-blasted and then given a natural anodised finish. The circular headlamp with the BMW emblem in the centre of the bulb cover pays homage to various role models from 90 years of BMW Motorrad.

A classic Black storm metallic paint finish with contrasting silver and metallic highlights was chosen to match the character of the nineT.

### **Specially designed electrical system to allow plenty of scope for customisation.**

The bike's electrical system has been specially configured for greater technical flexibility, thereby facilitating the installation of alternative electrical components, such as headlights or turn indicators.

### **Highlights of the new BMW R nineT:**

- Puristic design.
- Hand-built feel of the workmanship.
- Air/oil-cooled twin-cylinder boxer engine with a displacement of 1,170 cc. Output 81 kW (110 hp) at 7,750 rpm, maximum torque 119 Nm (88 lb-ft) at 6,000 rpm.
- Ideally suited to customisation.
- Modular frame concept with removable pillion frame and frame end-piece.
- Classic wheel suspension concept using high-quality upside-down telescopic fork at the front and paralever at the rear.
- Exhaust system with two silencers on the left-hand side, with variation options.
- Traditional wire-spoke wheels with black rims and hubs.
- Radial 4-piston monoblock brake callipers, steel-braided brake lines and floating 320 mm brake discs.
- Model plate riveted onto steering head in classic BMW Motorrad style.
- Bespoke range of special accessories made to BMW Motorrad's customary high standards of quality.

## 2. Technology.



### **BMW R nineT – classic roadster with a powerful, personalisable character.**

To mark the company's 90th anniversary, BMW Motorrad is presenting the BMW R nineT as a gift for enthusiasts and customers alike. The nineT essentially has the brand values from 90 years of BMW Motorrad ingrained in it, and neatly sums up the company's illustrious past with a unique concept, pure riding pleasure, a classic, reduced design, and a deliberate focus on the technical essentials. This is a classic roadster model oozing style and expressiveness and is the perfect choice for anyone looking for a pure, unadulterated bike with thrilling on-road performance.

But there's more to the BMW R nineT than being a BMW motorcycle with an unprecedented design. Besides its technical functionality, the BMW Motorrad development team also paid close attention to the emotional bond between man and machine – all in keeping with the principle that, apart from working flawlessly on a technical level, a motorcycle must also stimulate all of its rider's senses, trigger powerful emotions and provide non-stop thrills, whether it's pulling up in front of a café or darting along country roads.

To this effect, the nineT employs definitive styling cues from the past of motorcycle manufacture – and yet this is no retro bike. Rather, it synthesises state-of-the-art technical features from high-performance sports machines with classic principles derived from 90 years of BMW Motorrad, and applies them with compelling handcraftsmanship.

### **Ideally suited to customisation.**

Customisation allows motorcycles to be tailored to the owner's personal preferences. Possible enhancements range from the usual, original accessories to small runs of individual components or even one-off solutions.

With the nineT, BMW Motorrad is catering to the desire of many motorcycle enthusiasts to be creative with their bike and modify it to suit their individual taste and intended use.

As a result, not only does the new BMW R nineT boast a particularly sophisticated overall concept that lends itself to being individually modified, it also includes some far-reaching technical provisions for undertaking further

customisation work beyond choosing from the extensive range of special equipment from BMW Motorrad.

As such, the nineT and its unique design concept revolutionise the interaction between rider and machine. For the first time, the customer becomes actively involved in designing their BMW, a process which entails far more than simply adding optional extras or special accessories, as is usually the case. Taking the existing central components of engine and chassis as a basis, the nineT rider has a wealth of options for individually customising it as they please.

**Spirited BMW Motorrad boxer engine with short secondary transmission ratio for dynamic riding pleasure.**

For 90 years now, the longitudinal twin-cylinder boxer engine and power transmission by means of a cardan shaft drive have been synonymous with BMW motorcycles. Consequently, there could be no other choice when it came to selecting the drive configuration for this project, which was, after all, initiated to commemorate “90 years of BMW Motorrad”.

Ever since the first BMW motorcycle – the R 32 – made its debut in 1923, the BMW Motorrad boxer engines have been renowned for unmistakable, rugged design, abundant torque delivery and an unrivalled meaty sound. The BMW R nineT features the air/oil-cooled 1,170 cc boxer engine with a bore of 101 millimetres and a stroke of 73 millimetres that is already familiar from numerous BMW Motorrad models. Output peaks at 81 kW (110 hp) at 7,750 rpm, while maximum torque of 119 Nm (88 lb-ft) is generated at 6,000 rpm and the rev ceiling is set at 8,500 rpm.

