



Rolls-Royce Griffon VI (1-stage 2-speed)

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Model	Griffon VI (RG 14 SM).	
Type	12 cylinders, vee 60 degrees, pressure liquid cooled, geared drive, supercharged, 4-cycle.	
Construction	2-piece aluminum alloy crankcase, 2 aluminum alloy cylinder blocks with a detachable head for each block. Steel cylinder liners. 2 inlet valves and 2 exhaust valves (sodium cooled) per cylinder actuated by overhead camshaft. 6-throw 1-piece counterbalanced crankshaft supported in 7 plain bearings. Spur reduction gear, ratio 0.51:1. Provision for Rotol remote drive accessory gear box.	
Supercharger	Gear-driven 1-stage 2-speed supercharger, ratios 9.0:1 and 11.07:1. Automatic or manual gear change.	
Carburetion	1 S.U. AVT-44/203 2-barrel updraft injection type carburetor with automatic mixture control and progressive boost control.	
Ignition	1 B.T.H. CSH12-12S/4 dual magneto. 2 14-mm short reach spark plugs per cylinder. Shielded ignition system.	
Lubrication	Pressure feed, 45-60 lb./sq.in. (3.4-4.2 kg/cm ²). Main bearings lubricated by crankshaft end-to-end system. Dry sump.	
Starter	Plessey Coffman L3-1 cartridge starter.	
Bore	6.00 in.	152 mm
Stroke	6.60 in.	168 mm
Displacement	2,240 cu.in.	36.7 lit
Compression ratio	6.0:1	6.0:1
Width	30.3 in.	769 mm
Height	45.3 in.	1 150 mm
Length	71.1 in.	1 805 mm
Frontal area	7.9 sq.ft.	0.73 m ²
Weight	1,790 lb.	812 kg
Weight/horsepower	0.96 lb./h.p.	0.43 kg/hp
Fuel consumption (cr.)	0.50 lb./h.p./hr.	225 g/hp/hr
Oil consumption (cr.)	0.016 lb./h.p./hr.	7 g/hp/hr
Gasoline grade	100/130 (D.E.D. 2475)	100/130 grade
Oil grade (viscosity)	100 S.U. (D.E.D. 2472B)	20.5 cs
Output/displacement	0.82 h.p./cu.in.	50.4 hp/lit
Output/piston area	5.45 h.p./sq.in.	0.84 hp/cm ²
Piston speed (max.)	3,025 ft./min.	15.4 m/sec
B.m.e.p. (max.)	236 lb./sq.in.	16.6 kg/cm ²
Rating (take-off)	1,820 h.p./2,750 r.p.m./60.5 in. (1 537 mm) +15.0 lb.	
Rating (military, low)	1,850 h.p./2,750 r.p.m./2,000 ft. (600 m)	
Rating (military, high)	1,630 h.p./2,750 r.p.m./10,000 ft. (3 000 m)	
Rating (normal, low)	1,475 h.p./2,600 r.p.m./6,500 ft. (2 000 m)	
Rating (normal, high)	1,340 h.p./2,600 r.p.m./14,800 ft. (4 500 m)	
Rating (cruising, low)	1,295 h.p./2,400 r.p.m./7,000 ft. (2 100 m)	
Rating (cruising, high)	1,190 h.p./2,400 r.p.m./14,250 ft. (4 300 m)	

Griffon II, III, IV (RG 2 SM): Similar to Griffon VI, but with supercharger ratios 7.85:1 and 10.68:1. Reduction gear ratio 0.451:1. 1,720 h.p./2,750 r.p.m./take-off; 1,735 h.p./2,750 r.p.m./1,000 ft. (300 m) and 1,495 h.p./2,750 r.p.m./14,500 ft. (4 400 m) military ratings; 1,520 h.p./2,600 r.p.m./3,250 ft. (1 000 m) and 1,330 h.p./2,600 r.p.m./15,750 ft. (4 800 m) normal ratings. 100/130 grade gasoline.

Griffon V (RG 14 SM): Similar to Griffon VI, but with gear ratio 0.451:1.

Griffon VII (RG 14 SM): Same as Griffon VI.

Griffon VIII (RG 14 SM): Same as Griffon VI. Fuel injection pump.