

# Bonneville Pro - Version 3.2

## Racing Systems Analysis - www.QUARTERjr.com

File: motorcyc.dat

Note: test case for Bonneville Pro 3.2

### General Data

Elevation - feet 600  
 Barometer - in Hg 29.92  
 Temperature - deg F 69  
 Relative Humidity - % 45  
 Wind Velocity - MPH 6.0  
 Wind Angle - degs 45

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 Track: El Mirage Dry Lake  
 Traction Index 8

### Vehicle Data

Weight - lbs 615  
 Wheelbase - inches 80

### Engine Dyno Data

RPM	HP	Torque
6500	40	32
7000	47	35
7500	54	38
8000	58	38
8500	62	38
9000	65	38
9500	70	39
10000	72	38
10500	73	37
11000	74	35
11500	73	33

Fuel System:  
 Gasoline Carburetor  
 HP/Torque Multiplier 1.000

### Transmission Data

Clutch:  
 Slip RPM 9000  
 Clutch Slippage 1.000  
 Lock-up option? Yes

Gear	Ratio	Eff	Shift@
2nd -	3.08	0.990	11000
3rd -	2.06	0.991	10900
4th -	1.65	0.992	10800
5th -	1.40	0.993	10800
6th -	1.23	0.994	10800
	1.10	0.995	0

### Final Drive Data

Gear Ratio 5.72  
 Efficiency 0.990  
 Tire Diameter - inches 25.0  
 Tire Width - inches 5.00

### Aerodynamic Data

Frontal Area - sq ft 6.6  
 Drag Coefficient 0.550  
 Lift Coefficient 0.050

1.055	Time	Distance	MPH	Acceleration	Gear	RPM
	0.00	0.00	0.0	0.76	1	9,000
	2.08	0.01	43.1	0.73	1	11,000
	2.28	0.02	45.7	0.56	2	7,790
	3.88	0.04	63.8	0.47	2	10,880
	4.08	0.04	65.6	0.40	3	8,960
	5.00	0.06	73.5	0.37	3	10,020
	5.75	0.08	79.2	0.33	3	10,800
	5.95	0.08	80.5	0.30	4	9,320
	7.74	0.13	91.1	0.24	4	10,540
	8.19	0.14	93.4	0.23	4	10,800
	8.39	0.14	94.3	0.21	5	9,590
	9.75	0.18	100.0	0.18	5	10,160
	10.00	0.19	101.0	0.17	5	10,250
	11.56	0.23	106.3	0.14	5	10,790
	11.75	0.24	106.8	0.13	6	9,700
	12.22	0.25	108.1	0.12	6	9,810
	15.00	0.34	114.4	0.09	6	10,380
	19.99	0.50	121.5	0.05	6	11,030
	20.00	0.50	121.5	0.05	6	11,030
	25.00	0.67	125.2	0.02	6	11,350
	27.24	0.75	126.1	0.02	6	11,440
	30.00	0.85	126.9	0.01	6	11,510
	34.32	1.00	127.7	0.01	6	11,580
	35.00	1.02	127.7	0.01	6	11,580
	37.14	1.10	127.9	0.00	6	11,600
	39.95	1.20	128.2	0.00	6	11,620
	40.00	1.20	128.2	0.00	6	11,620
	42.75	1.30	128.4	0.00	6	11,650