

SOCATA

TBM 850

SOCATA, Aéroport de Tarbes-Lourdes-Pyrénées 65921 Tarbes cedex 9 - FRANCE
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Kind of operations : Day Night VFR & IFR icing cond. Data source : MANUFACTURER Year model : 2009

Datasheet Status Complete Start production year : 1991

Dimensions external Us Metric
Length : (ft,inch / m) : 34, 9,2 / 10,60
Height : (ft,inch / m) : 14, 2,9 / 4,34
Wingspan : (ft,inch / m) : 41, 6 / 12,65

Dimensions internal (cabin)
Cabin length : (ft,inch / m) With cockpit 14, 11,4 / 4,56
Cabin width : (ft,inch / m) 4 / 1,22
Cabin height : (ft,inch / m) 4 / 1,22

Powerplant / Propeller / Gear / De-icing
Engine (s) 1 Engine type: Turbine
Turbo : Not apply Energy : Jet A1
Engine manufacturer : PRATT & WHITNEY CANADA
Engine ident : PT6A-66D
Engine power hp / lbs : 850 /
Total power hp / lbs : 850 / 0
Blade (s) : 4 Propeller type : Cst speed, full feat & revers.
Gear : Tricycle Gear Type : Retractable
Wings de ice : Yes Engine(s) de ice : Yes
Carburator(s) de ice : Not apply Blade de ice : Yes

Empty weight
Empty weight lbs / kgs 4698 / 2131

Fuel
Fuel capacity gal / l 290,6 / 1100 usable 281,6 / 1066
Fuel cap. lbs/kgs 1947 / 883 usable 1887 / 856

Weight
Max Ramp weight lbs / kgs 7430 / 3370
Max takeoff weight lbs / kgs 7394 / 3354
Max landing weight lbs / kgs 7024 / 3186

Load
Max useful load lbs / kgs 2732 / 1239
Max usable load with full fuel lbs / kgs 785 / 356,07

Range example
Range example nm / km 1200 / 2224
isa, zero winds enroute, 4 people on board, NBAA IFR reserves.

Weight at takeoff 7424 / 3367
Cruise altitude for range data ft / m 31000 / 9449
Power in percent or rpm for range data MAX CRUISE
Flight time Hr if available 3,58

Takeoff performance
Flaps takeoff ° / position TO
Weight at takeoff lbs / kgs 7394 / 3354
Takeoff temp c°
Takeoff ground roll ft / m @ sl 15 2035 / 620
Tot.distance ov. 50 ft obst @ sl : 15 2840 / 866

Rotation speed MTOW
Rotation speed (vr) kts 90 / 167

Landing performance
Flaps landing ° / position LDG
Weight at landing lbs / kgs 7024 / 3186
Landing temp C°
Landing ground roll ft / m sl 15 1840 / 561
Landing ground roll 50 ft obst ft / m sl 15 2430 / 741

Seats & pressu.
Crew (min) 1 Pax (max vers.) 5 Total 6
Pressurization : Yes Cabin altitude at service ceiling: (in ft) 9350

Indicative price (Std avionics,no options, no v.a.t) : 2 919 850 \$



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Stall speeds
Stall speed no flaps at weight lbs 7394 gear up kts (VS1) 81
Stall speed no flaps at weight kg 3354 gear up kph (VS1) 150
(Stall speed above datas also apply for fixed gear aircraft no flaps config.)
Stall speed full flaps at weight lbs 7394 gear down kts (VSO) 65
Stall speed full flaps at weight kg 3354 gear down kph (VSO) 120

Rate of climb MTOW
Rate of climb sea level 1 engine ft per mn / m per mn 2005 / 611,12
Rate of climb sea level all eng ft per mn / m per mn / /

Performance
Maximum operating limit speed Knots type : KIAS
Sea level to (ft) 31000 VMO kts / kph 266 / 493
Above (ft) / MMO mach/ ex.at alt/ kts/ kph / / / /
Maneuvering speed kts / kph (VA) 158 / 293
Max structur. cruis. speed kts / kph (VNO) 266 / 493
Never exceed speed kts / kph (VNE) 266 / 493
Max landing gear extended speed kts / kph (VLE) 178 / 330
Max LDG flaps extended speed kts / kph (VFE) 122 / 226
Max speed sea level kts / kph 241 / 447

Cruise performance
Weight at takeoff 7100 / 3220 Cruise alt. ft / m 26000 / 7925
Cruise power in percent or rpm TRQ 115%
Speed at cruise altitude kts / kph ktas (true air speed) 317 / 587

Service ceiling
Service ceiling ft / m 31000 / 9449

Flight load factor limits
No flaps: +3,5 g / -1,5 g Full flaps: +2g / No neg g