

$$SFC_{ssl} = 0.595 \frac{(lb/hr)}{shp} = 1.01 \cdot 10^{-7} \frac{(kg/s)}{W}$$

$$w = 19.00 \text{ in} = 0.483 \text{ m}$$

$$H = 19.00 \text{ in} = 0.483 \text{ m}$$

$$L = 62.00 \text{ in} = 1.575 \text{ m}$$

Application: Australian AAC A10 Wamira Trainer

Bibliography: [Jawa1985]

Status: abandoned survey (never been produced)

PT6A-27

Manufacturer: Pratt Whitney Canada

Type: AC-P

Composition: (1+FT) -/3+1C/An/1/-/1

RPM: 38100 / - / 33183 # 2200

$$P_{ssl,eq} = 715 \text{ eshp} = 533 \text{ kW}$$

$$T_{ssl} = 90 \text{ lbf} = 400 \text{ N}$$

$$P_{ssl} = 680 \text{ shp} = 507 \text{ kW}$$

$$M_{eng} = 337 \text{ lb} = 153 \text{ kg}$$

$$SFC_{ssl} = 0.602 \frac{(lb/hr)}{shp} = 1.02 \cdot 10^{-7} \frac{(kg/s)}{W}$$

$$TET = 725 \text{ }^\circ\text{C} = 998.2 \text{ K}$$

$$\dot{w}_{ssl} = 6.80 \text{ lb/s} = 3.08 \text{ kg/s}$$

$$OPR = 6.7$$

$$w = 18.06 \text{ in} = 0.459 \text{ m}$$

$$CG_x = 3.04 \text{ in} = 0.077 \text{ m}$$

$$H = 18.06 \text{ in} = 0.459 \text{ m}$$

$$CG_y = 0.20 \text{ in} = 0.005 \text{ m}$$

$$L = 61.89 \text{ in} = 1.572 \text{ m}$$

$$CG_z = 0.32 \text{ in} = 0.008 \text{ m}$$

Application: de Havilland DHC-6 Twin Otter 300/320, Turbo-Beaver, Hamilton Westwind II/III (Beech 18), Airliner A99, King Air A90/B90/C90/C90-1/E90/E100, LET L-410A/F Turbolet, Embraer Bandeirante EMB-110, EMB-312, CATIC/HAIG (Harbin) Y-12 II, Pilatus Turbo Porter PC-6/B2-H2, UV-18A/B, CC-138 Twin Otter, G-21G Turbo-Goose, Raytheon Beech 99/99A, U-21A/D, Frakes Aviation Goose Grumman Mallard Conversion, Saunders ST-27A, SAC Spectrum-One, Schafer Comanchero 500B/Neiva Carajá, IAI Arava, Piper Cheyenne II, Fairchild Helio Porter /Stalion, Air Tractor AT-402/-502, Turbo Thrush Commander, Commander S2R-T34, Swearingen Merlin IIA

Bibliography: [E2NE, E4EA, E-6, EM-8005-07, EM-8005-08, Jae21-28, Jawa1968-2010, Mei05], <http://www.pwc.ca/fr/moteurs/pt6a-27>

	NAA	TCDS	Date
Certification:	FAA	E2NE, E4EA	20/12/1967
	TCCA	E-6	15/11/1966
	ANAC	EM-8005-07, EM-8005-08	10/07/1980

Remark: Based on PT6A-20 basic model with features higher ratings, revised engine parts and integrated propeller reversing control.

Status: in production

Note: FAA E4EA TCDS indicates a diameter of 18.286 in whereas FAA E2NE and ANAC TCDS indicate 18.06 in. FAA E4EA TCDS indicates a mass of 337 lb, E2NE TCDS indicates 300 lb, and ANAC TCDS indicates 315 lb = 142.88 kg.

PT6A-28

Manufacturer: Pratt Whitney Canada

Type: AC-P

Composition: (1+FT) -/3+1C/An/1/-/1

RPM: 38100 / - / 33183 # 2200