

Archer II PA 28-181

Specifications

ENGINE

Manufacturer	Lycoming
Model	O-360-A4M
Rating (hp @ rpm) (Take-off)	180 @ 2700
Rating (hp @ rpm) (Continuous)	178 @ 2650
Number of Cylinders	4
Recommended TBO (hrs.)	2000

PROPELLER

Manufacturer	Sensenich
Number of Blades	2
Type	Fixed Pitch
Diameter (in./cm.)	76/193

WEIGHTS

Ramp Weight (lbs./kg.)	2558/1160
Gross Weight (lbs./kg.)	2550/1156
Standard Empty Weight (lbs./kg.)	1413/641
(Includes: unusable fuel, full operating fluids and full oil)	
Standard Useful Load (lbs./kg.)	1137/516

WING AREA AND LOADINGS

Wing Area (ft. ² /m ²)	170/15.8
Wing Loading (lb./ft. ²) (kg./m ²)	15.0/73.2
Power Loading (lb./hp) (kg./hp)	14.2/6.4

DIMENSIONS

Wing Span (ft./m)	35.0/10.7
Length (ft./m)	23.8/7.3
Height (ft./m)	7.3/2.2
Cabin Length (Instrument Panel to Rear Bulkhead) (in./cm)	98/248.9
Cabin Width (in./cm.)	41.75/106.0
Cabin Height (in./cm.)	45/114.3
Headroom Seat to Ceiling	
Front Seat (in./cm.)	38/96.5
Rear Seat (in./cm.)	34.5/87.6
Baggage Door Size (in./cm.)	22/55.9 x 20/50.8
Cabin Door Size (in./cm.)	36/91.4 x 35/88.9
Wheel Base (ft./m)	6.58/2.01
Wheel Tread (ft./m)	10/3.05

FUEL CAPACITY

Two 25 gal. tanks (gal./L)	50/189
Usable Fuel (gal./L)	48/182

OIL CAPACITY (qts./L)

8/7.57

BAGGAGE

Volume (ft ³ /m ³)	26/.74
(with 2 cu. ft. hat shelf)	
Capacity (lbs./kg.)	200/91

Performance

MAXIMUM SPEED (kts./kmh)

(TAS at Gross Weight)	129/239
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CRUISING SPEEDS

(TAS at Gross Weight)	Best Power	Best Economy
75% at 8,000 ft. (kts./kmh)	129/239	126/233
65% at 12,000 ft. (kts./kmh)	125/232	121/224
55% at 12,500 ft. (kts./kmh)	111/206	106/196

CRUISE RANGE

(Cruising range includes 45-minute fuel reserve at max. range power plus allowance for fuel used during taxi, take-off, climb at MCP, cruise at stated mixture and descent)

	Best Power	Best Economy
75% at 8,000 ft. (nm/km)	520/ 963	600/1111
65% at 12,000 ft. (nm/km)	565/1047	645/1195
55% at 12,500 ft. (nm/km)	580/1075	670/1241

FUEL CONSUMPTION

	Best Power	Best Economy
75% power (gph./lph)	10.5/39.7	8.8/33.3
65% power (gph./lph)	9.0/34.1	7.6/28.8
55% power (gph./lph)	7.8/29.5	6.3/23.8

RATE OF CLIMB (At Sea Level and Gross Wt.)

Full Throttle (fpm/MPM)	735/224
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STALL SPEED

	IAS	CAS
Flaps Down, Full 40° (kts./kmh)	49/91	53/98
Flaps Up (kts./kmh)	55/102	59/109

SERVICE CEILING (100 fpm) (ft./m)

13650/4161

TAKE-OFF DISTANCE

(Sea Level, Zero Wind, Standard Temperature, 25° Flaps.)	
Ground Run (ft./m)	870/265
Total over 50-ft. obstacle (ft./m)	1625/495

LANDING DISTANCE

(Sea Level, Zero Wind, Standard Temperature)	
Ground Roll (ft./m)	925/282
Total over 50-ft. obstacle (ft./m)	1390/424

