

Rolls-Royce Phantom

Technical specification / World version

	Phantom	EWB
Dimensions		
No of doors / seats	4 / 5	4 / 5
Vehicle length	5834 mm / 229.7 in	6084 mm / 239.5 in
Vehicle width	1990 mm / 78.3 in	1990 mm / 78.3 in
Vehicle height (unladen)	1632 mm / 64.3 in	1634 mm / 64.3 in
Wheelbase	3570 mm / 140.6 in	3820 mm / 150.4 in
Turning circle	13.8 m / 45.3 ft	14.6 m / 47.9 ft
Track, front	1685 mm / 66.3 in	1685 mm / 66.3 in
Track, rear	1670 mm / 65.7 in	1670 mm / 65.7 in
Width at shoulder height, front	1509 mm / 59.4 in	1509 mm / 59.4 in
Width at shoulder height, rear	1431 mm / 56.3 in	1431 mm / 56.3 in
Leg room, front	1028 mm / 40.5 in	1028 mm / 40.5 in
Leg room, rear	947 mm / 37.3 in	1197 mm / 47.1 in
Head room, front	1020 mm / 40.2 in	1020 mm / 40.2 in
Head room, rear	979 mm / 38.5 in	979 mm / 38.5 in
Boot volume (DIN)	460 ltr / 16.2 cu ft	460 ltr / 16.2 cu ft
Fuel tank capacity	100 ltr / 22 Imp gal	100 ltr / 22 Imp gal
Weight		
Unladen weight (DIN)	2550 kg / 5622 lb	2670 kg / 5886 lb
Axle load ratio, rear (unladen)	49.6 %	49.1%
Gross vehicle weight	3050 kg / 6710 lb	3170 kg / 6989 lb
Payload	500 kg / 1102 lb	500 kg / 1102 lb
Axle load limit, front	1425 kg / 3141 lb	1475 kg / 3252 lb
Axle load limit, rear	1800 kg / 3968 lb	1800 kg / 3968 lb
Engine		
Engine / cylinders / valves	V / 12 / 48	V / 12 / 48
Fuel management	Direct injection	Direct injection
Displacement	6749 cc / 411.8 cu in	6749 cc / 411.8 cu in
Stroke	84.6 mm / 3.33 in	84.6 mm / 3.33 in
Bore	92.0 mm / 3.62 in	92.0 mm / 3.62 in
Power output @ engine speed	453 bhp / 460 PS (DIN) / 338 kW @ 5350 rpm	453 bhp / 460 PS (DIN) / 338 kW @ 5350 rpm
Max torque @ engine speed	720 Nm / 531 lb ft @ 3500 rpm	720 Nm / 531 lb ft @ 3500 rpm
Compression ratio / Fuel type	11:1 / super unleaded ¹	11:1 / super unleaded ¹
Transmission		
Transmission type	ZF 6HP32	ZF 6HP32
Gear ratios		
1st / 2nd / 3rd /	4.171 / 2.340 / 1.521 /	4.171 / 2.340 / 1.521 /
4th / 5th / 6th	1.143 / 0.867 / 0.691	1.143 / 0.867 / 0.691
Reverse	3.403	3.403
Final-drive ratio	3.460	3.460

