

# User Manual

## Pressure Testing Pitot Tube Case Set

For article number: 3030101



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## 1. Revision Overview

Revision	Date	Description
V01.00 UK	16.05.2023	JK: Initiale document
V01.01 UK	23.08.2023	SG

## 2. General

### 2.1 Introduction

Please read the complete manual for item no. 3030101, available here, before use. This is essential to ensure safe operation.

### 2.2 Customer Service

For more information, visit the website: [www.vocus3d.de](http://www.vocus3d.de), contact your dealer, or directly reach out to VOCUS GmbH at Tel.: +49 (0) 821 65 05 9020, Email: [info@vocus3d.de](mailto:info@vocus3d.de).

## 3. Introduction to the Case Set

The Snoop case set is designed to assist in the calibration, verification, and leakage testing of the barometric system. The set includes a static port adapter suitable for installation over a static pressure probe. These pressure measurements can be taken on flat surfaces as well as moderately to highly curved surfaces. Additionally, it includes Pitot tube adapters in the three most common sizes, allowing for the application of both static and total pressures using this set. All parts, except for the suction cups and hose connections, are made of high-quality PA6 and are resistant to most environmental influences. Furthermore, the adapters can be used in ambient conditions up to 160°C. Critical components are reinforced with carbon fibers to withstand higher loads.

### 3.1 Case Set Parts List

1. Static-Port-Adapter (Spider)
2. Pitot-Tube Adapter (16 mm)
3. Pitot-Tube Adapter (18 mm)
4. Pitot-Tube Adapter (21 mm)
5. Pump Unit with Switch
6. Vacuum System Hose
7. Pump Unit Charger



### 3.2 Assembly and Usage

Thoroughly clean the surface around the static pressure probe to be used. Take the adapter for static pressure measurement out of the case and set the switch for the vacuum pump to ON. The pump will now begin to create a vacuum at the suction cup attachments. Position the suction cup that will transmit the static pressure over the static pressure probe on your aircraft. Now, simultaneously position all holding suction cups on the surface and press them down. After turning off the pump, the adapter will remain in place on the surface for approximately 15 minutes. However, to avoid damage to the instruments, it is recommended to leave the pump on during measurements. Before the measurement can be performed, all other static pressure probe holes must be sealed. This can be done using a short strip of adhesive tape to seal the hole. After the measurement, release the measurement pressure first before turning off the vacuum pump and removing the adapter from the surface. This is best done by lifting one of the suction cup handles.

Don't forget to remove the adhesive tape from the remaining pressure probe holes. The Pitot tube adapters should be loosely rotated and slid over the Pitot tube. Then, use the screw mechanism to tighten the seal and thus seal the system. Measurement pressures can now also be applied using the connection point. It should be noted that these adapters can only be used on Pitot tubes without static pressure probe connections. To check the functionality of the airspeed indicator, interaction with the static port adapter is essential. The general connection to the measuring system needs to be customized accordingly.

### 3.3 Matching Pitot and Static Testers

The carrying case set is designed for use with a pressure testing instrument, such as those from Baker Hughes Company, for the series/types: ADTS500, ADTS542F, ADTS552F (2-channel), ADTS553F (3-channel), ADTS554F,

ADTS505, ADTS205, ADTS206, ATEQ ADSE 550/650/740/743/744/746, or an equivalent model. These are not included in the delivery and must be purchased separately.

## 4. Hazard Instructions

### 4.1 Static Port-Adapter (Spider)

The adapter for static pressure measurements on aircraft surfaces is held in place by three suction cups. While simulating static pressures for high altitudes, the adapter must not detach, as it could damage the instruments. Therefore, it is explicitly recommended to leave the vacuum pump on during measurements. Additionally, please observe the instructions in Chapter 3.2 and the care and maintenance instructions in Chapter 5 to reduce the risk of instrument damage. Ensure that the test pressure has been fully released before removing the adapter after your measurement.

### 4.2 Pitot Tube Adapter

Here too, pressures are applied to the instrument system. It is important to avoid sudden pressure drops. This can occur if the adapters are prematurely detached from the Pitot tube. Furthermore, it should be noted that the functionality of these adapters is only ensured when used in conjunction with the static port adapter.

## 5. Care and Maintenance Instructions

The case is designed for use with a pressure testing instrument such as ATEQ ADSE 550/650/740/743/744/746 or equivalent. These are not included in the delivery and must be purchased separately.

### 5.1 Care

It is recommended to check the seals every quarter. The suction cups should be kept clean to ensure a proper seal.

### 5.2 Maintenance

The components of the case are largely maintenance-free. However, the suction cups need to be replaced every year. Additionally, the vacuum system hose must be replaced annually. Refer to Chapter: Hazard Instructions.

The seals of the Pitot tube adapters should also be replaced every year.

## 6. Maintenance and Spare Parts Supply

VOCUS GmbH always keeps the necessary spare parts in stock. All wear parts such as seals, suction cups, etc., must be obtained from VOCUS GmbH to ensure proper functioning.

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## 7. Technical Specifications

- Weight: approx. 350 grams
- Dimensions: H 110 mm, L 340 mm, W 70 mm
- Pressure load capacity up to
- All individual parts are available as spare parts.

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