

Aircraft modular oxygen system (AMOS) – GOP3



The AMOS high pressure gaseous oxygen pack 3 (GOP3) is a self contained unit that stores gaseous breathing oxygen and delivers the gas to an aircraft oxygen system, by way of a two-stage pressure control valve.

The AMOS GOP3 uses high pressure gaseous oxygen which overcomes the operational restrictions of using liquid oxygen (LOX). LOX systems can present considerable logistic problems when aircraft are dispersed to forward sites. Constant loss of oxygen due to evaporation prevents effective pre positioning of LOX supplies unless bulk storage facilities are available and this seriously limits overall tactical flexibility.

The GOP3 is directly interchangeable with a LOX converter.

The oxygen vessel of the GOP 3 contains a usable volume of 2100 litres at a pressure of 317 bar, (4 600 lbf/in²), at a temperature of 20 degrees C. This is equivalent to the gaseous oxygen produced from approximately 2.7 litres of liquid oxygen.

The GOP 3 delivers oxygen at a nominal delivery pressure of 5.5 bar (80 lbf/in²) and has been developed as a portable oxygen supply for installation into various platforms.

Key features

- Delivery pressure of 5.5 bar
- Fully charged weight 16.59kg
- Man portable with integral handles
- The height of the system does not exceed 248mm with the overall floor plan 379mm x 311mm

Key benefits

- Quick to install
- Gaseous oxygen does not have the operational limitations of liquid oxygen.
- The oxygen vessel life can be extended from 20 years to 34 years
- Directly interchangeable with a LOX converter

AMOS GOP3 Major Components

The GOP 3 comprises a base mounting on which the major components are mounted and secured.

The oxygen vessel contains the gaseous oxygen.

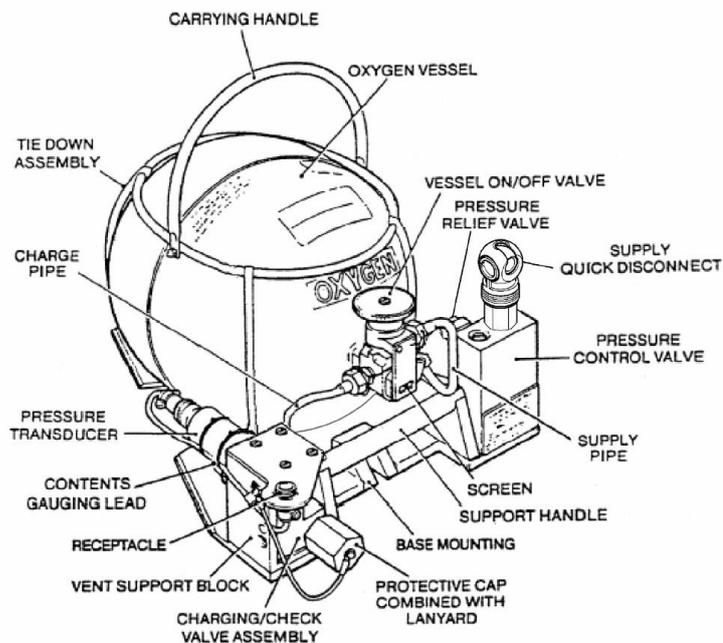
The On/Off valve is manually operated and allows the contained gas to flow from the oxygen vessel into the pressure control valve.

The pressure control valve has a quick disconnect coupling outlet for the oxygen supply fitted to the top.

A folding, bucket type handle is fitted at the top and a fixed support handle is shaped to provide a grip type handle. These handles are used when carrying the GOP3.

AMOS GOP3 Service Life

The overall charged 'in-service life' for this vessel type is limited to 20 years or 10 000 inflations, whichever occurs first. However, the total life of the vessel can be extended to 34 years, provided that the 'in-service life' and periodic inspection periods comply with the manufacturer's schedule.



Leading particulars

All values are given for normal temperature and pressure as appropriate

AMOS GOP3	part no 823800
Outlet flow	Up to 150 litres/min at 4.50 to 6.60 bar
Weight (empty)	13.88 kg (29.5 lb)
Output pressure (nominal)	5.5 bar (80 lbf/in ²)
Weight (fully charged)	16.59 kg (36.5 lb)
Max cylinder charging pressure	317 bar (4 600 lbf/in ²) at 20°C
Height / width / depth	248 x 379 x 311 mm (9.75 x 15 x 12.25 in)
Capacity – useable volume	2,100 litres (317 bar (4 600 lbf/in ²) at 20°C)

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