The valves are fitted in a radial arrangement in the combustion chamber and their timing is controlled by means of chain-driven double overhead camshafts (DOHC) for each cylinder. The valves are actuated by cam followers of a very lightweight design, making them ideal for high revving, while lightweight hemispherical shims are used for valve clearance compensation.

Power is transmitted to the rear wheel via the proven six-speed gearbox and the cardan shaft drive. In keeping with the dynamic character of the nineT, the secondary transmission ratio of the pinion and ring gear has been shortened for optimum accelerating power and the smoothest possible gear shifts.

**Twin-pipe exhaust on left-hand side for inimitable boxer sound.**

The exhaust system that runs down the left-hand side, with two silencers in blasted stainless steel positioned one above the other, fits in perfectly with the notion of a classically designed, sporty roadster. Indeed, it is a design that has already been used in similar form in the past, for example on sport and racing

bikes in the '60s and '70s. The BMW R nineT also features an acoustic valve operated by means of an electric servomotor and opening and closing cables to deliver the exceptionally sonorous boxer soundtrack that riders favour while still staying within the legal limits.

The BMW Motorrad accessory range for the nineT offers the customer various options for the exhaust system that allow the character of the nineT to be adapted to personal tastes. Fitting the Akrapović silencer unit in titanium with carbon heat shields, for instance, adds a special touch of technical finesse. There is, furthermore, the option of lowering or raising the exhaust system by fitting a short or long connecting pipe to the front silencer, thereby opening up even greater scope for putting a different slant on the bike's styling and lending it more of a café racer or scrambler feel, for example.

### **Modular frame concept for a host of possible variations.**

The nineT features a specially designed frame concept that is also geared towards enabling riders to stamp their own style on the bike by customising it. The previous frame has given way to a completely, newly developed tubular steel spaceframe on the BMW R nineT, with a modular construction consisting of four components: a front main frame, a rear main frame, a frame end-piece as well as a pillion frame, which are all bolted to one another.

With its removable frame end-piece and pillion frame, the BMW R nineT offers customers plenty of possibilities for varying the visual appearance and therefore the character of the sporty roadster model as they please.

This is a bike built for keen performance, so the geometry of the nineT chassis has been configured first and foremost for excellent handling and riding pleasure on winding country roads. The wheelbase measures 1,476 millimetres, the trail 102.5 millimetres and the steering head angle 64.5 degrees.

### **From a roadster for two to a sporty racer for one.**

The BMW R nineT leaves the factory in the form of a classic, sporty roadster that can carry two people. Despite the low rider's seat height (approx. 785 mm) and narrow straddle width, both rider and pillion passenger are able to enjoy a pleasant level of seating comfort. The optional comfort rear seat provides both a larger seat area and extra cushioning for the passenger.

If it's sporty solo rides that are on the agenda, on the other hand, the pillion frame can be simply removed by undoing its eight screws. An aluminium tail cover can also be fitted to complete the classic café racer look.



The nineT assumes an extremely puristic character in this guise, which can be intensified further still by detaching the frame end-piece together with the licence plate holder and rear light (not street legal), giving the tail end a particularly crisp and light feel. The custom rider's seat with its slender, low-slung design combines with the classy nineT lettering to emphatically bring out the bike's character as an uncompromising riding machine that has been pared down to the absolute essentials.

**Classic wheel suspension featuring upside-down telescopic fork at the front and paralever at the rear.**

The telelever front suspension usually fitted on the boxer models from BMW Motorrad has been replaced on the BMW R nineT by a top-class upside-down telescopic fork borrowed from the S 1000 RR superbike in order to produce an even more harmonious classic look and enable more extensive chassis modifications to be carried out far more easily. Spring travel is 120 millimetres.

Wheel location at the rear is carried out by the proven paralever single-sided swingarm used on the remaining air-cooled generation of boxer models. The task of wheel suspension and damping is performed by a central spring strut with a spring painted in white. The spring preload can be adjusted hydraulically with the greatest of ease using a hand wheel made from forged aluminium, while the rebound damping is infinitely adjustable. Spring travel is likewise 120 millimetres.

The housing for the rear axle drive incorporates a neat feature for further personalising the nineT. The housing, as on the other boxer models, includes three mounting points that can be used, for example, to attach a bracket for positioning the licence plate on one side together with the light unit. The nineT furthermore has so much room between the silencers and swingarm that the standard 17-inch wheel with a width of 5.5 inches can be replaced with a 6-inch-wide version. Such modifications require individual approval, however.

