

4 LITRE CLOSED CIRCUIT SAMPLER

- ◆ **FULL VISUAL AVIATION FUEL CHECKING IN A CLOSED SYSTEM**
- ◆ **NO FUEL SPILLAGE**
- ◆ **EASY DETECTION OF DIRT AND WATER**
- ◆ **NO SAMPLE CONTAMINATION**
- ◆ **EASY TO CLEAN**
- ◆ **DIRECT DRAINAGE UNDER GRAVITY**
- ◆ **WATER DETECTION, DENSITY AND TEMPERATURE CHECKING OPTIONS**
- ◆ **ABILITY TO MOUNT AS LEFT HAND OR RIGHT HAND ENTRY**
- ◆ **OPTIONAL MOUNTING BRACKET AVAILABLE FOR RETROFIT WITH PREVIOUS DESIGN**



Introduction

The accepted method of checking the cleanliness of aviation fuel is the 'clear and bright' test, where fuel is swirled around in an open bucket or clear glass jar and visually inspected. However, this procedure carries the risk of sample contamination from the elements or from dirty sample points and there is also a high probability of fuel spillage and contact with operations staff. The Aljac Closed Circuit Sampler (CCS) was developed to overcome these problems and is in widespread use with refuelling companies all over the world. JIG Bulletin 123 & JIG TID No 3 detail the design, use and maintenance of the CCS. With this in mind Aljac has developed an updated version of the widely used CCS to assist with visual appearance checks.

Description and Operation

The Aljac CCS consists of a clear glass tube fitted to a white epoxy coated conical base to assist in the detection of undissolved water, sediment, and suspended matter. The CCS is fitted with a hinged cover that fully opens to allow easy cleaning.

The base incorporates a tangential inlet port that promotes vortexing of the incoming fuel, and a close coupled stainless steel drain valve. The inlet port should be connected to the sample points using small bore tubing (typically 10mm diameter), and we recommend fitting spring close inlet valves close to the CCS to control the filling operation, which we can also supply. The drain port should be connected into the hydrant dispenser dump tank, depot product recovery system, or storage tank using 20mm pipework. It is recommended that the CCS is located such that gravity drainage is possible. If not, we are able to supply a rotary pump and non return valve to drain the CCS.

When fuel is drawn into the CCS under pressure from the sample points, the tangential inlet port promotes vortexing of the incoming fuel. This concentrates any contamination in the centre of the base, making detection very easy. After the fuel has been visually inspected the drain valve is opened to release the sample. Internal cleaning of the Aljac CCS is easily accomplished through the hinged lid.

A number of options are also available. A secondary chamber directly mounted to the CCS inlet, used specifically for installing hydrometer and thermometer instruments. This secondary chamber fills at the same rate as the main chamber and crucially, does not affect the fuel vortex required to conduct the visual appearance check. The new External SWD Fitting is in development and will be available soon.

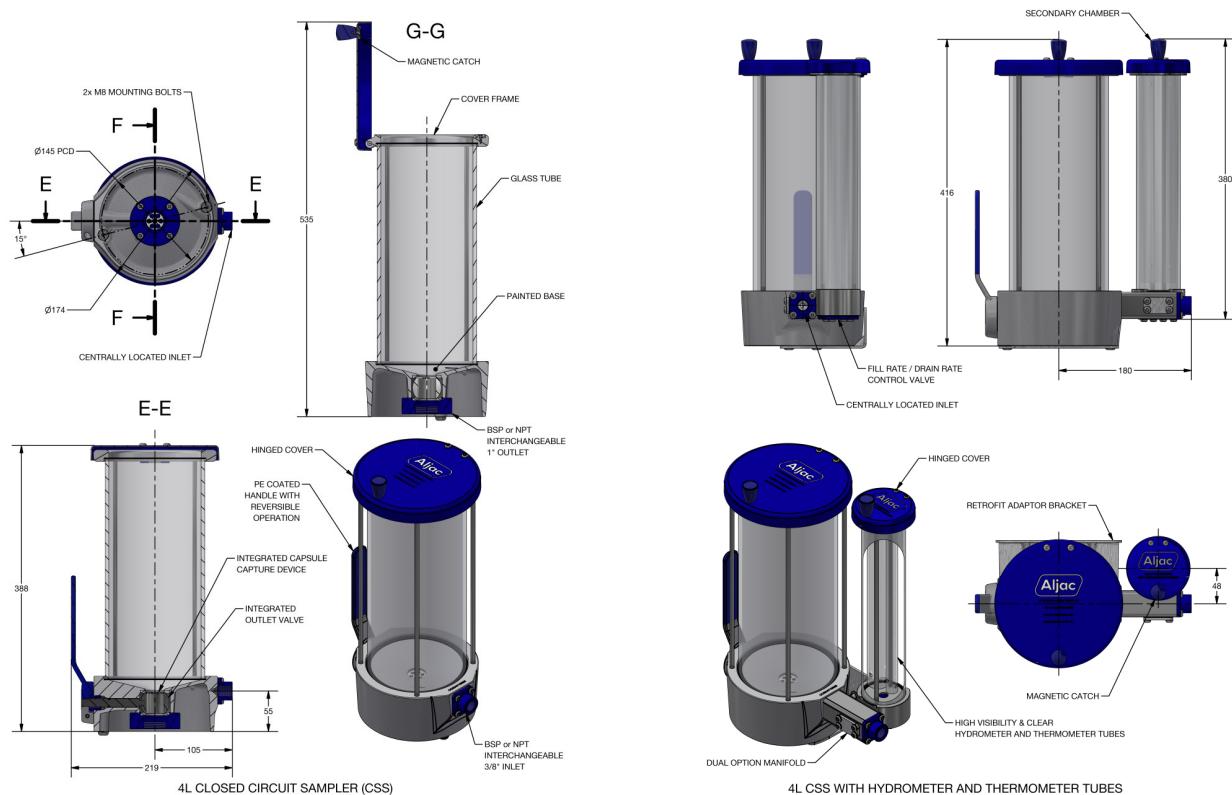
The Aljac CCS is available with BSPP or NPT threads.

The Capsule Catcher

The CCS drain valve combines a Capsule Catcher inside the ball of the drain valve. It prevents any Shell Water Detector (SWD) capsules which have been inadvertently dropped into the sampler from passing into the drain pipework. It does so without disrupting the vortex flow pattern of fuel entering the sampler, and also allows the sampler internals to be easily cleaned.



General Arrangement Drawing



Detailed Specification

Working Capacity: 4 Litres.

Materials: Borosilicate glass tube, cast aluminium base and upper section, base white epoxy lined internally.

Connections: Inlet 3/8 inch BSPP or NPT female, outlet 1 inch BSPP or NPT female, **Mounting**

Holes: 2x M12 female.

Overall Dimensions: 388 mm high (lid closed), 219 mm wide (basic model).

Nett Weight: 6.35 kg (empty).

Standards

The CCS has been designed to comply with the requirements detailed in JIG Bulletin 123 and JIG TID No 3 - Design, Use and Maintenance of 'Visijars' (Closed Circuit Samplers) for sampling and testing.

How To Order

Contact our Sales Department and quote the part number.

Description	Part Number BSPP threads	Part Number NPT threads
Basic Model	6007234000	6007234050
Basic Model—Offshore Painted	6007234020	6007234070
Adds 3/8" Apollo Spring Close Fill Valve	06076502P01	0607650201
Mounting Bracket for Retrofit		6007234300