

Liquid Oxygen Sampler Prod. N°: AVM-93003-000 N.U.C.: 6640-AB-800-0269



Usage of the Oxygen Sampler

It is used to withdraw a small quantity of Liquid Oxygen from storage containers, replenishers and from the on-board oxygen system.

The sampler, complete with supplied carrying case, is used to take the said sample of oxygen, albeit in a gaseous state, to a suitable equipped laboratory for analysis to evaluate the levels of contamination present in the sample, and thus the source container.

How it Works

The sampler is based on the principle of self cooling chambers. It is in fact the same liquid gas to be sampled that, before it is drawn into the withdrawal chamber (the central container), creates sufficient pressure (5 to 20 p.s.i) in the space between the outer wall and intermediate chamber. The intermediate chamber upon gasification and subsequent heat loss to the walls of the chamber provide the conditions for this chamber to also contain a small quantity of liquid oxygen. These high pressures and low temperatures cause the opening of a valve to the central chamber and allow the central withdrawal chamber to contain the sample of oxygen only in liquid state.

Once the valve is closed and the supply of liquid oxygen is cut off, the temperature of the surrounding air will slowly cause the sample to turn back into gaseous oxygen, this is due to the fact that the external chamber, is minimally connected to the internal chamber.

Technical Characteristics

Functional Internal Volume: 4.41

Depth: 240mm

Operational Pressure: 35.00 bar

Weight of Sampler: 9.0 Kg

Calibration Pressure / Safety Valve: 50 ± 2.5 bar

Weight of Tubing: 0.450 Kg

Height: 490mm

Weight of Case: 3.550 Kg

Width: 210mm

Total Weight: 13.0 Kg