	Phantom	EWB
Aerodynamics		
Drag Cd	0.38	0.38
Drag Cd x A	1.071 m ² / 11.5 ft ²	1.071 m ² / 11.5 ft ²
Steering & brakes		
Steering type	Rack & pinion, speed-sensitive variable-rate power assistance	Rack & pinion, speed-sensitive variable-rate power assistance
Brakes, front / diameter	Ventilated disc / 374 mm / 14.7 in	Ventilated disc / 374 mm / 14.7 in
Brakes, rear / diameter	Ventilated disc / 370 mm / 14.6 in	Ventilated disc / 370 mm / 14.6 in
Performance		
Top speed	149 mph / 240 km/h (governed)	149 mph / 240 km/h (governed)
Acceleration 0-60 mph	5.7 sec	5.9 sec
Acceleration 0-100 km/h	5.9 sec	6.1 sec
Acceleration 0-1000 m	25.6 sec	
Fuel consumption		
Urban	23.2 ltr/100 km / 12.2 mpg	23.3 ltr/100 km / 12.1 mpg
Extra urban	11.3 ltr/100 km / 25.0 mpg	11.4 ltr/100 km / 24.8 mpg
CO ₂ emissions	377 g/km	380 g/km
Wheels (standard PAX alloy)		
Tyre	Michelin PAX 265/790 R540 A 111W	Michelin PAX 265/790 R540 A 111W
Wheel size, front & rear	265 x 540 A	265 x 540 A
Wheels (21" alloy)		
Tyre, front	Goodyear EMT 255/50 R21 106W	Goodyear EMT 255/50 R21 106W
Wheel size, front	8" x 21"	8" x 21"
Tyre, rear	Goodyear EMT 285/45 R21 109W	Goodyear EMT 285/45 R21 109W
Wheel size, rear	9.5" x 21"	9.5" x 21"
Filling capacities		
Radiator incl heater / Engine oil	14 ltr / 8.5 ltr	14 ltr / 8.5 ltr
Transmission fluid / Final-drive fluid	Lifetime filling	Lifetime filling
Electric system		
Battery capacity / installed position	90+70 Ah / boot	90+70 Ah / boot
Alternator output rating	2 x 180 A / 2520 W	2 x 180 A / 2520 W

1. The engine is designed for octane grade 98 fuel; however, it may be run on fuel with a minimum octane grade of 91.

Rolls-Royce Phantom

Technical specification / USA version

	Phantom	EWB
Dimensions		
No of doors / seats	4 / 5	4 / 5
Vehicle length	5834 mm / 229.7 in	6084 mm / 239.5 in
Vehicle width	1990 mm / 78.3 in	1990 mm / 78.3 in
Vehicle height (unladen)	1632 mm / 64.3 in	1634 mm / 64.3 in
Wheelbase	3570 mm / 140.6 in	3820 mm / 150.4 in
Turning circle	13.8 m / 45.3 ft	14.6 m / 47.9 ft
Track, front	1685 mm / 66.3 in	1685 mm / 66.3 in
Track, rear	1670 mm / 65.7 in	1670 mm / 65.7 in
Width at shoulder height, front	1509 mm / 59.4 in	1509 mm / 59.4 in
Width at shoulder height, rear	1431 mm / 56.3 in	1431 mm / 56.3 in
Leg room, front	1028 mm / 40.5 in	1028 mm / 40.5 in
Leg room, rear	947 mm / 37.3 in	1197 mm / 47.1 in
Head room, front	1020 mm / 40.2 in	1020 mm / 40.2 in
Head room, rear	979 mm / 38.5 in	979 mm / 38.5 in
Trunk volume (SAE)	400 ltr / 14.1 cu ft	400 ltr / 14.1 cu ft
Fuel tank capacity	100 ltr / 26.4 US gal	100 ltr / 26.4 US gal
Weight		
Curb weight	2630 kg / 5798 lb	2688 kg / 5926 lb
Axle load ratio, rear (unladen)	50.1 %	49.3%
Gross vehicle weight	3050 kg / 6724 lb	3170 kg / 6989 lb
Payload	420 kg / 924 lb	482 kg / 1063 lb
Axle load limit, front	1425 kg / 3141 lb	1475 kg / 3245 lb
Axle load limit, rear	1800 kg / 3968 lb	1800 kg / 3968 lb
Engine		
Engine / cylinders / valves	V / 12 / 48	V / 12 / 48
Fuel management	Direct injection	Direct injection
Displacement	6749 cu cm / 411.8 cu in	6749 cu cm / 411.8 cu in
Stroke	84.6 mm / 3.33 in	84.6 mm / 3.33 in
Bore	92.0 mm / 3.62 in	92.0 mm / 3.62 in
Power output @ engine speed	453 hp (SAE) @ 5350 rpm	453 hp (SAE) @ 5350 rpm
Max torque @ engine speed	720 Nm / 531 lb ft @ 3500 rpm	720 Nm / 531 lb ft @ 3500 rpm
Compression ratio / Fuel type	11:1 / premium unleaded ¹	11:1 / premium unleaded ¹
Transmission		
Transmission type	ZF 6HP32	ZF 6HP32
Gear ratios		
1st / 2nd / 3rd /	4.171 / 2.340 / 1.521 /	4.171 / 2.340 / 1.521 /
4th / 5th / 6th	1.143 / 0.867 / 0.691	1.143 / 0.867 / 0.691
Reverse	3.403	3.403
Final-drive ratio	3.460	3.460