**Traditional wire-spoke wheels and high-performance brakes.**

In traditional roadster fashion, the new BMW R nineT rides on high-quality wire-spoke wheels comprising black anodised alloy non-flanged rims, cast aluminium hubs, stainless steel spokes as well as tubed tyres, size 120/70 ZR 17 at the front and 180/55 ZR 17 at the rear.

The 17-inch wheels and the tyre sizes represent the state of the art for sporty motorcycles designed for performance riding, while the stainless steel wire spokes and the black hubs and rims evoke the trademark styling cues and flair of bygone eras from 90 years of BMW Motorrad.

This forms a stark contrast to the highly sophisticated high-performance twin-disc brake that is more than a match for the dynamic performance abilities of the nineT. Featuring radial 4-piston monoblock brake callipers, steel-braided brake lines and floating 320 mm brake discs, it ensures superior, absolutely fade-resistant stopping power even on the sportiest of rides. Braking power at the rear is provided by a 265 mm single-disc brake with twin-piston floating calliper. The nineT already comes equipped as standard with BMW Motorrad ABS, as do all BMW motorcycles.

**Specially designed electrical system boosts scope for customisation.**

The electrics have undergone a thorough overhaul to allow more extensive modification of the technology of the nineT, so that its character can be given even more of a personal touch and its profile honed even more finely. For this reason, the parameters and interfaces in the bike's electrical system have been configured to enable alternative electrical components, such as headlights or indicators, to be installed as required.

Separating the engine and vehicle wiring harnesses keeps the amount of work involved to a manageable level even when carrying out major modifications to the motorcycle. This is an important consideration, above all for professional customisers.

### 3. Design, workmanship and colour scheme.



#### **Pared down styling and hand-built character.**

Whether with high- or low-mounted exhaust system, sporty aluminium tail cover or double seat – the nineT has many different looks, but they are all equally compelling.

In silhouette, the BMW R nineT is the epitome of casual elegance. The boxer engine, compact fuel tank and lean tail-end styling are just some of the features that help to give this bike its classic BMW Motorrad roadster proportions.

One of the designers' main goals was to give the body a pared-down, back-to-essentials look. This focus on the most important design elements of a motorcycle allows the nineT to express stylish individuality using just a small number of consummately crafted components. From every angle, the appearance of the nineT is defined by a mix of classic and modern motorcycle styling themes, combined with high-quality surface finishes.

#### **The front.**

The nineT's classic round headlamp – the central focus of the front silhouette – projects a sense of maturity and poise. A powerful high-tech contrast is provided by the gold-anodised outer tubes in the upside-down forks, while the classic shape of the boxer engine helps to create lean overall lines.

The instrument cluster, comprising two classic round speedometer and rev counter gauges, is smoothly and harmoniously integrated into the overall front-end design. The simple styling of these gauges reflects the classic inspiration behind the nineT's engineering, but at the same time incorporates the convenience and amenities of modern technology. For example, the nineT is specified as standard with an onboard computer that shows key information – such as time of day, engaged gear, remaining range, trip mileage, servicing interval and average speed and fuel consumption – very clearly in a large, segmented display.

#### **The tank.**

The 18-litre aluminium tank and, on the right-hand side, the aluminium plate with embossed nineT lettering over the air intake are further eye-catching elements. The nineT's high standards of manufacturing quality are reflected in

the meticulously hand-brushed and coated tank sides which show off the grain of the aluminium to full effect. The knee area can be further customised with optional classic-style rubber kneepads. Like the brushed aluminium tank surfaces, the air intake cover is naturally anodised, its finely brushed, high-tech surface neatly rounding out the styling in this area. The separate comfort rear seat is likewise made of aluminium, with a similar surface finish.

### **Attention to detail.**

Many further details draw attention to the high manufacturing quality of this bike with its hand-built character. For example, the yokes with their tapered bolt bosses and the tapered steering damper mount are superior forged aluminium parts with glass-bead-blasted and naturally anodised finish. Also made of aluminium, the clamp bracket for the tapered aluminium handlebars has embossed BMW Motorrad lettering, while the riveted model plate on the steering head – reminiscent of classic BMW motorcycle designs – is further evidence of the meticulous attention to detail that has gone into the development of the nineT.

References to historic forerunners from 90 years of BMW Motorrad manufacturing can be seen in the wire-spoked wheels with black rims and the headlamp with its sheet steel housing and BMW emblem centrally positioned on the bulb cover. An unusual feature is the vertical mounting of the headlamp by means of a meticulously finished aluminium bracket connected to the lower yoke. The nineT also boasts white direction indicators and an LED rear light.

