

CO2 SCRUBBER

97 - Diver Personal Equipment & Components C - Components





The **Drass CO₂** Scrubber is used as a $\rm CO_2$ removal system in the hyperbaric environment, in chambers and diving bells. The design is continuously enhanced thanks to the hundreds of units installed worldwide. Thanks to its compact size and its efficiency, the installation of the Drass $\rm CO_2$ scrubber on board hyperbaric chambers is recommended either as main or as emergency scrubbing system. The primary function is to remove $\rm CO_2$ by means of a chemical reaction with a carbon dioxide adsorbent, that can be easily replaced by removing the canister and passing it through the chamber food lock. Drass scrubbers are intended for use with 4-8 mesh size granules, a size at which absorption surface area and resistance to flow are optimized. To reduce odours and other contaminants, scrubbers can be partially filled with activated carbon, catalysts or zeolites.

Scrubbers are equipped with a high flow centrifugal fan. The fan performance has been tuned with the absorption time specific to the contaminated gas in the sodalime, in order to get the best results from the adsorbent. The brushless fan is internally protected from overcurrent.

New design:

The redesign of the scrubber is aimed to use smaller soda lime granules, sot to increase the absorption capacity and peak performances, and also to obtain a more stable performances versus different soda lime granule.

The different gas path is developed to improve the ${\rm CO_2}$ removal capacity.

Voltage 24 Vdc Current 350 mA at surface; 700 mA at 500 msw (Heliox)

Environmental Data

Ambient Temperature	-10 ÷ +55 °C
Max Operating Pressure	500 msw
Relative Humidity	0-100%
Installation position	vertical or horizontal

Performance Data

With fully basket (5.2 kg) can be removed 750 l of CO₂

CO₂ removal performance at various CO2 partial pressure:

CO ₂ Partial Pressure (mbar)	CO ₂ Removal Rate (I/min)
20	6
10	3
5	1,5

CO₂ Scrubber Dimensions

Length x Width x Height	252 x 221 x 386 mm
Weight (when empty)	6 kg
Basket Capacity	6L of sodalime

Medical lock minimum passage diameter 220 mm

COMMERCIAL CODE	DESCRIPTION

97CM-06-02-01-00-00 C02 Scrubber