

Altimeter

- 2-inch Counter Drum Pointer Altimeter
Types 3A43, 3A42
- 2-inch Counter Drum Pointer Altimeter with Baro-output
Types 3H43, 3H42



General

SATHOM 2 inch Altimeter are barometric instruments. The counter-pointer display is actuated by a high performance mechanism with a high stability beryllium capsule. A built-in vibrator minimizes friction and optimizes accuracy in use. Temperature compensation is accomplished by a bimetallic element. All instruments are offered customer-specific (see type designation) and are mounted for easy servicing.

Application

The 2 inch Altimeter are installed as primary or standby instruments in civil and military aircraft.

Users benefit from a high level of precision and reliability.

Characteristics

Counter-Pointer Presentation

The counter has three (option: two) moving drums, which show tens of thousands, thousands and hundreds of feet (three drums only). The pointer indicates 1,000 feet per revolution on a scale calibrated at intervals of 20 feet. Warning flags are displayed on the counter below 0 feet respectively between 10,000 and 0 feet (2 drums only).

Baro Scale

The barometric-counter indicates the pressure as four digits as single baro in inHg or in mbar or as dual baro in inHg/mbar. Adjustment for QNH/QFE is provided by a knob on the front, built-in stops are included.

Baro-output

An electrical indication of pressure (3H43, 3H42 only) can be provided by potentiometer geared to the baro-scale-mechanism.

Case

The SATHOM Altimeter are installed in light-weight aluminum ARINC, Square and Round cases.

Lighting

Lighting is offered in different voltages and different colors. Two cover plates in the front bezel allow quick replacement of lamps. All instruments are available in NVG-compatible lighting.

Glass

All instruments with lighting are equipped with antireflective coated glasses in compliance with MIL-C-14806.

Static Pressure Connector

The connector is a 9/16"-18UNJF-3B unit with a 150 wire mesh filter screen.

Electrical Connector

A 6-pin connector is used for the 3A43 and the 3A42, a 10-pin connector for 3H43 and 3H42 instruments. The standard connectors meet all the requirements of MIL-E-5400.

Type Designation

3A	Altimeter
3H	Altimeter with Baro-output
42.	Metric Counter Drum Pointer with Barocounter
43.	Feet Counter Drum Pointer with Barocounter
.10.	Round Case Grey, Bezel with Lip
.20.	Round Case Black, Bezel with Lip
.30.	ARINC Case 408 2ATI Black
.40.	ARINC Case 408 2ATI Grey
.50.	Square Case Black
.60.	Square Case Grey
.02.	Dial Markings are Lusterless White other colors on request
.20F.	Measuring Range -1,000 ... 20,000 Feet
.35F.	Measuring Range -1,000 ... 35,000 Feet
.50F.	Measuring Range -1,000 ... 50,000 Feet
.53F.	Measuring Range -1,000 ... 53,000 Feet
.06M.	Measuring Range -300 ... 6,000 Meters
.10M.	Measuring Range -300 ... 10,000 Meters
.15M.	Measuring Range -300 ... 15,000 Meters
.00.0.	Without Lighting
.05.	Lighting 5V AC/DC
.28.	Lighting 28V AC/DC
.1.	Lighting White Only
.2.	Lighting Red and White
.3.	Lighting Red Only
.4.	Lighting NVIS Green
.XX.	Customer Code

Technical Data

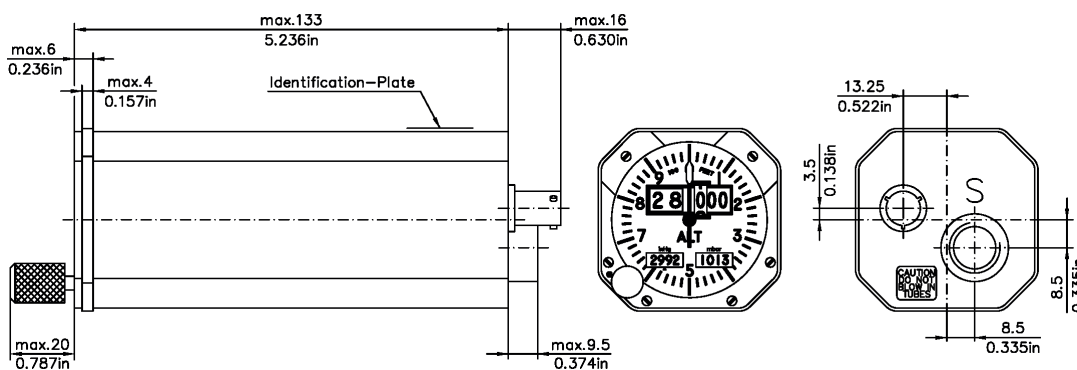
General

-Altimeter	Acc. TSO-C10b and DO160
-Vibrator Power Supply	28V DC
-Altitude Counter Presentation	3 Drum Altitude Counter with two Fixed Zeroes on Dial
	Four Digit Counter
	850 to 1050 mbar (hPa) or
	25.1 to 31.0 inHg
	Acc. Customer Specification
-Baro Counter Presentation	
-Baro-Setting Range	
-Baro-Setting Output (3H43/3H42 only)	
-Case (Bezel)	Acc. ARINC 408 2ATI
ARINC	Acc. MS 27560
Square	Acc. MS 33638
Round	Nightvision Goggle Compatibility
-Lighting NVIS Green	Acc. MIL-STD-3009 (MIL-L-85762)
	Acc. TSO-C10b
-Temperature Operating	-30° to +50°C
Non-Derangement	-65° to +70°C
-Pneumatic Connector	9/16"-18UNJF-3B (MS 33649-6)
-Weight in Standard Configuration	Less than 500 gr
-Colors White and Black	Acc. FED-STD-595a
-Glass, Anti-Reflective Coated	Acc. MIL-C-14806A

Options

-Altitude Counter Presentation	2 Drum Altitude Counter with three Fixed Zeroes on Dial
	850 to 1050 mbar (hPa) and 25.1 to 31.0 inHg
-Temperature Operating	-55° to +70°C
Non-Derangement	-60° to +90°C
-Further Pneumatic Connectors	Acc. MS 33649
-Lighting	LED

Drawing



Specifications are subject to change without notice.

SATHOM
Manufacturer of
mechanical aircraft
instruments used
in business, commercial
and military aviation.

SATHOM is a
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EASA Part 21 G+O
EASA Part 145

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