1. The engine is designed for octane grade 98 fuel; however, it may be run on fuel with a minimum octane grade of 91.

2. Manufacturer's test results. Actual acceleration results may vary depending on specifications of the vehicle, road and environmental conditions, testing procedures and driving styles. These results should be used for comparison only and verification should not be attempted on public roads.

3. EPA (Preliminary) – Use estimated mpg for comparison with other cars. Your mileage may vary with options, driving conditions, driving habits, the car's condition, speed and trip length. Actual highway mileage will probably be less.

	Phantom	EWB
Aerodynamics		
Drag Cd	0.38	0.38
Drag Cd x A	1.071 m ² / 11.5 ft ²	1.071 sq m ² / 11.5 ft ²
Steering & brakes		
Steering type	Rack and pinion, speed-sensitive variable-rate power assistance	Rack and pinion, speed-sensitive variable-rate power assistance
Brakes, front / diameter	Ventilated discs 374 mm / 14.7 in	Ventilated discs 374 mm / 14.7 in
Brakes, rear / diameter	Ventilated discs 370 mm / 14.6 in	Ventilated discs 370 mm / 14.6 in
Performance²		
Top speed	149 mph / 240 km/h (governed)	149 mph / 240 km/h (governed)
Acceleration 0-60 mph	5.7 sec	5.9 sec
Acceleration 0-100 km/h (Canada)	5.9 sec	6.1 sec
Acceleration 0-1/4 mile	14.0 sec	
Fuel consumption (USA)³		
City	11 mpg	11 mpg
Highway	18 mpg	18 mpg
Fuel consumption (Canada)⁴		
City	18.1 ltr/100 km	18.1 ltr/100 km
Highway	11.4 ltr/100 km	11.4 ltr/100 km
Combined	15.1 ltr/100 km	15.1 ltr/100 km
CO ₂ emissions	377 g/km	380 g/km
Wheels (standard PAX alloy)^{5 / 6}		
Tire	Michelin PAX 265/790 R540 A 111W	Michelin PAX 265/790 R540 A 111W
Wheel size	265 x 540 A	265 x 540 A
Wheels (21" alloy)^{6 / 7}		
Tire, front	Goodyear EMT 255/50 R21 106W	Goodyear EMT 255/50 R21 106W
Wheel size, front	8" x 21"	8" x 21"
Tire, rear	Goodyear EMT 285/45 R21 109W	Goodyear EMT 285/45 R21 109W
Wheel size, rear	9.5" x 21"	9.5" x 21"
Filling capacities		
Radiator incl heater	14 ltr / 14.8 quarts	14 ltr / 14.8 quarts
Engine oil	8.5 ltr / 9.0 quarts	8.5 ltr / 9.0 quarts
Transmission fluid / Final-drive fluid	Lifetime filling	Lifetime filling
Electric system		
Battery capacity / installed position	90+70 Ah / trunk	90+70 Ah / trunk
Alternator output rating	2 x 180 A / 2520 W	2 x 180 A / 2520 W

4. The fuel efficiency data was determined using approved Transport Canada Test Methods.

5. The Michelin PAX tire system has run-flat capabilities. Michelin PAX is a registered trademark of Michelin.

6. With run-flat tires, you can continue for a distance of at least 100 miles at speeds up to 50 mph, however when notified you should check your tire condition at the next available opportunity.

7. The Goodyear Extended Mobility Tyre system (EMT) has run-flat capabilities.