The front mudguard is a further interesting feature. It is bolted by two forged brackets to the fork bases and is one of many nicely judged touches with which the nineT stresses its allegiance to classic motorcycle styling themes. Again, a glass-bead-blasted and naturally anodised finish emphasises the high-quality workmanship of the nineT. Further forged parts, such as the aluminium seat mount or the adjustment knob for the shock absorber, are likewise glass bead-blasted and naturally anodised.

The waisted seat, too, boasts a high-quality, hand-built feel. It is trimmed with high-quality leather-effect material and edged with a contrasting white, hand-sewn double lap seam. On the left rear edge of the rider's seat is a small fabric label with a nineT logo in blue.

### **Classic yet modern colour scheme.**

The new BMW R nineT is available in only one colour scheme. Matching the character of the bike, this is based on classic black (Black storm metallic), with silver and metallic contrasts.

The classic, pared down elegance of the nineT is underpinned by black anodised components such as the frame and engine block. Tantalising contrasts and a high-tech look and feel are provided by the gold-anodised fork tubes and the numerous aluminium surfaces with various grains. In the drivetrain area, the paralever swingarm and magnesium valve covers are picked out in Granite grey metallic matt.

The main body of the two-tone fuel tank of the nineT is likewise finished in Black storm metallic, while at the sides, the meticulously brushed and coated aluminium is visible.

## 4. Equipment range.



The BMW Motorrad special accessories range and BMW rider accessories range are specially tailored to the overall character of the nineT.

BMW Motorrad special accessories can be fitted by BMW Motorrad dealers or by customers themselves.

