

OXY-LUNG

UNDERWATER BREATHING APPARATUS FOR SPECIAL FORCES & OPERATIONS

PRINCIPLE

The OXY-LUNG is a chest-worn (or optional back-worn) closed-circuit pure oxygen underwater breathing apparatus. Developed for intensive use, it has high performance, but simple design remains. The OXY-LUNG is robust compact, and it does not require any special tools for general maintenance. It comes in the form of a rigid unit comprising the absorbent canister, the oxygen cylinder and the breathing bag. The diver breathes into the apparatus through a mouthpiece which is fitted with a valve and is held in the mouth by a strap and connected to two corrugated tubes which lead to the inhalation and exhalation hose containing the corresponding non-return valve. It is fitted with a pressure gauge which indicates the pressure of oxygen remaining in the cylinder. The OXY-LUNG is a self-contained demand type free diving apparatus using pure oxygen in closed-circuit. It comes standard with a cylinder contents gauge and by-pass. The OXY-LUNG is made by Aqua-Lung in the U.S.A.

The oxygen consumed is automatically replaced when, as a result of a reduction in the volume of gases in the closed-circuit, the wall of the breathing bag activates the oxygen second stage demand valve. The circulation of gases is ensured by the action of two non-return valves. The whole of the exhaled gas passes directly through the absorbent canister where the carbon dioxide is 100% absorbed.



BY-PASS SYSTEM

The OXY-LUNG is fitted with an additional safety system for the manual supply of medium pressure oxygen via what is usually called a "by-pass". This by-pass is built into the first stage High Pressure -Medium Pressure reducing valve and permits Medium Pressure oxygen to be injected directly into the breathing bag through a pipe fitted to its support plate. The by-pass has a controlled flow in order to avoid over-rapid inflation of the bag and will assure the supply of oxygen, even in the case of failure of the second stage demand valve. From a tactical point of view, the by-pass can be used jointly with the Medium Pressure/Low Pressure handwheel to avoid the release of bubbles during peek and tactical approaches in very shallow water.

PERFORMANCE

Operational depth (depending on country regulations)	7 to 10 meters
Duration with Sofnolime 408-NI-L and 2 liter cylinder	4+ hours**
Duration with Sofnolime 812 NI and 2 liters cylinder	6+ hours**

**Depending on diver effort and water temperature

CHARACTERISTICS

Weight in the air (in working order)	11.6 kg.
Dimensions :	
Width	29 cm.
Height	46 cm.
Average thickness	17.5 cm.
Aluminum alloy oxygen cylinder	
Water capacity	2 L.
Working pressure	207 bar



Military & Professional Operations

Test pressure	300 bar
Duration, with 2.0 L. cylinder	4+ hours
Capacity of scrubber canister (approx.)	2.3 kg.
Breathing bag volume (approx.)	6 L.

OTHER EQUIPMENT REQUIRED

ATLANTIS Life-jacket with Cylinders	Part # 7629-50
ATLANTIS Life-jacket W/O Cylinder	Part # 7629-60

Charging connector for Atlantis cylinder	Part # 1010-15
Charging connector with purge for OXY-LUNG	Part # 1010-35
Maintenance tool kit	Part # 1010-60

*This version is non magnetic (NATO standard)
less than 4 nano telsa or gamma*

OXY-LUNG (2.0L)	Part # 1010.14
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