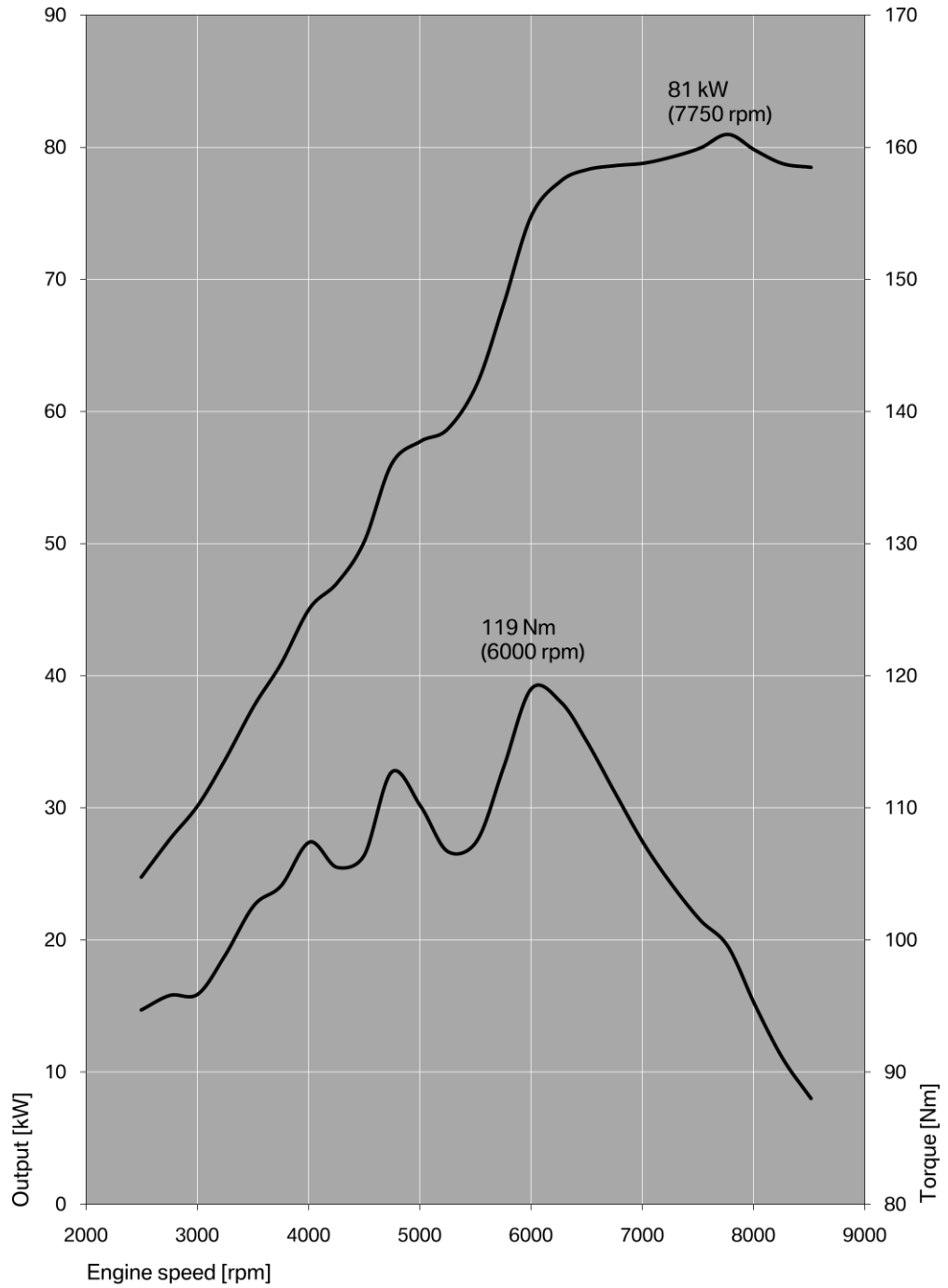
### **Special accessories.**

- Tank rucksack with attachment system.
- Rear bag with attachment system.
- Kneepads for tank sides.
- Aluminium tail cover with padded backrest.
- Custom rider's seat with R nineT logo.
- Comfort rear seat.
- HP Carbon cover for engine block.
- HP Carbon front mudguard.
- Titanium Akrapović exhaust system.
- Connector pipe, long, with bracket and cover for Akrapović silencer, high-mounted.
- Connector pipe, short, for Akrapović silencer, low-mounted.
- Mount for standard Akrapović silencer or accessory rear silencer (low-mounted), if pillion seat removed.
- Anti-theft alarm system.
- Heated grips.
- LED indicators.
- Mounting cradle for BMW Navigator, with connection to electrical system.

### **Rider's accessories.**

- Legend helmet
- BlackLeather jacket.
- FivePocket trousers.
- BMW Motorrad Style Vintage collection.

## 5. Engine output and torque.



## 6. Technical specifications.



<b>BMW R nineT</b>		
<b>Engine</b>		
Displacement	cc	1170
Bore/stroke	mm	101/73
Output	kW/hp	81/110
at	rpm	7750
Torque	Nm	119
at	rpm	6000
Type	air/oil-cooled twin cylinder boxer engine	
No. of cylinders	2	
Compression/fuel	12.0:1, premium unleaded (95-98 RON)	
Valve actuation	DOHC	
Valves per cylinder	4	
Ø Intake/outlet	mm	39/33
Ø Throttle valve	mm	50
Engine management	BMS-K+	
Emission control	closed-loop 3-way catalytic converter	
<b>Electrical system</b>		
Alternator	W	600
Battery	V/Ah	12/14 maintenance-free
Headlight	W	H7
Starter	kW	1.2
<b>Power transmission – gearbox</b>		
Clutch	hydraulically actuated dry clutch	
Gearbox	constant mesh 6-speed gearbox	
Primary ratio	1.737	
Transmission ratios	I	2.375
	II	1.696
	III	1.296
	IV	1.065
	V	0.939
	VI	0.848
Rear wheel drive	cardan shaft	
Transmission ratio	2.91	
<b>Chassis</b>		
Frame construction type	tubular steel bridge frame, engine self-supporting	
Suspension, front	upside-down telescopic fork, Ø 46 mm	
Suspension, rear	BMW Paralever with central strut	
Spring travel, front/rear	mm	120/120
Wheel castor	mm	102.5
Wheelbase	mm	1476
Steering head angle	°	64.5
Brakes	front	hydraulically actuated twin-disc brake Ø 320 mm
	rear	single-disc brake Ø 265 mm
ABS	BMW Motorrad ABS	



			<b>BMW R nineT</b>
Wheels			wire-spoke wheels
	front		3.5 x 17"
	rear		5.5 x 17"
Tyres	front		120/70 ZR17
	rear		180/55 ZR17
<b>Dimensions and weights</b>			
Total length	mm		2220
Total width with mirrors	mm		890
Seat height	mm		785
DIN unladen weight, road ready	kg		222
Permitted total weight	kg		430
Fuel tank capacity	l		18
<b>Performance figures</b>			
Fuel consumption			
90 km/h	l/100 km		4.5
120 km/h	l/100 km		5.8
Acceleration			
0-100 km/h	s		3.6
Maximum speed	km/h		>200